Chapter 8
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 other active software packages. This communication is known as Active-X Technology. When Research Insight and Microsoft Excel® use Active-X Technology, Excel initiates the conversation and requests data from the Research Insight databases. As with any Active-X Technology link, there is a source and a dependent file. In this situation, Research Insight is the source and Excel is the dependent file. The conversation between the two software packages takes place so quickly it seems almost instantaneous. You will immediately see the requested data displayed in the Excel spreadsheet.

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 spreadsheet created with Research Insight
- Open a Research Insight chart in an Excel spreadsheet
- Use Excel and the Chart Assistant to create a chart
- Use Active-X Technology formula call functions in Excel

## Using a Research Insight Set to Create an Excel Spreadsheet

Let's create a set of companies that are in the same SIC classification as Ricoh Co. and have an issue market value over $1 billion. Our Excel spreadsheet will list the company names, their GVKEYs and their net annual sales.

Begin with Excel open:

1. From the **S&P** menu, select **Research Assistant**.
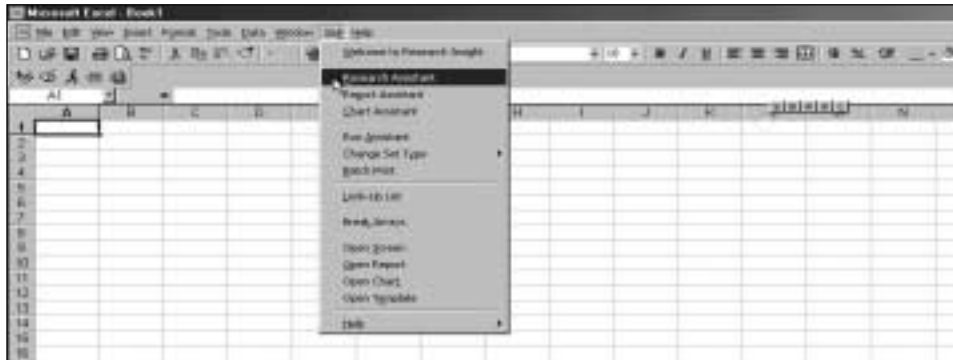
You will see the Research Assistant - Step 1 window on top of Excel.
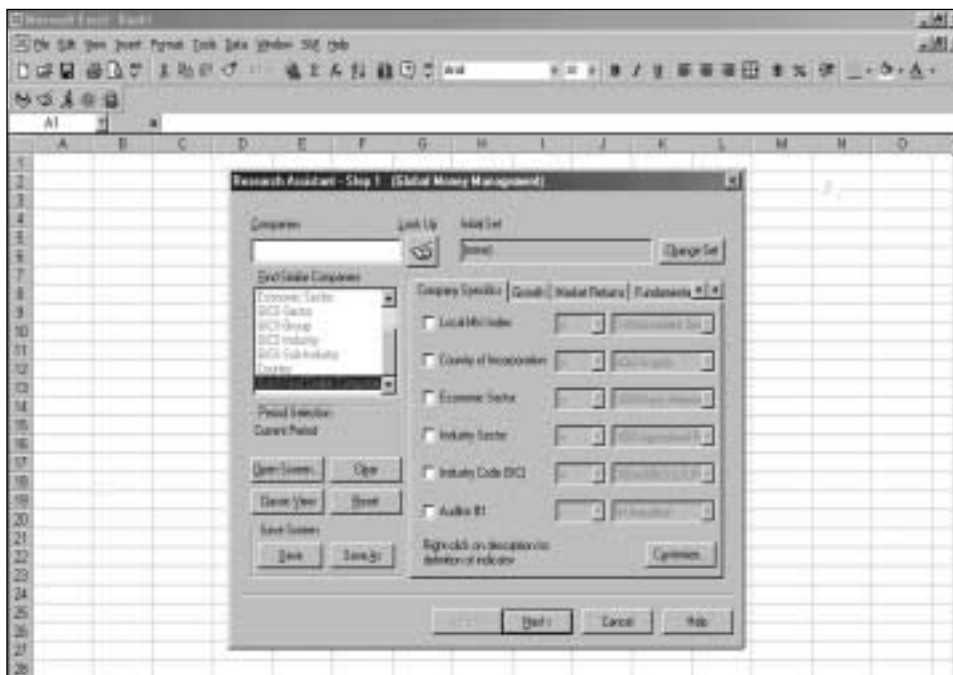
2. Enter the GVKEY for Ricoh (**9135**) in the **Companies** field
3. Select **SIC** from the Find Similar Companies area.
4. Under the **Valuation** tab, click the **Issue Market Value** check box.

Hint: If this tab does not appear on your screen, click **Customize**. From the Indicator Groups area, click **Valuation**. A check will appear in the box to the left of the name. Click **OK**.

5. Select **>** from the drop-down list to the right, enter **1000** in the far right field.
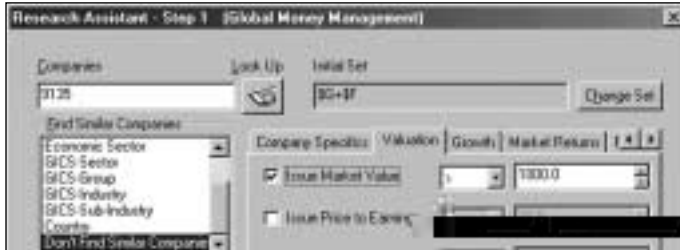
6. Click **Next**.
   The set of companies that passed the screening criteria will display in the Research Assistant - Step 2 window.
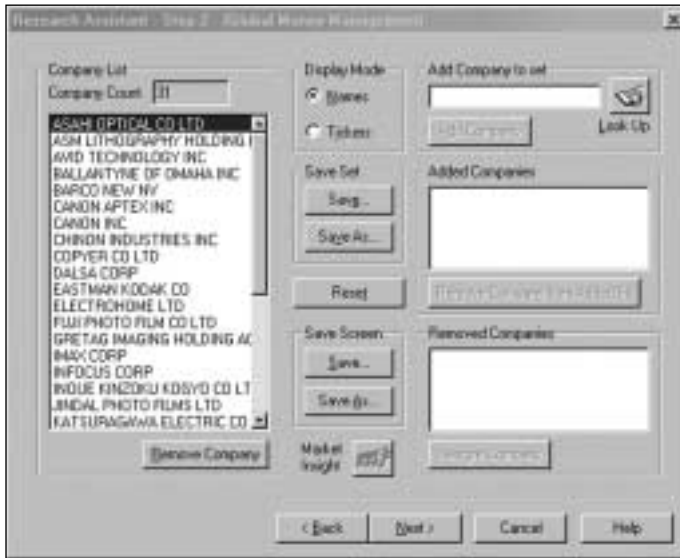
7. Click **Next**.
8. Click **Next** again.
   You will see the Report Assistant - Step 1 window.
9. Click the **Items vs. Companies** radio button under Current Time Period.

10. Click **Next**.

    You will see the Report Assistant - Step 2 window.

10. Click the **Income - Ann (Industrial)** radio button and select the **Revenue - Total** item.
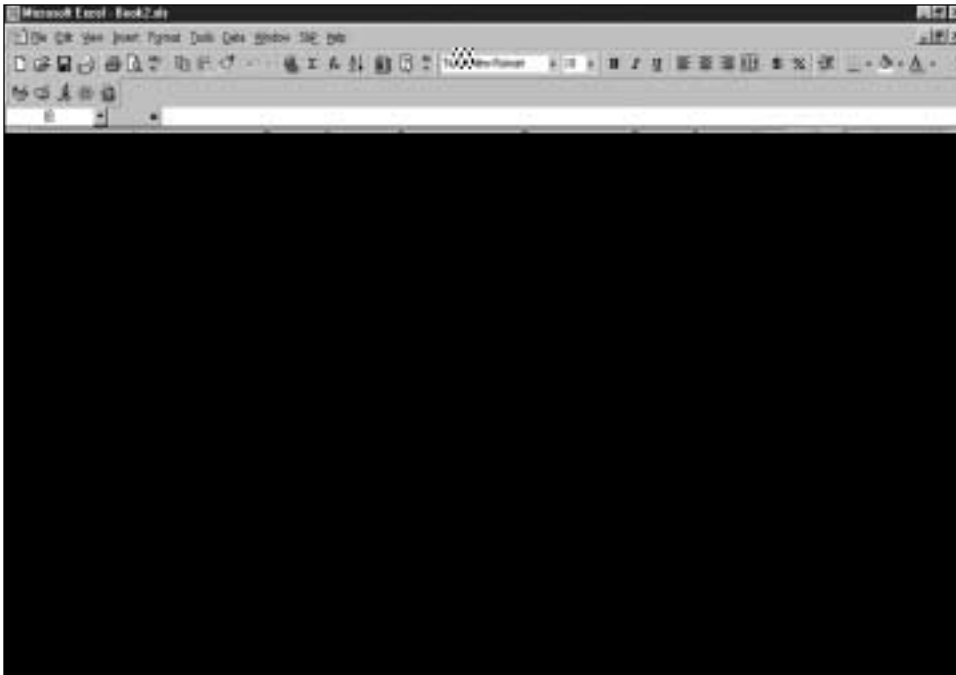
12. Click **Add**.

13. Enter **gvkey** 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.

14. Click **Finish**.

You will see your spreadsheet in Excel.

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

We'll show you how easy it is to open a Research Insight report and view it as a spreadsheet in Excel. Let's open a Full Detail Balance Sheet for British Airways, Air France and Japan Airlines.

Begin with Excel open:

1. From the **S&P** menu, select **Open Report**.
    You will see the File Open window on top of Excel.
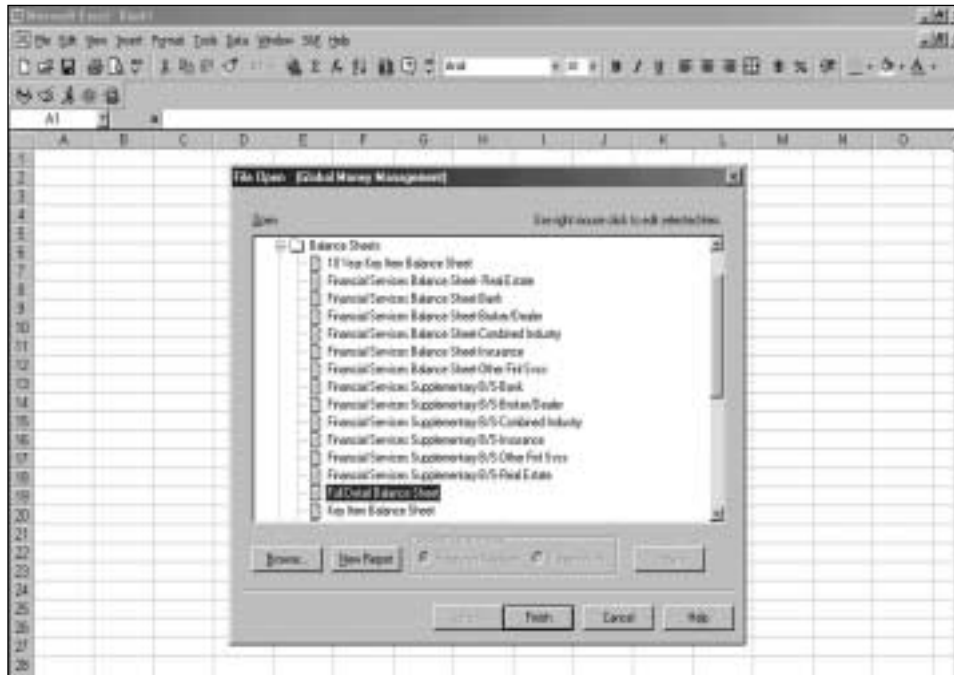
2. From the **Balance Sheets** folder, select **Full Detail Balance Sheet** and click **Finish**.

You will see the Run Assistant window.

3. Enter your target companies' GVKEYs in the **Companies** field, separating each with a comma. (**13145,101475,18957**).
4. Click **OK**.

   You will see the Quarterly Balance Sheet for British Airways 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] (**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

We'll show you how easy it is to create a spreadsheet using Excel and the Report Assistant. Let's create a spreadsheet that shows the sales 3-year cumulative annual growth rate 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.
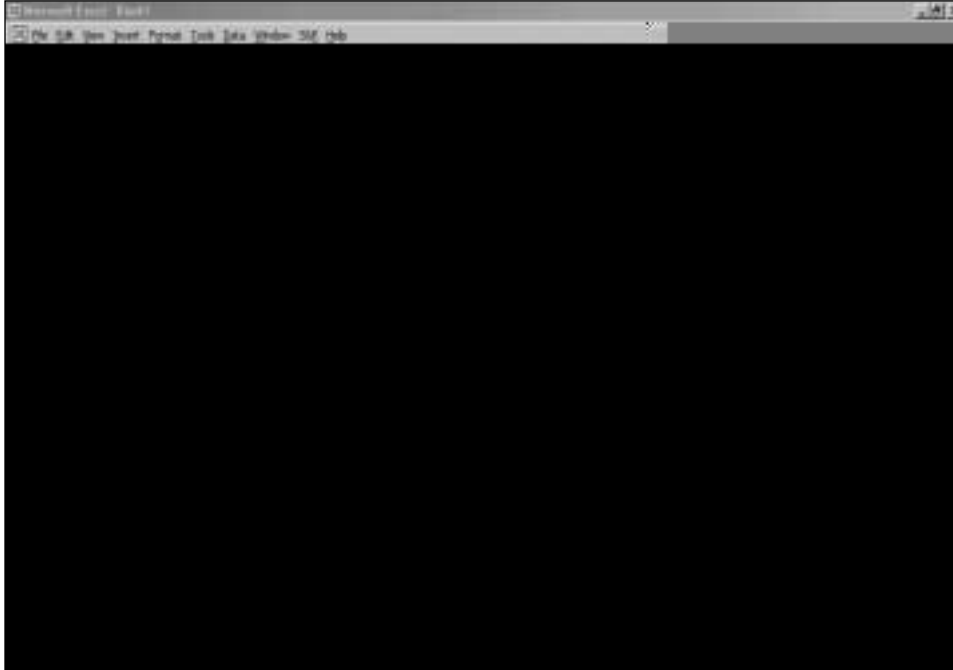
2. Select the **Items vs Companies** radio button under Current Time Period.
3. Click **Next**.

You will see the Report Assistant - Step 2 window.
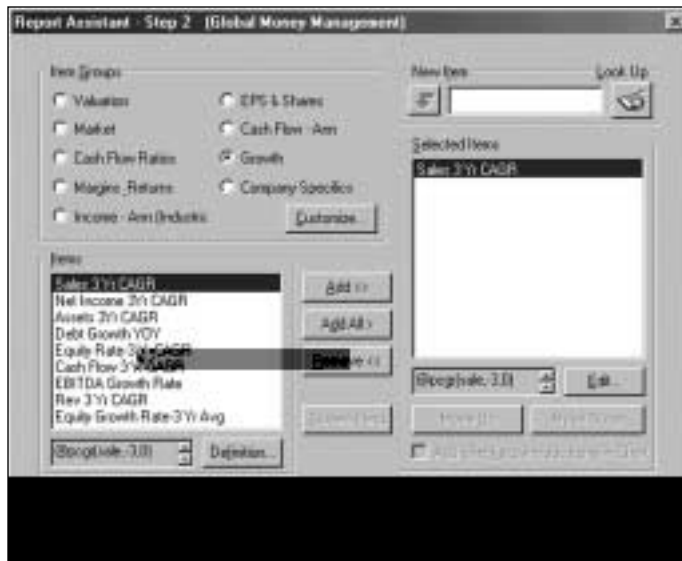
4. Click the **Growth** radio button.
5. Select the **Sales 3Yr CAGR** item, click **Add** and click **Finish**.
   You will see the Run Assistant window.
6. Enter your target companies' GVKEYs in the **Companies** field, separating each
   ticker symbol with a comma (**13145,101475,18957**).
7. Click **OK**.
   You will see the spreadsheet in Excel.
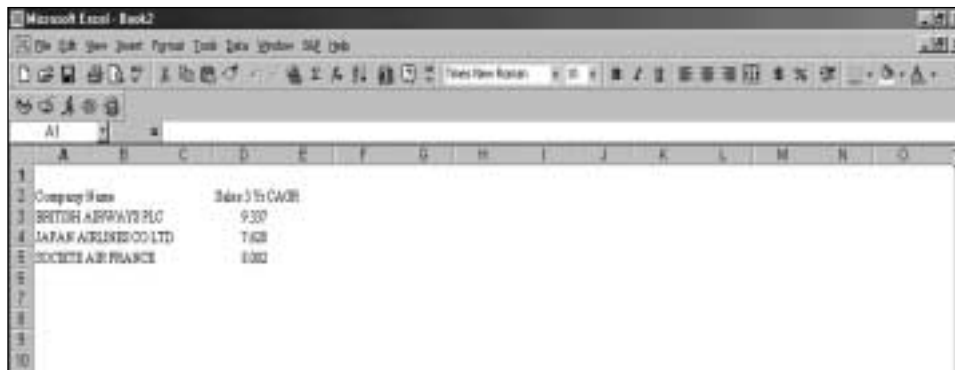
Hint: Close the Excel book before continuing with the next procedure.

Opening an Excel Spreadsheet Created with Research Insight

This example assumes that you have already created and saved an Excel spreadsheet using Research Insight.

Begin by opening Excel:

1. From the **File** menu, select **Open**.
   You will see the Open dialog box.

2. Locate and open the folder where you saved your spreadsheet.
3. Select the file and click **Open**.
   The selected spreadsheet displays in Excel.

Hint: Close the Excel Book before continuing with the next procedure.

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Open a Research Insight Chart in an Excel Spreadsheet

Let's open a 10-year price-close monthly chart for Casio Computer Company.

Begin with Excel open:

1. From the **S&P** menu, select **Open Chart**.
   You will see the File Open window on top of Excel.
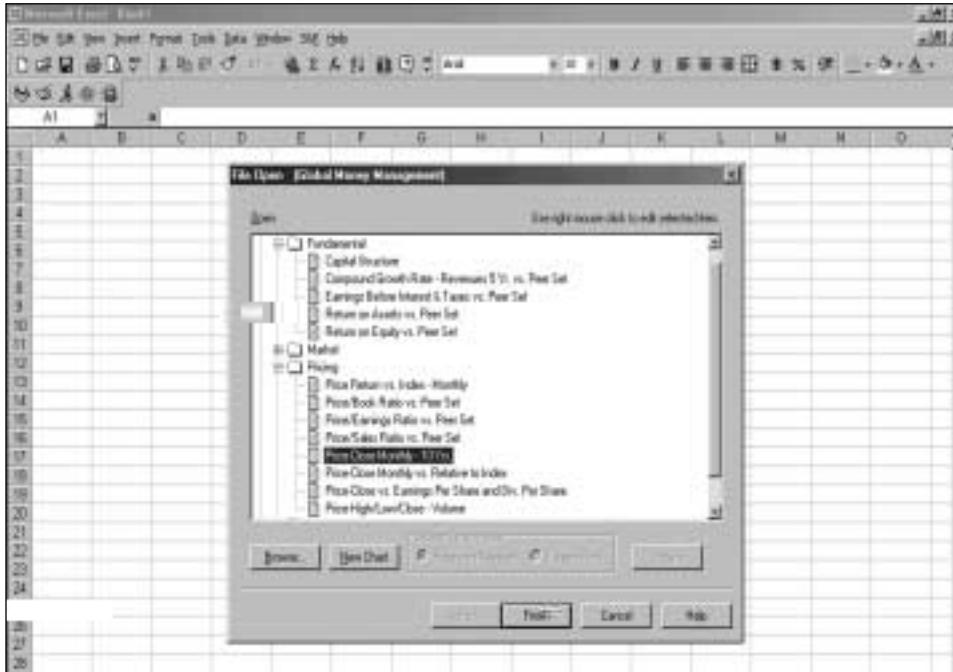
2. From the **Pricing** folder, select **Price - Close Monthly - 10 Yrs** and click **Finish**.
   You will see the Run Assistant window.
3. Enter Casio's GVKEY (**17703**) in the **Companies** field.
4. Click **OK**.

You will see the Price - Close Monthly - 10 Yrs chart in Excel.
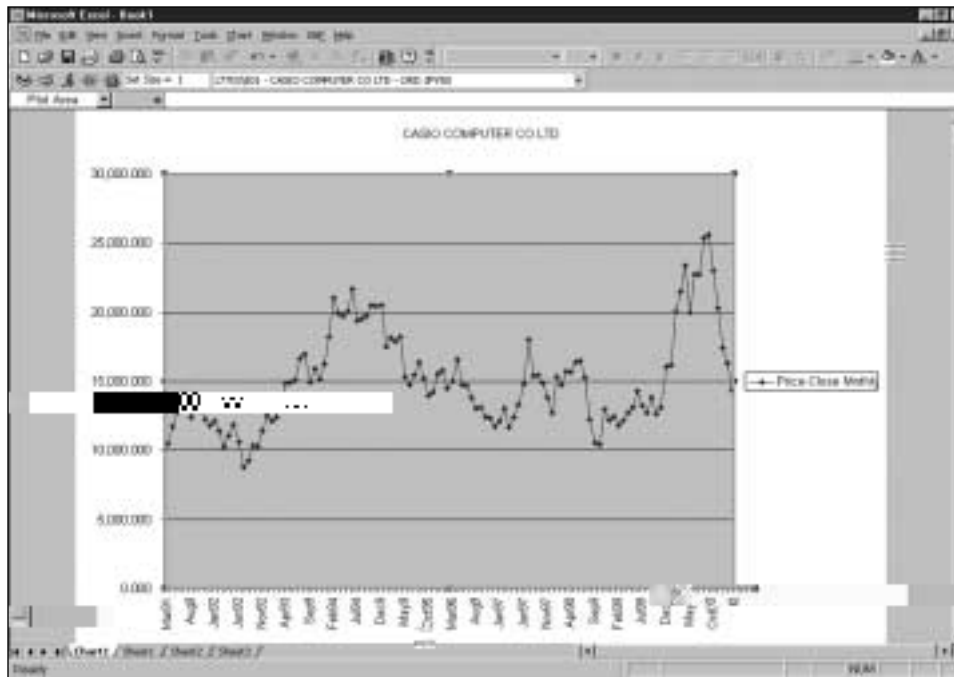
Hint: Click the **Run** button to open the Run Assistant window, where you can modify the criteria used to create the chart. Close the Excel book before continuing with the next procedure.

Using Excel and the Chart Assistant to Create a Chart

We'll show you how easy it is to create a chart using Excel and the Report Assistant. Let's create a chart that shows the price-high/low/close volume for the last 6 months for SAP AG.

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 **Market** radio button.
7. Select the **Price Close - Monthly** item and click **Add**.
8. Select the **Price High - Monthly** item and click **Add**.
9. Select the **Price Low - Monthly** item, click **Add** and click **Next**.

You will see the Chart Assistant - Step 3 window.

10. Click the **Absolute** radio button.
11. Enter **Sep98** in the **Beginning Period** field
12. Enter **Feb99** in the **Ending Period** field and click **Finish**.
    You will see the Run Assistant window.
13. Enter the GVKEY for SAP AG (**103487**) in the **Companies** field and click **Next**.
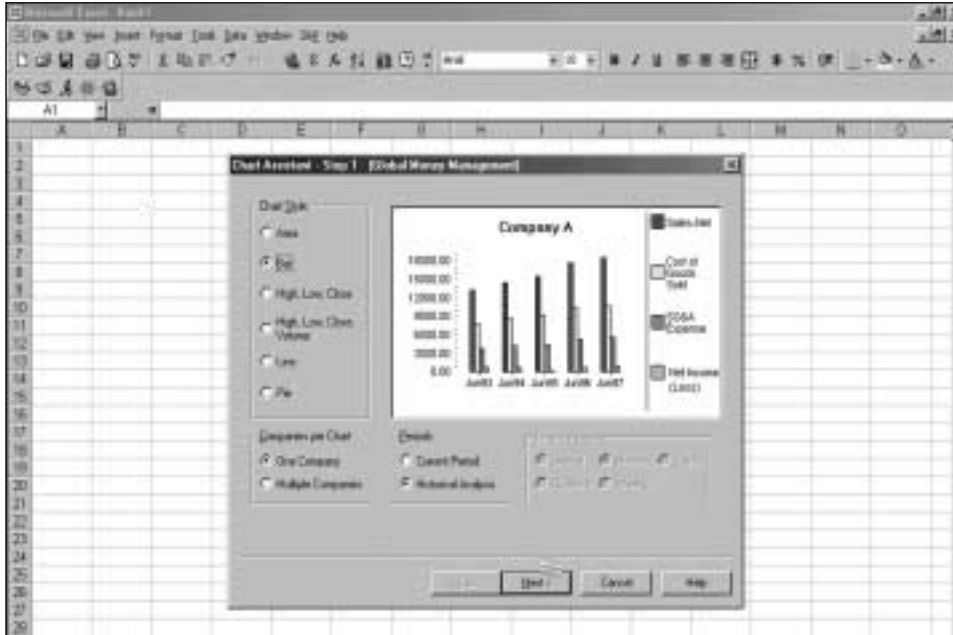
You will see the chart in Excel.
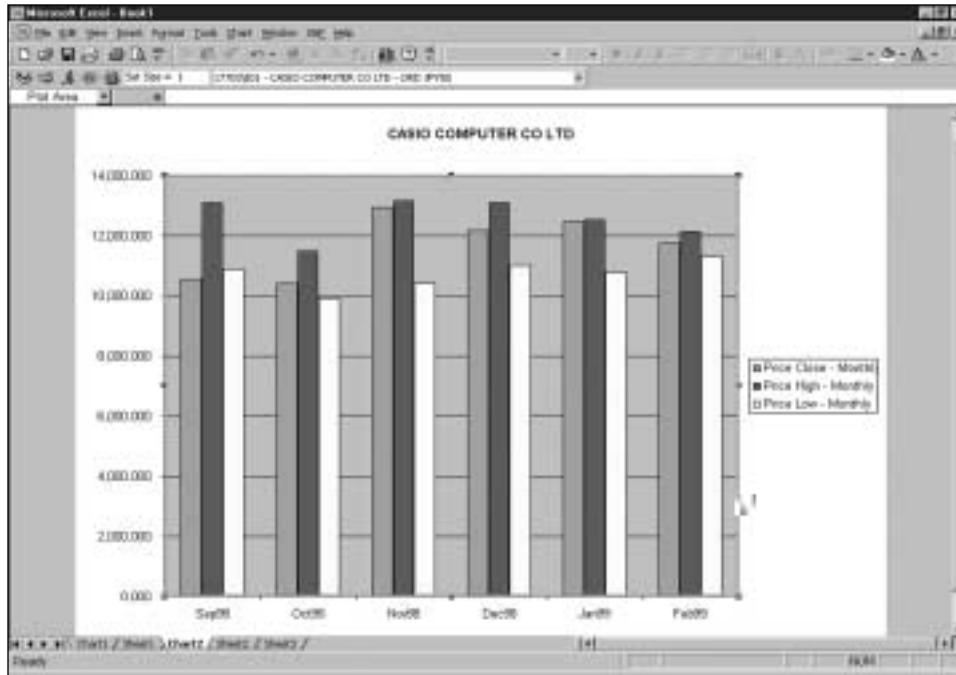
Hint: Click the **Run** button to open the Run Assistant window, where you can modify the criteria used to create the chart.

Advanced Active-X Technology Capabilities 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 are listed below.

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","pm","a","down")
> Sorts the company names in the' set "myset" in ascending order by Pretax Profit Margin.

=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","dec97")
> Runs the test.scn screen as of December 1997 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 1998.

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 modify a spreadsheet containing arrays, click the (**Unlink Array**) button.