Standard & Poor's
Research Insight℠

Getting Started
(North America)

By Standard & Poor's

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&POOR'S

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The McGraw-Hill Companies

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Chapter 1
Getting Started

Standard & Poor's Research Insight℠ puts a wealth of financial data and insightful company reports, performance graphs and textual documents at your fingertips—giving you the perspective you need to determine a company's true value and to identify buy/sell opportunities well before your competition.

Research Insight also offers you the flexibility to link to Microsoft® Excel, and its powerful graphical interface allows you to build, modify, generate and print multiple documents simultaneously so that all of your work is immediately available.

With Research Insight you can easily

- target companies that meet your investment criteria

- perform credit analyses to evaluate credit risk, lending situations, cash management and industry trends

- evaluate a company's vulnerability to merger or acquisition and develop contingency plans to deal with potential buyers for operations, divisions or businesses

- generate a competitive analysis to compare profitability, financial risk and growth among companies, industry sectors and indexes

- evaluate the performance of strategic business units based on contribution to the corporate performance, relative strength and industry attractiveness

This chapter

- highlights the available COMPUSTAT® databases

- shows you how to select your default database

- shows you how to choose or change your default research styles

- describes additional resources for working with the COMPUSTAT databases

Built on the Solid Foundation of COMPUSTAT® Data

Knowing your financial analyses will only be as strong as the data they are based on, we built Research Insight on the unparalleled foundation of Standard & Poor's COMPUSTAT data.

Since 1962 COMPUSTAT has been setting the industry standard for worldwide financial data collection. Extensively trained financial researchers extract financial information from companies' annual and quarterly shareholder's reports, Securities and Exchange Commission (SEC) 10-K and 10-Q reports, daily news services and direct company contact. We constantly monitor the rulings of the Financial Accounting Standards Board and the SEC to ensure that we collect and present financial data as consistently as possible.

Since presentations of financial data and reporting methods vary among companies and industries, COMPUSTAT uses standardized data definitions and collection procedures to assure a consistent presentation of data. Computerized validation and balancing models are designed to guarantee the most comparable and consistently accurate data available. This consistency gives you accurate comparisons of information across companies and over time.

For example, comparing sales figures published in annual reports is often misleading because some companies report sales figures which include excise taxes while others exclude them. In the COMPUSTAT (North America) and COMPUSTAT (Global) databases, the standard definition of sales always excludes excise taxes. As a result, sales figures are not distorted by different reporting methods.

COMPUSTAT Databases

We are committed to providing you with the most comprehensive and current databases of fundamental financial and market information available today. When using Research Insight, you will access either the COMPUSTAT (North America) database or the COMPUSTAT (Global) database, depending on your subscription. Each database is described below.

COMPUSTAT (North America)

The (North America) database contains up to 20 years of annual data, up to 48 quarters of history, seven years of business and geographic segment, and 240 months of stock prices and dividend data. Fundamental financial and market data for over 11,100 U.S. and Canadian companies provides a broad base for analysis of the North American market. The database also contains data for over 10,900 inactive companies that no longer file with the Securities and Exchange Commission due to a merger, liquidation or bankruptcy, etc.

COMPUSTAT (Global)

Our international database features detailed information on companies, indexes and currencies from around the globe. With more than 15,300 industrial and financial services companies representing over 80 countries, market data including over 90 local market indexes, and over 110 currencies, the Global database represents over 80% of the world's market capitalization.

COMPUSTAT (Classic)

COMPUSTAT (Classic) is an as-reported historical database that provides non-restated, quarterly COMPUSTAT data as it was originally collected by Standard & Poor's. This database allows you to look at data, as it was originally reported, at any point in time.

COMPUSTAT (BackData)

COMPUSTAT (BackData) provides historical annual and quarterly restated COMPUSTAT (North America) data for testing models and validating theories. Annual data is available from 1950 forward; quarterly data from 1962 forward.

Daily Prices

The Daily Prices database enables you to retrieve the previous day's stock price and other market data. Daily Prices data is integrated with Research Insight so your financial analyses and investment decision-making can be accomplished in a single application. Daily Prices is available with a separate subscription.

Insider Trading

Insider Trading Data in Research Insight is provided by Washington Services Association (WSA). The Insider Trading data features Top Ten Buys and Top Ten Sells, Summary data, Open market transactions of 100 or more shares, 13 months of History, Issue-level data, Data in Actual Numbers, Amended data, and adjustment for stock splits. Insider Trading Data is available through the Internet download of the Value- Added database using the Research Insight Task Scheduler.

Institutional Ownership

Institutional Ownership Data in Research Insight is provided by Computershare Analytics, N.A., Inc., which collects and adds value to a vast amount of proprietary financial data and distributes that data through subscriptions and partnerships with Internet financial networks and leading data providers. The Institutional data features Top Ten Buys, Top Ten Sells, Top Ten Changes, Top Ten Holders, Aggregate data, 4 quarters of data stored as monthly items, and Issue-level data. Institutional Ownership share-related items have been adjusted for stock splits and dividends. Institutional Ownership data can be accessed through an Internet download of the Value- Added database using the Research Insight Task Scheduler.

Thomson I/B/E/S

The Institutional Brokers Estimate System (I/B/E/S), provided by Thomson Financial, is a database of earnings expectations data obtained from more than 2,500 security analysts. The consensus earnings estimates for more than 3,000 companies are available with a separate subscription agreement.

THOMSON FIRST CALL

The FIRST CALL database, provided by FIRST CALL/Thomson Financial, contains daily consensus earnings & cash flow estimates, analysts' recommendations and related investment information from hundreds of contributing firms. This database is available with a separate subscription agreement.

Estimates are provided for two quarters and two fiscal years of consensus estimate data, expected report dates, consensus recommendations, future growth rates, surprise data, operating actual earnings and cash flow data, and P/E, as well as Price to Cash Flow ratios. The FIRST CALL database also contains estimate consensus trends and estimate revision momentum data to help you compare recent performance to expected performance.

If you are a FIRST CALL subscriber, you can download daily FIRST CALL data from the Internet through the Task Scheduler.

Stern Stewart's EVAntage ™

Stern Stewart's EVAntage is a comprehensive financial analysis of 1,300 publicly traded, U.S. - based, non-financial companies, encompassing both performance and valuation. Stern Stewart's EVAntage is available with a separate subscription.

Textual Databases

The Library is another integral component of Research Insight that enables you to retrieve information from the different COMPUSTAT textual databases. Each database is described below.

Business Descriptions

The Business Descriptions database contains descriptions for over 12,000 companies. The database information is compiled by Standard and Poor's analysts and is updated continually.

Trends and Projections

Trends & Projections is a monthly publication written by David M. Blitzer, Managing Director and Chief Investment Strategist of Standard & Poor's. This document, provided by DRI•WEFA, covers current economic issues.

Country Overviews

The Country Overviews database from DRI•WEFA contains economic information and forecasts for over 65 countries.

Selecting the Default Database

Research Insight gives you access to the Standard and Poor's database(s) to which you have subscribed. If you subscribe to a single database (e.g. COMPUSTAT (North America)), your default database is selected automatically. If you subscribe to multiple databases, here are the steps you should follow when you want to switch the default database.

Begin from the Research Insight desktop.

1. From the **Databases** menu, select **Default Database**.
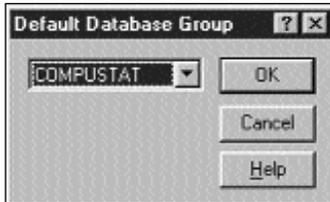
2. Select **COMPUSTAT**.
3. Click **OK.**

The COMPUSTAT (North America) database is now your default database. Any applications you run during this session will use data from this database.

Choosing Default Styles

Research Insight can be customized to suit your particular research needs. During initial installation of Research Insight, you may choose from five different styles: Money Management, Credit, Corporate Finance, Transfer Pricing or EVAntage (requires a separate subscription). Each style places a different group of financial and market indicators and data items in the Research Assistant, which is used to screen the COMPUSTAT (North America) database. You can also change the default style at any time, as well as add or change specific indicators and items on the Research Assistant.

The Money Management setting defaults to the indicator groups (i.e. Valuation, Fundamentals, Market, etc.) and indicator items (i.e. Issue Market Value, Sales, Price-Monthly, etc.) most commonly used by Money Managers.

The Credit setting defaults to the indicator groups (i.e. Fundamentals, Debt Coverage Ratios, Activity Ratios, etc.) and indicator items (i.e. Revenues-Total, LTD to Total Cap, Total Asset Turnover, etc.) most commonly used by Credit Managers.

The Corporate Finance setting defaults to the indicator groups (i.e. Company Specifics, EBITDA, Growth, etc.) and indicator items (i.e. Economic Sector Code, EBIT Margin, Sales 5Yr CAGR, etc.) most commonly used by Corporate Finance clients.

The Transfer Pricing setting defaults to the indicator groups (i.e. Fundamentals, Relative Ratios, N-Tiles, Fractiles Ratios, etc.) and indicator items (i.e. Revenue-Total, Relative Gross Profit Margin, Inter-Decile Sales, etc.) most commonly used by Transfer Pricing clients.

Likewise, the EVAntage setting defaults to the indicator groups (i.e. EVA, Ranks, Capital Intensity, etc.) and indicator items (NOPAT, EVA Margin, Widening Spread) most commonly used by EVAntage customers.

To change your default setting after you have installed Research Insight, begin by closing the Welcome to Research Insight window. From the **Tools** menu, select **Options**.

You will see the Options dialog box. Click the **Styles** tab, highlight the default option you prefer and click **Set Active Style**. You can also change a style name, create a copy of a style, create a new style, delete a style or restore the styles to the default settings.
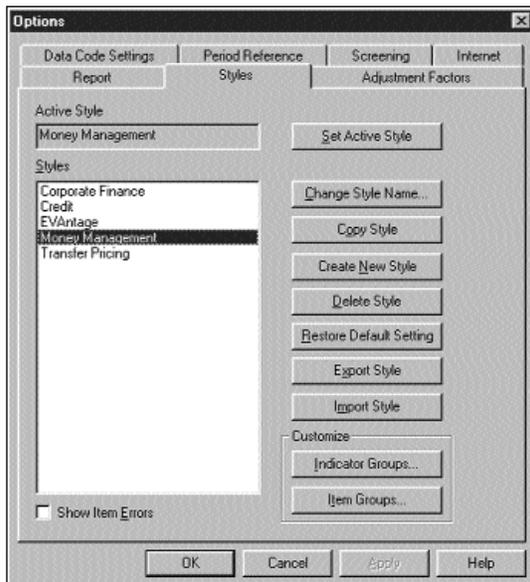
Where to Go When You Have Questions

This training guide is a hands-on learning tool. It is designed to take you through some of the many uses and applications of Research Insight. Since it's impossible to show you all of the ways that you can use Research Insight, we've selected some commonly used applications that you can immediately apply to your own work.

You will also find on-line help in Research Insight to be a valuable resource for step-by-step instructions for software functionality, detailed data definitions, reference tables, frequently asked questions and more. To access on-line help, select **Help** from the Research Insight menu bar.

On-Screen Help

On-screen help is available in windows where the ⬚Help⬚ button appears.

Window Tips offer a brief explanation on the functions of menu commands, toolbar buttons, parts of dialog boxes and the windows in the Research Insight Assistants. Display **Window Tips** by clicking the ⬚ button on the Research Insight desktop or the ⬚?⬚ button in a dialog box. When the cursor changes to a question mark, simply click an item for more information.

Tool Tips give you a description of tool buttons in the toolbar when you position the mouse pointer over the tool.

Web site

Visit Standard & Poor's web site at **http://www.compustat.com** for information on Standard & Poor's products.

Customer Support

Assistance is also available from the Standard & Poor's Customer Support Department.

U.S. and Canadian clients can call toll free **800.523.4534** between 8:00 a.m. and 8:00 p.m. ET, Monday through Friday.

Clients in Mexico can call **01.800.288.2872**, and after the prompt, dial **800.523.4534**. International clients can call **44.20.7826.8580** between 9:00 a.m. and 5:30 p.m. GMT.

Please visit the Customer Support web site at **http://support.compustat.com.**

Chapter 2
Navigating Research Insight

This chapter describes the various windows, toolbars and buttons you will see in Standard & Poor's Research Insight. It shows you how to navigate through Research Insight by describing the elements of the

- Welcome to Research Insight window

- Research Insight desktop

- Research Assistant

- Report Assistant

- Chart Assistant

- Run Assistant

- Look Up List

Welcome to Research Insight Window
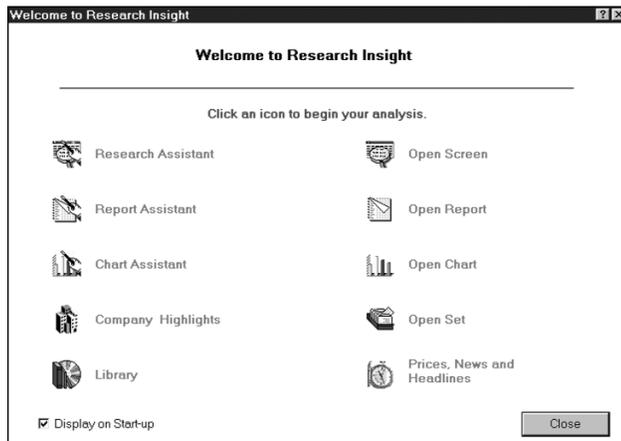
The Welcome to Research Insight window is your entry to the basic functions of Standard & Poor's Research Insight. When you click a button or corresponding text with your mouse, you will be taken to one of the many different functions of Research Insight. If you do not want this window to automatically display when you enter Research Insight, click the **Display on Startup** check box to turn off the default setting. Below is a description of each icon on the Welcome to Research Insight window.

Research Assistant: define your screening criteria, then develop custom reports and charts, or access pre-defined reports or charts.

Report Assistant: develop custom reports, then define your screening criteria.

Chart Assistant: develop custom charts, then define your screening criteria.

Company Highlights: run a financial highlights report for one or more companies.

Library: retrieve Business Descriptions and Trends and Projections.

Open Screen: open pre-defined screens or develop a new screen.

Open Report: open pre-defined reports or build a new report.

Open Chart: open pre-defined charts or build a new chart.

Open Set: open pre-defined sets or develop a new set.

Prices, News and Headlines: access Real Time for current prices and news.

Closes the Welcome window and displays the Research Insight desktop.

Research Insight Desktop

Report Assistant: develop custom reports, then define your screening criteria

Chart Assistant: develop custom charts, then define your screening criteria.

Open Chart: open pre-defined charts, or build a new chart.

Open Set: open pre-defined sets, or develop a new set.

Research Assistant: define your screening criteria, then develop custom reports and charts, or access pre-defined reports or charts.

Company Highlights: run a financial highlights report for one or more companies.

Open Screen: open pre-defined screens, or develop a new screen.

Open Report: open pre-defined reports, or build a new report.

Opens Real Time for current prices and news.

The desktop provides another way to access all the features of Research Insight. It displays when you close the Welcome window, or whenever you click **Cancel** in the Research Assistant. To return to the Welcome window click the ![icon] (**Welcome**) button or select **Welcome to Research Insight** from the **Help** menu. The buttons on the toolbar at the top of this window are described below.

Create a new report, chart, screen or set

Open an existing report, chart, screen or set

Save

Print

Welcome Window

Launch Library

About Research Insight

Context sensitive help

Cut

Copy

Paste

Look Up

Run a report, chart, screen or set

Launch Market Insight

Launch Company Home Page
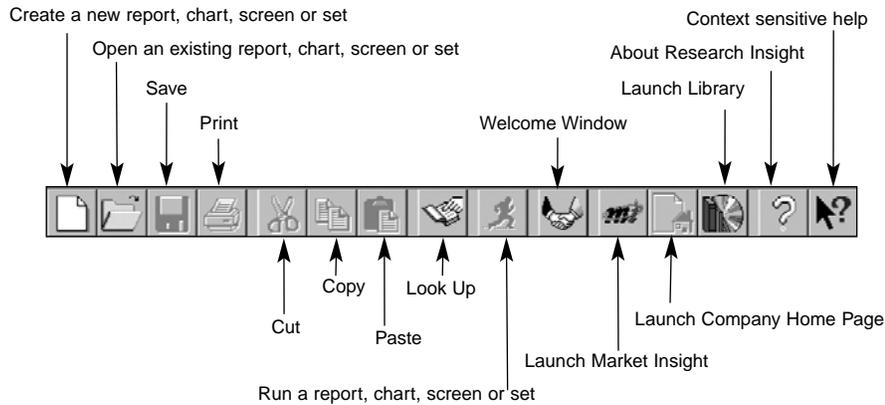
The Research Assistant

The Research Assistant is a wizard designed to walk you through screening the database. The Research Assistant can also link to other wizards in Research Insight to build reports or charts with the results of your database screen. For more information on how to screen the database with the Research Assistant, see Chapter 3 - Screening with the Research Assistant.

Following is a description of each version of the three Research Assistant windows.

Research Assistant - Step 1 Window
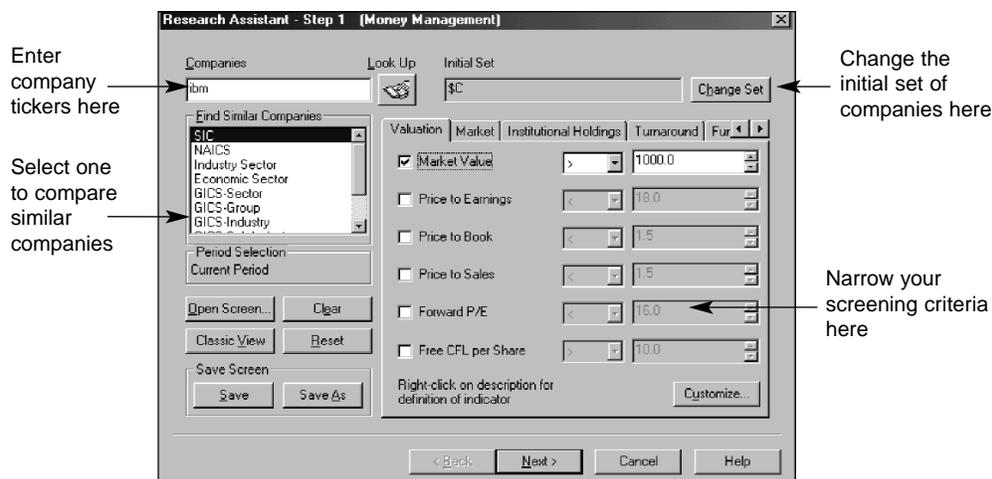
This window lets you search for companies using specific screening criteria. You can conduct a broad search for companies that are in the same industry sector, economic sector, SIC, NAICS or GICS Code or country.

Using the Change Set feature, you can narrow your search criteria by selecting a specific set of companies as your starting point (e.g. S&P 500). Screening criteria can be narrowed further by using the tabs on the right side of the window, checking the necessary fields under each tab and selecting the ranges from the drop down lists.

Following is a description of each button displayed in this window.

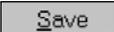|	
	Opens the Look Up List where you can search for a company by name or ticker symbol.
Change Set	Opens the Initial Set dialog box where you can choose a set of companies as the starting point for your screen.
Open Screen...	Opens the File Open window, which allows you to open predefined or previously saved screens.
Clear	Erases information you have entered in the window.
Classic View	Opens the Research Assistant - Step 1 Classic View window, for access to more advanced screening options.
Reset	Restores the default settings of the window.
Save	Saves your screening criteria for use in future analysis.
Save As	Saves your screening criteria with a specific name in a specific location.
Customize...	Opens the Custom Indicators window, which allows you to customize Indicator Groups (e.g. Valuation, Market, etc.) and Indicator Items (e.g. Beta, Sales, etc.).
Next >	Opens the Research Assistant - Step 2 window.
Cancel	Closes the Research Assistant.
Help	Displays step-by-step Help topics.

Research Assistant - Step 1 - Classic View Window
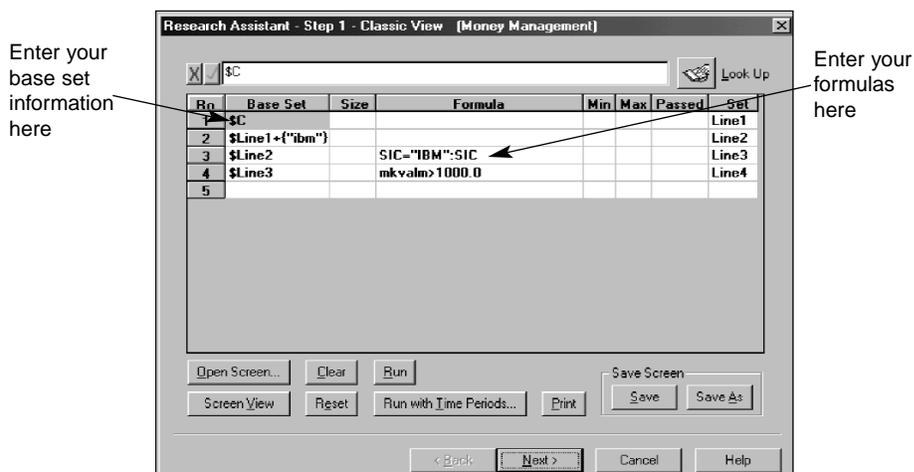
This window allows you to view and modify the underlying Base Set and Formulas used in developing your screen. To modify information, click on the field, enter the new information on the command line and press Enter on your keyboard. This window is accessed by clicking the Classic View button on the Research Assistant - Step 1 window. <u>If you make modifications in this window, you cannot return to the Research Assistant - Step 1 window</u>. Following is a description of each button displayed in this window.

Button	Description
Open Screen...	Opens the File Open dialog box, where you can open predefined or previously saved screens.
Screen View	Returns you to the Research Assistant - Step 1 window (only if you have not modified any information).
Clear	Erases the information you have entered in the window.
Reset	Restores the default settings of the window.
Run	Calculates the results of your screen.
Run with Time Periods...	Calculates your results for a specific time period.
Print	Prints the formulas used in developing your screen.
Save	Saves your screening criteria for use in future analysis.
Save As	Saves your screening criteria with a specific name in a specific location.
Next >	Opens the Research Assistant - Step 2 window.
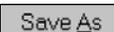
Research Assistant - Step 2 Window

The set of companies that passed your screen appear here

Add companies to your set here

Companies added to your set are displayed here

Companies removed from your set are displayed here
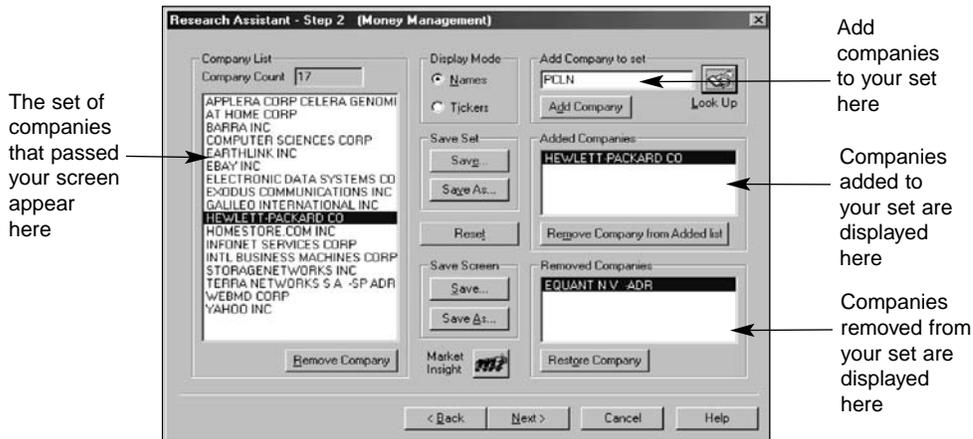
This window displays your screening results based on the criteria established in the first Research Assistant window. In this window, you can add companies to your set or remove any companies you do not want included in your set. You can also display the set by company name or ticker symbol. Following is a description of each button displayed in this window.

(Look Up icon)	Opens the Look Up List where you can search for a company by name or ticker symbol.
Add Company	Adds the ticker in the **Add Company to set** field to your set.
Save	Saves your set or your screen.
Save As	Allows you to save your set or your screen in a specific location with a specific name.
Reset	Restores your set to the last version saved.
Remove Company from Added list	Removes the highlighted company from the Company List and from the Added Companies list.
Remove Company	Removes the highlighted company from the Company List.
Restore Company	Inserts the highlighted company back into the Company List.
(Market Insight icon)	Launches Market Insight, which gives you on-line access to up-to-date financial information through reports such as Country Overviews, Risk Reports, Company Profiles, Balance Sheet Statements, Income Statements, and Financial Analysis Reports.
	Note: Market Insight requires a separate subscription from Research Insight.
< Back	Returns you to the previous window (Research Assistant - Step 1).
Next >	Opens the Research Assistant - Step 3 window.
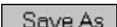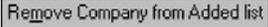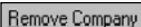
Research Assistant - Step 3 Window

Select another
Research Insight
function here

This window links the Research Assistant to additional Research Insight functions. The **Report Assistant** and **Chart Assistant** options take you to wizards that allow you to build customized reports or charts. The **Open Report** and **Open Chart** options allow you to run a pre-defined report or chart or build new ones. The **Company Highlights** option runs a company highlights report. Selecting **Finish** returns you to the Research Insight desktop.

Following is a description of each button displayed in this window.

        < Back   Returns you to the previous window (Research Assistant - Step 2).
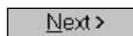
        Next >   Opens the next window based on the selection made.

The Report Assistant

The Report Assistant is a wizard designed to walk you through building and running custom reports. Depending upon which type of custom report you choose to work with, the Report Assistant can consist of up to three windows. The Report Assistant can be used as an extension of the Research Assistant to build a custom report with the results of your database screen or by itself with the aid of the Run Assistant as the method you use to screen the database. For more information on how to work with a custom report using the Report Assistant, see Chapter 4 - Reports.

Following is a description of the three Report Assistant windows.

Report Assistant - Step 1 Window

Select a format for reports run in the current time period

Select a format for reports run for a specific period of time

Click here to begin creating a free-form report

Shows how your report will be formatted

If you selected Companies vs. Items under Current Time Period, enter the number of companies to include in your report here

This window is used to define specific report parameters when building your own report. It opens when you choose the Report Assistant option on the Research Assistant - Step 3 window, or when you click the Report Assistant button on the Research Insight desktop. You can create a report using the current time period, or you can choose to compare data items and companies over a specified period of time with an historical analysis report. If you are building a report for the current time period and you select **Companies vs. Items**, you can choose to display multiple companies in your report by entering the number of companies in the **Company Count** field.

Following is a description of each button displayed in this window.

< Back	Returns you to the previous window.
Next >	Opens the Report Assistant - Step 2 window.

Report Assistant - Step 2 Window
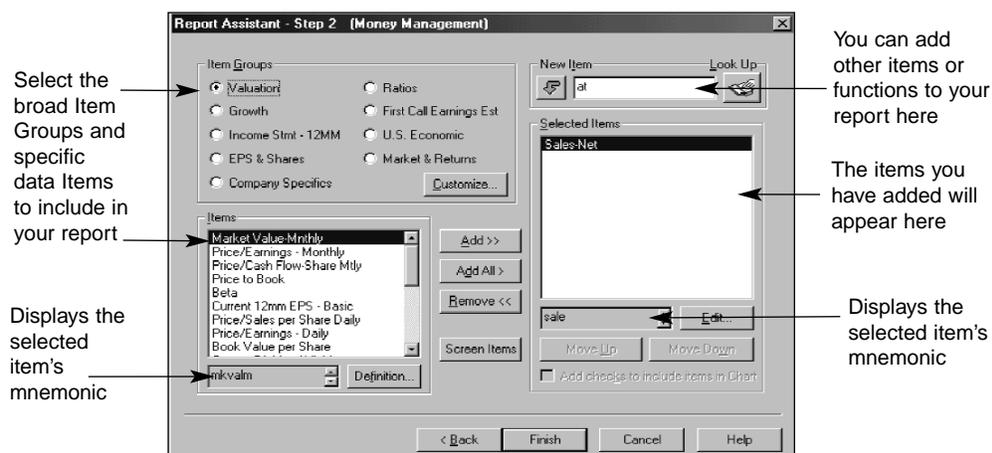
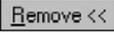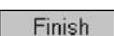Select the broad Item Groups and specific data Items to include in your report

Displays the selected item's mnemonic

You can add other items or functions to your report here

The items you have added will appear here

Displays the selected item's mnemonic
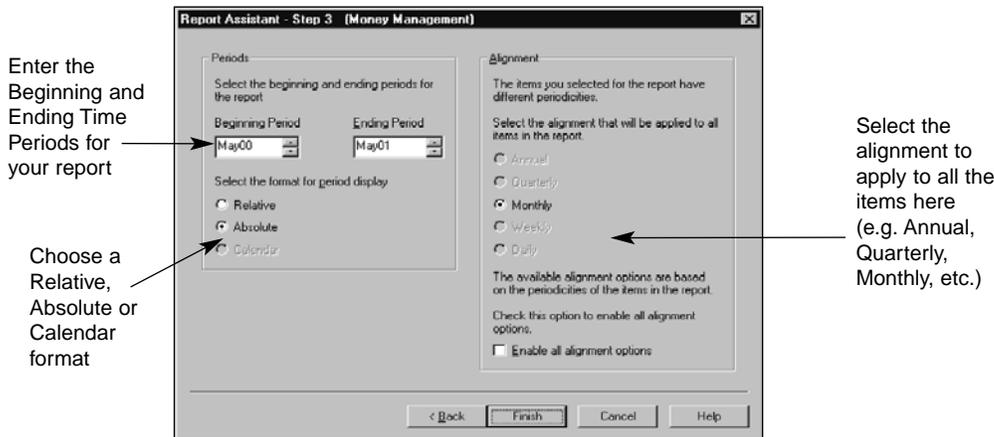
This window is used to select the broad item groups and specific data items within a group/category that you want to appear in your report. Following is a description of each button displayed in this window.

(icon)	Adds new items chosen from the Look Up List to the Selected Items area.
(icon)	Opens the Look Up List where you can search for a specific item to add to your report.
Customize...	Opens the Customize Item Sets dialog box where you can modify or create new item sets and items.
Add >>	Adds the items selected from the Items area to the Selected Items area.
Add All >	Adds all the items in the Items area to the Selected Items area, which lists all items that will appear on your report.
Remove <<	Removes any highlighted item(s) from the Selected Items area.
Edit...	Opens the Item Set Definition dialog box, where you can modify the highlighted Selected Item.
Definition...	Opens the Item Definition dialog box where you can view the definition of the highlighted Item
< Back	Returns you to the Report Assistant - Step 1 window.
Next >	If you are running an historical analysis report, this button opens the Report Assistant - Step 3 window.
Finish	If you are running a current time period report, this button opens your completed report.
Screen Items	Adds the items you used to screen the database to your report.
Move Up Move Down	Moves the selected item up or down one position in the list; this affects where the item will appear in the report.

Report Assistant - Step 3 Window

Enter the Beginning and Ending Time Periods for your report

Choose a Relative, Absolute or Calendar format

Select the alignment to apply to all the items here (e.g. Annual, Quarterly, Monthly, etc.)

This window displays after you choose to build a report based on an historical analysis and select the item categories and specific items within a category that you want to appear on your report. This window lets you enter the **Beginning** and **Ending** Periods you want to use when you run historical analysis reports.

This window also gives you the option of selecting a Relative, Absolute or Calendar time period for your report.

The **Relative** time period requires a point of reference in order to determine which time period is being referenced (e.g. the last three years, the most recent four quarters, etc.). Relative enables you to rerun your report in subsequent periods without changing the reference. The default Beginning and Ending periods are **0** where **0** represents the most current time period (e.g. annual, quarterly, monthly, etc.) for which data is available. One period prior to the current period is indicated by [-1], two periods prior to the current period is indicated by [-2], etc.

The **Absolute** time period tells the exact time period and ensures that a specific time period's data is returned (e.g. May01 for May 2001 or Y01 for fiscal year 2001).
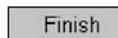
The **Calendar** time period is an exact calendar year, quarter, month, week or day. The calendar time period is always the exact year in which the time period ends. For example, suppose a company's fiscal year-end is May 2001. The calendar time period for annual data is 2001.

If you have selected data items with different periodicities (e.g. annual sales, quarterly EPS), this window will also prompt you to select an alignment for the data.

Following is a description of each button displayed in this window.
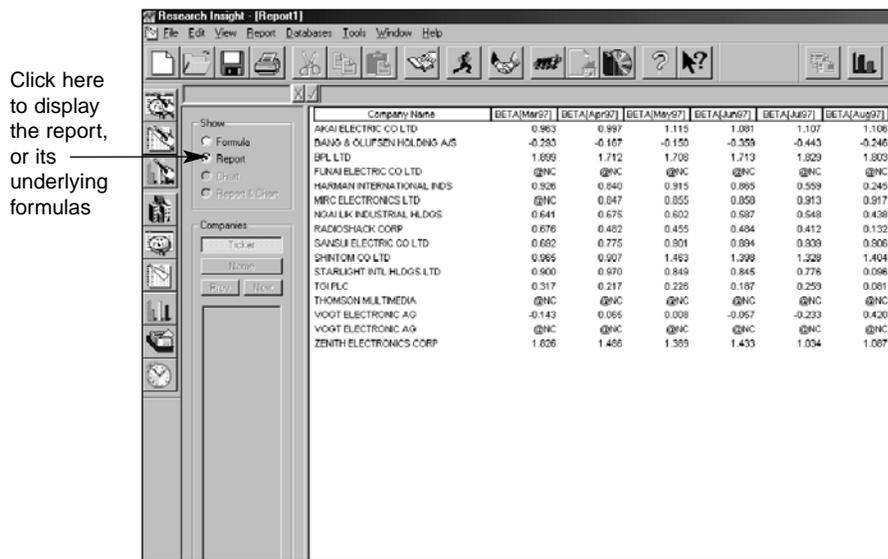
< Back	Returns you to the previous window (Report Assistant -Step 2).
Finish	Displays the Run Assistant window or your completed report, depending upon from where you accessed the Report Assistant.

Report Window

Click here to display the report, or its underlying formulas

This window displays a report according to the companies and criteria you established in the Research and Report Assistants. Under the **File** menu, you can choose to **Close** or **Save** your report, create a **New** report or **Open** an existing report. If you close or save your file, you will be taken out of the Research Assistant.
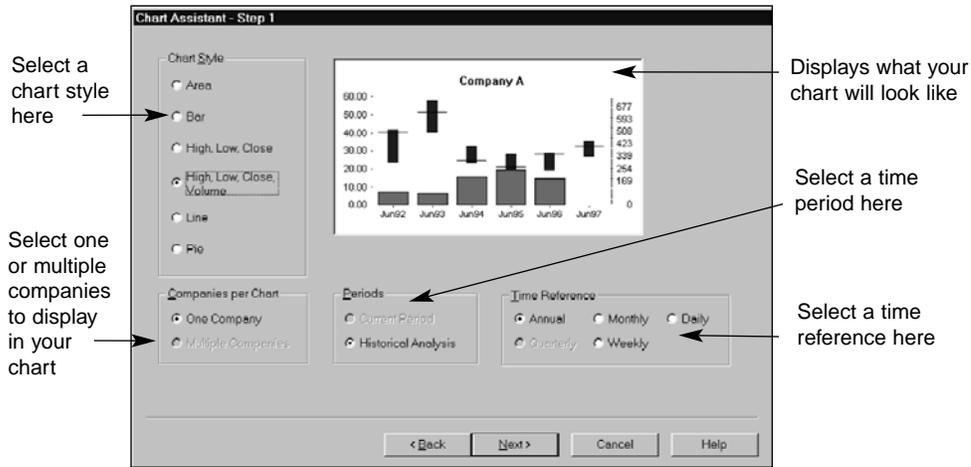
Click the [icon] (**Run**) button to access the Run Assistant window where you can modify your screening criteria for a report. To rerun the report with different data items, click the [icon] (**Rerun Assistant**) button or select Rerun Report/Chart Assistant from the Report menu. To return to the Research Assistant click the [icon] (**Research Assistant**) button on the desktop.

The Chart Assistant

The Chart Assistant is a wizard designed to walk you through building and running custom charts. Depending upon which type of custom chart you choose to work with, the Chart Assistant can consist of up to three windows. The Chart Assistant can be used as an extension of the Research Assistant to build a custom chart with the results of your database screen or by itself with the aid of the Run Assistant as the method you use to screen the database. For more information on how to work with a custom report using the Report Assistant, see Chapter 5 - Charts.

Following is a description of the three Chart Assistant windows.

Chart Assistant - Step 1 Window

Select a chart style here

Select one or multiple companies to display in your chart

Displays what your chart will look like

Select a time period here
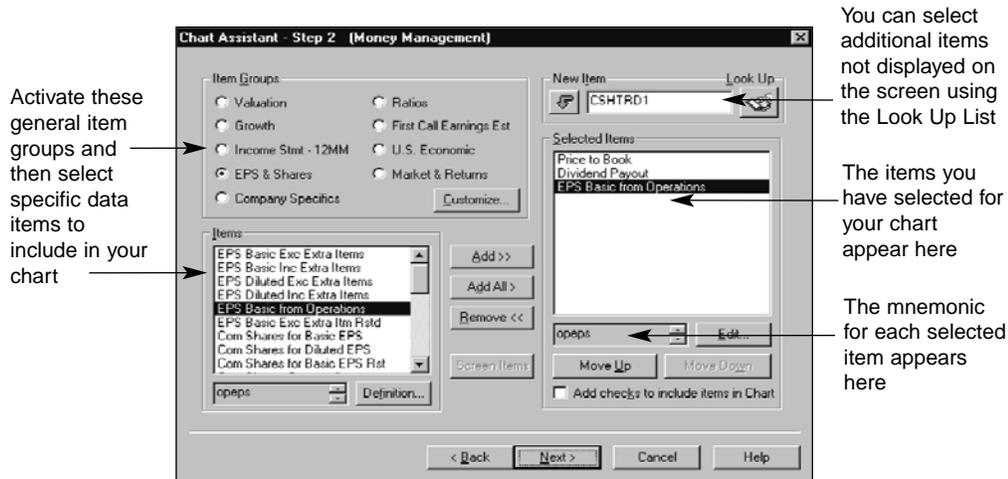
Select a time reference here

This window is used to define specific chart parameters when building your own chart. It displays when you choose the Chart Assistant option on the Research Assistant - Step 3 window or when you click the Chart Assistant button on the Research Insight desktop. You can select the chart style along with how many companies are to appear on the chart. In addition, you can create a chart using the current time period, or you can choose to specify the period of time for an historical analysis chart. Following is a description of each button displayed in this window.

| < Back | Returns you to the previous window. |
| Next > | Opens the Chart Assistant - Step 2 window. |

Chart Assistant - Step 2 Window

Activate these general item groups and then select specific data items to include in your chart

You can select additional items not displayed on the screen using the Look Up List

The items you have selected for your chart appear here

The mnemonic for each selected item appears here

This window is used to select the broad item groups and specific data items within a group/category that you want to appear on your chart. Following is a description of each button displayed in this window.
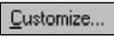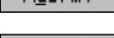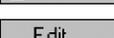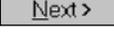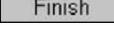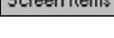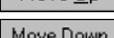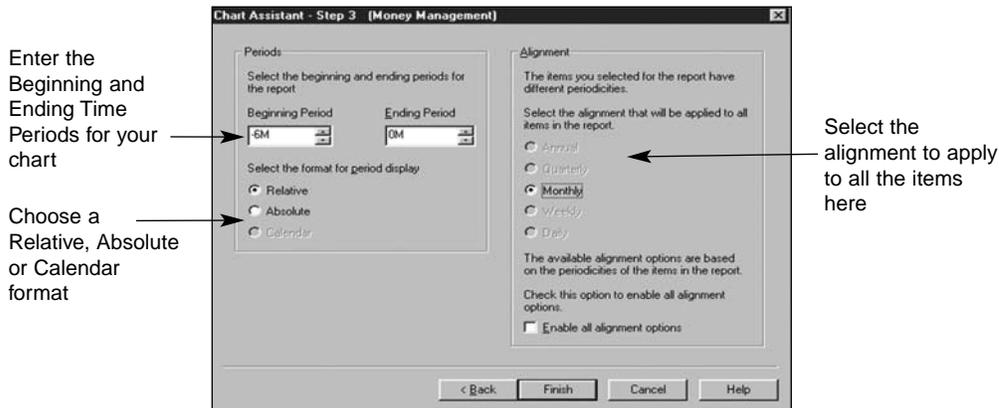
⬇	Adds new items chosen from the Look Up List to the Selected Items area.
🐾	Opens the Look Up List where you can search for a specific item to add to your chart.
Customize...	Opens the Customize Item Sets dialog box where you can modify or create new item sets and items.
Add >>	Adds the items selected from the Items list to the Selected Items area.
Add All >	Adds all the items displayed in the Items list to the Selected Items area, which shows all items that will appear on your chart.
Remove <<	Removes any highlighted item(s) from the Selected Items area.
Edit...	Opens the Item Set Definition dialog box, where you can modify the highlighted Selected Item.
Definition...	Opens the Item Definition dialog box where you can view the definition of the highlighted item.
< Back	Returns you to the Chart Assistant - Step 1 window.
Next >	If you are running an historical analysis report, use this button to open the Chart Assistant - Step 3 window.
Finish	If you are running a current time period report, this button opens your completed chart.
Screen Items	Adds the items you used to screen the database to your chart.
Move Up / Move Down	Moves the selected item up or down one position in the list; this affects where the item will appear in the chart.

Chart Assistant - Step 3 Window

Enter the Beginning and Ending Time Periods for your chart

Choose a Relative, Absolute or Calendar format

Select the alignment to apply to all the items here

This window displays after you choose to build a chart based on an historical analysis and select the item categories and specific items within a category that you want to appear on your chart. This window lets you enter the **Beginning** and **Ending** Periods you want to evaluate when you run historical analysis charts.

This window also gives you the option of selecting a Relative, Absolute or Calendar time period for your chart.

The **Relative** time period requires a point of reference in order to determine which time period is being referenced (e.g. the last three years, the most recent four quarters, etc.). This option enables you to rerun your report in subsequent periods without changing the reference. The default Beginning and Ending periods are **0** where **0** represents the most current time period (e.g. annual, quarterly, monthly, etc.) for which data is available. One period prior to the current period is indicated by [-1], two periods prior to the current period is indicated by [-2], etc.

The **Absolute** time period ensures that a specific time period's data is returned (e.g. May01 for May 2001 or Y01 for fiscal year 2001).
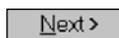
The **Calendar** time period is an exact calendar year, quarter, month, week, or day. The calendar time period is always the exact year in which the time period ends. For example, suppose a company's fiscal year-end is May 2001. The calendar time period for annual data is 2001.

If you have selected data items with different periodicities (e.g. annual sales, quarterly EPS), this window will also prompt you to select an alignment for the data.

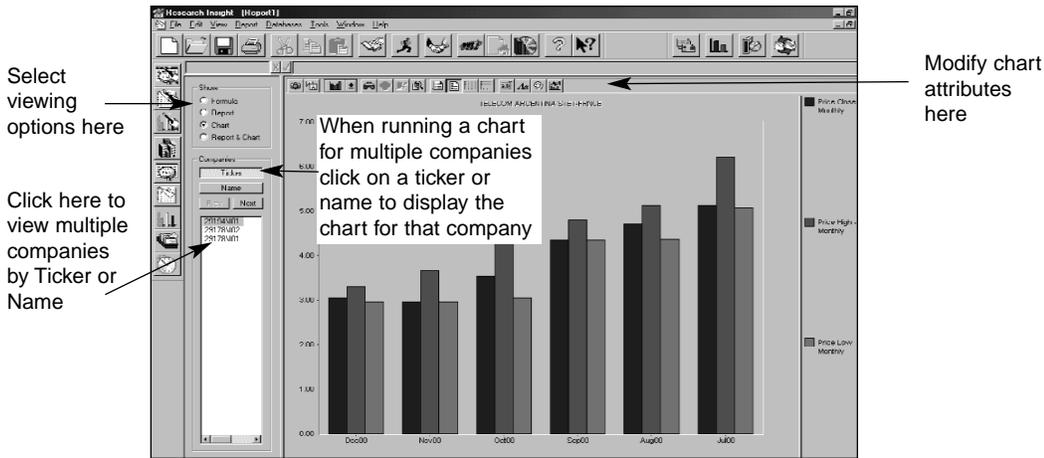Following is a description of each button displayed in this window.

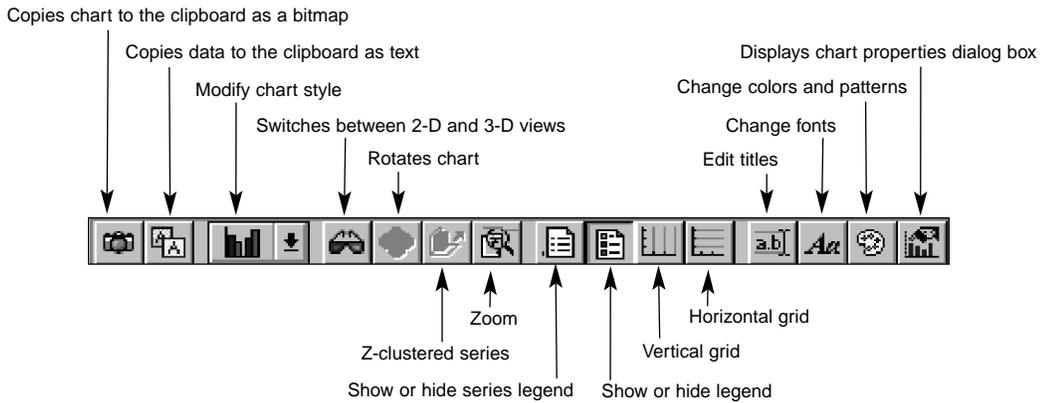|	
< Back	Returns you to the previous window (Chart Assistant - Step 2).
Next >	Displays the Run Assistant window or your completed chart, depending upon from where you accessed the Chart Assistant.

Chart Window

This window displays a chart according to the companies and criteria you established in the Research and Chart Assistants. Under the **File** menu, you can choose to **Close** or **Save** your chart, create a **New** chart or **Open** an existing chart. If you close or save your file, you will be taken out of the Research Assistant. Click the ![Run icon] (**Run**) button to access the Run Assistant window where you can modify your screening criteria for a chart. To rerun the chart with different data items, click the ![Rerun icon] (**Rerun Assistant**) button or select Rerun Report/Chart Assistant from the Report menu.

To return to the Research Assistant click the ![Research Assistant icon] (**Research Assistant**) button on the desktop.

Below is a description of each chart toolbar button.

File Open Window

Click on the folders to display all predefined reports and charts
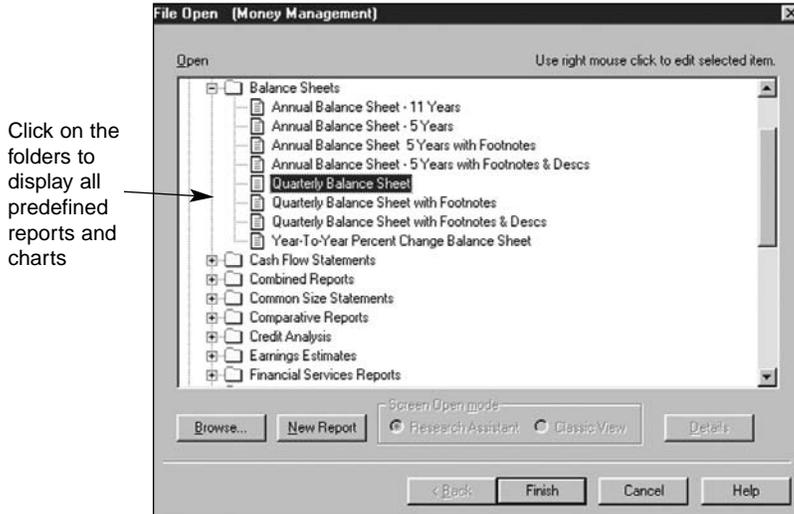
This window displays when you choose the **Open Report** or **Open Chart** option on the Research Assistant - Step 3 window or when you click the **Open Report** or **Open Chart** button on the Research Insight desktop. From this window you can open pre-defined reports or charts. Following is a description of each button displayed in this window.

Button	Description
Browse...	Allows you to open files residing in other drives.
New Report	Opens the Report Assistant - Step 1 window where you can create your own report.
New Chart	Opens the Chart Assistant - Step 1 window where you can create your own chart.
< Back	Returns you to the previous window.
Finish	Runs and displays the highlighted report or chart.

The Run Assistant

The Run Assistant window automatically opens before a custom report or chart is generated when you do not pre-screen the database with the Research Assistant. The Run Assistant window also displays after you have selected a pre-defined report or chart from the File Open window or when you click 🏃 (**Run**) to re-run a report or chart.

The Run Assistant does not guide you from one window to another. Instead, it has four stacked tabs in one window, each of which you must click to access. With the Run Assistant, you can create or modify the screening criteria, choose or change the set, modify the time period or view and change the underlying Base Set and Formulas for a report or chart.
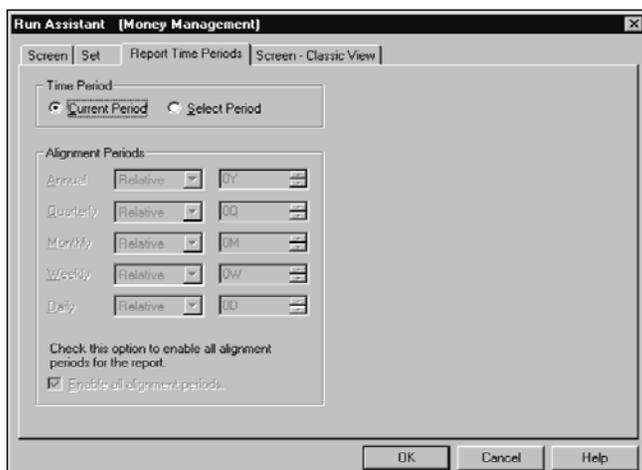
Run Assistant - Screen
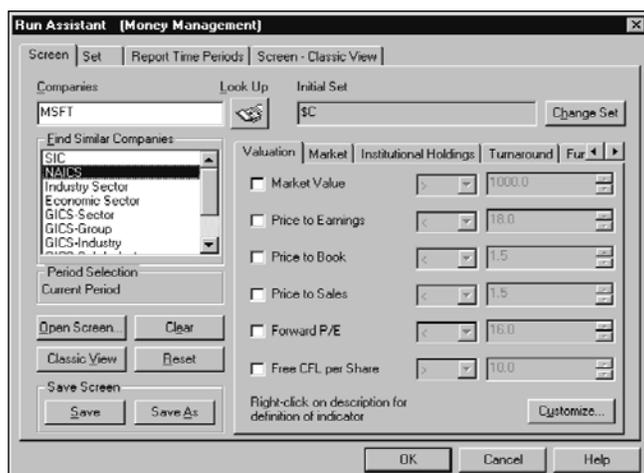
The Run Assistant - Screen tab allows you to create or modify the database screening criteria for the report or chart you want to run or re-run without using the Research Assistant. This tab contains the same buttons as the Research Assistant - Step 1 window except for the **Next** button. Instead, it contains the **OK** button, which runs the report or chart according to the screening criteria you just defined in the Run Assistant window. See page 13 for a description of the remaining buttons.

Run Assistant - Set
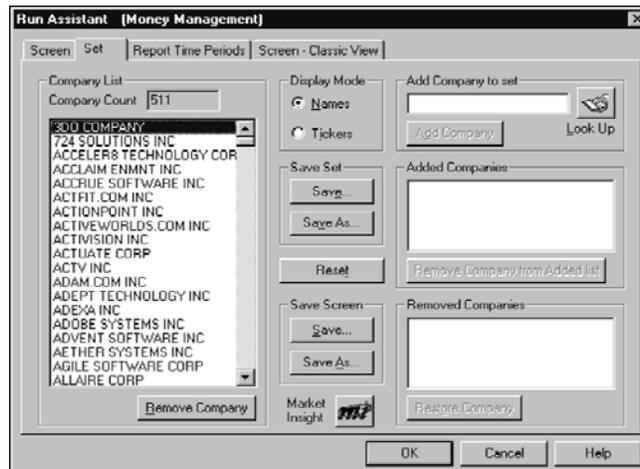
The Run Assistant - Set tab allows you to choose or change the set of companies for the report or chart you want to run or re-run. This tab contains the same buttons as the Research Assistant - Step 2 window except for the **Next** and **Back** buttons. Instead, it contains the **OK** button, which runs the report or chart according to the set you just chose in the Run Assistant window. See page 15 for a description of the remaining buttons.

Run Assistant - Report Time Periods

The Run Assistant - Report Time Periods tab allows you to modify the time period for the report or chart you want to run or re-run. This tab functions like the Step 3 windows of the Report and Chart Assistants. It gives you the option of selecting a Relative, Absolute or Calendar time period for your report or chart.

The **Relative** time period requires a point of reference in order to determine exactly what time period is being referenced (e.g. the last three years, the most recent four quarters, etc.). This option enables you to rerun your report in subsequent periods without changing the reference. One period prior to the current period is indicated by [-1], two periods prior to the current period is indicated by [-2], etc.

The **Absolute** time period ensures that a specific time period's data is returned (e.g. May01 for May 2001 or Y01 for fiscal year 2001).

The **Calendar** time period is an exact calendar year, quarter, month, week or day. The calendar time period is always the exact year in which the time period ends. For example, suppose a company's fiscal year-end is May 2001. The calendar time period for annual data is 2001.

Run Assistant - Screen - Classic View
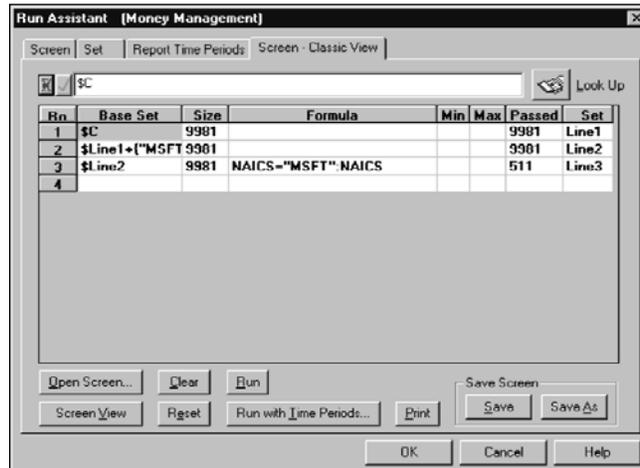
The Run Assistant - Screen - Classic View tab allows you to view and change the underlying Base Set and Formulas for the report or chart you want to run or re-run. This tab contains the same buttons as the Research Assistant - Step 1 - Classic View window except for the **Next** and **Back** buttons. Instead, it contains the **OK** button, which runs the report or chart according to the Base Set and Formulas you just viewed or defined in the Run Assistant window. See page 14 for a description of the remaining buttons.
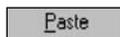
The Look Up List

The Look Up List is a Research Insight tool that enables you to look up information about the companies, items, functions and sets included in the database. Like the Run Assistant window, the Look Up List is comprised of four stacked tabs. It displays when you select **Look Up** from the **Tools** menu or whenever you click the 🖳 (**Look Up**) button.

The **Look Up** button is found throughout Research Insight, and if you access the Look Up List with the button, the contents of the list changes according to where the button is located. For example,
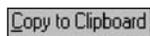
- if you click the Look Up button in the upper right-hand corner of the Research Assistant - Step 2 window, the Look Up List displays with only the Look Up - Companies tab

- if you click the Look Up button on the Initial Set dialog box, the Look Up List displays with only the Look Up - Set tab

- if you click the Look Up button in the upper right-hand corner of the Report Assistant - Step 2 window, the Look Up List displays with the Look Up - Items and the Look Up - Functions tabs

- if you access the Look Up List from the Tools menu with the Look Up button on the Research Insight Desktop or from the Research Assistant Classic View, it displays with all four tabs.

Buttons

All four tabs in the Look Up List contain most of the same buttons. Following is a description of the buttons common to all tabs in the Look Up List.

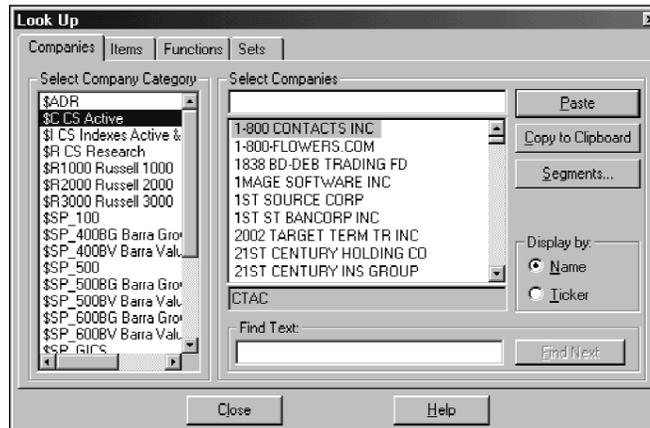| Button	Description
Paste	Pastes the company, set, item or function into the field from which you accessed the Look Up List.
Copy to Clipboard	Copies the company, set, item or function to your computer's clipboard so you can paste it wherever you want.
Close	Closes the Look Up List.
Help	Displays Help for the window you are in.

Look Up - Companies

To open the Look Up List from the **Tools** menu, select **Look Up**...

The Look Up - Companies tab lists every company and index in the COMPUSTAT (North America) database by tickers and names, and by the set to which they belong. With the Look Up - Companies tab, you can search for a company using the partial or whole name, and you can look up the industry segment information for a company as well. This tab allows you to sort the companies within a set by either ticker symbols or names.

The Look Up - Companies tab contains all the buttons common to the Look Up List (see page 30). In addition, it contains the **Segments** button, which accesses the Segments dialog box so you can view the industry segment information for a company.

Look Up - Items
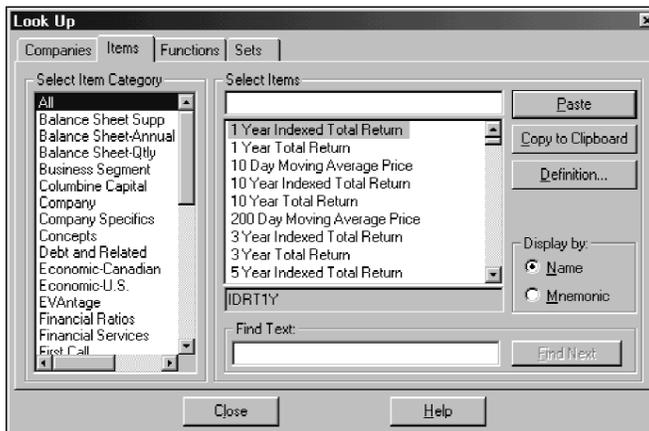
To open the Look Up List from the **Tools** menu, select **Look Up**...

The Look Up - Items tab lists every data item and concept within the database by category, by name and by mnemonic. With the Look Up - Items tab, you can search within a category for an item using the partial or whole name, and you can look up the data definition for the item as well. This tab allows you to sort the items within a category by either mnemonics or names.

The Look Up - Items tab contains all the buttons common to the Look Up List (see page 30). In addition, it contains the **Definition** button, which accesses the COMPUSTAT (North America) Data Definitions window so you can view the definition of the item.

Look Up - Functions
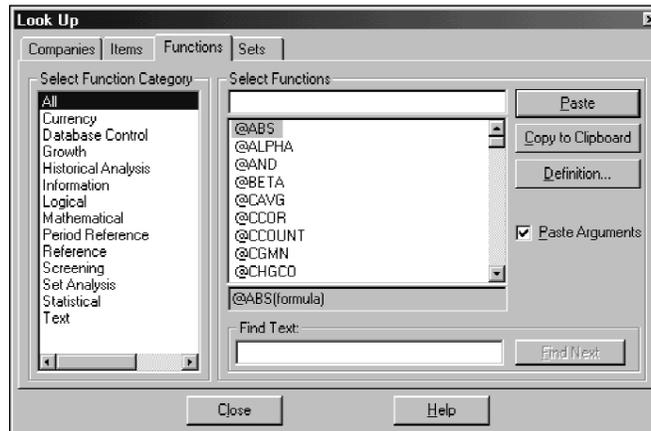
To open the Look Up List from the **Tools** menu, select **Look Up**...

The Look Up - Functions tab allows you to look up the different categories of functions (pre-defined calculations) within the database. With the Look Up - Functions tab, you can search within a category for a function using the partial or whole name, as well as review the definition for the function.

The Look Up - Functions tab contains all the buttons common to the Look Up List (see page 29). In addition, it contains the **Definition** button, which accesses the COMPUSTAT (North America) Data Definitions window so you can view the definition of the function.

Look Up - Sets
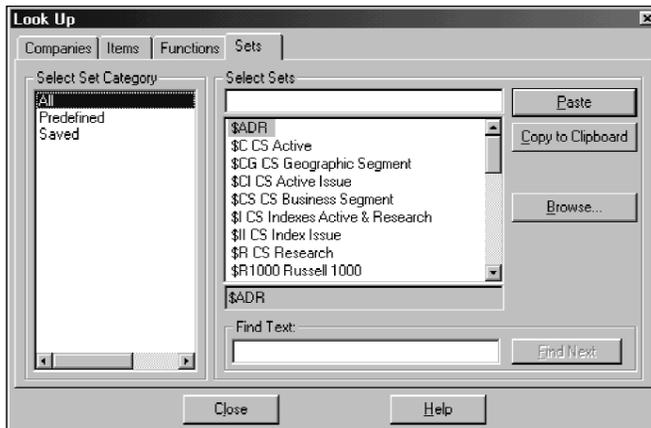
To open the Look Up List from the **Tools** menu, select **Look Up**...

The Look Up - Sets tab lists the sets available in the database. With the Look Up - Sets tab, you can search within a category for a set using the partial or whole name, and you can look up any sets you have stored outside the database on your computer or network.

The Look Up - Sets tab contains all the buttons common to the Look Up List (see page 29). In addition, it contains the **Browse** button, which accesses the Open dialog box so you can view any sets you have stored outside the database and add them to the database, if necessary.

Chapter 3
Screening COMPUSTAT (North America) with the Research Assistant

Are you looking for companies with a consistent record of outperforming their peers? Which semi-conductor companies have the lowest price-to-earnings ratios? What companies made up the S&P 500 in 1984? No matter what your questions are, the Research Assistant feature in Standard & Poor's Research Insight can guide you to the answers.

Research Insight gives you a powerful, yet easy-to-use tool for screening (searching) the extensive COMPUSTAT (North America) and COMPUSTAT (Global) databases for companies, industries and economic sectors that meet an endless range of criteria. You can run pre-defined screens built into the software (e.g. low price-to-book or quality blue chip stocks) or quickly create your own screens using the Research Assistant. Your screening criteria can include individual data items, concepts or formulas. The companies that pass your screen can be saved in a set so you can use the data in future analyses.

This chapter shows you how to

- define screening criteria

- customize screening criteria

- save the results of a screen

- access the Classic View of a screen

Note: The procedures in this chapter use the Money Management default style. To change your style to Money Management, select **Options** from the **Tools** menu, select the **Style** tab, select the Money Management style and click **Set Active Style**.

Defining Screening Criteria and Viewing
# the Results of a Screen

The first step in running a screen is to define your screening criteria. Let's say, for example, that you want to identify all the active companies with the same SIC classification as 3Com Corporation whose Return on Assets were greater than 12%.

Begin from the Research Insight Desktop.

1. Click the 📷 (**Research Assistant**) button.
2. Enter the ticker symbol for 3Com Corporation (**coms**) in the **Companies** field.

Hint: To search for a ticker symbol, click the **Look Up** button. Begin typing in the name of the company in the Select Companies field. When the name is highlighted, click **Paste**, then click **Close**. The company's ticker symbol will appear in the Companies field.

3. Select **SIC** from the Find Similar Companies area.
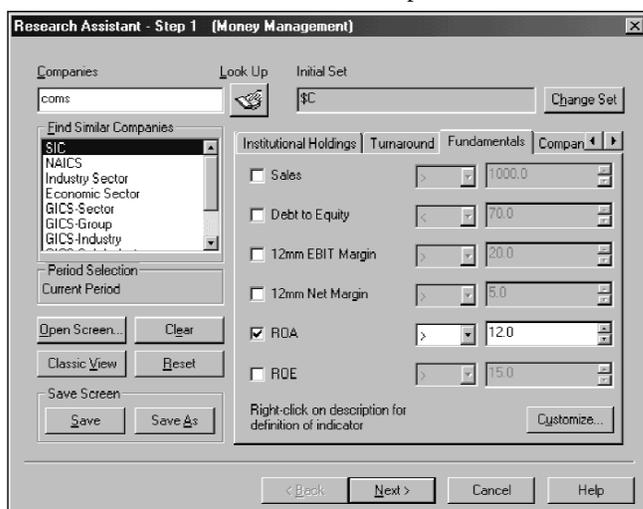
4. Select the **Fundamentals** tab and click the **ROA** (Return on Assets) check box.
5. Ensure **>** is selected from the drop-down list to the right and enter **12.0** in the far right field.

6.   Click **Next**. Research Insight will screen the North America database and the results will appear on the Research Assistant - Step 2 window.
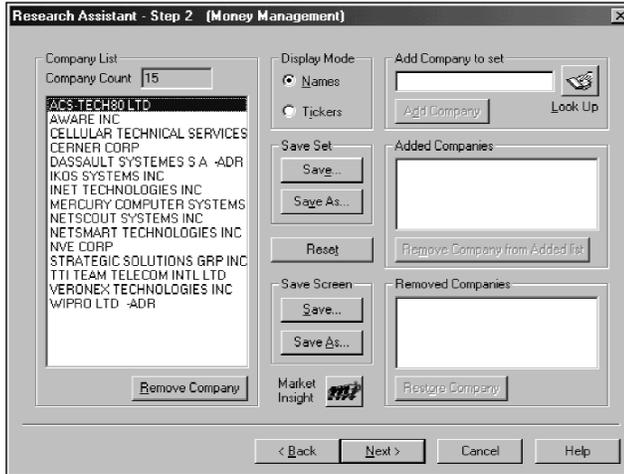
Let's take a closer look at these companies by viewing their 5 Year Annual Balance Sheet reports.

7.   Click **Next** to open the Research Assistant - Step 3 window.
8.   Click the **Open Report** radio button and click **Next** to open the File Open window.
9.   Select the **Annual Balance Sheet - 5 Years** report and click **Finish**.
     You'll see the report for the first company in your set.

To view the same report for other companies in this set, click the **Next** or **Prev** button. Or you can press **F7** to move ahead or **F8** to move backward through the list of companies.

Hint: Click the **Name** button to display the list of companies by company name.

Changing Your Initial Set and
Defining Multiple Criteria and Ranges

When you screen the COMPUSTAT (North America) database, Research Insight searches against a subset of the total population to find the companies that meet your criteria. This subset is called the initial set. Research Insight pre-defined sets contain groups of companies, issues or business segments. Sets are identified by the dollar sign ($) followed by an abbreviation. Examples of sets in COMPUSTAT (North America) include $C—the active U.S. companies and $SP_500—all companies in the S&P 500. A complete list of available sets can be found in the Look Up list under the Sets tab. The default set is $C (the Active U.S. companies). You can change the initial set to any pre-defined set or create your own set by saving your screen results.

Now let's say you want to search for companies in the S&P 500 with a price/earnings ratio between 25 and 30 and a year-to-date return of more than 15%.

Begin from the Research Assistant - Step 1 window.

1. Click **Change Set** to display the Initial Set dialog box.
2. Enter **$SP_500** in the **Set** field and click **OK**.

Hint: If you don't know the name of a specific set, click the **Look Up** button, select a set, click **Paste**, then click **Close**. The set name will be inserted in the **Set** field.

3. Select the **Valuation** tab and click the **Price to Earnings** check box.
4. Select **Range** from the drop-down list to the right.
   The Edit Range Values dialog box appears.
5. Enter **25.00** in the **Start of Range** field, **30.00** in the **End of Range** field, and click **OK**.

6. Select the **Returns** tab and click the **YTD** Return check box.
7. Select **>** (greater than) from the drop-down list to the right and enter **15** in the far right field.

8. Click **Next**.
    Research Insight will screen the North America database, and the results will appear on
   the Research Assistant - Step 2 window.
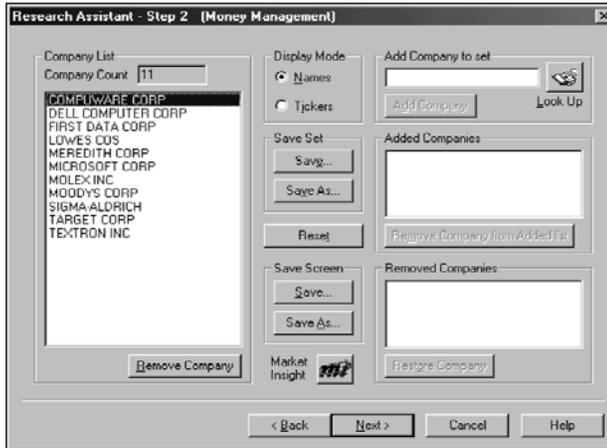
Assuming you are satisfied with the results, we will now save the screen.

Hint: Saving the screen allows you to run the screen in the future using your defined criteria
and formulating an up-to-date set. Or, you can save the original companies in the set by
clicking the **Save** button in the Save Set area.

To save your screen

1. Click **Save As** in the Save Screen area.
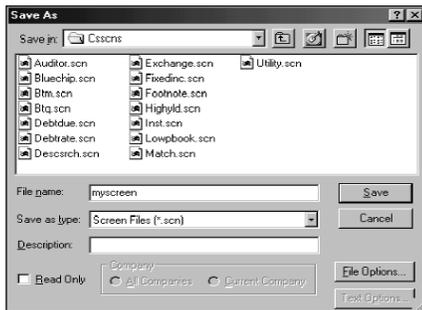
2. Select a location to save your screen. We will save ours in Research Insight/Csscns (the
    default location).
3. Enter a screen name in the **File Name** field and click **Save**.
    The screen is now saved for use in future analyses.

Customizing Screening Criteria

Research Insight offers the ultimate in flexibility by allowing you to customize your default screening criteria. The following example shows how you can customize the Research Assistant to meet your specific needs.

Note: Customizing your criteria will cancel your existing screening selections.

Let's say you want to screen the COMPUSTAT (North America) database for active companies with GICS Codes 35102010 through 35102030.
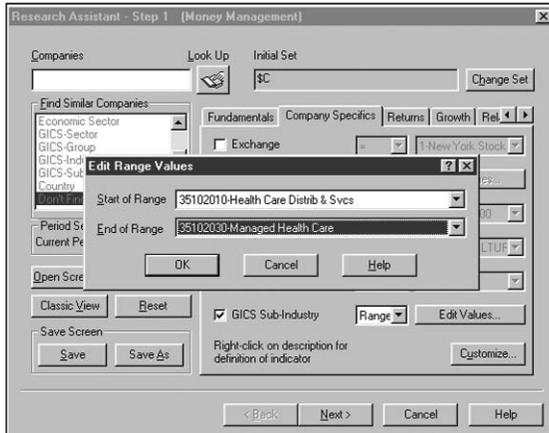
Begin from the Research Assistant - Step 1 window.

1. Click **Customize** to display the Custom Indicator Groups dialog box.
2. Under Indicator Groups, highlight the **Company Specifics** group.
3. Under Indicator Items, check the **GICS Sub-Industry** check box.
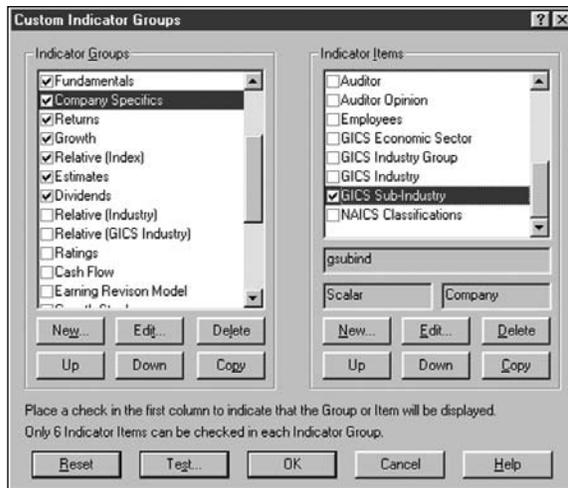
4. Click **OK**, and select whether or not you want to make the customization changes permanent.
5. Select the **Company Specifics** tab and click the **Industry Sector Code** check box.
6. Select **Range** from the drop-down list to the right.

7. Select **35102010-Health Care Distrib & Services** from the **Start of Range** drop-down list, **35102030-Managed Health Care** from the **End of Range** drop-down list and click OK.

8. Click **Next**. Research Insight will screen the North America database and the results will appear on the Research Assistant - Step 2 window. From this window you can add or remove ticker symbols, save your set, save your screen or continue to the next window and use your set in a report or chart.
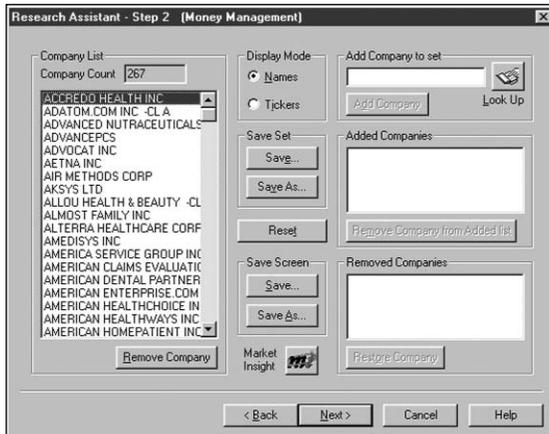
Accessing the Classic View of a Screen

To access the Classic View window, click the **Classic View** button on the Research Assistant - Step 1 window. The Classic View window allows you to view and modify the underlying Base Set and Formulas used in developing screens in the Research Assistant. However, if you make modifications in this window you **cannot** return to the first Research Assistant window.

You can also work in the Classic View window to develop and run your own customized screens by inserting various formulas.

The following example uses the Research Assistant - Step 1 - Classic View window to find all active companies that have a Market Value greater than $1 billion and a monthly P/E less than 18.
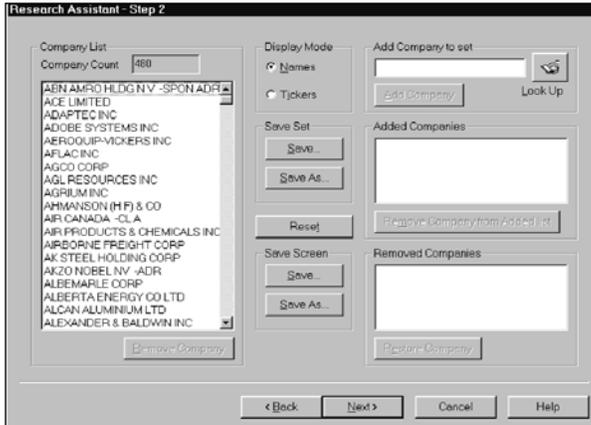
Begin from the Research Assistant - Step 1 window.

1. Click **Classic View**.
2. Select the **Base Set** cell in the first row, enter **$C** in the command line and press **Enter**.

3. Select the **Set** cell in the same row, enter **line1** in the command line and press **Enter**.
4. Select the **Base Set** cell in the second row, enter **$line1** in the command line and press **Enter**.
5. Select the **Formula** cell in the same row, enter **mkvalm>1000** in the command line and press **Enter**.
6. Select the **Set** cell in the same row, enter **line2** in the command line and press **Enter**.
7. Select the **Base Set** cell in the third row, enter **$Line2** in the command line and press **Enter**.
8. Select the **Formula** cell in the same row, enter **pem<18** in the command line and press **Enter**.
9. Click **Run**. Research Insight will screen the North America database and display the number of companies that passed the criteria in the **Passed** column.

10. Click **Next** to view the set of companies in the Research Assistant - Step 2 window. From this window you can add or remove tickers, save your set, save your screen or continue to the next window and use your set in a report or chart.

Exercises

You can practice using the Research Assistant by recreating the following scenarios.

I. Identify companies that have had 5 consecutive years of sales increases.
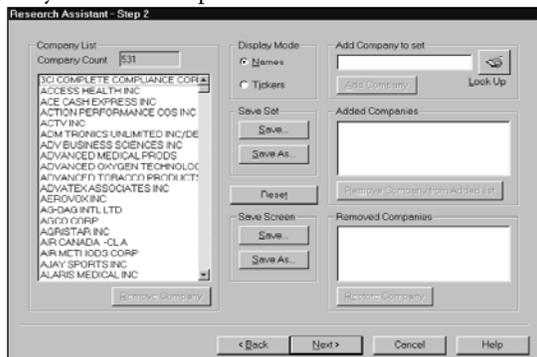
Begin from the Research Assistant - Step 1 window.

1.   Select the **Growth** tab and click the **No.Yrs. Sales Increase** check box.

Note: If the tab or check box is not available, refer to page 81 - Customizing Screening Criteria.

2.   Select **=** from the drop-down list to the right, and enter **5** in the far right field.

3.   Click **Next**. Research Insight will screen the North America database and the results will appear on the Research Assistant - Step 2 window. From this window you can add or remove ticker symbols, save your set, save your screen or continue to the next window and use your set in a report or chart.

II. Identify companies in the S&P Super Composite whose price/earnings ratio is greater than its industry average.

Begin from the Research Assistant - Step 1 window.

1. Click **Change Set** to display the Initial Set dialog box.
2. Enter **$SP_Super** in the **Set** field and click **OK**.

Hint: If you don't know the name of a specific set, click the **Look Up** button, select a set, click **Paste**, then click **Close**. The set name will be inserted in the **Set** field.

3. Click **Customize** to display the Custom Indicator Groups box.
4. Under Indicator Groups, highlight the **Relative (Industry)** group.
5. Under Indicator Items, select the **Relative PE** check box.
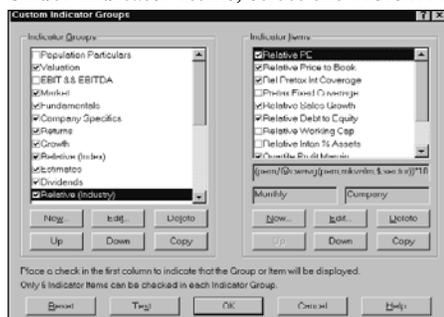
6. Click **OK** and select whether or not you want to make the customization changes permanent.
7. Select the **Relative (Industry)** tab and click the **Relative PE** check box.
8. Select **>** from the drop-down list to the right.

9. Click **Next**. The results of your inquiry will appear on the Research Assistant - Step 2 window.
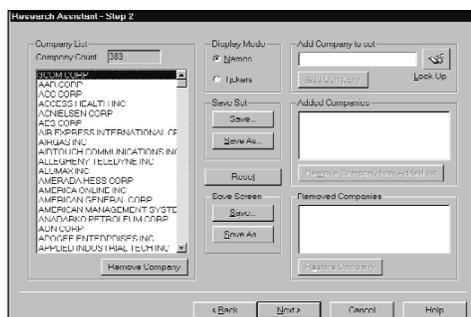
III. Screen the North America database to identify mid-cap companies* with a price-to-book ratio of less than 1.5% and an earnings per share of more than 10% over the past three years.

* Criteria defining mid-cap companies vary widely. In this example, we will define mid-cap companies as those that have a monthly market value between $39 million and $2.786 billion.

Begin from the Research Assistant - Step 1 window.

1. Click **Customize** to display the Custom Indicators dialog box.
2. Highlight **Growth** from the Indicator Groups and select the **EPS 3yr CAGR** check box under the Indicator Items.

Hint: Only 6 items can be activated at one time for each group. Simply click the check box next to an item to remove the check mark in it.

3. Click **OK** and select whether or not you want to make the Customization changes permanent.
4. Select the **Growth** tab, click the **EPS 3yr CAGR** check box, select **>** from the drop-down list to the right and enter **10** in the far right field.
5. Select the **Valuation** tab, click the **Market Value** check box and select **Range** from the drop-down list to the right. The **Edit Range Values** dialog box appears.
6. Enter **39** in the **Start of Range** field, **2786** in the **End of Range** field and click **OK**.
7. Click the **Price to Book** check box, select **<** from the drop-down list to the right, enter **1.5** in the far right field and click **Next**.
   Research Insight will screen the North America database, and the results will appear on the Research Assistant - Step 2 window.
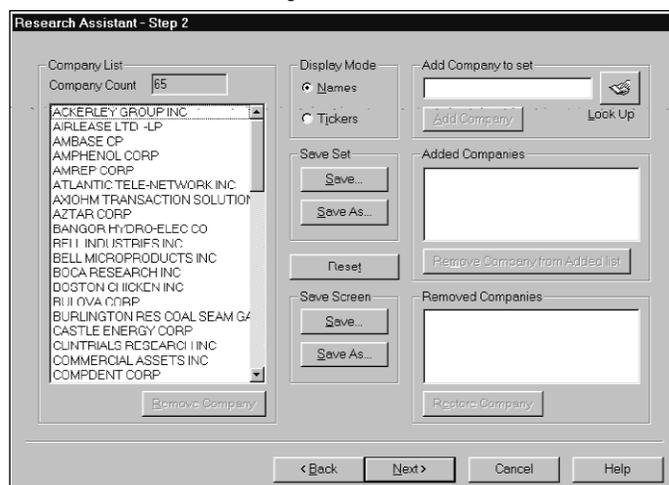
## IV. Identify value or growth stocks.

First, follow the instructions in Chapter 11 - Importing and Downloading, to download the Value-Added Data including the Value/Growth Indicator.

Next, to identify Growth/Value stocks, begin from the Research Assistant - Step 1 window.

1. Click **Customize**.
2. Under Indicator Groups, click **New** to display the **Create Indicator Group** dialog box.
3. Enter **Custom** in the **Group Name** field and click **OK**.

4. Under Indicator Items, click **New** to display the Indicator Item Definition dialog box.
5. Click the (**Look Up**) button to display the Look Up List.
6. Enter **Value/Growth** in the **Select Items** field. The **Value/Growth - Indicator** item will automatically be highlighted.
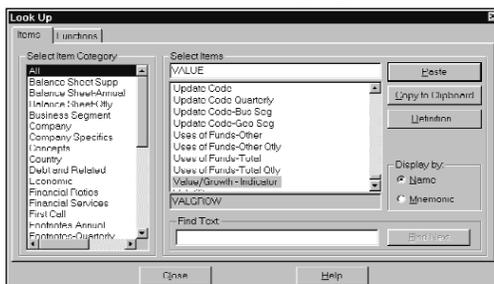
7. Click **Paste**, then click **Close.** The mnemonic **VALGROW** will automatically be inserted into the Expression field.
8. Click **Accept Expression**.
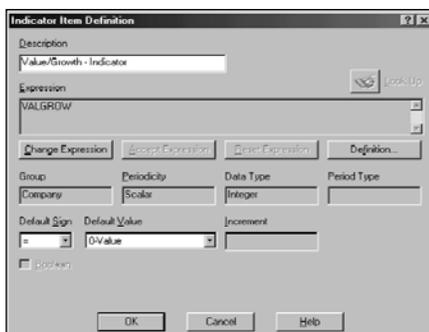
9. Click **OK**. You will see the new item **Value/Growth** in the Indicator Items area of the Custom Indicator Groups dialog box.
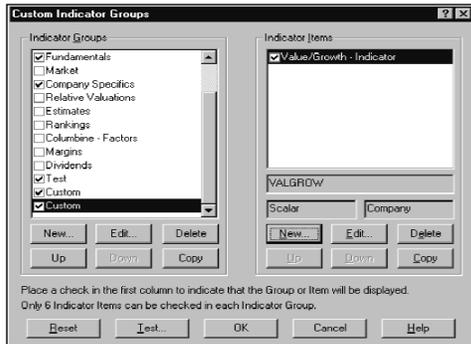
10. Click **OK** again and select whether or not you want to make the Customization changes permanent.
11. Select the **Custom** tab and click the **Value/Growth** Check box. If you want to view Value companies, select **0-Value** from the far right drop-down list.

12. Click **Next** to display the results.
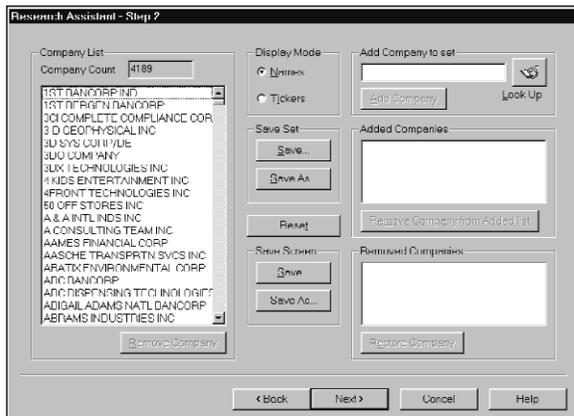
From this window you can add or remove tickers, save your set, save your screen or continue to the next window and use your set in a report or chart.

Chapter 4
Reports

Standard & Poor's Research Insight is your best resource to quickly access detailed financial information on thousands of companies around the world. You will find dozens of pre-defined reports in Research Insight, including the most commonly used income statement and balance sheet reports or design and build your own using our unique Report Assistant wizard. With the Research Assistant, you can also create a free-form report selecting the data you want to display and customizing the layout to your own specifications.

This chapter shows you how to

- run a Company Highlights report

- run a pre-defined report for one or more companies

- modify a pre-defined report

- create a table report using the Report Assistant

- create a free-form report using the Report Assistant

Note: The procedures in this chapter use the Money Management default style. To change your style to Money Management, select **Options** from the **Tools** menu, select the **Style** tab, select the **Money Management** style and click **Set Active Style**.

Running a Company Highlights Report

First, we'll show you how easy it is view financial highlights for a company. Here's how you run a Company Highlights report for Wm. Wrigley Jr. Company.

Begin from the Research Insight desktop.

1. Click the [icon] (**Company Highlights**) button. The Run Assistant window will appear on top of the Company Highlights report window. The Run Assistant is similar to the Research Assistant window.
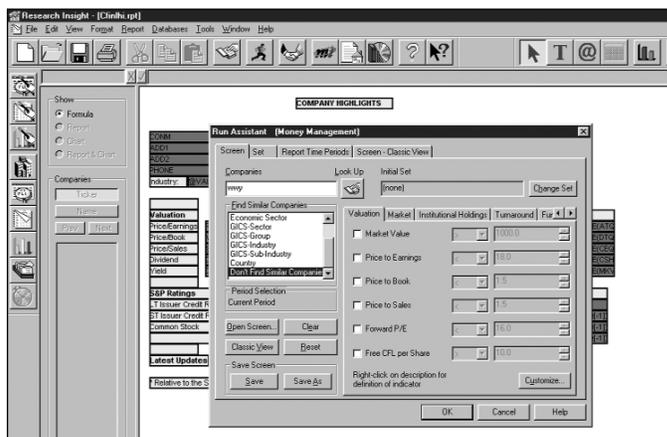
2. Enter the ticker symbol for Wrigley (**wwy**) in the **Companies** field and click **OK**. A Company Highlights report will appear.
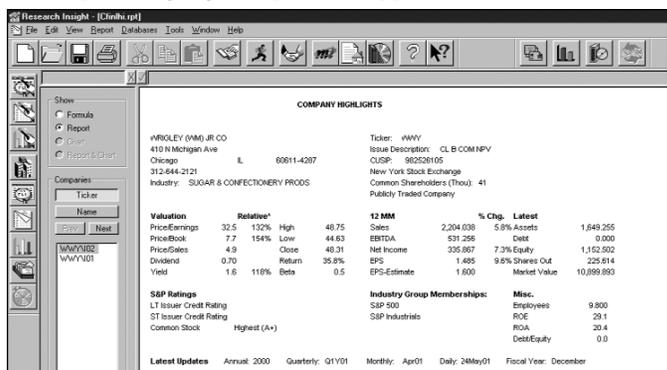

Hint: Click the [icon] (**Run**) button to open the Run Assistant window where you can change your initial set, or modify your base set and criteria. To view a Business Description or Trends and Projections report for the company, click the [icon] (**View Text**) button.

Running a Pre-defined Report

With just a few clicks of the mouse, you can open and run a pre-defined report and choose the company or set of companies that you want to appear in the report. For example, to view a 5 Year Annual Balance Sheet on Exxon Mobil Corporation, follow the steps below.

Begin from the Research Insight desktop.

1. Click the 📉 (**Open Report**) button.
    You will see the File Open dialog box
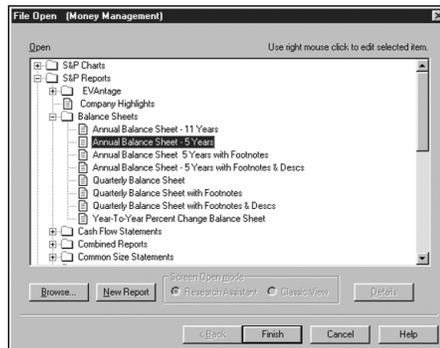
2. From the **Balance Sheets** folder select **Annual Balance Sheet-5 Years** and click **Finish**.
    You will see the Run Assistant window.
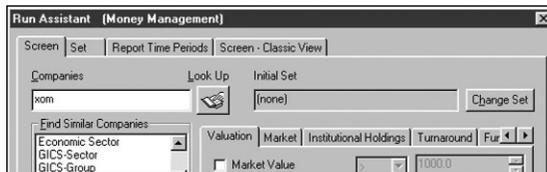
3. Enter the ticker symbol **xom** (Exxon Mobil) in the **Companies** field.

    Hint: To find a company's ticker symbol, click the 🖑 (**Look Up**) button.

4. Click OK. The 5 Year Annual Balance Sheet for Exxon Mobil will appear on your screen

Hint: To modify, add or view the underlying formulas for this report, select the **Formula** radio button in the Show area. To open another report, click the [icon] (**Open Report**) button from the desktop. To change your initial set or modify your base set and criteria, click the [icon] (**Run**) button to open the Run Assistant window. To view a Business Description or Trends and Projections report for the company, click the [icon] (**View Text**) button.

Running a Pre-defined Report on Multiple Companies

Now let's say you wanted to look at a 5 Year Annual Balance Sheet on several of Exxon Mobil Corporation's peers: Chevron Corporation and Texaco Incorporated. You would follow steps 1 and 2 on the previous page.

1. Enter the ticker symbols of the peer companies in the **Companies** field, separating each ticker symbol with a comma (i.e. **chv, tx**).
2. Click **OK**. A 5 Year Annual Balance Sheet report will appear for the first company.

Hint: To view the report for the other companies, click the ticker symbol of the company in the Companies area. Click the **Name** button to display the list of companies by name. To view a Business Description or Trends & Projections report for the company, click the [icon] (**View Text**) button.

Modifying a Pre-defined Report

To demonstrate how easy it is to modify a pre-defined report, here is how you could change the title of the 5 Year Annual Balance Sheet report you ran in the previous example.

Begin with the report displayed on your screen.

1. Click the **Formula** radio button in the Show box.
    The underlying formulas for the report are displayed.

2. Click the **Annual Balance Sheet** text box.
3. Place your cursor in the upper command line, change **ANNUAL BALANCE SHEET** to **PEER BALANCE SHEET** and press **Enter**.
    The new title will appear in the text box.

4. Click the 🏃 (**Run**) button.
    The Run Assistant window displays with the tickers **CHV** and **TX** in the Companies field.
5. Click **OK**.
    The new title will appear in the report on your screen.

Creating a Table Report

Although Research Insight offers a comprehensive library of pre-formatted reports, there will be many instances when you want to create your own table report. In a table report, data is displayed in rows and columns, and titles are automatically provided for each column. Table reports are useful when you need to display information for a large number of companies at the same time.

Let's say you want to prepare a table report that compares data for Arnold Palmer Golf Co., Black Rock Golf Co., Callaway Golf Co., and S2 Golf Inc.

Begin from the Research Insight desktop.

1. Click the ▨ (**Report Assistant**) button.
2. Click the **Items vs. Companies** radio button under Current Time Period.

Report Assistant - Step 1 (Money Management)

Current Time Period
- Items vs Companies
- Companies vs Items

Historical Analysis
- Items vs Companies
- Items vs Time For a Company
- Time vs Items For a Company

Blank Report

Company Count

EXAMPLE

Company Name	Mrkt Value-Mthly	Price to Earnings	Price to Sales
Houghton Mifflin	1,114.296	22.713	1.410
McGraw-Hill Co	6,775.262	12.864	1.956
Readers Digest	2,544.813	62.992	0.923
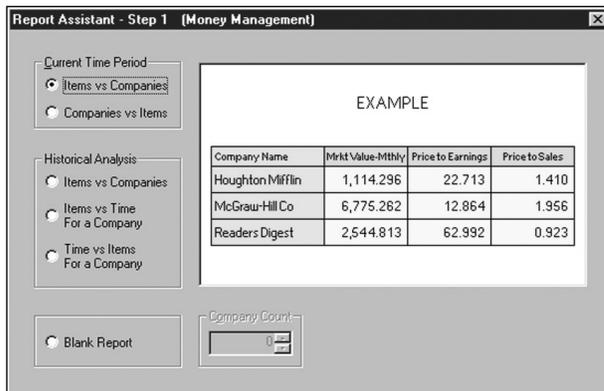
3. Click **Next**.
4. Click the **Valuation** radio button and select the **Return on Equity** item.
5. Click **Add**.
6. Click the **Income - Annual** radio button and select the **Sales** item.
7. Click **Add**.
8. Click the **EPS & Shares** radio button and select the **EPS Basic Exc Extra** item.
9. Click **Add**.

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.
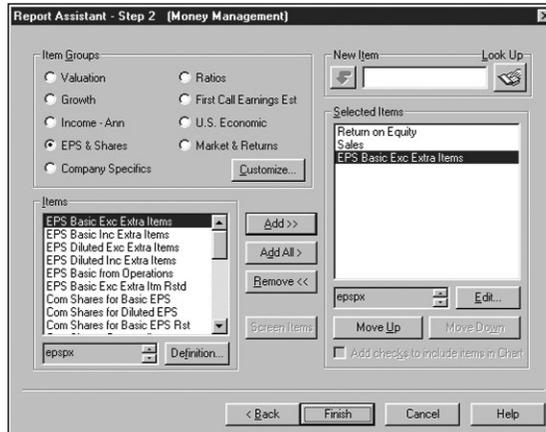
10. Click **Finish**.

11. In the Run Assistant window, enter your target companies' ticker symbols, separating each ticker symbol with a comma. (**3apgc,3blrk,ely,golf**).

12. Click **OK**. Your table report will appear on the screen.

Hint: Once you have run the report, you may need to expand some of the columns in order to see the whole column title. To access the underlying template for your table report, click the **Formula** radio button in the Show area of the window. Click on one of the column title cells to activate it, and place the cursor in the bottom right hand corner of the cell. The cursor will change to a crossbar tool. Hold the left mouse button down and drag the corner of the cell to the right to expand it so that the entire title is visible. Click the ⚡ (**Run**) button and click **OK** in the Run Assistant window to re-run the report with your modifications. To rerun the report with different data items, click the 🖐 (**Rerun Assistant**) button or select Rerun Report/Chart Assistant from the Report menu.

Sorting Columns in a Table Report

Sorting determines the order in which companies are displayed in your table. Research Insight automatically displays the companies alphabetically by name. If you prefer, you can sort the companies by values in any column in either ascending or descending order. We'll use the table report created in the previous example and sort the report by company name in descending order.

Begin from the table report.

1. Click the **Formula** radio button in the Show box to display the underlying template for the report.
2. Select the **Company Name** cell and right-click the mouse.
3. Select **Sort Order** from the drop-down list.
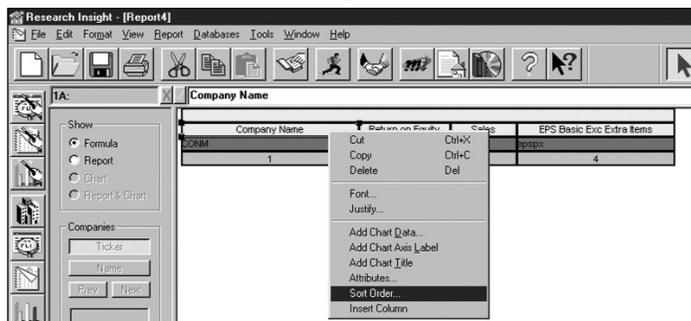
You will see the Table Sort Order Selection dialog box.
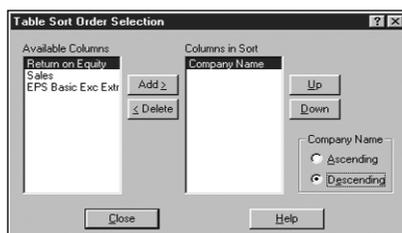
4. **Company Name** is already highlighted in the Columns in Sort list box, so simply click the **Descending** radio button and then click **Close**.
5. Click the ![Run icon] (**Run**) button.
   The Run Assistant window displays with the tickers **3apgc,3blrk,ely** and **golf** in the **Companies** field. Click **OK**.
   The report now displays by company name in descending order.

Company Name	Return on Equity	Sales	EPS Basic Exc Extra Items
S2 GOLF INC	3.252	12.510	0.100
PALMER (ARNOLD) GOLF CO	55.840	21.893	-5.010
CALLAWAY GOLF CO	16.015	837.627	1.170
BLACK ROCK GOLF CORP	-254.147	6.884	-0.850

Creating an Historical Analysis Table Report

In addition to viewing current reports, Research Insight lets you build and view reports using historical data. Now we will view data for the same companies from our previous example for the last 3 years.

Begin from the Research Insight desktop.

1. Click **Report Assistant**.
2. Under Historical Analysis, click the **Items vs. Companies** radio button and click **Next**.
3. Repeat steps 4–9 from the example on pages 54–55 - Creating a Table Report.
4. Click **Next**.
5. When the Report Assistant - Step 3 dialog box appears, click the **Relative** radio button.
6. Enter **0Y** in the **Beginning Period** field (to signify the current year), and enter -**2Y** in the **Ending Period** field (to signify 2 prior years). Notice that the Alignment area shows that the data will be aligned to annual.

7. Click **Finish**.
8. In the Run Assistant window, enter your ticker symbols, separating each symbol with a comma. (**3apgc,3blrk,ely,golf**).
9. Click **OK**. Your table report will appear on the screen.

Company Name	Return on Equity[0Y]	Return on Equity[-1Y]	Return on Equity[-2Y]	Sales[0Y]	Sales[-1Y]	Sales[-2Y]
BLACK ROCK GOLF CORP	-254.147	-49.036	-29.583	6.884	8.924	4.988
CALLAWAY GOLF CO	16.015	11.066	-5.863	837.627	714.471	697.621
PALMER (ARNOLD) GOLF CO	55.840	92.396	@NA	21.893	28.454	@NA
S2 GOLF INC	3.252	7.183	11.159	12.510	11.004	11.505

Selecting Time Periods

When you select a Current Time Period report on the Report Assistant - Step 1 window, it will return a report with the most current data available—whether the data you have requested is annual, quarterly, monthly, etc.

If you choose an Historical Analysis report in the Report Assistant - Step 1 window, you will be prompted to select a time period on the Run Assistant - Step 3 window. You can enter the beginning and ending time periods for the report in the Periods section of the window

Relative retrieves data for a specific time period relative to the current time period. An example of a relative time period would be the current year (0Y) vs. the past two years (-1Y and -2Y). **Absolute** retrieves data for a specific date. An example of an absolute time reference would be to use a beginning period of August 2000 and an ending period of December 2000. **Calendar** retrieves data for the same approximate time frame for companies with different fiscal years.

Creating a Free-Form Report

In addition to table reports, Research Insight lets you create your own free-form reports, which can be helpful for displaying information about companies, industries or sectors in a format customized to your specific needs.

For instance, here is how you could use a free-form report to evaluate the relative performance of Coca-Cola Company and Pepsico Inc.

Begin from the Report Assistant.

1.   Click the **Blank Report** radio button and click **Finish**.
2.   From the Toolbar, click the [T] (**Add Text**) tool. You will see the letter **T** attached to your cursor.
3.   Position your cursor at the top center of the blank report and click once.
    You will see a new text cell that you will use as a label for your report title.
4.   Click the text cell, enter **Quick Prices** and press **Enter**. Now that you have named the report, you will insert more text cells. Notice that you can place your text cells anywhere on the desktop.

5. Click the ⊤ (**Add Text**) tool again and position your cursor below and to the left of your report title. Click once to create the first text cell. Position the cursor below the cell and create another text cell. Repeat until you have a vertical column of four text cells.
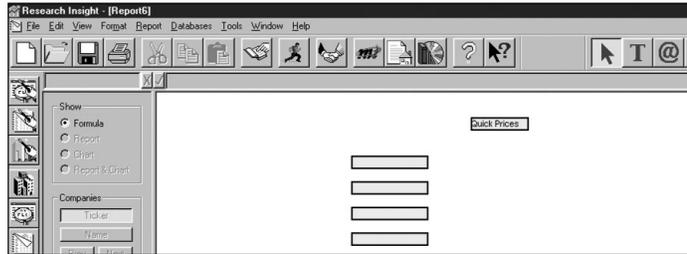
6. Enter **Company Name** in the first text cell and press **Enter**.
7. Enter the following into the next three text cells: **Total Return/S&P 500**, **PE/S&P 500** and **Price/S&P 500 - Monthly**.
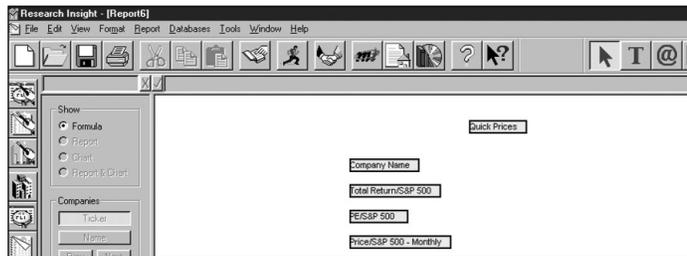
8. Click the @ (**Add Formula**) tool. You will see an **@** symbol attached to your cursor.
9. Position your cursor to the right of your text cells and click once to create the first formula cell. Position the cursor below the cell to create another formula cell. Continue until you have a vertical column of four formula cells next to your text cells.
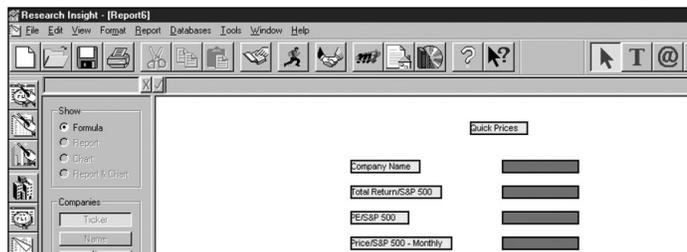
10. Click on the first formula cell, enter **conm** (Company Name) and press **Enter**. The item **conm** will display the full names of your target companies.

11. Enter the following into the next three formula cells: **trt5y500**, **pe500** and **pr500m**.
12. Click the Run (**Run**) button.
    You will see the Run Assistant window.
13. Enter your target companies' ticker symbols in the **Companies** field (**ko,pep**),
    separating each symbol with a comma.
14. Click **OK**.
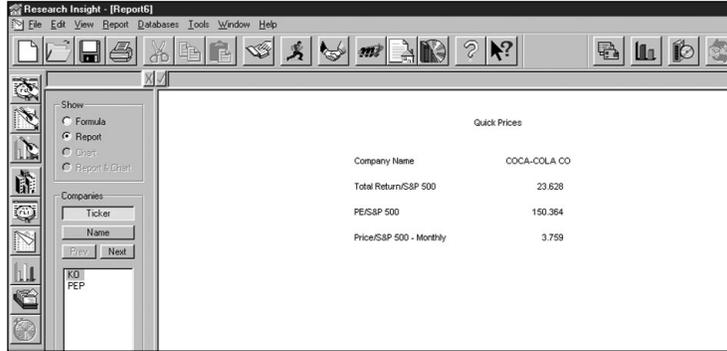
Hint: To view the report for the other company, click the **Next** button, or click the ticker
symbol or company name in the Companies area. To view a Business Description
or Trends and Projections report for the company, click the View Text (**View Text**) button.
To change your initial set or modify your base set and screening criteria, click the
Run (**Run**) button to open the Run Assistant window.

Exercises

You can learn more about the Report functions in Research Insight by recreating the following scenarios using the Research and Report Assistants.

I. Create a table report showing current Sales and P/E Monthly for all the companies in the S&P 100.

Begin from the Research Assistant - Step 1 window.

1. Click **Change Set** to display the Initial Set dialog box.
2. Enter **$SP_100** in the **Set** field and click **OK**.
3. Click **Next**. You will see the names of the companies included in the S&P 100.
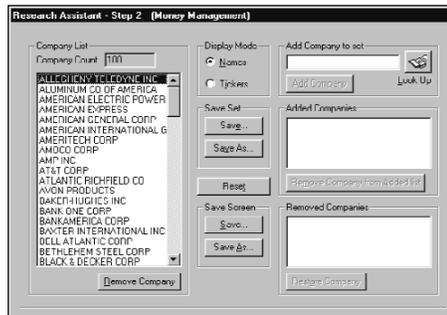
4. Click **Next** again.
5. Click the **Report Assistant** radio button and click **Next.**
6. Click the **Items vs. Companies** radio button under Current Time Period and click **Next.**
7. Click the **Valuation** radio button, select **Price/Earnings - Monthly** and click **Add.**
8. Click the **Income - Ann** radio button, select the **Sales** item and click **Add**.
9. Click **Finish**. Your report will appear on the screen.

II. Create a table report showing current Sales and P/E Monthly for all the companies in the S&P 500 for the past three years, and modify the report to display subtotals by SIC Code.

Begin from the Research Assistant - Step 1 window:

1. Click **Change Set** to display the Initial Set dialog box.
2. Enter **$SP_500** in the **Set** field and click **OK**.
3. Click **Next**. You will see the names of the companies in the S&P 500 on your screen.
4. Click **Next** again.
5. Click the **Report Assistant** radio button and click **Next.**
6. Click the **Items vs. Companies** radio button under Historical Analysis and click **Next.**
7. Click the **Valuation** radio button, select the **Price/Earnings - Monthly** item and click **Add.**
8. Click the **Income - Ann** radio button, select the **Sales** item and click **Add**.
9. Click **Next.**

You will see the Report Assistant - Step 3 window.
10. Enter **0Y** in the **Beginning Period** field (to signify the current year), and **-3Y** in the **Ending Period** field (to signify 3 prior years). Notice that the Alignment area shows that the data will be aligned to annual.
11. Click **Finish.** Your report will appear on the screen.

12. Click the **Formula** radio button. You will see the underlying formula for your report.

13. Right-click the **Earnings-Month** text cell and select **Insert Column** from the drop-down menu.

14. Click the blank formula cell below the **Column** text cell, enter **SIC** and press **Enter**.

15. Double-click the **SIC** formula cell.
    You will see the Column Attributes dialog box.
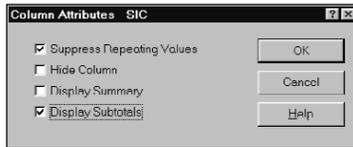
16. Click the **Display Subtotals** check box. Note that the **Suppress Repeating Values** box is automatically checked.
17. Click **OK**.
18. Click the [Run] (**Run**) button to re-run your report with your changes.
19. In the Report Assistant window, click **OK**. Your new report will appear on the screen.

III. Create a report comparing sales, research and development expenditures and total return to shareholders of competitors Ford Motor Co., Honda Motor Ltd. and General Motors Corp. over a five-year period.

Begin from the Report Assistant

1. Click **Blank Report**.
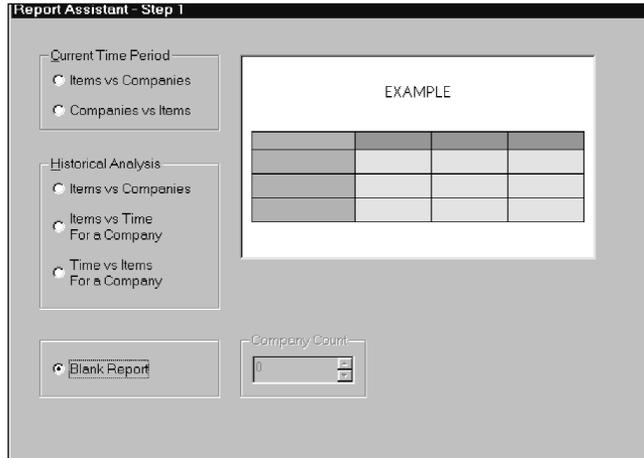
2. Click **Finish**.
    You will see a blank report on your screen.
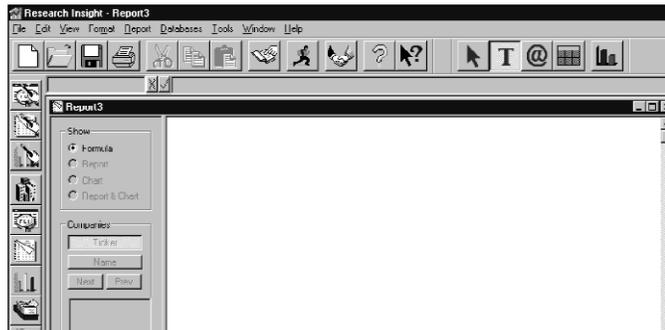
3. From the Report Toolbar, click the [T] (**Add Text**) tool.
4. Position your cursor at the top center of the blank report and click once.
    You will see a new text cell that you will use as a label for your report title.
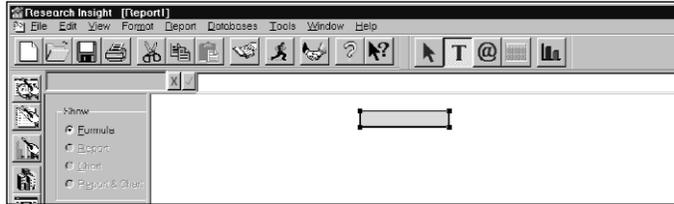
5. Click the ▶ (**Select**) tool, click on the text cell, enter **5-Year Performance** and press **Enter**.

6. Click the **T** (**Add Text**) tool again, and position your cursor below and to the left of your report title. Click once to create the first text cell. Position your cursor below the cell and create another text cell. Repeat until you have a vertical column of four text cells.
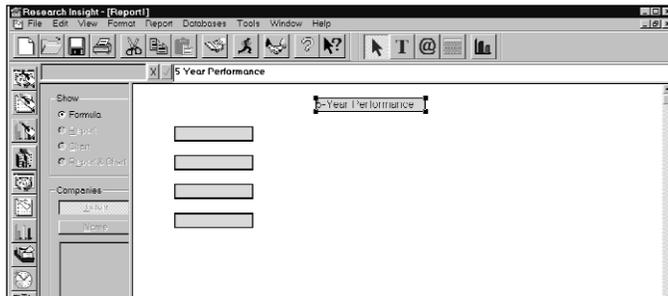
7. Enter **Company Name** in the first text cell and press **Enter**.

8. Enter the following into the next three text cells: **Sales**, **R&D**, and **5 Year Return**.
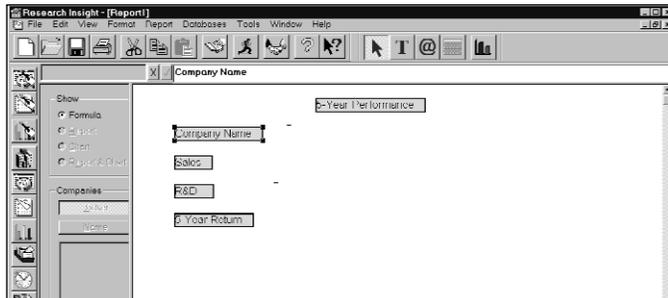
9. Now, click the **@** (**Add Formula**) tool. You will see an **@** symbol attached to your cursor.

10. Position your cursor to the right of your text cells and click once to create the first formula cell. Move the cursor down to create another formula cell. Continue until you have a vertical column of four formula cells.
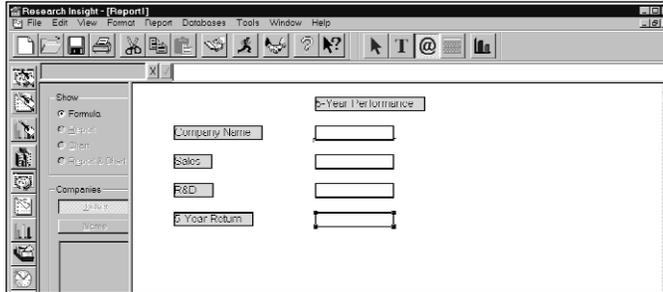
11. Click on the first formula cell, enter **conm**, and press **Enter**. The item **conm** will display the full names of your target companies.

12. Enter the following into the next three formula cells: **@pavg(sale,-5,0)**, **@pavg(xrd,-5,0)** and **trt5y**.
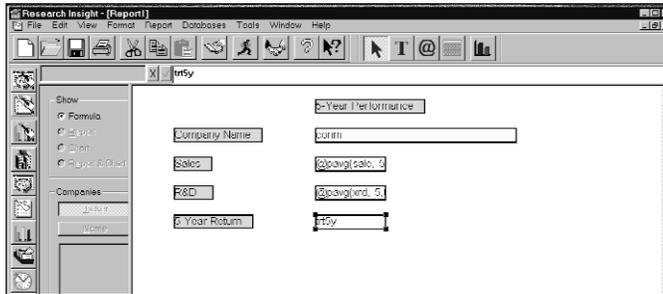
13. Click the [icon] (**Run**) button.

14. In the first Research Assistant window, enter your target companies' ticker symbols (**f,hmc,gm**) separating each symbol with a comma. Click **OK**.
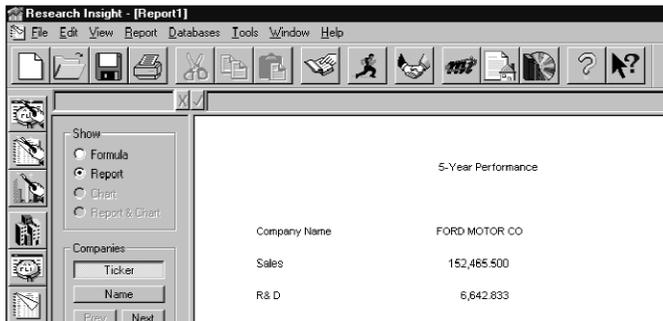
Hint: To move between reports for the other companies, click the ticker symbol or company name in the Companies area.

Chapter 5
Charts

Charts not only make your information easier to read and understand, but they can also help you identify trends, make comparisons and clarify relationships that may not otherwise be apparent.

Standard & Poor's Research Insight provides you with an extensive collection of pre-defined charts to help you bring your financial analysis to life. This collection includes the most commonly used charts for both the COMPUSTAT (North America) and COMPUSTAT (Global) databases. We've made it easy for you to modify these charts by changing the chart style, colors and axis labels. You can also add titles, change fonts and customize the legend.

Research Insight also gives you the flexibility to create your own charts. With just a few clicks of the mouse, you can select the data you want to display and design a chart to your own unique specifications.

This chapter shows you how to

- use pre-defined charts

- modify pre-defined charts

- create your own charts

Note: The procedures in this chapter use the Money Management default style. To change your style to Money Management, select **Options** from the **Tools** menu, select the **Style** tab, select the **Money Management** style and click **Set Active Style**.

Using Pre-defined Charts

Research Insight gives you the flexibility to evaluate your target companies using a variety of pre-defined charts. Here is how to run a 5 Year Total Return to Shareholders chart for Merck & Co.

Begin from the Research Insight desktop.

1. Click the ▐▌▐ (**Open Chart**) button.
   You will see the File Open dialog box.
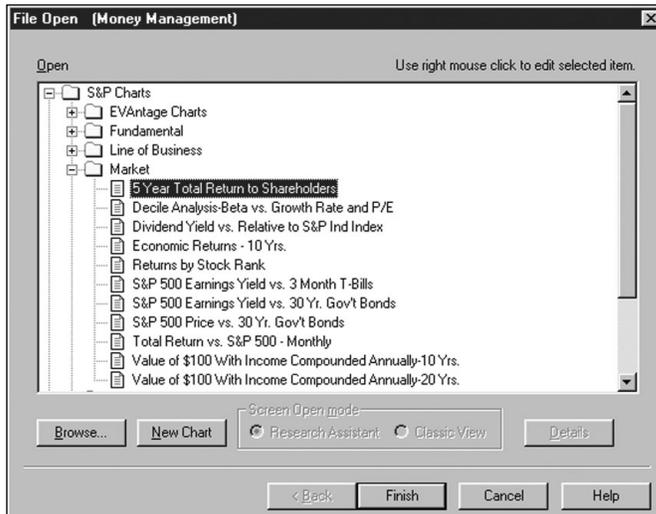
2. Open the **Market** folder, and select **5 Year Total Return to Shareholders**.
3. Click **Finish**.
   You will see the Run Assistant window.
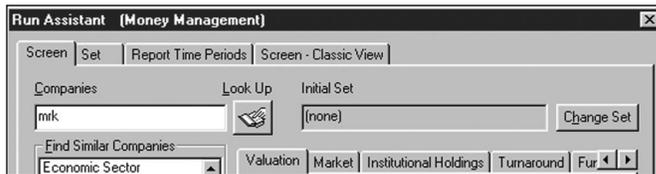
4. Enter the ticker symbol **mrk** (Merck & Co.) in the **Companies** field and click **OK**.

A 5 Year Total Return to Shareholders chart appears for the company.
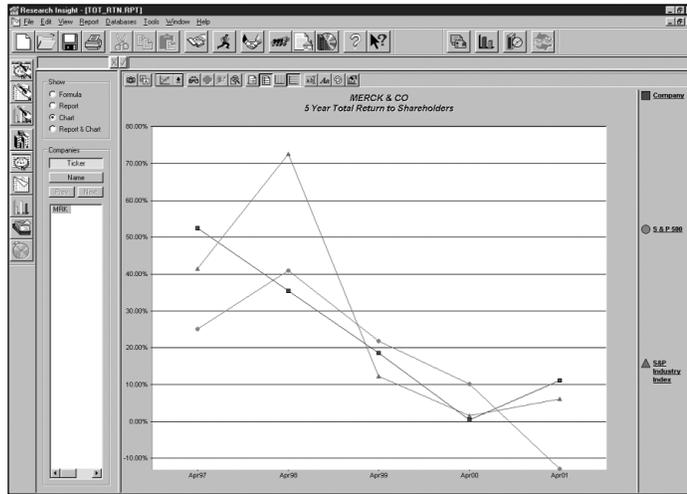
Hint: To view the underlying formulas for the corresponding report, select the **Formula** radio button in the Show area. To view the corresponding report for this chart, click the **Report** radio button. You can also view the report and chart at the same time by clicking the **Report & Chart** radio button. To open another chart, click the ▦ (**Open Chart**) icon on the desktop. To change your initial set or modify your base set and criteria, click the 🏃 (**Run**) button.

Running a Pre-defined Chart for Multiple Companies

Now let's say you want to look at a 5 Year Total Return to Shareholders chart on companies in the S&P 500 with the same SIC Code as Merck & Co. Follow the steps in the previous example, except in the Run Assistant window

1. Enter **mrk** in the **Companies** field.
2. Highlight **SIC** in the Find Similar Companies list.
3. Click **Change Set** to display the Initial Set dialog box.
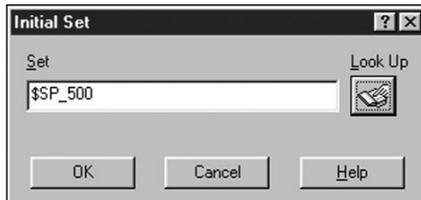
4. Enter **$SP_500** in the **Set** field and click **OK**.

Hint: If you don't know the name of a specific set, click the **Look Up** button, select a set, click **Paste**, then click **Close**. The set name will be inserted in the **Set** field.

5. Click **OK** again. A 5 Year Total Return to Shareholders chart appears for the first company.
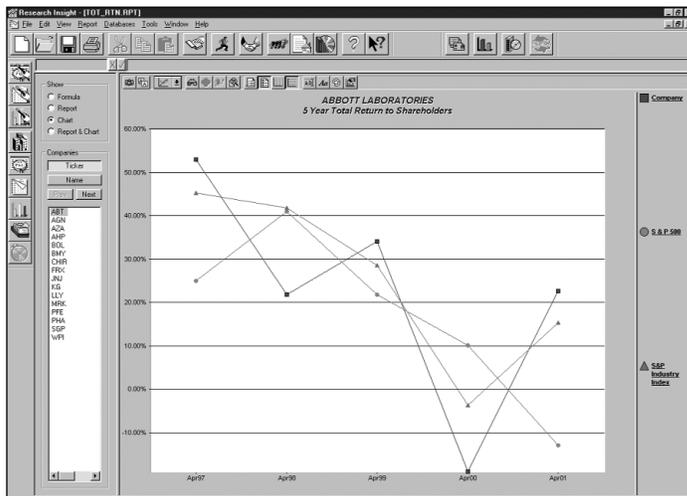
Hint: To view this chart for the other companies, click the ticker symbol of the company located in the Companies area. Click the **Name** button to display the list of companies by company name. To save the chart, select **Save As** from the **File** menu. Enter a name in the **File Name** field and click **Save**. To print the chart, select **Print** from the **File** menu.

Modifying a Pre-defined Chart

When a pre-defined chart is displayed on your screen, you can use the Chart toolbar at the top
of the screen to modify how the chart is displayed. You can use the previous example for
running a pre-defined chart on multiple companies.

1. Click the ![icon] (**Change Gallery Type**) button from the Chart toolbar and select
    Columns to display the chart in a column format.

2. Click the ![icon] (**Switch between 3D and 2D Views**) button to view the chart in 3D.

3. Click the ![icon] (**Horizontal Grid**) button to remove the grid.
    Your chart should now look like this:

Creating Your Own Charts

With Research Insight you can quickly create your own custom charts using the Chart Assistant. All you have to do is select the type of chart and the companies you want to appear in your chart, and Research Insight will retrieve and display the information you requested. The following example shows you how to create a bar chart comparing credit worthiness information for Ames Dept Stores, Target Corp., K Mart Corp. and Wal-Mart Stores.

Begin from the Research Insight desktop.

1. Click the (**Chart Assistant**) button.
2. Click the **Bar** radio button in the Chart Style area.
3. Click the **Multiple Companies** radio button in the Companies per Chart area.
4. Click the **Current Period** radio button in the Periods area, and click **Next**.
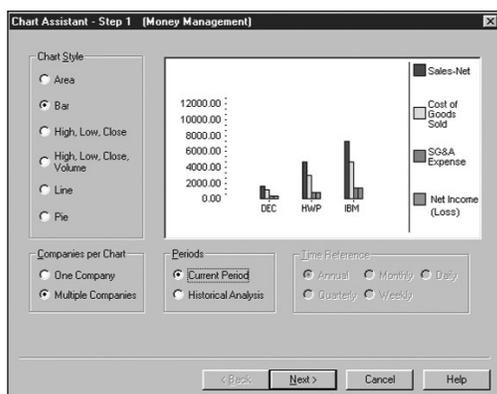
5. Click the **Credit Worthiness** radio button from the Item Groups area.

Hint: If the radio buttons 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.
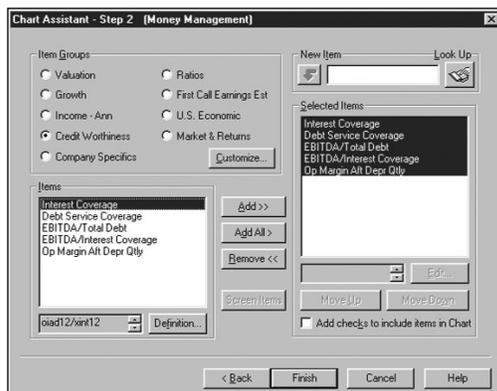
6. Click the **Add All** button in the middle of the window to move all the Credit Worthiness items over to the Selected Items area, and click **Finish**.
7. In the Run Assistant window, enter the companies' ticker symbols (**ames,tgt,km,wmt**) separating each with a comma.
8. Click **OK**. Your custom chart will appear on the screen.
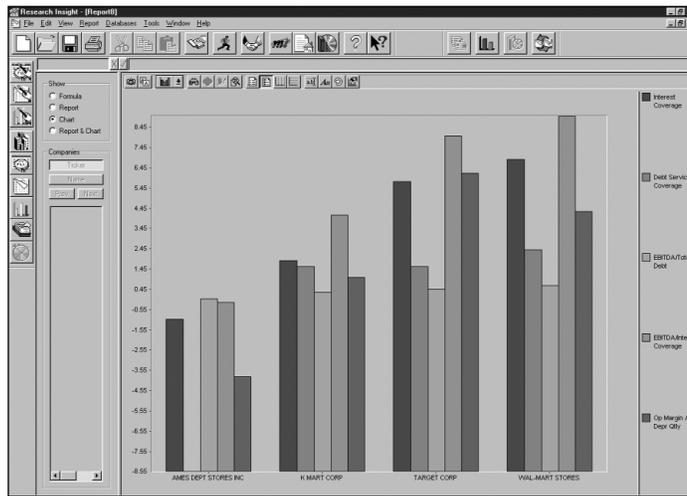
Hint: To view the underlying formulas for the corresponding report, select the **Formula** radio button in the Show area. To view the corresponding report for this chart, click the **Report** radio button. To view the report and chart at the same time, click the **Report & Chart** radio button. To change your initial set or modify your base set and screening criteria, click the (**Run**) button to open the Run Assistant window. To select different items to appear in the chart, click the (**Rerun Assistant**) button or select Rerun Report/Chart Assistant from the report menu.

Chapter 6
Customizing

Because you have your own unique style for evaluating the markets, individual companies and industry sectors, we've made it easy for you to customize Standard & Poor's Research Insight. With just a few clicks of the mouse, you can customize Research Insight to place the data items and concepts you use most frequently on your desktop.

This chapter shows you how to
- establish default style settings
- customize the Research Assistant window
- add data items and concepts
- import/export styles

Choosing or Changing Styles

During your initial installation of Research Insight, the styles you may choose from include Money Management, Credit, Corporate Finance, Transfer Pricing and EVAntage (available with a separate subscription). However, you can change your default setting anytime you are working in the software. Each style changes the Research Assistant - Step 1 to show specialized groups of data items commonly used in screening for companies that meet the needs of a particular research style.

The **Money Management** setting defaults to the indicator groups (i.e. Valuation, Returns, Growth, etc.) and indicator items (i.e. Market Value, Beta, YTD Returns, etc.) most commonly used by Money Managers.

The **Credit** setting defaults to the indicator groups (i.e. Fundamentals, Ratings, etc.) and indicator items (i.e. Sales, Senior Debt Rating, etc.) most commonly used by Credit Managers.

The **Corporate Finance** setting defaults to the indicator groups (i.e. Company Specifics, EBITDA, etc.) and indicator items (i.e. Economic Sector Code, EBIT Margin, etc.) most commonly used by Corporate Finance clients.

The **Transfer Pricing** setting defaults to the indicator groups (i.e. Relative Ratios, Transfer Screen, etc.) and indicator items (i.e. Relative Market Value, Mark Up, etc.) most commonly used by Transfer Pricing clients.

Likewise, if you subscribe to Stern Stewart's EVAntage, the **EVAntage** setting defaults to the indicator groups (i.e. EVA, Ranks, Capital Intensity, etc.) and indicator items (NOPAT, EVA Margin, Widening Spread) most commonly used by EVAntage clients.

To change your default setting after you have installed Research Insight, begin by closing the Welcome to Research Insight window. From the **Tools** menu, select **Options**. You will see the Options dialog box.

Click the **Styles** tab, highlight the default styles option you prefer and click **Set Active Style**. This dialog box also allows you to: change a style name, create a copy of a style, create a new style, delete a style, restore default styles, import a style or export a style.
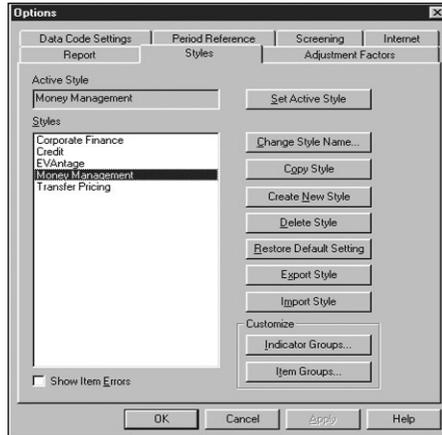
Customizing Indicators and Item Sets

You can further customize your screening options by selecting different indicator groups and data items that display on the Research Assistant - Step 1 window.

From the **Tools** menu, select **Options**. Select the **Styles** tab, and click the Indicator Groups button.
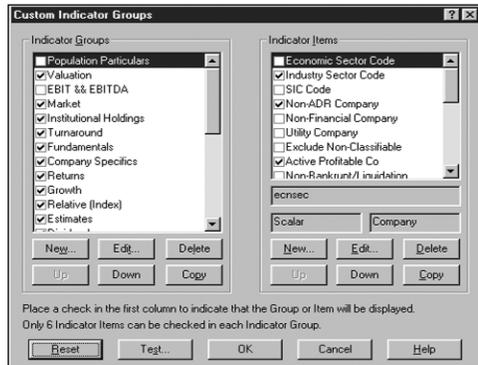
In the Custom Indicator Groups dialog box, the check marked indicator groups and items are displayed in the Research Assistant and are used to define your screening criteria. Highlight an indicator group to see which items appear within the group. If you do not want a specific group or item to display in the Research Assistant, simply deselect the check box next to the appropriate group or item. An item is activated only when a check mark appears. Only 6 items can be activated at one time for each group. Unchecked groups and items can be added to the Research Assistant at any time by clicking the appropriate check box.

To create a new indicator group
1. Click **New** in the indicator group area.
2. Enter a name in the **Indicator Group Name** field of the Create Indicator Group dialog box.
3. Click **OK**.
   The new Indicator Group displays in the Indicator Groups area.

To add indicator items to an indicator group
1. Click **New** in the Indicator Items area.
   The Indicator Item Definition dialog box will display.
2. Enter a valid expression in the **Expression** field and click **Accept Expression**.

Hint: If you do not know the expression, click the 🔍 (**Look Up**) button to search for a specific data item or function.

3. Set the default sign from the **Default Sign** drop-down list, and modify the default values of your expression by entering appropriate values in the Default Values and Increment fields.
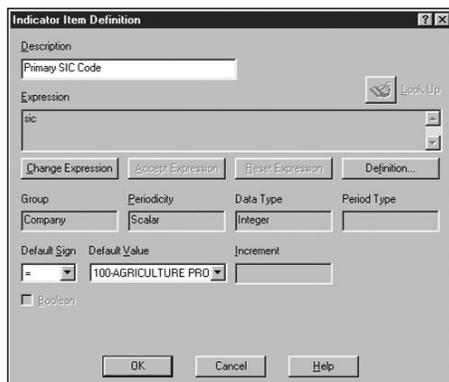
Note: In instances where expressions could be classified as true or false, Boolean Operators (e.g. True, False) are available. To activate this feature, click the **Boolean** check box.

When finished, click **OK**. Your new indicator item and indicator group should be highlighted, and a checkmark should appear in the boxes next to them. Click **OK** to return to the **Styles** tab of the Options dialog box.

The same basic procedures are also used when customizing Item Sets. Item Sets are displayed on the Report Assistant - Step 2 window and are used in developing reports and charts.

Importing/Exporting Styles

Many companies have a consistent set of screening criteria they use to identify investment opportunities (e.g., investing in companies with a specific market capitalization, beta or P/E range, or not investing in ADRs or specific industries). To create your own style template, follow the instructions under "Choosing or Changing Styles." When you reach the **Options** dialog box, click **Create New Style**, then follow the instructions under "Customizing Indicators and Item Sets." Once your style template is created, click **Export** to save the file in a common directory. To import a style template created by someone else, click **Import**.

Modifying Report Settings

From the **Tools** menu, select **Options**. In the **Report** tab, you can modify the settings used when developing table reports.
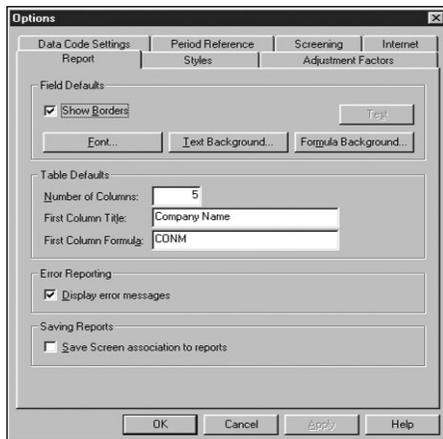
In the **Field Defaults** area, you can modify the fonts used in your report, the text background color and the formula background color.

In the **Table Defaults** area, you can modify the number of columns that will be automatically displayed when you create a new Table Report. You can also change the default settings of the First Column Title and the First Column Formula.

In the **Error Reporting** area, you can determine whether or not error messages will display when you are developing reports.

In the **Saving Reports** area, you can select whether or not you want to save your screen association with your reports.

Modifying Adjustment Factors
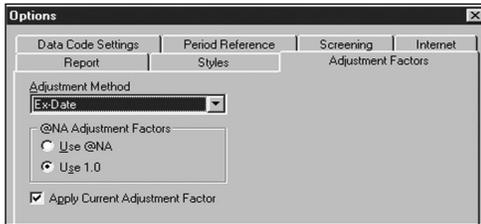
From the **Tools** menu, select **Options**. The **Adjustment Factor** tab is used to automatically adjust per-share data (such as prices, dividends, and earnings per share) and share data (such as common shares outstanding) for stock splits, stock dividends, and other capital changes. Select an adjustment method from the drop-down list. Your choices are **Ex-Date**, **Pay-Date**, or **None**. If you choose **None**, then no adjustment is made to per-share or share data in your Research Insight applications. When an adjustment factor (Ex-Date or Pay-Date) is not available, you can select one of the two following options from the @NA Adjustment Factors area:

Use @NA   Displays @NA (not available) for per-share data, share data, and the adjustment factor

Use 1.0   Displays unadjusted per-share and share data

The default is 1.0.

When the **Apply Current Adjustment Factor** option is selected, you can apply the latest available adjustment factor to per-share and share data; for example, if a stock split occurs after the update of your core database, you can download the new adjustment factor from the Internet, and it will be applied to per-share and share data.

When this option is turned off, even if you downloaded a more current adjustment factor from the Internet, it will not be applied to per-share and share data. In addition, if you downloaded prices from after the stock split, Research Insight will bring those prices into line with the pre-stock split prices. Therefore, you will not see prices adjusted for the new stock split until you update your core database.

Modifying Data Code Settings
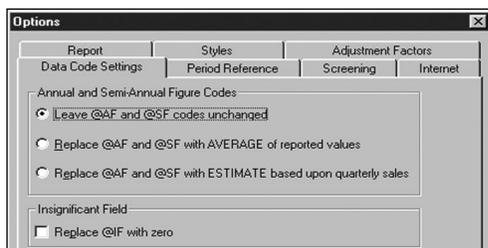
From the **Tools** menu, select **Options**. The **Data Code Settings** tab is used to modify the Annual and Semiannual Figure Codes and the Insignificant Field which are used to specify the treatment of annual, semiannual and insignificant figure data codes for quarterly data. These data codes are collected in quarterly items when actual quarterly data is not available.

Modifying Current Period Cutoffs
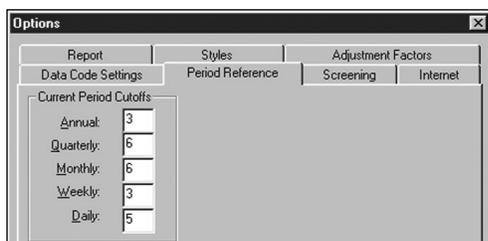
From the **Tools** menu, select **Options**. The **Period Reference** tab is used to define the current period cutoff for annual, quarterly, monthly, weekly, and daily data. Since a company's current period depends on the last reported data of a company, you can define how far back in time data is considered current. If you consider current annual data to be within the last three fiscal years, then enter the number 3 in the Annual field.

Modifying Your Default Base Set
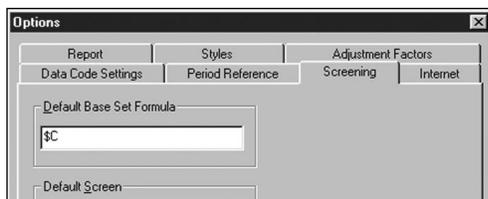
From the **Tools** menu, select **Options**. The **Screening** tab is used to change the Default Base Set or the population (i.e. initial group of companies) against which your screening criteria will be applied. Unless otherwise specified, the default set is **$C** which contains all actively traded public companies on the COMPUSTAT (North America) database.

Chapter 7
Using Formulas and Functions

Although the majority of your analysis can be performed through the Research Assistant, there may be times when you are building a custom report or chart or working in Research Insight's Classic window when you will want to incorporate formulas and functions.

A **Formula** is a mathematical or logical combination of components and operators that you can build to extract information from the database or perform a calculation.

You can use formulas, in one form or another, in almost all of the applications you use in Research Insight. Screens, reports, charts and spreadsheets all require formulas to extract the information you need from the database.

A **Function** is a pre-defined calculation that contains a combination of items, concepts, companies, time periods and other functions.

This chapter shows you how to

- build your own formulas

- add wildcards to your formulas

- add functions to your reports, charts and screens

Formulas in Research Insight

A formula is a mathematical or logical combination of one or more items, concepts, functions and operators that you can build to extract information from the database or perform a calculation.

You can use formulas in Research Insight to

- create screen criteria

- define data in your report or spreadsheet

- add data labels to your report or spreadsheet

- create your own concepts

Formulas consist of combinations of different components and operators. The components tell Research Insight what information it needs to retrieve or calculate. The operators tell Research Insight how to read the formula and perform the calculation.

@PAVG(SALE,Y96,Y00)

function   item   time period reference
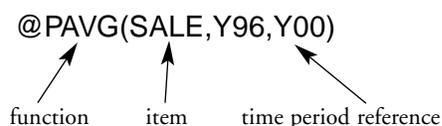
This formula calculates average sales over a five year period from fiscal year 1996 to fiscal year 2000.

Formula Components

Formula components tell Research Insight what information it needs to retrieve or calculate. There are five different formula components: functions, items, company references, sets, time period references and concepts. Each of these is explained in detail below.

Functions

A function is a pre-defined calculation. Functions can contain a combination of items, concepts, companies, time period references and other functions. Each function begins with the @ symbol and is followed by a short name. Each function also includes an argument. Arguments tell Research Insight which variables to evaluate, enabling you to tailor each function for your specific needs.

Example
Function:	@PAVG(formula, period 1,period 2)
Function with argument:	@PAVG(EPSPX,-4,0)
What it does:	Averages earnings per share over the last five years.

Items

An item is a piece of information collected and stored in a database. Each item is identified by a descriptive name and a mnemonic (abbreviated name). Research Insight contains hundreds of data items covering a wide range of fundamental financial and market information.

Example

Item Name:	Net Annual Sales
Item Mnemonic:	SALE
What it does:	This item represents gross sales (the amount of actual billings to customers for regular sales completed during the period) reduced by cash discounts, trade discounts, and returned sales and allowances for which credit is given to customers.

Company References

Company references allow you to attach a company's ticker symbol or GVKEY* to a formula so that Research Insight will refer to that company's data. When you include a company reference in a formula, you're telling Research Insight to retrieve or calculate that data for a specific company only, regardless of other companies or sets that may be included in your screen, report, chart or spreadsheet.

Example

"IBM":SALE	Retrieves the current year net sales for International Business Machines Corp. (Using the ticker symbol.)
"11217":AT[Y00]	Retrieves total assets for 2000 for Volvo AB. (Using the GVKEY.)

* GVKEY identifies companies in the COMPUSTAT (Global) database.

Sets

A set is a collection of companies, segments, issues or currencies that share a common attribute. All sets begin with a dollar sign ($) and are defined with a set name. Research Insight has an extensive collection of pre-defined sets you can use or you can create your own.

Example

$SP_500	A pre-defined set in the COMPUSTAT (North America) database that contains all of the current companies in the S&P 500 Index.
$F	A pre-defined set in the COMPUSTAT (Global) database that contains active financial companies around the world.

Time Period References

A time period reference tells Research Insight to retrieve a data value for a particular point in time other than the current period. If you do not include time period references in your formulas, Research Insight automatically uses the current period (or the most recently available data).

Example

(IB/SALE)[-3]   Calculates the return on sales value for the period 3 years prior to the current period. If the current period for this company is 2000, this formula returns the value for 1997.

Concepts

Concepts are mathematical or logical combinations of items and/or other concepts. They are generally used to save time and increase accuracy when manipulating data in routine, repetitious or complex expressions. Concepts do not contain values. They are mathematical calculations that are evaluated each time you use them. While Research Insight contains more than 300 pre-defined concepts, you can also create your own customized concepts or modify existing concepts.

Example

OANCF-DV-CAPX   This concept is Operating Activities - Net Cash Flow minus Cash Dividends minus Capital Expenditures, which is the calculation for Free Cash Flow.

Formula Operators

Parentheses and mathematical and relational operators, often referred to as formula operators, tell Research Insight how to read formulas and perform calculations. The following section explains each of these operators in detail.

Parentheses

Parentheses make long formulas easier to read and ensure that Research Insight performs the calculation in the appropriate order. The part of a formula enclosed in parentheses is always performed first. If the parentheses contain other parentheses, the innermost set is calculated first.

Example

NI/((AT+AT[-1])/2)   Calculates net income divided by the average total assets for the current and previous year.

If parentheses are not present, formula calculations are performed in the following order:

Precedence	Operator
1	All functions
2	Exponentiation (^)
3	Negation
4	Multiplication (*) and division (/)
5	Addition (+) and subtraction (-)
6	Relational operators

If your formula contains two or more operators with the same level of precedence, they are performed left to right.

Using Parentheses ( ), Brackets [ ], and Braces { }

When building formulas, it is important to know when to use parentheses, brackets and braces.

Parentheses are used to establish hierarchy within mathematical calculations.

Example 1

(SALE[Y99]+SALE[Y00])/2   Adds annual sales for 1999 and 2000, and divides the result by 2.

Brackets are used for time period referencing.

Example 2

PRCCM[May99]   Returns the monthly close price for May 1999.

Braces are used to create a temporary set of companies.

Example 3

{"dec","hwp","ibm","uis"}   Temporary sets are sets created "on the fly" and not deliberately saved.

Mathematical and Relational Operators

Mathematical and relational operators allow you to combine or compare two or more item values. These operators are consistent with mathematical conventions.

Mathematical operators allow basic mathematical combinations of two values. You can use mathematical operators with decimals, integers, time periods, dates and months. However, items must be the same data type to calculate a valid result.

Mathematical Operators

+	Addition
-	Subtraction
*	Multiplication
/	Division
^	Exponentiation

Example

(SALE+SALE[-1])/2   Adds the current year's annual sales to the annual sales of one year ago and divides the result by 2.

Relational operators allow you to compare 2 values. You can use relational operators with any items, but they must be the same data type to calculate a valid result. The result of a relational operator is either 1 (True) or 0 (False).

Relational Operators

=	Equal
< >	Not equal
<	Less than
>	Greater than
< =	Less than or equal to
> =	Greater than or equal to

Example

SALE > 500   Returns a 1 (true) for a company with current period annual sales greater than $500 million dollars.

Adding "Wildcards" to Your Formula

The Define Name option allows you to create a report or screen with "wildcard" formulas. Wildcards allow you to generate varying report or screen results, depending on how you define the wildcard. Examples of formulas with the Define Name option are shown below.

Example 1

@CAVG(formula1,$SP_500)   Averages whatever formula you enter (formula1) for $SP_500.

Example 2

"IBM":formula2   Retrieves whatever formula you enter (formula2) for International Business Machines.

Functions in Research Insight

A function is a pre-defined calculation that enables you to perform numerous tasks in your reports, screens, charts or spreadsheets. Functions can contain a combination of items, concepts, companies, time period references and other functions.

Research Insight contains more than 100 different functions that can be easily accessed through the Look Up List (Tools Menu>Look Up>Function Tab). All functions are categorized according to the type of analysis they perform. In this chapter, we'll show you the different components of a function and explain how these components work together to perform the calculation. We will also introduce you to each function category and explain how each function performs its task.

The Parts of a Function

Each function begins with the @ symbol and is followed by an abbreviated name, such as PLSG (least squares growth rate). Each function also includes an argument. Arguments tell Research Insight which variables to evaluate, enabling you to tailor each function for your specific needs. The function shown below contains a formula and a time period reference in the argument.

$$@PLSG(formula,period\ 1,period\ 2)$$

function symbol   function name   function argument

This function allows you to insert any formula and corresponding time references (beginning time (period 1) and ending time (period 2)). Once you insert the argument, you're ready to use the function.

Research Insight categorizes all functions according to the type of analysis they perform. The following sections explain each category in detail.

Currency Functions

Currency Functions are only used in the Global database and can be used to help you display currency data the way you want to display it. Two examples of currency functions are shown below.

Example 1

Function: @NATIVE(formula)
Function with argument: @NATIVE(PRCCM)
What it does: Displays the monthly closing price in native currency.

Example 2

Function:	@SCALE(formula)
Function with argument:	@SCALE(CEQ)/CSHO
What it does:	Returns units of representation in millions. This function is useful for scaling those currencies presented in Research Insight in billions of currency units, such as the Japanese Yen or Italian Lira. Most other currencies are already presented in millions of currency units. If data for the company is already presented in millions of currency units, then the currency units remain in millions.

Growth Functions

Growth functions can be used to measure growth of an item over time. Research Insight contains several different growth functions to help you in your financial analysis. Two examples of commonly used growth functions are shown below.

Example 1

Function:	@FORECAST(formula,period 1,period 2,period 3)
Function with argument:	@FORECAST(SALE,Y98,Y99,Y00)
What it does:	Forecasts sales for 2000 based on 1999 and 1998 sales.

Example 2

Function:	@PLSG(formula,period 1,period 2)
Function with argument:	@PLSG(SALEQ,Q4Y95,Q4Y00)
What it does:	Calculates quarterly sales growth for the quarterly periods between 4th quarter 1995 and 4th quarter 2000.

Historical Analysis Functions

Historical analysis functions can be used to evaluate data over a period of time. All historical analysis functions allow you to choose a beginning time (period 1) and an ending time (period 2). The examples below show you how you can use historical analysis functions to calculate a company's average earnings per share over the last five years, or calculate the median monthly stock price over a 5-year period.

Example 1

Function:	@PAVG(formula,period 1,period 2)
Function with argument:	@PAVG(EPSPX,-4,0)
What it does:	Averages earnings per share over the last five years.

Example 2

Function:	@PMED(formula,period 1,period 2)
Function with argument:	@PMED (PRCCM,-4,0)
What it does:	Returns the median monthly close price over 5 years.

Example 3

Function:	@EXPSMOOTH(weight,formula,period1,period2)
Function with argument	@EXPSMOOTH(.9,SALE,-4,0)
What it does:	Return the exponential average sales for 60 months.

Information Functions

Information functions return additional information about an item or abbreviate an item's value. For example, you can use the @ELEMENT function to return the inventory valuation method for the second element in a multiple element item. Or, you can use the @DATE function to insert a calendar date into a report. Two examples of information functions are shown below:

Example 1

Function:	@ELEMENT(item,element)
Function with argument:	@ELEMENT(INVVAL,2)
What it does:	INVVAL is a multiple element item. In other words, there is more than one data value available for this item. By stipulating the number 2, you're telling Research Insight that you want to see the item's second data value.

Example 2

Function:	@DATE (YY,MM,DD)
Function with argument:	@DATE(01,06,30)
What it does:	Inserts the date 6/30/01 into a report.

Logical Functions

Logical functions test items and formulas to determine whether or not they meet selected conditions. They are called logical functions because they evaluate a condition to be true or false, and return data depending on specified conditions. You specify the argument for the condition, and Research Insight displays the data as True (1) or False (0). These functions are often used in screens, reports and spreadsheets, and are helpful when building financial models. Two examples of logical functions are shown below

Example 1

Function:	@VALUE(formula 1,formula 2,formula 3)
Function with argument:	@VALUE(PRCCM, PRCCM[-1])
What it does:	Retrieves the current monthly close price. If the current monthly price is not available, it retrieves the price from one month prior.

Example 2

Function:	@INRANGE(formula,value 1,value 2)
Function with argument:	@INRANGE(MKBK,1.0,2.0)
What it does:	Finds those companies with a market to book ratio between 1.0 and 2.0 (inclusive).

Mathematical Functions

Mathematical functions perform many of the same calculations that are possible with your calculator, such as logarithms, square roots and exponents. Research Insight contains several different functions to help you in your financial analysis. Two examples of mathematical functions are shown below.

Example 1

Function:	@RND(formula)
Function with argument:	@RND(PRCCM)
What it does:	Rounds a price up or down to its nearest whole number. For example, if an actual stock price is 15.25 this function rounds and displays the price as 15.

Example 2

Function:	@SQRT(formula)
Function with argument:	@SQRT(144)
What it does:	Calculates the square root of 144; the result is 12.

Period Reference Functions

You can use period reference functions in conjunction with formulas to specify a time period for which you want the formula evaluated. If you do not specify a time period with your formulas, Research Insight uses current period data. Since companies may have different current periods, these functions allow you to align items so that Research Insight displays data using the same time period. Examples of period reference functions are shown below.

Example 1

Function: @MNT(period)
Function with argument: PRCCM[@MNT(0Q)]
What it does: Retrieves the monthly close price as of the last month
                                          of the current fiscal quarter.

Example 2

Function: @DAY(period)
Function with argument: @DAY(CPDQ)
What it does: Returns the last day of the current fiscal quarter.

Reference Functions

Reference functions tell Research Insight to refer to a particular geographic area, issue or segment for the formula you're evaluating. An example of a reference function is shown below.

Example

Function: @ISS(formula,number)
Function with argument: @ISS(PRCCM,2)
What it does: Returns the monthly price for the issue 2 of a company.

Screening Functions

Screening functions save time by allowing you to create a set "on the fly" and change set types. This means that you can apply any formula to a set other than just pre-defined or previously saved sets. Examples of screening functions are shown below.

Example 1

Function:	@CHGCO(set_type)
Function with argument:	@CSUM(DVPSXM,@CHGCO(ISSUE))
What it does:	Sums up the dividend per share for all issues of a company

Example 2

Function:	@SET(base set,condition)
Function with argument:	@SET($C,SIC=2834)
What it does:	Screens the active U.S. companies database ($C) for companies in the pharmaceutical industry (SIC=2834).

Example 3

Function:	@ISMEMBER(set_formula)
Function with argument:	@IF(@ISMEMBER($SP_500),"*","")
What it does:	In a table report, will print an "*" next to each company that is a member of the S&P 500.

Example 4

Function:	@TRIMPCT(formula,percentage)
Function with argument:	@CAVG(PEM,@SET($SP_500,@TRIMPCT(ROE,5)))
What it does:	Returns average Return on Equity ratio for the S&P 500, excluding values for companies that are within the top or bottom 5 percent.
Function with argument:	@CAVG(ROE,@SET($SP_500,@TRIMPCT(ROE,1)=1))
What it does:	The average ROE for the S&P 500 is 9.4. This average is distorted by a few outlying values; one company's ROE is over 4000 and another company's ROE is below -7000. If you trim off just 1% of the values, the average ROE for the S&P 500 is 11.5.

Example 5

Function:	@TRIMSTD(formula,trim_factor)
Function with argument:	@IF(TRIMSTD(ROE,2),"","*")
What it does:	Returns a "*" for each company whose Return on Equity is more than 2 times the standard deviation away from the base set's mean. The "*" lets you identify the outliers.

Set Analysis Functions

Set Analysis functions allow you to find out information about set characteristics. For example, you can use set analysis functions to find out how many companies are in a set or to average a formula across an entire set. Examples of set analysis functions are shown below.

Example 1

Function:	@CCOUNT(formula,set)
Function with argument:	@CCOUNT(EPSPX[Y00],$C)
What it does:	Counts the number of active U.S. companies with a value for earnings per share for 2000.

Example 2

Function:	@CAVG(formula,set[match_formula])
Function with argument:	@CAVG(PEM,$C,SECTOR)
What it does:	Selects active companies out of a set that produce the same sector for price to earnings monthly as the base company.

Example 3

Function:	@CAVG(formula,set)
Function with argument:	@CAVG(ROA,$MYSET)
What it does:	Calculates the average return on assets for the companies in the set MYSET.

Example 4

Function:	@CMED(formula, set, [match_formula])
Function with argument:	(PEM/@CMED(PEM,$SP_500,GIND))*100
What it does:	Calculates the relative P/E of a company vs. the median P/E of the S&P 500 companies in the same GICS Industry (6-digit GICS) as the subject company.

Example 5

Function:	@NTILE(formula, num_fractiles, set)
Function with Argument:	@NTILE(PEM,5,@SET($SP_500+@CHGCO(COMPANY), @CHGO(COMPANY):GIND=GIND))
What it does:	returns the quintile in which a company's P/E falls relative to its peers in the S&P 500 in the same GICS industry. This formula will work for any company whether it is on the S&P 500 or not.

Statistical Functions

Statistical functions provide you with the tools you need to generate statistical measures. For example, you can use statistical functions to calculate a fractile or rank order within a set. Two examples of statistical functions are shown below.

Example 1

Function:	@FRAC(formula,set)
Function with argument:	@FRAC(PI/SALE,$C)>.75
What it does:	Identifies the companies in the database for which the pretax income to sales ratio ranks in the top 25%.

Example 2

Function:	@RANK(formula,set)
Function with argument:	@RANK(MKVAL,$SP_500)<=25
What it does:	Ranks companies in the set $SP_500 based on market value and returns the top 25 companies.

Text Functions

Text Functions display the value of an item or formula in a textual format. For example, you can use a text function to see the textual description of an SIC code, or you can use text functions to find companies with specific characters in the company name. Examples of text functions are shown below.

Example 1

Function:	@DESC(value)
Function with argument:	@DESC(SIC)
What it does:	Displays the description of the SIC Code.

Example 2

Function:	@FIND(find_text,within_text)
Function with argument:	@FIND("CHEM",CONM)
What it does:	In screening criteria, this returns companies with the characters CHEM anywhere in the company name. In a report formula, this returns a number representing the beginning character position. For example, in a screen, the company BIOCHEM INTERNATIONAL INC. would be included in the passed set. The same formula in a report would return the number 4.

Note: The @FIND function is case sensitive.

Database Control Functions

Database Control Functions enable you to target or exclude a specific database layer, so you can specify the type of data Research Insight will return. Examples of database control function are shown below.

Example 1

Function: @DB(dbname,formula)

Function with argument: @DB(COMPUSTATDB,SALE[Y99])

What it does: Returns the value for SALE from the core database layer for 1999.

Example 2

Function: @EXCLUDEDB(dbname,formula)

Function with argument: @EXCLUDEDB(CLASSIC,GPMQ[Q2Y99])

What it does: Returns the gross profit margin - quarterly item from the first database layer it is found in, excluding the Classic layer, for the second quarter of 1999. Research Insight reads sequentially through the database layers, and it will retrieve a value for GPMQ from the first layer where it finds a value for the specified item.

Note: A time reference is required in order for Research Insight to retrieve the correct data.

Chapter 8
Current and Historical Data

Research Insight automatically evaluates the most recent data available when you run a database screen, report or chart, unless you include a time reference to a specific historical period. When selecting a time period reference, keep in mind that data in the COMPUSTAT databases is collected according to established periodicities, or the time periods for which an item is reported and available.

This chapter

- details periodicities for which data is available

- explains absolute, relative, calendar time period references

Annual Periodicity

Two different types of annual data are available: fiscal year data and calendar year data.

Fiscal Year Data

A fiscal year is an *accounting* period of twelve months. A company's fiscal year corresponds to the calendar year in which it has the most overlap in months. For example, if a company's fiscal year-end is March 2001, the data in its annual report represents the company's operations for nine months of 2000 and three months of 2001. The data would be classified as fiscal 2000 data.

Fiscal years ending in January through May are assigned to the calendar year in which the fiscal period began. Fiscal years ending in June through December are assigned to the calendar year in which the fiscal period ends.

To determine in which month a company ends its fiscal year, use the fiscal year item, FYR, in your applications. Research Insight returns a data value of 01 through 12 to represent the months January (01) through December (12).

Calendar Year Data

A calendar year spans from January 1 to December 31. Some annual items, such as high, low, and close prices, shares traded and Fortune 500 codes are collected on a calendar year basis. Companies report these items by December 31 each year.

The calendar year for each company is that in which its fiscal period ends. Research Insight provides the capability to retrieve the annual data of companies with different fiscal periods on a calendar basis. This is done by using calendar time period references, and explained later on in this chapter. For example, using a calendar time period reference of [C00], you can retrieve the fiscal 1999 data of a May fiscal year-end company (the period ended May 1999) and the fiscal 2000 data of a December fiscal year-end company.

Quarterly Periodicity

Quarterly data is reported on a fiscal quarter basis.

Fiscal Quarter Data

A fiscal quarter is an accounting period of three months. The first three months of the fiscal year comprise the first fiscal quarter, the second three months comprise the second fiscal quarter, and so on. A company's annual and quarterly fiscal year-end can be different if a company reports a fiscal year change. Otherwise, these two accounting periods for a quarterly company should be the same. You can use the fiscal year item, FYRQ, in your applications to determine which month a company ends its fiscal year. Research Insight returns a data value of 01 through 12 to represent the months January (01) through December (12).

Monthly Periodicity

Monthly data is reported on a calendar monthly basis.

Daily Periodicity

Issue market data is reported on a daily basis.

Scalar Periodicity

Scalar data is data that is unrelated to time, such as a company's headquarters address or telephone number.

The Current Period

We refer to a company's most recently available data as "current period data." Since companies report their financial statements at different times throughout the year—the reporting month being the fiscal year-end—the most current available data for a given company reflects its fiscal year.

As you work with Research Insight, keep in mind two points. First, companies have different fiscal years and therefore potentially different current periods. Second, unless you define the time period you are interested in, Research Insight will return current period data. These points become important when you are working with multiple companies or sets of companies. To ensure that you are evaluating the same time period for each company in a set, you should specify time period references in your formulas.

The following report shows you quarterly sales for companies in the S&P 500. By using the Current Period-Quarterly item (CPDQ), you're able to determine the current quarter for each company, and by using the Fiscal Year item (FYR) you're able to determine in which month a company ends its fiscal year. As you can see, the current quarter varies depending on the fiscal year-end of the company.

Company Name	Sales-Net Qtly	Current Period Qtly	Fiscal Year
ABBOTT LABORATORIES	3,559.880	Q1Y01	12
ADC TELECOMMUNICATIONS INC	652.400	Q2Y01	10
ADOBE SYSTEMS INC	328.969	Q1Y01	11
ADVANCED MICRO DEVICES	1,188.747	Q1Y01	12
AES CORP	2,545.000	Q1Y01	12
AETNA INC	6,428.699	Q1Y01	12
AFLAC INC	2,421.000	Q1Y01	12
AGILENT TECHNOLOGIES INC	2,744.000	Q2Y01	10
AIR PRODUCTS & CHEMICALS INC	1,498.300	Q2Y01	9
ALBERTO-CULVER CO -CL B	622.558	Q2Y01	9
ALBERTSONS INC	9,331.000	Q1Y01	1
ALCAN INC	3,270.000	Q1Y01	12
ALCOA INC	6,176.000	Q1Y01	12
ALLEGHENY ENERGY INC	1,814.341	Q1Y01	12
ALLEGHENY TECHNOLOGIES INC	542.500	Q1Y01	12
ALLERGAN INC	423.000	Q1Y01	12
ALLIED WASTE INDS INC	1,353.838	Q1Y01	12
ALLSTATE CORP	7,131.000	Q1Y01	12
ALLTEL CORP	1,797.900	Q1Y01	12
ALTERA CORP	287.438	Q1Y01	12
ALZA CORP	298.100	Q1Y01	12
AMBAC FINANCIAL GP	165.963	Q1Y01	12
AMERADA HESS CORP	4,182.000	Q1Y01	12
AMEREN CORP	1,024.528	Q1Y01	12
AMERICAN ELECTRIC POWER	14,238.000	Q1Y01	12
AMERICAN EXPRESS	6,135.000	Q1Y01	12
AMERICAN GENERAL CORP	2,770.000	Q1Y01	12

You may find that some quarterly items display a Not Available (**@NA**) code if you try to retrieve the current quarterly period. This is because some companies only report selected data on a preliminary basis in the Wall Street Journal Digest of Earnings, on the newswire services or in a press release. When any type of company data is entered for a quarterly period, that period is considered the current quarterly period. If this occurs, use the data for the previous quarter, as it is the most recent data available.

Research Insight may also display Not Available codes if you try to retrieve current period data for a research (inactive) company. Since research companies no longer report data, no information is available after the date of a research company's last financial report. To retrieve data for a research company, you must reference a time period before the company stopped reporting, or change the Research Insight program defaults and redefine how far back in time data should be considered current. To change these defaults, simply select the **Current Period** tab from the **Options** dialog box under the **Tools** menu and define the current period cutoffs. For example, if you consider current annual data to be within the last four fiscal years, then enter a **4** in the **Annual** field.

To determine whether or not company data has been recently updated, you can use the update code items, UPD or UPDQ. A **0** update code will appear for those years or quarters before data is available for a company. For example, if a company went public in 1995, all years prior to 1995 would have a 0 update code. A **1** update code indicates that the company has not been updated for a given year or quarter and that the only data available will be the Adjustment Factor (Cumulative) and, in some cases, market data such as price and/or dividend information. A **2** update code indicates that the company has been updated from a preliminary source, but additional data is expected to become available. A **3** update code indicates that the company has been updated from its final source (usually a 10-K or 10-Q), and no further data will be available.

Time Period References

A time period reference is a tool you can use in your formulas to extract data for one of the specific periodicities. Time period references tell Research Insight to retrieve data for a particular point in time other than the current period. For example, suppose you're building a report to display the December 2000 stock price for several companies. By attaching a time period reference to the Price-Close Monthly item, you're telling Research Insight to retrieve data for that particular time period. If you don't attach a time period reference, Research Insight automatically retrieves data for each company's current period.

There are three different types of time period references: absolute, relative and calendar. The following section explains the differences.

Absolute Time Period References

Absolute time period references retrieve data for a specific date or time period. Examples of absolute time period references are shown below.

Fiscal Year Example

(IB/SALE)[Y00]   Returns fiscal year 2000 return on sales.

Fiscal Quarter Example

(COGSQ/SALEQ)[Q2Y01]   Returns cost of goods sold to sales ratio for the 2nd
                         fiscal quarter of 2001.

Month-end Example

PRCCM[MAR01]   Returns the close market price for March 2001.

Relative Time Period References

Relative time period references retrieve data according to how far back in history from the present time you want to go. In other words, relative time period references enable you to retrieve data for a specific time period relative to the current time period. The current period for each company is the most recent period in which any data is available for that periodicity (annual, quarterly, etc.) Current period time references are implied [0]. Therefore, one period prior to current is indicated by [-1], two periods prior to current is indicated with [-2], etc.

Examples of relative time period references are shown below:

Annual Example

(IB/SALE)[-3]   Returns the return on sales value for the period 3 years prior to the current period. If the current period for this company is 2000, this formula returns the value for fiscal year 1997.

Quarterly Example

CSHOQ/CSHOQ[-1]   Returns the value for quarterly shares outstanding for the current quarter divided by the quarterly shares outstanding for the prior quarter.

Monthly Example

PRCCM/PRCCM[-12]   Returns the monthly close price from the current month divided by the monthly close price from 12 months ago. For example, you could use the price from January of the current year divided by January of the prior year.

Weekly Example

AJPW[-3]   Returns the weekly adjustment factor from 3 weeks prior to the current period.

Daily Example

@PAVG(PRCCD,-49,0)   Returns a 50-day average daily close price.

Calendar Time Period References

Calendar references retrieve data for the same approximate time frame for companies with different fiscal periods. The calendar time period reference is always the exact year in which the time period ends. For example, suppose a company's fiscal year-end is May 2000. The calendar time period for annual data is 2000.

The fiscal time period for the same company is different. If you evaluate monthly time periods for annual data ending May 2001, you'll see that seven of the 12 months are from the year 2000. Therefore, the fiscal time period for annual data is 2000. Examples of calendar time period references are shown below.

Calendar Year Example

SALE[C00]   Returns the annual sales value reported in calendar year 2000. This may not be the sales value for the 2000 fiscal year for the company.

Calendar Quarter Example

@PSUM(XINTQ,I00,IV00)   Returns the sum of quarterly interest expense values for the 1st through the 4th calendar quarters of 2000.

Using Calendar Quarters to Align Different Fiscal Periods

Calendar quarter references allow you to compare data from the same approximate time frame regardless of the company's fiscal year. When you include a calendar quarter reference in a formula, you tell Research Insight to align fiscal years and quarters to calendar time.

The following chart shows various companies' fiscal years, a sample of one of the fiscal year's quarters, the months that comprise that fiscal quarter, and the appropriate calendar quarter reference.

Fiscal Year	FY Quarter	Months in FY Quarter	Calendar Quarter Reference
12 FYR (Dec)	3	July, August, September	III
06 FYR (June)	1	July, August, September	III
02 FYR (Feb)	2	June, July, August	III
07 FYR (July)	1	August, September, October	III

Suppose you want to display the quarterly sales data for several companies in a report, and each of the companies has a different fiscal year (and different fiscal quarters). By attaching a calendar quarter reference to the Sales-Net Quarterly item (SALEQ[III97]), you tell Research Insight to display the quarterly sales data for the same approximate time even though all of the companies have different fiscal years.

Using Period Reference Functions to Align Items to Different Periodicities

Research Insight provides you with functions that you can use in your formulas to align items to different periodicities. Examples of period reference functions are shown below.

Day to Month Example

PRCCD[@DAY(0M)]   Returns the price on the last day of the current month.

Month to Month Example

PRCCM[@MNT(0Y,12)]   Returns the monthly close price as of December of each company's current year.

Month to Quarter Example

PRCCM[@MNT(0Q)]   Returns the monthly close price as of the last month of the current fiscal quarter.

Month to Year Example

PRCCM[@MNT(0Y)]   Returns the monthly close price as of the last month of the current year.

Quarter to Year Example

CSHOQ[@QTR(0Y)]   Returns the quarterly shares outstanding as of the end of the current annual period (4th quarter).

Chapter 9
Library

The Library is an integral component of Standard & Poor's Research Insight that allows you to access textual databases including Business Descriptions, Standard & Poor's Trends and Projections and DRI•WEFA Country Overviews. The Business Descriptions database is available for all COMPUSTAT (North America) and COMPUSTAT (Global) subscribers. The Trends and Projections publication is available for all North America subscribers, while DRI•WEFA Country Overviews are available for all Global subscribers.

This chapter shows you how to

- access Business Descriptions through Research Insight

- access Trends and Projections through Research Insight

- access Country Overviews through Research Insight

- view textual data from an open set

Accessing Business Descriptions Through Research Insight

Business Descriptions are brief textual descriptions of a company's business operations. The information is compiled by Standard and Poor's analysts and is continually updated. Business Descriptions are displayed in Notepad as text (.txt) files. The following example demonstrates how you would open a Business Description for Polaris Industries Inc.

Begin from the Research Insight desktop.

1. Click the ![Library icon] **Library** button.
    You will see the Select Company dialog box.

2. Enter the company's ticker symbol **(pii)** in the **Enter Ticker** field.

Hint: Global companies are identified by GVKEYs. The ![Look Up icon] (**Look Up**) button will help you locate company ticker symbols and GVKEYs.

3. Click **OK**.
    You will see the Document List dialog box.
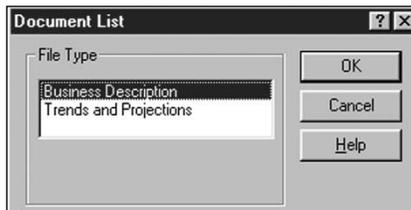
4. Select **Business Description** from the list (Global customers should select GV Business Descriptions.)
5. Click **OK.**

You will see the Business Description of the company you selected in a separate notepad window.
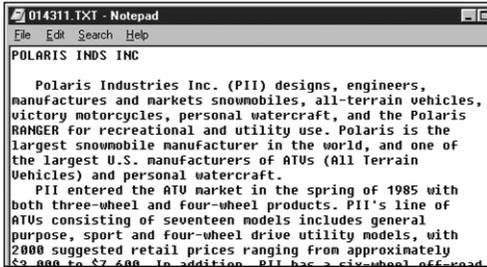
Note: You can now import shortened Business Descriptions directly into Excel. Refer to Chapter 9 - Creating Reports in Excel, of the *Beyond Basics* manual.

Batch Printing Business Descriptions

You can easily print Business Descriptions for multiple companies or a set of companies by using the batch print feature.

Begin from the Research Insight desktop.

1. Click the ![Library icon] **Library** button.
   You will see the Select Company dialog box.
2. Click the **Batch Print** Button.
   You will see the Set Formula dialog box.
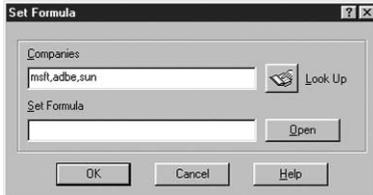
3. Enter a string of ticker symbols, separated by commas, in the **Companies** field, or enter a set in the **Set Formula** field.
4. Click **OK**.
   A Business Description will print for each company you entered, or for each company in the set you entered.

Accessing Trends & Projections Through Research Insight

Trends and Projections is a monthly publication by David M. Blitzer, Managing Director and Chief Investment Strategist of Standard and Poor's, covering current economic issues. It is displayed as a .pdf document.

Begin from the Research Insight desktop.

1. Click the ▓ (**Library**) button.
   You will see the Select Company dialog box.
2. Enter a company ticker symbol in the **Enter Ticker** field.

Hint: The ✍ (**Look Up**) button will help you access company ticker symbols.

3. Click **OK**.
   You will see the Document List dialog box.
4. Select **Trends and Projections** from the list and click **OK**.
   You will see the most recent publication of Trends and Projections.
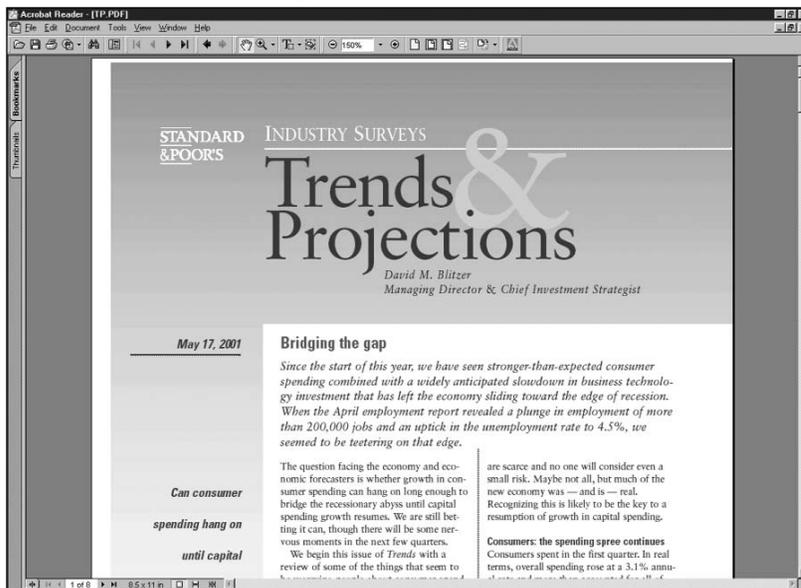
Accessing Country Overviews Through Research Insight

The Country Overviews database contains economic information and forecasts for more than 100 countries. Country Overviews are displayed as a .pdf document.

Begin from the Research Insight desktop.

1. Click the [icon] (**Library**) button.
    You will see the Select Company dialog box.
2. Enter a company **GVKEY** in the text box.

    Hint: The [icon] (**Look Up**) button will help you access company GVKEYs.

3. Click **OK**.
    You will see the Document List dialog box.
4. Select **Country Overview** from the list and click **OK**.
    You will see the Country Overview, for the country in which your company is incorporated.
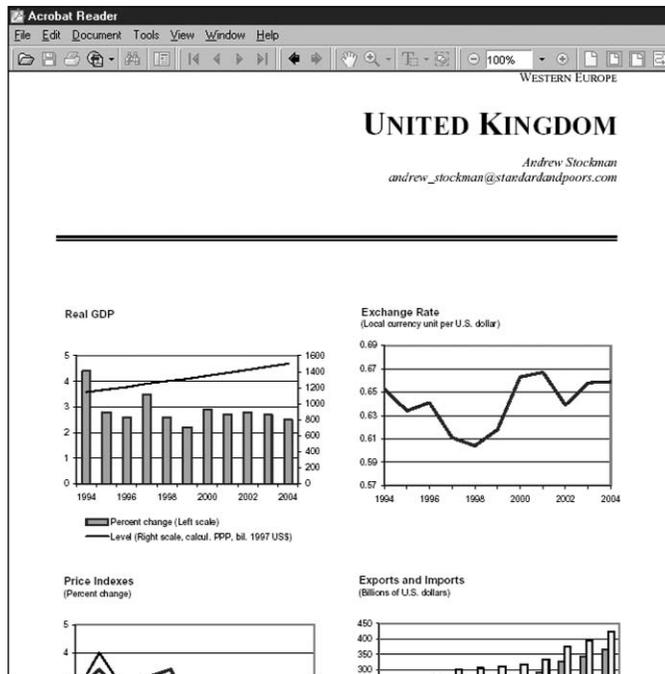
Hint: To access additional Country Overview documents, click the [icon] (**Library**) button and repeat Steps 2-4.

Viewing Textual Data From an Open Set

Research Insight makes it easy to view textual data for any company within an open set. Simply clicking a button provides instant access to textual information for any company you choose.

Begin from the Research Insight desktop.

1. Click the ![icon] (**Open Set**) button.
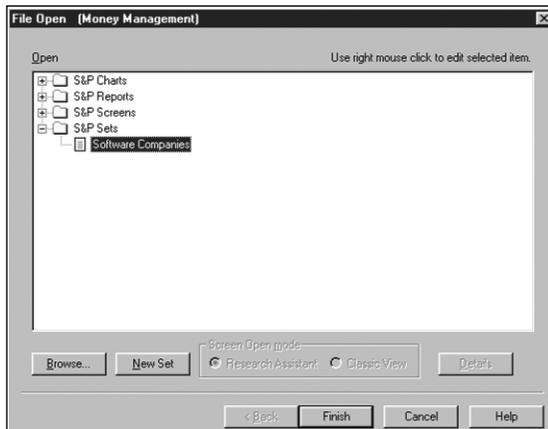
2. Select a set and click **Finish**.
    You will see the selected set.

3. Highlight the company that you want to view textual data for and click the (**View Text**) button.

   You will see the Document List dialog box.
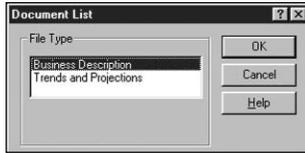
4. Select a document and click **OK**.
   You will see the document you selected.
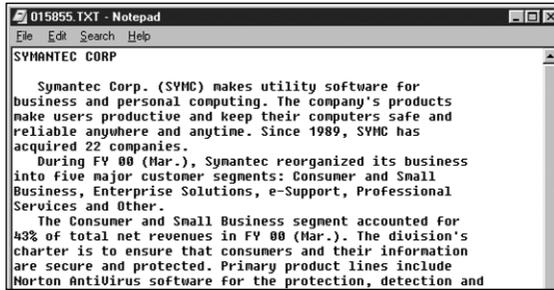
Chapter 10
Using Standard & Poor's Research Insight with Excel

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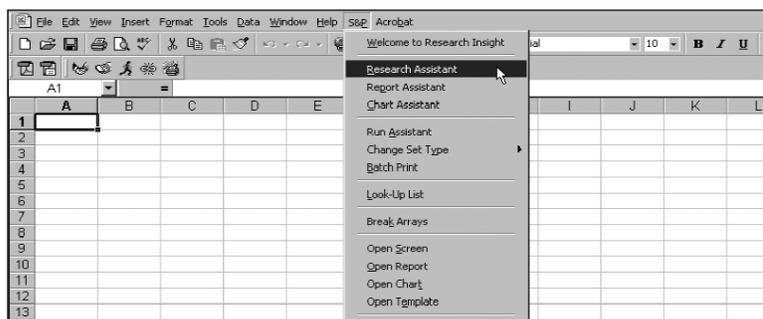
You will see the Research Assistant - Step 1 window on top of Excel.

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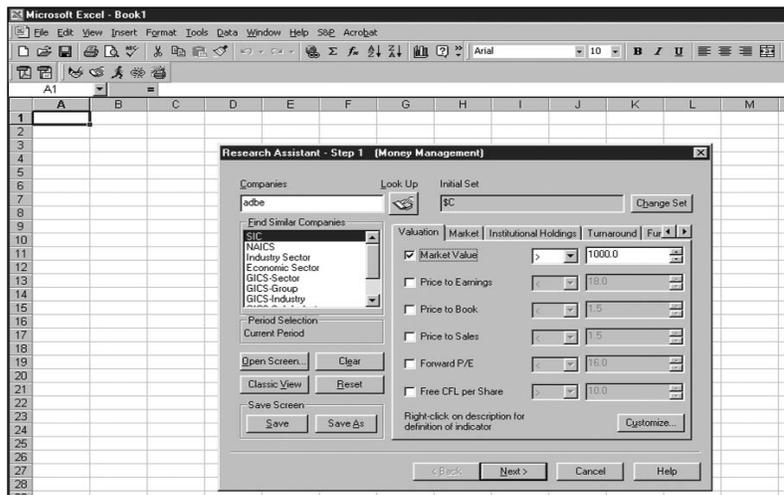
Hint: If the tabs or checkboxes you need are not displayed, click **Customize** and select the Items you need from the Item Group category. Click **OK** and choose whether or not to save your changes.

The set of companies that passed the screening criteria will display on the Research Assistant - Step 2 window.
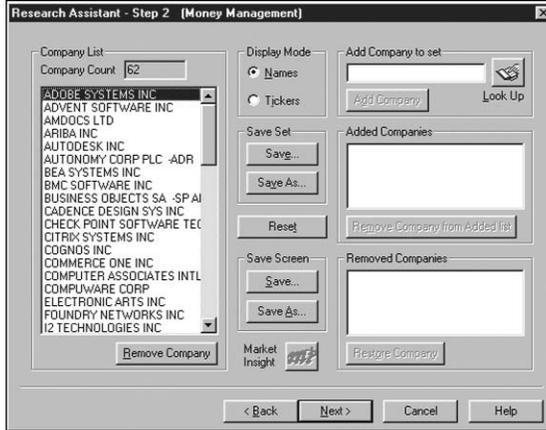
5. Click **Next**.
6. Click **Next** again. You will see the Report Assistant - Step 1 window.
7. Click the **Items vs. Companies** radio button under Current Time Period.
8. Click **Next**. You will see the Report Assistant - Step 2 window.
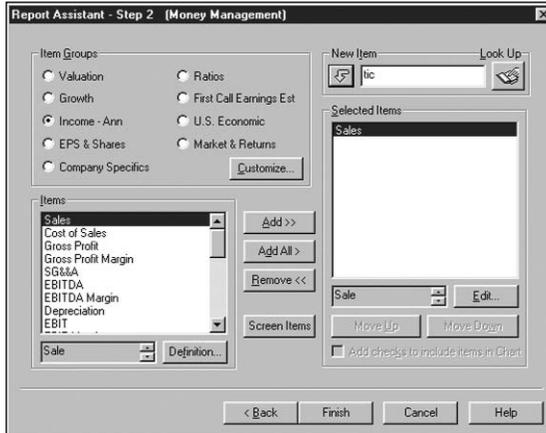
9. Click the **Income - Ann** radio button and select the **Sales** item.
10. Click **Add**.
11. Enter **tic** (the mnemonic for ticker symbol) in the **New Item** field and click the ⬇ button.

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.

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.
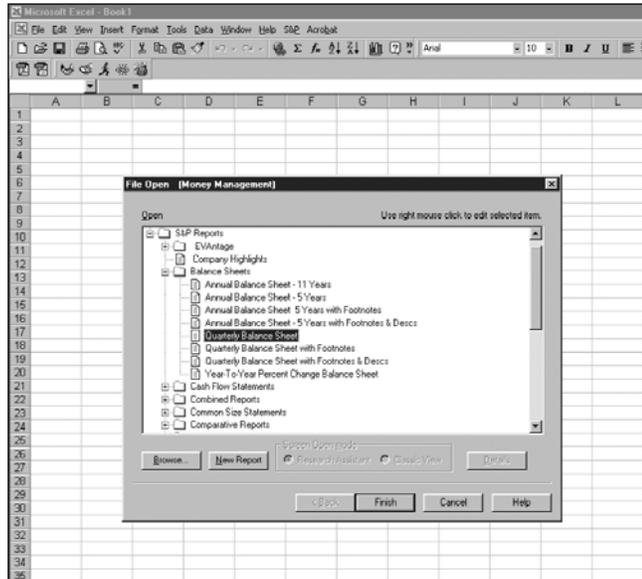
2. From the **Balance Sheets** folder, select **Quarterly Balance Sheet** and click **Finish**.
    You will see the Run Assistant window.
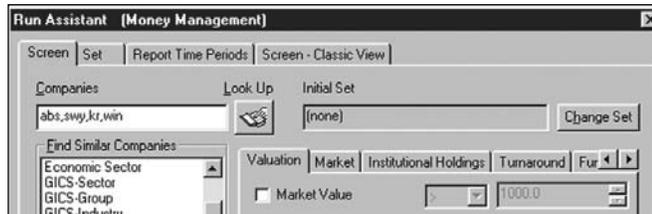
3. Enter your target companies' ticker symbols in the **Companies** field, separating each ticker symbol with a comma (**abs,swy,kr,win**).
4. Click **OK**.

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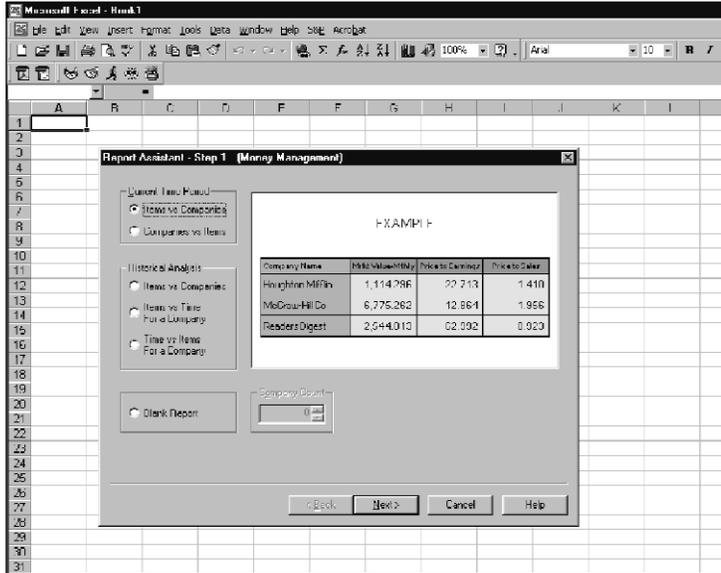
2. Select the **Items vs Companies** radio button under Current Time Period.
3. Click **Next**.

You will see the Report Assistant - Step 2 window.
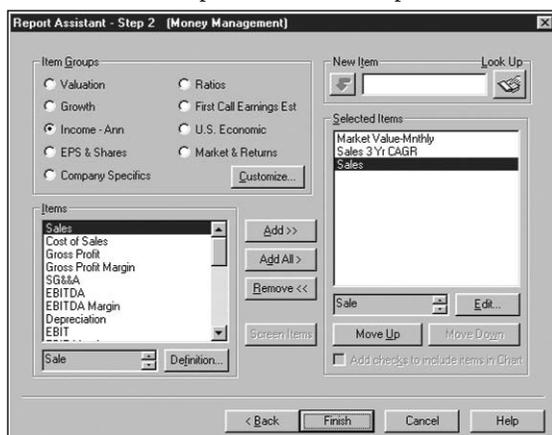
4. Click the **Valuation** radio button.

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.

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.
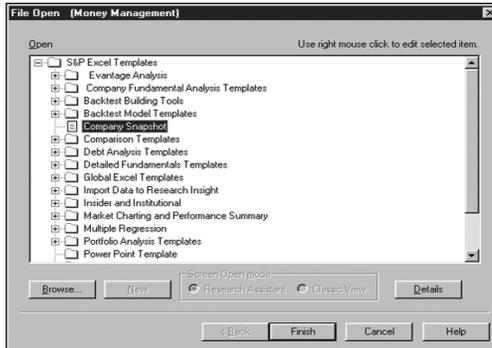
2. Select **Company Snapshot** and click **Finish**
    The selected spreadsheet displays in Excel.
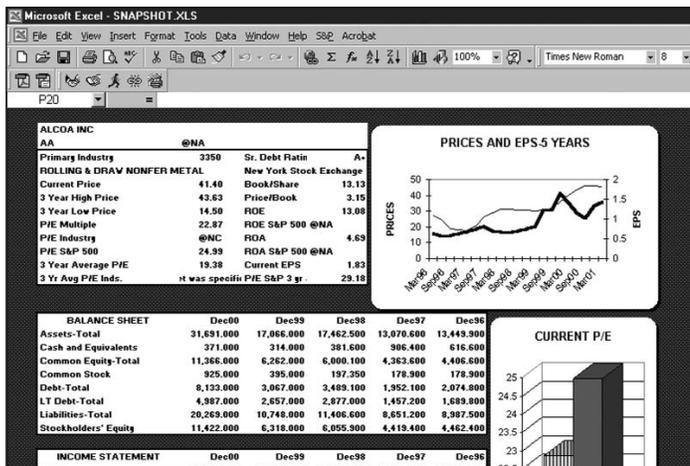
Hint: Close the Excel book before continuing with the next procedure.

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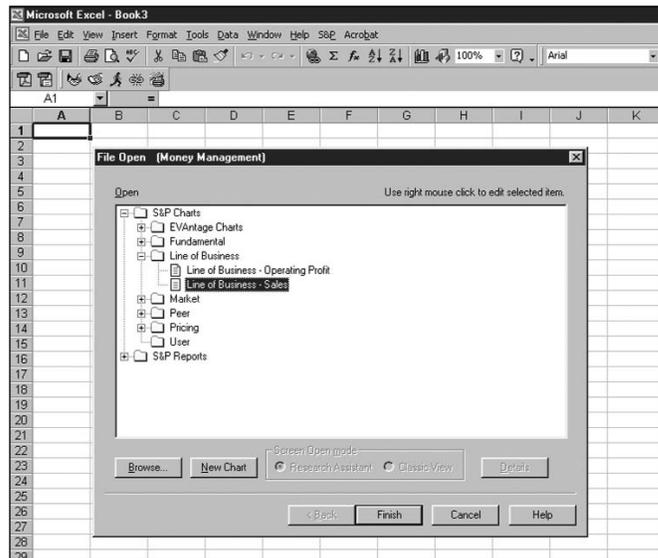
2. From the **Line of Business** folder, select **Line of Business - Sales** and click **Finish**.
   You will see the Run Assistant window.
3. Enter General Electric's ticker symbol (**GE**) in the **Companies** field.
4. Click **OK**.

You will see the Line of Business - Sales chart in Excel.
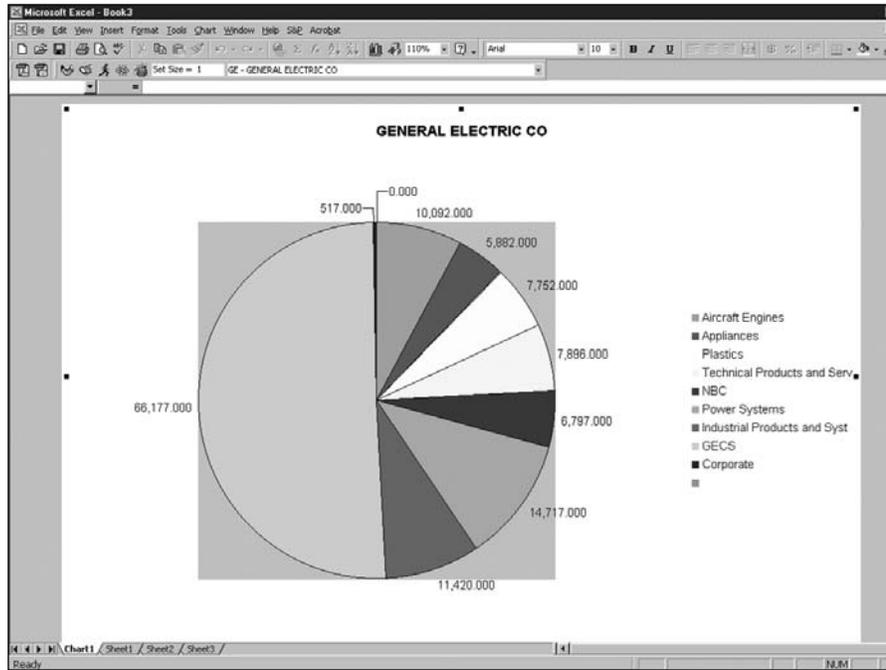
Hint: Click the ![Run icon] (**Run**) button to open the Run Assistant window, where you can modify the criteria used to create the chart. Close the Excel book before continuing with the next procedure.

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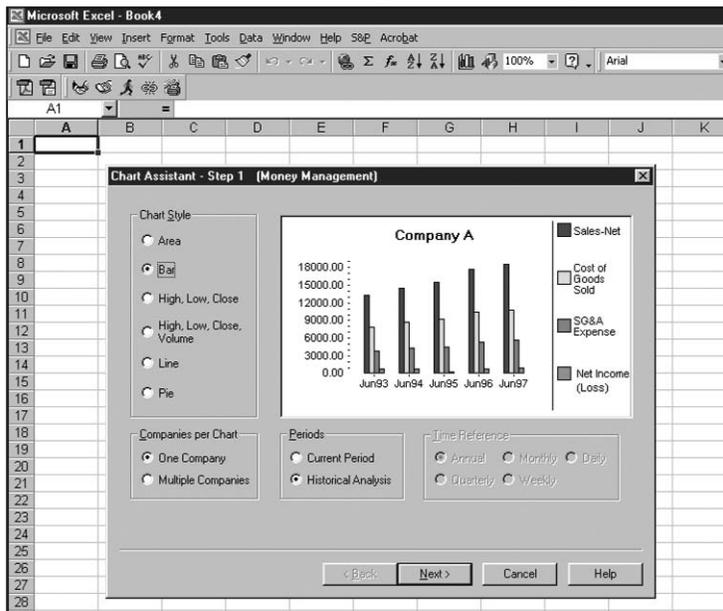
2. Select the **Bar** radio button under Chart Style.
3. Select the **One Company** radio button under Companies per Chart.
4. Select the **Historical Analysis** radio button under Periods.
5. Click **Next**.

You will see the Chart Assistant - Step 2 window.
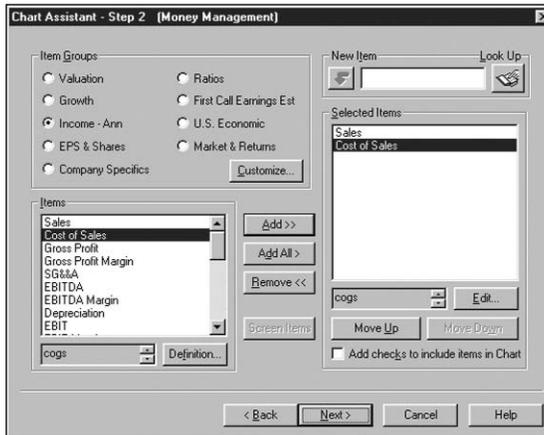
6. Click the **Income - Ann** radio button.
7. Select the **Sales** item and click **Add**.
8. Select the **Cost of Sales** item, click **Add** and click **Next**.
   You will see the Chart Assistant - Step 3 window.
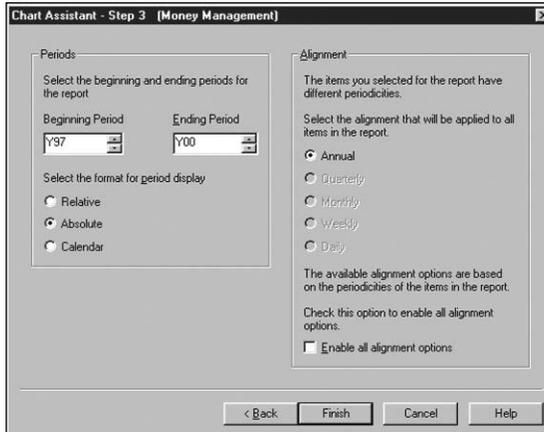
9. Click the **Absolute** radio button.
10. Enter **Y97** in the **Beginning Period** field.
11. Enter **Y00** in the **Ending Period** field and click **Finish**.
    You will see the Run Assistant window.
12. Enter the ticker symbol for Proctor & Gamble (**pg**) in the **Companies** field.
13. Click **OK**.

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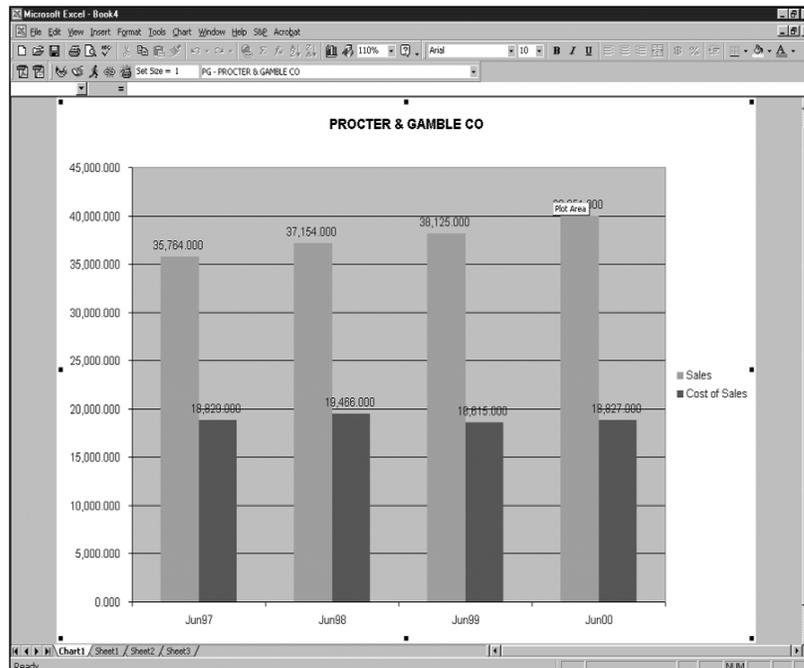
Hint: Click the [Run icon] (**Run**) button to open the Run Assistant window, where you can modify the criteria used to create the chart. Close the Excel book before continuing with the next procedure.

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.

Chapter 11
Importing and Downloading

Importing is one of the timesaving features of Standard & Poor's Research Insight. You can use the Task Scheduler to import or download files during your off-hours and optimize the time you spend at the office.

You can also incorporate your own data, companies and concepts into Research Insight directly from any application that can create a delimited ASCII file.

This chapter shows you how to

- use the Task Scheduler
- import data into Research Insight
- import sets into Research Insight
- import concepts into Research Insight

Using the Task Scheduler

Note: For network users. Only Network Administrators should use this feature. For further network usage recommendations, please refer to "Sharing Databases on a Network" in *Standard & Poor's Research Insight Beyond Basics* manual.

The Task Scheduler was designed to save you time when importing or downloading large files into Research Insight. You can import your own files or download files from the Internet. All you have to do is specify which files you want to import or download and the date and time you want the task performed. The Task Scheduler does the rest. The files you import or download will be added to the write-to databases. (For more information on write-to databases, see "Managing Your Databases" of the *Standard and Poor's Research Insight Beyond Basics* manual.)

Scheduling an Import

Research Insight makes it easy for you to schedule an import for your own files.

Begin from the Research Insight desktop.

1. From the **Tools** menu, select **Task Scheduler**.
    You will see the Task Scheduler dialog box.
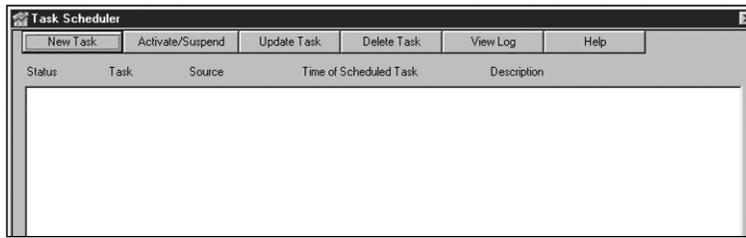
2. Click the **New Task** button.
    You will see the New Schedule Entry dialog box.
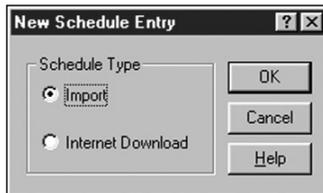
3. The **Import** radio button should be selected by default, so simply click **OK**.

You will see the Schedule Import dialog box.
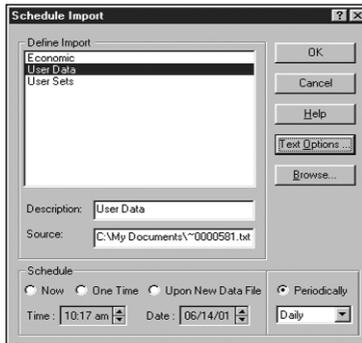
4. Select **User Data, User Sets or Economic Data** from the Define Import area.

Hint: Click the **Browse** button and select the drive and directory where the file is stored. This information will be reported in the source field.

5. Click the **Text Options** button. You will see the Text Options dialog box.
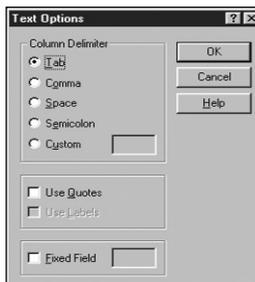
6. Select the column delimiter type used in the import file and click **OK**. The column delimiters are as follows:

Tab	Delimits columns with tabs.
Comma	Delimits columns with commas.
Space	Delimits columns with spaces.
Semicolon	Delimits columns with semicolons.
Custom	Delimits columns with a custom character.
Use Quotes	Encloses text with quotes.
Use Labels	Includes labels at the top of each column.
Fixed Field	Delimits columns with a specified number of spaces. Enter the number of spaces you want your columns separated by in the text box.

Hint: If you select the **Use Labels** option, Research Insight will include labels at the top of each column in a table report, but not in a free-form report.

7. If you like, enter a description of your file in the **Description** field.
8. Schedule your import. Select either **Now**, **One Time**, **Upon New Data File** or **Periodically** from the Schedule area of the Schedule Import dialog box.

Now	Research Insight will import your file as soon as you close the Task Scheduler.
One Time	Research Insight will import your file at a specific date and time. Once you select this option, you will be able to select the date and time you want your file imported.
Upon New Data File	At startup, Research Insight will look for a more current data file compared to the date of the file at setup time, or compared to the last data file imported. Once you select this option, you will be able to specify the time that you want Research Insight to begin searching for a new file.
Periodically	Research Insight will import your file either daily, weekly, or monthly at a specific time. Once you select this option, you will be able to schedule the time you of day you want your file imported and the date you want the import to begin.

9. When you are satisfied with your selections, click **OK**.
    You will return to the Task Scheduler dialog box. The import you just scheduled will appear in alphabetical order in the list of Scheduled Tasks.
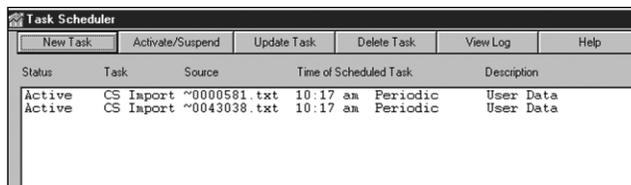
Hint: When you schedule multiple tasks, Research Insight will import files according to the order of the time scheduled, regardless of the length of time needed to import each file. For example, if you schedule one import at 11:00 p.m. and another at 11:15 p.m., and the first import takes 20 minutes, Research Insight will import the second task immediately after the first task is finished.

10. When you are finished scheduling imports, close the Task Scheduler dialog box.

Important: In order to import data, Research Insight must be running, so do not close Research Insight if you have an import scheduled.

Changing the Import Schedule

From time to time, you may want to alter the import schedule previously established. Research Insight makes changing this schedule a simple process.

Begin from the Research Insight desktop.

1. From the **Tools** menu, select **Task Scheduler**.
    You will see the Task Scheduler dialog box.
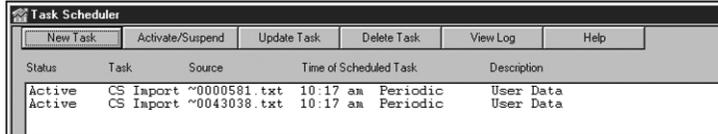
2. Highlight the task you want to change and click the **Update Task** button.
    You'll see the Schedule Import dialog box.
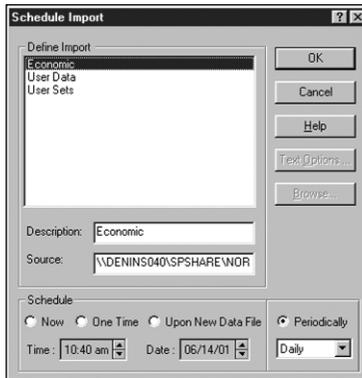
3. Make your changes to the import schedule and click **OK**.
    You will return to the Task Scheduler dialog box. The import you just rescheduled will appear in alphabetical order in the list of Scheduled Tasks.
4. When you are finished scheduling imports, close the Task Scheduler dialog box.

Important: Research Insight must be running in order to import data.

Scheduling an Internet Download

Research Insight makes it easy for you to schedule a download for fundamental and Value Added data from the Internet.

Begin from the Research Insight desktop.

1. From the **Tools** menu, select **Task Scheduler**.
   You will see the Task Scheduler dialog box.
2. Click the **New Task** button.
   You will see the New Schedule Entry dialog box.
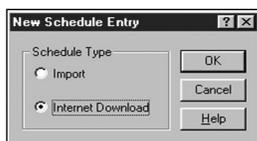
3. Click the **Internet Download** radio button and click **OK**.
   You will see the Schedule Internet Download dialog box.
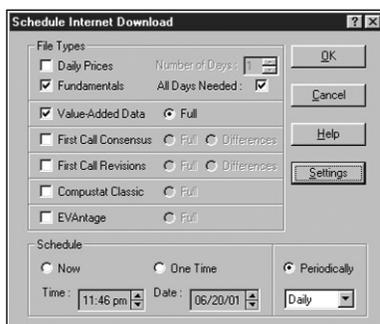
4. Select the file or files you want to download from the File Types area. These files are described below.

Daily Prices	Contains market data such as daily prices, adjustment factors, common shares traded, and dividends per share.
Fundamentals	Contains fundamental company information such as sales, net income and operating earnings per share. Also contains fundamental financial data, per share data and ratios for the S&P indexes.
Value Added Data	The Value Added database consolidates the sector, economic sector, non-active sector and Value/Growth Indicator files. It also includes IPO Date, Industry Sector Code–Historical, Economic Sector Code—Historical, Index Fundamentals, Insider Trading and Institutional Ownership data items.

FIRST CALL Consensus	Contains two quarters and two fiscal years of FIRST CALL consensus earnings estimate data, expected report dates, consensus recommendations, future growth rates, earnings surprise data, operating actual earnings, and P/E ratios.
FIRST CALL Revisions	Contains earnings estimate consensus trends and estimate revision momentum.
COMPUSTAT(Classic)	Contains non-restated, quarterly COMPUSTAT data as it was originally collected by Standard & Poor's.
EVAntage	Contains Stern Stewart's proprietary EVA model data.

5. Specify the number of days worth of data you want to download or select the **All days needed** option. This option is selected by default and automatically downloads the appropriate number of days' worth of data necessary to complete your fundamental data file.

6. If you're downloading one of the FIRST CALL estimates files, you can specify whether you want to download the entire file or only the changes that have been made to a file since your last download. To download the entire file, click the **Full** radio button. To download the changes, click the **Differences** radio button.

Hint: Unless you download FIRST CALL data on a daily basis, we recommend that you download the entire file or keep **All days needed** selected to ensure you are using the most current data available.

7. Schedule the time you want your file downloaded. Select either Now, One Time, or Periodically from the Schedule area of the dialog box.

Now	Research Insight will download your file as soon as you close the Task Scheduler.
One Time	Research Insight will download your file at a specific date and time.
Periodically	Research Insight will download your file either daily, weekly, or monthly at a specific time.

8. When you are satisfied with your selections, click **OK**.
   You will return to the Task Scheduler dialog box. The download you just scheduled will appear in alphabetical order in the list of Scheduled Tasks.

Hint: When you schedule multiple downloads, Research Insight will download files according to the order of the time scheduled, regardless of the length of time needed to download each file. For example, if you schedule one download at 12:00 a.m. and another at 12:15 a.m., and the first download takes 20 minutes, Research Insight will download the second task immediately after the first task is finished.

9. When you are finished scheduling downloads, close the Task Scheduler dialog box.

Important: In order to download data, Research Insight must be running, so do not close Research Insight if you have a download scheduled.

Establishing Your Internet Settings

In order to download data, you need to have a connection to the Internet. The first time you open the Schedule Internet Download dialog box, Research Insight will ask for your User Name and Password. You may also need to enter proxy settings, depending on whether you access the Internet through a firewall at your organization (check with your organization's Network Administrator).

The Internet Download Settings dialog box is shown below.
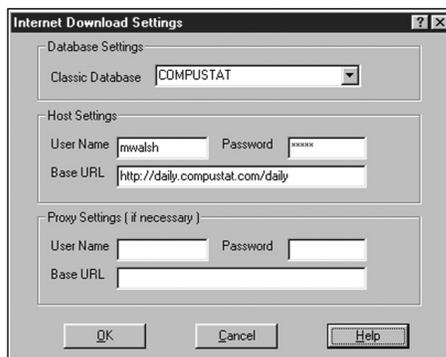
Changing the Internet Download Schedule

From time to time, you may want to alter the Internet download schedule previously established.

Begin from the Research Insight desktop.

1. From the **Tools** menu, select **Task Scheduler**.
   You will see the Task Scheduler dialog box.
2. Highlight the task you want to change and click the **Update Task** button.
   You will see the Schedule Internet Download dialog box.
3. Make your changes to the download schedule and click **OK**.
   You will return to the Task Scheduler dialog box. The download you just scheduled will appear in alphabetical order in the list of Scheduled Tasks.
4. When you are finished scheduling downloads, close the Task Scheduler dialog box.

Important: Research Insight must be running in order to download data.

Suspending a Scheduled Task

When a task is suspended, all of the scheduling information is saved and can be activated again.

Begin from the Research Insight desktop.

1. From the **Tools** menu, select **Task Scheduler**.
    You will see the Task Scheduler dialog box.
2. Highlight the task you want to suspend and click the **Activate/Suspend** button.
    The Task Scheduler suspends the highlighted task from the list of scheduled tasks. To activate this task again, simply highlight the task and click the **Activate/Suspend** button.
3. When you are finished, close the Task Scheduler dialog box.

Deleting a Scheduled Task

Once you decide that you have no further need for a scheduled task, you can delete it from the list of scheduled tasks.

Begin from the Research Insight desktop.

1. From the **Tools** menu, select **Task Scheduler**.
    You will see the Task Scheduler dialog box.
2. Highlight the task you want to delete and click the **Delete Task** button.
    Research Insight asks if you are sure you want to delete the selected tasks.
3. Click **Yes**.
    The Task Scheduler deletes the highlighted task from the list of scheduled tasks.
4. When you are finished, close the Task Scheduler dialog box.

Viewing Import and Download Results

For your convenience, the Task Scheduler records all completed activities in a log file. This file shows you information such as the name of the file imported or downloaded, and the date and time the import or download started and finished.

Begin from the Research Insight desktop.

1. From the **Tools** menu, select **Task Scheduler**.
    You will see the Task Scheduler dialog box.
2. Click the **View Log** button.
    You will see the Schedule.log file.
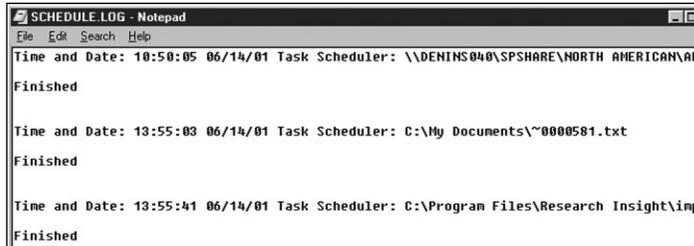
3. When you are finished viewing the import or download results, select **Exit** from the **File** menu.
    You will return to the Task Scheduler dialog box.
4. When you are finished, close the Task Scheduler dialog box.

Importing Your Own Data into Research Insight

You can use the importing feature to incorporate data items and values into Research Insight. This section shows you how to import data from a delimited ASCII file into Research Insight.

There are three steps involved in importing your own data: creating your spreadsheet file, saving and importing the data from your spreadsheet file into Research Insight.

Creating Your Spreadsheet

To create your spreadsheet file, open a new document in Excel. Create the table header by entering labels in the first row of the spreadsheet. First, enter the retrieval key (e.g., ticker symbol) in cell A1. The different types of retrieval keys you can use are listed below. Next, in cells B1 and across, enter the data that corresponds to the data item mnemonic, the time period and the specific company ticker symbol in each cell. An example is given below.

	A	B	C	D
1	Key	Mnemonic	Mnemonic	Mnemonic
2	Field	Field	Field	Field
3	Field	Field	Field	Field
4	Field	Field	Field	Field

Retrieval Keys

Valid retrieval keys are listed below.

TIC	The company's ticker symbol.
CUSIP	The company's CUSIP number, a 9-digit number.
GVKEY	The company's primary key in the Global database.
Currency Code	A currency key used for the Global database.

If you want to import an Issue, Business Segment or Geographic Segment, enter the ticker symbol, a backslash, the appropriate segment letter and two-digit segment identifier. For example, to import data for the Domestic Geographic segment of the Mirage Hotel and Casino, you would use MIR\G01 as the ticker symbol.

Mnemonics

Valid mnemonics will match mnemonics from the data dictionary of the active database group.

Saving Your File

In order for Research Insight to read your import file, it needs to be saved as a .csv (comma separated values) file.

Importing Your Data

After creating a delimited ASCII file, you are ready to import the data into Research Insight. The data you import will be loaded into the write-to database. (For more information on write-to databases, see "Managing Your Databases" in *Standard and Poor's Research Insight Beyond Basics* manual.) The file you are importing must be closed before you proceed.

Begin from the Research Insight desktop.

1. From the **File** menu, select **Import**.
   You will see the Import dialog box.
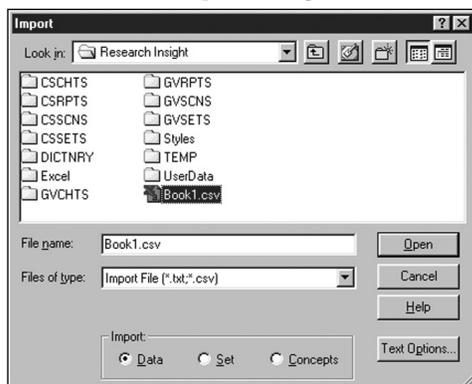
2. Select the drive and folder where the file you want to import is located.
3. Enter the name of the file you want to import in the **File Name** field or select it from the list box.
4. Ensure that the **Data** radio button is selected.
5. Click **Open** to import the file.
6. Click **OK** when Research Insight displays a message asking you to confirm that the file is comma separated.

   If you saved your spreadsheet as a comma separated file with the .csv extension (comma separated values), Research Insight displays a message asking you to confirm that the file is indeed comma separated. If so, click **OK**. If not, click **NO** and select the delimiter used for the file.

   A new window will briefly display an import progress bar, the write-to database, the type of retrieval key used and the items being imported. Research Insight will tell you when the processing is complete.

Hint: An import error file (import.err) is created if an import attempt is unsuccessful. This file explains what needs to be corrected to import successfully.

Importing Sets Into Research Insight

This section shows you how to import your own sets from an Excel spreadsheet into Research Insight. Sets imported into Research Insight must be in a delimited file.

There are two steps involved in importing sets: creating your spreadsheet file and importing the set from your spreadsheet file into Research Insight.

Creating Your Spreadsheet

To create your spreadsheet file, open a new document in Excel. Create the table header in the first row. The header must contain a retrieval key, such as a ticker symbol. An example is shown below.

	A	B
1	Key	
2	Field	
3	Field	
4	Field	

Next, fill in the company identifiers in cell A2 and down.

	A	B
1	TIC	
2	IBM	
3	HWP	
4	DEC	

We recommend that you save your file as a comma separated values file (*.csv file). After saving your file, close your spreadsheet application. You are ready to import your set into Research Insight.

Importing Your Set

Once you have completed your spreadsheet, you are ready to import your set. The set you import will be added to the write-to database.

Begin from the Research Insight desktop.

1. From the **File** menu, select **Import**.
   You will see the Import dialog box.
2. Select the drive and folder where the file you want to import is located.
3. Enter the name of the file you want to import in the **File Name** field or select it from the list box.
4. If you want to import a file delimited by anything other than commas or tabs, click the **Text Options** button, select your column delimiter and click **OK**.
5. Ensure that the **Set** radio button is selected.

6. Click **Open** to import the file.
    Research Insight displays a message asking you to confirm that the file is a comma separated values file. If so, click **OK**. If not, click **NO** and select the delimiter used for the file.
    The Set Type dialog box appears.
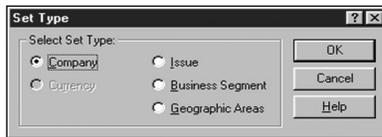
7. Select the type of set you want to import. If your spreadsheet contains company ticker symbols, you can still choose to import the companies as a Business Segment set, geographic segment set or issue set. The retrieval keys in the spreadsheet don't have to match the set type you choose.
8. Click **OK**.
    A window will briefly display an import progress bar, the write-to database, the type of retrieval key used and the items being imported.

Hint: An import error file (import.err) is created if an import attempt is unsuccessful. This file explains what needs to be corrected to import successfully.

The imported set appears on your screen in a spreadsheet format.

9. From the **File** menu, select **Save** to save the file as a set.
    You will see the Save As dialog box.
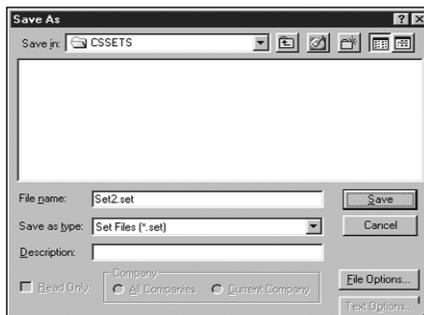
10. Enter the set name in the File Name text box.
11. Click **Save**. Your file is now saved as a set.

Importing Concepts Into Research Insight

This section shows you how to import concepts into Research Insight. The Import feature makes it easy to share your concepts with your colleagues. You can create concepts in Research Insight and export them so they can be imported back into another Research Insight system. The concepts you import will be added to the write-to database.

Begin from the Research Insight Desktop.

1. From the **File** menu, select **Import**.
   You will see the Import dialog box.
2. Select the drive and folder where the file you want to import is located.
3. Enter the name of the file you want to import in the **File Name** field or select it from the list box.
4. If you want to import a file delimited by anything other than commas or tabs, click the **Text Options** button, select your column delimiter and click **OK**.
5. Ensure that the **Concepts** radio button is selected.
6. Select the Concept radio button in the lower right corner and click **Open**.
   The Import Concepts dialog box appears.
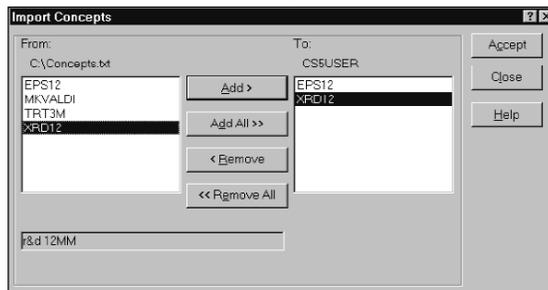
7. Select the concepts you want to import in the From list box and click **Add**.
8. Click **Accept**.
   Research Insight informs you when processing is complete.

Chapter 12
COMPUSTAT (Global) Data

Standard & Poor's Research Insight and the COMPUSTAT (Global) database offer a world-class research solution for analyzing the global marketplace. The Global database provides

- in-depth financial and market data on more than 12,000 active and inactive companies in more than 70 countries around the world

- complete histories including income statements, balance sheets and market data

- currency files with cross-translation tables for more than 110 currencies

- monthly pricing data on more than 90 local market indexes

- up to 12 years of historical data

This chapter shows you

- how to change your default database

- content that is unique to the Global database

Changing Your Default Database

To demonstrate how you can change your default database from North America to Global, let's search for active financial companies in the Global database with issue price to earnings ratios of less than 15%.

Begin from the Research Insight desktop.

1. From the **Databases** menu select **Default Database**.
    The Default Database Group dialog box displays.
2. Select **GLOBALVantage** from the drop-down list and click **OK**.

3. Click the (**Research Assistant**) button.
    You will see the Research Assistant - Step 1 window.
4. Click **Change Set**, enter **$F** in the **Set** field and click **OK**.
    This set contains all active financial companies in the COMPUSTAT (Global) database.
5. Select the **Valuation** tab and click the **Issue Price to Earnings** check box.
6. Select **<** from the drop-down list to the right and enter **15** in the far right field.
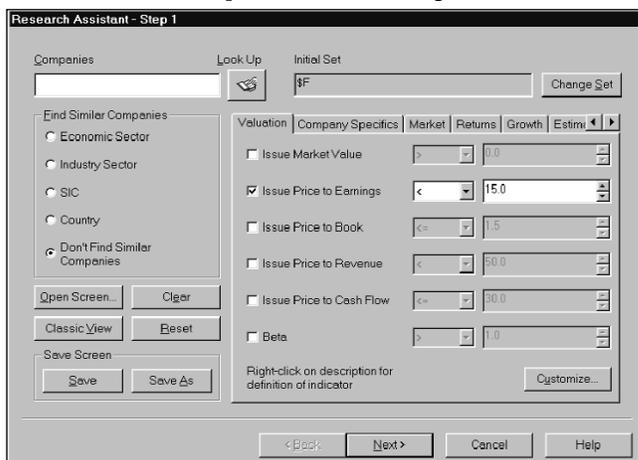
7. Click **Next**.

The results of your inquiry will appear in the Research Assistant - Step 2 window. From this window you can add or remove tickers, save your set, save your screen or continue to the next window and use your set in a report or chart.
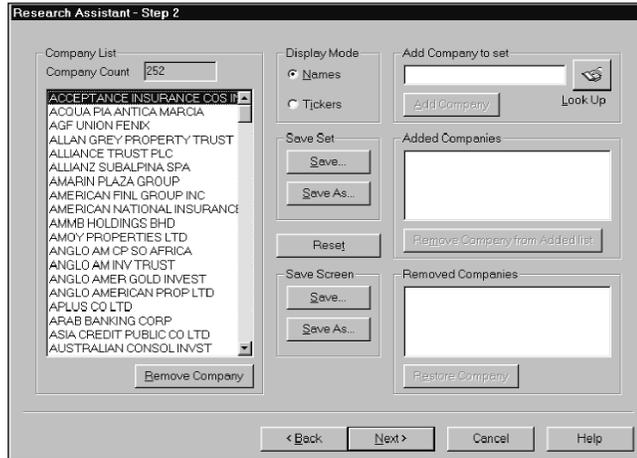
Content Unique to the Global Database

While the software functionality of Research Insight remains constant whether you are using North America or Global data, you will see that some data items, data sets, reports and charts will vary between the two databases. For example, the data items Total Assets and Retained Earnings will appear in Research Insight whether the North America or Global database is activated. However, items such as Foreign Exchange Assets and Resale Agreements will only appear when the Global database is used.

Here's another example of how content may differ between the two databases. These differences are the result of varying financial accounting standards around the world. You can view a current, detailed definition of any data item in the Global database in the on-line help system. Where applicable, these definitions include both industry- and country-specific information.

Other terms that are specific to the Global database include:

GVKEY: The Global Company Key. A retrieval key similar to a stock ticker symbol that the Global database uses to identify a company and serve as the primary key. It is also the base of the issue key.

$Sets: A group of companies, segments, issues or currencies in the Global database. Includes:

> **$GI:** The set of corresponding issues for active industrial companies.

> **$F:** The set of financial services companies, including banks and insurance companies available in the Global database.

        $FI: The set of corresponding issues for the financial services companies.

        $L: The set of local market indexes that are available in the Global database.

        $LI: The set of corresponding issues for the local market indexes.

        $N: The set of currencies that are available in the Global database.

        $D: The set of inactive industrial companies that are available in the Global database.

        $DI: The set of corresponding issues for inactive industrial companies.

        $X: The set of inactive financial services companies that are available in the Global database.

        $XI: The set of corresponding issues for inactive financial services companies.

Primary Currency: A currency that you select to facilitate a translation into another currency when no direct translation rate exists.

Target Currency: The currency in which you want Research Insight to display data for Screens, Reports and other operations.

ISO Currency Code: A code used to identify currencies in the Global database.

ISO Country Code: A code used to identify countries in the Global database.

Glossary

Useful Terms

The following terms are specific to the COMPUSTAT (North America) database. Knowing them makes navigating through Research Insight much easier.

Base Set: The population to which you apply your screening criteria. Research Insight contains pre-defined sets (e.g. $C - Active U.S. company data) or you can define your own.

Concept: A mathematical or logical combination of items and/or other concepts, generally used to save time and increase accuracy when manipulating data in routine, repetitious or complex expressions. Concepts do not contain values. They are mathematical calculations that are evaluated each time you use them.

Core Database: A COMPUSTAT database (North America, Global or Price History), downloaded through http.

Formula: A mathematical or logical combination of one or more items, concepts, functions and operators that you can build to extract information from the database or perform a calculation.

Function: A pre-defined calculation tool that you can use to perform numerous tasks, from something as simple as averaging data for an industry, to more sophisticated analyses using fractiles. You can use functions in screening, reporting, spreadsheet and concept formulas individually, or combine them for more complex analysis.

Item: A piece of information collected by Standard & Poor's and stored in a database. Each item is identified by a descriptive name and a mnemonic.

Mnemonic: An abbreviated name used to represent an item within the COMPUSTAT (North America) database.

Set: A grouping of companies, segments or issues in the COMPUSTAT (North America) database. Research Insight contains pre-defined sets, such as $C (Active U.S. Companies), but also allows you to create your own sets. All sets are identified by the dollar sign ($) in front of their name.

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