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**BLOOMBERG
FOR EDUCATION**

A Bloomberg Professional Service Offering

GETTING STARTED GUIDE

FOR STUDENTS // FEBRUARY 2012

Bloomberg



CONTENTS >>>>>>>>>>>

21 APPENDIX

21 Equity

21 Fundamental Analysis

22 Analytics

23 M&A Analysis

23 Fixed Income

25 Swaps

26 Money Markets

27 Structured Finance Analytics

28 Price Discovery

29 Analytics

29 Descriptive

29 Relative Value

29 Ticketing

29 Hedging

30 Additional FI Functions

31 FI Futures and Options

32 Repo Analysis Data

32 Calculators

33 High Yield/Syndicated

Loans/Distressed Research

34 Municipal Bonds

INTRODUCTION

For more than 20 years, Bloomberg has been committed to helping universities and colleges incorporate the BLOOMBERG PROFESSIONAL® service into their academic programs to better prepare students for the global job market.



Universities and colleges around the globe use Bloomberg to bring the real world of finance into the classroom, providing students with access to the same information platform used by leading decision makers in business, finance and government.

The BLOOMBERG PROFESSIONAL® service and BLOOMBERG TERMINAL® seamlessly integrate the very best in data, news and analytics. The Terminal is a 24-hour, global financial services system that provides transparent and reliable financial, economic and government information covering all market sectors. It features company financials, market data spanning more than 20 years, charts, statistics, a communications platform and current news reports.

This guide is intended to provide an overview of the BLOOMBERG PROFESSIONAL® service so you can get started using this powerful tool.

BLOOMBERG TERMINAL®



THE BLOOMBERG KEYBOARD

The red stop keys, green action keys and yellow market sector keys help you access information quickly and easily.



HELPFUL KEYS:

**Esc
CANCEL** Exits the current function and cancels the current activity on the screen.

HELP Connects to function Help Pages (online user guides) as well as the Bloomberg Helpdesk.

**Enter
GO** Executes a typed command.
Also known as the <GO> key.

SEARCH Enables keyword search of the entire Bloomberg database.

**END
MENU** » Navigates from any function back to a menu of related functions, then back through the menu hierarchy to the Home menu.
» Closes pop-ups.

The yellow market sector keys enable you to:
» Load securities
Example: IBM US <EQUITY> <GO>
» Access market sector menus
Example: <CORP> <GO>

BLOOMBERG TERMINAL



ACCESSING THE APPLICATION

The BLOOMBERG PROFESSIONAL® service delivers news, data and analytics to your desktop.

You can access the application in one of the following ways:

» Double-click the green Bloomberg icon on your computer desktop.



-OR-

» From the Windows Start menu select **START > All Programs > Bloomberg > BLOOMBERG.**

Once you open the application, the following two Bloomberg panels (“windows”) appear on your desktop.



Note: If you have problems locating the application on the computer, consult your Information Technology department for guidance on installation and configuration.

BLOOMBERG TERMINAL



LOGGING IN

Once you open the BLOOMBERG PROFESSIONAL service application, you must log in with a login name and password.

» Click on one of the Bloomberg panels.

The window activates, as denoted by the top bar turning from gray to blue.

» Press the red **<Pause Break/CONN DEFAULT>** key on the keyboard.

The login screen appears, including the yellow highlighted Login Name and Password fields, as shown below.

» You will be prompted to create a login name and password when logging in for the first time.

» Press **<GO>**.

Up to four Bloomberg panels or windows appear on your computer desktop with default “wake-up” screens.



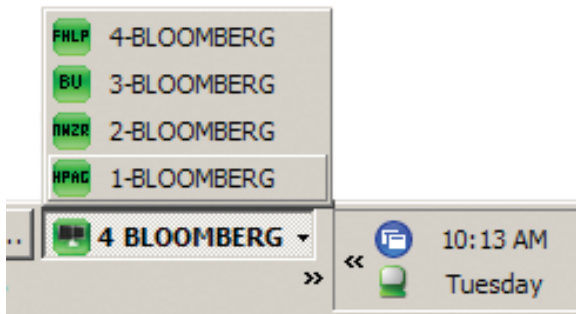
BLOOMBERG TERMINAL



BLOOMBERG PANELS

When you first log in to Bloomberg, up to four Bloomberg Panels appear. The panels are independent workspaces that enable you to multi-task within the Bloomberg system.

You can move from one panel to another using the blue <PANEL> key on the keyboard or by clicking on the specific panel you want from the Windows taskbar (see below).



The four Bloomberg Panels enable you to work with multiple functions simultaneously. As shown below, each panel is divided into four main sections:

A. Toolbar: The left side of the toolbar includes the menu tab and a drop-down list of recently loaded securities, with the current loaded security visible. The right side features icons to help you perform key tasks, including exporting data, viewing favorite places and securities, accessing Help and adjusting your defaults and display.

B. Command Line: Here you enter commands for functions and securities. You can also perform a keyword search for securities and functions from the command line. This Autocomplete feature makes the Bloomberg Terminal entirely discoverable from the command line.

C. Function Area: Here you will find the actual function content displayed.

D. Information Panel: This field highlights new or enhanced Bloomberg functionality typically, but not always, related to the function that is running.

A. Toolbar

B. Command Line

C. Function Area

D. Information Panel



FUNCTIONS & SECURITIES



RUNNING FUNCTIONS

About Functions

Functions are unique Bloomberg applications that provide analysis and information on securities, sectors, regions and more.

Each function is accessed by typing in its unique mnemonic (a short, memorable name) and then pressing the <GO> key.

Example: WEI is the mnemonic for the World Equity Indices analysis function. To access this function, enter **WEI <GO>**.



Types of Functions

There are two types of functions:

» Non-security functions provide information or analysis on an entire market sector and do not require a loaded security.

Example: WEI is a non-security function because it provides information for dozens of equity indices on one screen. You can run WEI without loading a security by loading **WEI <GO>**, as shown above.

» Security-specific functions analyze a loaded security.

Example: GP (Graph Price) is a security-specific function because you must specify a security before graphing its price. You must load a security to run the GP function: **IBM US <EQUITY> GP <GO>**.

Using Functions

There are two main way to run functions, depending on whether or not you know the function mnemonic.

FUNCTIONS & SECURITIES



If you know the function mnemonic:

- » Enter the function mnemonic in the command line.
- » Press the <GO> key.

The function runs on the active Bloomberg panel.

Example: In the command line, enter **WEI <GO>**.

If you don't know the function mnemonic:

- » Type a keyword for the information you want in the command line.

As you type, Autocomplete provides a list of suggested functions.

- » Select the function you want to run from the list.

The function runs on the active Bloomberg panel.

Example: You want to find a function that analyzes inflation.



Note: If you are running a security-specific function, the security you want to analyze must be loaded before you run the function, which is covered in the next section.

WORKING WITH SECURITIES

About Securities

Securities are financial instruments—like stocks and bonds—that you can analyze with Bloomberg functions.

Once you have loaded a security on a panel, it appears in the loaded security field on the panel's toolbar.



You can run a series of functions to analyze the loaded security.

Note: The loaded security remains the active security on the panel until you load a different security.

Loading Securities

There are three main ways to load a security—depending on whether or not you know the security's ticker symbol or identifier.

If you know the ticker symbol for the security you want to load:

- » Enter the ticker symbol in the command line.
- » Press the yellow market sector key corresponding to the security type (Corp, Muni, Equity, etc.).
- » Press <GO>.

The security appears as the loaded security in the active panel's toolbar.

Example: Using Ford Motor Company, enter **F<EQUITY><GO>**

If you know one of the widely used identification numbers for a security (e.g., CUSIP, ISIN, BBGID):

- » Enter the security identification number in the command line.
- » Press the yellow market sector key corresponding to the security type (Corp, Muni, Equity, etc.).
- » Press <GO>.

The security appears as the loaded security in the active panel's toolbar, and a categorized menu of security-specific analysis functions appears.

FUNCTIONS & SECURITIES



Example: Using the CUSIP for Wal-Mart Stores Inc., enter **931142DD2 <CORP> <GO>**

If you don't know the ticker or any other identification number for the security you want to load, follow the steps below:

» In the command line, start typing a keyword for the financial instrument you want to analyze.

As you type, Autocomplete provides a list of suggested securities.

Hint: The more information you enter, the more refined the list becomes. If you know the type of security you are looking for, press the matching yellow market sector key to update the results.

» Select the security you want to load from the list.

The security appears as the loaded security in the active panel's toolbar, and a categorized menu of security-specific analysis functions appears.

Example:



NAVIGATION



BASIC SEARCH (AUTOCOMPLETE)

Bloomberg's intelligent Autocomplete search makes it easy to find the security or function you want.

» Type a term in the command line at the top of the active panel.

As you type, Autocomplete displays a list of suggested functions and securities (see circled 1 below).

» From the list, pick a function to run or a security to load (see circled 2 below).

The panel updates with the security or function you selected.

Example:



NAVIGATION



FULL SEARCH

If you can't find what you're looking for with a basic search (Autocomplete), you can use the comprehensive Help Search (HL) function. HL allows you to search by keyword across all categories of information, including functions, securities, companies and people. HL groups results by category and relevance.

- » Enter a search term in the command line at the top of the active panel.
- » Press the **<SEARCH>** key on the keyboard.

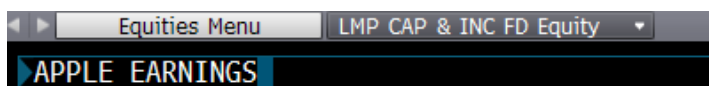
HL appears with a categorized list of matches.

- » Select the appropriate match from the featured search results section of the screen

-OR-

Select a category from the left sidebar to display full category results.

Example:



HL Search Results:

Search apple earnings (110) Feedback (111) Info Bloomberg Help

1) All Results 60
 2) Companies 4
 3) Functions
 4) People 22
 5) FAQs
 6) Definitions
 7) Documents
 8) Excel Library
 9) Data Fields
 10) News 28
 11) Law
 Securities
 12) Equities
 13) Funds
 14) Fixed Income
 15) Currencies
 16) Mtge Issuers
 17) Muni Issuers
 18) Commodities
 19) Indices
 20) Statistics
 21) Economics
 Contributors
 22) Pricing
 23) Research 6

31) Load AAPL US Equity
The Basic Earnings per Share of Apple Inc (U.S.) is
\$7.13
 As of: Fiscal Q4 2011
 33) View Data Transparency

99) View Actuals & Estimates in FA

Quarter	Actual (IS061)	Estimated (BE653)
Q3 2010	~4.5	~4.5
Q1 2011	~6.5	~6.5
Q3	~8.5	~8.5
Q4	~8.5	~8.5
Q1...	~10.0	~10.0
Q2	~8.5	~8.5

Related Functions

- 34) FA Financial Analysis
- 35) RV Relative Value
- 36) GF Fundamentals Graph
- 37) EEO Bloomberg Estimates Consensus Over...

Related Data

- Sales \$28.27B
- Net Income/Net Profit (Losses) \$6.62B
- Trailing 12M Earnings Per Share 27.67
- EBITDA \$9.25B

Companies, Governments and Organizations

- 39) 20349Z US Applera Corp/Old
- 40) CRA US Celera Corp
- 41) 3286728Q US Applied Biosystems Inc
- 42) Applied Biosystems Overseas... Applied Biosystems Overseas Corp

People

- 44) Dr J Craig Venter
 CHAIRMAN/CEO/FOUNDER, Synthetic Genomics Inc, US Compensation: 420,000 USD (2001)

32) Hide Best Answer
 38) See All (4)
 43) See All (22)

NAVIGATION



BROWSING MENUS

About Menus

All Bloomberg functions are organized by menus, classified by market sector or product type. Each menu is part of a hierarchy, going from the individual functions up to the Bloomberg Home menu. You can browse menus to discover more about the analysis and information the Bloomberg Terminal offers.

Here are some sample paths illustrating the navigation through the menu hierarchy to individual functions:

» Home > Equities > Analyze IBM Equity > Financial Performance > EE Home > Foreign Exchange > Forward Exchange Rates > FRD

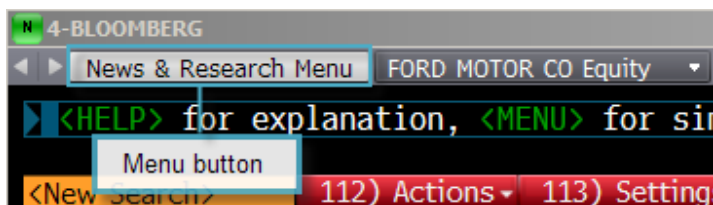
» Home > News & Research > N

Accessing Menus

There are three ways to access menus (Menu Button, Menu Key and Yellow Key).

Menu Button and Menu Key

From any function, click the Menu button on the toolbar or press the <MENU> key to access a menu of related functions. Once you access the menu, click or press the <MENU> key again to move up to the next menu in the hierarchy.



Yellow Key

To access the menu of functions related to a market sector, press the market sector's yellow key, then <GO>.

Example: To browse the Equities menu, press <EQUITY> <GO>.

Loading a Security

To access the menu for a specific security, simply load the security's ticker or other identifier.

Example: To access the menu of functions that can be used to analyze IBM US, enter **IBM US <EQUITY> <GO>**.

Menu Layout

Bloomberg menus are intuitively organized to speed your search efforts.



Categories and Functions

Menus organize functions under categories. For category headings followed by ">", click the category to see the next menu in the hierarchy.

Menu Breadcrumbs

These show your path in the overall menu hierarchy and enable you to navigate backward and forward.

<CANCEL> X

Click <Cancel> X located in the upper right-hand corner to close the menu.

PERFORMING ANALYSIS



NAVIGATING FUNCTIONS

Bloomberg functions use common screen elements that work in similar ways. Once you learn about these elements, you can use any function.

Menu Bar

The red bar at the top of each function includes the function's title at the right and provides drop-down menus and buttons to help you perform key tasks. It may also contain a page number indicator.



Amber-Colored Fields

Amber fields indicate areas on the screen that you can change. Amber-colored fields represent editable form elements, text and data input areas and drop-down lists.

Clickable Areas

Moving your cursor over a clickable area of the screen shows one of three types of indicators:

- » **A White Outline Box:** Indicates most clickable items, including entries in lists, menus and tables.
- » **Numbered Information:** Numbers indicate a topical link, enabling quick access to a related page by either clicking the line or entering the number and clicking <GO>.
- » **Highlighting:** Indicates clickable buttons and tabs.



Keyboard Navigation

Typing in the number next to a function allows you to quickly navigate any function using only your keyboard. Many clickable onscreen options are labeled with a Number <GO>.

PERFORMING ANALYSIS



STOCK/COMPANY SCREENING

The Equity Screening (EQS) function enables you to perform sophisticated searches for equity securities. There are many levels of criteria you can use in your search.

The following is a quick-start overview for using EQS.

Step 1

» Enter **EQS <GO>**.

The Equity Screening screen appears.



Step 2

» Click the **Build/Edit** Screen tab at the bottom of the screen.

Step 3

» Use the Universe Criteria section to define preliminary search criteria.

a. Click a category. A window appears with options for the selected category.

b. Drag and drop the appropriate criterion from the window so that it appears in the Included Options or Excluded Options section of the window.

c. Click the **Update** button.

The criterion for the category is saved, and the window closes. The Selected Screening Criteria section at the bottom of the tab updates with your selected criterion and count of company matches.

Step 4

» Use the Add Criteria section to refine the search with more data-driven criteria, such as industry classifications, fundamentals and ratios.

a. Click the **Fields** button.

The Browse Fields window appears with a list of all of the available search criteria fields.

b. Use the category tree or Search field at the left of the window to identify the specific criteria field for which you want to set conditions, then click the **Select** button.

The Add Criteria section of the Build/Edit Screen tab updates with the name of the selected criterion field and additional fields that allow you to set a condition(s) for the selected criterion.

c. Enter the appropriate condition(s), then press **<GO>**.

The Selected Screening Criteria section of the screen updates with your selected criterion.

Step 5

» Once you have selected all the criteria for the search, click the **Results** button.

The list of companies (equities) matching your search criteria appears.

Optional: To explore further options such as saving the search or exporting the results to Excel, click the red **Output and Actions** toolbar buttons on the results page.

Note: To access a complete guide to using EQS, press the green **<HELP>** key once from within the EQS function.

PERFORMING ANALYSIS



ANALYZING A COMPANY

In “Functions & Securities” and “Navigation”, we described the overall logic and navigation of the BLOOMBERG PROFESSIONAL service. With that information, the complete breadth and depth of information on Bloomberg is intuitively and completely discoverable.

This section highlights some of the key company analysis functions available on Bloomberg.

Step 1

» Load the company you want to analyze.

Example: Enter **F US <EQUITY> <GO>**.

The company appears in the panel's toolbar as the loaded security.



Step 2

» Run the analysis function on the loaded security in one of the following ways:

» Click on a category or function from the menu window—or type the mnemonic in the command field—to explore the full range of analysis options.

» Enter the mnemonic for the specific function you want to run, then press **<GO>**.

The analysis function runs on the loaded security.

Example: Enter **DES <GO>**.

F US Equity		Feedback		Page 1/4	Description: Profile
1) Profile		The DES function analyzes the loaded security.		3) Ratios	4) Revenue & EPS
FORD MOTOR CO					
Ford Motor Company designs, manufactures, and services cars and trucks. provides vehicle-related financing, leasing, and insurance through its subsidiary. [BBG000BFG000BQPC32]					
5) Price Chart (GP)		6) News (CN)		7) Earn (ERN) 8) Est (EE)	
		Ann Date (E) 01/27/12 P/E 5.49 Est P/E 12/11 6.11 T12M EPS USD 2.04 Est EPS 1.83 Est PEG 0.78		Corporate Info 9) www.ford.com/ Dearborn, MI, United States Empls 166,000 (06/30/11) 10) Management (MGMT) William Clay Ford Jr "Bill" Chairman Alan R Mulally President/CEO James D Farley Jr "Jim" Chief:Marketing 12) 12M Total Ret (TRA) -21.29% Beta vs SPX 1.35	
Px/Chg 1D (USD) 11.20/-4.11%		11) Dividend (DVD) USD			
52 Wk H (01/13/11) 18.97		Ind Gross Yield			
52 Wk L (10/04/11) 9.05		Amt (None)			
YTD Change/% -5.59/-33.29%		5YR Div Growth			
Mkt Cap USD 42558.1M		Ex-Date			
Shrs Out/Float 3729.0M/3694.7M		15) Multi-shares (MSH)			
SI/% of Float 147.7M/4%					
Days to Cover 1.9					

Note: Once you load a security, you can run any number of functions to analyze that security without having to re-enter the security

PERFORMING ANALYSIS



Mnemonics for popular company analysis functions include:

DES: Company Description and Overview

CN: Company News

HP: Historical Price Table

GP: Historical Price Chart

GIP: Intraday Price Chart

DVD: Dividend Information

ERN: Earnings Summary

FA: Fundamentals and Financial Statements

RG: Total Return Comparison

RELS: Capital Structure (including bonds and CDS spreads)

G: Technical Analysis and/or Multi-Security Charts

Note: To access a function's Help Page (a comprehensive user guide), press the **<HELP>** key once.

For cheatsheets that provide lists of popular analysis functions for specific security types, enter **BU <GO>**, then click the Access Training Documents link.

ANALYZING AN INDEX, BOND OR CURRENCY

The Functions & Securities and Navigation sections of this guide describe the overall logic and navigation of the BLOOMBERG PROFESSIONAL® service. With them, the complete breadth and depth of information on Bloomberg is completely discoverable. This section highlights the process behind loading different types of securities and indices and running analysis functions.

» Load the security or index you want to analyze using the Autocomplete feature or by entering a ticker and pressing the yellow key.

Examples:

SPX <INDEX> <GO> S&P 500 index

USURTOT <INDEX> <GO> Index tracking the US Unemployment Rate

EUR <CURRENCY> <GO> Euro spot

F 12 5/15/15 <CORP> <GO> Ford Motor Credit bond, 12% coupon, matures May 15, 2015

CL1 <CMDTY> <GO> Front-month NYMEX-traded sweet crude oil futures contract

» Run the analysis function on the loaded security in one of the following ways:

» Click on a **category** or **function** from the menu to explore the full range of analysis options.

» Enter the mnemonic for the function you want to run, then press **<GO>**.

For cheatsheets that provide lists of popular analysis functions for specific security types, enter **BU <GO>**, then click the Access Training Documents link.

Note: In some cases, a function that works for one type of security does not work for a different type of security. For example, the Yield Analysis (YA) function allows you to value a bond. If you load an index and try to run the YA function, an error message appears because the analysis and security type are incompatible.

EXPORTING DATA



THE BLOOMBERG EXCEL ADD-IN

Introduction

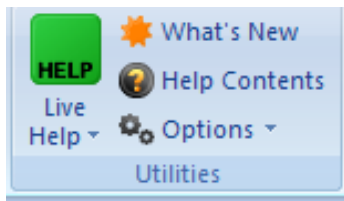
The Bloomberg Excel Add-in is a powerful tool that delivers Bloomberg data into a Microsoft Excel® spreadsheet for custom analysis and calculations. All data must remain on a licensed Bloomberg workstation.

On a computer where the Bloomberg software is active, you can access the Bloomberg Excel Add-In from the Excel taskbar.



The following is a quick overview of the Bloomberg Excel Add-In. For further details on and resources related to the Bloomberg Excel Add-In:

- » On the terminal, enter **API <GO>**.
- » On Excel's **Bloomberg** tab, in the **Utilities** group at the far right, select **Help Contents**.



Installation of the Add-In

If you do not see the Bloomberg tab in Excel, you can try to install the add-in by completing the following steps:

Step 1

- » From the computer's task bar select **Start > All Programs > Bloomberg > Install Excel Add-In**.

An Installing Bloomberg Excel Add-In dialog box appears.

Step 2

- » Click Install. A confirmation dialog box appears.

Step 3

- » Close the dialog boxes.

Step 4

- » Close Excel.

Step 5

- » Open Excel. A Bloomberg tab appears on Excel's taskbar.

Note: If you are unable to install the Add-In, consult your Information Technology team regarding administration rights to the computer.

EXPORTING DATA



Bloomberg Data Wizard

The easiest way to download data to Excel via the Bloomberg Excel Add-In is to use one of the Bloomberg Data Wizard tools. The wizards provide a guided process to draw data from Bloomberg into a spreadsheet.

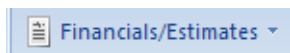
Step 1

- » On the **Bloomberg** tab of the Excel spreadsheet, in the **Import** group, choose from the following options:
- » To download most forms of data, click the **Real-Time/Historical** icon.



The Bloomberg Data Wizard window appears with four data type options.

- » To download values from financial statements and/or earnings data, click the **Financials/Estimates** icon.



The Bloomberg Fundamental Analysis Wizard window appears with two data type options.

Step 2

- » Move your mouse over each of the data type icons to display a blurb describing the type of data that is available with each wizard option.

Step 3

- » Click on the icon representing the type of data you want to download.

Step One of the wizard appears.

Step 4

- » Follow the instructions that appear in the wizard window to build your data set.

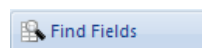
Once you have completed all of the steps in the wizard, the spreadsheet updates with the data you requested.

Bloomberg Formulas in Excel

The Bloomberg wizards are the easiest way to download data to Excel. The wizards write the Bloomberg API formulas for you. You can, however, write the formulas yourself if you need more flexibility than the wizards provide.

When using any of the formulas, you must specify the security for which you want to retrieve data (Security), and you must specify the data item you want to retrieve (Field). The Security must be represented as (Ticker) (Market Sector), for example IBM US Equity.

The Field must be represented by its field mnemonic. For example, to retrieve the last price for a security, the field mnemonic is PX_LAST. The Field Search tool in Excel enables you to search for field mnemonics by category or keyword. Access the Field Search tool by clicking the Find Fields icon on the Bloomberg tab.



Depending on the type of data you want to download, you can use one of the following formulas:

- » **BDP** (Bloomberg Data Point) This formula returns data to a single cell in the Excel spreadsheet. It contains only one ticker and only one field.

Formula syntax: **=BDP(Security, Field)**

Example:

=BDP("IBM US Equity", "Px_Last") retrieves the price of the last trade on IBM stock.

- » **BDH** (Bloomberg Data History) This formula returns the historical data for a selected security.

Formula syntax: **=BDH(Security, Field, Start Date, End Date)**

Example:

=BDH("IBM US Equity", "Px_Last", "01/01/01", "12/31/01") retrieves the closing prices on IBM from 01/01/01 to 12/31/01

- » **BDS** (Bloomberg Data Set) This formula returns multi-cell descriptive data to your Excel spreadsheet.

Formula Syntax: **=BDS (Security, Field)**

(continued on next page)

EXPORTING DATA



Example:

=BDS (“IBM US Equity”, “CIE_DES_BULK”) retrieves IBM’s company business description.

Note: A more flexible way to perform calculations using Bloomberg formulas is to use Excel cell references instead of entering Bloomberg tickers, field mnemonics or other formula parameters.

For example, type **IBM US Equity** in cell **A2**, then the formulas shown above will look like:

=BDP(A2,“Px_Last”)

=BDH(A2,“Px_Last”,“01/01/01”,“12/31/01”)

=BDS(A2,“CIE_DES_BULK”)

Additional Resources for the Bloomberg Excel Add-In

On the Bloomberg terminal:

Information, FAQs, news and tips: **API <GO>**

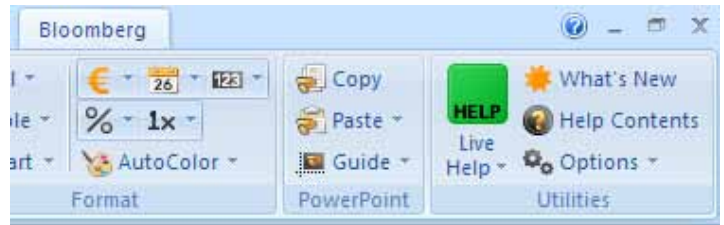
A library of preformatted Excel spreadsheet templates:

XLTP <GO>

A video tutorial on API (Bloomberg Data in Excel):
BESS <GO>

Within Excel:

On the **Bloomberg tab**, within the **Utilities group**, click on the **Help Contents** icon to get information and instructions on using the Excel Add-in to retrieve data.

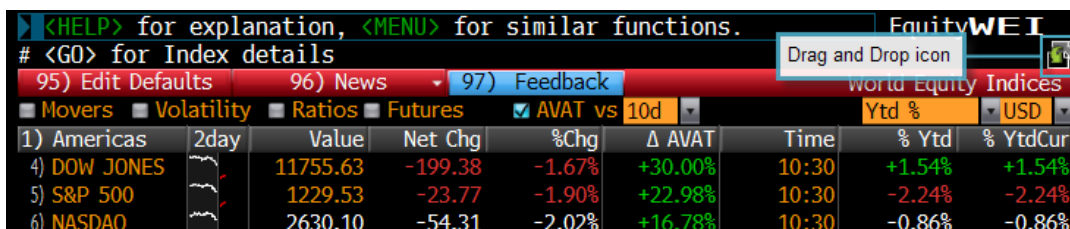


EXPORTING DATA



DRAG & DROP

Some functions display a drag and drop icon in the top right corner of the screen. You can click on and drag this icon to drag securities from the current screen into another application, such as a Microsoft Excel spreadsheet or a Bloomberg wizard as part of the Bloomberg Excel Add-In. Once in a wizard or in a spreadsheet, the tickers appear with Bloomberg market identifiers.

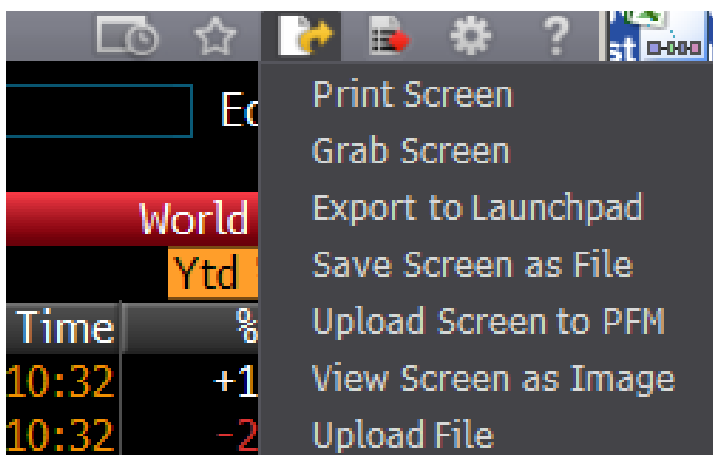


Note: When you use drag and drop, only the securities and/or data from the function's current page move. If you have more than one page of securities, you must repeat the drag and drop for each page.

PRINTING AND OTHER EXPORT OPTIONS

There are various ways you can save or export screen shots from Bloomberg.

To display a list of export options, click on the Export icon at the top right of a panel's toolbar.



The following options appear:

- » **Print Screen:** Prints the current screen.
- » **Grab Screen:** Allows you to send any BLOOMBERG PROFESSIONAL® service screen image as a message attachment.
- » **Save Screen as File:** Saves a GIF image of the current screen to a computer directory you specify.
- » **Upload Screen to PFM:** Uploads an image of the current screen to the Personal File Manager (PFM) function.
- » **View Screen as Image:** Displays an image of the screen as a .bmp file.
- » **Upload File:** Enables you to upload a file from the computer to the Personal File Manager (PFM) function.

GETTING HELP AND LEARNING MORE



There are a variety of ways to get help using the BLOOMBERG PROFESSIONAL® service.

Bloomberg Help

Enter **BHLP <GO>** for an online user guide to the overall logic and navigation of the BLOOMBERG PROFESSIONAL® service.

Bloomberg University

Enter **BU <GO>** for the Bloomberg University homepage with links to training resources, including training documents and video tutorials.

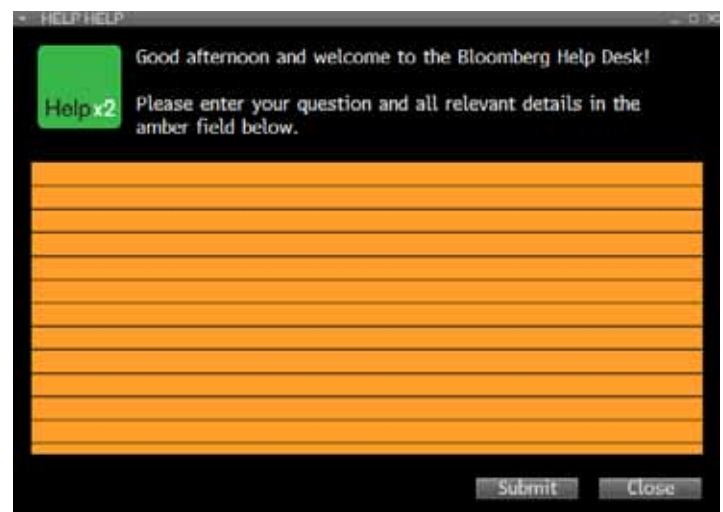
Help Pages

Each function has a comprehensive, searchable online user guide designed to answer common questions and describe key functionality. From within any function, press **<HELP>** once to access that function's Help Page.



The Bloomberg Help Desk

To answer any question, 24 hours a day, 7 days a week, you can start a live chat with the Bloomberg Help Desk. Press **<HELP>** twice to instantly connect.



Additional Support

For additional Bloomberg support, press the red **<ESC/CANCEL>** key. From the **<CANCEL>** screen you'll find links to:

- » Contact the Help Desk
- » Contact the Tech Support Team
- » Contact Us (a list of all local Global Customer Support numbers)
- » Your Account Manager and Product Representative (simply click on the rep's name)

APPENDIX



EQUITY

SECF <GO>

Use the security finder to search for any security across any market or asset class. Once a security is loaded, you can then run single-security functions like DES and RV. Functions like WEI and BI, which look across multiple tickers, do not need a security loaded to run.

WEI <GO>

Use WEI (World Equity Indices) to compare regional indices against one another and to determine current and historical performance levels. You can use this comparative analysis to determine investment opportunities and how changes in global markets may affect the stocks in your portfolio. This information may help you determine which stocks to eliminate from the worst-performance markets and then allow you to choose better-performing markets that may increase the return on your portfolio.

BI <GO>

We bring you a vast range of information and proprietary analytics on industries—in one convenient portal. Everything is curated, verified and analyzed by our objective industry experts. More than 100 analysts highlight themes, performance drivers and metrics for each industry, giving you insight and perspective for your investment decisions. The insights from Bloomberg's analysts are now integrated into the relative value function, RV <GO>, for better metrics, comps and a more sophisticated classification system.

MRR <GO>

Use MRR (Member Ranked Returns) to display the 10 best- and 10 worst-performing stocks of an index. MRR also ranks the returns of all the components of a selected index by simple price appreciation for a specified period. You can use MRR to compare member stocks to one another to determine which stocks are earning the highest returns.

FUNDAMENTAL ANALYSIS

DES <GO>

Use DES (Description) to display financial data and fundamental background information provided by the Bloomberg Professional[®] service for a specific stock, warrant, mutual fund, equity option, synthetic option or ETF. The screens you encounter differ based on the type of equity you are evaluating.

RV <GO>

Use RV (Relative Value) to perform a customized peer group analysis using BICS, a proprietary industry classification system that places companies in multiple industries by revenue. Relative value analysis can be applied to companies (stocks), mutual funds or municipal bond issuers.

FA <GO>

Use FA (Financial Analysis) to display financial history for a specific company or equity index, identify trends and to gain data transparency so you can analyze the value of a potential investment, partnership or acquisition target. You can choose from a list of templates that display a variety of company information and add specific data fields to the selected template.

FA also provides aggregated fundamental data for more than 15,400 global indices and tracks more than 100 individual financial values. Values include income statement, balance sheet, cash flow, ratios and profitability measures. You can display this data on a quarterly, semiannual, annual or trailing 12-month basis. You can also compare the performance of a selected index to any equity security by using the comparison feature.

SPLC <GO>

Supply chain conditions provide crucial insights into a company's future; we offer a unique look at supply chain fundamentals—mapping business relationships across suppliers, customers and competitors for more than 35,000 companies globally.

EE <GO>

Use EE (Earnings Estimates) to display Bloomberg's earnings projections as well as projections from various third-party contributors for a specific equity. Bloomberg collects all earnings estimates for a company in one place, so you can quickly gauge market expectations.

GF <GO>

Aggregate a broad array of data in a single chart to see a company's financial situation in the broadest possible context. Add level or trend lines, estimates, debt offerings, insider transactions and more to understand past performance and gauge where a company's stock might move next. Include ratios, correlations and spreads in your chart to create powerful comparisons between companies, indices, custom composites, currencies, commodities and more. Save the settings for charts you create as custom templates for the securities that you follow regularly.

APPENDIX



CF <GO>

Use CF (Company Filings) to search for corporate filings related to a specific equity, municipal or mortgage security. You can also use CF to display related Securities and Exchange Commission's EDGAR (Electronic Data Gathering, Analysis, and Retrieval) filings and Canadian Securities and Exchange Commission (SEDAR) filings.

DVD <GO>

Use DVD (Dividend/Split Summary) to display the dividend/split history of a security or, in the case of a corporate security, the dividend/split history of the parent of the issuer of the security. DVD also displays Bloomberg Dividend Forecast (BDVD) where available. You can use DVD to determine how a security's gross (before tax) or net (after-tax) dividend yield contributes to its overall returns.

ANR <GO>

Use ANR (Analyst Recommendations) to display a list of analysts' recommendations, price targets, price target time periods and a consensus rating for a selected equity. The consensus rating is based on analyst recommendations and compiled by Bloomberg reporters and researchers around the world. ANR allows you to determine the latest analyst sentiment and identify which analysts have the most accurate equity ratings. You can also create/edit an analyst recommendation alert.

ANALYTICS

EQS <GO>

Use EQS (Equity Screening) to perform a sophisticated search for equity securities. You can choose from example screens or create and save your own screening criteria manually or with the aid of on-screen wizard functionality. Criteria may include universe categories, such as countries, exchanges, indices, security types, security attributes, security lists, as well as data categories, such as fundamentals, estimates, financial and price ratios, and technical fields. You can also create advanced formulas or score an equity screen directly from search results.

The EQS function includes the In/Out Monitor screen (IOM) that allows you to monitor which securities are added to or dropped from the Equity Screening (Results) screen.

FTST <GO>

Our equity platform helps you efficiently backtest your strategies, offering powerful support to help you build and evaluate investment ideas. You can screen across a

huge universe of equities using a point-in-time database with 20 years of history for a complete picture of potential opportunities. And, you can test a broad range of factors, including custom factors, to gain a robust assessment of investment themes and models.

PORT <GO>

Our flagship application centralizes the crucial portfolio and risk analytics and data required by equity professionals. It seamlessly connects portfolio monitoring, characteristics, attribution, historical performance and scenario analysis with VaR, ex-post and ex-ante risk capabilities—in one convenient screen built for your workflow. You can pinpoint the sources of active risk in your portfolios with our fundamental risk factor models. PORT <GO> is an indispensable resource for equity investment managers.

COMP <GO>

COMP (Comparative Total Returns) compares the returns of a selected security to its benchmark index and industry group (if available) or with two other selected securities and indices. You can use COMP to evaluate a security's relative value and determine if it is outperforming other securities or indices.

ECO <GO>

Use ECO (Economic Release Calendars) to display, customize and manage multiple economic calendars. Economic calendars can be managed by region, country and event type, and can display current, historical and upcoming economic event details.

BETA <GO>

Use BETA to graph and display the historical sensitivity of a selected equity compared to a broad-based market index. You can use BETA to help determine an equity's risk level.

EQRP <GO>

Use EQRP to calculate the expected additional return (equity risk premium) sought above a specific country/region's risk-free rate when investing in a selected equity. You can use EQRP to help measure the relative risk/reward of investing in a selected equity and/or equity market.

WACC <GO>

Use WACC to display capital structure, theoretical weighted average cost of capital, economic value added, return on invested capital (ROIC) and economic value added spread

APPENDIX



(EVA Spread) for a selected company. You can customize default assumptions and data underlying the calculations to assist you in your analysis. You can also display historical WACC data and generate a PDF report of the current chart.

AZS <GO>

AZS forecasts the probability of a selected company entering bankruptcy within the next two years. You can use AZS to evaluate the general financial condition of a company and the associated risk of investing in the selected security. AZS does not calculate a score for financial institutions as it was developed primarily for manufacturing companies.

M&A ANALYSIS

MA <GO>

Use MA to track real-time global mergers and acquisitions data and utilize relevant valuations and data analysis. MA displays a customizable homepage featuring announced top deals, regional activity, global activity trends, top deal advisors and industry activity data. MA also provides comprehensive search functionality that allows you to perform a quick or advanced mergers and acquisitions data search—and allows you to save each search that you perform for future use. The M&A Results screen provides a detailed data summary (based on the search criteria you specify) as well as five of the following additional data analysis tabs: Deal Breakdown, Capital Flow, League Table, Deal List, and Time Series. You can also export all data sets and charts to a Microsoft Excel® spreadsheet or save charts as high-quality images for client use.

IPO <GO>

The new IPO is a comprehensive homepage for the Equity Capital Markets. Use IPO to monitor equity offerings by stage, industry sector, time period, currency or region. You can use IPO to compare year-over-year offerings performance data, display bar charts of the best and worst performers by offer-price-to-date-return percentage, or display a 12-month summary chart by amount or number of issues. You can also use IPO to access a custom company name search, underwriter rankings, Bloomberg World IPO indices and IPO news headlines.

CACS <GO>

Use CACS to display a list of corporate and municipal actions taken by a selected company or municipality. You can filter the information that appears by action type, date type or date range.

CACT <GO>

Use CACT/CLAC/BNKF to display a calendar of corporate and municipal actions, including stock buybacks, capital changes and distributions, so you can better understand how other companies are making capital and keep track of organizational changes. You can display information by date range and type, data source, action type and security type, as well as export to a Microsoft Excel spreadsheet.

FA <GO>

Use FA to display financial history for a specific company or equity index, identify trends and to gain data transparency so you can analyze the value of a potential investment, partnership or acquisition target. You can choose from a list of templates that display a variety of company information and add specific data fields to the selected template.

FA also provides aggregated fundamental data for more than 15,400 global indices and tracks more than 100 individual financial values. Values include income statement, balance sheet, cash flow, ratios and profitability measures. You can display this data on a quarterly, semiannual, annual or trailing 12-month basis. You can also compare the performance of a selected index to any equity security by using the comparison feature.

LEAG <GO>

Use LEAG/LALT to list underwriter/legal adviser rankings for the fixed-income, equity, equity-linked, syndicated loan and MTN & structured loans markets. Create market searches so you can examine the leading underwriters/legal advisers in a specific market or industry sector and evaluate their position relative to competitors. You can choose specific search criteria to create custom ranking tables using market variables, date ranges and/or specific underwriters/legal advisers.

FIXED INCOME

BTMM <GO>

Use BTMM (Bloomberg Treasury and Money Markets Monitor) to monitor all major rates, securities and economic releases for a selected country. BTMM provides a comprehensive picture of the current interest rate environment so you can react quickly to changing market conditions.

APPENDIX



GGR <GO>

Use GGR to monitor yield changes in government bond markets for individual countries. GGR also provides a global summary of government bill, note and bond rates.

IYC <GO>

Use IYC to display a menu of yield curve analytics. You can view the curves from different countries both currently and historically and run various scenarios. These scenarios can help you determine where returns have been in the past and where they may be in the future.

FMC <GO>

Use FMC to compare yields across maturities of multiple bond sectors to formulate a strategy when analyzing trade ideas or issuing bonds. You can compare sector curves to benchmark curves to determine which sectors and maturity points within those sectors currently offer the highest yields or the most relative value. You can also compare curves within the same sector, but with different ratings, to determine how much incremental yield you can pick up (give up) by trading into (out of) a lower- (higher-) quality sector curve.

NIM <GO>

Use NIM to monitor news headlines and security data for new issue bonds, syndicated loans and preferred stocks. You can display a reverse chronological calendar of new issue information for a predefined or custom fixed-income market.

NIM also displays contact information you can use to send Bloomberg new or updated information for new or existing fixed-income issues you want added to the Bloomberg database.

RATC <GO>

Use RATC to display a list of current and historical credit ratings for various issuers. RATC allows you to evaluate the financial security of the issuer based on its ability to meet debt obligations. You can use the historical ratings to analyze the issuer's creditworthiness and to track upgrades, downgrades and other moves that reflect the issuer's fiscal strength and degree of risk.

RATC is issuer-based and can display up to 10,000 issuer ratings.

YA <GO>

Use YA to evaluate the relationship between price and yield based on different yield conventions for a selected corporate security. You can calculate the price or yield for a bond and determine the cash due at settlement as well as the future cash flows. You can also calculate sensitivity measures to determine the price sensitivity of the bond to changes in interest rates.

YAS <GO>

Use YAS to price a fixed-income security using spreads to a benchmark issue/benchmark curve, calculate risk/hedge ratios/cost of carry, display market data, pricing information, interpolated spreads to benchmark curves, descriptive/fundamental/rating data and relative value analysis. You can also use YAS to maintain a log of securities on which you have run a YAS yield and spread analysis as well as save/edit analysis notes.

WBF <GO>

Use WBF to monitor prices or display yields for active bond futures contracts from around the world. WBF allows you to choose the display criteria, giving you a customized view of the market.

FMCI <GO>

Use FMCI to display a menu of fair market indices from around the world. Individual points that make up the Fair Market Curves (FMC) are saved as indices, allowing you to compare spread relationships to spot trends and opportunities and determine which sectors of the market offer the best value.

SRCH <GO>

Use SRCH to search Bloomberg's comprehensive fixed-income database so that you can find bonds that best meet your investment needs. You can search by coupon, maturity, country, currency and structure type for government, corporate, structured notes and private securities. SRCH displays up to 5,000 securities based on your criteria.

ISSD <GO>

Use ISSD to display descriptive, financial, operating and economic information for a selected issuer. ISSD provides a quick overview of the financial data and operations of the issuer of the security, so you can thoroughly evaluate the ability of the issuer to repay its debt.

APPENDIX



CRPR <GO>

Use CRPR to display the most recent and previous credit ratings for a selected structured finance security (CMO/ABS/CMBS/CDO), so you can identify any changes in the security's risk.

DDIS <GO>

Use DDIS to display the maturity distribution of the outstanding debt for a selected issuer and analyze its ability to meet its obligations to its debt holders. You can display outstanding debt (bonds, loans or both) by maturity, payment rank, coupon type, redemption type or loan type in a graph and table. You can choose which issuing entities and what type of bond and/or loans are included in the analysis. You can also compare an issuer's debt maturity distribution at the end of a past quarter with the current quarter.

TRA <GO>

Use TRA to display total return analysis for a selected government, corporate or municipal bond versus a comparable risk-free benchmark bond given various interest rate scenarios. You can also use TRA to perform convexity and duration analysis.

TRA allows you to change assumptions such as horizon date and reinvestment rate, so you can better determine projected total return in different interest-rate environments.

Note: TRA also supports total returns based on net-asset-value (NAV) calculations, which you can specify in the MFDF (Funds Defaults) function. MFDF <HELP> displays further information on how to specify NAV total return calculations.

RVM <GO>

Use RVM to graph the historical spread of a selected bond's yield to the interpolated point on the Treasury curve that corresponds with the bond's maturity. You can use RVM to compare the current spread of a bond with its average spread to see whether the bond is currently trading rich (narrow) or cheap (wide). You can also track recent trends in the bond's performance versus the interpolated point on the Treasury curve.

BFV <GO>

BFV determines where a selected municipal bond should trade based on comparable market contributed prices for municipal bonds with the same issuer type and credit quality. When a price is not available, BFV provides a starting point

for where a bond would be priced if it traded like other bonds in its industry sector and credit rating. BFV helps you determine whether a bond is priced rich or cheap compared with other bonds.

SWAPS

IRSM <GO>

Use IRSM to display a menu of functions used for analyzing interest-rate swaps and derivatives.

USSW <GO>

Use USSW to monitor current interest-rate swap data and data on US government, agency, LIBOR, futures markets and economic statistics.

SWDF <GO>

Use SWDF/TSSC to customize your swap rates and volatility contributor defaults for a variety of currencies. You can use these customized defaults in the interest-rates swap analytics on your Bloomberg Professional service.

FWCV <GO>

Use FWCV to analyze projected forward rates for fair market curves, interest-rate swap curves and government curves for three future dates. You can store up to five taxable and five tax-exempt curves as important benchmarks for your investment needs. You can also gauge how well FWCV historically predicted rates by comparing past projected rates with their corresponding actual rates. Forward curve analysis allows you to build an investment strategy that matches your interest-rate assumptions.

SWPM <GO>

Use SWPM to create, value and update interest-rate swaps and derivative securities. You can display and update curves and cash flows, and perform risk and scenario analyses for each leg of the swap and for the entire deal.

SWPR <GO>

Use SWPR to set up and store up to five report formats that display relevant floors and/or forward rate agreements, so you can make better assessments about the performance and risk of your portfolio. Resulting reports display critical details of the individual securities in the portfolio as well as summary information about the entire portfolio, including total market value.

APPENDIX



IRSB <GO>

Use IRSB to display a menu of global interest-rate swap monitors where current market rates of currency-based interest-rate swaps and swap spreads appear.

FWCM <GO>

Use FWCM to analyze projected forward rates for interest-rate swap curves out as far as 50 years. You can now perform additional analysis in other functions with the rates as they are tickerized. Some examples include the Historical Price Table function (HP), the Single Bond Hedge function (HG) and the Volatility Graph function (HVG).

GC <GO>

Use GC to find, view and manage curves on the BLOOMBERG PROFESSIONAL® Service. GC allows you to view one or more curves for one or more dates, including monitoring curve changes in real time. GC provides a variety of views, including changes between dates, changes between curves and 3-D views.

ICVS <GO>

Use ICVS to customize a swap curve. ICVS allows you to choose the instruments for the short-end and middle-of-the-swap curve. You can also use ICVS to create and save multiple curves for each swap curve.

IRDD <GO>

Use IRDD to display descriptions for the interest-rate swaps that can be valued in the Swap Manager function (SWPM). You can also list all your interest-rate swaps and credit swaps.

ASW <GO>

Use ASW to calculate the relative value of a selected bond through the interest-rate swap market. You can use ASW to determine if it is better to enter into an asset swap versus purchasing a floating-rate instrument. You can also use ASW to determine how much money can be saved in interest costs by issuing a fixed-rate bond and swapping the fixed payments for floating payments.

OAS1 <GO>

Use OAS1 to calculate values for the early redemption features of the selected security so you can make relative value judgments based purely on credit risk. OAS1 allows you to create custom credit curves and to determine the implied volatility assumptions that the market uses to price bonds

with redemption provisions. You can also compare bonds with different redemption features on a similar basis using four different models so you can identify better-valued securities.

YASN <GO>

Use YASN to price a selected structured note using OAS spreads to a yield curve. You can also calculate a curve with customized volatility assumptions, implicit option premiums within the structure, fixed-equivalent yields, and risk and hedge ratios to offset interest-rate risk.

VCUB <GO>

Use VCUB to calculate the interest-rate volatility and swaption volatility for the specified combination of strike, option term and swap tenor. VCUB captures the volatility smile/skew effect of in-the-money volatilities, at-the-money volatilities and out-of-the-money volatilities.

NSV <GO>

Use NSV to display and analyze annual/daily at-the-money (ATM) normal swaption volatility data. The data updates in real time.

MARS <GO>

Use MARS for risk management, stress-testing and scenario analysis of various derivatives strategies across asset classes. MARS allows you to upload a portfolio containing equity, FX, interest-rate and commodity derivatives and their underlying instruments, as well as vanilla bonds, floaters and structured notes. You can also calculate P/L and greeks and perform scenario analyses on any part of the portfolio.

MONEY MARKETS

MMR <GO>

Use MMR to display a menu of global money market rate monitors. MMR allows you to compare money market instruments to composite prices, third-party prices and electronic trading prices to quickly spot high-yielding instruments and maximize returns.

BTMM <GO>

Use BTMM (Bloomberg Treasury and Money Markets Monitor) to monitor all major rates, securities and economic releases for a selected country. BTMM provides a comprehensive picture of the current interest-rate environment so you can react quickly to changing market conditions.

APPENDIX



FED <GO>

Use FED to display a central portal for information on the US Federal Reserve, including important news, FOMC releases, relevant functions and educational materials.

MMCV <GO>

Use MMCV to display money market yield curves that you can use as benchmarks for relative value comparisons both on a current and historical basis. MMCV provides a variety of money market yield curves for money market securities around the world, enabling you to analyze your investment performance across multiple markets and currencies.

MCUR <GO>

Use MCUR to display the interpolated money market yield for a given maturity for LIBOR or any other curve on the MMCV1 menu. By comparing the money market yield to its benchmark yield, you can determine if you are paying a fair price for your security. This information appears on the top two lines of your screen and does not disrupt your current display.

GA1 <GO>

Use GA1 to evaluate short-term funding strategies for money market instruments on a breakeven basis. GA1 can help you determine what maturities generate the greatest returns based upon your time horizon and interest rate assumptions.

GA2 <GO>

GA2 calculates the potential profit/loss that results in choosing one investment strategy over another. You can use GA2 to help determine which short-term investment strategy best suits your time horizon and interest-rate assumptions.

FWCV <GO>

Use FWCV to analyze projected forward rates for fair market curves, interest-rate swap curves and government curves for three future dates. You can store up to five taxable and five tax-exempt curves as important benchmarks for your investment needs. You can also gauge how well FWCV historically predicted rates by comparing past projected rates with their corresponding actual rates. Forward curve analysis allows you to build an investment strategy that matches your interest-rate assumptions.

PGM <GO>

Use PGM to look up money market programs. You can access a program description page and create and store individual money market securities according to the program

type of a specific issuer. PGM can help you keep a record of any securities you purchase when you create and store them under your Bloomberg Professional service login.

STRUCTURED FINANCE ANALYTICS

HSST <GO>

Use HSST to display statistics on home sales and housing construction, completions and affordability.

BMMI <GO>

Use BMMI to research mortgage prepayment reports, credit performance, home equity statistics, real estate cleanup call reports, manufactured housing performance statistics and Bloomberg prepayment models.

CPH <GO>

Use CPH to display a table of generic monthly historical data for a selected mortgage-backed security (MBS), collateralized mortgage obligation (CMO) or mortgage pool. Data for pools and CMOs corresponds to the generic to which they are mapped. You can use CPH to compare (on separate screens) different securities' prepayment speeds and the rates at which they prepay. NOTE: You can also use CPH to graph the historical data (CPG <GO>).

CLC <GO>

Use CLC/CLCX to display data and statistics on the loans backing a collateralized mortgage obligation (CMO), a pool or an auto asset-backed security (ABS). CLC/CLCX allows you to easily follow the changes in a security's collateral—which can alter how risky a deal is from a credit perspective.

SPA <GO>

Use SPA to chart projected cash flow patterns for all tranches within the selected CMO/ABS/CMBS mortgage deal's credit group. SPA allows you to display the waterfall for the selected deal.

VALL <GO>

Use VALL/GALL to display a table or a graph of dealer prepayment assumptions for a mortgage-backed security's collateral over an interest rate range of +/- 300 basis points. VALL/GALL displays an average of these assumptions derived from the Bloomberg Median and allows you to customize the collateral type for analysis. You can use these functions to determine if a specific dealer's forecast is comparable to another dealer's forecast, allowing you to better gauge prepayment risk.

APPENDIX



PVG <GO>

Use PVG to display a graph of the first five years of vector forecasts for a selected mortgage security. PVG allows you to customize the shifts in the security's interest rate and select the prepayment model for each forecast so you can determine prepayment rates based on your assumptions.

DV <GO>

DV displays information on how to generate, save and incorporate dynamic vectors into your analysis of mortgage-backed securities. You can use dynamic vectors to make your own assumptions about the speed of prepayments and adjust your return projections accordingly.

YT <GO>

Use YT to display a table and graph of yields/prices for a mortgage or structured-product security over multiple assumptions regarding price, prepayment, yields or spread. YT allows you to quickly compare market prices for a range of yields.

WALG <GO>

Use WALG to graph the weighted average life (WAL) and principal payments of a selected mortgage-backed (MBS) or asset-backed security (ABS) under different prepayment scenarios. You can view WAL graphs constructed from the prepayment assumptions of different dealers. WALG allows you to gauge both call risk and extension risk for the selected security according to prepayment rate changes.

OAS1 <GO>

Use OAS1 to calculate values for the early redemption features of the selected security, so you can make relative value judgments based purely on credit risk. OAS1 allows you to create custom credit curves and to determine the implied volatility assumptions that the market uses to price bonds with redemption provisions. You can also compare bonds with different redemption features on a similar basis using four different models so you can identify better-valued securities.

PRICE DISCOVERY

FIPX <GO>

FIPX provides an integrated price discovery platform, combining MSG1 quotes (pricing from your messages), contributing dealer quotes, Bloomberg Generic pricing (BGN), Bloomberg Evaluated pricing (BVAL) and TRACE trade data. A graphical representation of the data provides a quick insight into the breadth of available pricing.

Use FIPX to determine a bond's value when evaluating individual securities, analyzing a potential trade or determining a mark to market.

ALLQ <GO>

ALLQ allows you to monitor current market data for a selected fixed-income security by contributed pricing sources. ALLQ provides price transparency by offering an overview of the firms pricing a selected security. ALLQ can also be used as a liquidity platform since you can execute trades through dealers with whom you have been privileged to trade. ALLQ refreshes pricing automatically and displays the time for each pricing update.

Use ALLQ to determine a security's current price/spread/ yield and liquidity, and electronically trade the security.

QMGR <GO>

QMGR allows you to monitor all the prices you have received via messages and dealer contributor pages for which you are enabled for a security. You can navigate between three different views: All Quotes, Best Quotes and Last Quotes, and choose to monitor prices for one security or two securities simultaneously.

Use QMGR to determine where a security is being priced in the current market, the most active dealers and market makers in the security, if the security represents value to a client and the amount of liquidity in the security.

QR <GO>

QR provides a quote-by-quote or trade-by-trade history for a selected security from a specific pricing source. You can change the pricing source and set a date range for trend analysis.

Use QR to gauge a security's intraday price movement and determine the fair price for a bond.

TDH <GO>

TDH allows you to determine the historical level of trading activity in a TRACE-eligible security. TDH aggregates historical TRACE trade data, including size and direction (dealer buy, dealer sell and dealer-to-dealer), and provides graphical representations of trading activity and trends in spreads for quick analysis.

Use TDH to determine a security's historical pricing by the market, liquidity, trends in spread and performance.

APPENDIX



ANALYTICS

YAS <GO>

YAS provides an integrated platform for security-level price, yield, spread and risk analysis. YAS allows you to navigate between tabs that show pricing information, descriptive data and historical spread graphs. You can also create a custom tab with the information that is most important to you.

Use YAS to price a fixed-income security using spreads to a benchmark issue or benchmark curve, and calculate risk, hedge ratios and cost of carry.

DESCRIPTIVE

DES <GO>

DES provides consolidated financial information about a specific corporate or government security, including issuance and redemption, identification numbers and ratings.

Use DES to review, in one place, all the descriptive information you need to evaluate, buy, sell and trade a bond. To simplify analysis, all the tools in DES remain the same regardless of the type of bond.

RELATIVE VALUE

FIRV <GO>

FIRV allows you to determine the relative richness/cheapness of a bond using a variety of spread and trend analyses.

Use FIRV to evaluate the relative value of a bond versus itself and versus comparable bonds over a historical time period you choose. Compare the selected bond to its own historical spreads and to spreads from comparable bonds and sector averages.

COMB <GO>

COMB allows you to compare the relative value of a customizable list of corporate bonds or syndicated loans. You can use filters to find bonds/loans that share similar characteristics or import a list of bonds/loans that you have previously created and saved.

Use COMB to display customizable tables and charts analyzing the spreads, prices and descriptive characteristics of a list of comparable bonds or loans.

CRVD <GO>

CRVD allows you to analyze the relative value of an issuer's bonds versus the issuer's credit default swap curve.

Use CRVD to chart aggregated issuer bond spreads with the issuer's credit default swap curve while displaying the data behind the chart in tables. You can customize the set of bonds from the issuer that are included in the analysis. You can also customize the CDS spreads used in the analysis.

RV <GO>

RV allows you analyze the historical performance of a bond using different benchmark spreads or CDS basis so that you can understand the relative richness or cheapness of a bond.

Use RV to chart the historical yield of a selected bond, a selected benchmark and their spread. Correlation and regression analysis are also available in RV.

SS <GO>

SS allows you to compare two bonds that are potential swap candidates so that you can choose the best time to swap the bonds in order to maximize your profits.

Use SS to display an overview of the relationship between two selected securities, including a summary of spread, risk and proceeds differentials.

TICKETING

BXT <GO>/SXT <GO>

BXT and SXT allow you to communicate the details of a trade directly over the BLOOMBERG PROFESSIONAL[®] service through an electronic ticket. The ticket includes descriptive data for the security, relevant trade calculations and any notes you want to accompany the trade. The completed ticket can be sent to other Bloomberg users via Bloomberg Message (MSG) and/or integrated with the VCON voice trade confirmation system.

Use BXT to write an electronic buy ticket. Use SXT to write an electronic sell ticket.

HEDGING

FIHG <GO>

FIHG provides an integrated platform for hedging single securities. You can compare hedging options and analyze residual risk and historical performance.

Use FIHG to identify efficient hedges to hedge rate, curve and credit risk and run a cost-benefit analysis across various hedging strategies.

APPENDIX



FIHR <GO>

FIHR calculates the number of cash bonds or bond futures contracts you must buy or sell to hedge the interest-rate risk of a position in a bond you specify.

Use FIHR to assess and hedge the interest-rate risk of a bond position.

TED <GO>

TED allows you to calculate the spread between a corporate or government security (with 10 or fewer years to maturity) and a Euro-Futures strip. TED can also generate a spread using a deliverable futures contract. TED displays the rate of return for a bond and a Eurodollar contract in comparable terms. TED uses the cheapest-to-deliver bond for all calculations.

Use TED to determine if a bond position could benefit from the difference between the bond's yield and LIBOR contracts of a similar maturity.

ADDITIONAL FIXED-INCOME FUNCTIONS

BTMM <GO>

Use BTMM (Bloomberg Treasury and Money Markets Monitor) to monitor all major rates, securities and economic releases for a selected country. BTMM provides a comprehensive picture of the current interest-rate environment so you can react quickly to changing market conditions.

GGR <GO>

Use GGR to monitor yield changes in government bond markets for individual countries. GGR also provides a global summary of government bill, note and bond rates.

IYC <GO>

Use IYC to display a menu of yield curve analytics. You can view the curves from different countries both currently and historically and run various scenarios. These scenarios can help you determine where returns have been in the past and where they may be in the future.

FMC <GO>

Use FMC to compare yields across maturities of multiple bond sectors to formulate a strategy when analyzing trade ideas or issuing bonds. You can compare sector curves to benchmark curves to determine which sectors and maturity

points within those sectors currently offer the highest yields or the most relative value. You can also compare curves within the same sector, but with different ratings, to determine how much incremental yield you can pick up (give up) by trading into (out of) a lower- (higher-) quality sector curve.

NIM <GO>

Use NIM to monitor news headlines and security data for new issue bonds, syndicated loans and preferred stocks. You can display a reverse chronological calendar of new issue information for a predefined or custom fixed-income market.

NIM also displays contact information you can use to send Bloomberg new or updated information for new or existing fixed-income issues you want added to the Bloomberg database.

RATC <GO>

Use RATC to display a list of current and historical credit ratings for various issuers. RATC allows you to evaluate the financial security of the issuer based on its ability to meet debt obligations. You can use the historical ratings to analyze the issuer's creditworthiness and to track upgrades, downgrades and other moves that reflect the issuer's fiscal strength and degree of risk.

RATC is issuer-based and can display up to 10,000 issuer ratings.

WBX <GO>

WBX allows you to compare and analyze sovereign debt cross market spreads.

Use WBX to select a country as the benchmark, measure its performance relative to other countries and determine which sovereign debt offers the best value.

WBMV <GO>

WBMV allows you to monitor sovereign debt movers in real time and determine which markets have the most price action.

Use WBMV to track the movement of 10-year benchmark bonds, 2-to-10-year yield spreads and 5-year CDS for developed countries and emerging markets. You can also access news stories to analyze why markets are moving.

APPENDIX



FMCI <GO>

Use FMCI to display a menu of fair market indices from around the world. Individual points that make up the Fair Market Curves (FMC) are saved as indices, allowing you to compare spread relationships to spot trends and opportunities and determine which sectors of the market offer the best value.

SRCH <GO>

Use SRCH to search Bloomberg's comprehensive fixed-income database so that you can find bonds that best meet your investment needs. You can search by coupon, maturity, country, currency and structure type for government, corporate, structured notes and private securities. SRCH displays up to 5,000 securities based on your criteria.

ISSD <GO>

Use ISSD to display descriptive, financial, operating and economic information for a selected issuer. ISSD provides a quick overview of the financial data and operations of the issuer of the security, so you can thoroughly evaluate the ability of the issuer to repay its debt.

DDIS <GO>

Use DDIS to display the maturity distribution of the outstanding debt for a selected issuer and analyze its ability to meet its obligations to its debt holders. You can display outstanding debt (bonds, loans or both) by maturity, payment rank, coupon type, redemption type or loan type in a graph and table. You can choose which issuing entities and what type of bond and/or loans are included in the analysis. You can also compare an issuer's debt maturity distribution at the end of a past quarter with the current quarter.

TRA <GO>

Use TRA to display total return analysis for a selected government, corporate or municipal bond versus a comparable risk-free benchmark bond under various interest-rate scenarios. You can also use TRA to perform convexity and duration analysis.

TRA allows you to change assumptions such as horizon date and reinvestment rate, so you can better determine projected total return in different interest-rate environments.

Note: TRA also supports total returns based on net-asset-value (NAV) calculations, which you can specify in the MFDF (Funds Defaults) function. MFDF <HELP> displays further information on how to specify NAV total return calculations.

FI FUTURES AND OPTIONS

WBX <GO>

WBX allows you to compare and analyze sovereign debt cross market spreads.

Use WBX to select a country as the benchmark, measure its performance relative to other countries and determine which sovereign debt offers the best value.

WBMV <GO>

WBMV allows you to monitor sovereign debt movers in real time and determine which markets have the most price action.

Use WBMV to track the movement of 10-year benchmark bonds, 2-to-10-year yield spreads, and 5-year CDS for developed countries and emerging markets. You can also access news stories to analyze why markets are moving.

WIR <GO>

Use WIR to monitor the prices or yields for active interest-rate futures contracts from around the world. WIR allows you to choose the display criteria, thereby giving you a customized view of the market.

CTM <GO>

Use CTM to search for contracts. You can use a variety of filters and sorts to locate the specific contract for which you are searching as well as customize the table to display specific data.

CCRV <GO>

Use CCRV to access forward curves for futures contracts and OTC forwards. A futures curve is made up of all the contract months that are traded for a specific commodity on a specific exchange. If you are a trader or analyst, these curves help you determine where the markets indicate commodity prices will be in the future. You can also create custom curves that you can add to custom curve charts or sample curve charts.

DLV <GO>

Use DLV to calculate the cheapest-to-deliver ranking analysis for either conversion-factor or yield-based bond futures. You can use DLV to list all deliverable bonds for a selected futures contract and to identify the cheapest-to-deliver bond.

APPENDIX



OMON <GO>

Use OMON to display real-time pricing and derived data for exchange-traded call and put options. You can customize multiple templates according to the option information you need, including implied volatility levels, risk measurements and historical volatility. Basic scenario analysis is available via Calc Mode with Overrideable option inputs and outputs. You can also filter the options according to center price, strike price and the exchange criteria you choose.

Note: The functions CALL <GO>, PUT <GO>, COAT <GO> and POAT <GO> are now consolidated into the function OMON <GO>.

The corresponding tab of the OMON function appears when you enter CALL <GO>, PUT <GO>, COAT <GO> or POAT <GO>.

OV <GO>

Use OV to calculate the value of a fixed-income option using custom pricing assumptions for government and corporate bonds. You can use OV to determine the value of over-the-counter (OTC) options by determining the option premium or the implied volatility used to calculate the premium.

HIVG <GO>

Use HIVG to graph the historical implied volatility and prices/yields for a selected security. HIVG helps you gauge historical price movement and volatility versus the market's prediction (implied) of volatility over time. You can use HIVG to identify trends in price direction, predict trends in future volatility or draw correlations between prices/yields and volatility.

TRMS <GO>

Use TRMS to display the term structure of historical and implied volatility for an equity or equity index. You can use TRMS to compare the term structure of implied volatility across multiple underlyings, dates and measures/levels of moneyness.

FYH <GO>

Use FYH to calculate the number of futures contracts required to hedge a selected corporate, government or mortgage security using the futures contract's proxy issue. FYH displays four different futures contracts and their respective deliverable bonds, so you can analyze various hedge scenarios.

REPO ANALYSIS DATA

BTMM <GO>

Use BTMM (Bloomberg Treasury and Money Markets Monitor) to monitor all major rates, securities and economic releases for a selected country. BTMM provides a comprehensive picture of the current interest-rate environment so you can react quickly to changing market conditions.

RPP <GO>

Repo pricing.

RRRA <GO>

Repo/reverse repo analysis. Simplified user interface. Moved extraneous information to settings.

COC <GO>

Use COC to analyze the purchase of a selected security with borrowed funds (repo) or the borrowing of a security by lending out funds (reverse repo). COC allows you to quickly view the basis point spread, price pick-up, net profit/loss, and the breakeven price and yield for a given repo agreement—so that you can measure the net profit realized or the loss incurred by entering into these transactions.

CALCULATORS

FPA <GO>

Use FPA to analyze the purchase of a selected fixed-income security with borrowed funds through forward pricing. Forward pricing derives its value from the spread between a bond's yield and the short-term cost of financing the bond, or the repo rate.

You can use FPA to facilitate communication between buyers and sellers by sending the FPA analysis to other Bloomberg Professional service users.

BSR <GO>

Use BSR to calculate the forward price for a selected bond's buy/sell back repo transaction for a one-year maximum period. You can specify the reinvestment rate of the coupons (if any), calculate the amount of bonds needed given a predetermined settlement amount, calculate a spot price from a forward price and incorporate security margins so you can measure the net profit or loss incurred by entering into this transaction.

APPENDIX



YAS <GO>

Use YAS to price a fixed-income security using spreads to a benchmark issue/benchmark curve, calculate risk/hedge ratios/cost of carry, display market data, pricing information, interpolated spreads to benchmark curves, descriptive/fundamental/rating data and relative value analysis. You can also use YAS to maintain a log of securities on which you have run a YAS yield and spread analysis, as well as save/edit analysis notes.

HIGH YIELD/SYNDICATED LOANS/ DISTRESSED RESEARCH

NIM <GO>

Use NIM to monitor news headlines and security data for new issue bonds, syndicated loans and preferred stocks. You can display a reverse chronological calendar of new issue information for a predefined or custom fixed-income market.

SRCH <GO>

Use SRCH to search Bloomberg's comprehensive fixed-income database so that you can find bonds that best meet your investment needs. You can search by coupon, maturity, country, currency and structure type for government, corporate, structured notes and private securities. SRCH displays up to 5,000 securities based on your criteria.

LSRC <GO>

Use LSRC to search the universe of live syndicated loans available on the Bloomberg Professional service using custom criteria.

The data is based on public information and matches the loan data that appears on the Loan Tranche Description (DES) function. DES <HELP> displays further information. The search excludes facilities and combined tranches, such as a BC or a loan strip. User-created loans from the Private Security Update (PPCR) function are not included in the search. PPCR <HELP> displays further information.

EQS <GO>

EQS (Equity Screening) performs sophisticated searches for equity securities. Use EQS to create and save your own screening criteria manually or with the aid of on-screen wizard functionality. Criteria may include universe categories, such as countries, exchanges, indices, security types, security attributes and security lists, as well as data categories, such as fundamentals, estimates, financial and price ratios, and technical fields.

RATC <GO>

Use RATC to display a list of current and historical credit ratings for various issuers. RATC allows you to evaluate the financial security of the issuer based on its ability to meet debt obligations. You can use the historical ratings to analyze the issuer's creditworthiness and to track upgrades, downgrades and other moves that reflect the issuer's fiscal strength and degree of risk.

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Use FMCI to display a menu of fair market indices from around the world. Individual points that make up the Fair Market Curves (FMC) are saved as indices, allowing you to compare spread relationships to spot trends and opportunities and determine which sectors of the market offer the best value.

RELS <GO>

Use RELS to gain insight into the types of expenditures a selected company may encounter and an overview of its capital structure. This comprehensive overview includes a company description, a comprehensive list of equity, debt, preferred, money market securities, major subsidiaries and brand names.

ISSD <GO>

Use ISSD to display descriptive, financial, operating and economic information for a selected issuer. ISSD provides a quick overview of the financial data and operations of the issuer of the security, so you can thoroughly evaluate the ability of the issuer to repay its debt.

DDIS <GO>

Use DDIS to display the maturity distribution of the outstanding debt for a selected issuer and analyze its ability to meet its obligations to its debt holders. You can display outstanding debt (bonds, loans or both) by maturity, payment rank, coupon type, redemption type or loan type in a graph and table. You can choose which issuing entities and what type of bond and/or loans are included in the analysis. You can also compare an issuer's debt maturity distribution at the end of a past quarter with the current quarter.

YAS <GO>

Use YAS to price a fixed-income security using spreads to a benchmark issue/benchmark curve, calculate risk/hedge ratios/cost of carry, display market data, pricing information,

APPENDIX



interpolated spreads to benchmark curves, descriptive/fundamental/rating data and relative value analysis. You can also use YAS to maintain a log of securities on which you have run a YAS yield and spread analysis, as well as save/edit analysis notes.

YTC <GO>

Use YTC to calculate yields to predetermined call dates for a selected security. YTC allows you to see the different yield scenarios at each possible redemption date, so you can better gauge the value of the bond based on your own redemption assumptions.

MUNICIPAL BONDS

SMUN <GO>

Use SMUN (Search for Municipal Issuers) to search for US municipalities that meet specific geographic and financial analysis criteria. You can evaluate the financial health of a municipality individually or as compared to a peer group. The fundamental data is sourced from municipal filings.

MIFA <GO>

Use MIFA to display current and historical financial information for the 50 US states, District of Columbia, Puerto Rico, and the US Trust Territories. The corresponding financial data has been entered into standard templates for easy comparison of issuers. The data has been compiled from the annual financials filed with Bloomberg's NRMSIR (Nationally Recognized Municipal Securities Information Repository).

CDRA <GO>

Use CDRA to display a calendar of upcoming, current and past fixed-rate municipal bond issues. You can filter the calendar of bond issues that appear by a variety of criteria.

PICK <GO>

Use PICK to post and monitor primary and secondary municipal bond offerings/trades. You can monitor all offerings/trades, target bonds with conventional characteristics or create a custom bulletin board of offerings/trades that match your investment strategies. PICK helps buy-side and sell-side firms gauge the supply of bonds in the marketplace.

MSRC <GO>

Use MSRC to search the universe of municipal bonds available on the BLOOMBERG PROFESSIONAL® Service using custom criteria. You can also save your custom searches and run reports with summary information for the bonds returned by the search.

MBWD <GO>

MBWD displays a list of municipal bids-wanted items for a specific firm. If you are a sell-side firm, you can use MBWD to submit bids via the BLOOMBERG PROFESSIONAL service to buy-side firms that have privileged you to receive their bids-wanted list. If you are a buy-side firm, you can use MBWD to display your own bids-wanted lists. You must be authorized to use this function.

MSRB <GO>

Use MSRB to display transaction reports designed by Bloomberg based on data received from the Municipal Securities Rule making Board (MSRB). These reports contain interdealer and dealer-customer transaction prices, as well as the number of trades and their par value. This information can help you determine the current market value of a municipal bond.

DEAL <GO>

Use Deal to communicate new offerings to buy-side customers in order to increase sales volume, maximize spreads by effectively conveying pricing information to salespeople and submit trade-eligibility data to the Depository Trust & Clearing Corporation (DTCC) to be in compliance with the G-34 Reporting Regulations enforced by the Municipal Securities Rule-Making Board (MSRB).

You can also:

- » Share real-time information to ensure all parties involved have the most current information.
- » Display the sale date, issuer, amount issued and other pertinent information, so you can quickly access the most important information on the deal.
- » Sort and manage current and historical deals by state and time, so you can quickly and efficiently find deals that meet your criteria.

