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In this workshop, you will learn how to leverage some of the key features in Morningstar Direct® in the following lessons:

- Reviewing stock sector performance
- Evaluating asset flow data in Morningstar Direct
- Identifying funds with consistent top performance
- Using portfolio attribution to understand performance
- Managing a portfolio in Morningstar Direct
- Using Presentation Studio to compare model portfolios

In this workshop, you will work in several Morningstar Direct modules.
Overview

You can sometimes find and present the same information in Morningstar Direct in more than one way. How you deliver the information is both a matter of choice, and the skills you have with the software. This scenario allows you to find the same set of data multiple ways, as well as present it in more than one fashion.

Scenario

As part of a review of fund flow data, your manager has asked you to identify how the various Morningstar stock sectors have performed during the trailing one-year period. Your manager, however, did not specify whether this information should be presented graphically, or as a set of data.

Solution

In Presentation Studio, you will illustrate stock sector performance by creating a workbook template and including the Markets Periodic Table. You will need to customize it to show the Morningstar Stock Sectors and only the trailing one-year time period.

In the event your manager prefers to see this information as a data set, you will also use the Workspace module to create a list of indexes tied to the stock sectors, and save the list in a view showing returns data.
You need to know how the various Morningstar stock sectors have performed over the past year, and show this as a ranking. First, you must decide what will represent the stock sectors. In Morningstar Direct, no such item as “Stock Sector returns” exists natively. Instead, you need find a set of indexes that tracks these sectors.

The Presentation Studio module has a component that allows you to display sector index data. You could create either a Workbook or Factsheet template to display this report; you will have to decide which version of the report you think looks better. The following instructions guide you through the process of creating a workbook template to show the trailing one-year performance for the Morningstar stock sectors.

To create a Presentation Studio workbook template, do the following:

1. If a Presentation Studio template is open, close it.
2. From the left navigation pane, select the Presentation Studio module.
3. Click the Workbook icon. The Create New Workbook dialog box opens.
4. The option for New Workbook should be selected. Click OK. The Investments: Settings dialog box opens.

To click the Workbook icon, you must first select the Presentation Studio module. This option should be selected automatically.
5. Click **Add**. The Find Investments dialog box opens.

Be sure to select **Ticker** from this drop-down field before entering a ticker in the search field.

6. From the **Find By** drop-down field, select **Ticker**.
7. In the search field, type **SLADX**, then click **Go**. Selected American Shares D appears in the Available Records list.
8. To select the fund, **double-click its name** (Selected American Shares D). Selected American Shares D appears in the Selected Records list.

When you double-click a fund name in the Available Records list, it appears here (the Selected Records list).
Reviewing Stock Sector Performance

9. Click **OK** to close the Find Investments dialog box.
10. Click **OK** to close the Investments: Settings dialog box. The workbook template opens in a new window.

Now that the blank report template has been created, you can add a component to depict the stock sectors’ performance. Do the following:

1. If the Home tab at the top of the Presentation Studio window is not selected, **select** it.
2. From the toolbar, from the **Chart** drop-down field, select **Markets**. A set of Markets charts opens to the right.
3. Drag the **Markets Periodic Table** to a blank space in the template.

Exercise 2: Adding the Markets Periodic Chart to the template

Note the highlighted selections
Exercise 3: Modifying the Markets Periodic Chart

By default, the Markets Periodic Chart shows the performance of four different US-equity-based indexes for the trailing five-year period. You need to do the following:

- select a different set of indexes, and
- change the time period being to the trailing one-year period.

To accomplish these tasks, do the following:

1. In the bottom-left corner of the Presentation Studio window, click Chart Settings. The Chart Settings window opens.
2. From the Index Group drop-down field, select Morningstar US Sector Indexes. The component shown in the template updates to reflect this selection.
3. Click **Chart Settings** again, and this time click the **Setup** button in the Time Period field. The Time Period Setup dialog box opens.

4. Because you want to depict only one time period on the chart, start by removing all time periods. Near the bottom of the Time Period Setup dialog box, click the **Remove All** button.
5. From the **Start Date** drop-down field, select **1 Year Ago**. The End Date should still display **Last Month End**.
6. To the right of the Number of Columns field, click **Add Column(s)**.

7. Click **OK**. The Time Period Setup dialog box closes. In the template, the Markets Periodic Table component updates to reflect this choice.
Exercise 4: Adding a header to the report

The report now reflects both the data and the time period you want. You could generate a PDF from here and send it to your manager, but a header at the top of the report would help someone who wasn’t involved in creating it understand what the report is depicting.

To add a header to the report, do the following:

1. At the top of the Presentation Studio window, select the Format tab.
2. From the toolbar, from the Header drop-down field, select Insert Header. A header is inserted at the top of the page.
3. From the toolbar, from the View drop-down field, select Snap to Grid to turn on this feature.
4. Use your mouse to drag the bottom border of the header so the header takes up just 1.00 inch of space.
Exercise 5: Adding a name to the header

To add a report name to the header, do the following:

1. From the toolbar, from the **Divide Page** drop-down field, select the **Two Cell** option with the vertical divider. The header area now has two cells. You will place the report title in the left cell, and the time period in the right cell.

2. If header cell on the left is not selected, select it. From the toolbar, from the **Text** drop-down field, select **Custom Text**.
3. **Double-click** the left header cell and type **Morningstar Stock Sector Returns**.
4. Select the **text** you just typed by pressing `<CTRL>+<A>`. The text is now highlighted.
5. From the toolbar, from the **Font Size** drop-down field, select 24.

When entering a time period in the header, if you use a dynamic date here rather than manually typing the date, the report can be updated without you having to manually change the date.

To enter a time period for the report without having to manually type the date, do the following:

1. Select the **header cell** to the right of the report title cell.
2. From the toolbar, from the **Text** drop-down field, select **Dynamic Text... Time Period**. The time period for the template is entered in the cell. Note, however, that this is not the same date being depicted in the component.
3. To change the date in the header, select the **Home** tab at the top of the Presentation Studio window.
4. Click the **Workbook** icon. The Workbook Settings: Data window opens.
5. The Data tab should be selected. From the **Start Date** drop-down field, select **1 Year Ago**.
6. Click **OK**. The Workbook Settings: Data window and the time period date in the header updates to reflect your choices.
7. Click the **date** in the right header cell. It changes to display [Time Period].
8. Select the date by pressing `<CTRL>+<A>`. [Time Period] is now highlighted.
9. Select the **Format** tab, then from the **Font Size** drop-down field, select **24**.
10. Click outside the cell to see the date displayed in the cell.
When you save a Presentation Studio template, you have the following choices:

- You can save your work as a template. This method allows you to re-use the template for any investment(s) you want in the future. A report based on a template does not reflect the investment(s) you selected at the time you created the template. The downside to saving a Presentation Studio file as a template is that you will always have to select an investment when opening the file. This will add some extra clicks to the process of editing the report.

- You can save your work as a report. The file will open much faster because the system already knows what investment(s) should be associated with the report. The downside to saving your Presentation Studio file as a report is that if you do want to change the investments being depicted on the report, you will have to manually select them.

To see this file as a PDF and save it as a report, do the following:

1. From the toolbar at the top of the Presentation Studio window, from the PDF drop-down field, select **Full Report**.

2. From the toolbar at the top of the Presentation Studio window, from the gear drop-down field, select **Save**. The Presentation Studio dialog box opens.
3. In the **Workbook Name** field, type **Morningstar Stock Sector Returns**.

4. Click **Save**.
5. Close the Presentation Studio window.
The Presentation Studio report is a great asset for depicting the performance of stock sectors over the past year, but it is possible your manager will ask to see the information as a list, instead of the graphic representation you created in Presentation Studio.

In order to make the stock sector data available as a list, you will use the Workspace module. You first have to find the correct indexes, select them, and then save them to a list. Do the following:

1. In the left navigation pane, select the **Workspace** module, click the **Search Criteria** folder to expand it, then select the **My Search Criteria** page.
2. From the toolbar above the grid, from the **New** drop-down field, select **Advanced Search**. The search by criteria dialog box opens.

---

Exercise 8: Saving the stock sector indexes to a list

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[Image]: Exercise 8: Saving the stock sector indexes to a list

---

Exercise 8: Saving the stock sector indexes to a list

---

[Image]: Exercise 8: Saving the stock sector indexes to a list
3. **Create** a search with the following criteria:

   - **Note:** Selecting the **Alphabetically** button in the lower-left corner of the dialog box can help find the criteria more quickly.

<table>
<thead>
<tr>
<th>Rel</th>
<th>Field Name</th>
<th>Operator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>---</td>
<td>Series Name</td>
<td>=</td>
<td>Morningstar US Sector</td>
</tr>
<tr>
<td>And</td>
<td>Return Type</td>
<td>=</td>
<td>Total Return</td>
</tr>
<tr>
<td>And</td>
<td>Base Currency</td>
<td>=</td>
<td>US Dollar</td>
</tr>
</tbody>
</table>

4. After entering the criteria, operators, and values, click **OK**.

5. From the header row at the top of the grid view, click the **checkbox** to the left of the **Name** column. All rows from the search should now be selected.

6. **Uncheck** the box next to the following indexes:

   - Morningstar US Bas Mat & Energy TR USD
   - Morningstar US Commn Svc Capped TR USD
   - Morningstar US Cyclcl Sup Sec TR USD
   - Morningstar US Dfnsve Sup Sec TR USD
   - Morningstar US Energy Capped TR USD
   - Morningstar US Fin Svc & RE TR USD
   - Morningstar US Snstve Sup Sec TR USD, and
   - Morningstar US Tech & Commun Svc TR USD.

7. **Confirm** all the following rows (11 in total) are still selected:

   - Morningstar US Basic Materials TR USD
   - Morningstar US Commun Svc TR USD
   - Morningstar US Consumr Cyclcl TR USD
   - Morningstar US Consumr Dfnsve TR USD
   - Morningstar US Energy TR USD
   - Morningstar US Financial Services TR USD
   - Morningstar US Healthcare TR USD
   - Morningstar US Industrial TR USD
   - Morningstar US Real Estate TR USD
   - Morningstar US Technology TR USD, and
   - Morningstar US Utilities TR USD.
8. From the toolbar above the grid view, from the **Action** drop-down field, select **Save As... Investment List**. The Save As dialog box opens.

![Image of the Action drop-down field with Save As... Investment List selected]

Use the highlighted selections to save your search as a list

9. In the **Name** field, type **Morningstar Stock Sectors**, then click **OK**.

![Image of the Save As dialog box with Morningstar Stock Sectors entered]

You can confirm the number of selected rows at the bottom of the window

Enter the name for the list here
10. From the **View** drop-down field, select **Returns (Month End)**. You can scroll right to see the values in the Total Return 1 Yr (Mo-End) USD column.

11. From the toolbar above the grid view, click the **Save** icon. (Saving ensures that the next time the list is opened, the Returns view is displayed by default.)
Evaluating Asset Flow Data in Morningstar Direct

The Asset Flows module in Morningstar Direct uses data from the SEC N-SAR form, as well as estimated data (provided by fund families to Morningstar) to understand changes in asset levels at the fund, category, strategy (active vs. passive), and firm levels. Not only can you see which items have net inflows vs. outflows, but you can also evaluate the size of the change relative to a fund itself, and measure investment trends as individuals and institutions adjust to market conditions.

Your manager is interested in learning about the impact to asset flows over the past year for non-sector-specific funds with significant exposure to the Energy sector. If a fund has a meaningful allocation to energy stocks and has underperformed in its category, did it also see large outflows as a consequence?

You will use the Workspace and Asset Flows modules to find the funds most likely to have been affected by their exposure to the Energy sector, and what the impact has been on the asset flows of those funds.
Exercise 9: Search for funds with high exposure to the Energy sector

To evaluate funds with meaningful exposure to the Energy sector that also underperformed in their category, you will search for funds that meet the following criteria:

- They were in the bottom quartile of their category during the past year, and
- They had meaningful exposure to the Real Estate sector during that time.

(Additionally, you will exclude funds in certain energy-related categories, because these funds would be expected to under-perform due to high exposure to this sector.)

Do the following:

1. In the left navigation pane, be sure the **Workspace** module is selected.
2. Click the **Search Criteria** folder to expand it, then select **My Search Criteria**.
3. From the toolbar above the grid view, from the **New** drop-down field, select **Advanced Search**. **Open End Fund**. The Search Criteria dialog box opens.
4. **Create** a search with the following criteria:

Note: Selecting the option button for *Alphabetically* in the bottom-left corner can help speed the search for various field names.

<table>
<thead>
<tr>
<th>Rel</th>
<th>Field Name</th>
<th>Operator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>--</td>
<td>Morningstar Category</td>
<td>Not=</td>
<td>Energy Limited Partnership</td>
</tr>
<tr>
<td>And</td>
<td>Morningstar Category</td>
<td>Not=</td>
<td>Equity Energy</td>
</tr>
<tr>
<td>And</td>
<td>Morningstar Category</td>
<td>Not=</td>
<td>Natural Resources</td>
</tr>
<tr>
<td>And</td>
<td>Domicile</td>
<td>=</td>
<td>United States</td>
</tr>
<tr>
<td>And</td>
<td>Oldest Share Class</td>
<td>=</td>
<td>Yes</td>
</tr>
<tr>
<td>And</td>
<td>Total Ret % Rank Cat 1 Yr (Mo-End)</td>
<td>&gt;</td>
<td>75</td>
</tr>
<tr>
<td>And</td>
<td>Equity Econ Sector Energy % (Net)</td>
<td>&gt;=</td>
<td>20</td>
</tr>
</tbody>
</table>

If you cannot find the criteria by category, select the *Alphabetically* option to look for them by name.
5. To save the search, from the toolbar near the top of the dialog box, click **Save As**. The Save As dialog box opens.
6. In the **Name** field, type **Energy**.

7. Click **OK**. The Save As dialog box closes.
8. Click **OK** again to close the Search dialog box and see your results.
Now that the search has revealed the funds with a significant exposure to the Real Estate sector that underperformed in their category, you can save these items to a list. With the funds saved as a list, you can see them in the Asset Flows module; you cannot open a saved search from Workspace in the Asset Flows module.

Do the following:

1. You should be looking at the results of your search in the Workspace module. To select all rows, click the box in the column header at the left. All rows are now selected.

2. From the Action drop-down field, select Save As… Investment List. The Save As dialog box opens.

3. In the Name field, type Energy Exposure.
4. Click OK.
5. When prompted to save your changes, click No. (This step simply ties the current data columns to the rows you’ve saved in your list.)
Exercise 11: Examining the asset flows for under-performing funds

Once you know the funds whose asset flows you want to evaluate, you can move to the Asset Flows module and begin the investigation.

Do the following:

1. From the left navigation pane, select the Asset Flows module. The Market Summary tab at the top is selected by default.
2. At the top of the Asset Flows pane, select the Workspace tab.
3. In the Saved Actions area, select the Inv. List tab.
5. Click the **1-Yr** column header to sort from best to worst.
6. Click the **1-Yr** column header again, to sort from worst to best.

7. To see the percentage of the fund’s assets represented by this inflow or outflow, click the **Organic Growth Rate (TTM)** column header to sort from best to worst.
8. To sort from worst to best, click the **Organic Growth Rate (TTM)** column header again.
Exercise 12: Adding context to the fund flow data

The fund with the largest outflow over the past year belonged to the Large Growth category. How do its outflows compare to other funds in this category? To see the outflows from a Morningstar Category, do the following:

1. Select the Market Summary tab at the top of the page.
2. Scroll down until you see the grouping for Morningstar Categories.
4. In the left pane, click **Funds**.
5. Be sure the **Sub-view** field reads **Estimated Net Flow... Estimated Net Flow (Current)**.

6. Click the **1-Yr** column header to sort from best to worst.
7. Click the **1-Yr** column header again, to sort from worst to best. How does the fund with the largest outflows here compare to the fund from Exercise 11?

   **Note:** In this view, funds are rolled up, and not broken out by share classes as when you were looking at funds from the list you saved.

8. **Close** any Asset Flow windows that are open.
To see how the outflows from this Large Growth fund compare to that of others at its fund family, do the following:

1. With the Market Summary tab selected, scroll to the top so you can see the Fund Families grouping.
2. Click Fidelity Investments. A new window opens.
3. In the left pane, click Funds.
4. From the **Sub-view** drop-down field in the upper-right corner of the dialog box, be sure **Estimated Net Flow (Current)** is selected.

5. Click the **1-Yr** column header to sort from best to worst.

6. Click the **1-Yr** column header again, to sort from worst to best. Where is the Large Growth fund you saw earlier in this exercise?

7. **Close** any Asset Flow windows that are open.
Identifying Funds with Consistent Top Performance

Overview

The Morningstar Rating for a fund is a starting point for evaluating a fund’s risk-adjusted performance, but it is also important to consider the consistency of a fund’s performance over time so you understand whether investors can rely on regular out-performance from the management team.

A performance report, which shows rows of investments and columns of data about those investments, allows you to show your manager the information being sought about funds with consistent performance. The Performance Reporting module in Morningstar Direct not only displays return and category rank data from multiple time periods more easily than in other parts of the application, but also allows you to use tools such as grouping, conditional formatting, and a scorecard to calculate results and present data in an easy-to-understand format.
Creating a performance report consists of the following steps:

1. Select the investments for the report.
2. Decide how the investments will be grouped together, what the investments on the report should be compared to, and select comparison and calculation benchmarks for the investments on the report.
3. Choose the time periods (trailing 1-year, rolling window, etc.) to display, and data points (Return, Category Rank) to display in each time period.
4. Choose supplementary information you want to include outside of the time periods.
5. Apply conditional formatting to call out important information.
6. Use a scorecard to calculate results over time.
Scenario

Your manager wants to understand the consistency of Large Growth open-end funds. Which of the funds have had truly reliable performance during the past five years? Your manager wants you to produce a report identifying consistent Large Growth funds. Each fund must meet the following criteria:

- still open to new investors
- an above-average Sharpe Ratio for the trailing five-year period when compared to their category peers
- an expense ratio below the category average
- a Downside Capture Ratio for the five-year period below 100, and
- only the cheapest share class of a fund should be considered.

The report should show returns and category ranks for rolling three-year periods, starting from five years ago through the most recent month end.

In the following exercises, a fund will be considered a consistent top performer if it has appeared in the top quarter of its category during all of the 25 time periods being considered. If a fund has a Morningstar Analyst Rating, your manager wants to see that, but funds are not required to have an analyst rating in order to be considered a top performer. Finally, the Sharpe Ratio should also be shown, but only for the most recent three-year period.

Solution

In this performance report, you will search for the investments to consider, then configure the performance report to retrieve the proper time periods and data points. Conditional formatting will be used to highlight both funds appearing in the top quartile for each time period, and the Morningstar Analyst Rating (where available). Finally, a scorecard will be employed to determine whether funds have consistently appeared in the top quartile of their respective Morningstar Category.
When creating an advanced search to find only one instance of a fund (rather than seeing all share classes of a fund), you have a number of options, including looking for the following:

- the oldest share class of a fund
- a specific share class for a fund, such as the A share, or
- the least expensive share class for a fund.

Before conducting an advanced search to look for the cheapest share class for a fund, you need to set the proper user preference to allow for this. Do the following:

1. From the menu bar at the top of the Morningstar Direct window, select **File…Set User Preferences**. The Set User Preferences window opens.
Exercise 13: Searching for the cheapest share class of a fund

Identifying Funds with Consistent Top Performance

2. Select the **User Defined Primary** tab.
3. Select the row for **Annual Report Net Expense Ratio**, then click the **move to top** button. (The move to top button displays two up arrows.) This ensures this criterion takes precedence when conducting a search.
4. Be sure the word **Lowest** appears in the Choose column.

5. Click **OK**. In the next exercise, you will learn to leverage this setting.
The first step in identifying consistently top performing large cap funds is to search for those open-end funds that meet the following criteria:

- an expense ratio below the category average
- still open to new investors
- an above-average Sharpe Ratio for the trailing five-year period, when compared to their category peers, and
- a Downside Capture Ratio below 100 for the five-year period.

To create a search by criteria in the Performance Reporting module, do the following:

1. In Morningstar Direct, select the **Performance Reporting** tab. The Folders page should be selected by default.
2. From the toolbar above the grid view, click **New**. The Select Investments dialog box opens.
3. Select the option for **Search Criteria**. Be sure the **Open End Funds** option is selected from the drop-down field.
4. Click **OK**. The Search Criteria dialog box opens.
5. Set your criteria as shown in the following table:

   Note: At the bottom of the Search Criteria dialog box, be sure to check the checkbox for User Defined Primary Class Only.

<table>
<thead>
<tr>
<th>Rel</th>
<th>( Field Name</th>
<th>Operator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>--</td>
<td>Morningstar Category</td>
<td>=</td>
<td>US Large Growth</td>
</tr>
<tr>
<td>And</td>
<td>Annual Report Net Expense Ratio</td>
<td>&lt;</td>
<td>CAT AVG</td>
</tr>
<tr>
<td>And</td>
<td>Closed to New Inv</td>
<td>Not=</td>
<td>Yes</td>
</tr>
<tr>
<td>And</td>
<td>Sharpe Ratio 5 Yr (Mo-End)</td>
<td>&gt;</td>
<td>CAT AVG</td>
</tr>
<tr>
<td>And</td>
<td>Downside Capture Ratio 5 Yr (Mo-End)</td>
<td>&lt;</td>
<td>100</td>
</tr>
<tr>
<td>And</td>
<td>Inception Date</td>
<td>&lt;=</td>
<td>10/1/2012</td>
</tr>
</tbody>
</table>

6. Click **OK**. The Group Settings window opens.
By default, when examining the performance of selected funds in a performance report, Morningstar Direct compares the funds to each other, rather than all of the funds in the appropriate Morningstar Category. In this section, you will learn how to change the peer group for a set of funds.

In a performance report, it is also important to use a relevant benchmark for both the performance comparison and performance calculations. You can also decide whether to display only one comparison benchmark (rather than the default two benchmarks).

To change these settings for a performance report, do the following:

1. In the Peer Group column for row 1, click the Peer Group icon. The Peer Group dialog box opens.

2. Select the Morningstar Category option.

3. Click OK to close the dialog box.
4. In row 1, from the Display Benchmark 1 drop-down field, select Morningstar Category Index.

5. To see what the benchmarks are for each category, from the toolbar, click Show Benchmarks.
6. From the toolbar, click Report Settings. The Report Settings dialog box opens. From here, the second display benchmark can be hidden.
7. Uncheck the **Show display benchmark 2** checkbox.

8. Click **OK** to close the Report Settings dialog box.
9. Next, you need to ensure the proper benchmark is used for calculating the data on the performance report. From the **Calculation Benchmark** drop-down field, select **Display Benchmark 1**. This allows you to use the same benchmark for both display and calculation. It also ensures a peer-appropriate index is being used for calculation purposes.

10. Click **OK**. The Select Column dialog box opens.
11. Make sure the option for **User Defined** is selected, then click **OK**. The Performance Column Setup window opens.
To see if this set of funds has had consistent performance over a set of rolling three-year periods starting from five years ago, do the following:

1. In the Performance Column Setup, select the Rolling window option.
2. From the Start Date field, select Enter Date, and select the first day of the current month from five years ago.
3. From the End Date field, select Last Month End.
4. From the Window size drop-down field, select 3 years.
5. From the Moving step drop-down field, select 1 month. The Number of columns field should read 25.
6. Click Add Columns. The time periods for the report are added to the Selected Time Periods area.

Note: Do not click OK yet; the Data Points and Ranks tabs still need to be addressed.
Exercise 17: Set the values for Data Points and Ranks

Remember that your manager requested to see not only the return for each time period, but also the Sharpe Ratio for only the most recent time period. To set the values for the two remaining tabs in the Performance Column Setup window, do the following:

1. Select the Data Points tab, and ensure Return is displayed in the Selected Data Points list.
2. To see the Sharpe Ratio value for the funds, but only for the most recent time period, at the bottom of the window, uncheck the **Apply add/remove to all time periods** checkbox.

3. From the **Time Period** drop-down field at the top of the window, **scroll** down to select the **most recent time period**.

4. In the Data Points list, **scroll** down until you see the Sharpe Ratio data point, then **double-click Sharpe Ratio** to add it to the Selected Data Points area.
Exercise 17: Set the values for Data Points and Ranks

Identifying Funds with Consistent Top Performance

5. Select the Ranks tab, and ensure only Peer group percentile is selected in the Selected Rank Columns list.
6. In the Selected Rank Columns list, double-click Peer group percentile. The Display Setting dialog box opens.

7. In the Display Name field, type Peer group %.

8. Click OK to close the Display Setting dialog box.
9. Click OK to close the Performance Column Setup window. The Supplementary Columns window opens.
In addition to seeing the name of a fund on the performance report, it will also be useful to include the fund’s ticker symbol. Also, your manager asked to see a Morningstar Analyst Rating if one is assigned to the fund. To include a fund’s ticker symbol and Analyst Rating on the performance report, do the following:

1. On the Supplementary tab, in the Available Supplementary Columns list, double-click Ticker to move it to the Selected Supplementary Columns list.
2. In the Selected Supplementary Columns list, select Ticker and click the up arrow to move it above Name.

Note the position of the two selected columns.
3. **Scroll** down in the Available Supplementary Columns list, and **double-click Morningstar Analyst Rating**.

4. Click **OK** to close the Supplementary Columns window. The performance report is now ready to be saved and calculated.
Exercise 19: Rename a data column

Only the most recent time period has the correct label for the Peer group percentile column; the others were not renamed to Peer group %. To correct this for all other time periods at once, do the following:

1. From the toolbar above the grid, from the Edit drop-down field, select Manage Columns. The Manage Columns dialog box opens.

2. Scroll down to the row where Peer group % is shown.
3. Hover your mouse over the Peer group % cell.
4. Click Apply change to all.

Note: You could also click in a row to manually rename “Peer group percentile” to “Peer group %,” but this would take much more effort.

5. Click OK to close the Manage Columns dialog box.
Exercise 20: Save the performance report

Now that the parameters for the report are set, the last step before calculating it is to save it.

To save the performance report, do the following:

1. From the toolbar above the spreadsheet grid, click Save. The Save Report dialog box opens.

2. In the Name field, type Consistent Large Growth Funds.

3. Click OK. The Save Report dialog box closes.
To calculate the report, do the following:

1. From the toolbar above the grid view, click **Calculate**. During the calculation, the Folders page is displayed.

2. When the Report Calculation Complete message opens, click **Yes** to view the report. The spreadsheet grid is now filled with data.
Exercise 22: Apply conditional formatting to a performance report

The information in the performance report is great, but it is also a bit difficult to read without some additional formatting. The conditional formatting feature in the Performance Reporting module allows you to color each row, cell, or column to aid the interpretation of the data.

In this exercise, you will apply a color to the Peer group % column to call out the times when each fund was in the top quartile of its category. To apply conditional formatting to a performance report, do the following:

1. From the toolbar above the grid view, from the Tools drop-down field, select Conditional Format...Conditional Formatting. The Conditional Formatting Rules dialog box opens.

2. From the Field Name drop-down field, expand the All Time Periods option and select Return : Peer group %.

Select this option to highlight information on the report

Be sure to select the correct option here
3. From the **Operator** drop-down field, select <=.
4. In the **Value** field, type **25**.
5. From the **Cell Color** drop-down field, select **green** in the upper-right corner.
6. Be sure the box for **Column Only** is checked.
7. Click **Preview** to ensure the rule is working as expected.

8. Click **OK**. The Conditional Formatting Rules dialog box closes.

In addition to highlighting funds when they appeared in the top quartile, you can also apply conditional formatting to the Morningstar Analyst Rating column, to help these values stand out. Do the following:

1. From the toolbar above the grid view, from the **Tools** drop-down field, select **Conditional Format... Conditional Formatting**. The Conditional Formatting Rules dialog box opens.
2. Click **Add Rule**. Rule 2 now appears.
3. From the Field Name drop-down field, select Morningstar Analyst Rating.
4. The Operator field should show =.
5. From the Value field, select Gold.
6. From the Cell Color drop-down field, click Custom. The Custom Color dialog box opens.

7. Set the following values:
   - Red = 250
   - Green = 164
   - Blue = 29

8. Click OK.
9. Be sure the Column Only box is checked.
10. To help you create multiple conditional formatting rules for the same column, you can use the Clone Rule icon. From the Rule 2 heading bar, click the **Clone Rule** icon. Rule 3 now appears. The Field Name, Operator, and Value fields are populated automatically based on the rule you cloned.

11. In the Rule 3 section, from the **Value** drop-down field, select **Silver**.
12. From the **Cell Color** drop-down field, click **Custom**. The Custom Color dialog box opens.
13. Set the following values:
   - Red = 139
   - Green = 155
   - Blue = 151

14. Click OK to close the Custom Color dialog box.
15. In the Conditional Formatting Rules dialog box, on the Rule 3 heading bar, click the Clone Rule icon. Rule 4 now appears.
16. In the for Rule 4 section, from the Value drop-down field, select Bronze.
17. From the Cell Color drop-down field, select Custom. The Custom Color dialog box opens.
18. Set the following values:
   - Red = 200
   - Green = 116
   - Blue = 90

19. Click OK to close the Custom Color dialog box.
20. Click OK to close the Conditional Formatting Rules dialog box.
Conditional formatting is helpful, but it still is not clear which funds have actually performed consistently well. Remember, your manager stated that to be considered a top performer, a fund had to be in the top quartile at least 75% of the time over these time periods. This calculation can be done with the Scorecard feature. A new column will be added to each time period, as well as to the right side of the report for the Total Score of each fund across these time periods.

In this instance, each time a fund appears in the top quartile of its category for a time period, it will be given a score of one point. If it is not in the top quartile, it will not receive any points. Once you add a scorecard to a performance report, you will need to recalculate the report.

To create a Scorecard for this set of investments, do the following:

1. From the toolbar above the grid view, from the Edit drop-down field, select Scorecard. The Investment Scorecard dialog box opens.

2. In the Scoring Type area, select the Custom Scoring option.

   Note: When the Performance Reporting warning message opens related to all formatting being lost, click Yes.

3. In the Performance Factors area, click Add Score. The Custom Score Setting dialog box opens.

   Be sure to select this option to create your own scoring rules

   Use this icon to create your custom scorecard
4. The Time Period field should read All Time Periods. From the **Data Point/Rank Selected** drop-down field, select **Return: Peer group %**.

5. In row 1, enter the following values:

<table>
<thead>
<tr>
<th>Operator</th>
<th>Value1</th>
<th>Score</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;=</td>
<td>25</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

6. Click **OK** to close the Custom Score Setting dialog box.

7. Click **OK** to close the Investment Scorecard dialog box.

8. From the toolbar above the spreadsheet grid, click **Calculate**.
9. When the confirmation message opens, click **Yes** to view the report.
10. To see only the scores, from the toolbar above the grid view, from the **View** drop-down field, select **Score Columns**. Note the new Total Score column on the far right side.

![Image of a report grid showing score columns and total score column]
Exercise 25: Add a summary column for various scores

The information in the score columns is useful, but it would be nice to summarize the scores, and then analyze the funds. How many have been truly consistent over all 25 time periods? Do the following:

1. From the toolbar above the spreadsheet grid, from the Edit drop-down field, select Scorecard. The Investment Scorecard window opens.

2. From the toolbar in the Performance Factors section, click Add Score. The Custom Score Setting dialog box opens.
3. From the Time Period drop-down field, select Score. The Data Point/Rank Selected drop-down field should show Total Score.

4. In row 1 under Default Display, enter the following values:

<table>
<thead>
<tr>
<th>Operator</th>
<th>Value1</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>=</td>
<td>25</td>
<td>Consistent Performer</td>
</tr>
</tbody>
</table>

5. Click Insert Rule to create the following rule:

<table>
<thead>
<tr>
<th>Operator</th>
<th>Value1</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;</td>
<td>25</td>
<td>Do Not Consider</td>
</tr>
</tbody>
</table>

6. Click OK to close the Custom Score Setting dialog box.
7. Click OK to close the Investment Scorecard window.
8. From the toolbar above the grid view, click Calculate.
9. When the confirmation message opens, click Yes to view the report.
10. Scroll to the right and double-click the Total Score column header to sort the content of this column.
Exercise 26: Save investments to a list

Now that you know which funds should be considered consistent top performers, you can do further analysis on the portfolio of each one. The first step is to save these items to a list. Do the following:

1. For each fund in the Large Growth category marked as a Consistent Top Performer in the Total Score column, click the checkbox to the left of its row number.
2. From the toolbar, from the Save drop-down field, select Save as Investment List. The Save As dialog box opens.

3. In the Name field, type Large Growth Consistent Performers.
4. Click OK.

You have now successfully generated a Performance Report, and saved the securities to a list for further analysis. To conduct that analysis, you will use the Portfolio Analysis module, which is covered in the next section.
Using Portfolio Attribution to Understand Performance

Now that you have a list of funds to examine, you can begin to explore how they have achieved their success, particularly in the past year. Can the funds’ success be credited to an overexposure to Financial Services and Technology, or being underexposed to Energy and Real Estate? Maybe both? The Portfolio Analysis module in Morningstar Direct allows you to conduct this type of attribution exploration.

Your manager has asked you to investigate the Large Growth Consistent Performers list you saved from the performance report you created. Which fund has the highest active return? What investment decisions can account for this? Did the manager make any missteps in selecting different stocks or sector investments?

The steps to accomplish your assignment are as follows:

1. Use the Portfolio Analysis tool in Morningstar Direct Cloud to analyze the funds on the list you saved in Performance Reporting.
2. Display the Attribution worksheet on the dashboard view, then drill down on a specific fund to conduct further attribution analysis.
3. Select, configure, and navigate through the Attribution workspace to investigate the fund and provide insightful analysis to your manager on the fund’s return over the past year.
Exercise 27: Opening a list in Portfolio Analysis

Rather than manually re-creating the list of funds in Portfolio Analysis, you can simply recall the list you saved.

Do the following:

1. **Log in** to Morningstar Direct Cloud at [http://direct.morningstar.com](http://direct.morningstar.com), using the same credentials you use to log in to the desktop version of Morningstar Direct.

2. On the Portfolio tile, click **Monitoring**. The dashboard mode of the Portfolio Analysis tool opens.

   Note: You may be asked to log in again. If necessary, close the Release Notes window once the Portfolio Analysis tool opens.

3. From the **Investment List** drop-down field in the upper-left corner of the screen, select **Investment Lists → Large Growth Consistent Performers**. The funds from the list automatically show in the dashboard.
Now you need to ensure the Attribution workspace is displaying these funds. To see the attribution analysis for this list of funds, do the following:

1. From the toolbar at the top of the window, from the **Column Set** drop-down field, select **Open**. The Open dialog box opens.

2. In the Morningstar Column Sets list, select **Attribution**.

3. Click **Open**. The attribution data points now show in the dashboard.
Exercise 29: Adjusting the benchmark for attribution analysis

One of the keys to conducting Attribution Analysis is to ensure you are using a comparison benchmark for which you have constituent rights to see the holdings for the index. If you do not have the rights to see constituent data for an index, the Attribution data points cannot be calculated for the funds you are reviewing. You can address this issue the following ways:

- Work with your Morningstar Client Service Consultant to enable those indexes for which you do have constituent rights in Morningstar Direct so you can see this data in the Portfolio Analysis module (and elsewhere, such as Presentation Studio).
- Use an ETF proxy instead of an index for attribution analysis, or
- Use a Morningstar Index as the comparison benchmark when conducting attribution analysis. Because you are a Morningstar Direct subscriber, you automatically have constituent rights to all Morningstar Indexes.

To use the Morningstar index for each fund, do the following:

1. In the header row at the top of the grid view, check the checkbox at the far left. This selects all rows in the list.
2. From the Benchmark drop-down field for row 1, select Morningstar Index. The workspace recalculates all rows.
By default, the Attribution workspace shows information from the past quarter. To adjust the time period being considered, do the following:

1. From the toolbar at the top of the window, from the Column Set drop-down field, select Edit. The Attribution - Column Set dialog box opens.

   ![Column Set Dialog Box](image1)

2. Click the row for Attribution Effects Total. Additional fields appear to the right.

   ![Additional Fields](image2)

3. From the Start Date drop-down field, select 1 year ago.
4. From the End Date drop-down field, select Last Month End.
5. **Double-click** the label for **Sector Attribution - Last Quarter**, and change this text to **Sector Attribution - Last Year**.

6. Click **Save**. The Save As dialog box opens.

7. In the Data Set Name field, type **My Attribution**.

8. Click **Save**.
In reviewing the Active Return column, which fund has the highest Selection Effect value over the past year? Click the name of that fund in the list. The Detail view opens.

### Exercise 31: Moving to Analysis mode

You need to click only once on a fund’s name to go to Analysis mode.
Exercise 32: Displaying the Attribution workspace template

As in the Dashboard view, you need to ensure the Attribution workspace is being displayed in the Detail view. To display the Attribution workspace template from Morningstar, do the following:

1. In the bottom-right corner of the screen, click the Content Management icon. The Content Management dialog box opens.

2. In the left pane, click Morningstar Templates.

3. In the list, click Attribution Highlights. The workspace loads automatically.
By default, components on the Highlights page (and on the other pages in the Attribution workspace) reflect information for the prior one-month period. You can change this to the trailing one-year period by doing the following:

1. In the Weight component, click the pen icon to the right of the displayed date. A flyover panel opens.

2. From the Start Date drop-down field, select 1 year ago. (Leave the End Date field set to Last Month End).
3. Click the checkbox for Apply Time Period to Template. All the components recalculate.
4. Click OK.
5. Close the Attribution Highlights save message in the upper-right part of the window.
Exercise 34: Displaying the Attribution Detail table

By default, the Attribution page shows a chart, rather than a table. To display the Attribution Detail table in place of the default chart, do the following:

1. Select the Attribution tab. The Attribution Detail (By Effect) chart component opens.
2. Click the X in the upper-right corner of the component to remove the chart.

   Note: When the Confirmation message appears, click OK.

3. From the toolbar at the top of the window, click Components. The Select component(s) to add pane opens.
4. Under the Select component(s) to add pane on the left, select Portfolio Analysis \ Attribution.
5. Click the Attribution Detail table component to add it to the workspace. The component appears automatically, but it is not sized correctly.

6. In the upper-right corner of the Select component(s) to add pane, click [X]Close.
7. In the upper-right corner of the Attribution Detail component, click Maximize this component to resize the table to take up the entire page.
Although you updated the time period for the entire template, components you add to a page will not reflect that change. To update the data being reflected in the Attribution Detail table, do the following:

1. In the upper-right corner of the component, click the pen icon to the right of the date. A dialog box opens.

2. From the Start Date drop-down field, select 1 year ago. (Leave the End Date field set to Last Month End).

3. Click OK. The Save Template dialog box opens.

4. Close the Save Template dialog box.
Exercise 36: Exploring the worst stock selection for the fund

In examining the attribution data for this fund, you can see not only where management made good and bad choices on sectors for exposure, but also where they made good and poor choices on specific stocks. When a stock was doing poorly, did management maintain their position in the security? Did they decrease their position in it? Did they increase their position in the security? If the stock is covered by a Morningstar Analyst, what does that person think of the stock’s value?

To learn more about the stock decisions for this fund, do the following:

1. In the Attribution Effect tab for the trailing one-year period, click the column header *Selection %* to sort by this column.
2. In the section where the management team did the worst job selecting stocks, click the triangle to the left of the sector’s name to expand this section. Note the stock that has had the worst performance relative to the index for this fund.

3. To investigate the fund’s history with this stock, select the *Holdings* tab.
4. In the Buy/Sell component at the bottom of the page, click the *pen* icon to the right of Data Column. A flyover panel opens.
5. Check the **Buy/Sell** checkbox, and uncheck the **Weights** checkbox.

6. Click **OK**.

7. **Scroll** down until you see the stock that had the worst selection effect, then **scroll** right to see the buy/sell history for the stock in this fund’s portfolio.

8. **Right-click** the name of the stock, then select **Security Profile... Research**. The Security Profile window opens.

9. **Scroll** down to the Detailed Reports area to see the Morningstar Analyst’s take on this stock, and whether it is fairly valued.

10. **Close** the Security Profile window.
Finding Sustainable Investments in Morningstar Direct Cloud

Overview

Morningstar Direct Cloud offers more than just access to the Portfolio Analysis module. You can also use this platform to read Morningstar Research (either on specific investments, methodology, or thematic topics), and conduct investment analysis similar to what you would do in the Workspace module of the desktop version of Morningstar Direct. Morningstar Direct Cloud, however, has several data points not found in the desktop version.

Scenario

Your manager is looking for information on Morningstar’s Sustainability Rating, and for a list of managed investments not invested either directly or indirectly in companies extracting or using thermal coal. The funds should also have a Morningstar Sustainability Rating that is at least three globes, and a Morningstar Rating of at least three stars.

Solution

Use the Morningstar Research area in Morningstar Direct Cloud to find documentation related to sustainable investing, and use the Investment Analysis area to screen for funds that meet your manager’s criteria.

Exercise 37: Accessing Morningstar research on sustainability

To see articles and videos from Morningstar’s Research team related to sustainability, including the methodology papers related to proprietary statistics, do the following:

1. If you are not already logged in to Morningstar Direct Cloud, log in at http://direct.morningstar.com, using the same credentials you use to log in to the desktop version of Morningstar Direct. If you are logged into Morningstar Direct Cloud and still in the Portfolio Analysis module, click the Home icon in the bottom-left corner.
2. From the Home page, in the Morningstar Research tile, click Topics. The Topics page opens.
3. On the Topics page, click the tile for **Sustainable Investing**. A list of articles and videos related to this topic are presented.

4. At the top of the page, you can see links to methodology papers related to sustainable investing. The articles on the page are listed in reverse chronological order, with the most recent article available at the top. Click an **article’s headline** to read it.

5. To receive a notification each time a new article is added to the page, in the upper-right corner, click the **Subscribe** button.
Exercise 38: Create a screen for sustainable investments

To find investments not owning companies involved with thermal coal, you can create a screen. The screen will look for both mutual funds and ETFs that are socially conscious, and will eliminate funds not meeting a certain threshold for both the Morningstar Sustainability Rating, and the Morningstar Rating. Do the following:

1. To go to the Investment Analysis area, click the menu icon in the upper-left corner of the screen, then select Investment Analysis. You are returned to the Home page.

2. From the Home page, on the Managed Investments tile, click U.S. Open-End. The Investment Analysis area opens.
3. By default, all open-end US funds are shown in the grid view. To screen for the funds you want, click the Open Screener icon. The Screener window opens.

4. At the top of the Screener window, note that the system is already filtering for Open-End Funds that are domiciled in the United States. To include ETFs as well, click the header for the Investment Type, then select the option for Exchange-Traded Fund.

5. To close the Investment Type element, click OK.
Exercise 38: Create a screen for sustainable investments

Finding Sustainable Investments in Morningstar Direct Cloud

6. In the Add Criteria search field, type **Social**, then select **Socially Conscious**.

7. The option for Yes should be selected. Click **OK**.
8. In the Add Criteria search field, type **Ethic**, then select **Ethical Issue Strategy Focus**.
9. Select the options for **ESG Focus** and **Environmental Focus**, then click **OK**.

10. In the Add Criteria search field, type **Prod**, then select **Product Involvement**.
11. By default, the Product Involvement data point points to Adult Entertainment (because this alphabetically comes first in the options for this field). To change this, in the Product Involvement header, click the **Settings** icon.

12. From the **Product Area Type** drop-down field, select **Thermal Coal**, then click **OK**.
13. From the Operator area, select **Equal to**.
14. In the Value field, type **0**, then click **OK**.

15. In the Add Criteria search field, type **Old** then select **Oldest Share Class**.

16. The option for Yes should be selected. Click **OK**.
17. In the Add Criteria search field, type **Rating** then select **Morningstar Sustainability Rating**.

18. Select the options for the 3-, 4-, and 5-globe ratings, then click **OK**.
19. In the Add Criteria search field, type Rating then select Morningstar Rating > Overall.

20. Select the options for the 3-, 4-, and 5-star ratings, then click OK.

21. In the upper-right corner of the Screener window, click Done. You are returned to the grid view.
Exercise 39: Save the screen and its investments to a list

Just as with searches and lists in the desktop version of Morningstar Direct, in Morningstar Direct Cloud, you can save both a screen and a list. To separately save both this screen, and the results of the screen as a list, do the following:

1. Click the List/Screen menu in the upper-left corner and select Save. The name field is highlighted, awaiting for you to enter a name.

2. In the name field, type **Sustainable ETFs and Funds**, then press «ENTER». The screen is now saved.
3. To save the investments from the screen to a list, start by clicking the **Select All** option in the upper-left corner of the grid view.

4. Click the **Actions** icon above the grid view and select **Save As**.
5. In the list name field, type **Q4 2017 No Coal Funds**, then click **Done**.

6. In the future, you can retrieve the saved screen and list by using the **Workspace** icon on the header.
Managing a Portfolio in Morningstar Direct

The Portfolio Management module in Morningstar Direct allows you to enter either accounts or model portfolios of holdings. You can manually enter holdings or import them from Microsoft® Excel®. When you import a portfolio, you need to evaluate the portfolio settings (such as the Portfolio Start Date) that could impact the data for the portfolio elsewhere in Morningstar Direct. Finally, the Portfolio Management module also allows you to create and assign custom benchmarks to model portfolios and accounts.

You have been asked to determine whether one Large Growth fund should be replaced with another in a model portfolio. You need to first create the model portfolio, then assign a custom benchmark to determine how the portfolio’s comparison to the benchmark will change if the fund is replaced.

You will import the portfolio that has been provided in an Excel file, then configure a setting for the portfolio. Next, you will create a custom benchmark and assign it to the portfolio. Finally, you will add a holding to the portfolio so you can compare two large-cap funds to one another.

An Excel file (FundPortfolio.xlsx) has been saved to your desktop. Importing a portfolio into Morningstar Direct uses the following three-step process:

1. Save the portfolio holdings in a properly formatted Excel file.
2. Import the file and review the portfolio’s information in the import blotter.
3. Post the portfolio to Morningstar Direct.

To import and post the Excel file as a model portfolio in Morningstar Direct, do the following:

1. From the left navigation pane, select the Portfolio Management module.
2. Select the Model Portfolios page.
3. From the toolbar, click Import. A new dialog box opens.
4. Check the **row 1** checkbox (Model Portfolio Holdings).
5. From the toolbar, click **Import**. The Import - Morningstar Direct dialog box opens.

![Import dialog box]

6. In the File Name field, click the **magnifying glass** icon. The Open dialog box opens.
7. Select the **Desktop**, then select the **FundPortfolio.xlsx** file.
8. Click **Open**.
9. Ensure the Column Code and Column No. fields match each other as shown in the following table:

<table>
<thead>
<tr>
<th>This Column Code field…</th>
<th>Should be mapped to this Column No.…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portfolio Date</td>
<td>Column A (Portfolio Date)</td>
</tr>
<tr>
<td>Portfolio Id</td>
<td>Column B (Portfolio ID)</td>
</tr>
<tr>
<td>Portfolio Name</td>
<td>Column C (Portfolio Name)</td>
</tr>
<tr>
<td>Holding Identifier</td>
<td>Column D (Ticker or CUSIP)</td>
</tr>
<tr>
<td>Holding Description</td>
<td>Column E (Name)</td>
</tr>
<tr>
<td>Weight</td>
<td>Column H (Weight)</td>
</tr>
</tbody>
</table>
10. Click **Import**. The import blotter opens.

11. Ensure no errors exist with the funds you are importing. From the toolbar above the grid view, click **Post**.

12. When the confirmation message appears, click **OK**.
13. **Close** the import window. The grid view is displayed.
14. From the toolbar above the grid view, click **Refresh**. Your portfolio should now be displayed.

Exercise 41: Adjusting a portfolio’s settings for Performance Reporting

The portfolio you imported had a date of 10/31/2013. You need to manually set this as the performance start date for the portfolio. Do the following:

1. In the grid view, **double-click** the **Fund Lineup** portfolio. A new window opens, showing the holdings for the portfolio.

2. In the left navigation pane of the new window, select the **General Settings** page.
3. **Scroll down** until you see the Performance calculation start date.
4. From the **Performance calculation start date** drop-down field, select **Earliest Common**.

5. Click **Save**.
6. **Close** the portfolio window.

The process for creating a custom benchmark is parallel to that of creating a model portfolio: you select the items for the benchmark (in this case, indexes, but you can use Morningstar Categories or securities if you prefer), then assign an allocation to them.

To create a custom benchmark, do the following:

1. With the **Portfolio Management** module still selected, select the **Custom Benchmarks** page.
2. From the toolbar, click **New**. The Benchmark Basics dialog box opens.
3. In the **Name** field, type **Moderate Aggressive**.
4. From the **Currency** drop-down field, select **US Dollar**.
5. **Scroll** down to the **Performance calculation start date** drop-down field, and select **Earliest Common**.

6. **Click Save**. The Holdings Entry window opens.
To select and allocate weightings to the custom benchmark, do the following:

1. In the Holdings Entry window, click the **Name** field for the first row.
2. Type **S&P 500 TR**, then from the list that opens, select **S&P 500 TR USD**.
3. Repeat steps 1-2 for the following indexes:
   - **MSCI EAFE PR USD**, and
   - **Morningstar US Gov Bd TR USD**.
4. In the Percent (%) column, assign the following percentages to each index:

<table>
<thead>
<tr>
<th>Index</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S&amp;P 500 TR USD</td>
<td>50</td>
</tr>
<tr>
<td>MSCI EAFE PR USD</td>
<td>20</td>
</tr>
<tr>
<td>Morningstar US Gov Bd TR USD</td>
<td>25</td>
</tr>
</tbody>
</table>
5. Select the **Cash** tab.
6. Click the **magnifying glass** icon in the first row. The Add Holdings dialog box opens.
7. Click **Go**.
8. In the Available Records list, **double-click Default Cash** to move it to the Selected Records list.

9. Click **OK** to close the Add Holdings dialog box. The Holdings Entry window is displayed.
10. In the **Percent (%)** column for Default Cash, type **5**.

11. Click the **Finish>>** button. The Training Benchmark window opens. You can now **close** this window.
Exercise 44: Assigning a custom benchmark to a model portfolio

To assign a custom benchmark to the model portfolio you created, do the following on the Model Portfolios page:

1. The Portfolio Management module should still be selected. From the left navigation pane, select the Model Portfolios page.
2. Double-click the Fund Lineup model portfolio to open it. The Fund Lineup window opens.

3. On the navigation pane, select the General Settings page.
4. To the right of the Benchmark 1 field, click the magnifying glass icon. The Select Benchmark dialog box opens.
5. At the top of the dialog box, Universes should be selected. From the drop-down field at the top, select **Custom Benchmarks**.

6. Click **Go**.

7. In the Available records list, click **Moderate Aggressive**.

8. Click **OK** to close the Select Benchmark dialog box.

9. In the Moderate Aggressive Model window, click **Save**.
Exercise 45: Adding a holding to a portfolio for comparison

As stated in the introduction for this section, you have been asked to evaluate whether IronBridge Large Cap (the Large Growth fund in the portfolio) should be replaced by another Large Growth fund. To add the new fund and generate a report comparing the two funds, do the following:

1. The portfolio window should still be open. In the left navigation pane, select the Holdings Summary page.
2. From the toolbar above the grid view, from the Edit drop-down field, select Edit Portfolio. The Portfolio Date Selection dialog box opens.
3. Click OK. The Holdings Entry window opens.
4. In row 9, type the ticker symbol for the fund you want to consider, and click its name when it appears. The fund is added to the portfolio.
5. Click Finish. (You do not need to assign a value to the fund to be able to compare it to the other Large Growth fund.)
6. In the grid view, select the following by checking the checkboxes at the beginning of their rows:
   - IronBridge Large Cap
   - the fund you added.

7. From the toolbar above the grid view, from the Action drop-down field, select Reports... Fund vs. Fund. The Fund vs. Fund report opens in a new window.

8. From the toolbar, click the PDF Report icon. The PDF report opens in a new window.
Exercise 46: Creating a new model portfolio from an existing model portfolio

After comparing the two Large Growth funds, you are not sure whether the model would be better off with the Parnassus Endeavor fund or the American Funds AMCAP fund, but you want to compare the model portfolio with the original fund to a model portfolio with the new fund. You can easily copy an existing model portfolio and make a change to the lineup. (You will compare the two models in the next section on Presentation Studio.)

To copy and edit an existing model portfolio, do the following:

1. With the Fund Lineup portfolio still open, in the header row, check the checkbox above the grid view; this selects all rows.

2. Uncheck the IronBridge Large Cap checkbox.
3. From the Action drop-down field, select Save As… Model Portfolio. The Model Portfolio Basics dialog box opens.

4. In the Name field, type Alternate Fund Lineup.
5. From the Currency drop-down field, select US Dollar.
6. In the Benchmark 1 field, click the magnifying glass icon. The Select Benchmark dialog box opens.
Exercise 46: Creating a new model portfolio from an existing model portfolio

Managing a Portfolio in Morningstar Direct

7. The option button for Universes should be selected. From the drop-down field at the top, select Custom Benchmarks.
8. Click Go.
9. Click Moderate Aggressive.

10. Click OK to close the Select Benchmark dialog box.
11. From the **Performance calculation start date** drop-down field, select **Earliest Common**.

12. Click **Save**. The Holdings Entry window opens.
13. At the bottom-left corner of the window, click Equal Weight.

15. The Fund Lineup Model portfolio window should still be open. The fund you added can now be removed from this model portfolio. From the toolbar, from the Edit drop-down field, select Edit Portfolio. The Portfolio Date Selection dialog box opens.

16. Click OK.
17. Select the fund you added by clicking the checkbox at the beginning of its row.
18. From the Action drop-down field, select Delete Rows.

19. Click Finish>>.
21. From the toolbar, click Refresh to see the new model you created.
Using Presentation Studio to Compare Model Portfolios

Overview

The Presentation Studio module has a number of templates you can take advantage of to display the power and diversity of a portfolio of holdings. For example, the Portfolio Aggregation Factsheet template is the basis for a compact, powerful report containing almost two dozen components covering asset allocation, geographic distribution, performance data, holdings intersections, and much more. However, because this is a Factsheet template, it is designed to reflect information for only one holding at a time.

If you need to compare two model portfolios, rather than simply analyze a single portfolio of holdings, you can use the Current versus Proposal Portfolio Comparison workbook template.

Scenario

You’ve decided to create a report comparing the two model portfolios, to illustrate the similarities and differences between them.

Solution

You will use Presentation Studio to create a workbook template from scratch, and include the two model portfolios as part of the template. The multi-page report you produce will compare the portfolios in terms of asset allocation, holdings, performance, and more.

Portfolio Comparison Report

Performance

Investment Growth

Time Period: 1/1/2013 to 12/31/2016

Source: Morningstar Direct
To create a Presentation Studio workbook template from scratch, do the following:

1. If a Presentation Studio template window is open, close it.
2. In Morningstar Direct, select the Presentation Studio module.
3. At the top of the page, click the Workbook tile. The Create New Workbook dialog box opens.
4. The option for New Workbook should be selected. Click OK. The Investments: Settings dialog box opens.
5. Click +Add. The Find Investments dialog box opens.
6. From the **Within** drop-down field, select **Model Portfolios**.
7. Click **Go**.
8. To select both model portfolios at once, click **Add All**.

9. Click **OK** to close the Find Investments dialog box.
10. In the Alternate Fund Lineup row, from the Calculation Benchmark drop-down field, be sure Display Benchmark 1 is displayed for both model portfolios.

11. In the Display Benchmarks area, click the magnifying glass icon in the top row. The Select Benchmark dialog box opens.

12. From the Within drop-down field, select Custom Benchmarks.

13. Click Go. The Moderate Aggressive benchmark you created should now be displayed in the Available records list.

14. In the Available records list, click the name of the custom benchmark to select it.
Exercise 48: Add the pages for the report template

Your custom report template will be comprised of six pages. To create additional pages you need, do the following:

1. In the Presentation Studio window, the Home tab should be selected. From the toolbar, from the Page drop-down field, select New.

2. Repeat step 1 four more times. The left pane should display a total of six blank pages.

Exercise 49: Save the Presentation Studio template and report

When you save a file in Presentation Studio, you have two options:

- Save the file as a template, or
- Save the file as a report.

Saving the workbook as a template allows you to use it with any two portfolios in the future, not just the two portfolios you selected to help build out the template. However, when you open the template, you will always need to select the portfolios to associate with it; the system will not remember portfolios you previously selected.

If you save the report with the two model portfolios you chose in Exercise 47, you will not have to make that selection again, but if you make changes to that report file, they will not be saved to a template as well; you will need to save both the report and the report template if you wish to save your changes in both places.
To save your Presentation Studio template, do the following:

1. In the upper-left corner of the Presentation Studio window, click the gear icon, then select **Save As Template**. The Presentation Studio dialog box opens.

2. In the **Template Name** field, type **Portfolio Comparison**.

3. Click **Save**.

4. When the confirmation message opens, click **OK**.

To save the report with the portfolios you have selected, do the following:

1. In the upper-left corner of the Presentation Studio window, click the gear icon, then select **Save**. The Presentation Studio dialog box opens.

2. In the **Workbook Name** field, type **Model Portfolio Comparison Report**.

3. Click **Save**.
Exercise 50: Insert and design the report header and footer

After saving the workbook, you are ready to insert a header and footer on the first page. This provides a title for the factsheet and also allows you to include a logo. The footer will display the page number for the report. Once built, the header and footer will be copied to all other pages.

To insert and style the header and footer on the first page, do the following:

1. In the left pane, be sure the first page is selected.
2. From the toolbar at the top of the window, select the Format tab.
3. From the toolbar above the ruler, click the Header icon and select Insert Header.
4. From the toolbar above the ruler, click the Text icon and select Custom Text.
5. Click the header area, then type **Portfolio Comparison Report**.

6. To select the text you just typed, press `<CTRL>`+`<A>`, then use the font size drop-down field from the toolbar to select 36.

7. To change the color of the text, with the text still selected, **right-click** on the text and select **Font Color**.

8. Select the **dark blue** color in the upper-left corner of the color palette.
9. From the toolbar, use the Align icon to select the second instance of Middle. Note the new position of the header’s text.

10. To place an image in the header, click the Divide Page icon, then select the option displaying two side-by-side cells.

11. In the header, select the cell on the left.
12. From the toolbar, from the Image drop-down field, select Insert Image.

13. Navigate to your desktop, select the XYZ Advisor logo and open it. The image now appears in the right cell of the header.
14. From the toolbar, from the Align drop-down field, select Right.
15. To create the border on the left header cell, **right-click** in the cell, then select **Border Type** → **Bottom Edge**.
16. To change the thickness of the border, right-click in the left cell, then select **Border Style** > **Thick Line**.
17. To change the color of the border, right-click in the left cell, then select **Border Color** and select the **dark blue color** in the upper-left corner of the color palette.

18. **Repeat steps 14-16** for the cell with the logo image.
19. To insert a page number in the footer, be sure the **Format** tab is selected.
20. From the toolbar, click the **Footer** icon and select **Insert Footer**.
Exercise 50: Insert and design the report header and footer

21. From the toolbar, click the **Text** icon and select **Dynamic Text** → **Page #**.

![Image of the toolbar with highlighted Dynamic Text and Page #]

Select this option to insert the page number in the footer

22. From the toolbar, click the **Align** icon and select **Right**.

23. From the toolbar, from the **Align** icon and select **Bottom**.

![Image of the toolbar with highlighted Align options]

Use each of these options separately to properly display the page number in the footer
24. **Hover** your mouse over the bottom border of the header, then **click, hold, and drag up** until the bottom of the header is at the **1.50** mark on the vertical ruler.

25. **Hover** your mouse over the top border of the footer, then **click, hold, and drag down** until the top of the footer is at the **7.75** mark on the vertical ruler.

26. Make sure the footer cell is still selected, then click the **Footer** icon and select **Apply Header & Footer to Workbook**. A page number now appears in the footer of each page.
Exercise 51: Divide the first page to hold three components

The first page of the report has two charts and includes a label for the page, so that needs to be accounted for when designing the page’s layout. To divide the page accordingly, do the following:

1. Select the main part of page 1 (below the header), then use the Divide Page icon to select the second Three-Cell option (second from the left).

2. The label does not need to be as tall as the other cells. Click, hold, and drag the bottom of the top cell until your mouse is at the 2.25 mark on the vertical ruler.
3. To make the remaining two cells equal in width, **click, hold, and drag** the bottom border of the middle cell until your mouse is at the **5.00** mark on the vertical ruler.
Exercise 52: Divide the second page to hold six components

The second page of the report has two charts that are repeated for each portfolio. Each chart section also needs a label, which means a total of six components. To divide the page for that content, do the following:

1. On page 2, select the main part.
2. On the Home tab, click the Divide Page icon and select the Four-Cell option that is third from the left.

3. Select the bottom cell.
4. On the Home tab, click the Divide Page icon and select the Three-Cell option in the bottom-right corner.
5. Resize the **top cell** so the bottom border is at the 2.25 mark on the vertical ruler.
6. Resize the **next two cells** so the bottom border is at the 5.00 mark on the vertical ruler.
7. Resize the **bottom cell** so the top border is at the 5.75 mark on the vertical ruler.

Click and hold the bottom border to drag the top section to this position

Click and hold each of these borders to drag them to the positions shown here
Exercise 53: Divide the third page to hold five components

The third page of the report has a table and chart for each portfolio, as well as a label. To divide the page for that content, do the following:

1. On page 3, select the **main part**.
2. On the **Home** tab, click the **Divide Page** icon and select the **Five-Cell** option in the bottom-right corner.

3. **Resize** the top cell so the bottom border is at the **2.25** mark on the vertical ruler.
4. **Resize** the next two cells so the bottom border is at the **5.00** mark on the vertical ruler.
The fourth page of the report uses the same layout as the third. Rather than manually recreate the layout, you can simply duplicate page three, and then delete what would have been page four. Do the following:

1. In the left pane, right-click page 3.
2. From the right-click drop-down field, select Duplicate. An identical page is inserted immediately after page 3.

3. You now have an extra page in the report. In the left pane, right-click page 5.
4. From the right-click drop-down field, select Delete.
5. When the confirmation message opens, click Yes.
Exercise 55: Divide the fifth page to hold four components

The fifth page of the report has a label at the top, and three other components in a 2X1 layout. To divide the page for that content, do the following:

1. Select the main part of page 5.
2. On the Home tab, click the Divide Page icon and select the Four-Cell option that is third from the left.

3. Resize the top cell so the bottom border is at the 2.25 mark on the vertical ruler.
4. Resize the next two cells so the bottom border is at the 5.00 mark on the vertical ruler.

Be sure the main part of page 5 is selected before choosing this option.
The last page of the report will have a chart for each portfolio, as well as a label. To divide the page for that content, do the following:

1. On page 6, select the **main part**.
2. On the **Home** tab, click the **Divide Page** icon and select the **Three-Cell** option in the bottom-right corner.
3. Resize the **top cell** so the bottom border is at the **2.25** mark on the vertical ruler.

You are now ready to add the components to each page.
Exercise 57: Add the label to the first page

To add the component label to the first page of the report, do the following:

1. In the left pane, select page 1.
2. Select the top cell on the page; this is where the label for the page will go.
3. On the Home tab, click the Text icon and select Custom Text.
4. Double-click the top cell, then type Performance.
5. To select the text you just typed, press <CTRL>+<A>, then use the font size drop-down field to select 24.
Using Presentation Studio to Compare Model Portfolios

Exercise 57: Add the label to the first page

6. **Right-click** the text, then select **Font Color... Light Blue** (the second option from the top on the left side of the color palette).

7. Be sure the **Format** tab is selected. From the toolbar, click the **Align** icon and select the second **Middle** option.

---

Choose this color for the label

Use this command to vertically center the label in the cell
Exercise 58: Add the components to the first page

The first page of the report contains two graphical components:

- an Investment Growth chart depicts the performance of each portfolio as well as the custom benchmark, and
- a histogram shows return values for different time periods for both portfolios and the custom benchmark.

The Investment Growth chart will be modified to help the three elements visually stand out from one another. The histogram will be updated to both remove a couple of time periods shown by default, and to add the values for each bar shown.

To add and configure the components to the first page of the report, do the following:

1. Select the Home tab.
2. From the toolbar, click the Chart icon and select Performance.
3. Drag the Multiple Investment Growth Chart into the cell below the Performance label.
4. To improve the readability and presentation of the chart, click **Chart Settings** in the bottom-left corner of the screen. The Chart Settings window opens.

5. On the Chart tab of the menu, in the Investments list, from the Fund Lineup **Display** drop-down field, select **Shaded Area**

6. From the Moderate Aggressive **Display** drop-down field, select **Dotted Line**.

Note the values selected for these two chart elements.
7. To change the color of the benchmark throughout the workbook, select the Home tab at the top of the window.
8. From the toolbar, click the Investments icon. A dialog box opens.
9. In the Display Benchmarks area, in the Moderate Aggressive row, from the color drop-down field, select the dark red color that is fourth from the bottom.

10. Click OK to close the dialog box.
11. From the toolbar, click the Chart icon and select Performance.
12. Drag the Trailing Returns Bar Chart into the bottom cell.
13. To ensure the time periods here match those in the rest of the report, in the bottom-left corner of the screen, click **Chart Settings**. The Chart Settings window opens.


15. In the Selected Time Periods area, click the **10 Years** row, then click **Remove**.

16. **Repeat step 14** for the **15 Years** row.

17. Click **OK** to close the Time Period Setup dialog box.
Exercise 59: Add the labels to the second page

Using Presentation Studio to Compare Model Portfolios

18. In the Chart Settings window, click the **Values** box. The numeric value for the return in each time period is now shown.

19. **Close** the Chart Settings window. The first page is now complete.

Exercise 59: Add the labels to the second page

To add the labels for the two sets of components on the second page of the report, do the following:

1. In the left pane, select **page 2**.
2. Select the **top cell** on the page; this is where the label for the page will go.
3. On the **Home** tab, click the **Text** icon and select **Custom Text**.

Click once here to see the values above each bar in the chart

Select this option from the Text drop-down field
4. **Double-click** the **top cell**, then type **Asset Allocation - Sector Analysis**.
5. To select the text you just typed, press `<CTRL>+<A>`, then from the **font size** drop-down field, select **24**.

6. **Right-click** the **text**, then select **Font Color… Light Blue** (second option from the top on the left side).
7. Select the third cell from the top on the page; this is where the other label for the page will go.
8. On the Home tab, click the Text icon and select Custom Text.
9. **Double-click** in the **third cell** from the top on the page, then type **Broad Asset Class Lineup**.

10. Select the text, then from the font size drop-down field, select **24**.

11. **Right-click** the **text**, then select **Font Color…Light Blue** (second option from the top on the left side).

12. Select the **Format** tab.

13. From the toolbar, click the **Align** icon and select the second **Middle** option.
Exercise 60: Add the components to the second page

On the second page of the report, separate donut charts show the asset allocation for each portfolio, while the bottom of the page shows separate bar charts for the broad asset class allocation for each portfolio compared to the custom benchmark. For the elements on this page, note the following important points:

- The donut charts will start as a pie chart; you will change not only the appearance of the chart but also the information depicted on it.
- Although this page includes four graphical components, you actually need to create just one donut chart and one bar chart. You will then see how to copy, paste and update a component for a separate portfolio. This process will be repeated elsewhere throughout this report.

To add the components to the second page of the report, do the following:

1. Select the Home tab.
2. Click the Chart icon and select Asset Exposure.
3. Drag the Pie Chart component into the upper-left cell below the label.
4. At the bottom of the window, click Chart Settings. The Chart Settings window opens.
5. From the **Data Set** drop-down field, select **Equity Sectors (Morningstar)**.

6. **Close** the Chart Settings window.
7. From the toolbar, click the **Workbook** icon. The Workbook Settings Data window opens.
8. Select the **Asset Exposure** tab.
9. In the Pie Chart Type area, Select the **Donut** option.

10. Click **OK** to close the Workbook Settings Data window.
11. Rather than recreate the same chart for the other portfolio, you can simply copy and paste the one you already have. **Right-click** the component you just configured in the upper-left cell and select **Copy**.
12. Right-click in the upper-right cell and select Paste.

13. Note that the component you pasted is still showing data from the Alternate Fund Lineup portfolio. You will change this to reflect the Fund Lineup portfolio. Be sure the upper-left cell where you just pasted the donut chart is still selected.

14. At the top of the window, the Chart tab should be selected. From the toolbar, click Investments. A dialog box opens.

15. In the Show column, uncheck the box for Alternate Fund Lineup.

16. Click OK to close the dialog box.
17. The bar chart can now be added to the cell in the bottom-left corner of the page. At the top of the window, select the **Home** tab.
18. Click the **Chart** icon and select **Snapshot**.
19. **Drag** the **Supplementary Data Bar Chart** component into the **lower-left cell** on the page.

```
Be sure to select the correct tab (Home), icon (Chart), and menu (Snapshot) in order to select the **Supplementary Data Bar Chart** component.
```

20. The **Supplementary Data bar chart** depicts both portfolios and the custom benchmark by default. Only one portfolio and the benchmark should show at once. The **Chart** tab should be selected. From the toolbar, click **Investments**. A dialog box opens.
21. In the **Show column**, **uncheck** the box for **Fund Lineup**.

```
Be sure to uncheck this box from the **Investments** dialog box on the **Chart** tab, and not the **Home** tab.
```

22. Click **OK** to close the dialog box.
23. As before, you will copy the component you just created, and paste it into the adjacent cell. **Right-click** the Supplementary Data bar chart **component** you just configured in the lower-left cell and select **Copy**.

24. In the **lower-right cell**, **right-click** and select **Paste**.
25. The last step is to change the portfolio being depicted in the lower-right cell. The Chart tab should be selected. From the toolbar, click Investments. A dialog box opens.

26. In the Show column, uncheck the box for Alternate Fund Lineup and check the box for Fund Lineup.

27. Click OK. The second page is now complete.

To add the label for the components to the third page of the report, do the following:

1. In the left pane, select page 3.
2. Select the top cell on the page; this is where the label for the page will go.
3. Select the Home tab.
4. Click the Text icon and select Custom Text.

5. Double-click the top cell, then type Asset Allocation - Holdings.
6. Select the text, then use the font size drop-down field from the toolbar to select 24.
7. **Right-click** the text, then select **Font Color... Light Blue** (the second option from the top on the left side).

8. Be sure the **Format** tab is selected.
9. From the toolbar, click the **Align** icon and select the second **Middle** option.
As on the previous page, on this page you will add a component (in this case, a table), manipulate it to show something other than the default data, then copy and paste it into an adjacent cell. You will then repeat this process for a chart component at the bottom of the page.

To add the components to the third page of the report, do the following:

1. Select the **Home** tab.
2. Click the **Table** icon and select **Holdings Analysis**.
3. Drag the **Portfolio Holdings** component into the upper-left cell on the page.
4. In the table, click the drop-down header for column C (Position Market Value (mil)). A dialog box opens.
5. From the top drop-down field, scroll all the way down and select All Managed Investments.

6. From the list of available fields, select Morningstar Category.
7. Click Add, then click Close.
8. Now that the table is configured for one portfolio, you can copy and paste it into the adjacent cell for the other portfolio. **Right-click** the upper-left cell you just configured, then from the **right-click** drop-down field, select **Copy**.

9. **Right-click** in the upper-right cell, then select **Paste**.
10. Now you need to change the portfolio being displayed in the table you pasted. Be sure the upper-right cell is selected.

11. At the top of the window, make sure the Data Table tab is selected.

12. From the toolbar, click the Investments icon. A dialog box opens.

13. In the Show column, uncheck the box for Alternate Fund Lineup.

14. Click OK.

15. Select the Home tab.

16. Click the Chart icon select Style Analysis.

17. Drag the Holdings-Based Style Map component into the bottom-left cell on the page.
18. In the bottom-left corner of the screen, click **Chart Settings**.
19. In the Chart Settings window, note the values in the following table for the area at the bottom:

<table>
<thead>
<tr>
<th>Investments</th>
<th>Ownership Zone</th>
<th>Detailed Holdings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative Fund Lineup</td>
<td>Show</td>
<td>Show</td>
</tr>
<tr>
<td>Fund Lineup</td>
<td>Hide</td>
<td>Hide</td>
</tr>
<tr>
<td>Moderate Aggressive</td>
<td>Show</td>
<td>Hide</td>
</tr>
</tbody>
</table>

20. After making your selections, close the Chart Settings window.
21. **Right-click** the chart you just configured in the lower-left cell, then select **Copy**.

22. **Right-click** the lower-right cell, then from the **right-click** drop-down field, select **Paste**.

23. In the bottom-left corner of the screen, click **Chart Settings**.
24. In the Chart Settings window, note the values in the following table for the area at the bottom:

<table>
<thead>
<tr>
<th>Investments</th>
<th>Ownership Zone</th>
<th>Detailed Holdings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative Fund Lineup</td>
<td>Hide</td>
<td>Hide</td>
</tr>
<tr>
<td>Fund Lineup</td>
<td>Show</td>
<td>Show</td>
</tr>
<tr>
<td>Moderate Aggressive</td>
<td>Show</td>
<td>Hide</td>
</tr>
</tbody>
</table>

25. After making your selections, close the Chart Settings window. The third page is now complete.
Exercise 63: Add the label to the fourth page

To add the label for the components on the fourth page of the report, do the following:

1. In the left pane, select **page 4**.
2. Select the top cell on the page; this is where the label for the page will go.
3. Select the **Home** tab.
4. Click the **Text** icon, then select **Custom Text**.

5. **Double-click** the top cell, then type **Asset Allocation - Equity Breakdown**.
6. Select the **text**, then use the **font size** drop-down field to select **24**.
7. **Right-click** the text, then select **Font Color...** **Light Blue** (the second option from the top on the left side).

8. Make sure the **Format** tab is selected.
9. From the toolbar, click the **Align** icon and select the second **Middle** option.

The fourth page is nearly the same as the third, in terms of adding a component, modifying it, copying it, then adding another component and copying it as well.

To add the components to the fourth page of the report, do the following:

1. Select the **Home** tab.
2. Click the **Chart** icon and select **Style Analysis**.
3. Drag the **Morningstar Style Box** component into the top-left cell on the page.
4. In the bottom-left corner of the screen, click **Chart Settings**. The Chart Settings window opens.
5. From the **Data** drop-down field, select **Equity Style Percentage**.

6. Close the Chart Settings window. You can now copy the component and paste it into the cell on the right.

7. **Right-click** the **upper-left cell**, then select **Copy**.

8. **Right-click** the **upper-right cell**, then select **Paste**.
9. Make sure the upper-right cell is selected.
10. Be sure the Chart tab is selected.
11. From the toolbar, click the Investments icon. A dialog box opens.
12. In the Show column, uncheck the box for Alternate Fund Lineup.

13. Click OK. The next component can now be added to the bottom-left cell on the page.
14. Select the Home tab.
15. Click the Chart icon and select Holdings Analysis.
16. Drag-and-drop the Pie Chart component into the bottom-left cell on the page.

   Note: The component appears as a donut chart because you made a change earlier from the Home tab to convert pie charts to donut charts.

17. In the bottom-left corner of the screen, click Chart Settings. The Chart Settings window opens.
18. From the **Data Set** drop-down field, select **Equity Style**.

19. Close the Chart Settings window. You can now copy this component, and paste it into the cell on the right.

20. **Right-click** the **donut chart** you just configured in the bottom-left cell, then select **Copy**.

21. **Right-click** in the **bottom-right cell**, then select **Paste**.

22. Now it’s time to switch the portfolio being reflected in the **bottom-right cell**. Make sure the **bottom-right cell** is selected.

23. Be sure the **Chart** tab is selected.

24. Click the **Investments** icon. A dialog box opens.

25. In the Show column, **uncheck** the box for Alternate Fund Lineup.

26. Click **OK**. The fourth page is now complete.
To add the label for the components on the fifth page of the report, do the following:

1. In the left pane, select page 5.
2. Select the top cell on the page; this is where the label for the page will go.
3. Select the Home tab.
4. Click the Text icon and select Custom Text.
5. Double-click the top cell, then type Portfolio Risk.
6. To select the text, press <CTRL>+<A>, then use the font size drop-down field from the toolbar to select 24.
7. Right-click the text, then select Font Color…Light Blue (the second option from the top on the left side).
8. Select the Format tab.
9. From the toolbar, click the Align icon and select the second Middle option.
Exercise 66: Add the components to the fifth page

The fifth page has three components, all of which reflect both portfolios and the custom benchmark. Therefore, you do not need to copy and paste any components.

To add the components to the fifth page of the report, do the following:

1. Select the Home tab.
2. Click the Chart icon and select Performance.
3. Drag-and-drop the X/Y Scatter Plot Chart component into the top-left cell on the page.

4. For the next component, click the Table icon and select Performance.
5. Drag-and-drop the Multiple Investment Risk component into the top-right cell on the page.
6. For the component at the bottom of the page, click the Chart icon and select Performance.
7. Drag-and-drop the Drawdown Chart component into the bottom cell on the page.

8. In the bottom-left corner of the screen, click Chart Settings.
9. From the Display drop-down field for Fund Lineup, select Shaded Area.
10. From the Display drop-down field for Moderate Aggressive Benchmark, select Dotted Line.

11. Close the Chart Settings window. The fifth page is now complete.
Exercise 67: Add the label to the last page

To add the label for the components to the sixth page of the report, do the following:

1. In the left pane, select page 6.
2. Select the top cell on the page; this is where the label for the page will go.
3. Select the Home tab.
4. Click the Text icon and select Custom Text.
5. Double-click the top cell, then type Geographic Regions.
6. To select the text, press <CTRL>+<A>, then from the font size drop-down field, select 24.
7. Right-click the text, then select Font Color... Light Blue (the second option from the top on the left side).
8. Select the Format tab.
9. From the toolbar, click the Align icon and select the second Middle option.
Exercise 68: Add the components to the last page

The last page has two components, but you only need to build one, then copy and paste it into the adjacent cell.

To add the components to the sixth page of the report, do the following:

1. Select the **Home** tab.
2. Click the **Chart** icon and select **Holdings Analysis**.
3. **Drag-and-drop** the **Pie Chart** component into the **left cell** on the page.

4. In the bottom-left corner of the screen, click **Chart Settings**.
5. From the **Data Set** drop-down field, select **Equity Regional Exposure**.

6. Close the Chart Settings window.
7. You can now copy and paste the pie chart into the cell on the right. **Right-click** in the **left cell**, then select **Copy**.
8. **Right-click** in the **right cell**, then select **Paste**.
9. Make sure the **right cell** is selected.
10. Be sure the **Chart** tab is selected.
11. From the toolbar, click the **Investments** icon. A dialog box opens.
12. In the **Show column**, **uncheck** the box for Alternate Fund Lineup.

13. Click **OK**. The sixth page is now complete. Be sure to save the report via the **gear icon** in the upper-left corner of the window.