Morningstar® Excel Add-In

User Guide

MORNINGSTAR Direct

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Morningstar® Excel Add-In User Guide

Overview

The Morningstar® Excel Add-In allows you to retrieve data from the Morningstar database and load it into Microsoft® Excel® for further calculation, formatting, or charting. Thousands of widely used data points and investment types are available.

☞ Note: The Morningstar Excel Add-In is available to all users of Morningstar Direct℠.

As of February 25, 2017, you can retrieve custom data created in Morningstar Direct℠ Cloud, as well as data from lists and searches created in Morningstar Direct Cloud.

The Morningstar Excel Add-In allows you to retrieve the following:

- data related to investments, and
- economic data.

The Morningstar Excel Add-In supports the following databases:

- mutual funds
- closed end funds
- stocks
- ETFs
- money market funds
- hedge funds
- separate accounts
- market indexes
- categories
- accounts
- model portfolios
- custom benchmarks, and
- custom databases.

☞ Note: It is assumed you have a working knowledge of Microsoft Excel.

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

- install the Morningstar Excel Add-In and set preferences for it (page 6)
- work with investments in the Morningstar Excel Add-In (page 15)
- retrieve Morningstar data for securities (page 28)
- retrieve Morningstar data from a portfolio (page 38)
- working with economic data in the Morningstar Excel Add-In (page 45), and
- retrieve economic indicator data (page 47).

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Installation and Preferences

Overview

The Morningstar Excel Add-In is an option for users of Morningstar Direct. You do not need a separate license.

You can retrieve discrete and time series data for various instruments in the Morningstar Direct database, including your lists, accounts, and portfolio holdings. You can use predictive search to find securities and data points, and specify the parameters to customize the output.

☞ Note: Go to http://addin.morningstarcommodity.com/ and click **Data Dictionary** to learn what universes and data points are covered in the Morningstar Excel Add-In.

In this section, you will learn how to:

- install the Morningstar Excel Add-In (page 7)
- log in to the Morningstar Excel Add-In (page 9), and
- select your preferences (page 12).

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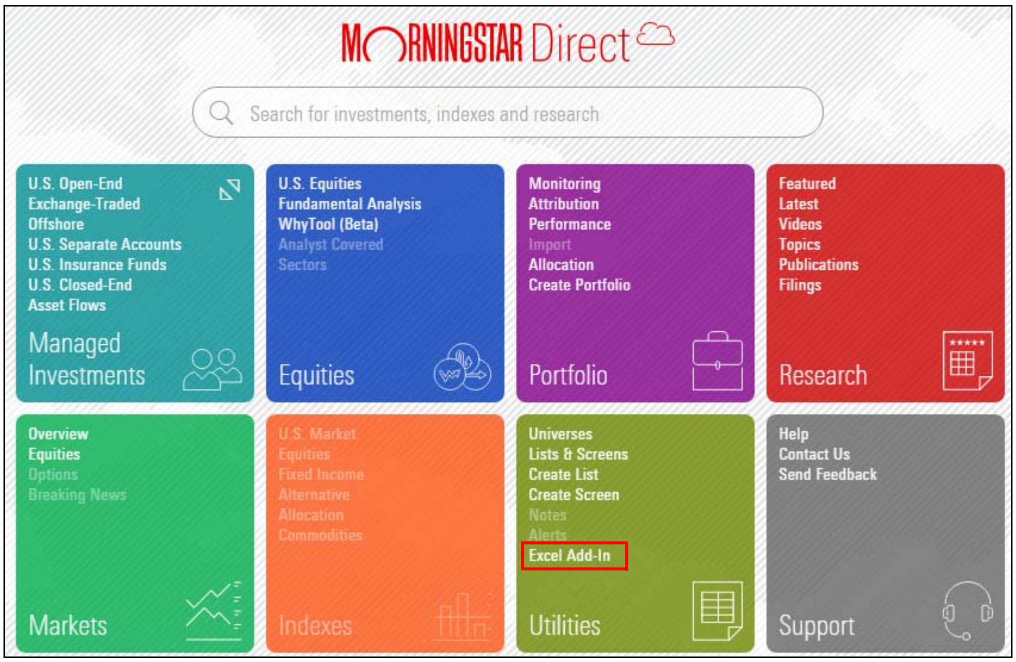
Install the Morningstar Excel Add-In

Before installing the Morningstar Excel Add-In, make sure your system meets the minimum requirements:

- Microsoft Excel: 2007, 2010, 2013 (2010/2013 are available in both 32-bit and 64-bit), and
- Operating System: Windows 7, Windows 8.

To install the Morningstar Excel Add-In, do the following:

1. Quit **Excel**.
2. Do one of the following:
   - In your browser, go to http://addin.morningstarcommodity.com/, or
   - On the Morningstar Direct Cloud home page, in the Utilities module, click **Excel Add-In.**



Note the highlighted selection

3. On the Morningstar Excel Add-In page, under Downloads, locate the latest version and click the **Download** button. A window opens.
4. Click the **Download** button for one of the following:
   - Executable package (.exe)
   - Windows Installer (.msi), or
   - Zipped files (.zip).

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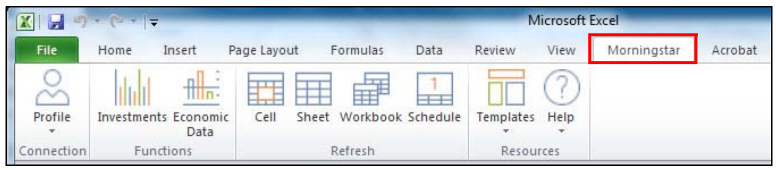
5. In the window, follow the **instructions** for the download you selected. The Morningstar Setup Wizard opens Excel.

   ☞ Note: During the installation process, the Setup Wizard will automatically install a Primary Interop Assemblies (PIA) if it is not found. (For more information on PIAs, see http://msdn.microsoft.com/en- us/library/aa302338.aspx.) In some cases, you might receive an error message about the PIA's installation and the Setup Wizard will stop installing. This is most likely caused by administrator rights on your computer. Log off and log back into the computer as an administrator, then re-install the Morningstar Excel Add-In. Once installation is complete, you do not need administrator rights to run the Morningstar Excel Add-In.

6. In Excel, you may see a Security Warning reading "Macros have been disabled." Click **Enable Content**.
7. In the Setup Wizard window, click **Close**. Excel opens. Note the Morningstar tab at the top of the window.

Note the highlighted selection



In Excel 2007 and higher, the Morningstar Excel Add-In leverages the Microsoft® Office Fluent™-based user interface, in which command icons are displayed on a ribbon at the top of the window. Earlier versions of Excel do not support the ribbon, but the same functions available from the ribbon will be available on a drop-down field. Fluent is a trademark of Microsoft Corporation and the Fluent user interface is licensed from Microsoft Corporation.

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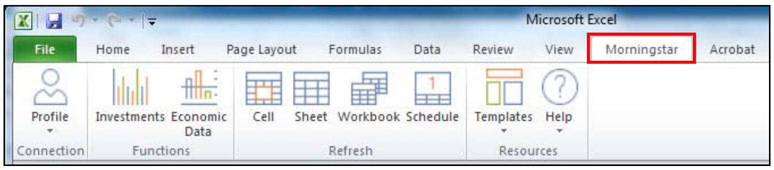
Log in to the Morningstar Excel Add-In

Because the Morningstar Excel Add-In retrieves data from Morningstar Direct and Morningstar Direct Cloud, you must create a connection between the Excel Add-In tool and the two Morningstar applications when you log in.

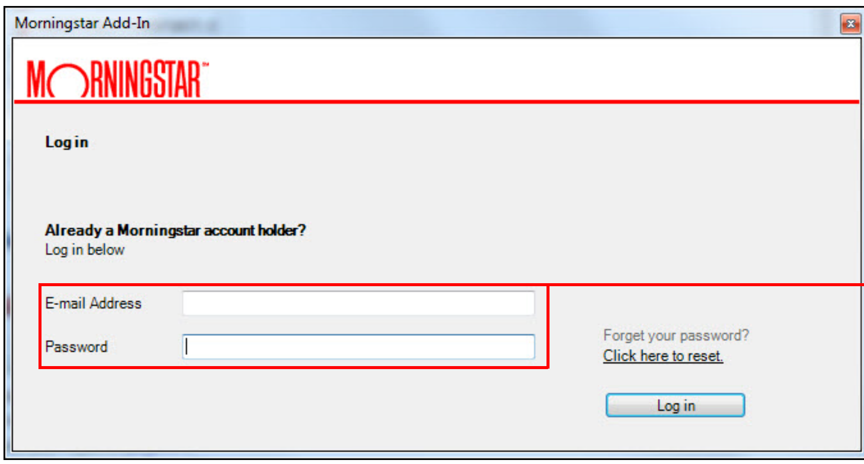
To log in to the Morningstar Excel Add-In and create a connection with Morningstar Direct and Morningstar Direct Cloud, do the following:

1. In Excel, select the **Morningstar** tab. One of the following happens:
   - ▶ The Morningstar Add-In dialog box opens.
   - ▶ The Morningstar Add-In dialog box does not open. On the Morningstar ribbon, click **Profile** and from the drop-down field, select **Direct**. The Morningstar dialog box opens.



Note the highlighted selection

2. Enter your **E-mail Address** and **Password** for Morningstar Direct.



If you have multiple e-mail addresses, be sure to enter the one you use to log in to Morningstar Direct

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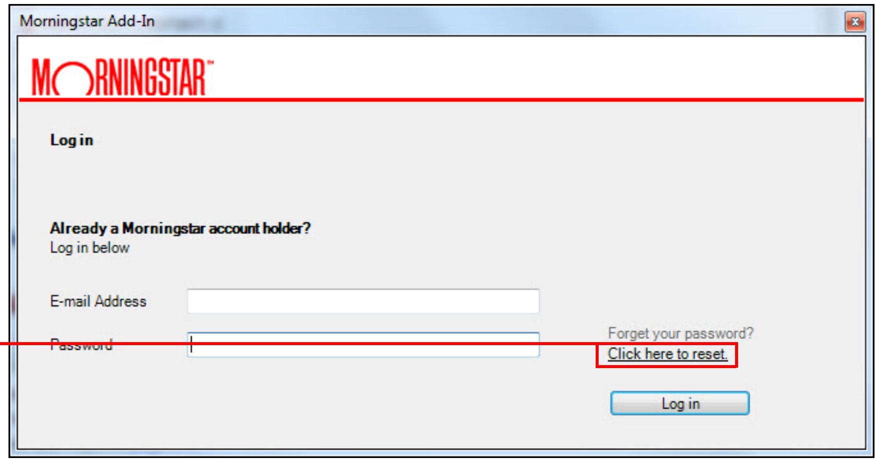
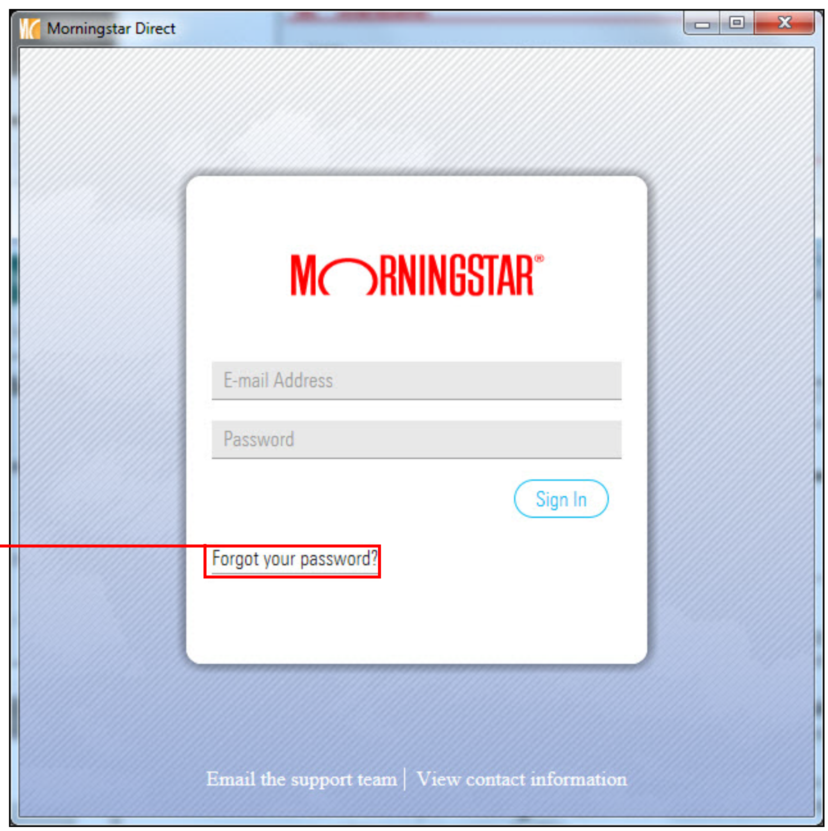
3. If you cannot remember your Morningstar Direct login and password, do one of the following:
   - If you are using version 6.3 of the Morningstar Excel Add-In, click **Click here to reset**. After resetting your credentials, continue logging in to the Morningstar Excel Add-In.

Click here if you have forgotten your Morningstar Direct e-mail address and/or password



   - If you are using a version of the Morningstar Excel Add-In earlier than version 6.3, launch Morningstar Direct. In the Sign-In window, click **Forgot your password?** After resetting your credentials, return to the Morningstar Excel Add-In and use your new login and password to log in.

Click here if you have forgotten your Morningstar Direct e-mail address and/or password



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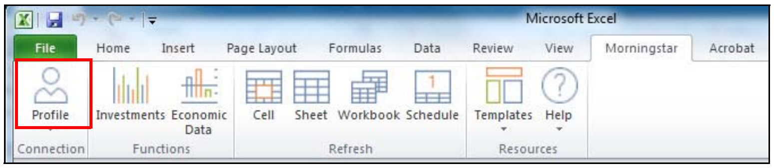
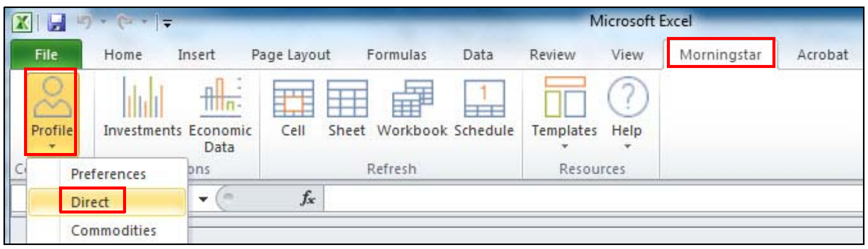
4. Click **Log in**. The Morningstar Add-In dialog box closes.
5. Do one of the following:
   - If the Morningstar Add-In dialog box opened on its own (step 1 on page 12), **proceed** to the next step.
   - If you opened the Morningstar Add-In dialog box by selecting Direct from the Profile drop-down field (step 1 on page 12), the connection is established. Stop here.
6. In Excel, on the Morningstar ribbon, click **Profile**. A drop-down fields opens.



Note the highlighted selection

7. From the **Profile** drop-down field, select **Direct**. The connection between Excel and Morningstar Direct is established.



Note the highlighted selections

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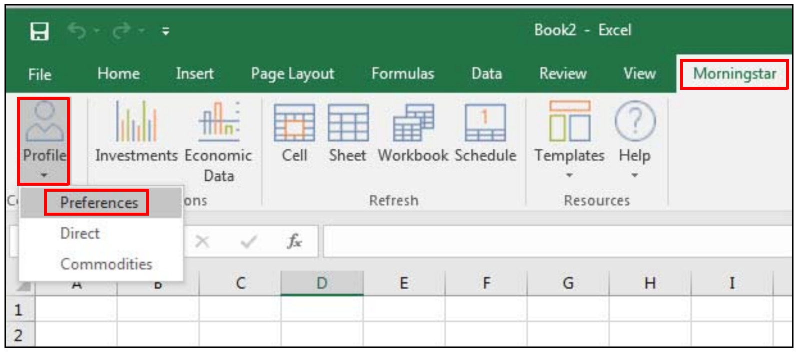
Select Your Preferences

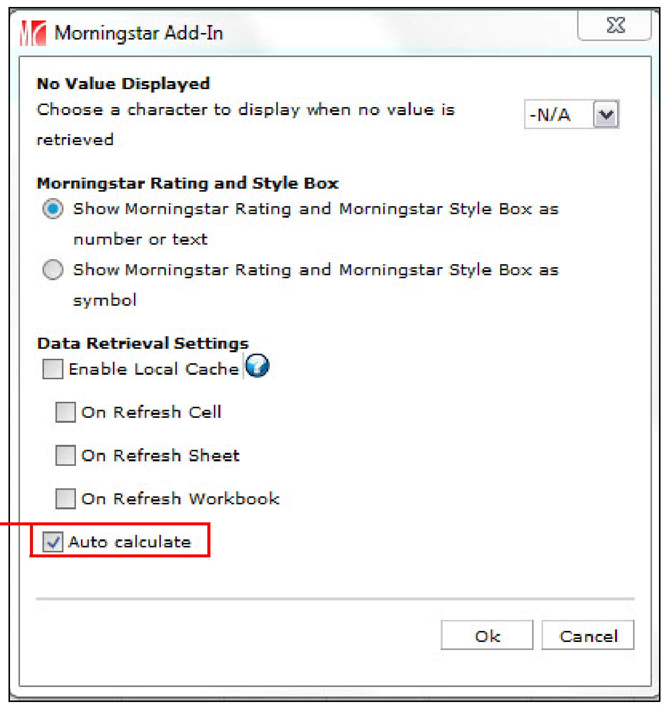
In this section, you will select your preferences for working with the Morningstar Excel Add-In. You can change your preferences at any time.

To select your preferences, do the following:

1. On the Morningstar ribbon, from the **Profile** drop-down field, select **Preferences**. The Morningstar Add-In dialog box opens.

Note the highlighted selections





Auto calculate is on by default

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2. In the Morningstar Add-In dialog box, **select** from the various options (described here).

Option	**Action**
No Value Displayed	From the drop-down field, select the character(s) to display when no value is retrieved: ► N/A ► Blank (display a blank cell) ► - (display a hyphen)
Morningstar Rating and Style Box	Click one of the two options: ► Show Morningstar Rating and Morningstar Style Box as number or text ► Show Morningstar Rating and Morningstar Style Box as symbol
Data Retrieval Settings	When Enable local cache is on, the sub-options are available. When a sub-option is on, data is stored in local memory when you refresh. The sub-options are as follows: ► On Refresh Cell ► On Refresh Sheet, and ► On Refresh Workbook. ☞ Note: Local memory is cleared when you log out of Excel.
Auto Calculate	The Morningstar Excel Add-In defaults to immediately begin processing a function calculation. If you disable automatic calculation by clearing the Auto Calculate checkbox, you can manually initiate the calculations at a later time. See How do I manually initiate calculations? on page 14.

3. Click **OK**.

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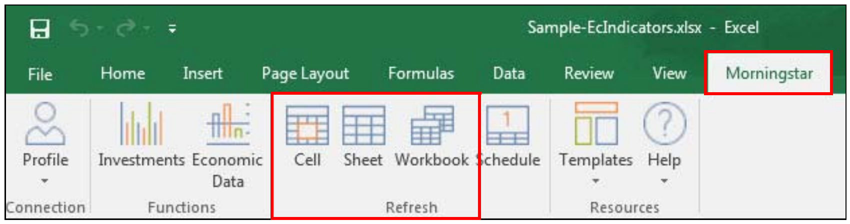
How do I manually initiate calculations?

When auto-calculation is disabled, you must manually initiate calculations. To do so, simply refresh the data as follows:

1. With a spreadsheet open, select the **Morningstar** tab.
2. (Optional) If you want to refresh specific cells, select them. If you want to refresh a specific sheet, make sure the sheet is displayed.
3. In the Refresh section of the Morningstar tab, click one of the following:
   - **Cell** (if you want to refresh only the selected a cell or cells)
   - **Sheet** (if you want to refresh only the displayed sheet), or
   - **Workbook** (if you want to fresh the entire workbook (all sheets and cells).

Note the highlighted selections



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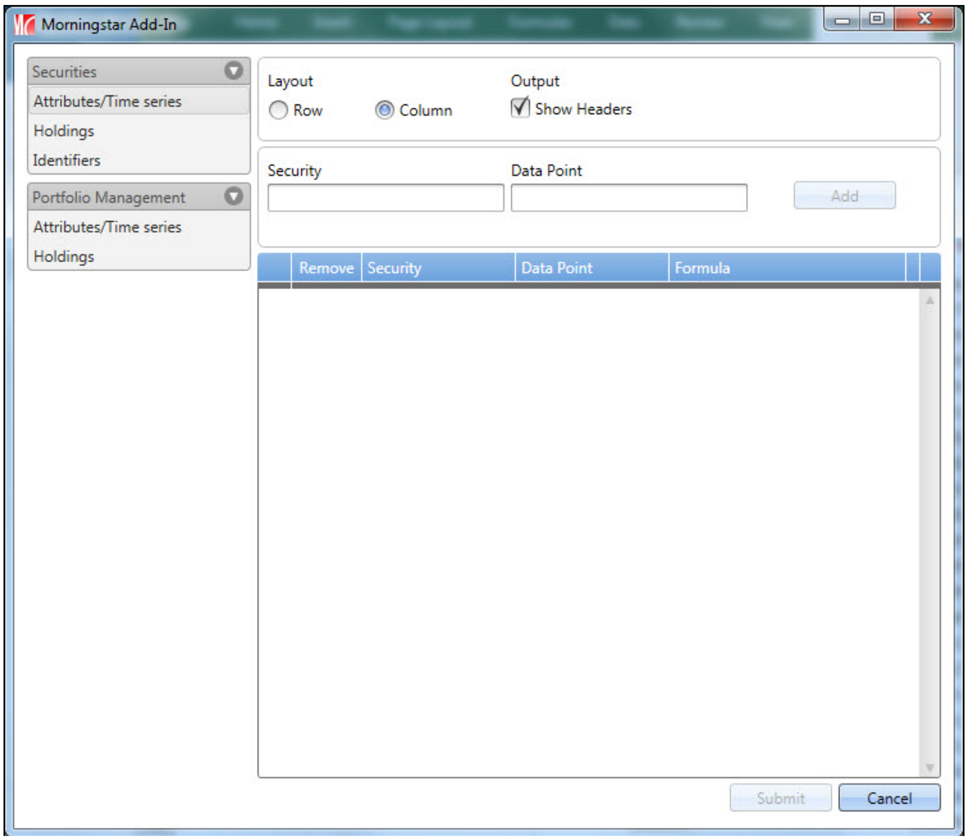
Introduction to Working with Investments in the Morningstar Excel Add-In

Overview

In the Morningstar Excel Add-In, retrieving data from the Morningstar database is handled in the Morningstar Add-In window. Key features are as follows:

- You can create multiple entries and add them to your spreadsheet all at once.
- You can access the Morningstar database using simple text entry, drop-down fields, and toggles, and
- Many of the selections are dynamic; for example, when you select a data point, the fields required to further define the data point become instantly available.



The initial view of the Morningstar Add-In window for investments is shown here

In this section, you will learn about the following:

- the features of the Morningstar Add-In window for investments (page 16)
- the layout and output options (page 17)
- creating an spreadsheet entry for an investment (page 18)
- creating a new entry based on an existing entry (page 20)
- creating a time series entry (page 21)
- changing the order of the entries (page 23)
- deleting an entry (page 23)
- submitting the entries to the spreadsheet (page 24)
- opening the Morningstar Add-In window from the spreadsheet (page 25)
- editing an entry (page 26), and
- changing the order of position-locked entries (page 27).

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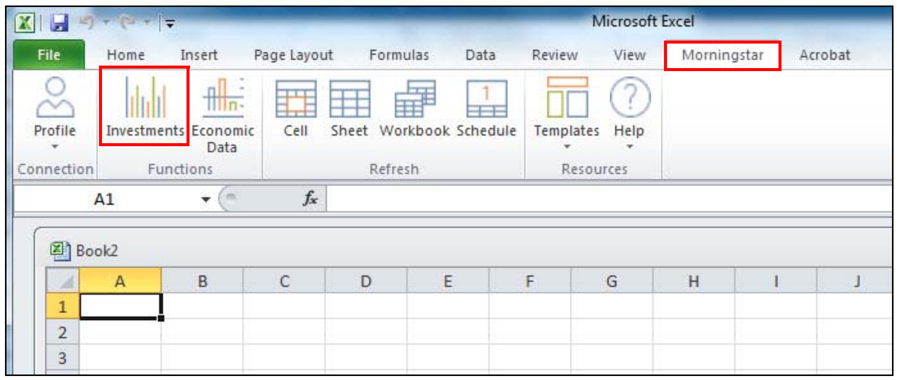
Features of the Morningstar Add-In window for investments

Creating spreadsheet entries for investments and data points is a good way to familiarize yourself with the features and functions of the Morningstar Add-In window. This is accomplished in the Morningstar Add-In window.

To open the Morningstar Add-In window, do the following:

1. In a spreadsheet, select the **cell** in the row and column in which you want your entries to start (in this sample, **cell A:1**).
2. On the Morningstar ribbon, click the **Investments** icon. The Morningstar Add-In window opens.

Note the highlighted selections

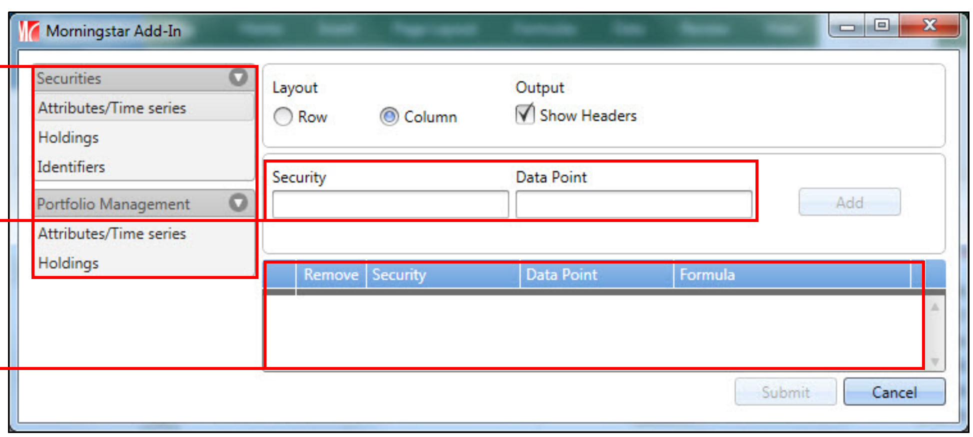


3. **Notice** the following in the Morningstar Add-In window (displayed below):
   - ► The Securities and Portfolio Management tabs are displayed in the Navigation pane along the left side.
   - ► Both the Securities and Portfolio Management tabs are open (indicated by the down arrows). Click an arrow to **close** the Securities or Portfolio Management tab.
   - ► When open, sub-tabs are displayed below the Securities and Portfolio Management tabs. Each sub-tab allows you to search for specific investment data.
   - ► The large list area displaying the column headings Security, Data Point, and Formula is the basket. You will add investments to the basket, and then submit them to your spreadsheet.

Use the Navigation Pane to access different types of data

When you enter text in the Security or Data Point field, a drop-down field opens

Your entries for the spreadsheet will be displayed in this area — the basket



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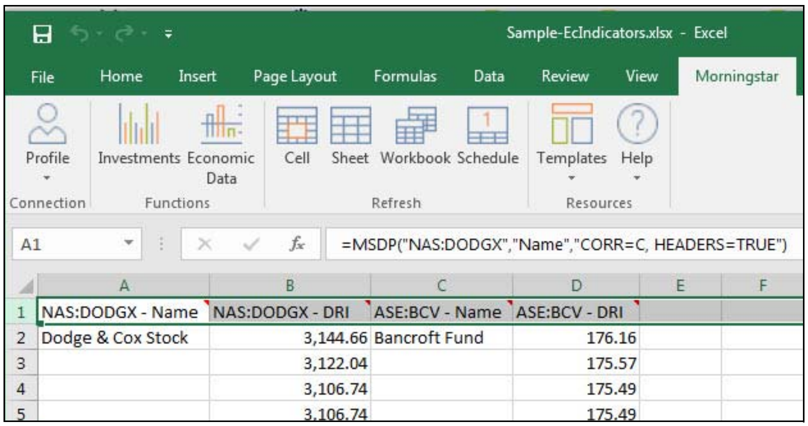
Select the layout and output options for your spreadsheet

The Layout and Output options for a spreadsheet are as follows:

- Row or Column, and
- Show headers.

Your selections in Layout apply to the entire spreadsheet, not individual entries

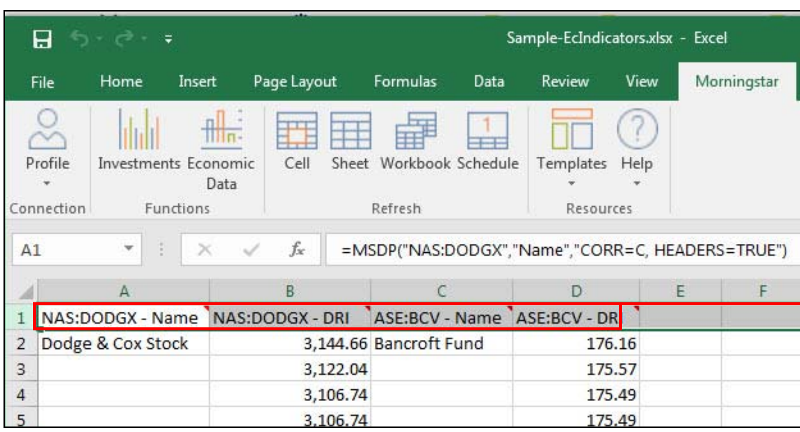
The default Layout selection is Column. In a Column layout, each data point is in a separate column, as shown here.



In column layout, scroll down to view more data

If you prefer to view data horizontally, select **Row**.

The default Output selection is Show headers. In the spreadsheet, the headers will be displayed at the top of the columns, as shown here.



Each header displays the data point's formula and name, but not the formula

If you prefer not to display the headers, deselect **Show headers** and click **Submit**.

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Create a spreadsheet entry for an investment

When you create an entry, it is displayed in the basket—the list area in the Morningstar Add-In window. Later, you will submit the entry (or entries) to your spreadsheet. In this section, you will create entries from the Securities tab on the Navigation pane.

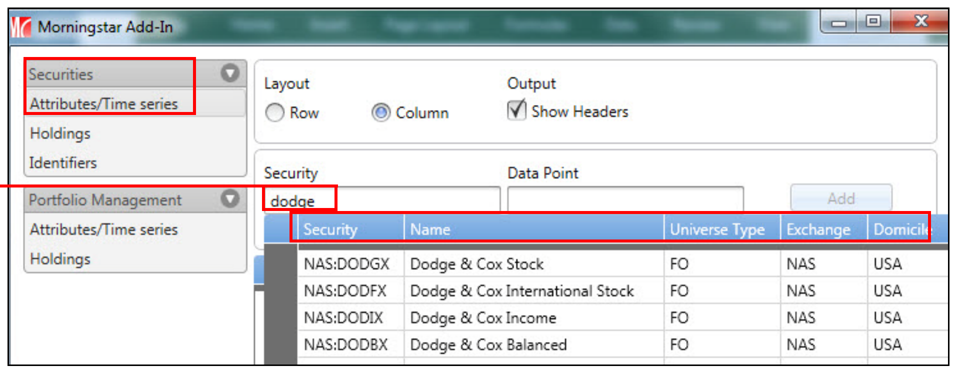
In its simplest form, a spreadsheet entry for an investment consists of an investment and an associated data point.

To create a spreadsheet entry for an investment, do the following:

1. In the Morningstar Add-In window, on the Navigation pane, select the **Securities** tab, then select **Attributes/Time series**.
2. In the Security field, enter the **name**, **ticker**, or **other identifier** of the security to add to the basket. The **Security** drop-down field opens.

   ☞ Note: From the Security drop-down field, you can access funds, stocks, indexes, and separate accounts.

If you enter only partial information (such as a portion of an investment name), the drop-down field will display multiple selections

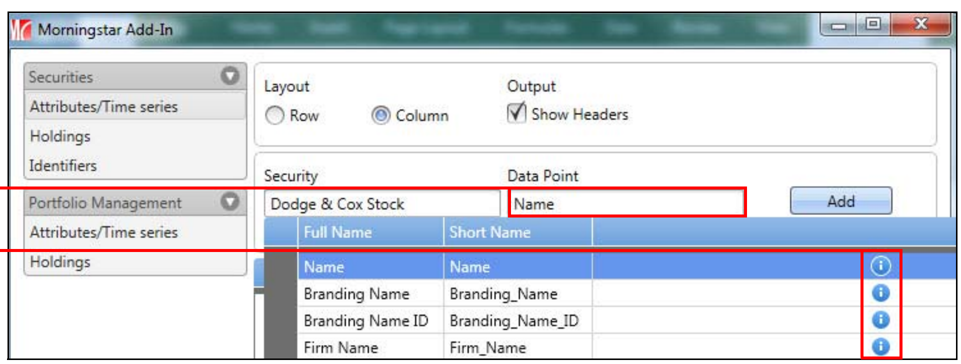


3. From the **Security** drop-down field, select a **security** (in this case, **Dodge & Cox Stock**).
4. In the Data Point field, enter the name (or partial name) of a **Morningstar data point** to associate with the security. The **Data Point** drop-down field opens.

   ☞ Note: Name is recommended for the first data point, as shown here.

The Data Point drop-down field for "name" displays the security's full name and short name

Click an **Information** icon to read the data point's definition



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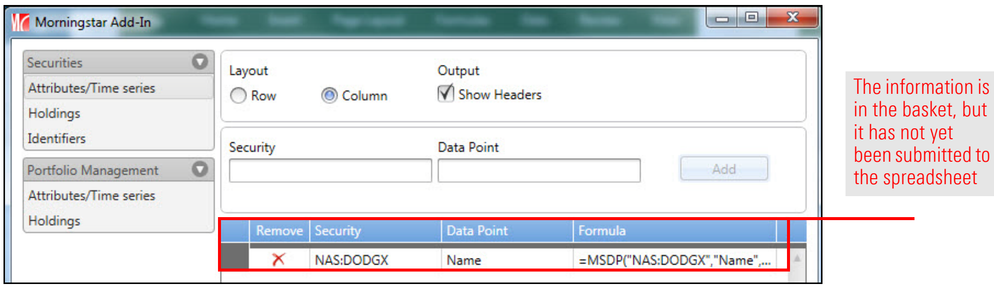
5. From the **Data Point** drop-down field, select a **data point** (in this case, **Name**). The Security and Data Point fields display your selections.

   ☞ Note: Depending on the data point you select, other settings may now be displayed. See Data point parameters associated with investments on page 30 for a list of options in data points associated with a security.

6. In the upper-right corner of the window, click **Add**. The Security, Data Point, and Formula columns in the basket display the information for the newly created entry.

   ☞ Note: Entries must be displayed in the basket to be submitted to the spreadsheet.



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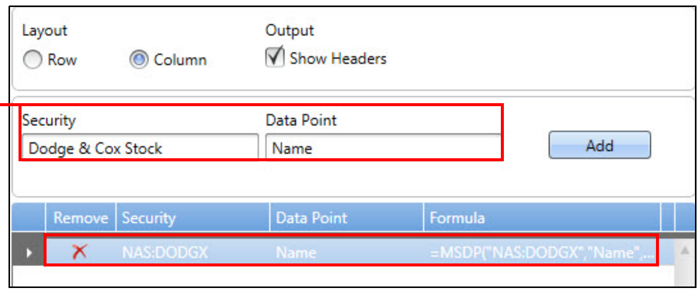
Create an entry based on an existing entry

Once you have created an entry for an investment and a data point, you probably want to retrieve other data points for the same investment. Keep in mind each data point must be associated with an investment. For example, you have created an entry to retrieve the Name data point of a specific investment, and you want to retrieve another data point for the same investment. Rather than once more selecting the investment from the drop-down field, you can quickly create the new entry by basing it on an existing entry.

To use an existing entry as the basis for a new entry, do the following:

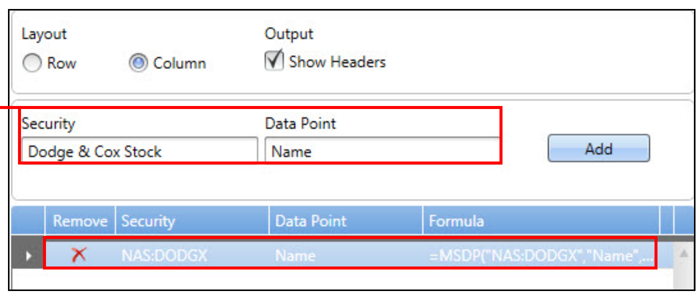
1. In the basket, select the **existing entry**. In this sample, the entry for the security Dodge & Cox Stock is used as the basis for a new entry for another Dodge & Cox Stock data point.

The current Security and Data Point values for the selected row are displayed



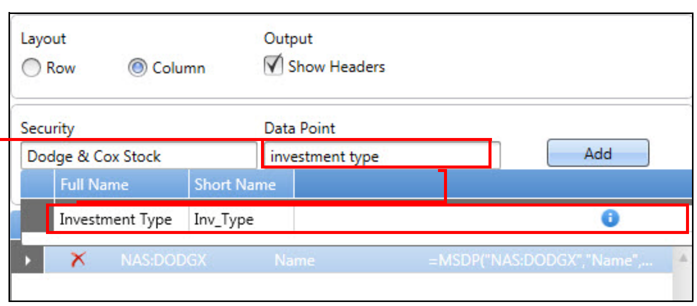
2. In the fields above the basket, click the **field** you want to change (in this case, Data Point).

By not changing the Security field, you can create another data point for that security



3. Enter the name (or part of the name) of a **Morningstar Data Point** (in this case, **Investment Type**).

If you enter a data point's complete full or short name, the Data Point drop-down field offers only one selection



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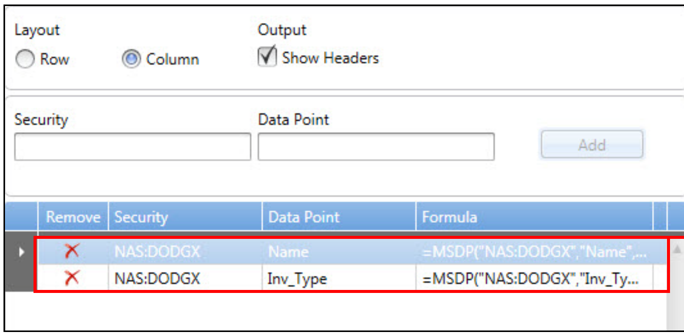
4. From the **Data Point** drop-down field, select a **data point**. Even if only one data point is shown on the Data Point drop-down field, you must select it.

   ☞ Note: Depending on the data point you select, other fields for parameters for the data point may now be displayed. See Data point parameters associated with investments on page 30 for a list of data point parameters associated with a security.

5. Click **Add**. The new data point is added to the basket.

   ☞ Note: If an entry is not listed in the basket, it will not be submitted to the spreadsheet.



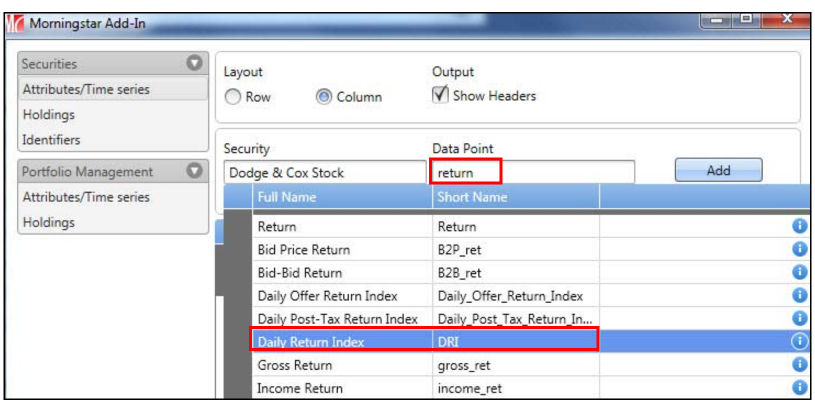
Entries in the list are displayed in the order in which they were created

Create a time series entry

Many of the Morningstar data points represent a time series; that is, they reference a start and end date. All investment entries require a security and a data point, but time series entries (as well as many other data points) require additional parameters.

To create a time series entry, do the following:

1. In the Security field, enter the **name**, **ticker**, or **other identifier** of a security. The Security drop-down field opens.
2. From the **Security** drop-down field, select a **security** (in this case, **return**).
3. In the Data Point field, enter the name (or partial name) of a **time series Morningstar data point**. The Data Point drop-down field opens, displaying the data points containing the text you entered.



Note the highlighted selections

4. From the **Data Point** drop-down field, select a **data point** (in this case, **Daily Report Index**). Additional required fields for the selected data point are displayed in the top part of the window.

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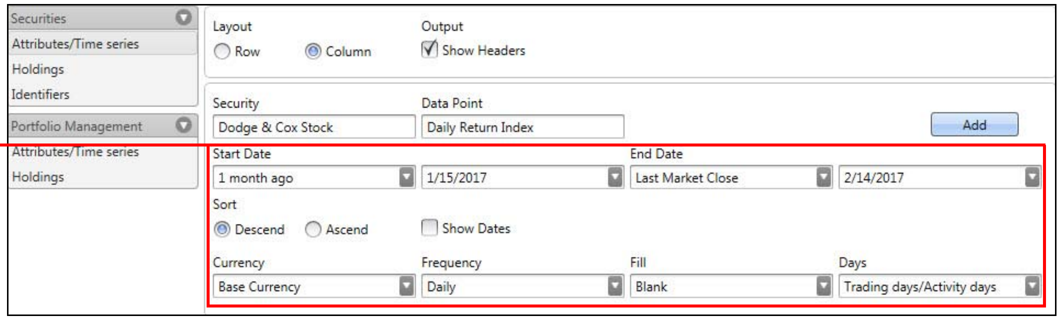
5. Enter **text** or make a **selection** for each of the new fields.

   ☞ Note: Depending on the data point you select, other parameters may now be displayed. See Data point parameters associated with investments on page 30 for a list of data points associated with a time series entry.

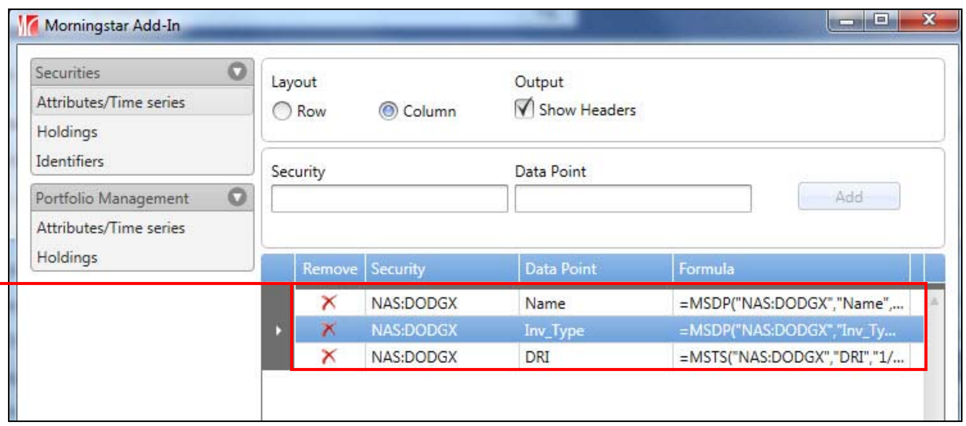
In this sample, the defaults for the data point Daily Return Index are shown



6. When you have finished with all the fields, click **Add** in the upper-right corner of the window. The security's exchange, ticker, data point, and formula are displayed in the basket, below the previous row.

   ☞ Note: If an entry is not in the basket, it will not be submitted to the spreadsheet.

The data points are displayed in the order in which they were added to the basket



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Change the order of the entries

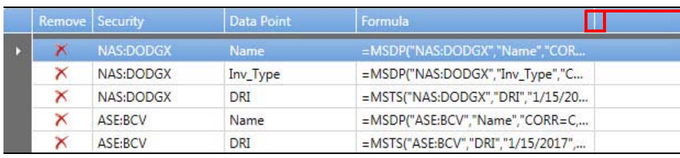
In the basket, the rows are displayed in the order in which you create the entries. At this point, you can change the order, but once you submit the entries to the spreadsheet, re-ordering can only be accomplished on the spreadsheet.

☞ Note: See Change the order of position-locked entries on page 27 for information on changing the order of position-locked entries.

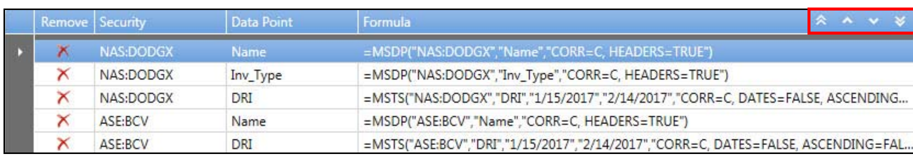
To change the order of the entries, do the following:

1. Select a **row** you want to move
2. In the heading at the top of the Formula column, click an **arrow** icon. The row moves up or down, depending on which arrow you clicked.

☞ Note: If the arrow icons are not displayed, increase the width of the Morningstar Add-In window and/or the Formula column.



To resize a column, drag its right border

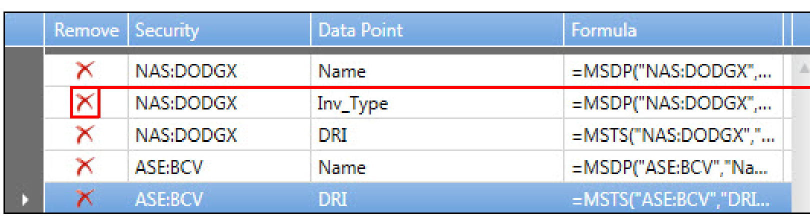


Click a single arrow to move the row up or down, and a double arrow to move the row to the top or bottom of the list

Delete an entry

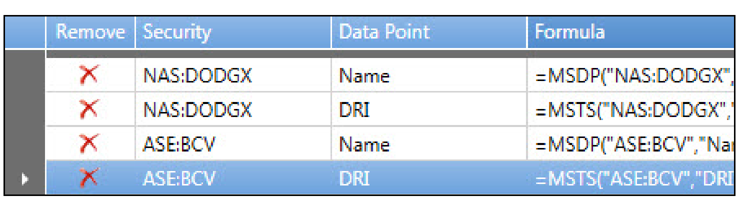
While working in the Morningstar Add-In window, you can delete an entry by simply clicking the **Delete** icon in the Remove column for that row.

In the sample shown here, note the Delete icon at the beginning of each row. Although the fifth entry is selected, you can delete any entry by clicking its Delete icon, regardless of what row is selected.



You do not have to select an entry to click its Delete icon

The result is shown here.



The second entry has been removed

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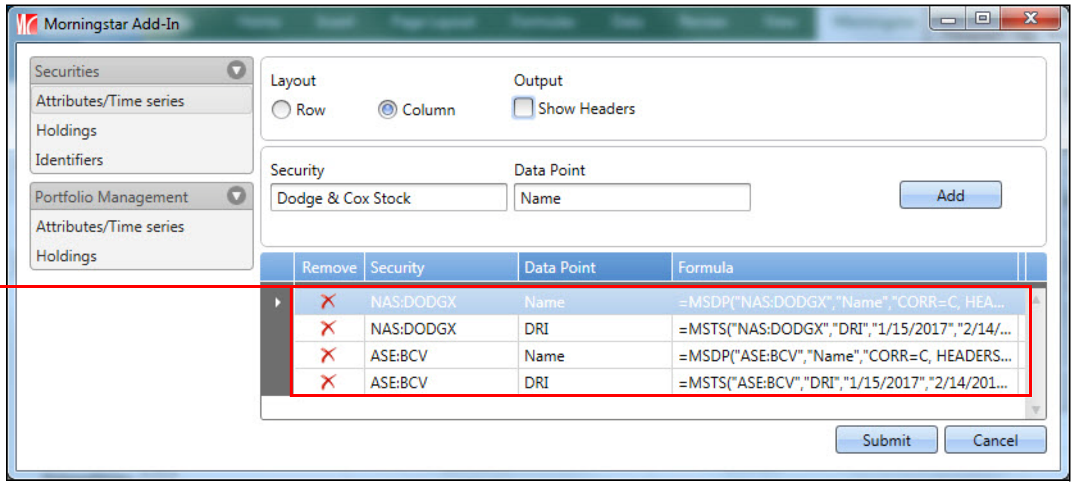
Submit the entries to the spreadsheet

Entries listed in the basket do not automatically transfer to the spreadsheet. You must submit the entries to the spreadsheet.

> Note: Keep in mind the difference between Add and Submit. Add creates an entry in the basket. Submit submits all entries in the basket to the spreadsheet.

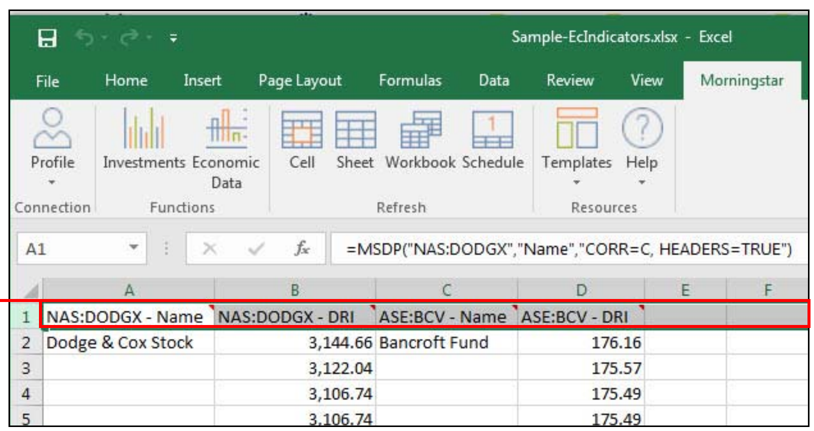
To submit your entries to the spreadsheet, click **Submit** in the lower-right corner of the window. The Morningstar Add-In window closes.

When you click **Submit**, all entries in the basket are sent to the spreadsheet



The spreadsheet displays the data, which was retrieved from Morningstar Direct.

The column headers display the security exchange, ticker, and data point name



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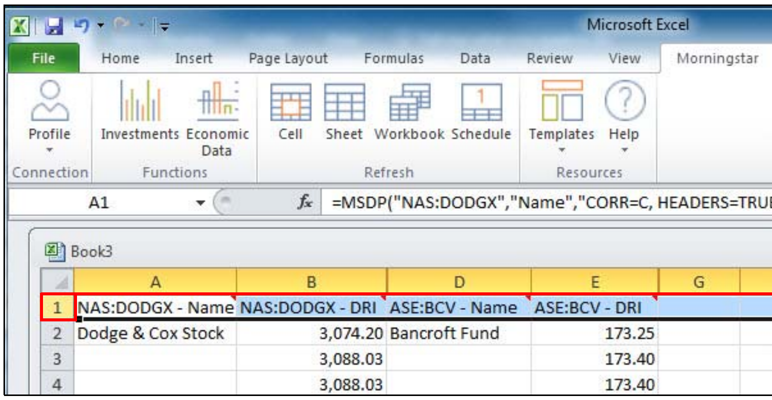
Open the Morningstar Add-In window from the spreadsheet

When viewing the spreadsheet, you can open the Morningstar Add-In window at any time to create more entries, as well as delete and edit existing entries.

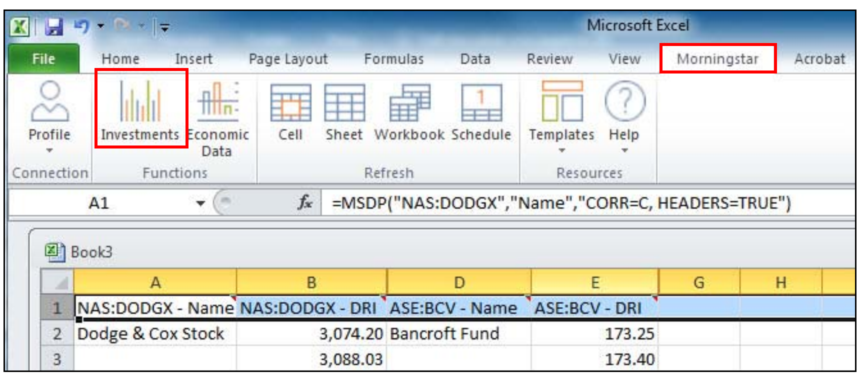
To open the Morningstar Add-In window, do the following:

1. In your spreadsheet, select the **top row**. The top row is usually, but not always, the header row—the row containing the formulas.

   ☞ Note: If the layout is set to row, select the **left-most column**.



2. Select the **Morningstar** tab and click the **Investments** icon. The Morningstar Add-In window opens.



3. **Add** and/or **edit entries**.

   ☞ Note: For information on editing spreadsheet entries in the basket, go to Edit an entry on page 26.

4. When you're finished, be sure to click **Submit** to send the entries to the spreadsheet.

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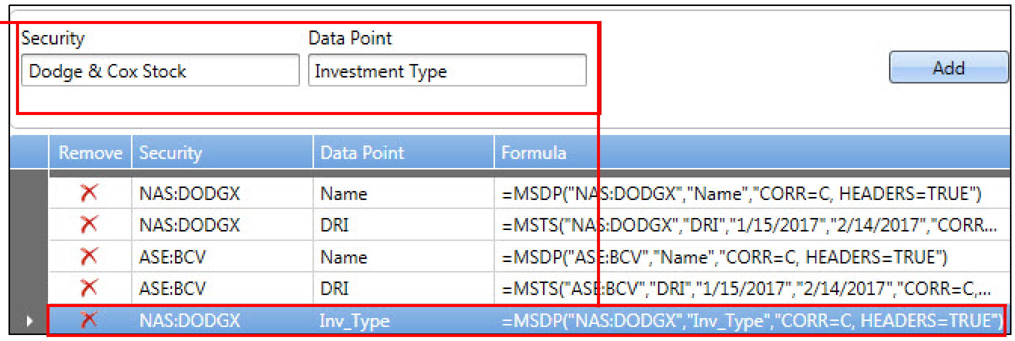
Edit an entry

You cannot directly edit an entry in the basket. Instead, create a new entry to replace the existing entry, and then delete the existing entry, as follows:

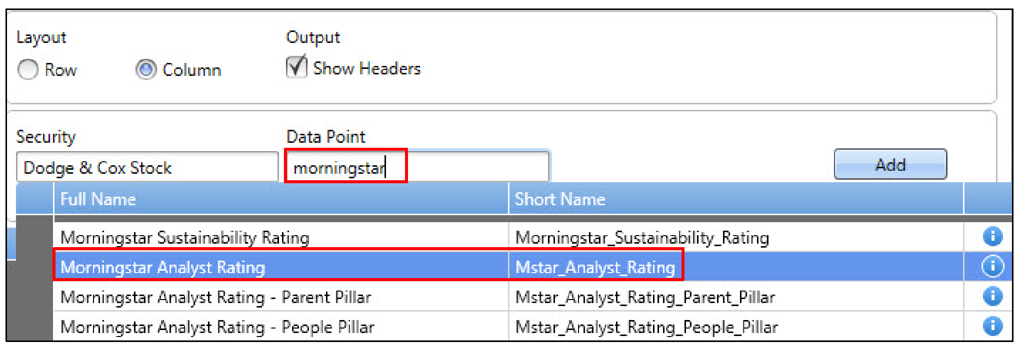
1. In the Morningstar Add-In window, select the **entry** to replace (in this case, **NAS:DODGX**, **Inv_Type**).

The parameters for the selected entry are shown in this area



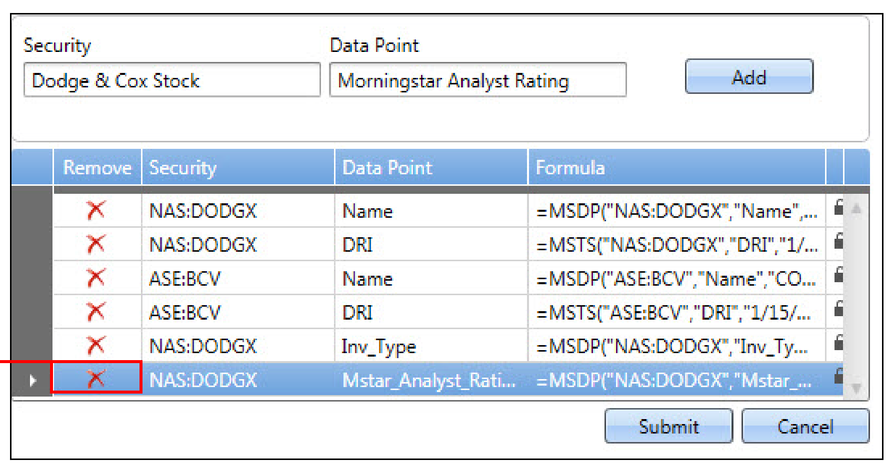
2. Enter **text** or make **selections** in the field(s) you want to change (in this case, the data point Investment Type is being replaced by **Morningstar Analyst Rating**).

Note the highlighted selections



3. Click **Add**. The new data point is added to the bottom of the list in the basket.
4. In the row for the entry you are replacing (in this case, **NAS:DODGX**, **Inv_Type**), click the **Delete** icon.

You do not have to select a row to click its Delete icon



5. Click **Submit**. The spreadsheet is displayed.

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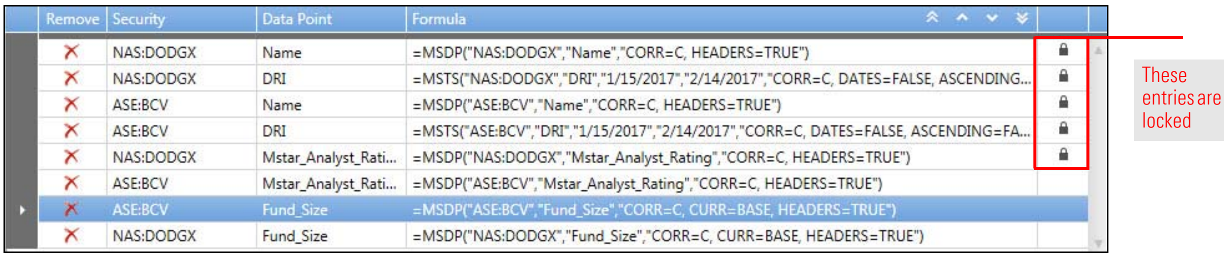
Change the order of position-locked entries

When using the Morningstar Add-In window with one or more new entries (i.e., entries not yet submitted to the spreadsheet), you can change the order of those entries using the arrow icons displayed on the Formula column heading. (See Change the order of the entries on page 23.) However, entries you have submitted to the spreadsheet have fixed positions, indicated by a Lock icon. This means you cannot to change the order of those entries in the basket.

When both locked and unlocked entries are shown in the basket, you can re-order unlocked entries but only within the unlocked entries. You cannot move an unlocked entry to a position between two locked entries.



To change the order of entries with fixed positions, you must do so in the spreadsheet, using standard Microsoft Excel procedures, as follows:

1. In the Morningstar Add-In window (if it is open), if you have added or deleted entries to the basket, be sure to click **Submit**. Otherwise, **close** the Morningstar Add-In window. The spreadsheet is displayed.
2. In the spreadsheet, select the **column** you want to move.
3. **Cut** (or **copy**) the column.
4. Select the **column** to the right of where you want to paste column.
5. **Right-click**, then from the drop-down field, select **Insert Copied Cells**.
6. **Select** the column you cut or copied, and **Delete**.

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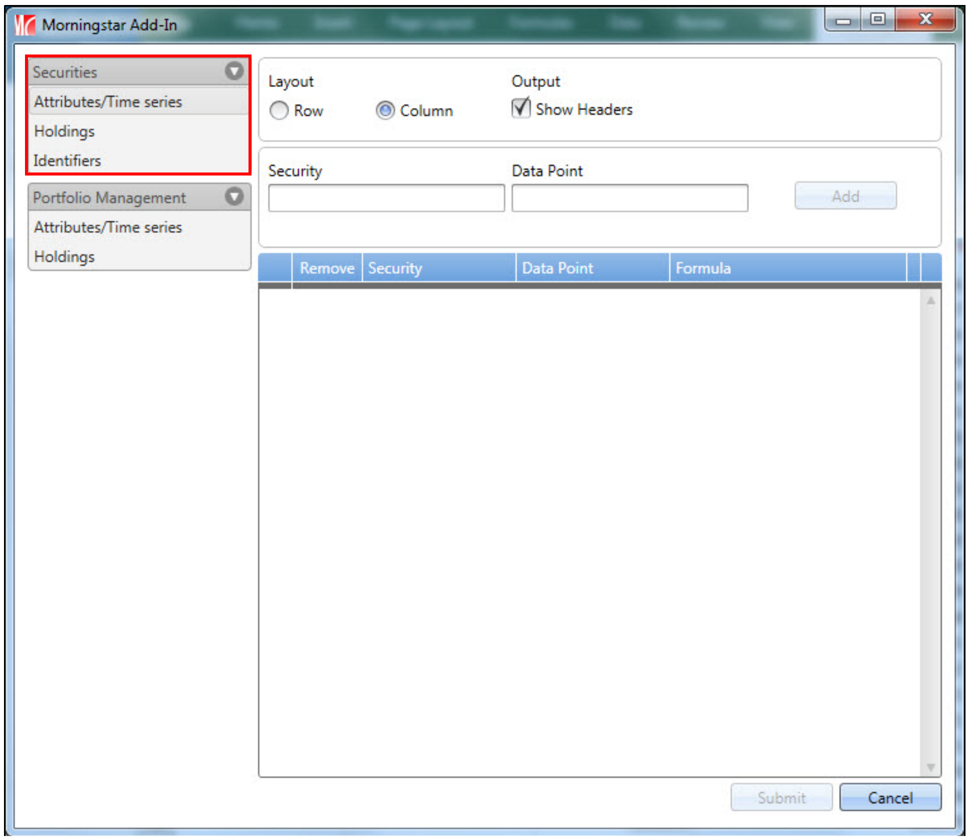
Retrieving Data for Securities

Overview

On the Securities tab of the basket, you can create spreadsheet entries for funds, stocks, indexes, and separate accounts based on the following:

- attributes and/or time series
- holdings, or
- identifiers.

Note the highlighted selection



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

- work with the Attributes/Time series sub-tab (page 29)
- work with the Holdings sub-tab (page 32), and
- work with the Identifiers sub-tab (page 35).

Before proceeding, you should familiarize yourself with the information in Introduction to Working with Investments in the Morningstar Excel Add-In, beginning on page 15.

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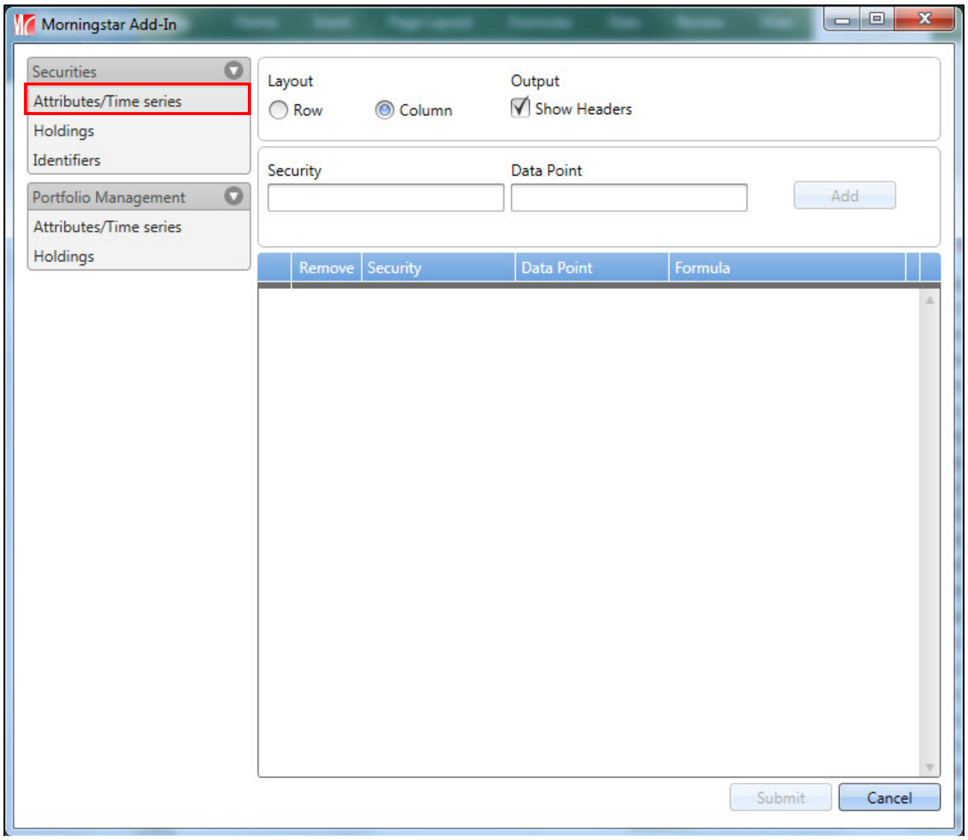
Working with the Attributes/Time series sub-tab

On the Attributes/Time series sub-tab, you can create spreadsheet entries based on the following:

- securities
- data points to associate with the selected securities, and
- additional parameters required by the selected data points.



Note the highlighted selection

Do not confuse the Attributes/Time series sub-tab on the Securities tab with the same-named sub-tab on the Portfolio Management tab. The difference is as follows:

- On the Securities tab, data is retrieved from a database.
- On the Portfolio Management tab, data is retrieved from a model portfolio created in Morningstar Direct.

See Working with the Attributes/Time series sub-tab on page 38 for information on the Portfolio Management tab.

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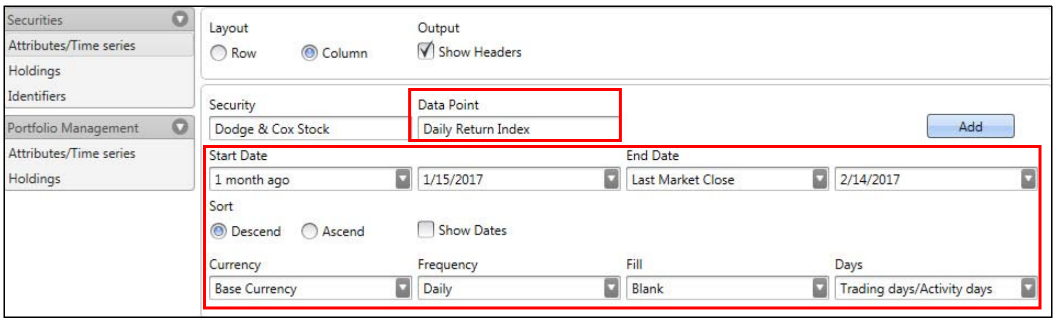
Data point parameters associated with investments

Once you have selected an investment, select a data point to associate with the selected investment.

The fields that define a data point in the Morningstar Excel Add-In are dynamic. In other words, when you select a data point, other parameter fields may be displayed. In these fields (which are required), you must make a selection in each field to further define the parameters of the data point.

For example, when you select the data point Daily Report Index from the Data Point drop-down field, new fields, such as Start Date, End Date, Sort, etc., open. In each of these fields, you must make a selection.

Note the highlighted selections



The table shown here describes the parameters associated with data points on the Attributes/Time series sub-tab.

☞ Note: Not all parameters are used in the samples shown in this document.

Parameter	Description
Start Date	Start Date has the following options: ► Manually enter a date. ► Enter Dash Codes from the Start Date drop-down field, or select a relative date, or ► Select a date from a calendar.
End Date	End Date has the following options: ► Manually enter a date. ► Enter Dash Codes from the Start Date drop-down field, or select a relative date, or ► Select a date from a calendar.
Sort	Select to sort the values in the column in Descending or Ascending order.
Show Dates	Select Show Dates to display the dates in the spreadsheet column headings.
Currency	Currency has the following options: ► Base Currency, or ► Select a currency from the Currency drop-down field.

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Parameter	Description
Frequency	Frequency has the following options: ► Daily, or ► Select a frequency from the Frequency drop-down field.
Fill	Fill (the returned value for non-trading days) has the following options: ► Blank, or ► Select a fill from the Fill drop-down field.
Days	Days has the following options: ► Trading days/Activity days, or ► Select Calendar days or Week days from the Days drop-down field.
Return Type	Select total, market, post-tax, or other return type.
Annualized	Select to annualize returns.
Source	Select a source from the Source drop-down field.
Benchmark	Enter the name (or partial name) of a benchmark to use to calculate a custom calculation, then select from the Benchmark drop-down field.
Risk-free proxy	Enter the name (or partial name) of a risk-free proxy to use to calculate a custom calculation, then select from the Risk-free proxy drop-down field.
Compounding method	Select the compounding method.
Rolling window	Select the time period for the calculation.
Window shift	Select how often the calculation is performed.
Formulas	Display the formula as you fill in parameters.

☞ Note: Source, Benchmark, Risk-free proxy, Compounding method, Rolling window, and Window shift are activated when you select a custom calculation data point.

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Working with the Holdings sub-tab

On the Holdings sub-tab, you can create spreadsheet entries based on the following:

- holdings
- data points to associate with the selected holdings, and
- additional parameters required by the selected data points.

Do not confuse the Holdings sub-tab on the Securities tab with the same-named sub-tab on the Portfolio Management tab. The difference is as follows:

- On the Securities tab, data is retrieved from a database
- On the Portfolio Management tab, data is retrieved from portfolios created in Morningstar Direct.

See Working with the Holdings sub-tab on page 43 for information on the Portfolio Management tab.

Data point parameters associated with holdings

Once you have selected a holding, select a data point to associate with the selected holding.

The fields that define a data point in the Morningstar Excel Add-In are dynamic. In other words, when you select a data point, other parameter fields may be displayed. In these fields (which are required), you must make a selection in each field to further define the parameters of the data point.

The table shown here describes the parameters associated with data points associated with holdings.

☞ Note: Not all parameters are used in the samples shown in this document.

Parameter	Description
Position ID	From the Position ID drop-down field, select one of the following: ▸ SecID ▸ Ticker ▸ ISIN, or ▸ CUSIP. All selections are equally valid.
Start Date	Select a date in the past to show holdings as of that date, by doing one of the following: ▸ Manually enter a date. ▸ Enter Dash Codes from the Start Date drop-down field, or select a relative date, or ▸ Select a date from a calendar.

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Parameter	Description
End Date	Select the last time period for which you want to see holdings data for the selected security, by doing one of the following: ▶ Manually enter a date. ▶ Enter Dash Codes from the Start Date drop-down field, or select a relative date, or ▶ Select a date from a calendar.
Sort	Sort has the following options: ▶ Descend, or ▶ Ascend.
Show holding name	Select to display the holding name in the spreadsheet.
Show detail holding type	To display asset type, check Show detail holding type.
Holding Type	Holding Type has the following options: ▶ Stocks ▶ Bonds, or ▶ All.
Data Type	Data Type has the following options: ▶ Weight(%) ▶ Market Value, or ▶ Number of Shares.
Frequency	Frequency has the following options: ▶ All, or ▶ Select a frequency from the Frequency drop-down field.
Top N Holding	Enter the number of holdings to display.

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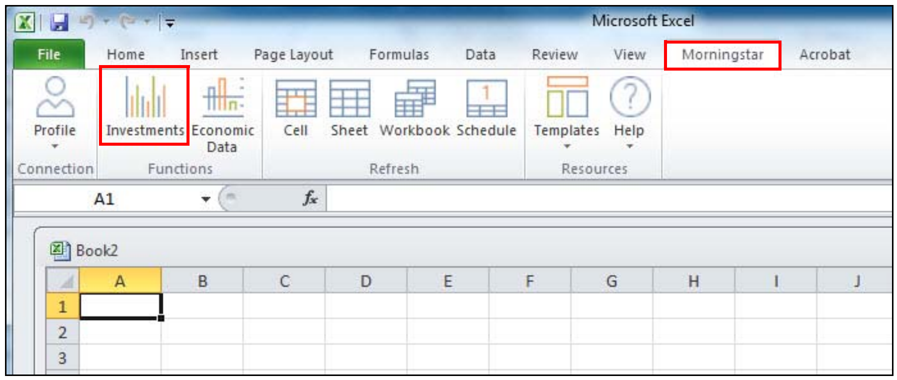
Create spreadsheet entries for holdings

To create spreadsheet entries for holdings, do the following:

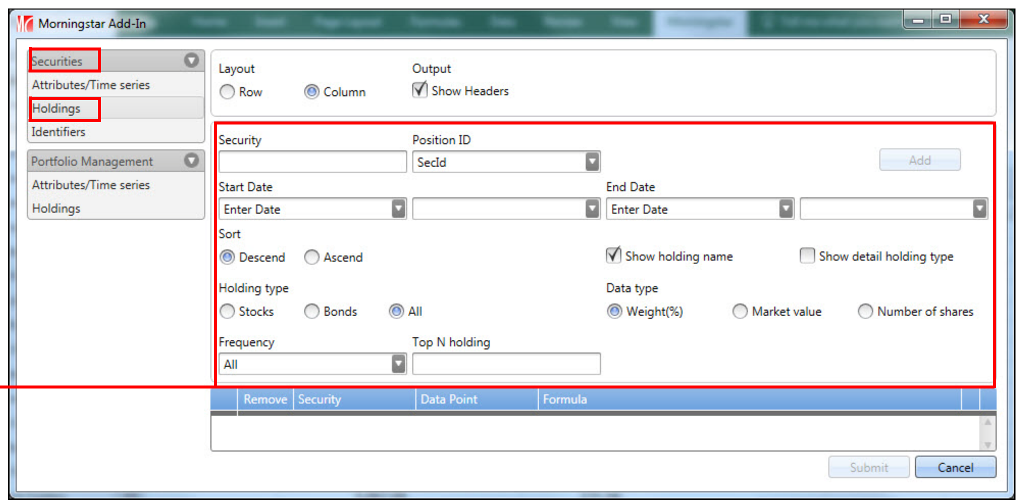
1. In a spreadsheet, select the **cell** in the row and column in which you want your entries to start (in this sample, **cell A:1**).
2. On the Morningstar ribbon, click the **Investments** icon. The Morningstar Add-In window opens.

Note the highlighted selections



3. In the Navigation Pane, select the **Securities** tab, then select **Holdings**.

In this sample, the defaults for holdings are shown



4. Starting with the Security field, select a **managed product**.
5. **Fill in** each of the fields. See Data point parameters associated with holdings on page 32 to learn about parameters required for data points associated with holdings.
6. When you finish all the fields, click **Add** in the upper-right corner of the window. The holding is listed in the basket.
7. Continue creating **entries** for holdings.
8. When all your entries are complete, click **Submit** in the lower-right corner of the window to submit the entries to the spreadsheet.

When you submit multiple holdings, a new spreadsheet is created for each holding and its data points.

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Working with the Identifiers sub-tab

You can retrieve the security identifiers (ticker, SecID, ISIN, etc.) from one of your investment lists or saved searches. This is a quick way to create numerous spreadsheet entries at once.

When you retrieve security identifiers from an investment list, only the security identifier appears in the output. The data points from the selected investment list, such as Return, Category Rank, etc., will not be retrieved. You will need to add each data in separate calls.

When the source of an entry is an investment list or saved search, data points other than the security ID cannot be retrieved in the Morningstar Add-In window. To create data points for identifier entries, use the Morningstar code functions, such as MSDP or MSTS, in a formula in the spreadsheet.

For more information on Morningstar code functions, see the Morningstar Excel Add-In Reference Guide.

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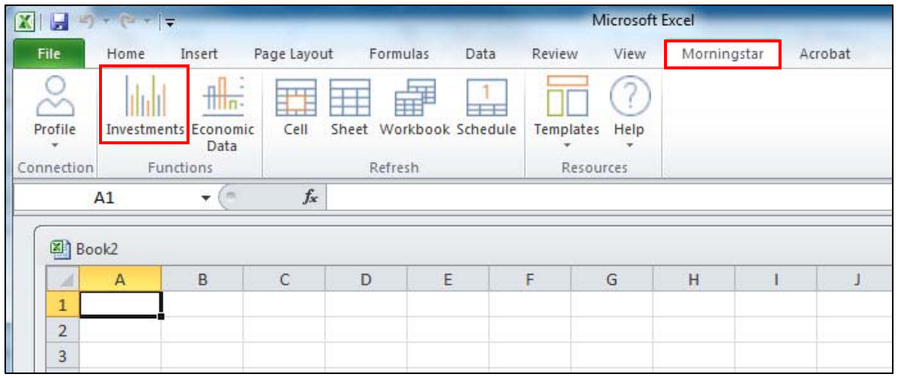
Create spreadsheet entries from an investment list or saved search

To create spreadsheet entries by retrieving data from an investment list or saved search, do the following:

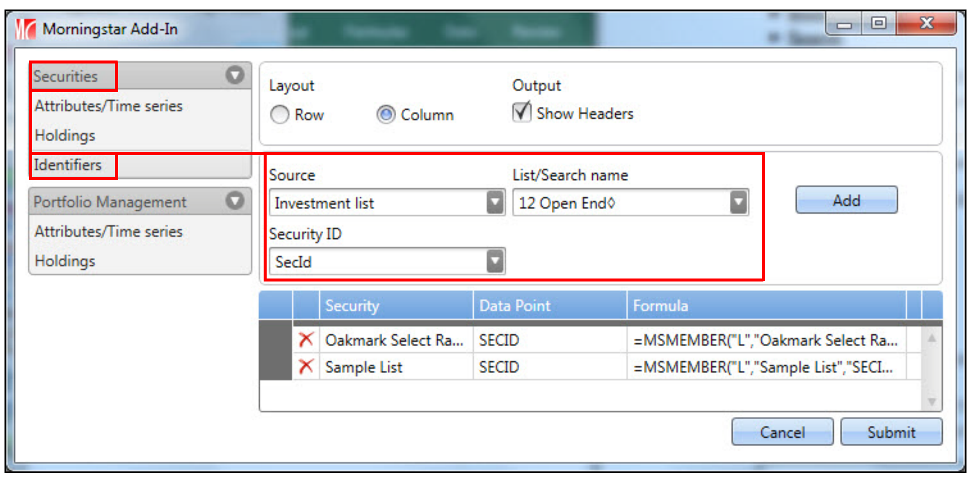
1. In a spreadsheet, select the **cell** in the row and column in which you want your entries to start (in this sample, **cell A:1**).
2. On the Morningstar ribbon, click the **Investments** icon. The Morningstar Add-In window opens.

Note the highlighted selections



3. In the Navigation Pane, select the **Securities** tab, then select **Identifiers**. The options necessary to define an identifier entry are displayed.

Note the highlighted selections



4. From the **Source** drop-down field, select one of the following:
   - **Investment List,** or
   - **Search**.
5. When the selected source is Investment List, select one of your **investments lists** from the **List/Search name** drop-down field.

   When the selected source is Search, select one of your **saved searches** from the **List/Search name** drop-down field.

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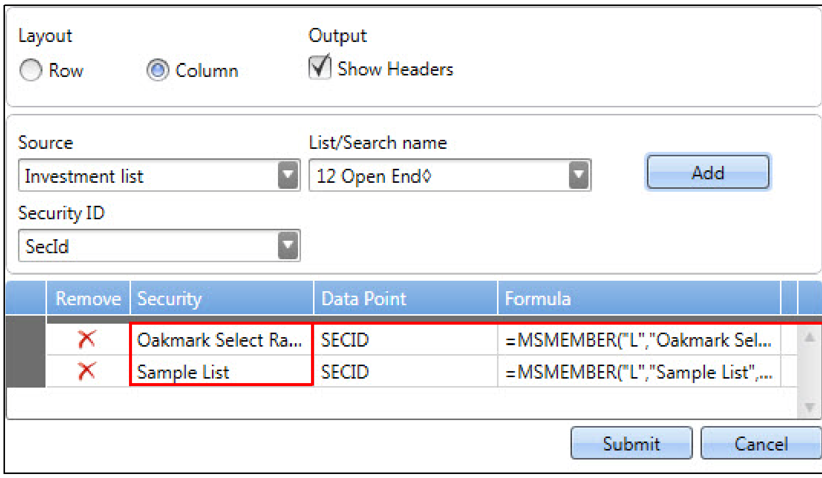
6. From the **Security ID** drop-down field, select one of the following to be displayed in the spreadsheet:
   - **SecId**
   - **Ticker**
   - **ISIN**, or
   - **CUSIP**.

   Note: These are the only data points you can retrieve for an identifier entry.

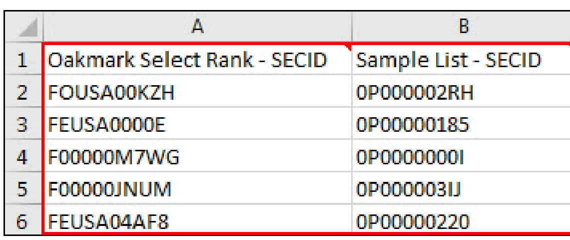
7. In the upper-right corner of the window, click **Add**. The name of the investment list or saved search is listed in the basket.



When the source is an investment list or saved search, the name of the list or search is displayed in the Security column

8. When all your entries are complete, click **Submit** in the lower-right corner of the window to submit the entries to the spreadsheet.

In the Morningstar Add-In, the basket displayed a single entry for each source (an investment list or saved search) in the Security column; however in the spreadsheet, the security ID of each security from the source is displayed in a separate row.



	A	B
1	Oakmark Select Rank - SECID	Sample List - SECID
2	FOUSA00KZH	0P000002RH
3	FEUSA0000E	0P00000185
4	F00000M7WG	0P0000000I
5	F00000JNUM	0P000003IJ
6	FEUSA04AF8	0P00000220

When an investments list is the source, only the security ID data points are retrieved, even though other data points may be present the investment list in Morningstar Direct

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Retrieving Morningstar Data from a Portfolio

Overview

On the Portfolio Management tab within the Morningstar Excel Add-In, you can create spreadsheet entries retrieved from the following:

- accounts
- custom benchmarks to which you have constituent rights
- model portfolios, and
- holdings.

On the Portfolio Management tab, all of the above are referred to as objects.

> Note: To retrieve data using the Portfolio Management tab, you need to have already saved the accounts, custom benchmarks, models portfolios, and/or holdings files in the Portfolio Management module in Morningstar Direct.

In this section, you will learn how to work with the following functions from the Portfolio Management tab:

- work with the Attributes/Time series sub-tab, and
- work with the Holdings sub-tab.

Before proceeding, you should familiarize yourself with the information in Introduction to Working with Investments in the Morningstar Excel Add-In, beginning on page 15.

Working with the Attributes/Time series sub-tab

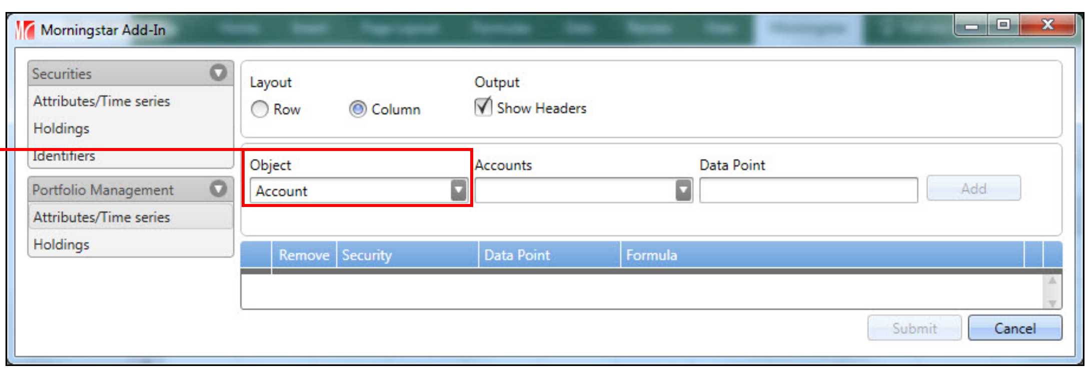
In its simplest form, a spreadsheet entry for an object consists of an object and an associated data point. You will select these from the drop-down fields in the Morningstar Add-In window.

On the Attributes/Time series sub-tab, you can create spreadsheet entries based on the following objects:

- account
- custom benchmark to which you have constituent rights, or
- model portfolio.

With each of the above, you will also make selections from the account and data point drop-down fields.

Account is the default selection from the Object drop-down field



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Do not confuse the Attributes/Time series sub-tab on the Portfolio Management tab with the same-named sub-tab on the Securities tab. The difference is as follows:

- On the Securities tab, data is retrieved from a database.
- On the Portfolio Management tab, data is retrieved from portfolios created in Morningstar Direct.

See Working with the Attributes/Time series sub-tab on page 29 for information on the Securities tab.

Data point parameters associated with an object

Once you have selected an account, custom benchmark, or model portfolio, select a data point to associate with the selected object.

The fields that define a data point in the Morningstar Excel Add-In are dynamic. In other words, when you select a data point, other parameter fields may be displayed. In these fields (which are required), you must make a selection in each field to further define the parameters of the data point.

The table shown here describes parameters associated with data points on the Attributes/Time series sub-tab.

Parameter	Description
Start Date	Select a date in the past to show values beginning at that date, by doing one of the following: ▸ Manually enter a date. ▸ Enter Dash Codes from the Start Date drop-down field, or select a relative date, or ▸ Select a date from a calendar.
End Date	Select the last time period for which you want to see values for the selected object, by doing one of the following: ▸ Manually enter a date. ▸ Enter Dash Codes from the Start Date drop-down field, or select a relative date, or ▸ Select a date from a calendar.
Sort	Select to sort data in Descending or Ascending order.
Show Dates	To display dates, select Show Dates to display dates.
Currency	Currency has the following options: ▸ Base Currency, or ▸ Select a currency from the Currency drop-down field.
Frequency	Frequency has the following options: ▸ Daily, or ▸ Select a frequency from the Frequency drop-down field.

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Parameter	Description
Fill	Fill (the returned value for non-trading days) has the following options: ▶ Blank, or ▶ Select a fill from the Fill drop-down field.
Days	Days has the following options: ▶ Trading days/Activity days, or ▶ Select Calendar days or Week days from the Days drop-down field.
Return Type	Select total, market, post-tax, or other return type.
Annualized	Select to annualize returns.
Source	Select a source from the Source drop-down field.
Benchmark	Enter the name (or partial name) of a benchmark to use to calculate a custom calculation, then select from the Benchmark drop-down field.
Risk-free proxy	Enter the name (or partial name) of a risk-free proxy to use to calculate a custom calculation, then select from the Risk-free proxy drop-down field.
Compounding method	Select the compounding method.
Rolling window	Select the time period for the calculation.
Window shift	Select how often the calculation is performed.
Formulas	Display the formula as you fill in parameters.

☞ Note: Benchmark, Risk-free proxy, Compounding method, Rolling window, and Window shift are activated when you select a custom calculation data point.

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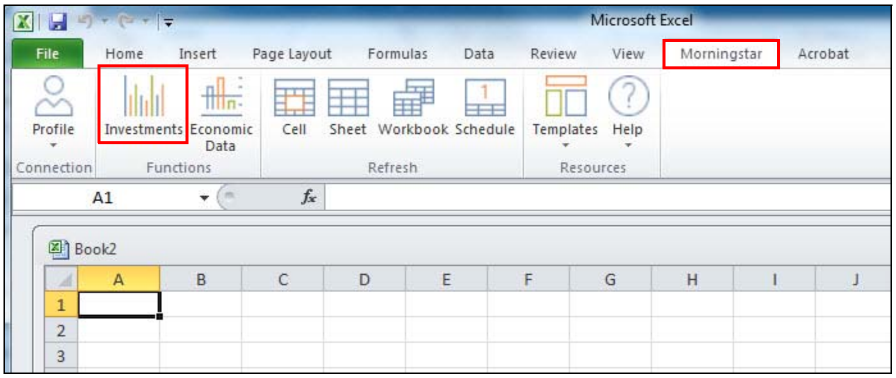
Create spreadsheet entries from an account, custom benchmark, or model portfolio

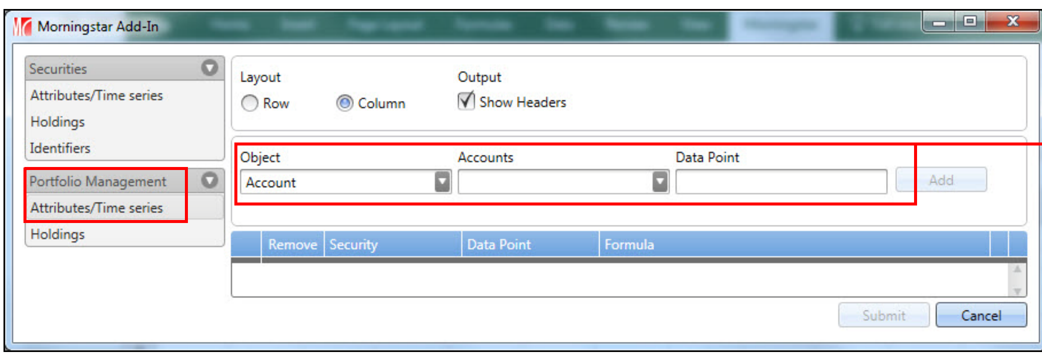
To create a spreadsheet entry from an account, custom benchmark, or model portfolio, do the following:

1. In a spreadsheet, select the **cell** in the row and column in which you want your entries to start (in this sample, **cell A:1**).
2. On the Morningstar ribbon, click the **Investments** icon. The Morningstar Add-In window opens.



Note the highlighted selections

3. In the Navigation Pane, select the **Portfolio Management** tab, then select the **Attributes/Time series** sub-tab. The fields Object, Accounts, and Data Point are displayed above the basket.



Note the highlighted selections

4. From the **Object** drop-down field, select one of the following:
   - **Account**
   - **Custom Benchmark**, or
   - **Model Portfolio**.
5. When the selected object is Account, select one of your **accounts** from the **Accounts** drop-down field.

   When the selected object is Custom Benchmark, select one of your **custom benchmarks** from the **Accounts** drop-down field.

   When the selected object is Model Portfolio, select one of your **model portfolios** from the **Accounts** drop-down field.

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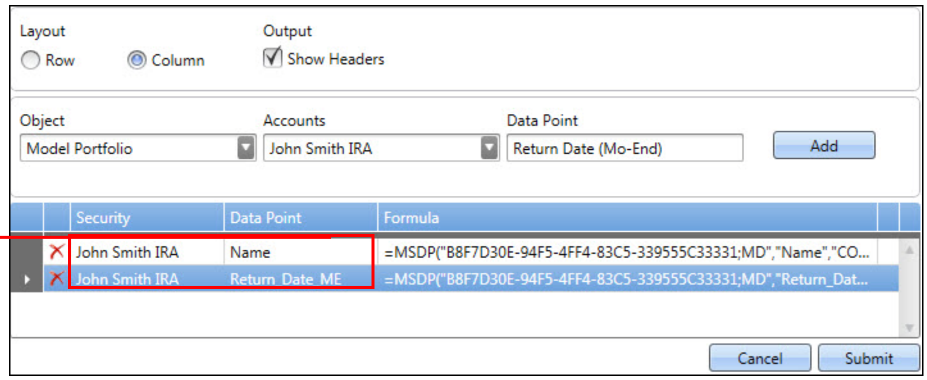
6. In the Data Point field, enter the name of a **Morningstar data point** to associate with the selected object. A list of matching data points appears as you type.

   ☞ Note: Using "Name" as the first data point is recommended.

7. When you finish filling in the fields for the data point you selected, click **Add** in the upper-right corner of the window. The name of the investment list or saved search is listed in the basket, along with the data point and formula.

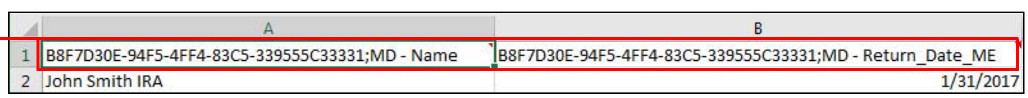
   ☞ Note: See Data point parameters associated with an object on page 39 to learn about the selections in the Data Point drop-down field

In this sample, the object is a model portfolio, John Smith IRA is the account, and the data points are Name and Return Date Month End



8. Continue creating **entries** to see other accounts, custom benchmarks, and/or model portfolios.
9. When all your entries are complete, click **Submit** in the lower-right corner of the window to submit the entries to the spreadsheet.

   ☞ Note: When you create a spreadsheet entry from an object (account, custom benchmark, or model portfolio), the object name is displayed in the spreadsheet, but not the individual investments in the selected object.



The header row displays the ID code and the name of the data point

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Working with the Holdings sub-tab

On the Holdings sub-tab of the Portfolio Management tab, you can create spreadsheet entries based on holdings in the following objects:

- an account
- a custom benchmark, and
- a model portfolio.

Do not confuse the Holdings sub-tab on the Portfolio Management tab with the same-named sub-tab on the Securities tab. The difference is as follows:

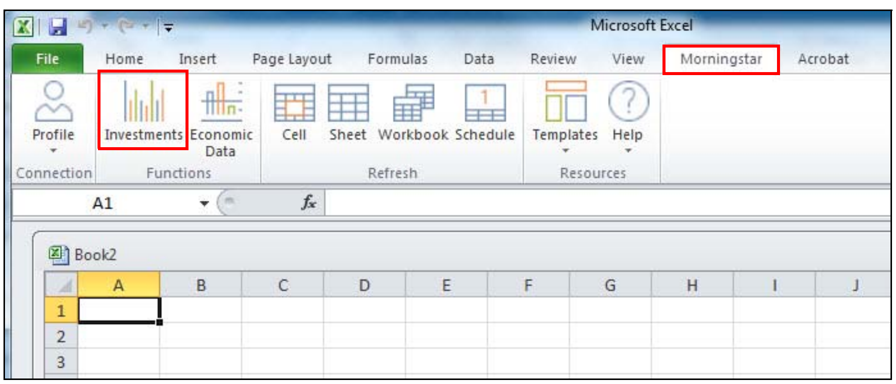
- On the Securities tab, data is retrieved from Morningstar data.
- On the Portfolio Management tab, data is retrieved from objects created in Morningstar Direct.

See Working with the Holdings sub-tab on page 32 for information on the Holdings tab.

Create spreadsheet entries from holdings in an object

To create spreadsheet entries by retrieving data from holdings in an object, do the following:

1. In a spreadsheet, select the **cell** in the row and column in which you want your entries to start (in this sample, **cell A:1**).
2. On the Morningstar ribbon, click the **Investments** icon. The Morningstar Add-In window opens.



Note the highlighted selections

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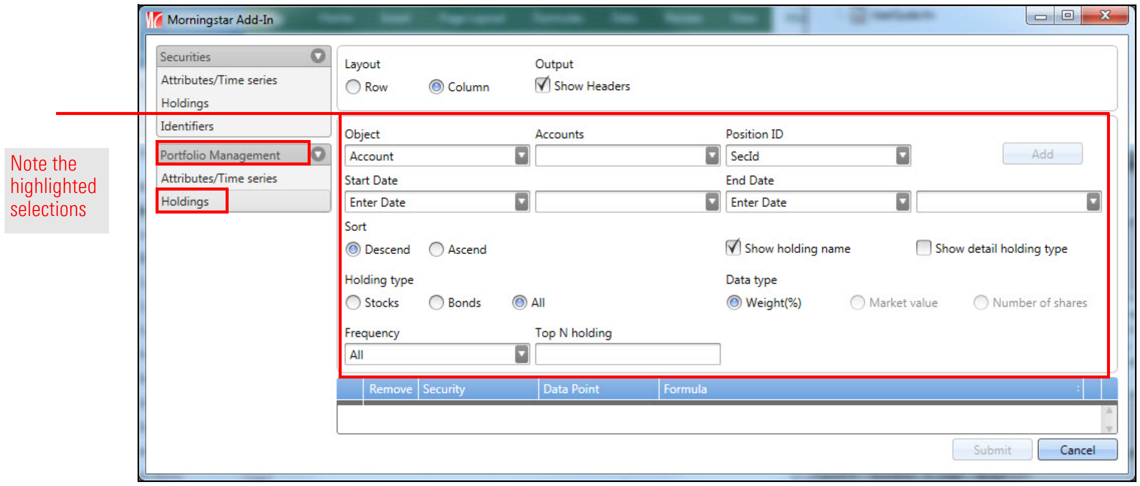
3. In the Navigation Pane, select the **Portfolio Management** tab, then select the **Holdings** sub-tab. The options necessary to define a holding entry are displayed.



4. From the **Object** drop-down field, select one of the following:
   - **Account**
   - **Custom Benchmark**, or
   - **Model Portfolio**.
5. From the **Accounts** drop-down field, select an **account** within the object you selected in step 4.
6. From, the **Position ID** drop-down field, select one of the following:
   - **SecID**
   - **Ticker**
   - **ISIN**, or
   - **CUSIP**.
7. **Fill in** the remaining fields. See Data point parameters associated with holdings on page 32 to learn about the various parameters required for data points associated with holdings.
8. When you have finished with all the fields, click **Add** in the upper-right corner of the window. The holding is listed in the basket.
9. Continue creating **entries** for holdings
10. When all your entries are complete, click **Submit** in the lower-right corner of the window to submit the entries to the spreadsheet.

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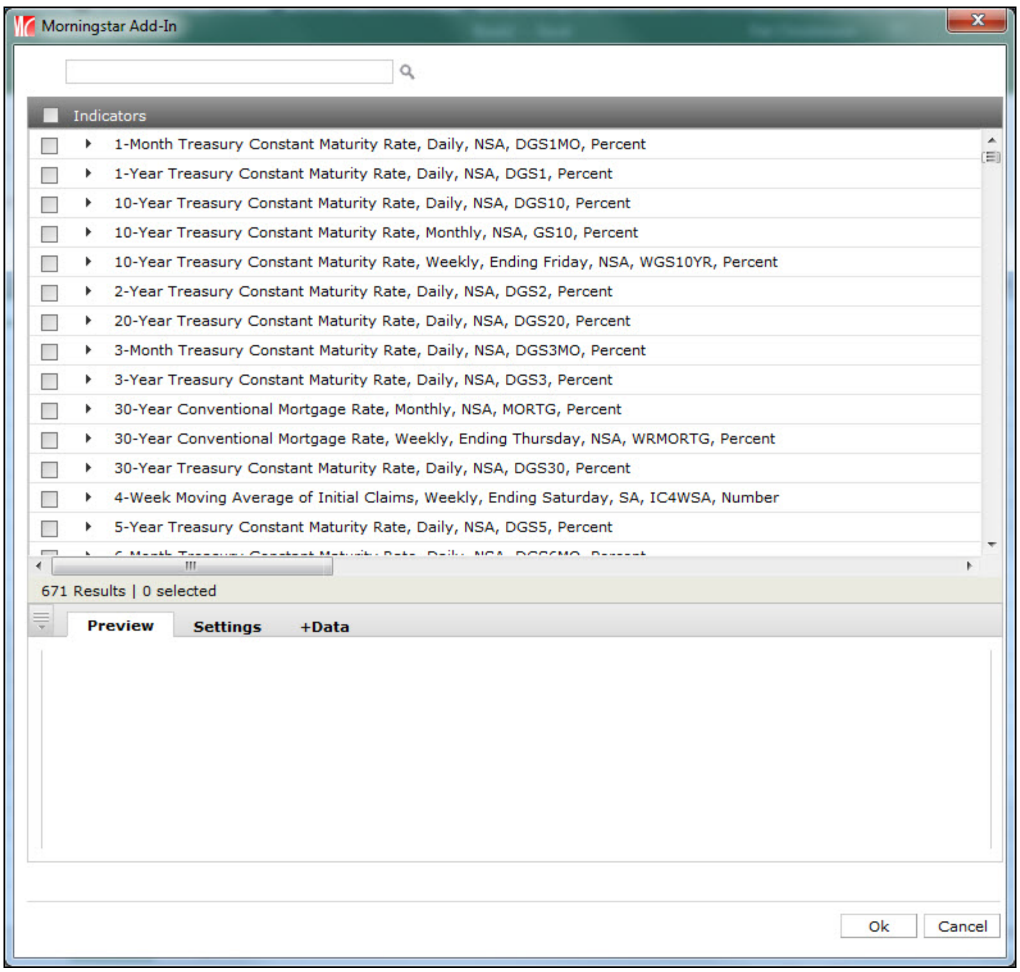
Introduction to Working with Economic Data in the Morningstar Excel Add-In

Overview

With the Morningstar Excel Add-In, you can retrieve the most influential economic indicators (such as GDP, Jobs, etc.) by keyword to access the latest and most reliable data, powered by the Federal Reserve Economic Data (FRED) and Action Economics.

In the Morningstar Excel Add-In, retrieving economic indicators is done via the Morningstar Add-In window where you can do the following:

- search for economic indicators
- access multiple economic indicators and add them to your spreadsheet all at once, and
- edit the settings and data points associated with an economic indicator.



The initial view of the Morningstar Add-In window for economic indicators is shown here

In this section, you will learn how to work with the features of the Morningstar Add-In window for economic indicators.

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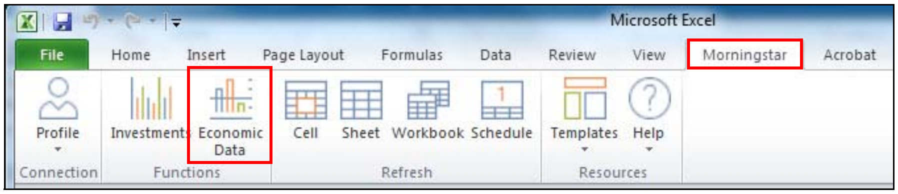
Features of the Morningstar Add-In window for economic indicators

Before you begin using the Morningstar Excel Add-In to retrieve economic indicators for a spreadsheet, you should be familiar with the features of the Morningstar Add-In window (described in this section).

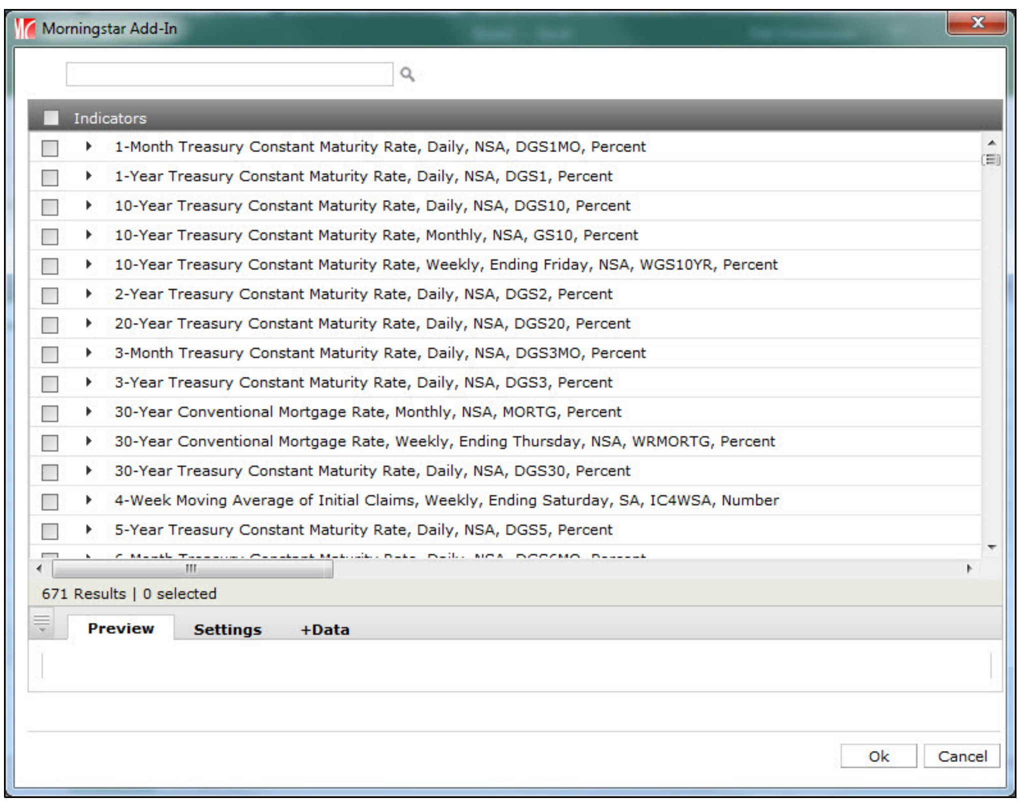
To open the Morningstar Add-In window, do the following:

1. In a spreadsheet, select the **cell** in which you want your entries to start.
2. On the Morningstar ribbon, click the **Economic Data** icon. The Morningstar Add-In window opens.

Note the highlighted selections



3. **Notice** the following in the Morningstar Add-In window (displayed below):
   - In the Search field at the top of the window, you can search by keyword or MSECON function. For more information on MSECON and other Morningstar code functions, see the Morningstar Excel Add-In Reference Guide.
   - The Indicators list displays commonly used economic indicators from which you can select.
   - The Preview tab displays the indicators you select for your spreadsheet
   - The Settings tab displays options for the selected indicator(s).
   - The +Data tab displays data point options for the selected indicator(s).



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Retrieving Economic Data

Overview

Before proceeding, you should familiarize yourself with the information in Introduction to Working with Economic Data in the Morningstar Excel Add-In, beginning on page 45.

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

- create spreadsheet entries for economic indicators (page 47)
- add an entry to a spreadsheet (page 53)
- use search to create a new entry (page 56)
- edit an entry (page 58), and
- delete an entry (page 60).

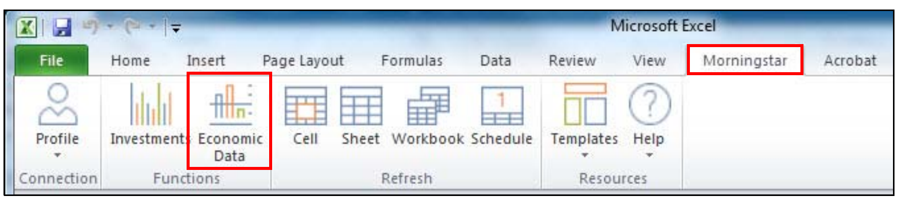
Create spreadsheet entries for economic indicators

You can create spreadsheet entries in the following ways:

- select an entry or entries from the Indicators list (described in this section), or
- search for keywords (described in Use search to create a spreadsheet entry on page 56).

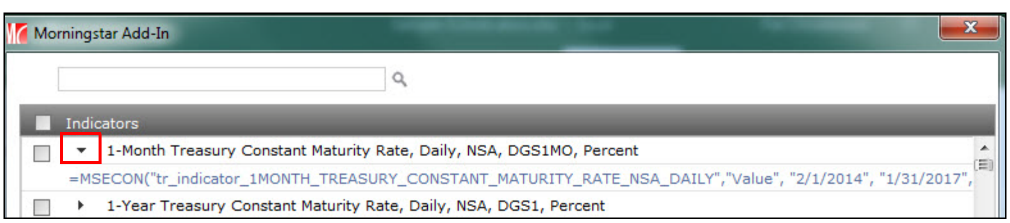
To create spreadsheet entries from the default Indicators list, do the following:

1. In a spreadsheet, select the **cell** in which you want your entries to start.
2. On the Morningstar ribbon, click the **Economic Data** icon. The Morningstar Add-In window opens.



Note the highlighted selections

Note: (Optional) In the Morningstar Add-In window, click the **arrow** at the beginning of any entry in the Indicators list. A row opens, displaying the formula for the indicator.



Note the highlighted selection

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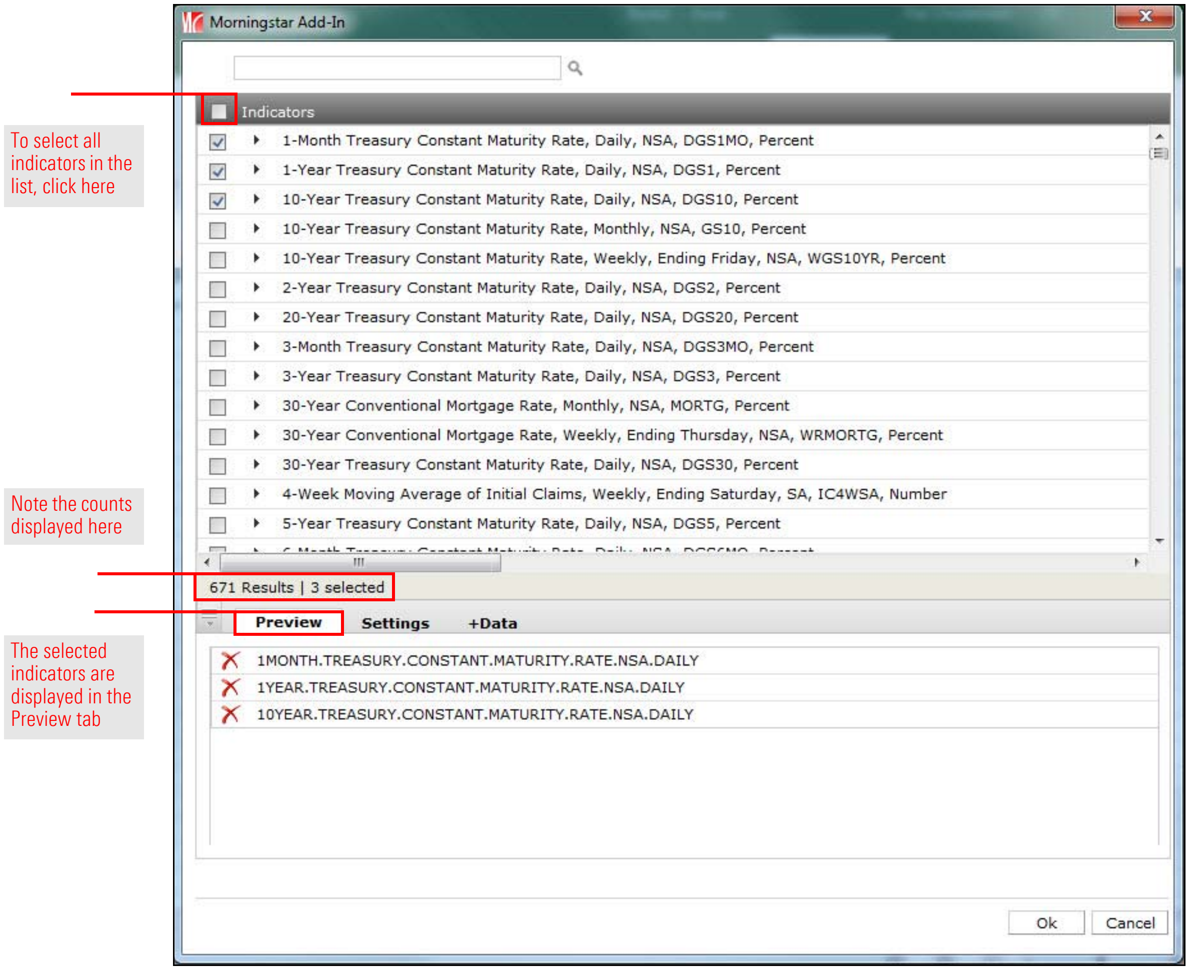
3. Select **indicator(s)** from the default list by clicking the **checkbox** at the beginning of each row you want to include. The selected indicator(s) are displayed in the Preview tab.

   ☞ Note: The options you select in the Settings and +Data tabs (in steps 4–8) will be applied to all selected indicators. If you want to select different options for an individual indicator, select only that indicator, then proceed to steps 4–8.



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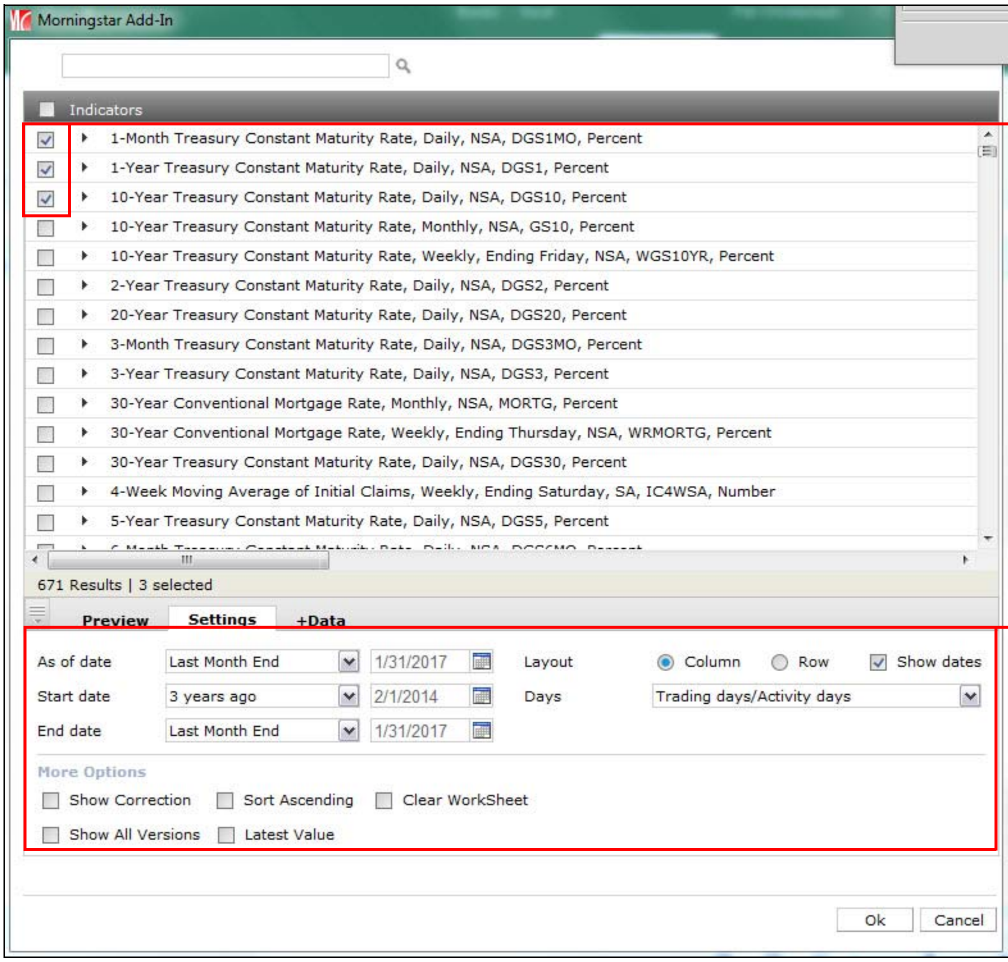
4. In the bottom portion of the window, select the **Settings** tab. The Settings tab opens.



You can select and deselect indicators while displaying any tab (Preview, Settings, or +Data)

The initial display shows the default options for settings

5. Modify the **selections** on the Settings tab, keeping in mind that the selections will be applied to all the economic indicators you have selected.

   ☞ Note: See Options on the Settings tab on page 52 for information on the Settings tab.

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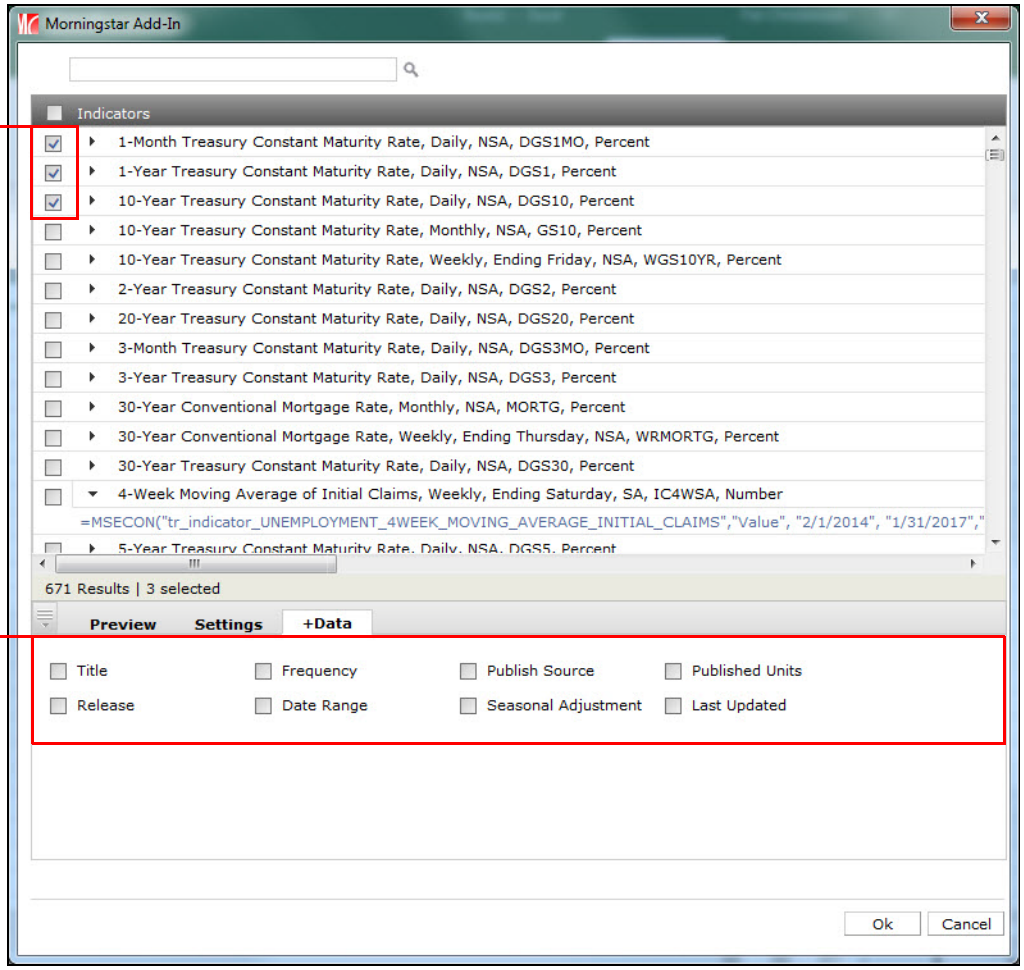
6. In the bottom portion of the window, select the **+Data** tab. The +Data tab opens.

You can select and deselect indicators while displaying any tab (Preview, Settings, or +Data)

The initial display shows the default options for settings



7. Modify the **selections** on the +Data tab, keeping in mind keeping in mind that the selections will be applied to all the economic indicators you have selected.

   ☞ Note: See Options on the +Data tab on page 53 for information on the +Data tab.

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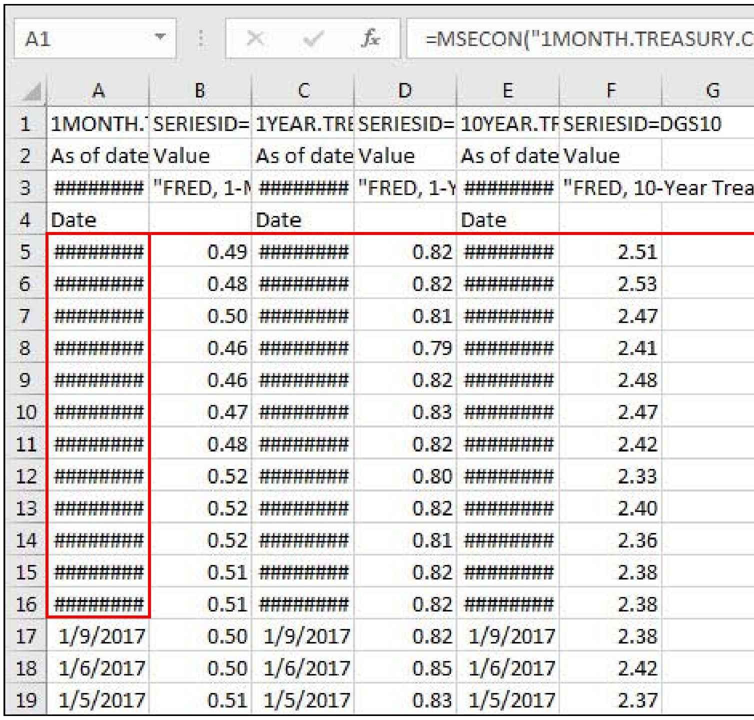
8. Click **Ok**. The Morningstar Add-In window closes and the spreadsheet is displayed.

   ☞ Note: The default column widths are controlled by Microsoft Excel so it is likely some of the data will not fit.



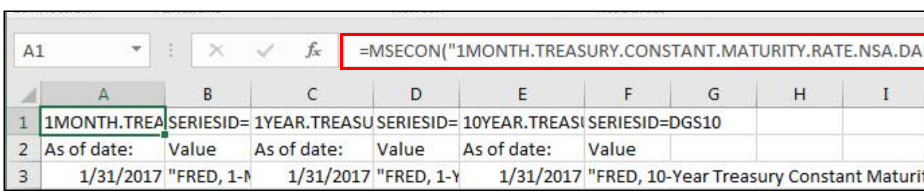
A1 =MSECON("1MONTH.TREASURY.C

	A	B	C	D	E	F	G
1	1MONTH.T	SERIESID=	1YEAR.TRE	SERIESID=	10YEAR.TF	SERIESID=DGS10	
2	As of date	Value	As of date	Value	As of date	Value	
3	########	"FRED, 1-M	########	"FRED, 1-Y	########	"FRED, 10-Year Trea	
4	Date		Date		Date		
5	########	0.49	########	0.82	########	2.51	
6	########	0.48	########	0.82	########	2.53	
7	########	0.50	########	0.81	########	2.47	
8	########	0.46	########	0.79	########	2.41	
9	########	0.46	########	0.82	########	2.48	
10	########	0.47	########	0.83	########	2.47	
11	########	0.48	########	0.82	########	2.42	
12	########	0.52	########	0.80	########	2.33	
13	########	0.52	########	0.82	########	2.40	
14	########	0.52	########	0.81	########	2.36	
15	########	0.51	########	0.82	########	2.38	
16	########	0.51	########	0.82	########	2.38	
17	1/9/2017	0.50	1/9/2017	0.82	1/9/2017	2.38	
18	1/6/2017	0.50	1/6/2017	0.85	1/6/2017	2.42	
19	1/5/2017	0.51	1/5/2017	0.83	1/5/2017	2.37	

The # symbols indicate the data output is too large for the cell

9. Select cell **A:1**. The cell's formula is displayed in the Formula Bar.

   ☞ Note: In the Formula bar, the portion of the formula displayed between quotation marks represents the selection from the Morningstar Add-In window.



A1 =MSECON("1MONTH.TREASURY.CONSTANT.MATURITY.RATE.NSA.DAI

	A	B	C	D	E	F	G	H	I
1	1MONTH.TREA	SERIESID=	1YEAR.TREASU	SERIESID=	10YEAR.TREASU	SERIESID=DGS10			
2	As of date:	Value	As of date:	Value	As of date:	Value			
3	1/31/2017	"FRED, 1-M	1/31/2017	"FRED, 1-Y	1/31/2017	"FRED, 10-Year Treasury Constant Maturit			

In many cases, the full formula will not fit in the Formula bar.

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Options on the Settings tab

The table shown here describes the options on the Settings tab.

Option	Action
As of date	Select a date in the past to show economic indicators as of that date, by doing one of the following: ► Manually enter a date. ► From the Start Date drop-down field, select a relative date, or ► Select a date from a calendar.
Start date	Select a date in the past to show economic indicators starting on that date, by doing one of the following: ► Manually enter a date. ► Enter Dash Codes from the Start Date drop-down field, or select a relative date, or ► Select a date from a calendar.
End date	Select the last time period for which you want to see economic indicators data, by doing one of the following: ► Manually enter a date. ► Enter Dash Codes from the Start Date drop-down field, or select a relative date, or ► Select a date from a calendar.
Layout	Select Column or Row.
Show dates	Deselect to hide dates.
Days	Days has the following options: ► Trading days/Activity days ► Calendar days, or ► Week days.
Show Correction	Select to include corrected values in the series output. If left unselected, corrections to the economic indicators during the time series will not be reflected in the spreadsheet.
Sort Ascending	Select to sort output in ascending order. Data is displayed in descending order by default.
Clear Worksheet	Select to clear data in worksheet prior to output.
Show all versions	Select to display all versions of the data.
Latest Value	Select to display the latest value of the data. This setting overrides As of date, Start date, and End date.

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Options on the +Data tab

The table shown here describes the options on the +Data -tab.

Option	Action
Title	Select to display the title of the economic indicator (such as 10-Year Treasury Constant Maturity Rate).
Frequency	Select to display the frequency with which the source publishes the data.
Publish Source	Select to display the source of data.
Published Units	Select to display the units in which the data is expressed (percentage, numbers, etc.).
Release	Select to display the release date of data
Date Range	Select to display the first date of historical data to present.
Seasonal Adjustment	Select to indicate that data is seasonally adjusted.
Last Updated	Select to display the date of last update of data.

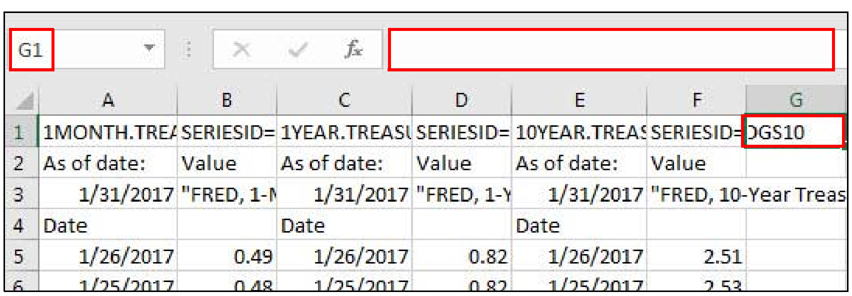
Add an entry to a spreadsheet

When adding an entry to a spreadsheet, always select an empty cell where you want the entry you are adding to begin. If you select a cell that contains content, that content will be overwritten. Depending on how many entries you created and the options selected in the Settings and +Data tabs, other cells in the row as well as cells in subsequent rows could also be overwritten.

To create a new spreadsheet entry, do the following:

1. In the spreadsheet, select an **empty cell** (in this case, cell **G:1**).

   ☞ Note: Although text may appear to be displayed in the selected cell (as shown below), it is actually continued text from the adjacent cell (in this case, F:1). When an empty cell is selected, the Formula bar is empty.



If you select a cell that is not empty, its content will be replaced by the new spreadsheet entry you create

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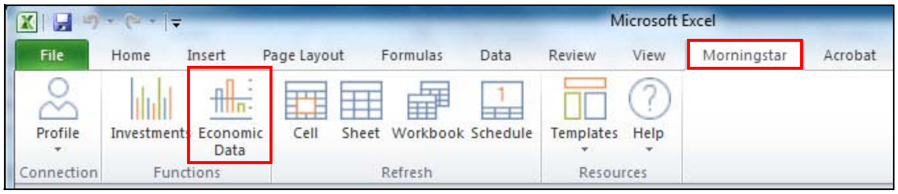
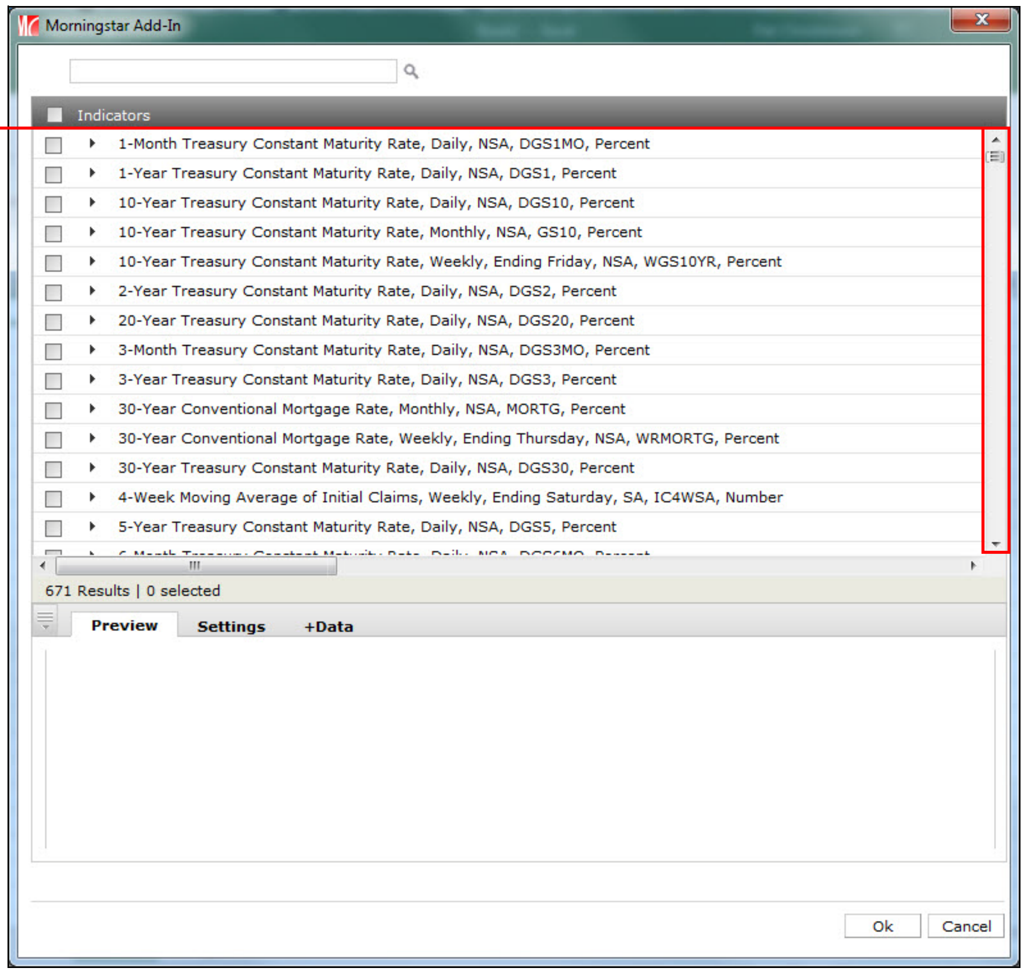
2. On the Morningstar ribbon, click the **Economic Data** icon. The Morningstar Add-In window opens.

Note the highlighted selections



☞ Note: When you open the Morningstar Add-In window from an empty cell, the Preview tab displays the default Indicators list (shown below). If you open the Morningstar Add-In window from a cell with content, that content is reflected in the Preview window.

Scroll down to view more of the list



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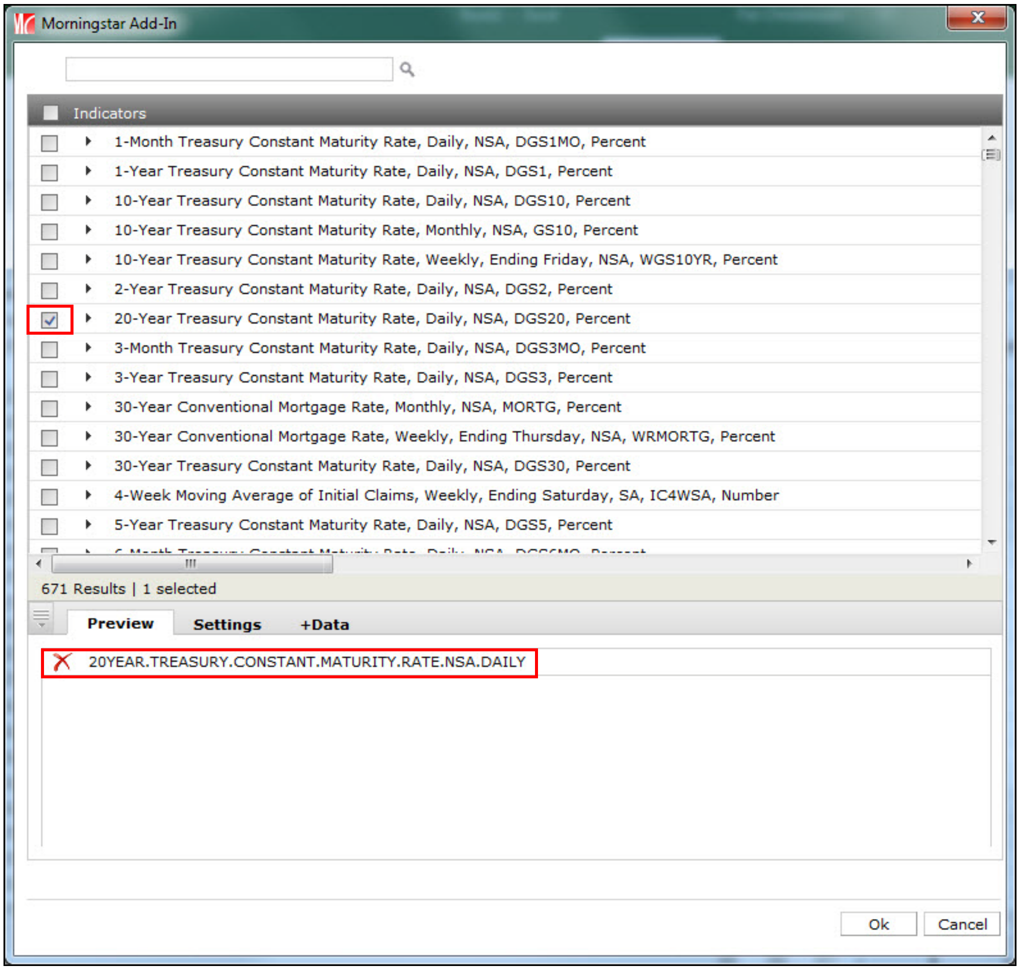
3. Select an **indicator** (or indicators) to add to the spreadsheet. The selected indicator is shown in the Preview tab at the bottom portion of the window.



Note the highlighted selections

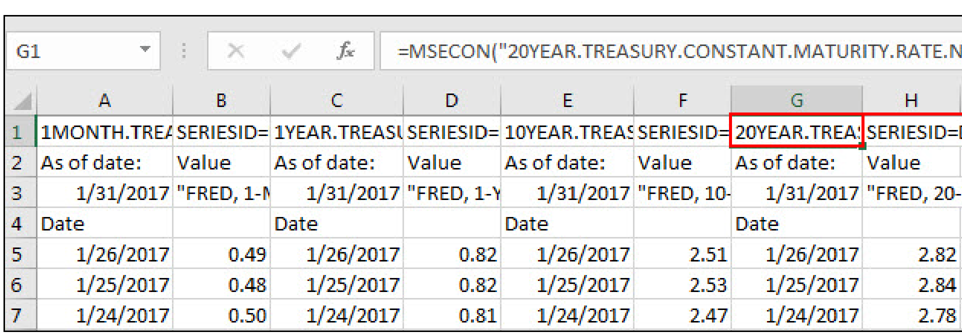
4. Select the **Settings** tab and make any necessary **changes** to the options displayed.

   ☞ Note: See Options on the Settings tab on page 52 for information on the Settings tab.

5. Open the **+Data** tab and make any necessary **changes** to the options displayed.

   ☞ Note: See Options on the +Data tab on page 53 for information on the +Data tab.

6. Click **Ok**. The spreadsheet is displayed with the new entries' display starting in the cell you selected in step 1 on page 53.



The new entry begins in the selected cell (in this case, G:1)

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Use search to create a spreadsheet entry

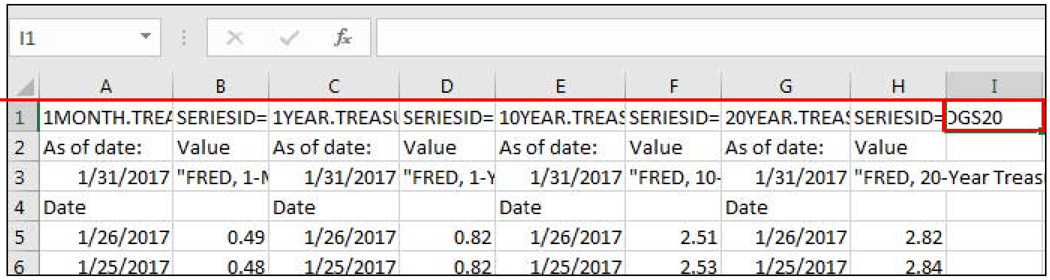
The search function allows you to find indicators by keyword, such as GDP (Gross Domestic Product) or EPI (Economic Performance Index).

To use search to create a new spreadsheet entry, do the following:

1. In the spreadsheet, select an **empty cell** (in this case, cell **I:1**).

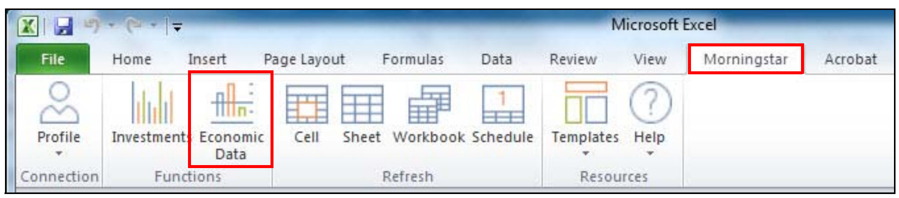
   ☞ Note: Although text may appear to be displayed in the selected cell (as shown below), it is actually continued text from the adjacent cell (in this case, H:1). When an empty cell is selected, the Formula bar is empty.

If you select a cell that is not empty, its content will be replaced by the new spreadsheet entry you create



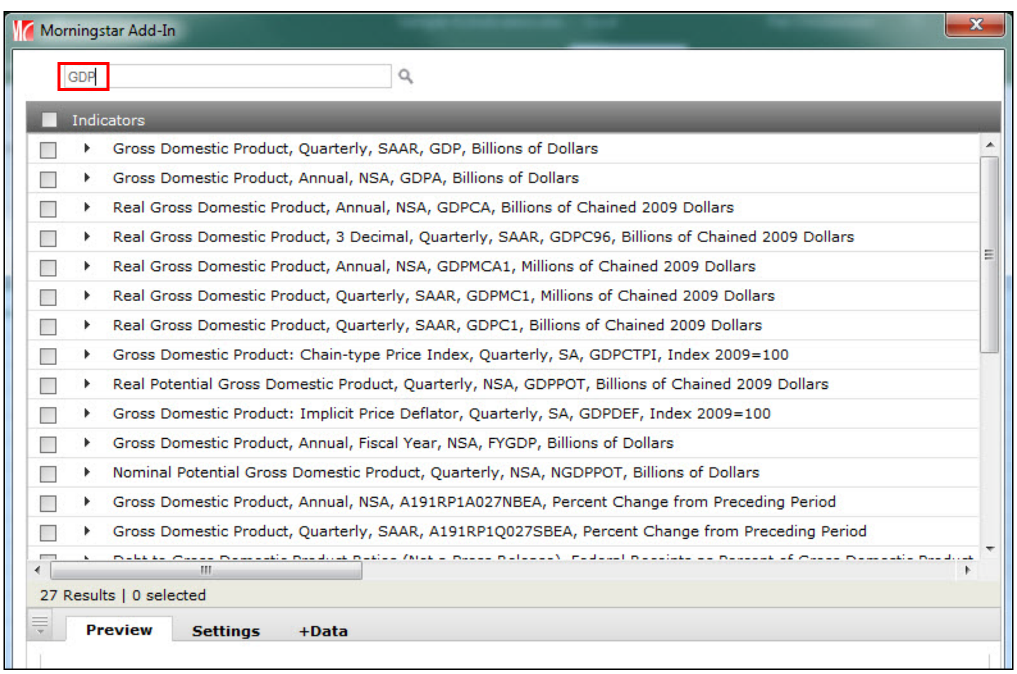
2. On the Morningstar ribbon, click the **Economic Data** icon. The Morningstar Add-In window opens.

Note the highlighted selections



3. In the search field, enter a **keyword** (in this case, **GDP**).
4. Press <**ENTER**>. The Indicators list refreshes and displays indicators for the keyword.

Note the highlighted selection



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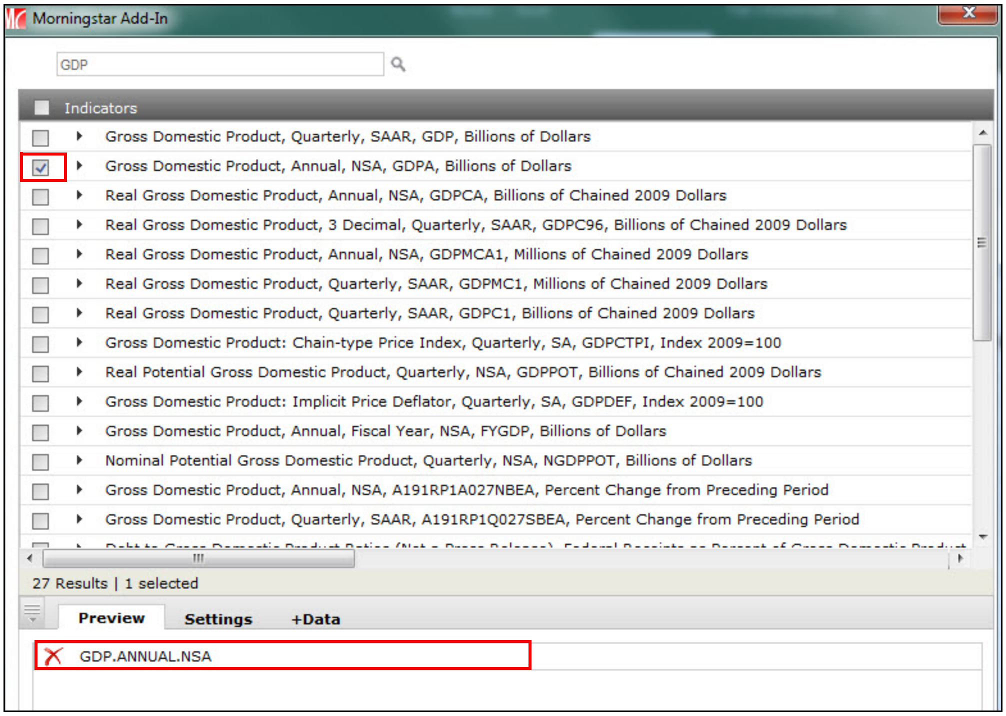
5. Select an **indicator** (or indicators) to add to the spreadsheet by clicking its checkbox. The selected indicator is displayed on the Preview tab.



Note the highlighted selections

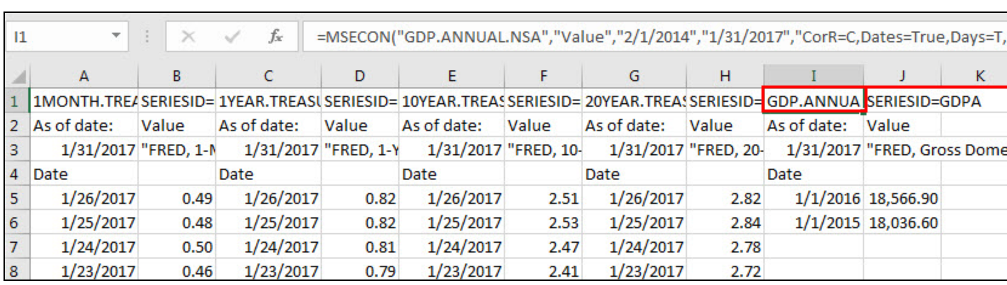
6. Select the **Settings** tab and make any necessary **changes** to the options displayed.

   ☞ Note: See Options on the Settings tab on page 52 for information on the Settings tab.

7. Select the **+Data** tab and make any necessary **changes** to the options displayed.

   ☞ Note: See Options on the +Data tab on page 53 for information on the +Data tab.

8. Click **Ok**. The spreadsheet is displayed with the new entries' display starting in the cell you selected in step 1 on page 56.



I1 =MSECON("GDP.ANNUAL.NSA","Value","2/1/2014","1/31/2017","CorR=C,Dates=True,Days=T,

	A	B	C	D	E	F	G	H	I	J	K
1	1MONTH.TREA	SERIESID=	1YEAR.TREASU	SERIESID=	10YEAR.TREAS	SERIESID=	20YEAR.TREAS	SERIESID=	GDP.ANNUA	SERIESID=GDPA	
2	As of date:	Value	As of date:	Value	As of date:	Value	As of date:	Value	As of date:	Value	
3	1/31/2017	"FRED, 1-M	1/31/2017	"FRED, 1-Y	1/31/2017	"FRED, 10-	1/31/2017	"FRED, 20-	1/31/2017	"FRED, Gross Domes	
4	Date		Date		Date		Date		Date		
5	1/26/2017	0.49	1/26/2017	0.82	1/26/2017	2.51	1/26/2017	2.82	1/1/2016	18,566.90	
6	1/25/2017	0.48	1/25/2017	0.82	1/25/2017	2.53	1/25/2017	2.84	1/1/2015	18,036.60	
7	1/24/2017	0.50	1/24/2017	0.81	1/24/2017	2.47	1/24/2017	2.78			
8	1/23/2017	0.46	1/23/2017	0.79	1/23/2017	2.41	1/23/2017	2.72			

The new entry begins in the selected cell (in this case, I:1)

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Edit an entry

You can edit an entry's options on the Settings and +Data tabs in the Morningstar Add-In window.

To edit an entry, do the following:

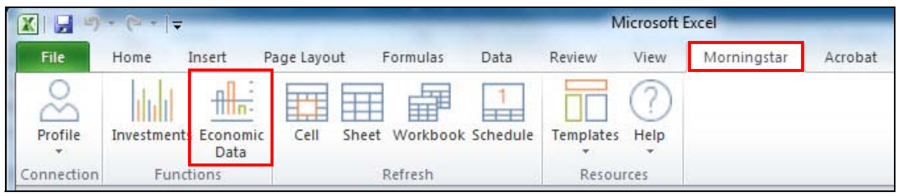
1. In the spreadsheet, select the top **cell** of an existing entry's column (in this case, **C:1**). The Format bar displays the content of the selected cell.

   ☞ Note: In this sample, the values in cell C:3 (As of date) and column E will be changed.

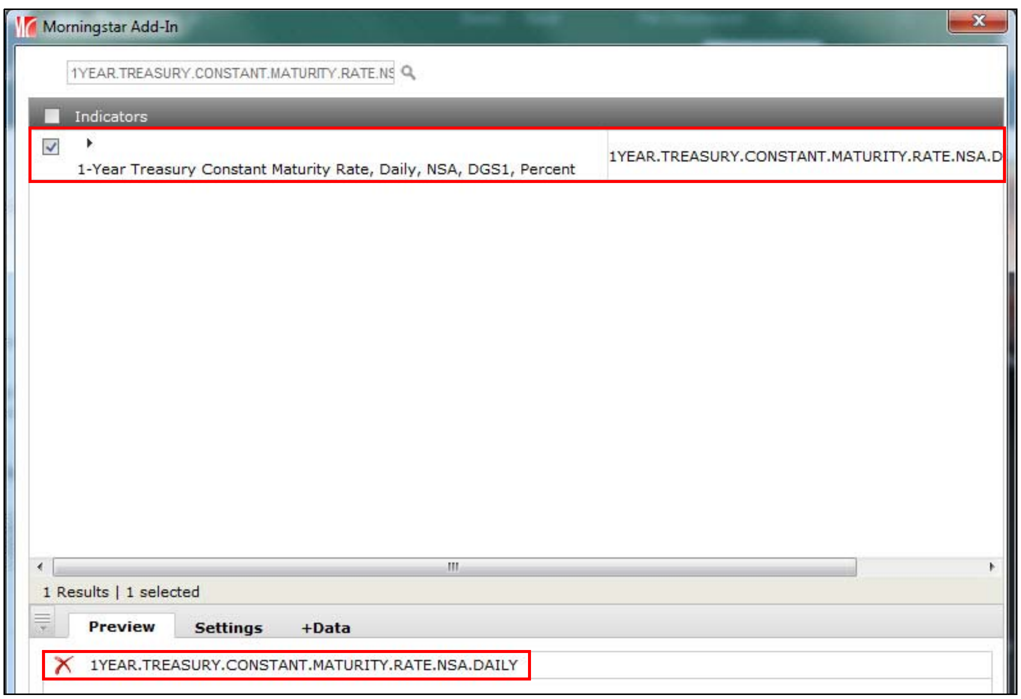
The Formula bar displays the formula for the selected cell

2. On the Morningstar ribbon, click the **Economic Data** icon. The Morningstar Add-In window opens.

Note the highlighted selections



The entry for the selected cell is displayed in the Indicators list and in the Preview tab



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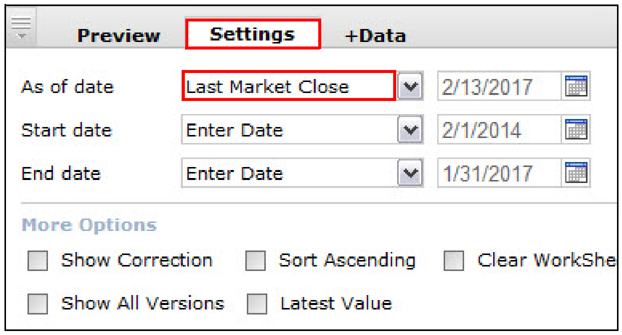
3. Select the **Settings** tab and make any necessary **changes** to the options displayed. In this sample, the As of date has been changed to **Last Market Close**.

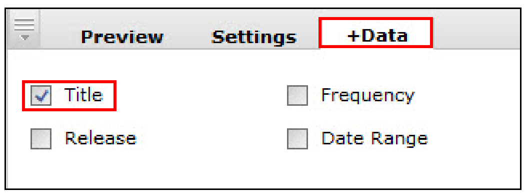


Note the highlighted selections

Note: See Options on the Settings tab on page 52 for information on the Settings tab.

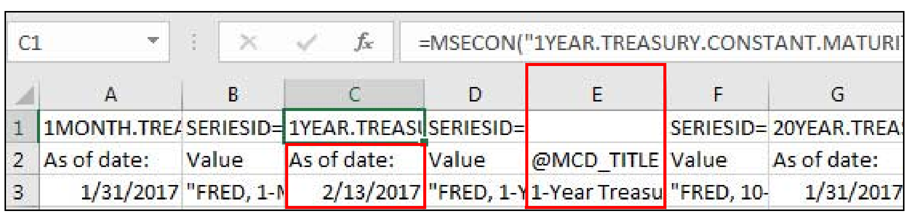
4. Select the **+Data** tab and make any necessary **changes** to the options displayed. In this sample, the **Title** checkbox has been enabled.

Note: See Options on the +Data tab on page 53 for information on the +Data tab.



Note the highlighted selections

5. Click **Ok**. The spreadsheet is displayed. Note the following:
   - In cell C:3, the As of date (which was 1/26/2017) now reflects the last market close (2/13/2017)
   - A new column (column E) has been added to display the Title, and
   - The data previously displayed in column E and columns to its right now occupy column F and the columns to its right.



Note the hig selections

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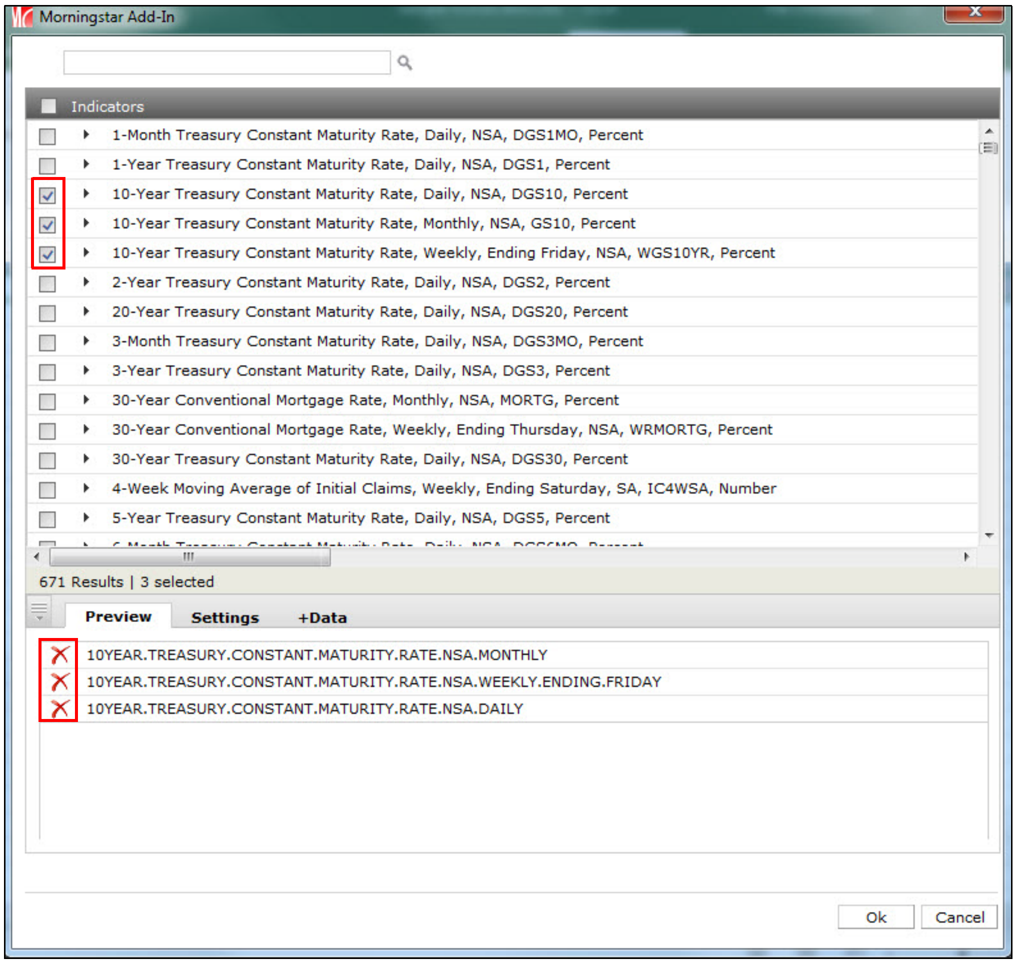
Delete an entry

In the Morningstar Add-In window, when you have not yet sent your entries to the spreadsheet, they can be deleted. However, if the entries are in the spreadsheet, they cannot be deleted from the Morningstar Add-In window. Instead, use standard Microsoft Excel procedures (not covered in this document) to delete them.

To delete an entry, do the following:

1. In the Morningstar Add-In window, delete an entry by doing one of the following:
   - In the Indicators list, deselect the entry's **checkbox**, or
   - In the Preview tab, click the **Delete** icon.

Note the highlighted selections



2. If you are finished creating and deleting entries in the Morningstar Add-In window, click **Ok**. The spreadsheet opens and the entries you did not delete are now in the spreadsheet.

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