Working with Model Portfolios

Morningstar Direct℠ for Asset Management
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A model portfolio is a mock-up of an actual portfolio. In Morningstar DirectSM for Asset Management, a model portfolio can be used to do the following:

- analyze a group of investments
- assign custom benchmarks, and
- add an investment policy to aid in that analysis.

By now, you should have completed the Creating Lists & Workbooks, Creating Screens, and Creating Column Sets guides, where you learned how to create and leverage those tools.

Note: The phrase “portfolio object” is used throughout this guide to refer to a model portfolio, client account, custom benchmark, or investment policy.

This manual covers the following topics:

- Creating a Model Portfolio (page 5)
- Using Custom Benchmarks (page 15)
- Using an Investment Policy (page 41), and
- Editing a Model Portfolio (page 62).
Creating a Model Portfolio

A model portfolio allows you to analyze a set of investments and determine the set’s suitability as a recommended investment. A model portfolio can be created either by manually entering information, or by importing data from Microsoft® Excel®.

In this section, you will learn how to do the following:

- Exercise 1: Create a model portfolio from an investment list (page 5)
- Exercise 2: Create a model portfolio by importing (page 10)

If you have a list of investments you want to examine as a single investment (or portfolio), you can use the list as the basis of a model portfolio.

Exercise 1: Create a model portfolio from an investment list

In this exercise, you will create a model portfolio from an investment list, using the Income ETFs list you created in the Creating Lists and Workbooks guide. (If you do not already have this list, you can create it now.)

To create a model portfolio from an investment list, do the following:

1. On the header, click the Create icon and select Model Portfolio. The Creating Model Portfolios window opens.

Select this option.
2. In the upper-left corner, click the Add icon. The Add dialog box opens.

3. In the Add dialog box, select From Investment List. The Investment List dialog box opens.
4. From the investment lists, select **Income ETFs**.

The funds in that list are displayed as follows:
- Financial Select Sector SPDR ETF
- Invesco S&P Emerging Markets Low Vol ETF
- Real Estate Select Sector SPDF
- Schwab US Dividend Equity ETF
- Vanguard FTSE Developed Markets ETF, and
- Vanguard Growth Index Admiral.

5. Click **Add All 6 Investments**. The investments are listed in the Creating Model Portfolios window.
Exercise 1: Create a model portfolio from an investment list

6. Click Close.
7. Change the Weight of each fund according to this table:
   - Note: Press Enter after each entry to move to the next one.

<table>
<thead>
<tr>
<th>Fund Name</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Select Sector SPDR ETF</td>
<td>25</td>
</tr>
<tr>
<td>Invesco S&amp;P Emerging Markets Low Vol ETF</td>
<td>15</td>
</tr>
<tr>
<td>Real Estate Select Sector SPDR</td>
<td>15</td>
</tr>
<tr>
<td>Schwab US Dividend Equity ETF</td>
<td>15</td>
</tr>
<tr>
<td>Vanguard FTSE Developed Markets ETF</td>
<td>15</td>
</tr>
<tr>
<td>Vanguard Growth Index Admiral</td>
<td>15</td>
</tr>
</tbody>
</table>

8. In the upper-right corner of the Untitled area, click Recalculate.

9. In the upper-right corner of the Creating Model Portfolios window, click Save As. The “Save portfolio as” dialog box opens.
10. Enter **Income ETFs Portfolio**, then click **Save**. In the upper-left corner of the window, “Untitled” is replaced with the name of the model.

```
Save portfolio as
Income ETFs Portfolio
```

11. In the upper-right corner of the Creating Model Portfolios window, click **Close**. An alert opens, giving you the opportunity to save. Click **Don’t Save**.

The Income ETFs Portfolio is displayed in the list of Model Portfolios on the Home page.

*Note: You might have to refresh your browser to see this.*
Creating a Model Portfolio

Exercise 2: Create a model portfolio by importing

A colleague has asked you to analyze a model portfolio. She provides the model as an Excel spreadsheet. You can import it directly into a model portfolio, instead of manually entering the investments and weights (as you did in Exercise 1 on page 5).

In this exercise, you will import an Excel file to create a model portfolio.

Note: When using an Excel file on your own, be sure to first check the requirements for importing an Excel file, found in Data Import Specifications.

To import an Excel file, do the following:

1. Download the Excel file for this exercise.
2. In the upper-left corner of the Home page, hover the cursor over and select Import. The Import page opens.

3. At the left side of the Import window, the Upload File option is selected. Click Select File Type, then select Model Portfolios. To the right of the Select File Type button, the Upload File icon appears.
5. On your computer system, **locate** and **double-click Moderate.xls** (the file you just downloaded). The Import page opens, displaying mapping options.

6. In the Column Mapping area, use the pull-down menus to make **a selection** from each **Unmapped** field. Each unmapped column must correspond to a column in the Excel spreadsheet. A selection for each column is required.

7. In the **Exclude Header Row** field, make sure **First 1 row** is selected.

8. From the **Date Format** menu, select **MM/DD/YYYY** (or the date format you want to use).

9. In the **Weight Format** area, select **Percentage**.
10. In the upper-right corner of the window, click **Preview Data**. The Import Status window opens.

11. Under **Model Portfolios**, click **Preview Data Section**.

   ![Preview Data Section](image)

   Note: In the Preview Data window, securities listed as "New" have not been imported before. Existing Securities have been previously imported. Some securities in the spreadsheet being imported might be listed under Existing Securities.

12. On the right side of the window, select the **Model Portfolios tab**.

   ![Model Portfolios Tab](image)
13. Click the circle next to Moderate, then select Import.

14. A message opens, announcing the account was imported successfully. Click Portfolio Workbook. The "Select a portfolio list to view in this workbook" dialog box opens.

15. In the “Select a portfolio list to view in this workbook” dialog box, select All Model Portfolios.

In the workbook, the Moderate model portfolio is displayed in the Grid.
16. To see the holdings in the model portfolio, in the Grid, click **Moderate**. The Analytical View opens from the right. The Holdings tab is selected.
Working with Custom Benchmarks

A custom benchmark is created by manually adding indexes or investments and allocating weights to them, or by importing a file. The blended benchmark can then be used in the following ways:

- Assigned to model portfolios
- Displayed in various charts and tables, and
- Used as a reference point when analyzing model portfolios.

This section covers the following topics and exercises:

- Why should I use a custom benchmark? (page 15)
- Exercise 3: Create a custom benchmark (page 16)
- Exercise 4: Create a custom benchmark of Morningstar indexes (page 19)
- Exercise 5: Import a set of custom benchmarks (page 22)
- Exercise 6: Apply custom benchmarks to a model portfolio (page 27)
- What are the options for displaying benchmarks? (page 30)
- Exercise 7: Compare the Morningstar Sector allocations of a model portfolio and a benchmark (page 30)
- Exercise 8: Compare the historical returns of a model portfolio and both of its benchmarks (page 35)
- Exercise 9: Hide a benchmark (page 36)
- Exercise 10: Compare the Sustainability Ratings Analysis of a model portfolio and both of its benchmarks (page 37)

When comparing a model portfolio to a common yardstick of market performance, such as the S&P 500 or the Bloomberg Barclays U.S. Aggregate Bond Index, the results might not always be helpful, unless you want to compare a portfolio’s Beta to a single index.

A custom benchmark can help you discover if the investment selections in a model portfolio are helping or hurting the returns. A benchmark is also a view into whether the model portfolio could benefit from a simpler and less expensive mix of holdings.
In this exercise, you will create a custom benchmark composed of indexes. When the goal is moderate risk and returns, this benchmark can be a measuring and comparison tool. Is the model portfolio too conservative to meet the investment goals? Riskier than intended? Which current holdings are contributing to the conservative or risky nature of the portfolio?

Do the following:

1. On the header, click the Create icon, then select Custom Benchmark. The Creating Custom Benchmarks window opens.

2. In the upper-left corner of the Untitled area, click the Add icon. The Search dialog box opens.
3. In the **Search** field, type **S&P 500 TR USD**.

4. In the search results, **click** that index. The Search dialog box closes and the S&P 500 TR USD index is added to the list in the Untitled area.

5. Repeat step 2 through step 4 to **add** each of the following indexes:
   - Russell 2000 Growth TR USD
   - Russell 2000 Value TR USD
   - BBgBarc US Agg Bond TR USD
   - MSCI ACWI Ex US (EAFE Prior to 07/01/13), and
   - BBgBarc US Treasury Bill 1-3 Mon TR USD.

   ✐ Note: Allow time for each index to load before adding the next.

6. In the Weight column, change the **weight** of each index as shown in the following table:

   ✐ Note: Press **Enter** after each entry to move to the next row.

<table>
<thead>
<tr>
<th>Index Name</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>S&amp;P 500 TR USD</td>
<td>40</td>
</tr>
<tr>
<td>BBgBarc US Agg Bond TR USD</td>
<td>25</td>
</tr>
<tr>
<td>MSCI ACWI Ex US (EAFE Prior to 07/01/13)</td>
<td>20</td>
</tr>
<tr>
<td>Russell 2000 Growth TR USD</td>
<td>5</td>
</tr>
<tr>
<td>Russell 2000 Value TR USD</td>
<td>5</td>
</tr>
<tr>
<td>BBgBarc US Treasury Bill 1-3 Mon TR USD</td>
<td>5</td>
</tr>
</tbody>
</table>
7. In the upper-right corner of the Untitled area, click **Recalculate**.

8. In the upper-right corner of the window, click **Save As**. The Save As dialog box opens.

9. In the Save As dialog box, enter **Sample Custom Benchmark**, then click **Save**.

10. In the upper-right corner of the Creating Custom Benchmarks window, click **Close**.
In Exercise 3 on page 16, you created a custom benchmark composed of several commonly used indexes. In this exercise, you’ll create a benchmark composed of similar Morningstar indexes with the same weights. The benefit of using Morningstar indexes is that all users have constituent rights to these indexes. Also, having a second benchmark can offer a unique perspective on a model portfolio.

Do the following:

1. On the header, click the Create icon, then select Custom Benchmark. The Creating Custom Benchmarks window opens.

2. In the upper-left corner of the Untitled area, click the Add icon. The Search dialog box opens.
3. In the **Search** field, type **Morningstar US Market TR USD.**

4. In the search results, **click** that index. The Search dialog box closes and Morningstar US Market TR USD is added to the list in the Untitled area.

5. Repeat **step 2 through step 4** to **add** each of the following indexes:
   - Morningstar Gbl Ex US PR USD, and
   - Morningstar US Growth TR USD
   - Morningstar US Trgt Value TR USD
   - Morningstar Mod Agg Tgt Risk TR USD
   - Morningstar US Treasury TR USD.

   **Note:** Allow time for each index to load before adding the next.

6. In the Weight column, change the **weight** of each index as shown in the following table:

   **Note:** Press **Enter** after each entry to move to the next row.

<table>
<thead>
<tr>
<th>Index Name</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morningstar US Market TR USD</td>
<td>40</td>
</tr>
<tr>
<td>Morningstar Gbl Ex US PR USD</td>
<td>20</td>
</tr>
<tr>
<td>Morningstar US Growth TR USD</td>
<td>5</td>
</tr>
<tr>
<td>Morningstar US Trgt Value TR USD</td>
<td>5</td>
</tr>
<tr>
<td>Morningstar Mod Agg Tgt Risk TR USD</td>
<td>25</td>
</tr>
<tr>
<td>Morningstar US Treasury TR USD</td>
<td>5</td>
</tr>
</tbody>
</table>
7. In the upper-right corner of the Untitled area, click Recalculate.

8. In the upper-right corner of the window, click Save As. The Save As dialog box opens.

9. In the Save As dialog box, enter Morningstar Indexes Benchmark, then click Save.

10. In the upper-right corner of the window, click Close.
Exercise 5: Import a set of custom benchmarks

Another way to create a custom benchmark is to import a set of custom benchmarks. In this exercise, you will import the following custom benchmarks from Microsoft Excel:

- Moderate Custom Benchmark,
- Aggressive Custom Benchmark, and
- Conservative Custom Benchmark.

Do the following:

1. Download the Excel file for this exercise.
2. Hover the cursor over the Menu, then select Import. The Import page opens.

Note the highlighted selections.
3. From the Select File Type menu, select Custom Benchmark.

4. Click Upload File.

5. On your computer system, locate and double-click CustomBenchmarks.xlsx (the file you just downloaded). The Import page opens, displaying mapping options.
6. In the Column Mapping area, use the pull-down menus to make a selection for each Unmapped column. Each unmapped column must correspond to a column in the Excel spreadsheet. A selection for each column is required.

7. In the Exclude Header Row field, select First 1 row.

8. In the Weight Format area, select the option for Percentage.

9. Click Preview Data.

10. From the Preview page, click Preview Data Section under the Custom Benchmark section.
11. Select the **Custom Benchmarks** tab.

![Custom Benchmarks tab](image)

12. To select all three custom benchmarks, click the circle to the left of **New Custom Benchmarks**.

![New Custom Benchmarks](image)

13. Click **Import**. A notification dialog box opens.

14. In the upper-right corner, click the X to close the dialog box.

![Good news, your custom benchmark has (have) imported successfully. To see your custom benchmark in action go to the Portfolio Workbook. To import another custom benchmark, select your File Type and click Upload.](image)
15. Hover the cursor over Menu, then select Your Files > Custom Benchmarks. The Custom Benchmarks page opens.
In this exercise, you will apply two custom benchmarks to the Income ETFs Portfolio. They will then be available to use for comparison when analyzing the model portfolio.

Exercise 6: Apply custom benchmarks to a model portfolio

Do the following:

1. On the header, hover the cursor over Menu, then select Model Portfolios. The Model Portfolios page opens.

2. On the Model Portfolios page, hover the cursor over the Income ETFs Portfolio row. The Actions icon appears to the right.
3. From the **Actions** menu, select **Settings**. The Model Portfolio Settings window opens.
4. On the left side of the window, select **Calculation**. The Calculation fields appear in the empty area.

5. Click the **Benchmark 1** field. The Benchmark 1 menu opens.

6. Select **User Created > Custom Benchmarks > Sample Custom Benchmark**.

7. Click the **Benchmark 2** field. The Benchmark 2 menu opens.

8. Select **User Created > Custom Benchmarks > Morningstar Indexes Benchmark**.

9. In the upper-right corner of the window, click **Save**. The window closes.
Not every chart and table support the display of benchmarks. Of the charts and tables that can display benchmarks, some can display only one at a time, while others can display both simultaneously. To learn which charts and tables are capable of displaying benchmark(s) and which benchmark(s) are displayed by default, please read Displaying Benchmarks in Client Accounts.

In this exercise, the Morningstar Sector allocation of the Income ETFs Portfolio will be compared to the Morningstar Indexes Benchmark.

Do the following:

1. The Model Portfolios page should still be open. Click Income ETFs Portfolio. The “Select a workbook to view the model portfolio” dialog box opens.

2. Click Model Portfolios. The Model Portfolios workbook opens, displaying Income ETFs Portfolio in the Grid.

Exercise 7: Compare the Morningstar Sector allocations of a model portfolio and a benchmark
3. In the **Model Portfolios** workbook, click **Income ETFs Portfolio**. The Analytical View opens from the right.

4. Select the **Allocation** tab. In the Allocation chart, both the model portfolio and Benchmark 1 allocation data is displayed by default. The Historical Allocation chart displays data for only the model portfolio.

   Note: To see the donut charts for both the model portfolio and its benchmark, you might need to expand the Holdings Analysis chart or widen the browser window.
5. By default, the Allocation chart shows the asset class allocation of the Income ETFs Portfolio and its assigned Benchmark 1 as a donut chart or charts. To display Morningstar Sectors as a horizontal bar chart, do the following:

A. Click the **Component Settings** icon, then select **Grouping > Morningstar Sector**. The Component Settings menu is displayed again.

B. Select **Data View > Horizontal Bar Chart**.

Note: The highlighted selections.
C. **Click away** from the Component Settings menu to close it.

![Analytical View](image)

The benchmark is represented by a vertical line superimposed on the bars representing the Morningstar Sectors.

6. To display Benchmark 2 (Morningstar Indexes Benchmark), click the **Component Settings** icon, then select **Benchmark > Portfolio Benchmark 2**.

Note that you can select Portfolio Benchmark 1 or Portfolio Benchmark 2, but not both.
7. **Click away** from the Component Settings menu to close it. Note the Benchmark 2 sector allocations and **compare** them to the model portfolio.
Some charts and tables can display two benchmarks at the same time. In this exercise, you will do that in the Historical Return chart.

Do the following

1. Select the **Performance** tab and make sure **Income ETFs Portfolio** is still selected.

2. In both Performance charts (Investment Growth and Historical Return), note that benchmark names are displayed in the legend and in the chart.
   
   ![Note: The legend can be displayed at the top of the chart or on the right, depending on the width of your screen and/or the Morningstar Direct window.]

3. To better focus on the Historical Return chart, expand it.
A chart capable of displaying both benchmarks also includes an option to hide one or both.

Do the following:

1. The Historical Return chart displays both benchmarks by default, but one or both can be hidden. To display only Benchmark 1 (Sample Custom Benchmark), click the Component Settings icon, then select Benchmark 2 > No Benchmark.

2. Click away from the Component Settings menu to close it. Now the Morningstar Indexes Benchmark is hidden.

In what months (if any) did the model portfolio outperform the benchmark?

Did the benchmark experience a significant downturn at any time in the past year? If so, how did the model portfolio perform during that time?

What is your overall assessment of the model portfolio’s returns over the past year, compared to Sample Custom Benchmark?
Suppose you want to use the Sustainability Ratings Analysis chart to compare Income ETFs Portfolio to both benchmarks simultaneously. Unfortunately, the Sustainability Ratings Analysis chart can display only one benchmark at a time, and by default, it displays Benchmark 1 (in this case, Sample Custom Benchmark).

However, when a second instance of the Sustainability Ratings Analysis chart is created, each instance can display a different benchmark.

Do the following:

1. In the Analytical View of Income ETFs Portfolio, on the Tabs bar, select New Tab. A new tab opens. It is named Untitled 1 and displays no charts, tables, or research tools. Also, the Edit panel automatically opens.

2. In the Edit panel, scroll down to the Sustainability area. Drag Sustainability Ratings Analysis from the Edit panel and place it in the empty area of the Analytical View.
3. To create a second instance of the chart, drag **Sustainability Ratings Analysis** from the Edit panel and place it to the right of the existing chart.

4. At the top of the Edit panel, click **Done** to close it.

   Two instances of the Sustainability Ratings Analysis chart are displayed. Note that each instance displays the same data—Income ETFs Portfolio and Sample Custom Benchmark.

   ✔️ Note: To see both charts in full, you might need to widen your browser window.
5. In the right chart, click the **Component Settings** icon, then select **Benchmark > Portfolio Benchmark 2**.

6. **Click away** from the Component Settings menu to close it.

   **Note** the benchmark and account information in the legend.
7. (Optional) If you want to save the new tab (Untitled 1), you must save the tab and then use Save As to save the workbook. Do the following:
   A. On the Tabs bar, **hover the cursor** over **Untitled 1**.
   B. From the menu, select **Rename**.
   C. Name the tab **My Custom Tab**.
   D. To save the workbook, **hover the cursor** over the workbook name (**Client Accounts**).
   E. From the menu, select **Save As**. Note that Save cannot be selected.

8. Name the workbook **My Custom Workbook** and click **Save**
Using an Investment Policy

An investment policy serves as a blueprint for investment plans. How much should a client invest in equities versus fixed income versus commodities versus cash, or other asset classes? For the equity portion, how much will be in US stocks versus international stocks? Small/Mid-Cap versus Large Cap holdings? Value versus growth? An investment policy is designed to communicate this path.

Morningstar Direct for Asset Management allows you to create custom policies to document your firm’s various investment strategies. Not only can an investment policy be used to compare a model portfolio’s alignment to asset allocation lineups and performance outcomes, but also to conduct total portfolio attribution for a model portfolio to determine if adjustments should be made, either to asset classes or the managers selected.

This section covers the following topics and exercises:

► What is involved in creating an investment policy? (page 42)
► Exercise 11: Create an investment policy and its Level 1 asset classes and proxies (page 43)
► Exercise 12: Add a level for Morningstar Category (page 45)
► Exercise 13: Create the Level 2 asset classes and proxies (page 46)
► Exercise 14: Assign weights to the Level 2 asset classes (page 50)
► Exercise 15: Save an investment policy (page 51)
► Exercise 16: Create an investment policy from a custom benchmark (page 52)
► Exercise 17: Attach an investment policy to a model portfolio (page 55)
► Exercise 18: Compare the allocations of the model portfolio and the policy (page 57)
► Exercise 19: Use groupings to replicate a policy’s asset classes (page 59)
In this section, you will create an investment policy and apply it to a model portfolio. Global Broad Category, Morningstar Category, and Morningstar Institutional Category are the levels initially available for a policy, but custom data points can be used to build policies instead of (or in addition to) these.

Note: To create a policy based on custom data points (such as your firm’s own asset class lineups), the custom data point(s) must first be created from the Custom Data Management page. The investments used in model portfolios should also be mapped to these custom data points.

For example, a policy could be created only at the Morningstar Category level. If you don’t intend to conduct total portfolio attribution at the Global Broad Category Group level or otherwise use that asset classification for comparison purposes, then this asset class grouping does not need to be created as a policy level.

The overall steps to creating an investment policy are as follows:

1. Create an investment policy and select the Level 1 (in this case, Global Category) asset classes and proxies.
   
   Note: When creating a policy with only one level, go to step 4.

2. Add the Level 2 (in this case, Morningstar Category) asset class.

3. Select the Level 2 sub-asset classes and proxies.

4. Set the weights for the Level 2 asset classes. (These will automatically roll up to the Level 1 grouping.)

5. Save the investment policy.

Note: You can also create a third level in an investment policy.
In this exercise, you will create an investment policy with four Level 1 asset classes and their proxies, as shown in the following table:

<table>
<thead>
<tr>
<th>Level 1 Asset Class: Global Broad Category Group</th>
<th>Proxy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative</td>
<td>ICE BofAML US High Yield TR USD</td>
</tr>
<tr>
<td>Equity</td>
<td>S&amp;P 500 TR USD</td>
</tr>
<tr>
<td>Fixed Income</td>
<td>BBgBarc Aggregate Bond Treasury TR</td>
</tr>
<tr>
<td>Money Market</td>
<td>BBgBarc US Treasury Bill 1-3 Mon TR USD</td>
</tr>
</tbody>
</table>

Do the following:

1. In the header, click the Create icon, then select Policy. The Policy Editor window opens.

2. In the Asset Class Level area, from the Level 1 drop-down field, select Global Broad Category Group.
3. From the Name drop-down field, select Alternative.
4. In the Proxy column Search field, enter ICE BofAML US High Yield TR USD and select it from the search results.
5. Click the Add Asset Class icon. A new row appears.

6. From the Name drop-down field, select Equity.

7. In the Proxy column Search field, enter S&P 500 TR USD and select it from the search results.

8. Continue adding asset classes and their proxies, as described in this table:

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Proxy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Income</td>
<td>BBgBarc Aggregate Bond Treasury TR</td>
</tr>
<tr>
<td>Money Market</td>
<td>BBgBarc US Treasury Bill 1-3 Mon TR USD</td>
</tr>
</tbody>
</table>
Now that you have created the Level 1 asset classes and their proxies, you can create the Level 2 asset classes. Do the following:

1. In the Asset Class Level area, click **Add Level**. The Level 2 drop-down field appears.

2. From the Level 2 drop-down field, select **Morningstar Category**.

In the list to the right, the Level 1 asset classes (Name column) and proxies (Proxy column) are displayed. Each Level 1 shows a row in which you will create its Level 2 asset classes (sub-asset classes).
Exercise 13: Create the Level 2 asset classes and proxies

To create the Level 2 asset classes and proxies, do the following:

1. In the new row beneath Alternative, the empty field can be used as a Search field. Click the empty Select an Asset Class field and type United States Long-Short Credit. Select it from the search results.

2. In the Select a Proxy field, search for and select Morningstar Diversd Alt TR USD.

3. Under Equity, in the Select an Asset Class field, search for and select United States Large Growth.

4. In the Select a Proxy field, search for and select Russell 1000 Growth TR USD.

5. To add another asset class under Equity, click the Add Asset Class icon, then from the Add Asset Class menu, select Level 2 > Equity. A new row appears under Equity.
6. In the new row, search for and select **United States Large Growth**.

7. **Repeat step 6 four times** so Equity shows four rows to be filled in under United States Large Growth.

8. In the new rows, search for and select **asset classes** and their **proxies**, as shown in this table:

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Proxy</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States Large Value</td>
<td>Russell 1000 Value TR USD</td>
</tr>
<tr>
<td>United States Small Growth</td>
<td>Russell 2000 Growth TR USD</td>
</tr>
<tr>
<td>United States Small Value</td>
<td>Russell 2000 Value TR USD</td>
</tr>
<tr>
<td>United States Foreign Large</td>
<td>MSCI ACWI ex US Momentum NR USD</td>
</tr>
</tbody>
</table>

These are the rows you just created.

The Equity Name and Proxy columns should look like this.
9. In the Fixed Income column **Search** field, search for and select **United States High Yield Bond**.

10. In the **Select a Proxy** field, search for and select **BBgBarc Aggregate Bond Treasury TR**.

11. To add another sub-asset class under Fixed Income, click the **Add Asset Class** icon, then from the **Add Asset Class** menu, select **Level 2 > Fixed Income**.

12. Under Fixed Income, **repeat step 11** to add **one more asset class** (row).

13. In the unassigned Fixed Income rows, search for and select **asset classes** and their **proxies**, as shown in this table:

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Proxy</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States Intermediate-Term Bond</td>
<td>BBgBarc Aggregate Bond Treasury TR</td>
</tr>
<tr>
<td>United States Muni National Interm</td>
<td>BBgBarc US Municipal 1-15 Yr TR USD</td>
</tr>
</tbody>
</table>

The Fixed Income Name and Proxy columns should look like this.
14. In the Money Market column **Select an Asset Class** field, search for and select **United States Prime Money Market**.

15. In the Proxy column **Select a Proxy** field, search for and select **BBgBarc US Treasury Bill 1-3 Mon TR USD**.

<table>
<thead>
<tr>
<th>Name</th>
<th>Proxy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative Total</td>
<td>ICE BofAML US High Yield TR USD</td>
</tr>
<tr>
<td>United States Long-Short Credit</td>
<td>Morningstar Diversified Alt TR USD</td>
</tr>
<tr>
<td>Equity</td>
<td></td>
</tr>
<tr>
<td>United States Large Growth</td>
<td>S&amp;P 500 TR USD</td>
</tr>
<tr>
<td>United States Large Value</td>
<td>Russell 1000 TR USD</td>
</tr>
<tr>
<td>United States Small Growth</td>
<td>Russell 2000 TR USD</td>
</tr>
<tr>
<td>United States Small Value</td>
<td>Russell 2000 TR USD</td>
</tr>
<tr>
<td>United States Foreign Large Blend</td>
<td>MSCI ACWI ex US Momentum NR USD</td>
</tr>
<tr>
<td>Fixed Income</td>
<td></td>
</tr>
<tr>
<td>United States Long-Short Equity</td>
<td>BBgBarc Aggregate Bond Treasury</td>
</tr>
<tr>
<td>United States Intermediate-Term</td>
<td>S&amp;P 500 TR USD</td>
</tr>
<tr>
<td>United States Muni National Int'l</td>
<td>BBgBarc Municipal 1-15 Yr TR USD</td>
</tr>
<tr>
<td>Money Market</td>
<td></td>
</tr>
<tr>
<td>United States Prime Money Market</td>
<td>BBgBarc US Treasury Bill 1-3 Mon TR USD</td>
</tr>
</tbody>
</table>

The Money Market Name and Proxy columns should look like this.
Finally, assign a weight to each of the Level 2 asset classes. The weights must total 100.

- Note: You don’t need to enter weights for Level 1 because it automatically equals the sum of its Level 2 asset classes.

To assign the weights, do the following:

1. If the Weight % column is not visible at the right side of the window, do one of the following:
   - **zoom out**
     - Note: In Chrome or Internet Explorer, zoom out by pressing `<CTRL>+<->` one or more times until you can see the Weight % column at the right.
   - **widen your browser window,** or
   - **scroll right.**

2. In the Weight % column (to the right of the Proxy column), enter the weight of each Morningstar Category level (Level 2) as shown in the following table:
   - Note: The broad category weights update as you add weights to the Level 2 asset classes.

<table>
<thead>
<tr>
<th>Level 1 Asset Class: Global Broad Category Group</th>
<th>Level 2 Asset Class: Morningstar Category</th>
<th>Proxy</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative</td>
<td>United States Long-Short Credit</td>
<td>Morningstar Diversd Alt TR USD</td>
<td>10</td>
</tr>
<tr>
<td>Equity</td>
<td>United States Large Growth</td>
<td>Russell 1000 Growth TR USD</td>
<td>17.5</td>
</tr>
<tr>
<td></td>
<td>United States Large Value</td>
<td>Russell 1000 Value TR USD</td>
<td>17.5</td>
</tr>
<tr>
<td></td>
<td>United States Small Growth</td>
<td>Russell 2000 Growth TR USD</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>United States Small Value</td>
<td>Russell 2000 Value TR USD</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>United States Foreign Large Blend</td>
<td>MSCI ACWI ex US Momentum NR USD</td>
<td>20</td>
</tr>
<tr>
<td>Fixed Income</td>
<td>United States High-Yield Bond</td>
<td>BBgBarc Aggregate Bond Treasury TR USD</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>United States Intermediate-Term Bond</td>
<td>BBgBarc Aggregate Bond Treasury TR USD</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>United States Muni National Interim</td>
<td>BBgBarc Municipal 1-15 Yr TR USD</td>
<td>5</td>
</tr>
<tr>
<td>Money Market</td>
<td>United States Prime Money Market</td>
<td>BBgBarc US Treasury Bill 1-3 Mon TR USD</td>
<td>5</td>
</tr>
</tbody>
</table>
To save your policy, do the following:

1. From the top-left corner of the window, click the **Untitled** drop-down field, then select **Save As**.

2. In the text field, type **Sample Investment Policy**, then click **Save**.

3. An alert opens to tell you that the policy has been saved successfully. Click **Close**.

4. In the upper-right corner of the Policy Editor window, click the **X** to close it.

**Note:** Now that this policy is saved, you can easily create other policies by using the **Save As** command to give this policy a new name, then change the weights, proxies, categories, or a combination of all three.
Another way to create an investment policy is to create it from a custom benchmark. In this exercise, you will use the Aggressive custom benchmark, which you created in Exercise 5 on page 22.

Do the following:

1. From the header, select Create > Policy. The policy window opens.

2. Click Load Data, then select Custom Benchmarks > Aggressive Custom Benchmark > 01/01/2009.
3. Click **Level 1**, then from the menu, select **Morningstar Category**.

![Image of Morningstar Category level 1](image)

Note the highlighted selections.

4. In the **Name** column, from the **Select an Asset Class** menus, make a **selection** according to the following table:

   - Note: As you make each selection, that row moves into place in the list, so the next Select an Asset Class menu is at the top of the list.

<table>
<thead>
<tr>
<th>For this Proxy...</th>
<th>Select this Morningstar Category...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morningstar US Core Bd TR USD</td>
<td>United States Intermediate Core Bond</td>
</tr>
<tr>
<td>Morningstar US Corp Bd TR USD</td>
<td>United States Corporate Bond</td>
</tr>
<tr>
<td>Morningstar US Treasury TR USD</td>
<td>United States Money Market-Taxable</td>
</tr>
<tr>
<td>Morningstar US Inter Gov Bd TR USD</td>
<td>United States Intermediate Government</td>
</tr>
<tr>
<td>Morningstar US Mid Val TR USD</td>
<td>United States Mid-Cap Value</td>
</tr>
<tr>
<td>Morningstar Gbl Mkts xUS GR USD</td>
<td>United States Foreign Large Blend</td>
</tr>
<tr>
<td>Morningstar US Small Cap TR USD</td>
<td>United States Small Blend</td>
</tr>
<tr>
<td>Morningstar US Large Cap TR USD</td>
<td>United States Large Blend</td>
</tr>
<tr>
<td>Morningstar EM GR USD</td>
<td>United States Diversified Emerging Mkts</td>
</tr>
</tbody>
</table>
5. In the upper-left corner of the window, click **Untitled**. From the **Policy** menu, select **Save As**.

6. Name the policy **Aggressive Policy**, then click **Save**.
7. When the notification opens, click **Close**.
8. In the upper-right corner of the window, click to **X** to close it.
As you know, an investment policy describes the process to be used by a wealth manager in making investment decisions. The wealth manager should periodically review a model portfolio’s policy and monitor how well the portfolio is meeting its objectives. Applying a policy to a model portfolio makes it easy to use in such a review.

In this exercise, you will attach the Sample Investment Policy to the Income ETFs Portfolio.

Note: A policy can be attached to multiple model portfolios.

To attach an investment policy to a model portfolio, do the following:

1. From the Menu, select Model Portfolios. The Model Portfolios page opens.

2. On the Model Portfolios page, double-click Income ETFs Portfolio.
3. In the “Select a workbook to view the model portfolio” dialog box, select **Model Portfolios**. The Model Portfolios workbook opens, displaying the Grid.

   ![Select a workbook to view the model portfolio](image)

   Select this option.

4. Hover the cursor over the **Income ETFs Portfolio** row. The Actions icon appears. Click the **Actions** icon and select **Settings**. The Model Portfolio Settings window opens.

   ![Model Portfolio Settings](image)

   Note the highlighted selections.
5. On the left side of the window, select Calculation.

6. On the right side of the window, from the Policy menu, select Sample Investment Policy.

   Note: A policy can also be used as a benchmark. This saves the time of creating a new benchmark with the same holdings as the policy. If a policy is used as Benchmark 1, when the model portfolio is edited, the Editor window reflects data from the investment policy.

7. In the upper-right corner of the window, click Save. The window closes.

If a model portfolio is edited, the portfolio’s correlation to the policy could change. Comparing the portfolio to the policy might reveal disparities to be addressed.

In this exercise, you will examine the allocations of the portfolio against those of the policy.

Do the following:

1. In the Model Portfolios workbook, click the name Income ETFs Portfolio, select the Equity tab.
2. Expand the Allocation chart.
By default, the chart shows the Level 1 asset class allocations of the policy attached to the portfolio.

3. **Examine** the results.

   Note: Your results will differ from those shown in the screenshot.

   In your results, when comparing the model portfolio and the policy, in which sector(s) is the portfolio overweighted? In which is it underweighted?
4. **Collapse** the chart.

The policy’s groupings (or asset classes) provide additional lenses to examine a model portfolio. In the Holdings Analysis table, you cannot directly group holdings to match the policy’s groupings, but you can recreate them.

The supported groupings in the Holdings Analysis table are as follows:

- Global Broad Category
- Morningstar Category, and
- Morningstar Institutional Category.

The Holdings Analysis table can also reflect groupings based on custom data points created by you or your firm. The table supports up to five levels of grouping.

In this exercise, you will recreate an investment policy’s groupings in the Holdings Analysis table.

![Sample Investment Policy](chart)

**Exercise 19: Use groupings to replicate a policy’s asset classes**

Note: To refresh your memory of the structure of the investment policy, review Exercise 14 on page 50.
Do the following:

1. In the Model Portfolio workbook, make sure the Income ETFs Portfolio is selected.
2. Select the Holdings tab.
   
   In the Holdings Analysis table, note that the Sample Custom Benchmark is displayed.

3. Click the Component Settings icon, then select Grouping > Global Broad Category.
   
   The Grouping menu reappears.
4. Click **Select Grouping** again, then select **Morningstar Category** (the policy’s Level 2 Asset Class).

![Grouping menu with Morningstar Category highlighted]

The Grouping menu reopens. The selected groupings are listed in the order in which you selected them.

![Grouping menu with Global Broad Category and Morningstar Category highlighted]

5. Click **Done**.

6. Click the **Component Settings** icon to close the menu.

   The model portfolio’s holdings are now displayed according to the assigned groupings (matching the groupings in the policy).

7. **Scroll right** to see more of the Holdings Analysis table.
Editing a Model Portfolio

Suppose you are reviewing the Moderate model portfolio and you discover that, due to changes in the market and economic conditions in the US and abroad, changes need to be made to the weightings in the model portfolio. How can a model portfolio be edited to add, remove, or change holdings, and to add an additional date to the same model portfolio?

This section covers the following:

- Exercise 20: Create a new portfolio date (page 63)
- Exercise 21: Remove a holding from a model portfolio (page 65)
- Exercise 22: Add a holding to a model portfolio (page 66)
- Exercise 23: Change a model portfolio’s identifier (page 68)
- Exercise 24: Use an identifier to import data to an existing model portfolio (page 69)
- What is embedding and how is it used in a model portfolio? (page 75)
- Exercise 25: Import data for multiple model portfolios (page 75)
- Exercise 26: Build a model portfolio based on other model portfolios (page 78)
- What happens when I delete a child portfolio object (or one of its holdings)? (page 80)
- Exercise 27: Delete a model portfolio (page 80)
You might need to periodically revise the holdings or their weights in a model portfolio. Before making such a change to the model portfolio, be sure to create a new portfolio date. This ensures that you can look back at the previous date’s holdings and weights.

Do the following:

1. In the Model Portfolios workbook Grid, hover the cursor over Moderate. The Actions icon appears.
2. Click the Actions icon and from the menu, select Edit Holdings. The Editing Holdings window opens.
3. In the list of holdings, click the **Component Settings** icon, then select **Portfolio Date** > **Create From Existing Date**. A new menu opens.

4. **Select the date** you want to use as the basis of the new date. In this case, only one date is available (03/31/2012). A new menu opens.

5. In the **Holdings Date** field, **type yesterday’s date**.

   **Note:** In the Retain From 03/31/2012 field, leave Shares selected. The other option for this field is Weights.

6. Click **Done**.

7. In the upper-right corner of the Editing Holdings window, click **Save**. Don’t close the Editing Holdings window.
In this exercise, you will remove a holding from the Moderate model portfolio.
The Editing Holdings window should still be open.

1. Hover the cursor over AMG Yacktman I. The Actions icon appears to the right of the name.
2. Click the Actions icon and select Remove from portfolio. The holding is removed from the model portfolio.

Note that the weight of AMG Yacktman I (15.00) has been assigned to Unallocated Cash.
In Exercise 21 on page 65, you removed AMG Yacktman I from Joe Franklin model portfolio. In this exercise, you will add iShares Core S&P 500 ETF to take its place.

The Editing Holdings window should still be open. Do the following:

1. In the upper-left corner of the Editing Holdings window, click the Add icon. The Add dialog box opens.

2. In the Add field, enter IVV. The results list displays more than one selection for iShares Core S&P 500 ETF. Select the one traded on NYSE ARCA. The Add dialog box opens.
iShares Core S&P 500 ETF is now listed as a holding. Its weight displays a dash (—).

3. In the iShares Core S&P 500 ETF row, click the dash in the Weight column.

4. Enter 15.00 (the weight currently assigned to Unallocated Cash and previously assigned to AMG Yacktman I).

5. In the upper-right corner of the window, click Save. Then click Close.
When you create a model portfolio, a unique identifier is automatically generated as a string of letters and numbers. You can use the identifier when updating a model portfolio, but it’s a good idea to first change it to meaningful text.

For example, suppose you need to update a model portfolio on an annual basis to reflect the date, current market conditions, and so on. You could modify each holding manually, but by using an identifier, you can make the changes in an Excel spreadsheet. When you import the spreadsheet, the identifier directs the data to the existing model portfolio with the same identifier.

To change a model portfolio’s identifier, do the following:

1. In a Model Portfolios workbook, hover the cursor over the Moderate row. The Action icon appears.
2. Click the Action icon, then from the menu, select Settings. The Settings window opens.
3. The General tab should be selected. In the Identifier field, enter unique text. In this case, enter MODERATE1.
4. Click Save. The Settings window closes.

Now you can use the identifier when importing an updated Excel file for the model portfolio with that identifier.
In this exercise, you will import an Excel file containing updated data for the Moderate model portfolio. The updated files differs from Moderate in the following ways:

- Two funds (American Funds Growth Fund of Amer A and American Funds Ltd-Term Tx-Ex Bd A) have been added.
- One fund (Dodge & Cox Income) has been removed.
- The funds’ weights have changed.
- The identifier assigned to the Moderate model portfolio (MODERATE1) is included, and
- The date (originally 3/31/2012) has been updated.

The data to be imported is shown here.

<table>
<thead>
<tr>
<th>Account Number</th>
<th>Account Name</th>
<th>Date</th>
<th>Ticker</th>
<th>Holding Name</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODERATE1</td>
<td>Moderate</td>
<td>7/31/2019</td>
<td>AEPGX</td>
<td>American Funds Europacific Growth A</td>
<td>20</td>
</tr>
<tr>
<td>MODERATE1</td>
<td>Moderate</td>
<td>7/31/2019</td>
<td>AMCPX</td>
<td>American Funds AMCAP A</td>
<td>12.5</td>
</tr>
<tr>
<td>MODERATE1</td>
<td>Moderate</td>
<td>7/31/2019</td>
<td>AMRNX</td>
<td>American Funds American Mutual A</td>
<td>12.5</td>
</tr>
<tr>
<td>MODERATE1</td>
<td>Moderate</td>
<td>7/31/2019</td>
<td>ANWPX</td>
<td>American Funds New Perspective A</td>
<td>12.5</td>
</tr>
<tr>
<td>MODERATE1</td>
<td>Moderate</td>
<td>7/31/2019</td>
<td>AWSHX</td>
<td>American Funds Washington Mutual A</td>
<td>5</td>
</tr>
<tr>
<td>MODERATE1</td>
<td>Moderate</td>
<td>7/31/2019</td>
<td>CGIAX</td>
<td>American Funds Intl Gr and Inc529A</td>
<td>5</td>
</tr>
<tr>
<td>MODERATE1</td>
<td>Moderate</td>
<td>7/31/2019</td>
<td>CWGIX</td>
<td>American Funds Capital World GR&amp;I</td>
<td>10</td>
</tr>
<tr>
<td>MODERATE1</td>
<td>Moderate</td>
<td>7/31/2019</td>
<td>IVV</td>
<td>iShares Core S&amp;P 500 ETF</td>
<td>12.5</td>
</tr>
<tr>
<td>MODERATE1</td>
<td>Moderate</td>
<td>7/31/2019</td>
<td>AGTHX</td>
<td>American Funds Growth Fund of Amer A</td>
<td>5</td>
</tr>
<tr>
<td>MODERATE1</td>
<td>Moderate</td>
<td>7/31/2019</td>
<td>LTEBX</td>
<td>American Funds Ltd-Term Tx-Ex Bd A</td>
<td>5</td>
</tr>
</tbody>
</table>

Note: You imported an Excel file earlier Exercise 2 on page 10. This procedure is the same except the identifier directs the imported data to the Moderate model portfolio.
Do the following:

1. Download the Excel file for this exercise.
2. In the upper-left corner of the Home page, hover the cursor over Menu and select Import. The Import page opens.

3. At the left side of the Import window, the Upload File option is selected. From the Select File Type menu, select Model Portfolios. To the right of the Select File Type menu, the Upload File icon appears.
4. Click **Upload File**. A navigation window opens.

5. Locate and **double-click ModerateUpdate.xls**. On the Import page, the import options are displayed.

6. In the Column Mapping area, make a **selection** from each Unmapped menu. Each unmapped menu selection corresponds to a column in the Excel spreadsheet. A selection for each column is required. Be sure to select **Model Portfolio Number** in the first column.

   - **Note**: The rightmost Mapping columns might not be displayed. **Scroll right** until you can see the column displaying weights.
7. In the upper-right corner, click **Preview Data**. File uploading begins.
8. Under **Model Portfolios**, click **Preview Data Section**.

9. Select the **Model Portfolios** tab.
10. Click the circle next to MODERATE1, then click Import.

11. A message opens, announcing the account was imported successfully. Click Portfolio Workbook. The “Select a portfolio list to view in this workbook” dialog box opens.

12. In the “Select a portfolio list to view in this workbook” dialog box, select All Model Portfolios. The Model Portfolios workbook opens.
13. In the Grid, click Moderate, then select the Holdings worksheet.

In the Holdings Analysis table, note the following:

- Two funds (American Funds Growth Fund of Amer A and American Funds Ltd-Term Tx-Ex Bd A) have been added.
- One fund (Dodge & Cox Income) has been removed, and
- The funds’ weights have changed.

By default, a table or chart always displays the data from the most recent date.
In addition to its holdings, a model portfolio can contain other portfolio objects. Adding a portfolio object to a model portfolio is called “embedding.” The model portfolio is the “parent.” The portfolio object added to the parent is the “child.”

When embedding objects in the Portfolio Editor, all custom portfolio objects are available. Five levels of nesting are supported.

Before you can go on to the embedding exercise, you need to import an Excel file.

In Exercise 24 on page 69, you used an identifier to import data directly into an existing model portfolio. In this exercise, you will use an identifier to create two new model portfolios. In the following image, note that two model names are listed in the Model Name column.

<table>
<thead>
<tr>
<th>Model Name</th>
<th>Date</th>
<th>Identifier</th>
<th>Holding Name</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model2</td>
<td>3/31/2012</td>
<td>FDCAX</td>
<td>Fidelity Capital Appreciation</td>
<td>10</td>
</tr>
<tr>
<td>Model2</td>
<td>3/31/2012</td>
<td>VSEQX</td>
<td>Vanguard Strategic Equity Inv</td>
<td>15</td>
</tr>
<tr>
<td>Model2</td>
<td>3/31/2012</td>
<td>POGRX</td>
<td>PRIMECAP Odyssey Growth</td>
<td>20</td>
</tr>
<tr>
<td>Model2</td>
<td>3/31/2012</td>
<td>RFI</td>
<td>Cohen &amp; Steers Tot Ret Realty</td>
<td>20</td>
</tr>
<tr>
<td>Model2</td>
<td>3/31/2012</td>
<td>BST</td>
<td>BlackRock Science and Technology</td>
<td>25</td>
</tr>
<tr>
<td>Model2</td>
<td>3/31/2012</td>
<td>SKYY</td>
<td>First Trust Cloud Computer ETF</td>
<td>10</td>
</tr>
<tr>
<td>Model3</td>
<td>7/31/2013</td>
<td>VWELX</td>
<td>Vanguard Wellington</td>
<td>20</td>
</tr>
<tr>
<td>Model3</td>
<td>7/31/2013</td>
<td>GLRBX</td>
<td>James Balanced Golden Rainbow</td>
<td>20</td>
</tr>
<tr>
<td>Model3</td>
<td>7/31/2013</td>
<td>PRSIX</td>
<td>T. Rowe Price Personal Strategies</td>
<td>20</td>
</tr>
<tr>
<td>Model3</td>
<td>7/31/2013</td>
<td>HABDX</td>
<td>Harbor Bond</td>
<td>20</td>
</tr>
<tr>
<td>Model3</td>
<td>7/31/2013</td>
<td>FSHBX</td>
<td>Fidelity Short-Term Bond</td>
<td>20</td>
</tr>
</tbody>
</table>

The data will be imported as separate model portfolios—Model2 and Model3.

Do the following:

1. **Download** the Excel file for this exercise. This file (Combination.xls) lists aggressive investments and conservative investments, named Model2 and Model3, respectively.
   
   - Note: You will change the names after importing.

2. **Import** it as a model portfolio, following the steps in Exercise 2 on page 10.
3. In step 9 on page 11, the window should look like this:

When you're finishing importing, the Grid in the Model Portfolios workbook should include Model2 and Model3.

4. Model2 and Model3 are generic names, which are not useful. You can rename them in the Grid. In the Model2 row, hover the cursor over the Action icon.

5. From the menu, select Edit Holdings. The Editing Holdings window opens.
6. In the upper-right corner of the Editing Holdings window, click Rename. The Rename portfolio dialog box opens.

7. Type Conservative and click Rename.

8. In the Editing Holdings window, click Save and Close.

9. Repeat step 4 through step 7, renaming Model3 as Aggressive.

10. In the Editing Holdings window, click Save and Close.
Exercise 26: Build a model portfolio based on other model portfolios

Suppose the following:

- You need to create a moderate model portfolio, and
- You have access to conservative and aggressive model portfolios.

Instead of adding holdings manually, you will create a new model portfolio and embed the Conservative and Aggressive model portfolios.

1. On the header, click the Create icon and select Model Portfolio. The Creating Model Portfolios window opens.

2. In the upper-left corner, click the Add icon. The Add dialog box opens.

3. Select From User Created Portfolios > Model Portfolios > select Conservative model portfolio.

4. Click away from the menu to close it.
5. Add the **Conservative** model portfolio by repeating step 2 through step 4.
   Note the list of holdings.

6. Set the **weight** of each embedded model portfolio to **50**.

7. In the upper-right corner, click **Save As**.
8. Name the new model portfolio **Moderate Combination** and click **Save**.
9. In the upper-right corner, click **Close**.
You have embedded two model portfolios in a new model portfolio named Moderate Combination. The model portfolios have the following relationship:

- Moderate Combination is the parent, and
- Conservative and Aggressive are the children.

When you delete a child, a message opens, requiring confirmation before continuing.

In the following illustration, if you click Delete, the Conservative model portfolio is deleted from your system and from all portfolio objects (parents) it is held by.

When you delete a holding from a child portfolio object, the holding is deleted. No confirmation message opens.

At some point in time, a model portfolio might outlive its usefulness. In this exercise, you will delete that model portfolio.

Do the following:

1. In the Model Portfolios workbook Grid, hover the cursor over Moderate. The Actions icon appears.
2. Click the Actions icon and select Delete. An alert dialog box opens, where you can cancel or continue with the deletion.

Exercise 27: Delete a model portfolio
3. Click **Delete**. The dialog box closes.

![Delete Portfolio dialog box]

Select this option.

![Model Portfolios table]

Moderate is no longer listed in Model Portfolios.