# Chapter 10
## Using Standard & Poor's Research Insight with Excel

One of the most powerful features of Standard & Poor's Research Insight is its ability to communicate with Microsoft Excel® through Active-X Technology. Excel requests data from the Research Insight database and the exchange between the two applications takes place so quickly that you immediately see the requested data displayed in the Excel spreadsheet. You can view Research Insight Reports and Charts directly in Excel, and create your own spreadsheets in Excel using all of the features and data available in Research Insight. The link between Excel and Research Insight brings you the power of both applications.

This chapter shows you how to

- use a Research Insight set to create an Excel spreadsheet
- open a Research Insight report as an Excel spreadsheet
- use Excel and the Report Assistant to create a spreadsheet
- open an Excel template created with Research Insight
- open a Research Insight chart in an Excel spreadsheet
- use Excel and the Chart Assistant to create a chart
- Add-in functions in Excel

# Using the Research Assistant to Create an Excel Spreadsheet

Let's create a set of companies with the same SIC classification as Adobe Systems and a monthly market value over $1 billion. Our Excel spreadsheet will list the company names, their ticker symbols and their net annual sales.

Begin with Excel open.

1. From the **S&P** menu, select **Research Assistant**.

You will see the Research Assistant - Step 1 window on top of Excel.

2. Enter the ticker symbol for Adobe (**adbe**) in the **Companies** field.
3. Highlight **SIC** under the Find Similar Companies list.
4. Under the **Valuation** tab, click the **Market Value** check box and click **Next**.

**Hint**: If the tabs or checkboxes you need are not displayed, click **Customize** and select the Items you need from the Item Group category. Click **OK** and choose whether or not to save your changes.

The set of companies that passed the screening criteria will display on the Research Assistant - Step 2 window.

5. Click **Next**.
6. Click **Next** again. You will see the Report Assistant - Step 1 window.
7. Click the **Items vs. Companies** radio button under Current Time Period.
8. Click **Next**. You will see the Report Assistant - Step 2 window.

9. Click the **Income - Ann** radio button and select the **Sales** item.
10. Click **Add**.
11. Enter **tic** (the mnemonic for ticker symbol) in the **New Item** field and click the button.

**Hint:** To search for an item to add to your spreadsheet, click the (**Look Up**) button.

12. Click **Finish**.
    You will see your spreadsheet in Excel.

| Company Name | Sales | Ticker Symbol |
|---|---|---|
| ADOBE SYSTEMS INC | 1,266.378 | ADBE |
| ADVENT SOFTWARE INC | 134.931 | ADVS |
| AMDOCS LTD | 1,118.320 | DOX |
| ARIBA INC | 279.039 | ARBA |
| AUTODESK INC | 936.324 | ADSK |
| AUTONOMY CORP PLC -ADR | 26.665 | AUTN |
| BEA SYSTEMS INC | 819.760 | BEAS |
| BMC SOFTWARE INC | 1,719.200 | BMC |
| BUSINESS OBJECTS SA -SP ADR | 348.934 | BOBJ |
| CADENCE DESIGN SYS INC | 1,279.550 | CDN |
| CHECK POINT SOFTWARE TECH | 219.567 | CHKP |
| CITRIX SYSTEMS INC | 470.446 | CTXS |
| COGNOS INC | 495.652 | COGN |
| COMMERCE ONE INC | 401.796 | CMRC |
| COMPUTER ASSOCIATES INTL II | 6,103.000 | CA |
| COMPUWARE CORP | 2,010.050 | CPWR |
| ELECTRONIC ARTS INC | 1,322.273 | ERTS |
| FOUNDRY NETWORKS INC | 377.156 | FDRY |
| I2 TECHNOLOGIES INC | 1,126.325 | ITWO |
| INFORMATICA CORP | 154.058 | INFA |
| INFORMIX CORP | 929.319 | IFMX |
| INTERNET SECURITY SYS INC | 194.975 | ISSX |
| INTERWOVEN INC | 132.129 | IWOV |
| INTUIT INC | 1,093.825 | INTU |
| LEGATO SYSTEMS INC | 231.395 | LGTO |
| LIBERATE TECHNOLOGIES | 28.017 | LBRT |
| MACROMEDIA INC | 389.600 | MACR |

**Hint:** Click the (**Run**) button to open the Run Assistant window where you can change your initial set, or modify your base set and criteria. Close the Excel book before continuing with the next procedure.

## Opening a Research Insight Report as an Excel Spreadsheet

It's easy to open a Research Insight report and view it as a spreadsheet in Excel. Let's open a Quarterly Balance Sheet for Albertsons Inc., Safeway Inc., Kroger Co., and Winn-Dixie Stores Inc.

Begin with Excel open.

1. From the **S&P** menu, select **Open Report**.
   You will see the File Open window.

2. From the **Balance Sheets** folder, select **Quarterly Balance Sheet** and click **Finish**.
   You will see the Run Assistant window.

3. Enter your target companies' ticker symbols in the **Companies** field, separating each ticker symbol with a comma (**abs,swy,kr,win**).
4. Click **OK**.

You will see the Quarterly Balance Sheet for Albertsons Inc. in Excel.

**Hint:** To view the report for the other companies, select the company from the drop-down list directly above the report. Click the (**Run**) button to open the Run Assistant window, where you can modify the criteria used to create the spreadsheet. Close the Excel book before continuing with the next procedure.

# Using Excel and the Report Assistant to Create a Spreadsheet

It's easy to create a spreadsheet using Excel and the Report Assistant. Let's create a spreadsheet that shows the market value monthly, sales 3 year compound annual growth rate and net sales for the companies in the previous example.

Begin with Excel open.

1. From the **S&P** menu, select **Report Assistant**.
   You will see the Report Assistant - Step 1 window on top of Excel.

2. Select the **Items vs Companies** radio button under Current Time Period.
3. Click **Next**.

You will see the Report Assistant - Step 2 window.

4. Click the **Valuation** radio button.

**Hint**: If the radio buttons you need are not displayed, click **Customize** and select the Items you need from the Item Group category and Item List box. Click **OK**, and choose whether or not to save your changes.

5. Select the **Market Value-Mnthly** item and click **Add**.
6. Click the **Growth** radio button.
7. Select the **Sales 3 Yr CAGR** item and click **Add**.
8. Select the **Income - Ann** radio button.
9. Select the **Sales** item, click **Add** and click **Finish**.
   You will see the Run Assistant window.
10. Enter your target companies' ticker symbols in the **Companies** field, separating each ticker symbol with a comma (**sbux,farm,peet**).
11. Click **OK**.
    You will see the spreadsheet in Excel.

| | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | |
| 2 | Company Name | | | Market Value-Mnthly | Sales 3 Yr CAGR | Sales | | |
| 3 | FARMER BROS CO | | | 422.013 | (0.915) | 218.688 | | |
| 4 | PEETS COFFEE & TEA INC | | | 67.181 | 19.855 | 84.302 | | |
| 5 | STARBUCKS CORP | | | 7,420.801 | 30.908 | 2,169.218 | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |

**Hint:** Close the Excel book before continuing with the next procedure.

# Opening an Excel Template

Research Insight includes more than 60 templates for backtesting, debt analysis, market and performance summary, portfolio analysis and more. You can also use this example to open a spreadsheet you have previously created and saved.

Begin by opening Excel.

1. From the **S&P** menu, select **Open Template**.
   You will see the File Open dialog box.

2. Select **Company Snapshot** and click **Finish**
   The selected spreadsheet displays in Excel.

**Hint:** Close the Excel book before continuing with the next procedure.

# Open a Research Insight Chart in an Excel Spreadsheet

Let's open a Line of Business - Sales chart for General Electric.

Begin with Excel open.

1. From the **S&P** menu, select **Open Chart**.
   You will see the File Open window on top of Excel.

2. From the **Line of Business** folder, select **Line of Business - Sales** and click **Finish**.
   You will see the Run Assistant window.
3. Enter General Electric's ticker symbol (**GE**) in the **Companies** field.
4. Click **OK**.

You will see the Line of Business - Sales chart in Excel.

**Hint:** Click the (**Run**) button to open the Run Assistant window, where you can modify the criteria used to create the chart. Close the Excel book before continuing with the next procedure.

# Using Excel and the Chart Assistant to Create a Chart

It's easy to create a chart using Excel and the Chart Assistant. Let's create a chart that shows the Net Sales and Cost of Goods Sold for the last three years for Proctor & Gamble.

Begin with Excel open.

1. From the **S&P** menu, select **Chart Assistant**.
   You will see the Chart Assistant - Step 1 window on top of Excel.

2. Select the **Bar** radio button under Chart Style.
3. Select the **One Company** radio button under Companies per Chart.
4. Select the **Historical Analysis** radio button under Periods.
5. Click **Next**.

You will see the Chart Assistant - Step 2 window.

6. Click the **Income - Ann** radio button.
7. Select the **Sales** item and click **Add**.
8. Select the **Cost of Sales** item, click **Add** and click **Next**.
   You will see the Chart Assistant - Step 3 window.

9. Click the **Absolute** radio button.
10. Enter **Y97** in the **Beginning Period** field.
11. Enter **Y00** in the **Ending Period** field and click **Finish**.
    You will see the Run Assistant window.
12. Enter the ticker symbol for Proctor & Gamble (**pg**) in the **Companies** field.
13. Click **OK**.

You will see the chart in Excel.

**Hint**: Click the (**Run**) button to open the Run Assistant window, where you can modify the criteria used to create the chart. Close the Excel book before continuing with the next procedure.

## Add-in Functions in Excel

In this section, we'll discuss advanced Active-X Technology capabilities known as add-in functions. Add-in functions make it easy to retrieve company data from the North America and Global databases and use it in your Excel spreadsheet. Add-in functions evaluate arguments and display either single item values or a range of item values (also known as a data array). The six add-in functions listed below allow you to create your own templates in Excel.

**Hint:** When entering add-in functions into a spreadsheet, you must include the function arguments (shown in italics).

**=spws(*key*, *expression*)**
Displays a single data value in one cell for a single company.

**Example**
=spws("ibm","sale")
Displays current sales for IBM.

**=spws_set_size ("*set*")**
Displays the number of companies in a set.

**Example**
=spws_set_size("$myset")
Displays the number of set members in the set, "myset".

**=spws_set(*set*,*expression*,*array_direction*)**
Displays a single data value for each member of a set of companies.

**Example**
=spws_set("$myset","sale", "down")
Displays the total net sales for each member of the set, "myset". Excel displays the item values downward in a column. If you enter "across" into the function, Excel will display the item values across in a row.

**=spws_time_series(*key,expression, begin_period,end_period,array_direction*)**
Displays a data value over a period of time (an array) for a single company.

**Example**
=spws_time_series("ibm","sale","-4y","0y","down")
Displays the total net sales for the most recent 5 years for International Business Machines Corp. Excel displays the data values in the column beginning with the fifth year of data and ending with the most recent year of data.

**=spws_set_sort(*set*,"*expression*","*sort variable*", "*sort direction*","*array_direction*")**
Sorts a set of companies based on your screening criteria.

**Example**

=spws_set_sort ("$myset","conm","oppe","a","down")
Sorts the company names in $MYSET in ascending order by Price/EPS from Operations.

**=spws_screen("*screen*","*set*","*date*")**
Runs a saved screen and returns a set of companies that pass your investment criteria for a given time period.

**Example**

=spws_screen("test.scn","test.set","dec96")
Runs the test.scn screen as of December 1996 and saves the companies that passed the criteria to the set "test.set". Then, reference the $test.set in another function: for example, you could find the average one year return for the set a year later, in December 1997.

The last four add-in functions listed (=spws_set, =spws_time_series, =spws_set_sort and =spws_screen) are also referred to as array formulas. Array formulas perform calculations that produce multiple results or perform calculations for a group of arguments arranged in rows or columns. You can use array formulas to take the place of several single-value formulas. This will reduce the amount of time you spend typing repetitive formulas. You will recognize array formulas because they are surrounded by brackets ({ }) in the Formula Bar.

Because an array shares only one formula, you must edit an array differently from ordinary cells. When you edit an array, you edit the entire range at once as if it were a single cell. To do this, simply highlight the range, enter the new contents in the **Formula** bar and press the **Ctrl**, **Shift** and **Enter** keys simultaneously.

To edit an existing array, select any cell in the array and press **Ctrl** and **/** simultaneously. This will select the entire array for you. Edit the formula and press **Ctrl**, **Shift** and **Enter** to update the data.