

Copyright © 2020 Morningstar, Inc. All rights reserved.

The information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied or distributed; (3) is not warranted to be accurate, complete or timely; and (4) does not constitute advice of any kind. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information. Any statements that are nonfactual in nature constitute opinions only, are subject to change without notice, and may not be consistent across Morningstar. Past performance is no guarantee of future results.



### Contents

	Overview	4	
Manua	Ily Creating Model Portfolios		5
	Overview	5	
	Exercise 1: Manually create a model portfolio		
	Exercise 2: Record a change to the portfolio's composition		
	Exercise 3: Generate a Growth chart for a model	11	
	Exercise 4: Generate the Portfolio Aggregation report	12	
Importi	ng Model Portfolios		13
	Overview	13	
	Preparing to import a model portfolio		
	Exercise 5: Set user preferences for importing		
	Exercise 6: Import a model portfolio from Microsoft Excel		
	Exercise 7: Adjust a portfolio's settings for Performance Reporting	23	
Workin	g with Custom Benchmarks		24
	Overview	24	
	Exercise 8: Create a custom benchmark	24	
	Exercise 9: Select and allocate the weightings for a custom benchmark	27	
	Exercise 10: Create a new benchmark from an existing benchmark	30	
	Exercise 11: Assign a custom benchmark to a model portfolio	34	
	Exercise 12: Generate a Growth chart	37	



# Working with Model Portfolios and Custom Benchmarks in Morningstar Direct<sup>SM</sup>

The Portfolio Management module offers the following main pages for users:

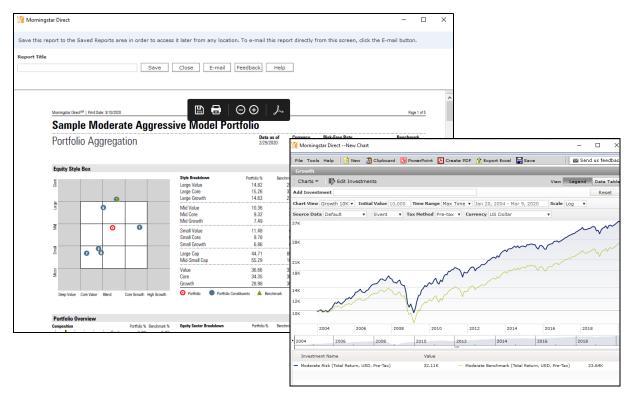
Overview

- ► Model Portfolios
- ► Custom Benchmarks, and
- ► Accounts (for returns series or holdings import).

The process for creating any of these items is similar. This guide includes the following general workflows:

- ► Manually Creating Model Portfolios (page 5)
- ► Importing Model Portfolios (page 13)
- ► Working with Custom Benchmarks (page 24)

Users will also see how to create both charts and pre-built reports for these items, and how to easily make changes to record updates to model portfolios over time.





#### **Manually Creating Model Portfolios**

Manually creating a model portfolio in Morningstar Direct involves the following basic process:

Overview

- 1. Determine how frequently the model should be rebalanced (if ever)
- 2. Select investments for the model portfolio
- 3. Assign weights to the holdings, and
- 4. Save the model portfolio.

This section includes the following exercises:

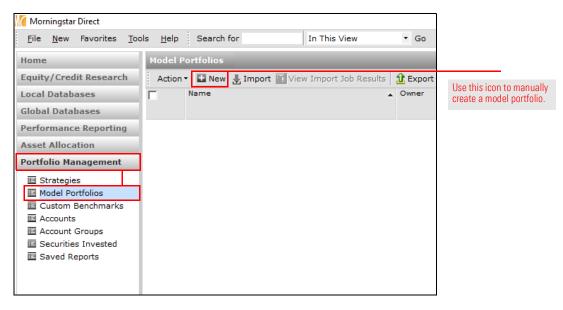
- ► Exercise 1: Manually create a model portfolio on page 5
- ► Exercise 2: Record a change to the portfolio's composition on page 9
- ► Exercise 3: Generate a Growth chart for a model on page 11, and
- ► Exercise 4: Generate the Portfolio Aggregation report on page 12.

This exercise uses an investment list to choose a number of funds for a model portfolio. Specifically, the Multiple Investment list created as part of the Working with Lists onboarding guide is used. If this list is not available, another can be used, or investments can be selected at the time the model portfolio is created.

Exercise 1: Manually create a model portfolio

To manually create a model portfolio, do the following:

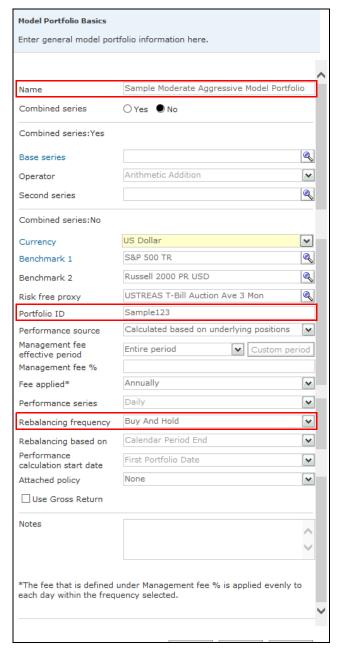
- In Morningstar Direct, select the **Portfolio Management** module. The Accounts page is selected by default.
- 2. Select the **Model Portfolios** page.
- 3. From the toolbar, click **New**. The Model Portfolio Basics window opens.



4. Fill in the following fields with the values shown in this table:



For this field	Enter this value
Name	Sample Moderate Aggressive Model Portfolio
Portfolio ID	Sample123
Rebalancing Frequency	Buy And Hold

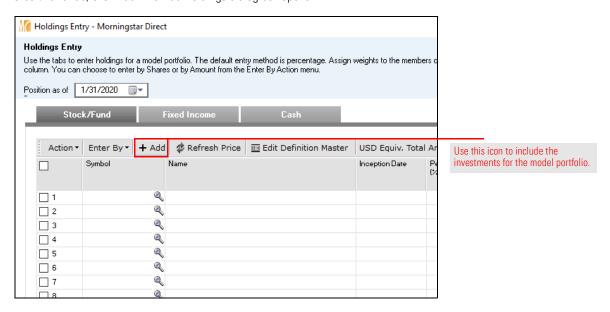


Note the values in the highlighted fields.

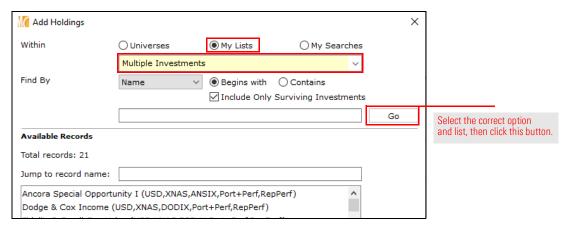
5. Click **Save**. The Holdings Entry window opens.



 Investments can be selected from an existing investment list, or users can simply select funds by looking for them by name or identifier. To select investments, on the Stock/Fund tab, click Add. The Add Holdings dialog box opens.



- 7. At the top of the dialog box, select My Lists.
  - Note: Users could also select either Universes, to access the Morningstar databases, or My Searches, to access saved Search Criteria.
- 8. Select the **Multiple Investments** list, then click **Go**.

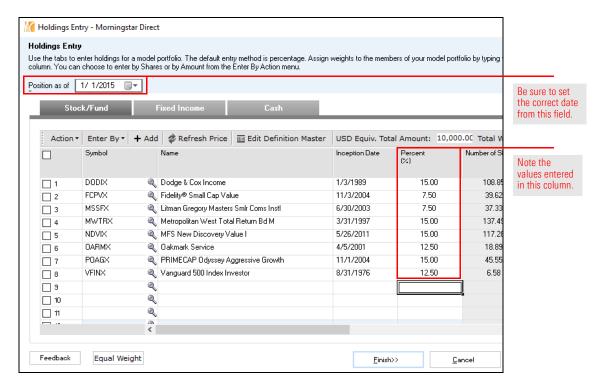


- 9. Click **OK** to close the dialog box.
- 10. Select the following investments from the list:
  - ► Dodge & Cox Income
  - ► Fidelity® Small Cap Value
  - ► Litman Gregory Masters Smlr Coms Instl
  - Metropolitan West Total Return Bd M
  - ► MFS New Discovery Value I
  - ► Oakmark Service
  - ► PRIMECAP Odyssey Aggressive Growth, and
  - Vanguard 500 Index Investor.



- 11. Click **OK** to close the Add Holdings dialog box.
- 12. From the **Position as of** field, set the date to **01/01/2015**.
- 13. Under the **Percent (%)** column, assign the following weights to each holding:

Holding	Weight
Dodge & Cox Income	15%
Fidelity® Small Cap Value	7.5%
Litman Gregory Masters Smlr Coms Instl	7.5%
Metropolitan West Total Return Bd M	15%
MFS New Discovery Value I	15%
Oakmark Service	12.5%
PRIMECAP Odyssey Aggressive Growth	15%
Vanguard 500 Index Investor	12.5%



14. Click **Finish**. The portfolio is saved and opens on screen.

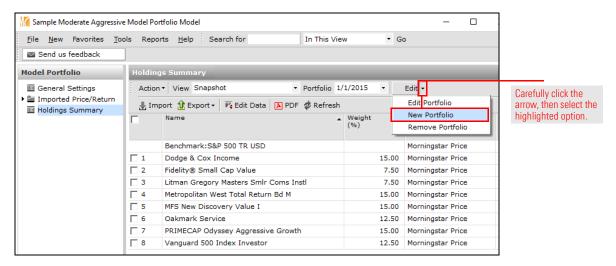


This exercise shows users how to record a change in a portfolio over time. This may involve either a tactical replacement of one investment with another, or a strategic shift of weights between existing investments. Updating a model portfolio in this way requires creating a new portfolio with a unique date.

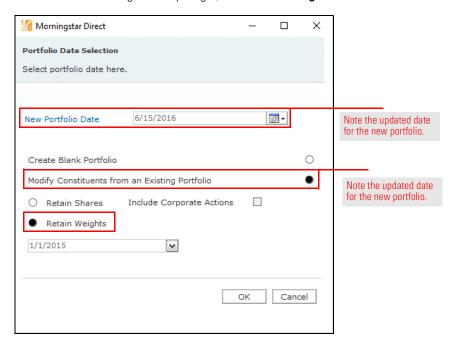
Exercise 2: Record a change to the portfolio's composition

To remove one holding and add another in a new portfolio, do the following:

The Sample Moderate Aggressive Model Portfolio window should still be open. (If not, double-click its name from the Model Portfolios page.) From the toolbar in the Model Portfolio window, click the arrow next to Edit, then select New Portfolio. The Portfolio Date Selection dialog box opens.

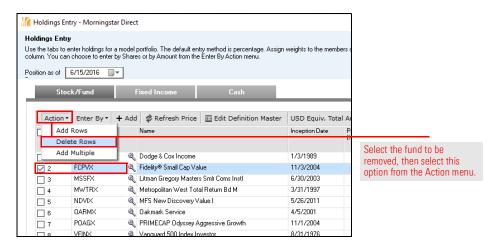


- 2. In the **New Portfolio Date** field, enter **06/15/2016**.
- 3. To copy the constituents of the existing model portfolio, select the option for **Modify** Constituents from an Existing Portfolio.
- 4. To enter the new holding values by weight, select **Retain Weights**.

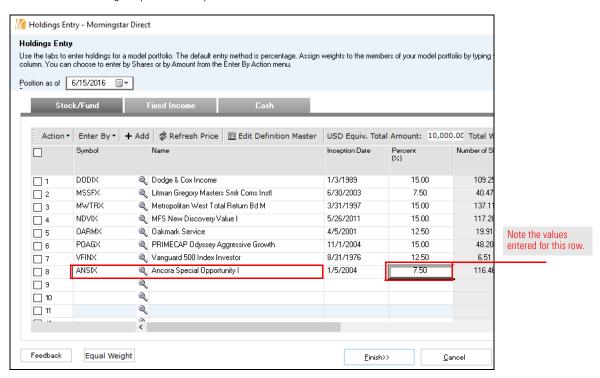




- 5. The original portfolio date is already selected, so no change or selection needs to be made from that field. Click **OK**. The Holdings Entry dialog box opens.
- 6. Check the box next to Fidelity Small Cap Value.
- 7. From the **Action** menu, select **Delete Rows**.

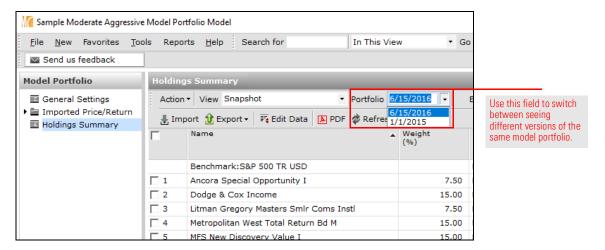


- 8. In the **Symbol** field for row 8, type **ANSIX**, then select the **Ancora Special Opportunity** I fund.
- 9. In the **Percent (%)** field for row 8, type **7.5**.
- 10. Click Finish. The change in portfolio composition has now been recorded.





11. Use the **Portfolio** drop-down field to toggle between the dates.



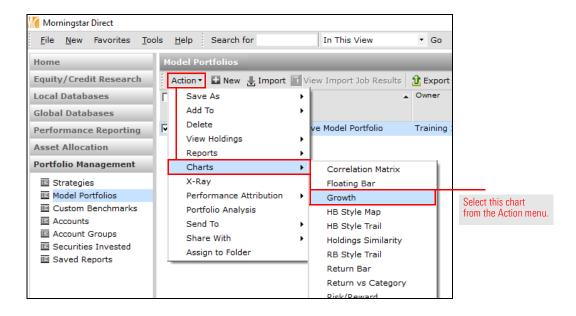
12. **Close** the model portfolio window.

The Action menu in the model portfolio window allows users to generate graphs, but these would be at the holding level, and not the model portfolio level. To see charts for model portfolios themselves, users need to be on the Model Portfolios page.

Exercise 3: Generate a Growth chart for a model

To see the performance of a portfolio in a growth chart, do the following:

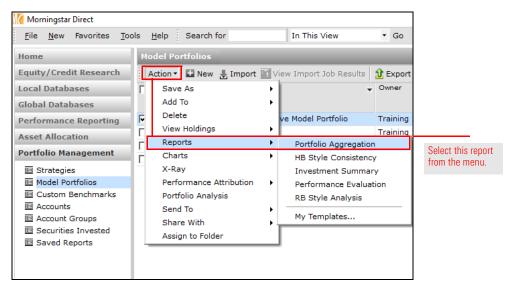
- 1. The Model Portfolios page should be selected. **Check the box** for the model portfolio.
- From the Action menu, select Charts > Growth. The Growth chart opens, displaying the
  portfolio as well as a benchmark. Various options are available to customize the data,
  such as Chart View, Initial Value, Time Range, Currency, and so on.
  - Note: In Working with Custom Benchmarks on page 24, users will see how to create and apply a custom benchmark to a model portfolio. When that is done, that custom benchmark will automatically appear on the charts seen for a model portfolio.



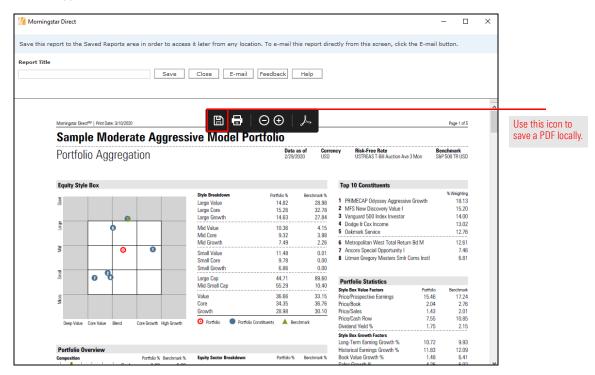
To easily generate a report for quick analysis of a model portfolio's asset allocation, risk and return data, as well as the top 25 underlying stocks, generate the Portfolio Aggregation report. To see this PDF report, do the following:

## Exercise 4: Generate the Portfolio Aggregation report

- 1. The Model Portfolios page should be selected. **Check the box** next to the model portfolio.
- 2. From the **Action** menu, select **Reports** > **Portfolio Aggregation**. The Portfolio Aggregation dialog box opens.



- 3. Leave all options selected and click **OK**.
- 4. When prompted to save the changes, click No. The Portfolio Aggregation report opens.
- 5. To save the report to your computer, hover the cursor over the report, then click the **Save** icon that appears.





Importing Model Portfolios Overview

#### **Importing Model Portfolios**

This section offers the following exercises:

- ► Exercise 5: Set user preferences for importing on page 14
- ► Exercise 6: Import a model portfolio from Microsoft Excel on page 18, and
- ► Exercise 7: Adjust a portfolio's settings for Performance Reporting on page 23.

Importing a model portfolio involves the following process:

- 1. Ensure the holdings are in a properly formatted Microsoft® Excel® file.
- 2. Import the file and review the portfolio's information in the import blotter.
- 3. Post the portfolio to Morningstar Direct.
- 4. Refresh the Model Portfolios page to see the new content.

The Microsoft® Excel® file needs to include only the following information:

- ► Portfolio Date (the date as of when the holding positions and performance are being recorded)
- ► Portfolio ID (a unique alphanumeric designation you choose)
- ► Portfolio Name
- ► Holding Identifier (Ticker, ISIN, CUSIP, or SecId)
- ► Holding Name, and
- ► Weight (enter as a decimal value).

1	Α	В	С	D	E	F
		n .( l: In	5 . ( ): N		1	
1			Portfolio Name	HoldingName	Ticker	Weight
2	1/1/2016	123456	Moderate Risk	American Funds New World A	NEWFX	0.10
3	1/1/2016	123456	Moderate Risk	American Funds Washington Mutual A	AWSHX	0.10
4	1/1/2016	123456	Moderate Risk	Default Cash	\$CASHEQ\$	0.05
5	1/1/2016	123456	Moderate Risk	DFA US Micro Cap I	DFSCX	0.10
6	1/1/2016	123456	Moderate Risk	Fidelity® GNMA	FGMNX	0.08
7	1/1/2016	123456	Moderate Risk	Invesco Oppenheimer Intl Sml-Mid Com A	OSMAX	0.10
8	1/1/2016	123456	Moderate Risk	iShares Core S&P Total US Stock Mkt ETF	ITOT	0.10
9	1/1/2016	123456	Moderate Risk	Loomis Sayles Core Plus Bond A	NEFRX	0.10
10	1/1/2016	123456	Moderate Risk	MFS International Intrinsic Value A	MGIAX	0.10
11	1/1/2016	123456	Moderate Risk	PIMCO Investment Grade Credit Bond Instl	PIGIX	0.08
12	1/1/2016	123456	Moderate Risk	T. Rowe Price Mid-Cap Value	TRMCX	0.10
13	1/1/2009	123456	Moderate Risk	MFS International Intrinsic Value A	MGIAX	0.10
14	1/1/2009	123456	Moderate Risk	iShares Core S&P Total US Stock Mkt ETF	ITOT	0.10
15	1/1/2009	123456	Moderate Risk	DFA US Micro Cap I	DFSCX	0.10
16	1/1/2009	123456	Moderate Risk	Invesco Oppenheimer Intl Sml-Mid Com A	OSMAX	0.10
17	1/1/2009	123456	Moderate Risk	T. Rowe Price Mid-Cap Value	TRMCX	0.10
18	1/1/2009	123456	Moderate Risk	Invesco Oppenheimer Developing Markets A	ODMAX	0.10

This is a sample of the data needed to import a model portfolio. Note the use of two different dates for a model with the same Portfolio ID.

Overview

Preparing to

import a model portfolio

Also, keep in mind the following rules for investments when importing:

- 1. Users can enter multiple dates with different holdings and weights for the same model portfolio in a single import file.
- 2. The Weight can be entered either as a percentage value (for example, 12.5), or as a decimal (for example, .125). Be sure the total weight for each portfolio for each date being imported sums exactly to either 100 (in the cases where percentage is used) or 1.00 (in the cases where decimal is used) in the spreadsheet. Otherwise, Morningstar Direct will attempt to rescale the weights.

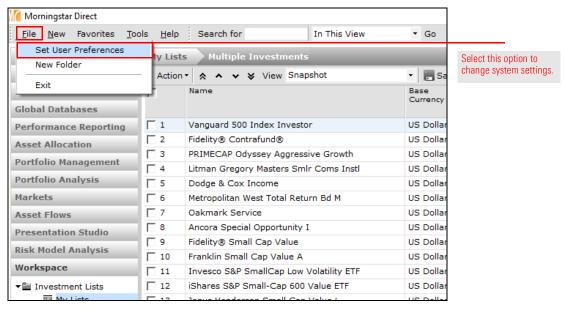


- In lieu of Weight, users can instead import number of shares and the price for each holding.
- 4. To import a Cash position, use the Holding Identifier \$CASHEQ\$ and the Holding Name of Default Cash.
- Importing a return stream for holdings is a different type of import not covered in this
  onboarding exercise guide. Your Customer Success Manager can help you with this type
  of import, if needed. It should be needed only for securities not tracked by Morningstar.

#### To set user preferences for imports, do the following:

- Note: Users might've already completed this exercise in the onboarding guide for Working with Investment Lists. If so, simply use these steps to confirm the settings are correct.
- From the menu bar, select File > Set User Preferences. The Set User Preferences window opens.

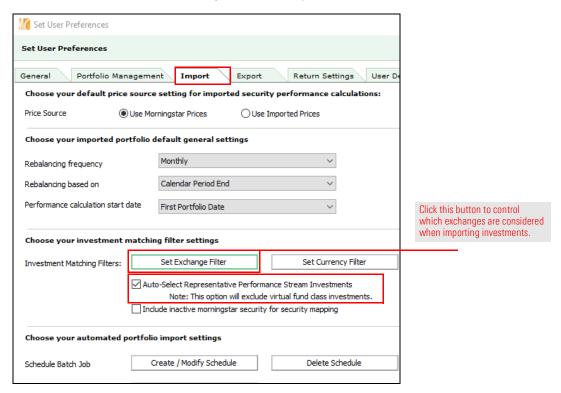
Exercise 5: Set user preferences for importing



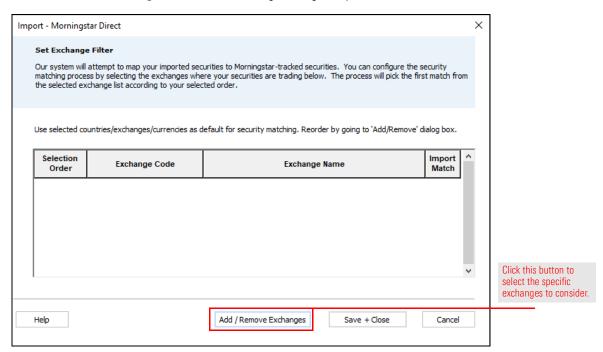
2. Select the **Import** tab.



- To automatically selects the ETF or stock from its primary listing when importing model portfolios, check the box for Auto-Select Representative Performance Stream Investments.
- 4. Click **Set Exchange Filter**. The Set Exchange Filter window opens.

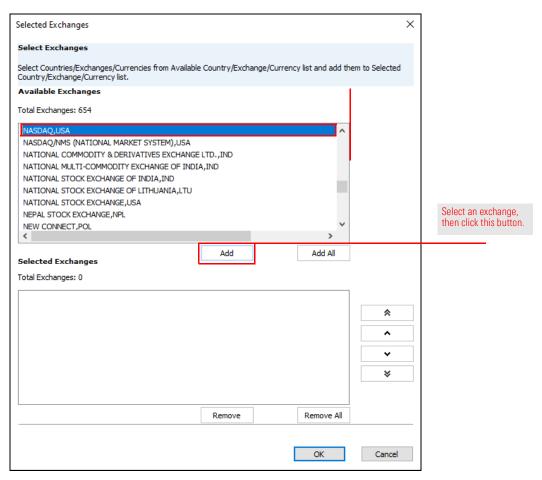


5. Click **Add / Remove Exchanges**. The Selected Exchanges dialog box opens.





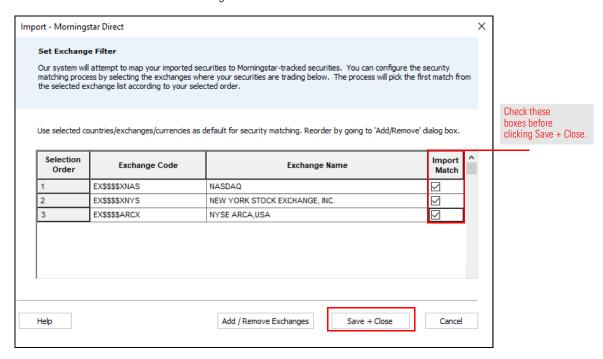
- 6. Scroll down to select each of the following exchanges, then click Add:
  - ► NASDAQ,USA
  - ► **NYSE ARCA, USA**, and
  - ► NEW YORK STOCK EXCHANGE, INC., USA.



7. Click **OK** to close the Select Exchanges dialog box.



- 8. Check the **Import Match** box to the right of the name of each exchange.
- 9. Click **Save + Close** to close the Set Exchange Filter window.



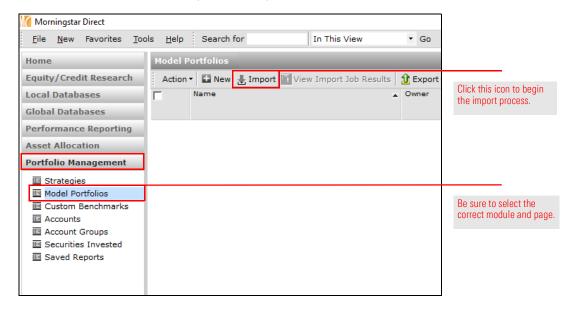
10. Click **OK** to close the Set User Preferences window.



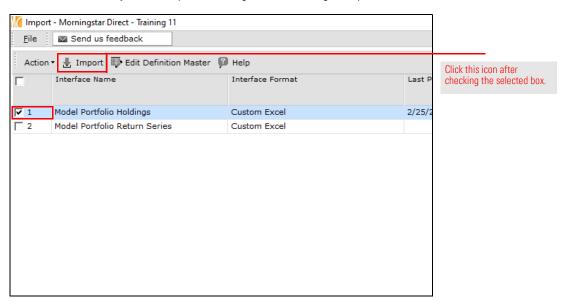
To import and post the model portfolio in Morningstar Direct, do the following:

- 1. **Download** this Microsoft® Excel® file.
- 2. From the left navigation pane in Morningstar Direct, select the **Portfolio Management** module, then select the **Model Portfolios** page.
- 3. From the toolbar, click **Import**. The import window opens.

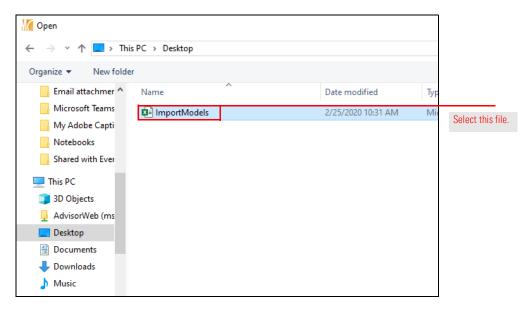
Exercise 6: Import a model portfolio from Microsoft Excel



- 4. Check the row 1 checkbox (Model Portfolio Holdings).
- 5. On the toolbar, click **Import**. The Import Morningstar Direct dialog box opens.



- 6. To the right of the File Name field, click the **Search** (magnifying glass) icon. The Open dialog box opens.
- 7. Navigate to the location where you saved the file downloaded in step 1, then **select the file.**



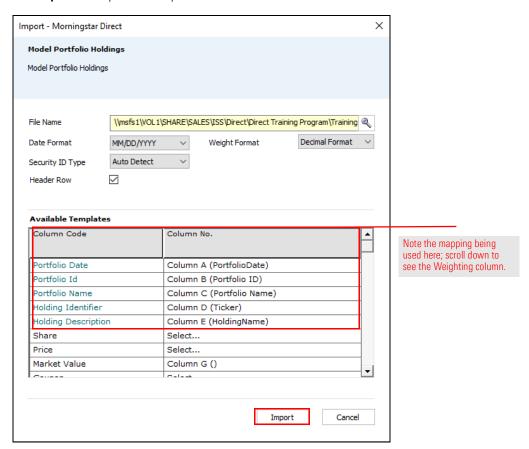
8. Click Open.



- 9. Be sure the **Weight Format** drop-down field is **Decimal Format**, as this was the style used in the file downloaded for this exercise.
- 10. Ensure the Column Code and Column No. fields match as shown in the following table:

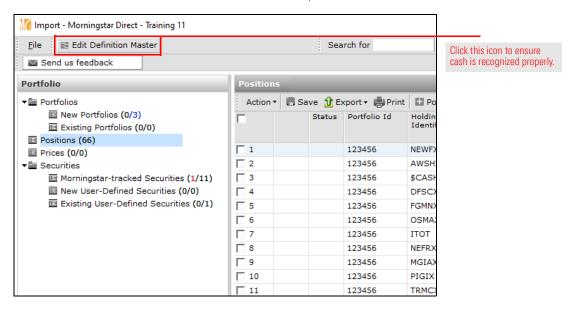
This Column Code field	Should be mapped to this Column No
Portfolio Date	Column A (PortfolioDate)
Portfolio Id	Column B (Portfolio ID)
Portfolio Name	Column C (Portfolio Name)
Holding Identifier	Column D (Ticker)
Holding Description	Column E (HoldingName)
Weight	Column F (Weight)

11. Click **Import**. The Import blotter opens.

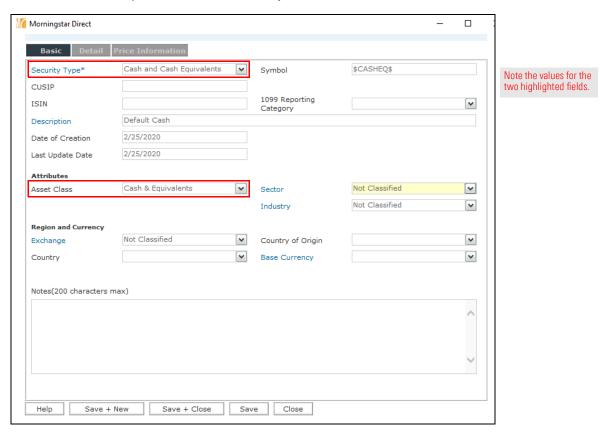




12. To ensure the cash holdings is properly recognized as cash (and not simply undefined), click **Edit Definition Master**. The Definition Master window opens.



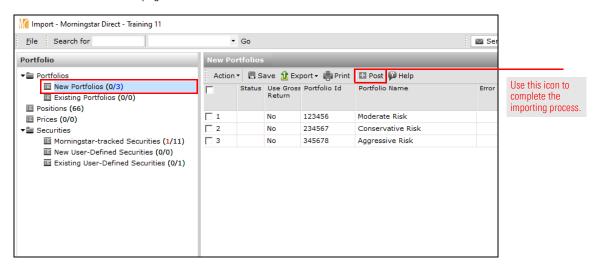
- 13. **Double-click** the **Default Cash** security. A new window opens.
- 14. From the Security Type drop-down field, select Cash and Cash Equivalents.
- 15. From the Asset Class drop-down field, select Cash & Equivalents.



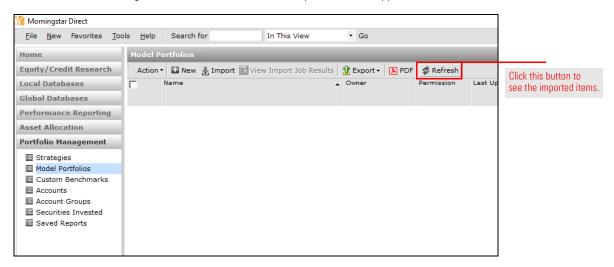
16. Click Save + Close, and click OK when the confirmation message opens.



- 17. Close the Definition Master window.
- 18. Select the **New Portfolios** page, then click **Post**.



- 19. When the confirmation message opens, click **OK**.
- 20. **Close** the import window. The Model Portfolios page is displayed, but still does not show the imported model portfolios.
- 21. On the toolbar above the grid view, click **Refresh**. The model portfolios now appear.

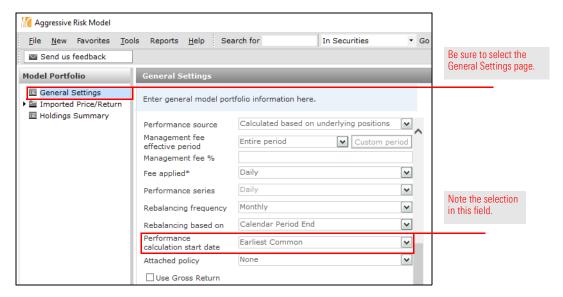




When a portfolio is imported, users need to evaluate the portfolio settings (such as the Portfolio Start Date) that could impact the data for the portfolio elsewhere in Morningstar Direct, such as Presentation Studio or Performance Reporting. The imported portfolios have an earliest date of 01/01/2009. This date needs to be manually set as the performance start date for the portfolio. Do the following:

Exercise 7: Adjust a portfolio's settings for Performance Reporting

- From the Portfolio Management > Model Portfolios page, double-click the Aggressive Risk portfolio. The Aggressive Risk Model window opens, showing the portfolio's holdings.
- 2. In the left navigation pane, select the **General Settings** page.
- 3. **Scroll down** until you see the Performance calculation start date field.
- 4. From the **Performance calculation start date** drop-down field, select **Earliest Common**.



- 5. Click Save.
- 6. Close the window.
- 7. Repeat steps 1-6 for the other two imported model portfolios.



#### **Working with Custom Benchmarks**

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

Overview

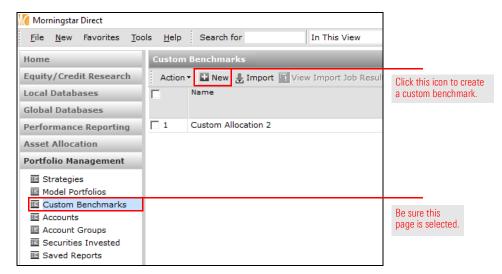
This section offers the following exercises in support of learning how to work with custom benchmarks:

- ► Exercise 8: Create a custom benchmark on page 24
- Exercise 9: Select and allocate the weightings for a custom benchmark on page 27
- ► Exercise 10: Create a new benchmark from an existing benchmark on page 30
- ► Exercise 11: Assign a custom benchmark to a model portfolio on page 34, and
- ► Exercise 12: Generate a Growth chart on page 37.

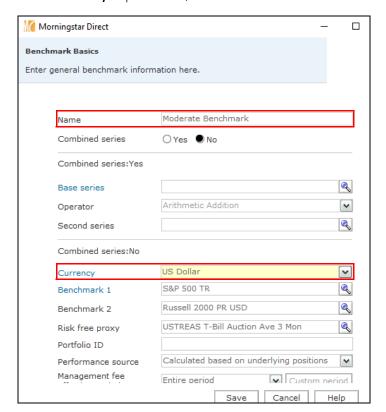
To create a custom benchmark, do the following:

### Exercise 8: Create a custom benchmark

- 1. With the **Portfolio Management** module still selected, select the **Custom Benchmarks** page.
- 2. On the toolbar, click **New**. The Benchmark Basics dialog box opens.



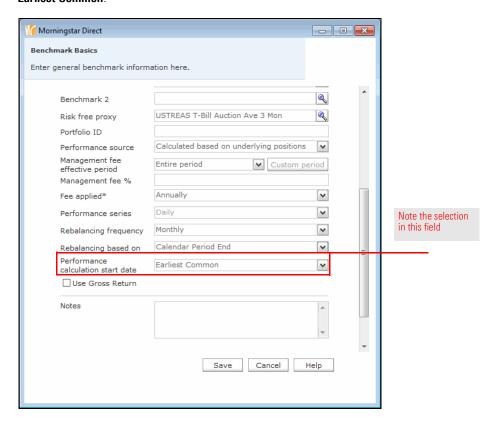
- 3. In the Name field, type Moderate Benchmark.
- 4. From the Currency drop-down field, be sure US Dollar is selected.



Note the name for the custom benchmark and the Currency setting.



5. **Scroll down** to the **Performance calculation start date** drop-down field, and select **Earliest Common**.



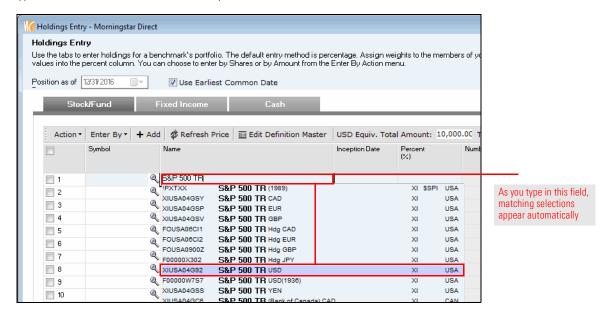
6. Click Save. The Holdings Entry window opens.



To select and allocate weightings for 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**.

Exercise 9: Select and allocate the weightings for a custom benchmark

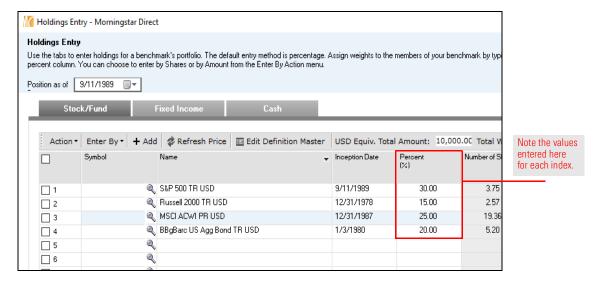


- 3. Repeat steps 1–2 for the following indexes:
  - ► Russell 2000 TR USD
  - ► MSCI ACWI PR USD, and
  - BBgBarc US Agg Bond TD USD.



4. In the Percent (%) column, assign the following percentages to each index:

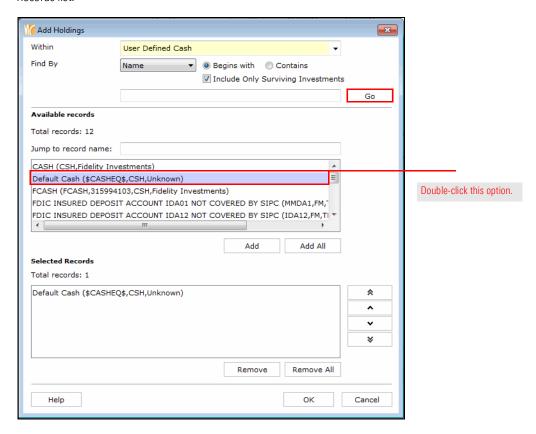
Index	Percent (%)
S&P 500 TR USD	30
Russell 2000 TR USD	15
MSCI ACWI PR USD	25
BBgBarc US Agg Bond TR USD	20



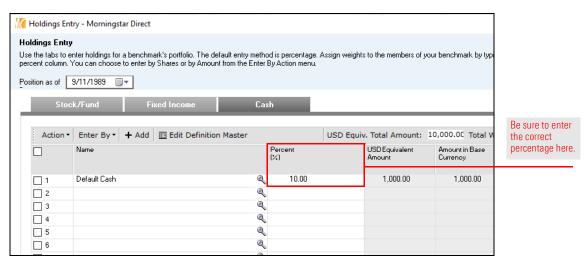
5. Select the **Cash** tab.



- 6. In the Name column of row 1, click the **Search** (magnifying glass) icon. The Add Holdings dialog box opens.
- 7. Click Go.
- 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 10.

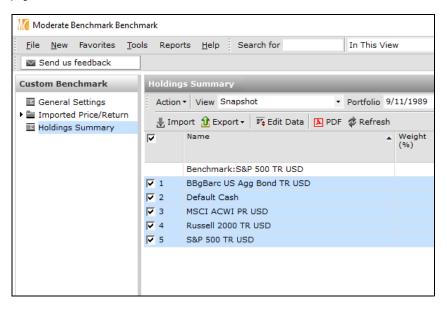




11. Click the **Finish>>** button. The Moderate Benchmark window opens. The next step will be to use this existing custom benchmark to create an additional custom benchmark merely by changing weights among the indexes comprising the benchmark.

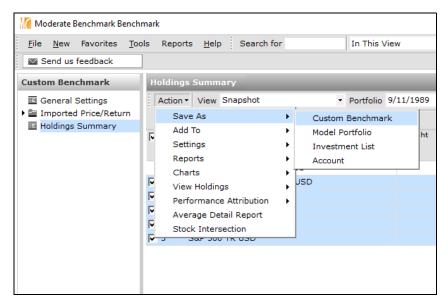
A new custom benchmark can be created from an existing custom benchmark simply by selecting the holdings of the custom benchmark and using a command from the Action menu. This exercise shows users how to create both an Aggressive and Conservative custom benchmark from the Moderate Benchmark. Do the following:

 The Moderate Custom Benchmark window should be open, with the Holdings Summary page selected. Click the **Select All** checkbox.

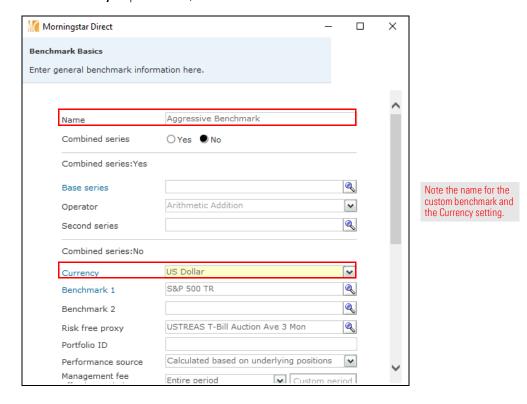


Exercise 10: Create a new benchmark from an existing benchmark

From the Action menu, select Save As > Custom Benchmark. The Benchmark Basics window opens.

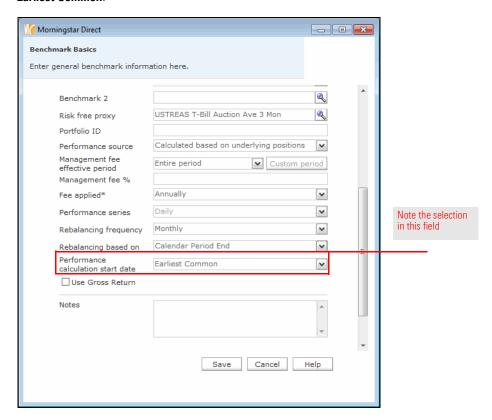


- 3. In the Name field, type Aggressive Benchmark.
- 4. From the Currency drop-down field, be sure US Dollar is selected.





Scroll down to the Performance calculation start date drop-down field, and select Earliest Common.



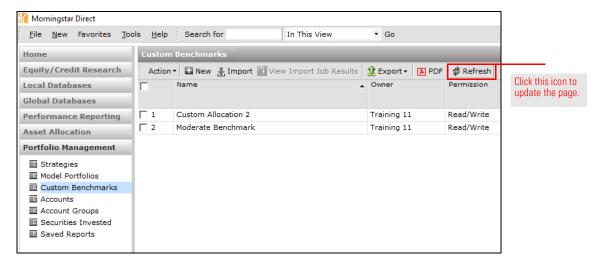
- 6. Click Save. The Holdings Entry window opens.
- 7. In the Percent (%) column, assign the following percentages to each index:

Index	Percent (%)
BBgBarc US Agg Bond TR USD	10
MSCI ACWI PR USD	30
Russell 2000 TR USD	20
S&P 500 TR USD	35

- 8. Switch to the **Cash** tab, and enter a value of **5**.
- 9. Click the **Finish>>** button.
- 10. The Moderate Benchmark window is still open. To see the new custom benchmark, **close** the window.



11. On the Custom Benchmarks page, click Refresh.



- 12. To create the Conservative Benchmark, **double-click** the Moderate Benchmark custom benchmark to open it, and repeat steps 1-11. Note the following:
  - ► For the name, enter Conservative Benchmark.
  - ► For the weights, use the following table:

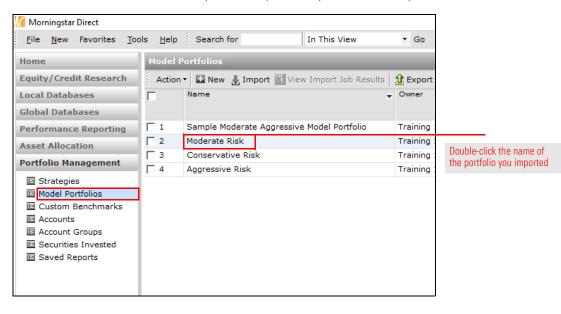
Index	Percent (%)
BBgBarc US Agg Bond TR USD	40
MSCI ACWI PR USD	10
Russell 2000 TR USD	10
S&P 500 TR USD	20
Cash	20



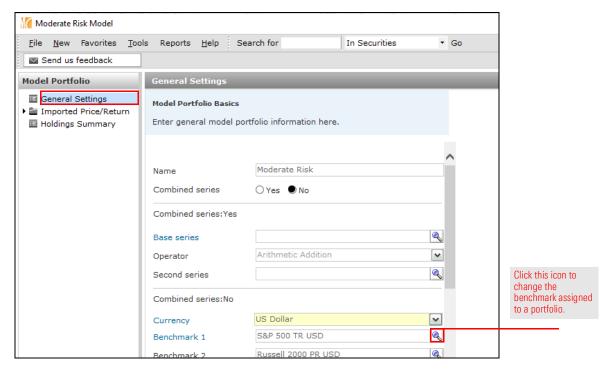
To assign a custom benchmark to a model portfolio, do the following:

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

# Exercise 11: Assign a custom benchmark to a model portfolio

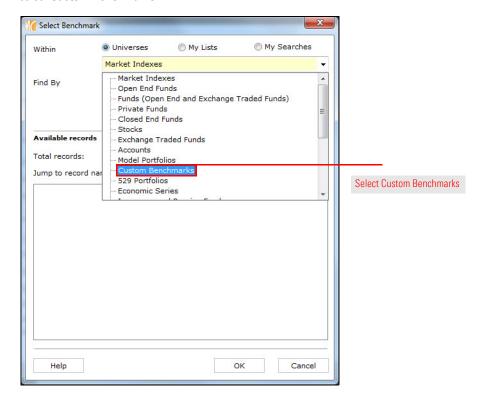


- 3. In the navigation pane, select the **General Settings** page.
- 4. To the right of the **Benchmark 1** field, click the **Search** (magnifying glass) icon. The Select Benchmark dialog box opens.





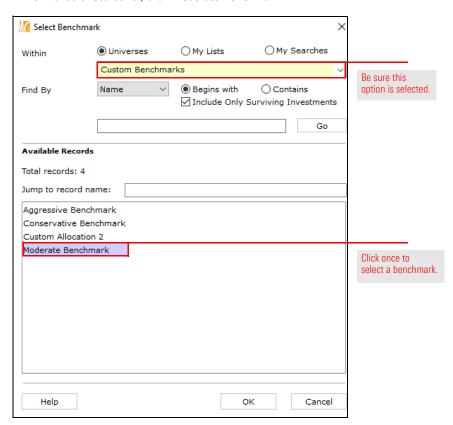
5. At the top of the dialog box, Universes should be selected. From the drop-down field, select **Custom Benchmarks**.



6. Click Go.



7. In the Available records list, click Moderate Benchmark.



- 8. Click **OK** to close the Select Benchmark dialog box.
- 9. In the portfolio window, click Save.
- 10. Close the portfolio window.
- 11. Repeat steps 2-10 to assign the correct custom benchmarks to the **Aggressive Risk** and **Conservative Risk** model portfolios.



To see the impact of this custom benchmark setting on a chart for a model portfolio, do the following:

- Exercise 12: Generate a Growth chart
- The Model Portfolios page should be selected. Check the box for the Moderate Risk model portfolio.
- 2. From the **Action** menu, select **Charts** > **Growth**. The Growth chart opens, displaying the portfolio as well as the custom benchmark assigned to the model portfolio.

