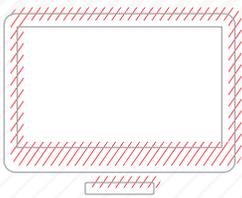
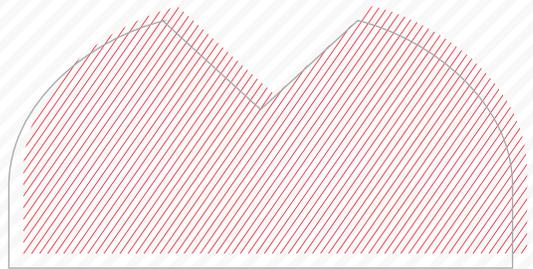
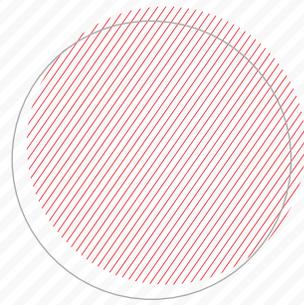
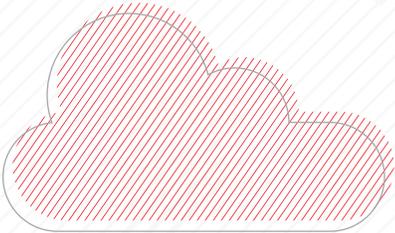


# Using the Markets Workbooks

Morningstar Direct Cloud Editions



**MORNINGSTAR** Direct



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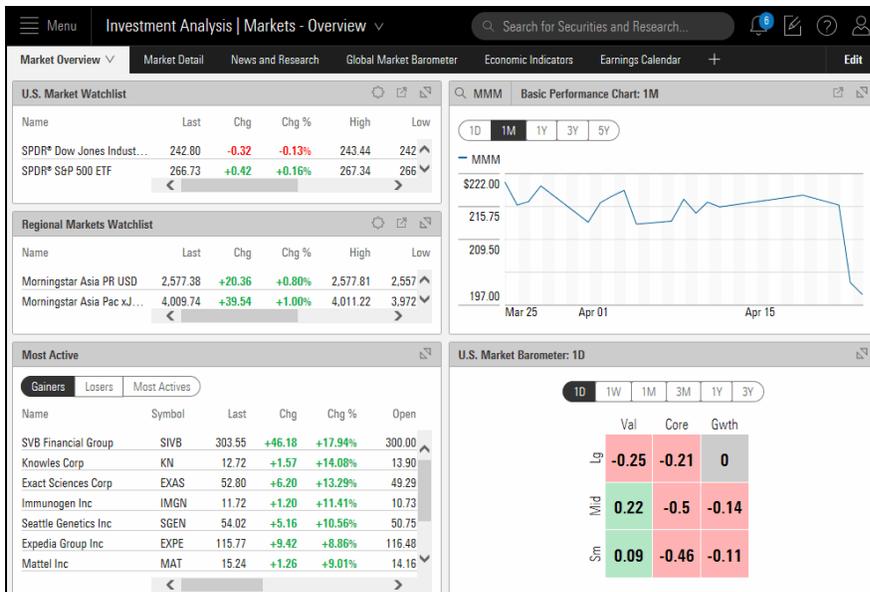
# Using the Morningstar Direct<sup>SM</sup> Cloud Editions to Monitor the Markets

The Morningstar Direct<sup>SM</sup> Cloud editions offers two workbooks dedicated to helping you monitor financial markets. The Markets - Overview workbook contains several worksheets to help you find news, research, and data for markets foreign and domestic.

The Markets - Equity Research workbook contains worksheets designed to help you investigate securities, such as an advanced chart to display technical indicators and fundamental data points, price and earnings targets, and earnings estimates and results.

This manual contains several exercises to familiarize you with the use of the Markets workbooks, and how you can use it to help monitor the financial markets.

## Overview

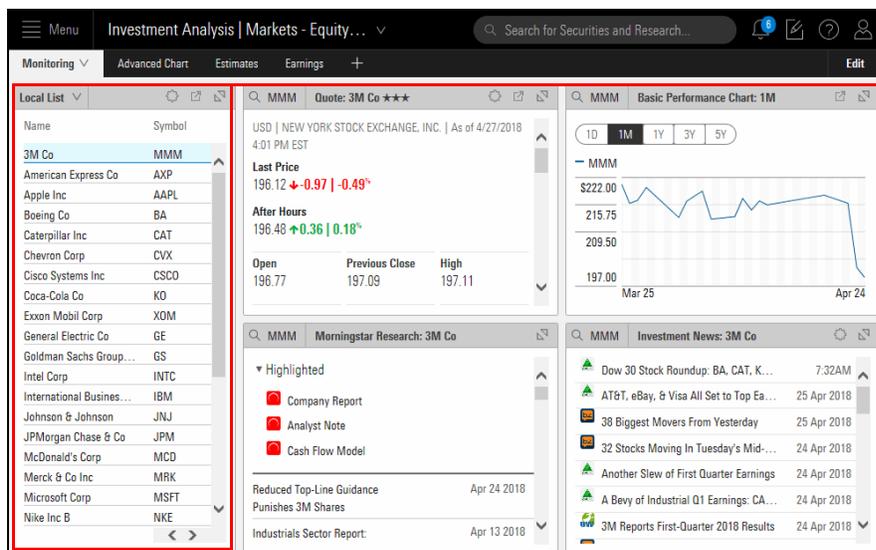


The Markets - Overview workbook offers a variety of worksheets and components to help investigate and make sense of the financial markets

In previous exercise guides, the Investment Analysis workbooks (Grid View, Equity Fund) you have seen and the Markets workbooks are identical in that they are composed of worksheets containing various components. That said, these two workbook types differ in two important ways.

First, when opening either the Grid View or Equity Fund workbooks, you are prompted to select a list or screen to surface in the workbook. In contrast, the Markets - Overview workbook is agnostic of any investments. Its components merely show you news and information about global financial markets, so you do not need to select a list or screen. And when you open the Markets - Equity Research workbook, the workbook opens without prompting you to select an object. Instead, a list of 30 stocks shows by default.

**How do the Markets workbooks differ from the Investment Analysis workbooks?**



The items in this component appear by default, but you can choose to surface another list or screen instead, so long as the list or screen contains no more than 200 investments.

You can always replace that list of 30 stocks with another saved list or screen, so long as it contains no more than 200 investments. However, note that the component containing the investments is not the Grid View component, as you are used to seeing in the Investment Analysis workbooks. In the Grid component here, you cannot change the criteria for a screen, and you cannot customize the specific data columns you see as you can in the Grid View component, although you can change what data points are showing by selecting another option from the Component Settings icon.

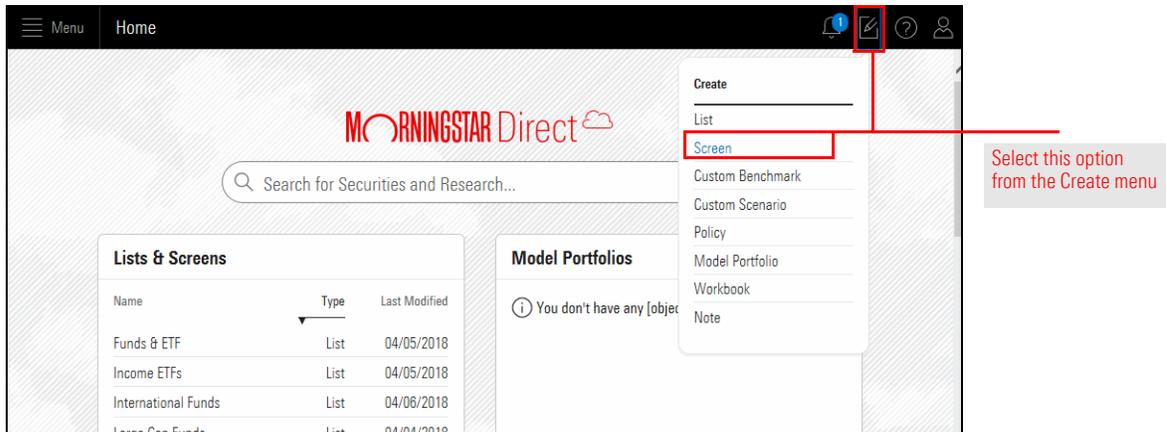
The lesson here is that you need to be sure all of the investments you would want to broadcast to the other components on the worksheets in this workbook are already present in the saved list or screen before opening it in this workbook. Otherwise, you will need to enter an investment's name or ticker in a component directly (where available) to see its information in one component at a time.

Stocks assigned a 5-star rating are those that Morningstar’s Analysts believe are the most deeply undervalued. Because the Morningstar Rating for Stocks is updated everyday, creating and saving a screen to track 5-star stocks is helpful. Doing so allows you to open this screen each day to see which new stocks are now in 5-star territory, and thus discover new investment opportunities.

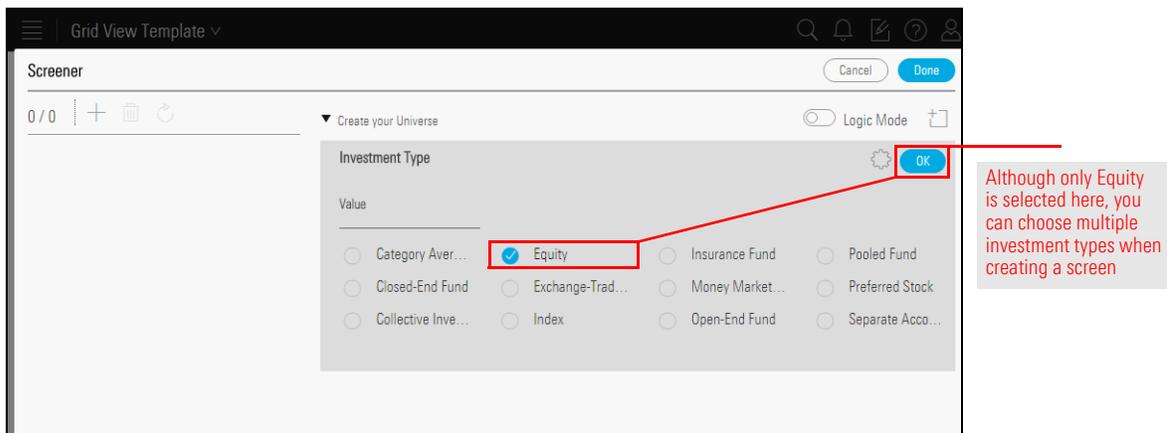
**Exercise 1: Create a screen for five-star stocks**

A screen can be created from anywhere in Morningstar Direct Cloud<sup>SM</sup> by clicking the Create icon on the header. To find 5-star stocks traded in the U.S., do the following:

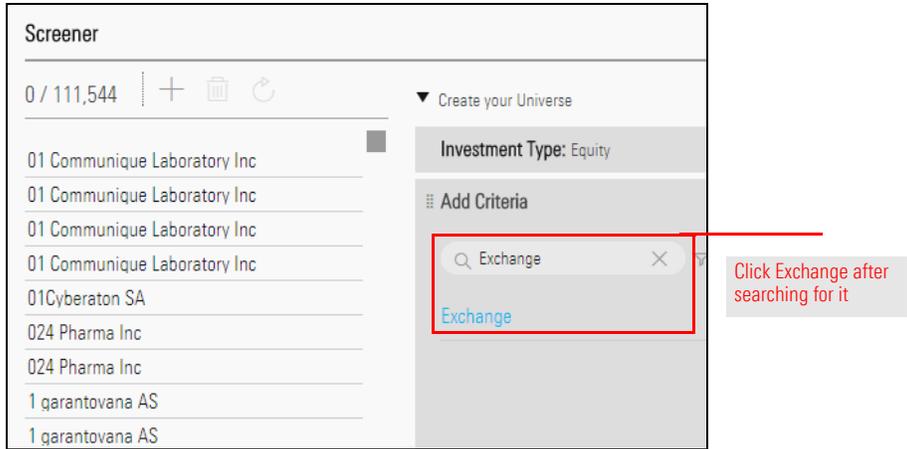
1. On the header, click the **Create** icon, then select **Screen**. The Screener window opens.



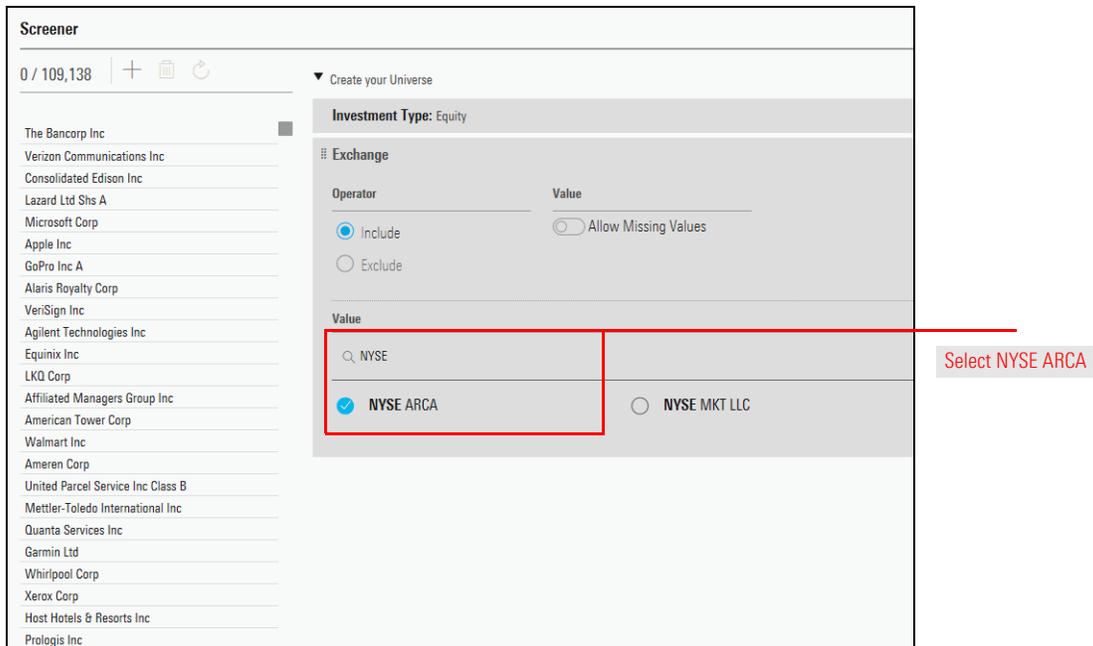
2. Select the option for **Equity**.
3. Click **OK**. All investments matching the criteria appear in the Screener window’s left-hand pane.



- 4. The system shows every instance of a stock, including every exchange it trades on; which results in some stocks appearing on the list more than once. To address this, narrow the results by adding more search criteria. In the Add Criteria area, in the Search for data points field, type **Exchange**, then select the **Exchange** data point when it appears.



- 5. In the Value area, search for **NYSE**, then click to select **NYSE ARCA**.



6. Clear the Value field, then enter **NASDAQ** and click it to select its option.

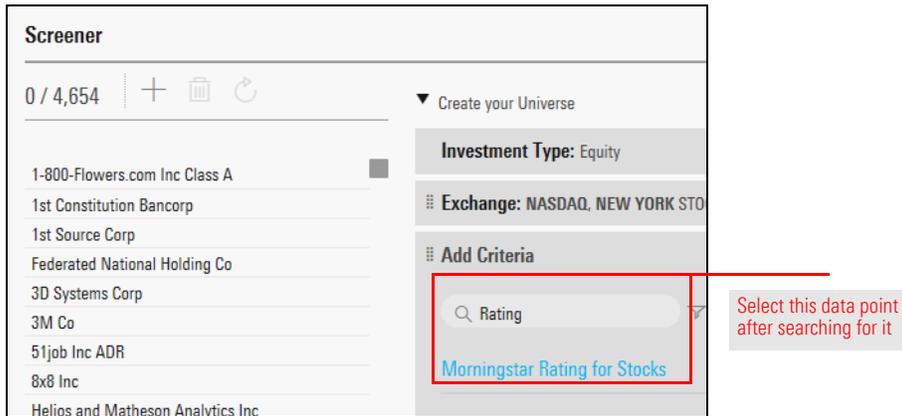
The screenshot shows the 'Screener' interface with the 'Exchange' section expanded. The 'Investment Type' is set to 'Equity'. Under the 'Exchange' section, there are two columns: 'Operator' and 'Value'. The 'Operator' column has 'Include' selected. The 'Value' column has a search field containing 'NASDAQ' and several options listed below it. The 'NASDAQ' option is selected with a blue checkmark. A red box highlights the search field and the selected 'NASDAQ' option. A callout box on the right says 'Select this exchange'.

7. Clear the Value field, then enter **New York** and click **New York Stock Exchange** to select its option.

The screenshot shows the 'Screener' interface with the 'Exchange' section expanded. The 'Investment Type' is set to 'Equity'. Under the 'Exchange' section, there are two columns: 'Operator' and 'Value'. The 'Operator' column has 'Include' selected. The 'Value' column has a search field containing 'New York' and several options listed below it. The 'NEW YORK STOCK EXCHANGE, INC.' option is selected with a blue checkmark. A red box highlights the search field and the selected option. A callout box on the right says 'Select this exchange'.

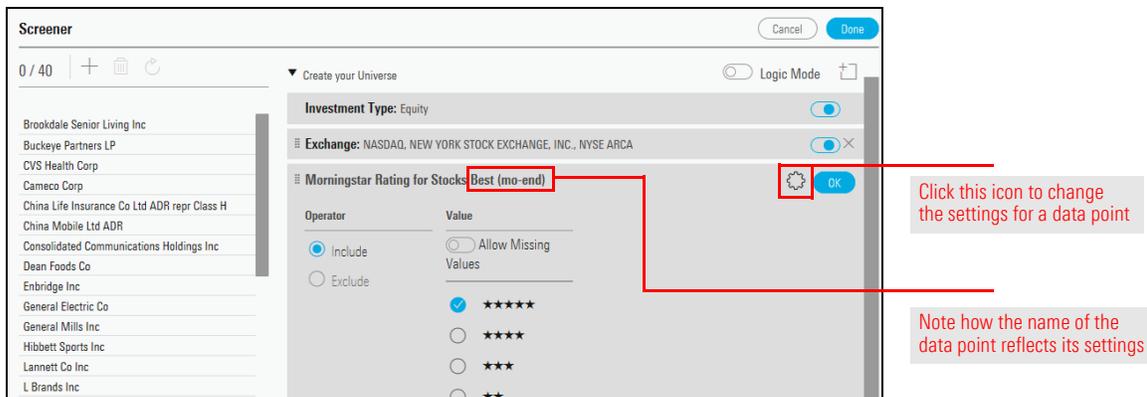
8. Click **OK**. Note that the number of matching stocks shrinks considerably.

- To find stocks with a 5-star rating, in the Add Criteria area, in the **Search for data points** field, type **Rating**, then select **Morningstar Rating for Stocks**.



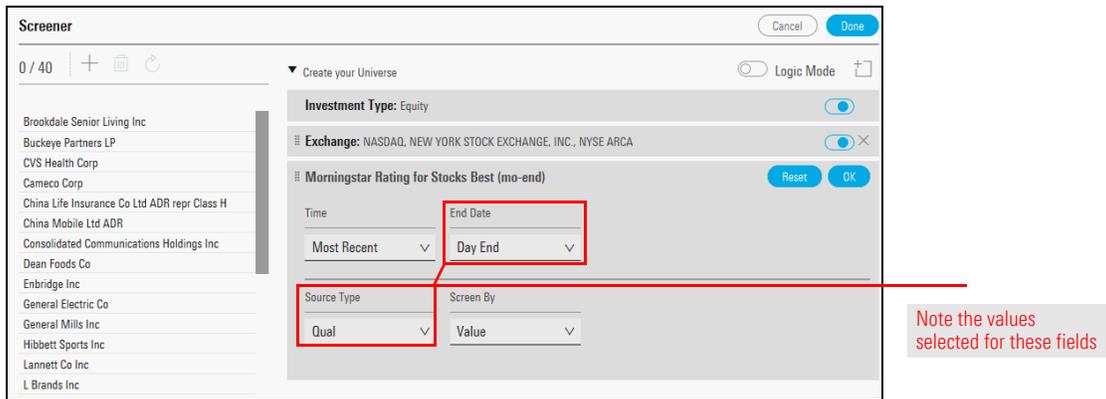
- Select the option for ★★★★★.
- By default, the Morningstar Rating data point is configured to show both qualitative and quantitative values. Additionally, it is set to show the star rating for a stock as of the previous month end, rather than the most recent value. Both of these values will be changed so you are seeing only qualitative ratings as of the previous day end. Click the **Settings** icon in the data point area. A set of fields opens.

Note: Stocks with a qualitative star rating are covered by a Morningstar Analyst. Stocks with a quantitative rating have their rating assigned by an algorithm based on the process Morningstar Analysts use to calculate the fair value estimate for a company.



- From the **End Date** drop-down field, select **Day End**.

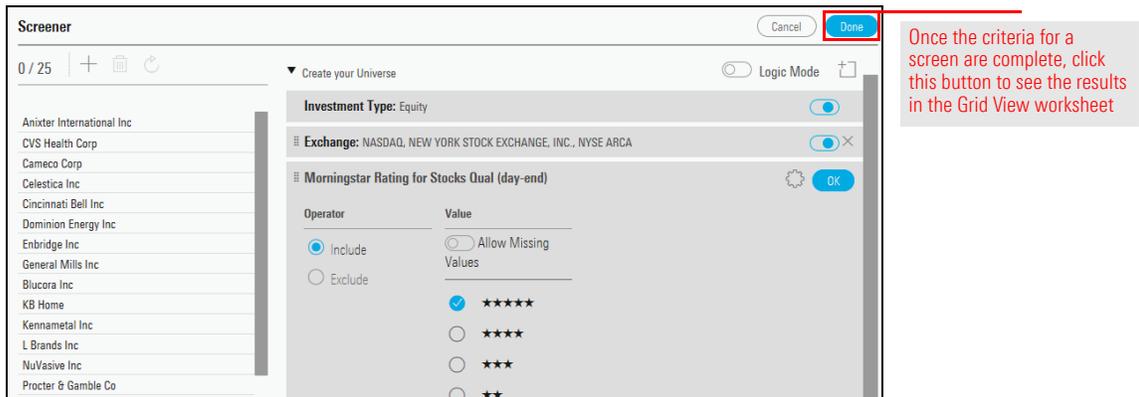
13. From the **Source Type** drop-down field, select **Qual**.



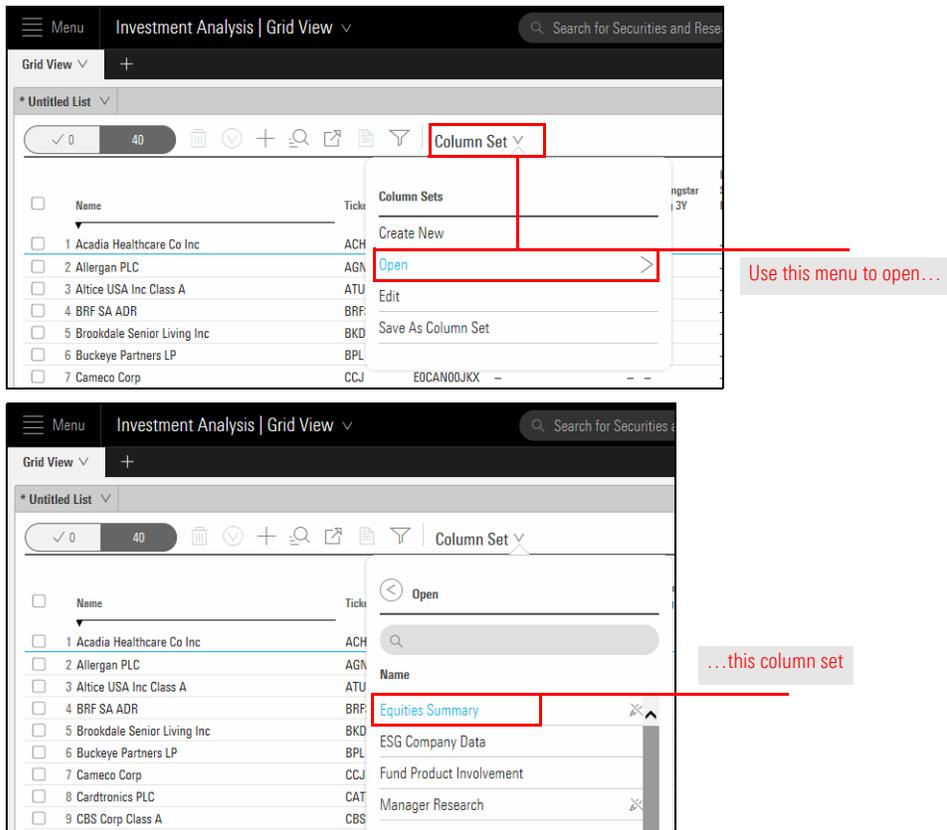
14. Click **OK** to close the Settings window.

15. Click **OK** to accept the data point as it is configured.

16. Click **Done**. The Screener window closes, and the Grid View workbook opens.

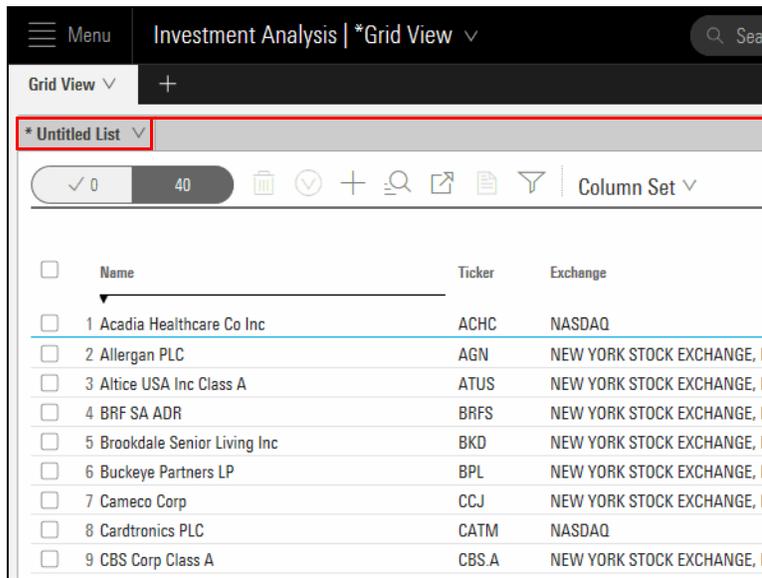


- Note that few data points are shown. When the Create icon in the header is used to create a screen, the results open in the Grid View workbook, which defaults to displaying the Summary column set. The data points in this column set are intended for managed investments, such as mutual funds or ETFs, but you have screened for stocks. To display data points for stocks, click the **Column Set** menu and select **Open**, then choose the **Equities Summary** column set.



A screen is not automatically saved when you create it. In the upper-left corner of the window, note the name of the screen (\*Untitled List – yes, it says “\*Untitled List,” even though it’s a screen). The asterisk indicates that the screen has not been saved.

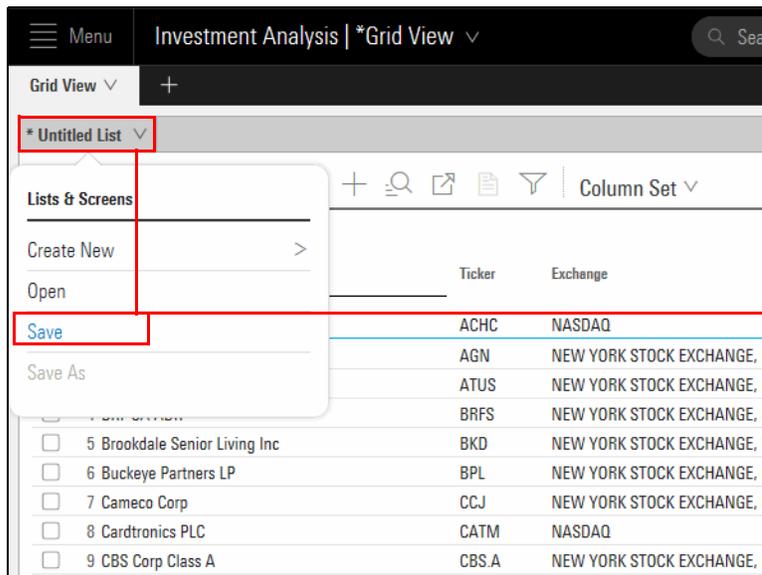
**Exercise 2: Save the screen you created**



Note the name of the unsaved screen

Once saved, the screens you create in Morningstar Direct Cloud are dynamic; that is, when you open a screen, it always shows the securities matching the criteria associated with the screen. This allows you to always see the current results of a saved screen you open on a regular basis. To save the screen you created, do the following:

1. From the toolbar above the grid, click the drop-down field that reads **\*Untitled List**, then select **Save**. A dialog box opens.



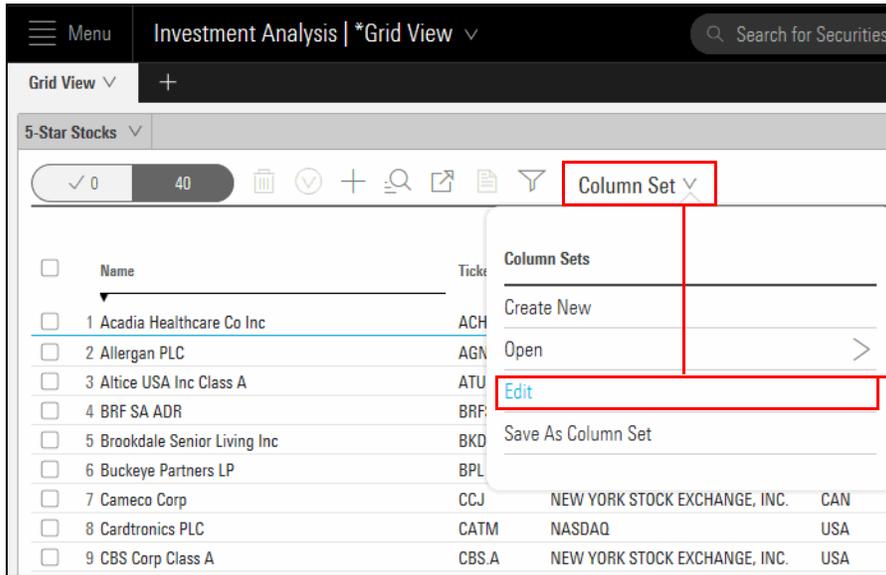
Use this command to save a screen

2. In the **name** field, type **5-Star Stocks**.
3. Click **Save**. The dialog box closes, and the name of the screen now appears in the field on the toolbar.

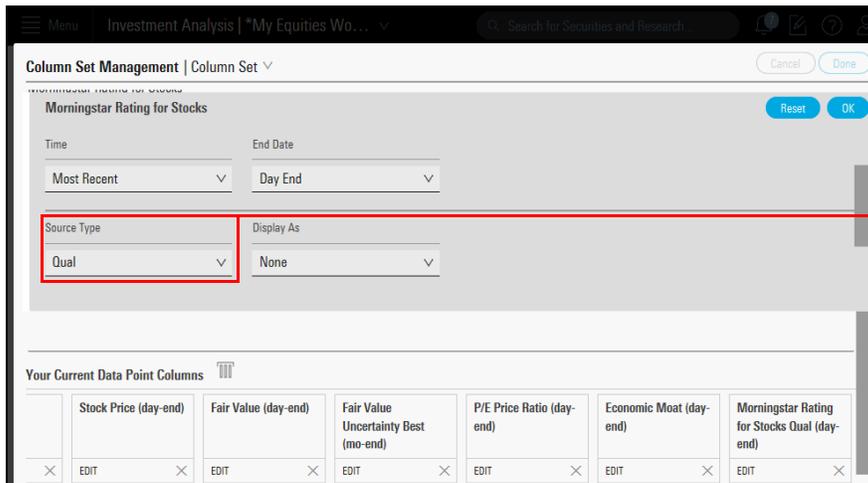
The Equities Summary column set needs a slight change to reflect the same Morningstar Rating for Stocks data point you screened for. By default, the column set shows the Morningstar Rating Best (day-end) data point. You will edit this to show the Morningstar Rating Qual (day-end) data point. Do the following:

**Exercise 3: Edit the Equities Summary column set**

1. Click the **Column Set** menu, then select **Edit**. The Column Set Management window opens.



2. In the Morningstar Rating for Stocks data point box, click **Edit**. A dialog box opens.
3. Change the **Source Type** field to **Qual**.

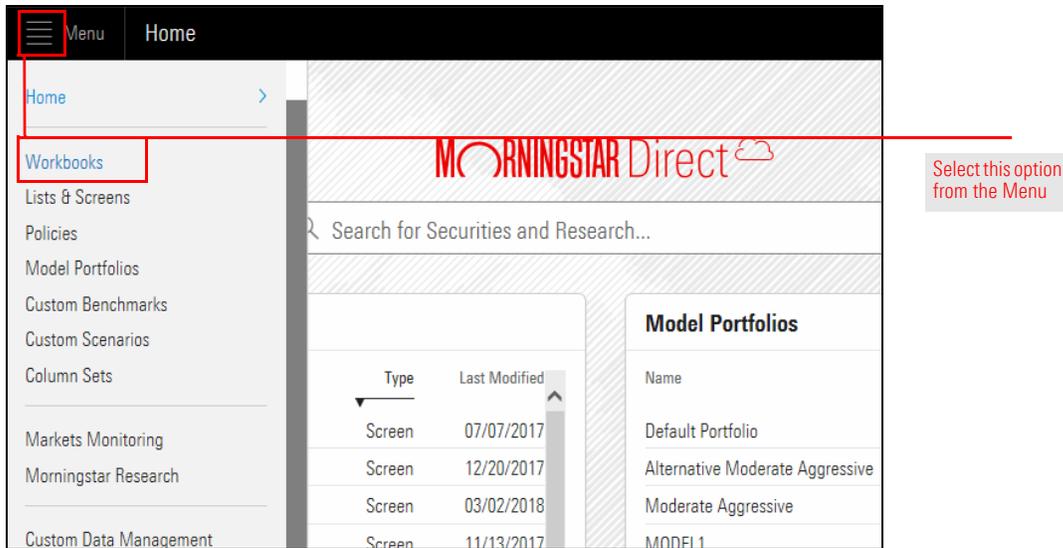


4. Click **OK**.
5. Click **Done**. Each row in the Grid View should now have a five-star rating in the Morningstar Rating for Stocks Qual (day-end) column.

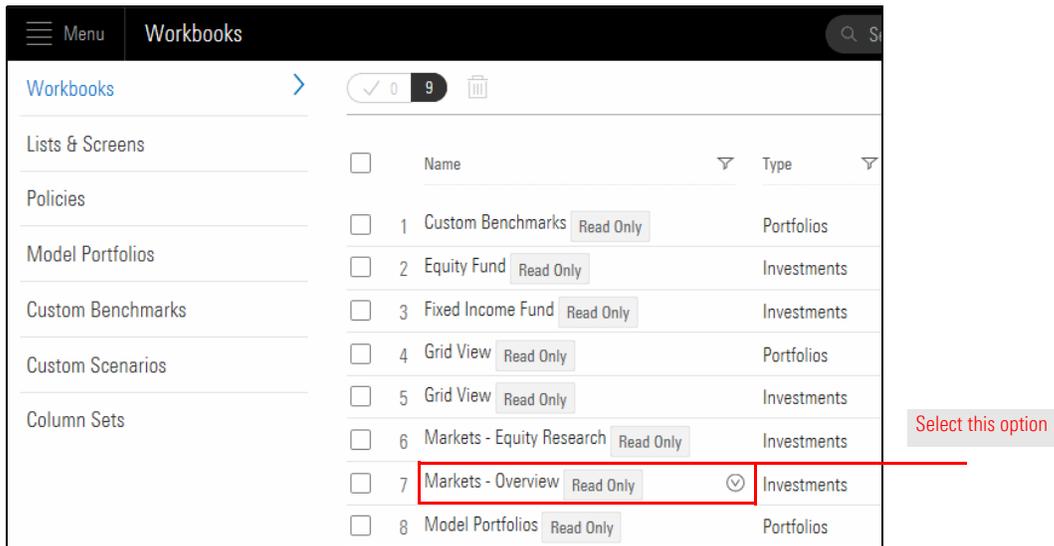
To open the Markets - Overview workbook and switch to the Markets - Equity Research workbook, do the following:

**Exercise 4: Opening the Markets workbooks**

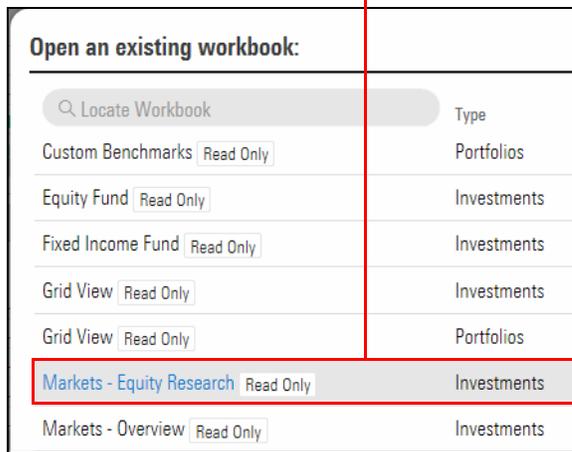
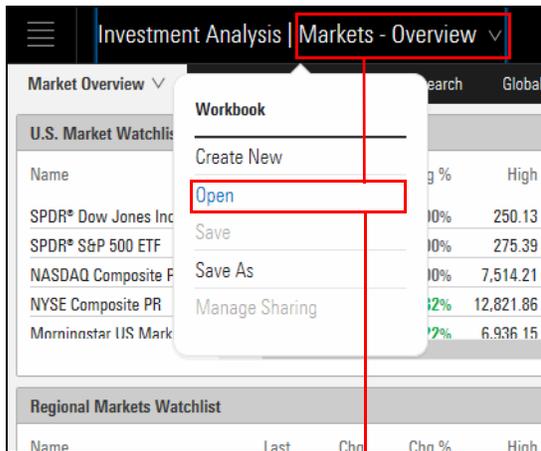
1. From the Home page, click the **Menu** icon, then select the **Workbooks** page. You are brought to the Workbooks page.



2. Select the **Markets - Overview** workbook. The Markets - Overview workbook opens.



- To open the **Markets - Equity Research** workbook from here, use the **workbook menu**.



Use this menu to open the other Markets workbook

This exercise requires you to use the Markets - Equity Research workbook. Note that the question specifically asks about the headline for the latest headline from a note by the Morningstar Analyst, not the latest news story about Cisco Systems. Therefore, you must choose the correct worksheet and component, and ensure Cisco Systems is broadcast to that component.

**Exercise 5: What is the headline for the latest Morningstar Analyst Note for Cisco Systems?**

Do the following:

1. If the **Markets - Equity Research** workbook is not already, open it now.
2. The **Monitoring** worksheet should be selected. In the focus List component, click **Cisco Systems**. The other component on the worksheet update to reflect your selection.
3. In the Morningstar Research component, click **Analyst Note**. The latest analyst note opens in the component.

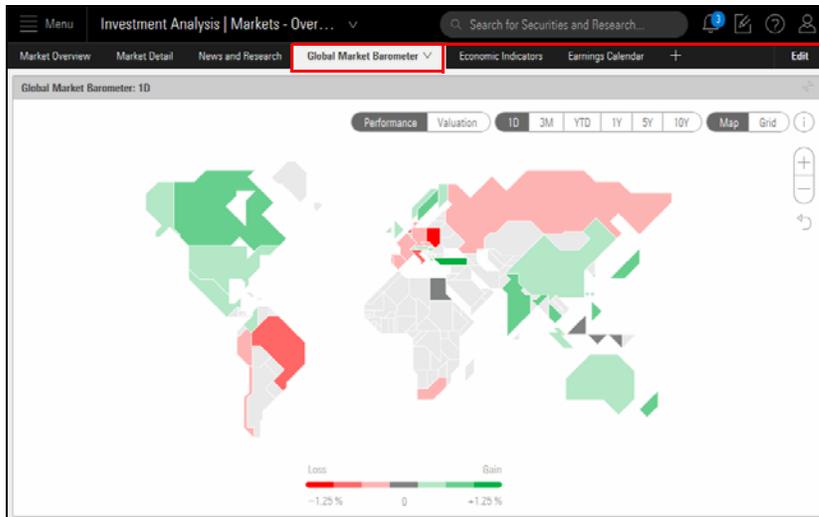
The screenshot shows the Morningstar Direct interface. At the top, the workbook is 'Investment Analysis | Markets - Equity Research'. The 'Monitoring' worksheet is selected. On the left, the 'Local List' contains various stocks, with 'Cisco Systems' (CSCO) highlighted. The main area shows the 'Quote' for CSCO, including 'Open' (45.10), 'Previous Close' (45.16), 'High' (46.08), and 'Low' (44.92). Below the quote, the 'Morningstar Research: Cisco Systems Inc' section is visible, with 'Analyst Note' selected under the 'Highlighted' options. Red boxes and lines highlight the 'Monitoring' tab, 'Cisco Systems' in the Local List, and 'Analyst Note' in the research section. Callout boxes provide instructions: 'Be sure the correct workbook and worksheet are selected, then click the name of the stock' and 'Click this option'.

4. What is the headline for the note?

This question can be answered from the Markets - Overview workbook. However, it may not prove to be as straightforward as it looks. Do the following:

**Exercise 6: For the trailing 1-Yr, which country's Morningstar index had lowest return?**

1. If the Markets - Overview workbook is not open, open it now.
  - Note: You can open the Markets - Overview workbook by using the **Menu** to select **Monitoring Markets**.
2. Select the **Global Market Barometer** worksheet. The default layout of this tool shows you the performance of difference country indexes, and displays it as a map. Rather than hovering the cursor over every country, you can convert the map to a table.



Be sure this worksheet is selected

3. Click **Grid**. The Grid contains a 1 Year column, but the columns in the grid cannot be sorted. Note that the component also lacks an Export icon. Therefore, the only way to answer the question is to carefully scan the column for the lowest value.

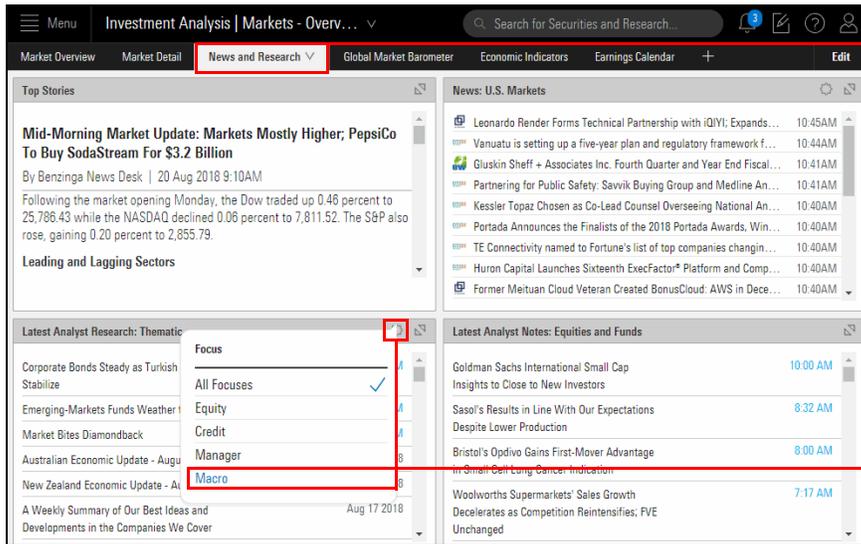
Index	Performance*				Returns					
	Day Change (%)	Last Value	Open Value	Last Close	3 Month	YTD	1 Year	5 Year	10 Year	
Morningstar U.S. Market Index	0.34	7,172.60	7,141.87	7,148.55	5.20	8.12	20.09	13.58	10.64	
Morningstar Australia Index PR AUD	0.19	2,893.79	2,892.46	2,888.28	4.52	7.16	14.55	9.20	7.38	
Morningstar Austria Index PR EUR	0.02	1,934.05	1,933.57	1,933.57	-3.68	0.90	7.95	9.04	2.65	
Morningstar Belgium Index PR EUR	0.09	1,150.07	1,150.62	1,149.05	2.00	-0.86	-2.12	9.40	7.00	
Morningstar Brazil Index PR BRL	-0.92	9,518.20	9,606.70	9,606.70	-8.62	0.18	12.42	8.57	6.13	
Morningstar Canada Index PR CAD	0.62	2,837.86	2,823.01	2,820.44	1.69	2.65	12.18	8.22	5.47	
Morningstar Chile Index PR CLP	-0.18	4,595.47	4,637.58	4,603.57	-7.87	-6.05	2.36	7.12	6.85	
Morningstar China Index PR CNY	0.40	2,082.09	2,069.27	2,073.80	-7.62	-5.64	4.78	9.72	6.17	
Morningstar Colombia Index PR COP	0.21	7,260.54	7,255.09	7,245.14	1.30	3.35	6.33	1.15	9.72	
Morningstar Czech Republic Index PR CZK	-0.05	2,421.77	2,426.06	2,423.02	1.30	9.38	15.67	10.00	1.32	

Click this button

This question requires you to filter the data in a component to show just a particular set of information. Do the following:

1. Select the **Markets - Overview** workbook.
2. Select the **News and Research** worksheet.
3. In the Latest Analyst Research component, click the Component Settings icon, and select **Macro**.

**Exercise 7: What is the subject of the most recent Analyst Research using the Macro theme?**



Be sure this worksheet is selected

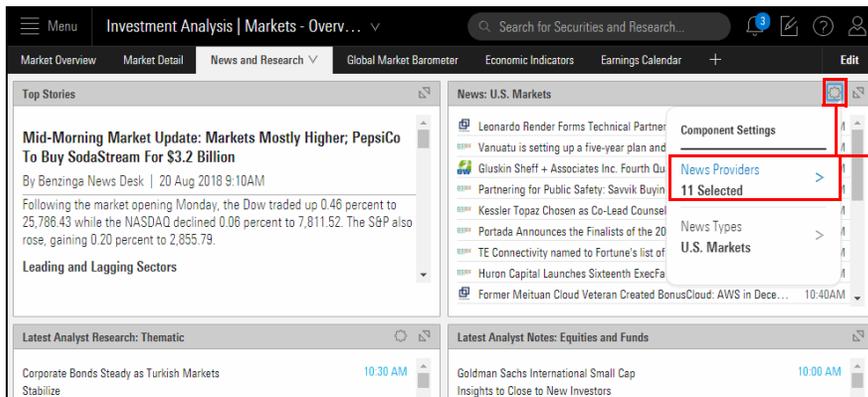
Use the Component Settings icon to select this option

As before, this question also requires you to filter for a specific set of information. However, the method for doing so is slightly different than the previous exercise

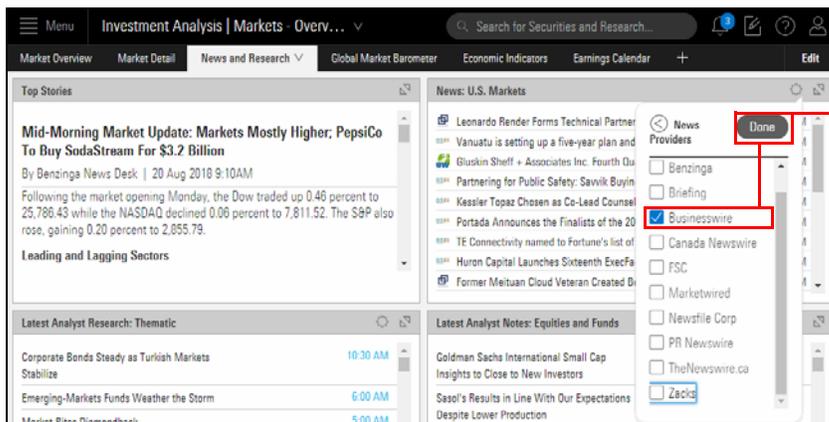
Do the following:

1. The **Markets - Overview** workbook should be selected, as should the **News and Research** worksheet.
2. From the News: U.S. Markets component, click the Component Settings icon and select News Providers.

**Exercise 8: What is the subject of the most recent story from Businesswire?**



3. **Uncheck** every box, except for Businesswire, then click **Done**.



4. Click the **Component Settings** icon to close it.

This exercise reveals a unique relationship between two components on the Economic Indicators worksheet.

Do the following:

1. The **Markets - Overview** workbook should be selected.
2. Select the **Economic Indicators** worksheet.
3. In the Economic Indicators component at the top of the worksheet, scroll down then click **US Crude Oil Production**. Note that the chart below the table component updates to reflect the economic indicator you selected in the table.

**Exercise 9: At the low point for US Crude Oil production over the past year, how many thousands of barrels of oil per day were being produced?**

The screenshot shows the Morningstar Direct interface with the 'Economic Indicators' component selected. The 'U.S. Economic Indicators' table lists various indicators, with 'US Crude Oil Production' highlighted in red. Below the table is a line chart titled 'U.S. Economic Indicators: CPI 1Y' showing the Consumer Price Index from 2017 to 2018. To the right, there are sections for 'Economic Calendar' and 'LIBOR Rates'.

Indicator	Period	L
Personal Saving Rate	June 2018	
Personal Income	June 2018	
US Crude Oil Stocks (Including SPR)	2018-08-10	1
US Crude Oil Stocks (Excluding SPR)	2018-08-10	
US Crude Oil Production	2018-08-10	
US Crude Oil Imports	2018-08-10	
U.S. Crude Oil Refinery Inputs	2018-08-10	

Be sure this worksheet is selected

Selecting an option in this component automatically updates the chart below

4. **Hover the mouse** over the low point on the chart to find the answer to the question.

The screenshot displays the Morningstar Direct interface for "Investment Analysis | \*Markets - Overview". The "U.S. Economic Indicators" table lists "US Crude Oil Production" for the period "2018-08-10". Below it, a line chart titled "U.S. Economic Indicators: US Crude Oil Production 1Y" shows production levels from August 2017 to July 2018. A red box highlights the low point on 10/13/2017, with a tooltip showing a value of 8,406.00. To the right, the "Economic Calendar" and "LIBOR Rates" tables are visible. A red callout box points to the tooltip with the text: "Move the mouse over the low point on the chart to see the number for that month".

Indicator	Period	L
Personal Saving Rate	June 2018	
Personal Income	June 2018	
US Crude Oil Stocks (Including SPR)	2018-08-10	1
US Crude Oil Stocks (Excluding SPR)	2018-08-10	
<b>US Crude Oil Production</b>	<b>2018-08-10</b>	
US Crude Oil Imports	2018-08-10	
U.S. Crude Oil Refinery Inputs	2018-08-10	

Date	Time	Release
08/22/2018	07:00 AM	MBA Mortgage Appl
	07:00 AM	MBA Mortgage Purch
	10:00 AM	Existing Home Sales
	10:30 AM	Crude Inventories
08/23/2018	02:00 PM	FOMC Minutes
	08:30 AM	Initial Claims
	08:30 AM	Continuing Claims
	08:30 AM	Continuing Claims

Rate	Maturity	Latest
CHF	Spot/Next	-0.7838
CHF	1 Week	-0.7914
CHF	1 Month	-0.7766
CHF	2 Month	-0.7396
CHF	3 Month	-0.7256
CHF	6 Month	-0.6508
CHF	1 Year	-0.5180

This question points out that data from S&P Capital IQ is available for stocks. But be careful to look at the correct data point, and remember to select the correct stock, too.

**Exercise 10: What is the median estimated target price for UnitedHealth Group?**

Do the following:

1. Select the **Markets - Equity Research** workbook.
2. Select the **Estimates** worksheet.
3. In the focus panel, the default Local List should be showing. If not, you will need to re-open the window. Click **UnitedHealth Group**.
4. In the Price Targets component, what is the **Median** price target for the stock?

The screenshot shows the Morningstar Direct interface with the following components:

- Local List:** A list of stocks with 'UnitedHealth Group Inc. (UNH)' highlighted in red.
- Price Targets Table:**

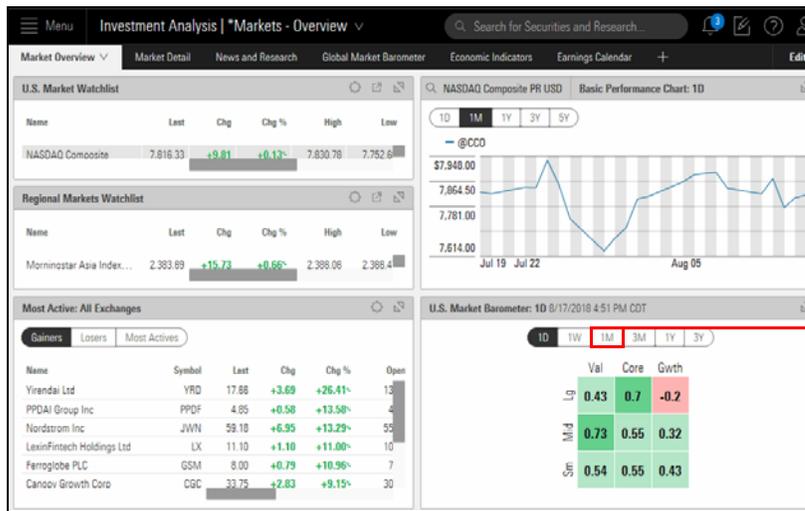
Name	Mean	Median	High/Low	Std Dev	No. of Estimates
Target Price	280.05	282.00	310/190	22.95	21
IT Growth	13.66	13.50	16 127/10	1.93	7
- Estimates Table:**

Name	FY 2017				FY 2018
	Q1	Q2	Q3	Q4	
Revenue	40,209.34	40,344.11	56,401.22	51,576.43	206,850.75
EBITDA	3,828.78	4,092.95	4,439.24	4,454.34	17,349.83
Free Cash Flow	-	1,352.00	1,338.00	-5,070.00	10,464.54

The challenge with this question is realizing that the words “Equity Style Box” do not appear anywhere in the interface. Looking at the names of the component on each worksheet will not help answer it. Instead, you must recognize the Equity Style Box when you see it. Do the following:

1. Select the **Markets - Overview** workbook.
2. Select the **Market Overview** worksheet should be selected.
3. In the U.S. Market Barometer component, clicik **1M**.

**Exercise 11: For the trailing 1-month time period, what part of the Equity Style Box has performed best? What was its return?**



Click this button to see the trailing one-month returns

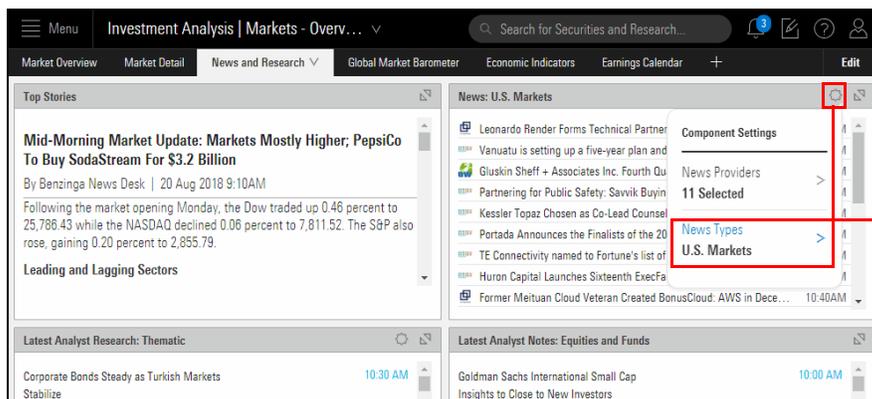
4. Which part of the Equity Style Box (which derives its data from the Morningstar Indexes) has the best return, and what is its value?

Exactly what options are available from each component's settings? Sometimes the only way to know is to take the time to explore each one in detail, as this question requires, after a bit of narrowing. For example, it makes sense that this question's answer would be found on the worksheet called "News and Research," but how, exactly, can you find it there?

**Exercise 12: What is the subject of the most-viewed news story?**

Do the following:

1. The **Markets - Overview** workbook should be selected.
2. Select the **News and Research** worksheet.
3. In the News: U.S. Markets component, click the **Component Settings** icon, then select **News Types > Most Viewed**.



Select this option to change the focus of this component

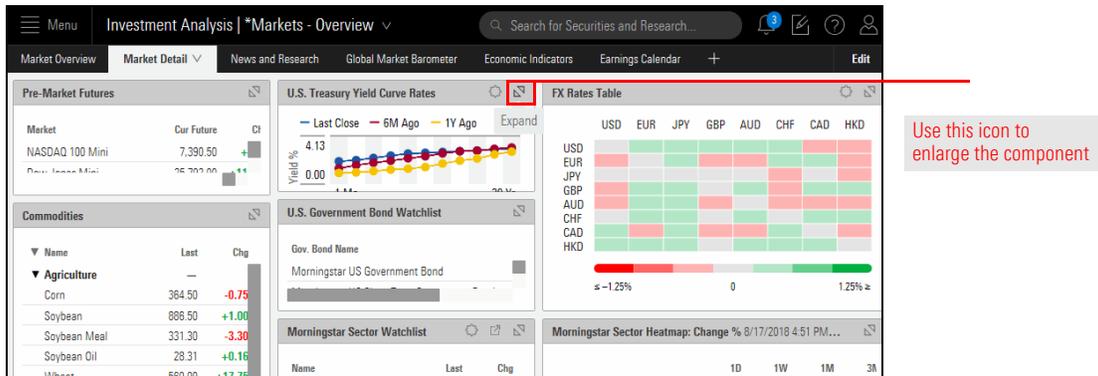
4. Click **Done**.
5. Click the **Component Settings** icon to close the menu. The most-viewed stories from the past seven days appear in the component. Which headline is at the top?

This question can be answered either using a chart or a table. The chart needs to be configured to show you the information you seek, while the table can be seen merely by changing the component's settings.

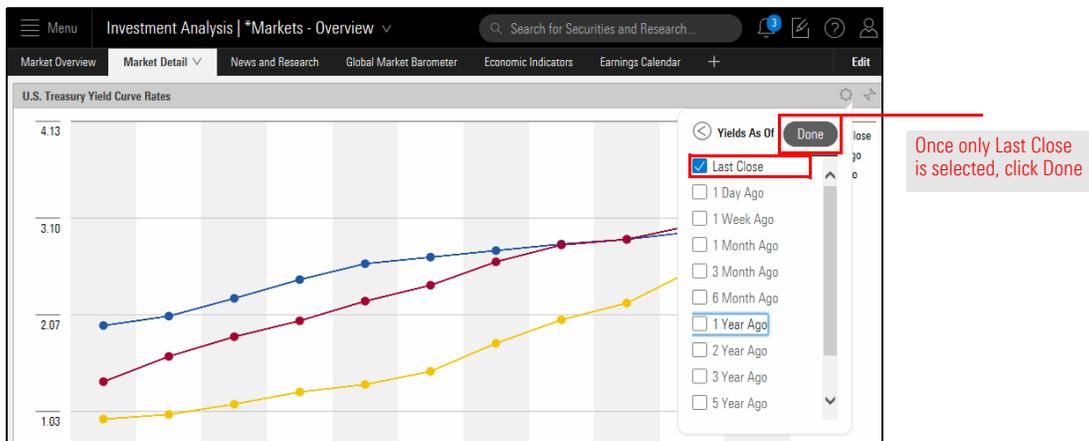
**Exercise 13: As of the last market close, what is the yield on the 10-year US Treasury note?**

Do the following:

1. The **Markets - Overview** workbook should be selected.
2. Select the **Market Detail** worksheet.
3. **Expand** the U.S. Treasury Yield Curve Rates component to make it easier to read.

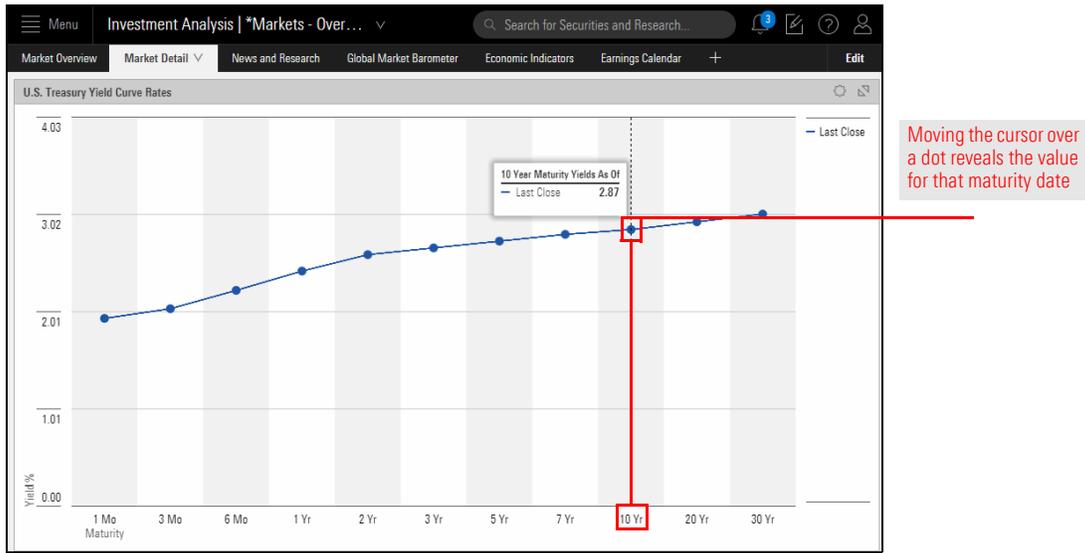


4. Click the **Component Settings** icon, then click **Yield As Of**.
5. Be sure only **Last Close** is selected, then click **Done**.

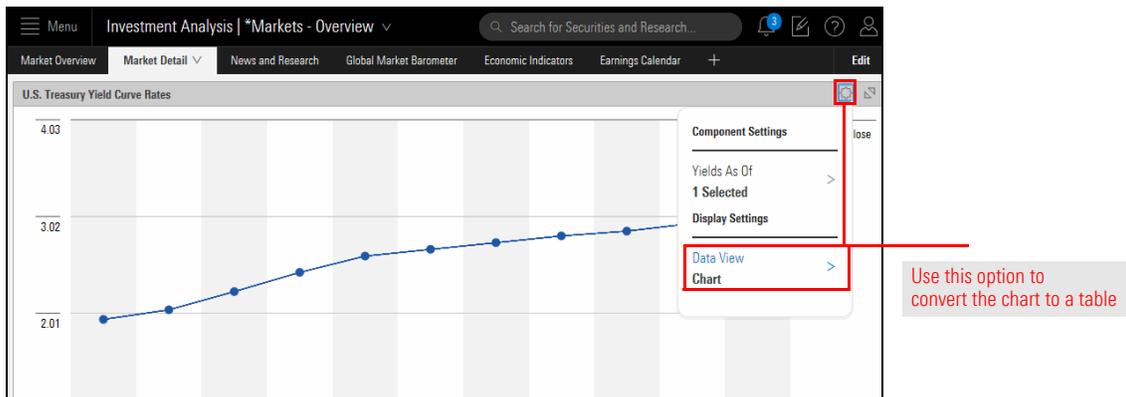


6. Click the **Component Settings** icon to close it.

7. **Hover the cursor** over the dot for the yield on the 10-year US Treasury note to see its value.



8. Click the **Component Settings** icon, then select **Data View > Table**. The yield for the 10-year US Treasury note is found in the top row.



	1M	3M	6M	1Y	2Y	3Y	5Y	7Y	10Y	20Y	30Y
1 Day Ago	1.96	2.07	2.24	2.45	2.63	2.70	2.75	2.82	2.87	2.95	3.03
1 Week Ago	1.92	2.05	2.23	2.42	2.61	2.68	2.75	2.82	2.87	2.96	3.03
1 Month Ago	1.93	2.02	2.19	2.39	2.62	2.69	2.76	2.83	2.88	2.91	2.97
3 Month Ago	1.70	1.92	2.10	2.32	2.57	2.75	2.94	3.07	3.11	3.19	3.25
6 Month Ago	1.35	1.62	1.83	2.00	2.21	2.38	2.63	2.81	2.87	3.02	3.13
1 Year Ago	0.95	1.00	1.11	1.24	1.32	1.46	1.76	2.01	2.19	2.54	2.78
2 Year Ago	0.27	0.30	0.46	0.58	0.74	0.86	1.15	1.41	1.56	1.90	2.27
3 Year Ago	0.03	0.10	0.24	0.40	0.72	1.07	1.58	1.92	2.16	2.51	2.81
5 Year Ago	0.05	0.05	0.08	0.13	0.36	0.73	1.60	2.25	2.84	3.61	3.86
7 Year Ago	0.01	0.01	0.06	0.12	0.19	0.33	0.92	1.48	2.17	3.14	3.57
10 Year Ago	1.73	1.85	1.99	2.12	2.40	2.67	3.11	3.42	3.84	4.50	4.47

Note that the value here matches that from the chart

9. Click the **Collapse** icon to resize the U.S. Treasury Yield Curve Rates component.

This question really asks two questions: First, what is the biggest losing stock? And second, what are the Morningstar estimated earnings per share for that stock? This inquiry requires the use of both Markets workbooks, and keep in mind that the second question may be unanswerable, if a Morningstar Analyst does not cover the stock that happens to be the biggest loser at the time you complete this exercise.

**Exercise 14: What are the Morningstar estimated earnings per share in 2018 for the current biggest losing stock?**

Do the following:

1. The **Markets - Overview** workbook should be selected.
2. Select the **Market Overview** worksheet.
3. In the Most Active component, click the **Losers** button.
4. Which stock is currently the biggest loser? Write down its name and ticker symbol.

Be sure this worksheet is selected

Click this button

Name	Symbol	Last	Chg	Chg %	Open
Adtalem Global Education Inc	ATGE	47.20	-8.55	-15.34%	49
Camping World Holdings Inc	CWH	19.77	-2.08	-9.52%	21
Tesla Inc	TSLA	305.50	-29.95	-8.93%	323
Applied Materials Inc	AMAT	43.77	-3.66	-7.72%	44
SJW Group	SJW	61.73	-4.94	-7.41%	68
Desoear.com Coro	DESP	17.03	-1.28	-7.01%	17

	Val	Core
Lg	0.43	0.7
Mid	0.73	0.55
Sm	0.54	0.55

5. Select the **Markets - Equity Research** component.
6. Select the **Estimates** worksheet.
7. In the Estimates component, type the **ticker symbol** of the biggest losing stock in the **search** field, then click its **name** when it appears.

Be sure this worksheet is selected

After entering the stock's ticker symbol, click its name

Name	Mean	Median	High/Low	Std.Dev	No. of Estimates
Target Price	280.05	282.00	310/190	22.95	21
1 T Growth	13.66	13.50	16.177/10	1.93	7

8. If the Morningstar EPS line is not present in the table, then a Morningstar Analyst does not cover the stock, and that is the answer for this question. If the line is present, then scroll to the right to find the answer for the current year.

Note that no line appears for the Morningstar EPS estimate for this stock

	FY 2018				FY 2019
Name	Q1	Q2	Q3	Q4	
► Earnings Per Share (Normalized)	0.55	0.86	0.72	0.71	2.85
► EPS (GAAP)	0.55	0.82	0.71	0.68	2.81
► Cash Flow Per Share	—	—	—	—	4.59
► DPS	0.00	0.18	0.00	0.18	0.36

This question merely requires you to make a particular selection from the Global Markets Barometer component, and then scan for the information.

Do the following:

1. Select the **Markets - Overview** workbook.
2. Select the **Global Market Barometer** worksheet.
3. Click the option for **Valuation**, then click **Grid**.

**Exercise 15: Which country's index is currently the most overvalued and most undervalued?**

The screenshot shows the Morningstar Direct interface. The 'Global Market Barometer' section is active, and the 'Valuation' and 'Grid' options are highlighted with red boxes. A red line points from a text box to these two options.

	Price/Fair Value			
	Most Recent*	3 Month 04, 2018	1 Year 07, 2017	5 Year 07, 2013
Morningstar U.S. Market Index	1.01	0.99	1.01	1.01
Morningstar Australia Index PR AUD	1.04	1.05	1.04	0.97
Morningstar Austria Index PR EUR	1.01	1.04	1.08	0.93
Morningstar Belgium Index PR EUR	0.94	0.96	1.00	1.03
Morningstar Brazil Index PR BRL	0.82	1.09	1.14	0.85
Morningstar Canada Index PR CAD	1.00	1.00	1.01	0.95

Note the two options selected

4. The data here can be neither sorted nor exported. Scan the **Most Recent** column for the country with the highest (overvalued) and lowest (undervalued) numbers.

This question also has two parts to it:

1. What is the most heavily traded stock in the default list?
2. What is its 52-week high and low value?

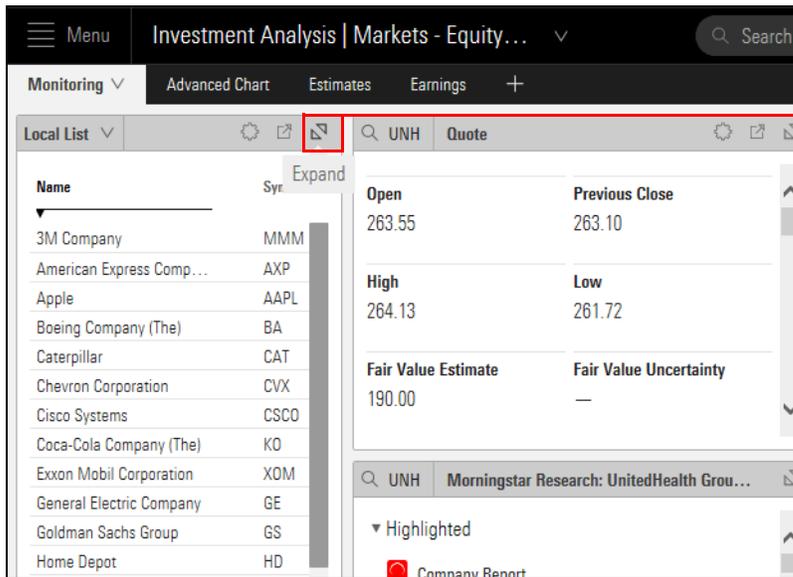
**Exercise 16: What is the 52-week high and low value of the most heavily traded stock in the default list?**

Both parts can be answered from the Markets - Equity Research workbook.

Do the following:

1. Select the **Markets - Equity Research** workbook.
2. Select the **Monitoring** worksheet.
3. **Expand** the Local List.

Note: If the default list is not showing here, close and re-open the window.



Use this icon to expand this component

4. Click the **Volume** column header twice to sort in descending order.

Name	Symbol	Last	Chg	Chg %	Open	High	Low	Volume	Avg. Vol. (Mil.)	Quote Date	Quote Time
Coca-Cola Company (The)	KO	46.80	+0.38	+0.82%	46.29	46.73	46.24	420,201	10.7	8/17/2018	4:00 PM
United Technologies Cor...	UTX	134.44	+1.13	+0.85%	133.72	134.80	133.29	89,828	3.7	8/17/2018	4:02 PM
Procter & Gamble Comp...	PG	83.89	—	—	83.73	84.20	83.60	73,775	6.2	8/17/2018	4:03 PM
The Travelers Companies	TRV	130.42	+0.08	+0.06%	130.17	130.81	129.61	7,703	1.4	8/17/2018	4:01 PM
Cisco Systems	CSCO	45.87	+0.71	+1.57%	45.10	46.08	44.92	400	21.4	8/17/2018	4:00 PM
J.P. Morgan Chase & Co	JPM	114.77	—	—	114.64	115.07	114.30	400	13.7	8/17/2018	4:00 PM
Pfizer	PFE	42.09	+0.67	+1.62%	41.48	42.19	41.47	300	20.4	8/17/2018	4:02 PM
Walt Disney Company (...)	DIS	112.48	—	—	112.51	112.88	111.89	150	8.1	8/17/2018	4:03 PM
Johnson & Johnson	JNJ	134.47	+1.99	+1.50%	132.45	135.00	132.19	140	6.5	8/17/2018	4:00 PM
Boeing Company (The)	BA	348.40	+0.42	+0.12%	348.00	348.50	341.67	100	3.4	8/17/2018	4:00 PM
Home Depot	HD	195.56	+0.17	+0.09%	195.60	195.98	194.82	100	4	8/17/2018	4:00 PM
Microsoft Corp	MSFT	107.58	-0.06	-0.06%	107.36	107.90	106.69	100	25.4	8/17/2018	4:00 PM

Note the sort order for this column

5. Which stock is the most heavily traded?

- To see the 52-week high and low values, click the **Component Settings** icon, then select **Column Set > Fundamentals**.

Name	Symbol	Last	Chg	Chg %	Open	High	Low	Volume	Avg.	Actions
Coca-Cola Company (The)	KO	48.60	+0.38	+0.82%	48.29	48.73	48.24	420,201		M
United Technologies Cor...	UTX	134.44	+1.13	+0.85%	133.72	134.80	133.29	89,828		M
Procter & Gamble Comp...	PG	83.69	—	—	83.73	84.20	83.60	73,775		M
The Travelers Companies	TRV	130.42	+0.08	+0.06%	130.17	130.81	129.61	7,703		M
Cisco Systems	CSCO	45.87	+0.71	+1.57%	45.10	46.08	44.92	400		M
J P Morgan Chase & Co	JPM	114.77	—	—	114.64	115.07	114.30	400		M
Pfizer	PFE	42.09	+0.67	+1.62%	41.48	42.19	41.47	300		M
Walt Disney Company (...)	DIS	112.48	—	—	112.51	112.86	111.89	150	8.1	8/17/2018 4:03 PM
Johnson & Johnson	JNJ	134.47	+1.99	+1.50%	132.45	135.00	132.19	140	6.5	8/17/2018 4:00 PM
Boeing Company (The)	BA	346.40	+0.42	+0.12%	346.00	348.50	341.67	100	3.4	8/17/2018 4:00 PM
Home Depot	HD	195.56	+0.17	+0.09%	195.60	195.98	194.82	100	4	8/17/2018 4:00 PM
Microsoft Corp	MSFT	107.58	-0.06	-0.06%	107.36	107.90	106.69	100	25.4	8/17/2018 4:00 PM

Use this setting to change the columns showing in the component

- Click the **Component Settings** icon again to close the menu.
- Click the **Volume** column header twice again to sort in descending order.

Name	Symbol	Last	Chg	Chg %	Volume	Avg. Vol. (Mil.)	52W High	52W Low	Mkt Cap (Mil.)	P/E	Div. Yield	Last Div.
Coca-Cola Company (The)	KO	48.60	+0.38	+0.82%	420,201	10.7	48.62	41.45	198,186	89.62	3.26	0.39
United Technologies Cor...	UTX	134.44	+1.13	+0.85%	89,828	3.7	139.24	109.10	107,564	21.17	2.08	0.70
Procter & Gamble Comp...	PG	83.69	—	—	73,775	8.2	94.67	70.73	208,221	22.80	3.36	0.72
The Travelers Companies	TRV	130.42	+0.08	+0.06%	7,703	1.4	150.55	113.76	34,911	17.62	2.25	0.77
Cisco Systems	CSCO	45.87	+0.71	+1.57%	400	21.4	46.37	30.36	215,721	—	2.70	0.33
J P Morgan Chase & Co	JPM	114.77	—	—	400	13.7	119.33	88.08	385,728	15.30	1.95	0.56
Pfizer	PFE	42.09	+0.67	+1.62%	300	20.4	42.19	32.32	246,736	11.25	3.18	0.34
Walt Disney Company (...)	DIS	112.48	—	—	150	8.1	117.90	96.20	167,285	14.15	1.49	0.84
Johnson & Johnson	JNJ	134.47	+1.99	+1.50%	140	6.5	148.32	118.62	360,750	25.80	2.54	0.90
Boeing Company (The)	BA	346.40	+0.42	+0.12%	100	3.4	374.48	234.29	199,009	21.79	1.69	1.71
Home Depot	HD	195.56	+0.17	+0.09%	100	4	207.61	146.89	225,586	25.40	1.96	1.03

Note that after changing the data set, you must resort by this column

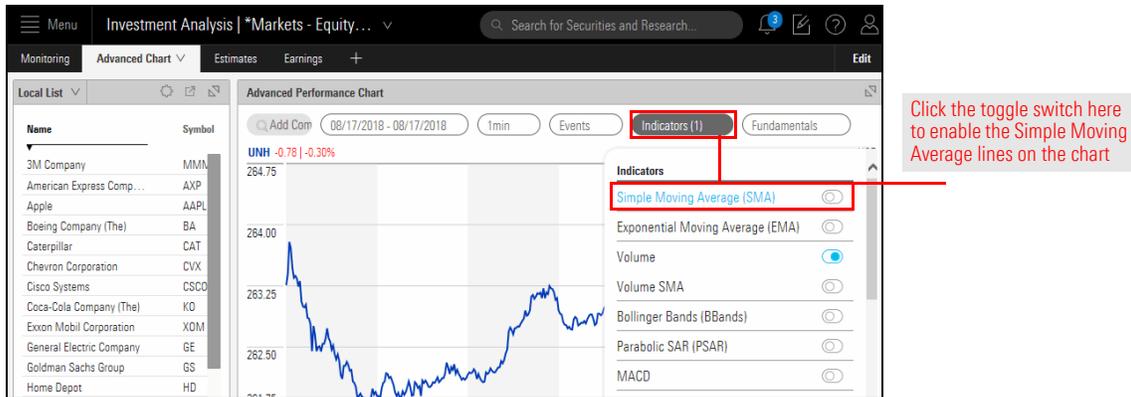
- Find the 52-week high and low values for the most heavily traded stock.

Using the Markets - Equity Research workbook, and considering the trailing 6-month period, find a stock in the default list whose latest price is trading above its 200-day simple moving average, and one that is trading below its 200-day simple moving average.

**Exercise 17: Evaluate a stock's price relative to its simple moving average**

Do the following:

1. The **Markets - Equity Research** workbook should be selected.
2. Select the **Advanced Chart** worksheet.
3. In the Advanced Chart component, click the **Indicators** field, then switch on the toggle for **Simple Moving Average**.



4. Click the **Indicators** field again.
5. In the Simple Moving Average area, in the **Line3 period** field, enter **200**, then click **Update**.



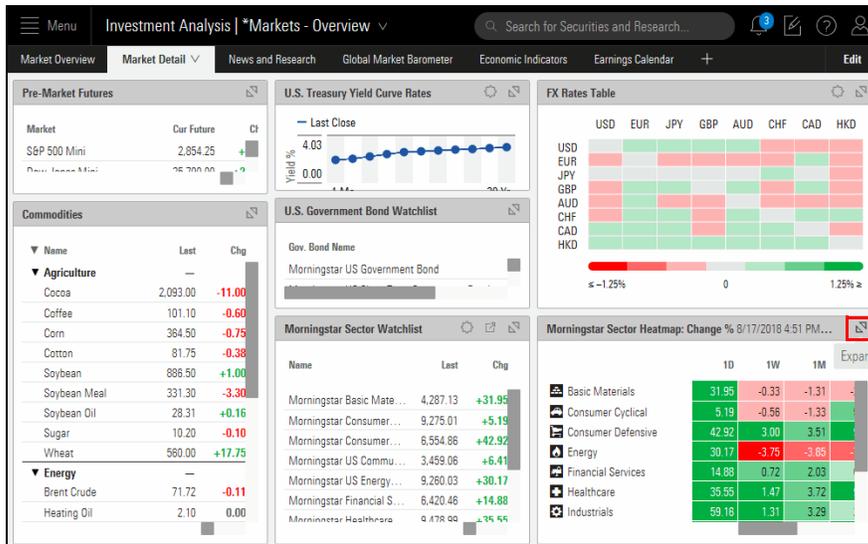
6. Click away from the Indicators menu to close it.
7. Click the **name** of a stock in the Local List component to find one trading above its 200-day moving average, and one trading below its 200-day moving average.

What is the return value for the Morningstar Sector index with the best and worst performance over the same period? The answer can be found from the Markets - Overview workbook.

**Exercise 18: How have the Morningstar Sector indexes performed over the past year?**

Do the following:

1. Select the **Markets - Overview** workbook.
2. Select the **Market Detail** worksheet.
3. Expand the **Morningstar Sector Heatmap** component.



Expand this component

4. Looking at the **1Y** column, which sector has performed the best? Which has been worst?



Check for the high and low values in this column

This question requires you to not only select the correct worksheet, but also to change the period depicted in a component.

Do the following:

1. The **Markets -Overview** workbook should be open.
2. Select the **Economic Indicators** worksheet.
3. In the U.S. Economic Indicators component at the top of the worksheet, click the **Housing Starts** row. The chart in the component below updates to reflect this information.

**Exercise 19: How many more or fewer housing starts were reported in October 2017 compared to October 2016?**

The screenshot shows the Morningstar Direct interface with the 'Markets - Overview' workbook open. The 'Economic Indicators' tab is selected. In the 'U.S. Economic Indicators' table, the 'Housing Starts' row is highlighted in blue. A red box highlights this row, and a red arrow points from a text box 'Click this option' to the row. Below the table is a line chart titled 'U.S. Economic Indicators: Housing Starts 1Y' showing data from September 2017 to May 2018. The y-axis ranges from 1,149.00 to 1,343.00. The x-axis shows dates: 09 2017, 11, 01 2018, 03, 05. The chart shows a fluctuating line representing housing starts over time.

Indicator	Period	L
CPI	July 2018	
GDP	Q2 2018	
<b>Housing Starts</b>	<b>July 2018</b>	
Nonfarm Payrolls	July 2018	
Initial Jobless Claims	2018-08-11	
Civilian Unemployment Rate	July 2018	
Industrial Production Index	July 2018	

Date	Time	Release
08/22/2018	07:00 AM	MBA Mortgage Appl
	07:00 AM	MBA Mortgage Purch
	10:00 AM	Existing Home Sales
	10:30 AM	Crude Inventories
	02:00 PM	FOMC Minutes
08/23/2018	08:30 AM	Initial Claims
	08:30 AM	Continuing Claims
	08:30 AM	New Home Sales

Rate	Maturity	Latest
CHF	Spot/Next	-0.7838
CHF	1 Week	-0.7914
CHF	1 Month	-0.7766
CHF	2 Month	-0.7396
CHF	3 Month	-0.7256
CHF	6 Month	-0.6508
CHF	1 Year	-0.5180

- In the U.S. Economic Indicators component at the bottom of the worksheet, click the **Component Settings** icon, then select **Time Period > 2 Years**.

The screenshot shows the 'U.S. Economic Indicators' table with 'Housing Starts' selected for July 2018. Below it is a line chart titled 'U.S. Economic Indicators: Housing Starts 1Y'. A red box highlights the 'Component Settings' icon in the top right of the chart area. A red line points from this icon to the 'Component Settings' dialog box, which has 'Time Period' set to '1 Year'. A red box highlights '1 Year' in the 'Time Period' dropdown. A red line points from this dropdown to a callout box that says 'Change this setting to the trailing 2 year time period'.

Indicator	Period	L
CPI	July 2018	
GDP	Q2 2018	
Housing Starts	July 2018	
Nonfarm Payrolls	July 2018	
Initial Jobless Claims	2018-08-11	
Civilian Unemployment Rate	July 2018	
Industrial Production Index	July 2018	

Date	Time	Release
08/22/2018	07:00 AM	MBA Mortgage Appl...
	07:00 AM	MBA Mortgage Purch...
	10:00 AM	Existing Home Sales
	10:30 AM	Crude Inventories
	02:00 PM	FOMC Minutes
08/23/2018	08:30 AM	Initial Claims
	08:30 AM	Continuing Claims
	08:30 AM	New Home Sales

Rate	Maturity	Latest
CHF	Spot/Next	-0.7838
	1 Week	-0.7914
	1 Month	-0.7766
	2 Month	-0.7396
	3 Month	-0.7256
	6 Month	-0.6508
	1 Year	-0.5180

- Hover the mouse over the chart to find the value from October 2016, and compare this to the value from October 2017.

The screenshot shows the 'U.S. Economic Indicators' table with 'Housing Starts' selected for July 2018. Below it is a line chart titled 'U.S. Economic Indicators: Housing Starts 2Y'. A red box highlights the 'Component Settings' icon in the top right of the chart area. A red line points from this icon to the 'Component Settings' dialog box, which has 'Time Period' set to '2 Years'. A red box highlights '2 Years' in the 'Time Period' dropdown. A red line points from this dropdown to a callout box that says 'Move the mouse over the line to find the correct time periods'. A red line points from the '2 Years' dropdown to a tooltip over the chart for the date 10/01/2016, which shows 'Housing Starts 1,327.00'.

Indicator	Period	L
CPI	July 2018	
GDP	Q2 2018	
Housing Starts	July 2018	
Nonfarm Payrolls	July 2018	
Initial Jobless Claims	2018-08-11	
Civilian Unemployment Rate	July 2018	
Industrial Production Index	July 2018	

Date	Time	Release	Estimate	Actual
08/22/2018	07:00 AM	MBA Mortgage Applica...	NA	--
	07:00 AM	MBA Mortgage Purchas...	NA	--
	10:00 AM	Existing Home Sales	5.30M	--
	10:30 AM	Crude Inventories	NA	--
	02:00 PM	FOMC Minutes	NA	--
08/23/2018	08:30 AM	Initial Claims	215K	--
	08:30 AM	Continuing Claims	NA	--
	08:30 AM	New Home Sales	NA	--

Rate	Maturity	Latest
CHF	Spot/Next	-0.7838
CHF	1 Week	-0.7914
CHF	1 Month	-0.7766
CHF	2 Month	-0.7396
CHF	3 Month	-0.7256
CHF	6 Month	-0.6508
CHF	1 Year	-0.5180

The key to this question is not just selecting the correct worksheet, but also configuring the start and end dates depicted in the component. In this exercise, you will use a dashcode to enter the start and end dates. A dashcode uses the following formula:

-tn = where, t = time period, and n = number

The time periods available are:

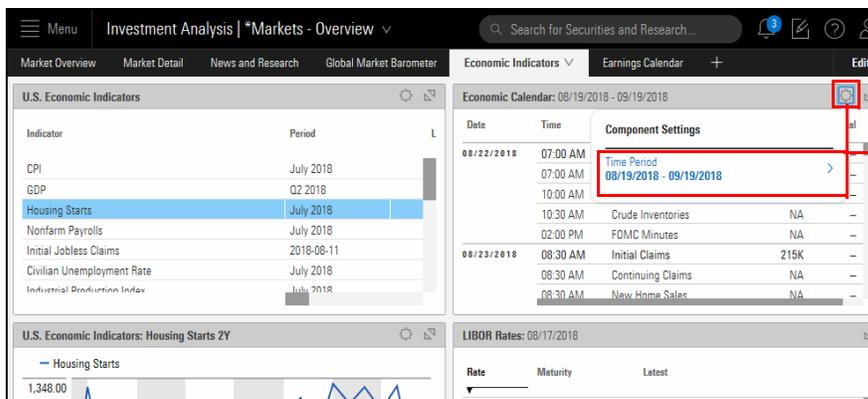
- ▶ d (day)
- ▶ w (week)
- ▶ m (month)
- ▶ q (quarter)
- ▶ y (year)

For example, to find the start date from three years ago, you would type -y3.

Do the following:

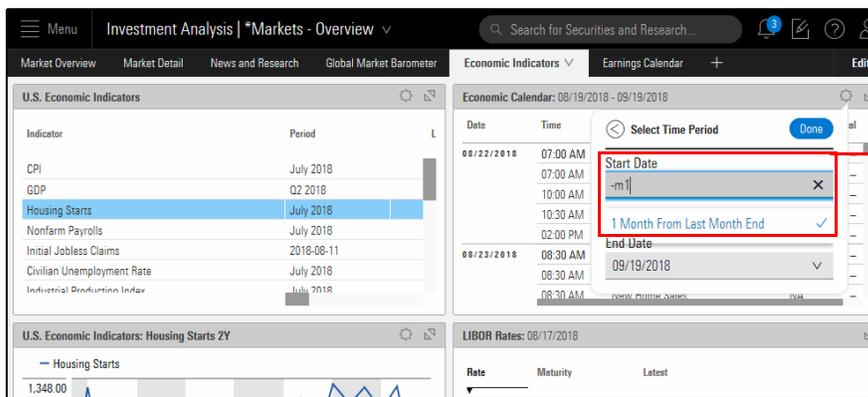
1. Select the **Markets - Overview** workbook.
2. Select the **Economic Indicators** worksheet.
3. In the Economic Calendar component, click the **Component Settings** icon, then select **Time Period**.

**Exercise 20: How did Retail Sales perform last month, compared to its estimate?**



Change the time period for this component

4. In the **Start Date** field, type **-m1**, then select **1 Month From Last Month End**.



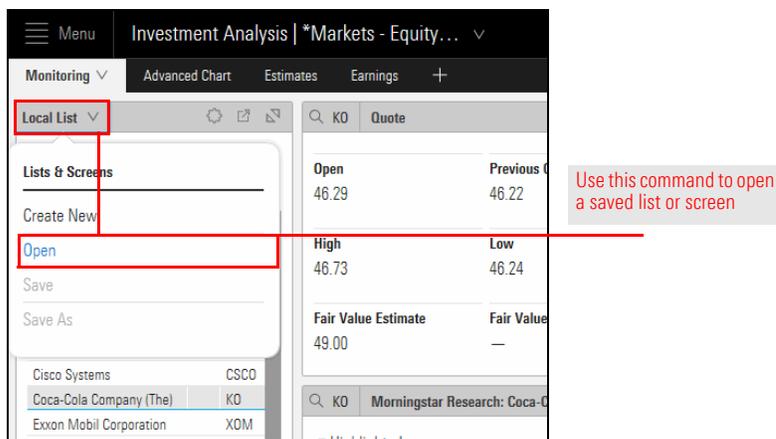
Note the dash code and result to select

5. In the **End Date** field, type **-m0**, then select **Last Month End**.
6. Click **Done**.
7. Click the **Component Settings** icon to close the menu.
8. Scroll down to find the Retail Sales number.

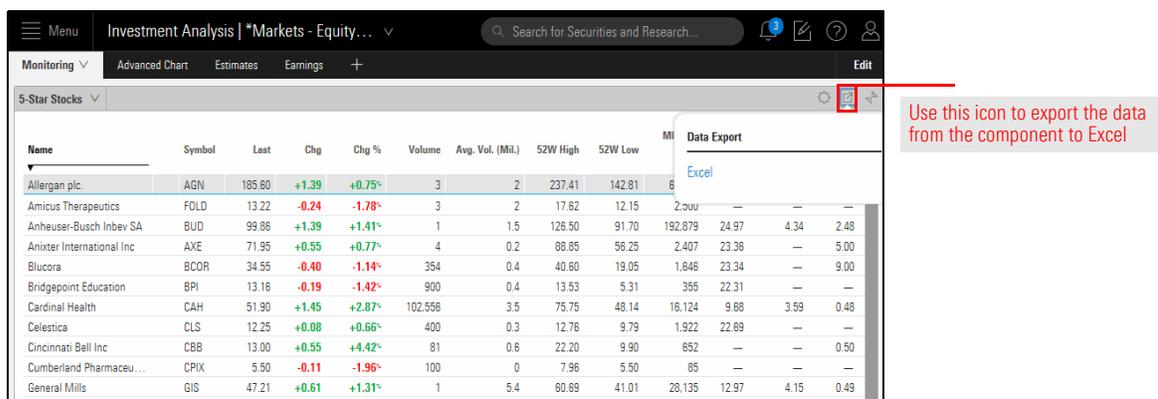
A list or screen you saved can be opened from the Markets - Equity Research workbook, in the focus panel where the default list of stock appears. This question also requires the use of a tool outside of Morningstar Direct Cloud in order to answer it.

Do the following:

1. Open the **Markets - Equity Research** workbook, and select the **Monitoring** worksheet.
2. From the focus panel component, click the **Lists & Screens** menu, then select **Open**.



3. Open the **5-Star Stocks** screen you created in [Exercise 1 on page 6](#).
4. **Expand** the focus panel component. The Last (price) and 52W Low columns show by default, but which stock's Last price is actually closest to its 52W Low price? You cannot tell just by looking at the data.
5. Click the **Export** icon, then select **Excel**.



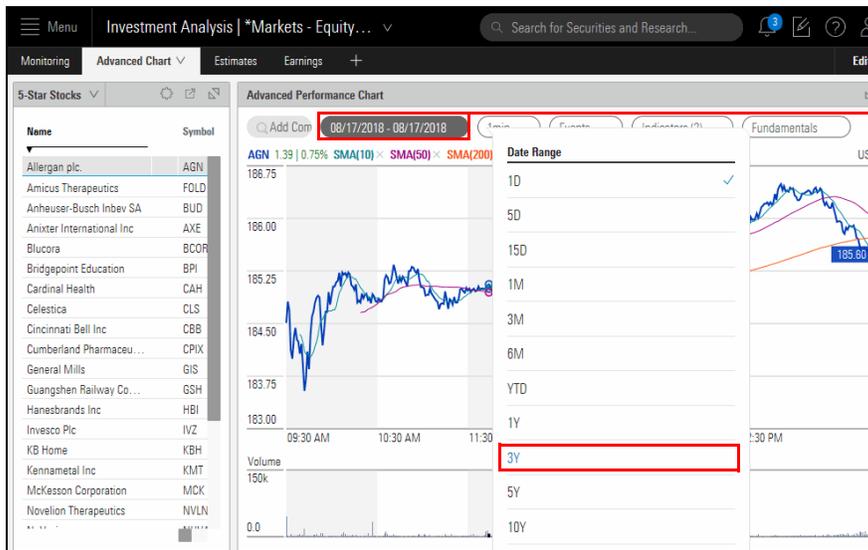
6. When the file opens in Microsoft Excel, create a formula to subtract the 52W Low price from the Last price. Which stock has the lowest value? this is the stock trading closest to its 52-week low.

This question requires the use of the Advanced Chart worksheet, and changing a few settings there.

Do the following:

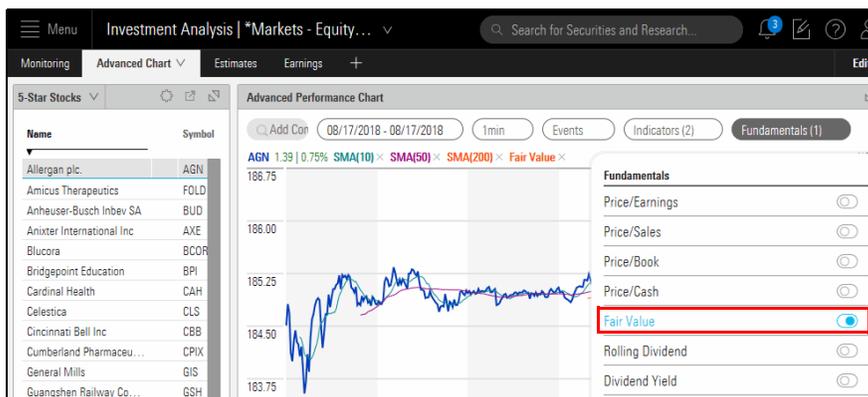
1. The **Markets - Equity Research** workbook should be open. The 5-Star Stocks screen should be showing in the focus panel.
2. Select the **Advanced Chart** worksheet.
3. From the **Date Range** field, select **3Y**.

**Exercise 22: From the 5-Star Stocks list, pick a stock and find the date on which it last traded above its Fair Value Estimate**



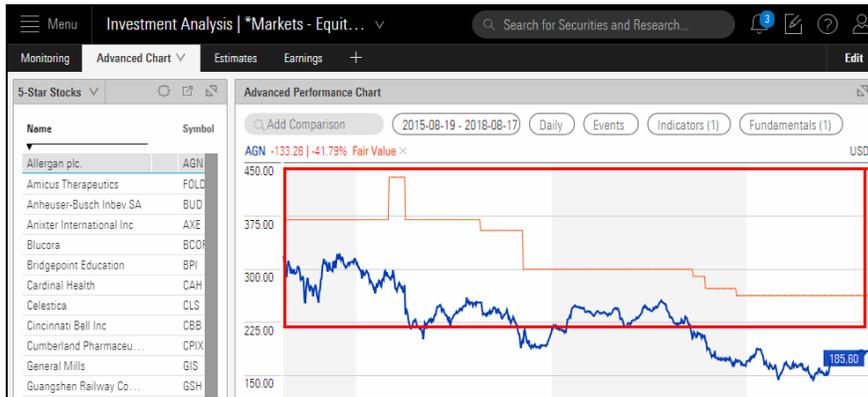
Use this field to change the time period depicted in the chart

4. From the Fundamentals field, switch on the toggle for **Fair Value Estimate**.



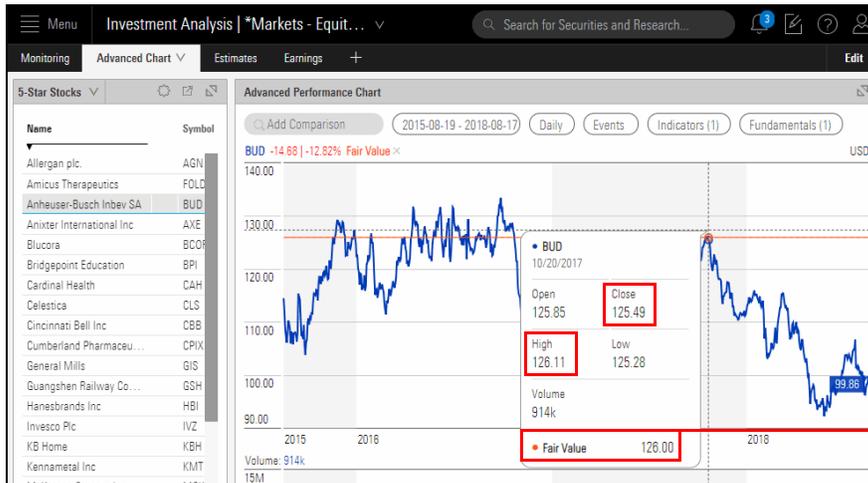
Click this switch to display this element on the chart

- If the selected stock has not traded above its Fair Value Estimate at any point during the time period selected, either select a different stock or use the Date Range field to look even further back in time.



Note that this stock has not traded above its Fair Value Estimate for the past three years

- Hover the mouse over the point in time at which the stock last traded above its Fair Value Estimate, to find the date on which this happened.



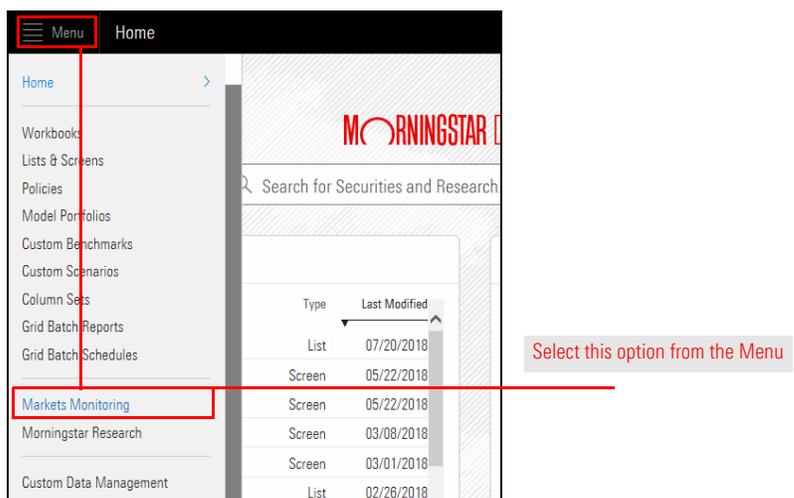
Although the stock did not close above its Fair Value Estimate on this day, it did trade above it at some point

Occasionally, a component is available, but not included by default on a worksheet in a workbook. This exercise shows you how to add a component to a new worksheet. The Cryptocurrencies Exchange Rates component shows you a table of popular cryptocurrencies, and the exchange rate of each one to various currencies.

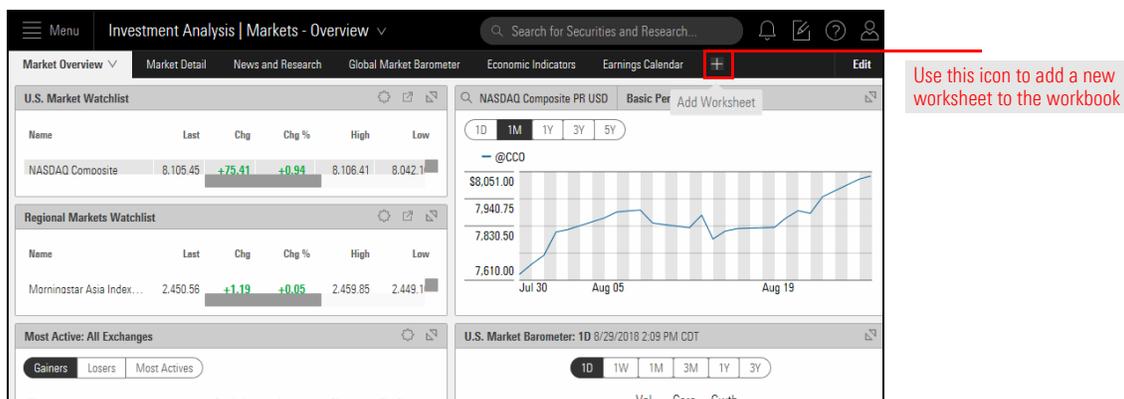
**Exercise 23: Review the Cryptocurrencies Exchange Rates component**

Do the following:

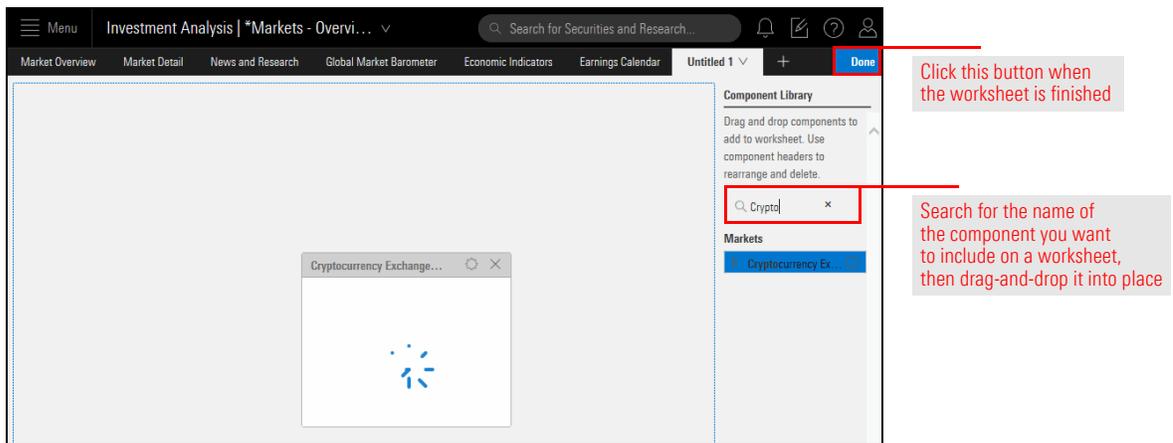
1. From the **Menu**, select **Markets Monitoring**. The Markets - Overview workbook opens.



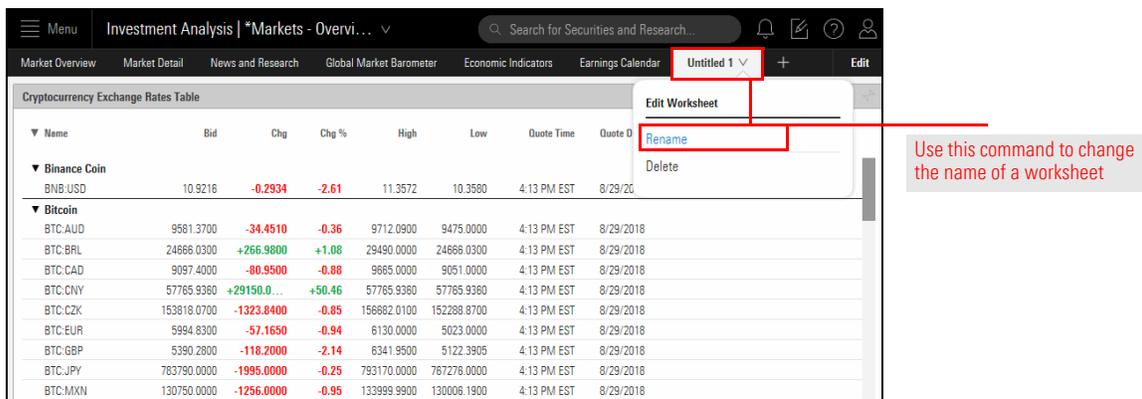
2. While you could edit a worksheet and include the Cryptocurrencies Exchange Rate component there, it might be easier to read if it were on its own worksheet. Click the **Add Worksheet** icon. The Component Library panel opens from the right.



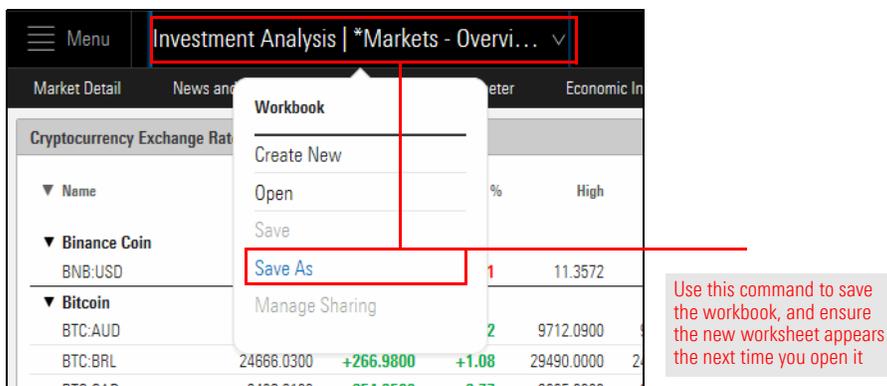
- In the **Search Component** field, type **crypto**, then **drag-and-drop** the **Cryptocurrency Exchange Rates** component onto the worksheet.
- Click **Done**.



- Click the **worksheet name**, then select **Rename**.



- Name the worksheet **Cryptocurrencies**, then click **Save**.
- To preserve this change and make it a permanent part of a workbook, click the **workbook menu** and select **Save As**.



- Name the workbook **My Markets Workbook**, then click **Save**. The next time you open this workbook, the new Cryptocurrencies worksheet will appear automatically.