A Bloomberg Professional Services Offering

DAPI <GO> Overview of Desktop API Help Page

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Date: 05/30/2022

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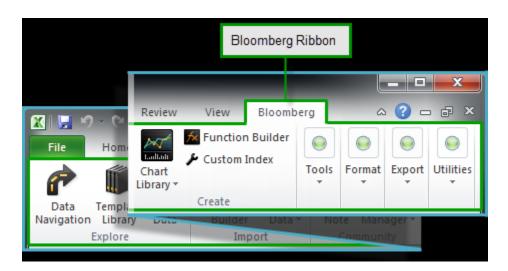
Bloomberg

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Bloomberg Ribbon

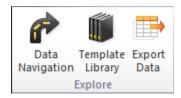
The *Bloomberg* ribbon at the top of Microsoft® Excel provides quick access to the entire suite of tools developed to simplify data imports from the Bloomberg Professional® service into your spreadsheets as well as into Microsoft® PowerPoint and Microsoft® Word. You can also use the tools on the ribbon to access pre-created spreadsheets, format and control your spreadsheet, and send or save your file on Bloomberg.

The ribbon that appears for you depends on your default settings. The image below shows the *Advanced* ribbon, which features the full set of add-in tools. For information on changing the ribbon that appears for you, see <u>Ribbon</u>.



Explore

The tools in the Explore group allow you to search Bloomberg for pre-created solutions for your analysis.



- Data Navigation: Allows you to browse through categories of data for an equity or fixed income security, so you can easily
 locate data sets, Bloomberg functions, and pre-built Excel spreadsheets relevant to your analysis.
 For more: <u>Data Navigation</u>.
- Template Library: Provides the functionality of the Excel Template Library (XLTP) function directly in Excel, giving you access
 to Bloomberg's comprehensive library of hundreds of pre-built spreadsheets. You can search or browse by category to
 discover if Bloomberg has already created an Excel solution that meets your analytical needs.
 For more: Template Library, XLTP Help Page.

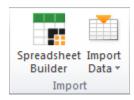
• Export Data: Allows you to create and distribute reports containing Bloomberg data to a group of colleagues at your firm who do not have the Bloomberg Professional® service running on their computer.

Note: You must be enabled to use this feature. For more information on this Research Analyst Data tool, contact your Bloomberg representative.

For more: Export Data.

Import

You can use the wizards within the *Import* group to follow step-by-step procedures to import data from Bloomberg into your spreadsheet, so you can easily obtain the data you need for your analysis. The wizards guide you through each option that affects the imported data and then automatically build the corresponding Bloomberg formulas.



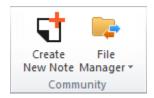
• Spreadsheet Builder: Allows you to easily create an entire custom table with the Bloomberg Professional® service data you need. You use a simple wizard to define a set of securities, choose the data you want to download for each of them, then specify the layout of the table. Bloomberg then automatically builds the right formulas in your spreadsheet. The Spreadsheet Builder lets you download real-time (continuously updating), current, historical, or intraday data across every market sector and type of data available on the Bloomberg.

For more: Custom Tables.

- Import Data: When you click Import Data, a menu appears with the following options:
 - Technical Analysis: Allows you to import technical indicator data and analyze securities in Excel as you would with the
 Technical Study Browser (TECH) function. You can evaluate securities by analyzing statistics generated by market activity,
 such as past prices and volume, and identify patterns that suggest future performance.
 For more: Retrieving Real-Time/Current Data, Retrieving Historical End of Day Data, Retrieving Historical Intraday Bars,
 TECH Help Page.
 - Equity Screening: Allows you to import screens that you build with the *Equity Screening* (EQS) function, so you can quickly create spreadsheets of data with the universe of equities and corresponding data that you define. For more: Equity and Fund Screening, EQS Help Page.

Community

The tools in the Community section allow you to store a spreadsheet on the Bloomberg for future use or share your spreadsheet with other Bloomberg users.



• Create New Note: Allows you to publish spreadsheets to the Notes (NOTE) function on the Bloomberg Terminal® for sharing information with your colleagues or clients. While uploading your documents, you can also upload data to Custom Data Editor (CDE) fields, so you can store and share your custom data with other Bloomberg users, as well as perform time series analysis in other functions (e.g., G, PORT, etc.).

For more: Create New Note, NOTE Help Page, CDE Help Page.

File Manager: Provides the functionality of the File Manager (FILE) and Message (MSG) functions directly in Excel, so you
can create and access a centralized repository for your spreadsheets. You can save a file to your personal FILE repository,
open files from FILE, and send a file as an attachment to a Bloomberg message.

For more: File Manager, FILE Help Page, MSG Help Page.

Create

The tools within the Create group allow you to build Bloomberg charts and formulas on your spreadsheet.



• Chart Library: Allows you to easily create and display Bloomberg charts within your spreadsheets, so you can visually analyze data with robust, customizable charts that update in real-time. You can create new charts or add existing charts from those stored in your Chart Library on the Charts (G) function.

For more: Creating New Charts, Opening Existing Charts, G Help Page.

Note: You can also drag standard charts directly from G onto your spreadsheet. For more information, see <u>Dragging Charts</u> from G.

• Function Builder: Opens the Function Builder, which allows you to create custom Bloomberg formulas without prior knowledge of the Bloomberg API syntax. Autocomplete functionality for securities, data fields, and optional parameters displays suggested options based on the characters you enter, so you can easily identify the required and optional parameters that allow you to download the data you want.

For more: Function Builder.

Trading

The tools in the *Trading* group integrate Bloomberg trading systems functionality with Excel.

Note: You must be permissioned to use each of the trading systems tools. For more information, please contact your sales representative.

Import Trading Systems Data: Allows you to import trading systems data by firm and entity (book) types, so you can display
the positions within each entity. Information such as position and risk can be imported, filtered by security, and displayed
according to position and second risk.

For more: <u>Trading Systems Wizard</u>.

• Tradebook Order Builder: Provides access to the core functionality of the domestic and global Tradebook platforms, and allows you to easily connect a variety of new or existing trading models to Bloomberg Tradebook. The *Tradebook Order Builder* supports the following categories of functionality: Order, Modify, and Cancel executions; Trade and Order recaps; Fill messages; and Blotter capabilities.

The *Tradebook Order Builder* is built as an extension of Tradebook on the Bloomberg, and is integrated with all of the Tradebook blotters, market depth trading screens, and other functionality on the terminal. It leverages all the settings of your core terminal Tradebook profile, so your orders from the *Tradebook Order Builder* behave the same way as the orders you input using the Bloomberg Tradebook pop-up ticket.

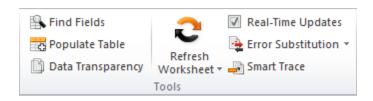
For more: Tradebook Order Builder.

• EMSX Control Panel: Integrates the Execution Management System (EMSX) function with Excel, so you can import information about your orders and routes to a spreadsheet, as well as place new orders and routes directly from Excel. The EMSX Control Panel allows you to enter multiple equity, futures, and options securities into a spreadsheet and execute trades based on various custom-built strategies. Within each blotter, you can choose which columns you want to display. For ease of use, you can create multiple instances of the spreadsheet, so you can maintain a staging, order, and route blotter all at once.

For more: EMSX Control Panel, BEMS <GO>, EMSX Help Page.

Tools

The tools within the *Tools* group assist you in uploading, auditing, and updating the data on your spreadsheet.



• Find Fields: Provides the functionality of the Field Search (FLDS) function directly in Excel, so you can locate, store, and use Bloomberg data fields, gaining access to the data you need for your analysis.

For more: Find Fields, FLDS Help Page.

• **Populate Table**: Automatically creates a dynamically updating table of data from the column and row headers that you specify, so you can identify the information you want to analyze for a group of securities then import the corresponding data with a single mouse click.

For more: Populate Table.

• Data Transparency: Displays further details about imported fundamental data for an equity security, such as the components that make up the value, and allows you to access the original source documents. This allows you and anyone who uses the spreadsheet to pinpoint the origination of the data.

For more: Data Transparency.

• **Refresh Workbooks**: Allows you to refresh your formulas on a range, worksheet, or workbook level to ensure that the most up-to-date data appears.

For more: Refresh Workbooks.

 Real-Time Updates: When working with real-time data, allows you to enable continuous, live data updates on your spreadsheet.

For more: Real-Time Updates.

• Error Substitution: Allows you to replace Bloomberg or Excel formula errors throughout your spreadsheet with a blank space or custom text, so your data tables are ready to be placed in your presentations or documents.

Note: You must be a Bloomberg Anywhere® subscriber to use *Error Substitution*. For more information, please contact your sales representative.

For more: Error Substitution.

• Smart Trace: Helps you maintain your models and collaborate with other developers by providing transparency into the calculations on a spreadsheet. You can evaluate each component of a formula and determine which cells in which workbooks influence the output of a specific cell. Additionally, you can name each cell or cell range and insert comments.

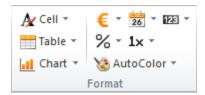
Note: You must be a Bloomberg Anywhere subscriber to use *Smart Trace*. For more information, please contact your sales representative.

For more: Smart Trace.

Format

The tools within the *Format* group assist you in creating custom formats and applying those formats to your spreadsheet, so you can quickly and easily update the spreadsheet's layout and appearance to prepare the data tables for your presentations and documents.

Note: You must be a Bloomberg Anywhere® subscriber to access the tools within the *Format* group. For more information, please contact your sales representative.



• Speed Formatting (Cell, Table, Chart, Currency, Date, Number, Percentage, and Multiples): Attaches number, cell, table, and Excel chart formats to a keyboard shortcut cycle, so you can quickly modify the appearance of your spreadsheet to prepare the data for your presentations. Speed Formatting also allows you to memorize custom formatting for cells, tables, and Excel charts, so you can save frequently-used styles and maintain uniformity of design.

For more: Speed Formatting.

• AutoColor: Helps you identify at a glance the components of a spreadsheet by color coding the cell contents. This can help you audit your financial model and prepare your data tables for insertion into documents or presentations. For more: AutoColor.

Export

The tools within the *Export* group help simplify the process of creating and maintaining your Microsoft® Office presentations with Bloomberg data. You can download data from Bloomberg into Excel to fuel your analytical models, then seamlessly connect the models to your PowerPoint presentations and Word documents. The exported data retains a link to the spreadsheet, so you can refresh your data and ensure that the values within your presentations and documents are accurate and up-to-date.

Note: You must be a Bloomberg Anywhere® subscriber to access the tools within the *Export* group. For more information, please contact your sales representative.

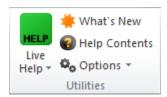


- Copy: Allows you to copy data from Excel, so you can then use the Bloomberg Add-In in PowerPoint or Word to paste and arrange the data.
- Paste: Allows you to paste data directly to PowerPoint or Word, formatting the data based on your menu selection, so you can quickly link the files.
- **Guide**: Helps you resize a table or chart to fit a specific destination area in a PowerPoint presentation, to assist you in creating attractive and professional presentations.

For more: PowerTools.

Utilities

The tools within the *Utilities* section help you control the Bloomberg Add-In, by allowing you to set your default settings, obtain assistance, and troubleshoot issues.



- Live Help: Provides a menu of options to help you use the Bloomberg Add-In. You can open a live help chat with the Bloomberg Help Desk, share your spreadsheet during the live help chat, convert old Bloomberg formulas to the new format, display the version of the Add-In you are running, and run a diagnostics tool that will identify issues with your Add-In installation and attempt to repair those issues.
 - For more: Diagnostics, Live Help, Formula Conversion.
- What's New: Provides information about new Add-In features.
- Help Contents: Displays this help file, so you can learn the benefits of the Add-In and how to use the tools it provides.
- Options: Allows you to save default settings that control the functionality of the Add-In.

For more: Settings.

Bloomberg Formulas

Bloomberg Professional® service API formulas allow you to quickly import the data you need by constructing short, simple strings of code within cells on your spreadsheet. There are multiple types of Bloomberg formulas that each have their own syntax and are used for different purposes. The most commonly used formulas are:

- BDP: Imports a single data point of current or real-time (continuously updating) data for a selected security.
 For more: BDP (Current/Real-Time Data), BDP & BDS: Overrides.
- BDH: Imports a single data point or a time series of historical intraday or end of day data for a selected security.
 For more: BDH (Historical Data), BDH: Fundamentals/Estimates, BDH: Intraday Ticks, BDH: Intraday Bars.
- BDS: Imports a set of data into multiple cells (i.e., cashflows for a bond, description for an equity, or option chain for a security) for a selected security.

For more: BDS (Data Sets), BDP & BDS: Overrides.

Additional formulas include:

• BMatrix and BMatrixArray: Allows you to create a list of securities and realtime/current fields in a single formula and import the corresponding data to your spreadsheet in a matrix format, so you can create an entire table of data using only one formula.

For more: BMatrix & BMatrixArray (Data Matrix).

• BSRCH: Imports data corresponding to specific searches performed in Bloomberg databases, so you can analyze data from the Bloomberg Commodity Maps (BMAP), Global Weather Platform (WETR), Fixed Income Search (SRCH), and League Tables (LEAG) functions in Excel.

For more: BSRCH (Bloomberg Searches).

• BRB: Imports a time series of historical intraday data for a selected security and updates the imported data for each additional interval of time that passes.

For more: BRB (Real-Time Bars).

 BAddPeriods: Imports an unknown date based on a known date, a specified number of periods, and additional parameters, such as day count convention.

For more: BAddPeriods (Dates).

• **BCountPeriods**: Imports the number of periods between two dates using a variety of parameters, such as the day count convention and days to include.

For more: BCountPeriods (Period Counts).

• BInterpol: Interpolates a point based on a set of data that you specify.

For more: BInterpol (Interpolation).

• BEQS: Imports a table of data for a selected equity screen created with the Equity Screening (EQS) function.

For more: BEQS (Equity Screens).

BPGE: Imports data from pages contributed to the Bloomberg by outside sources.

For more: BPGE (Page Based Data).

• BQR and BQRP: Imports live tick data (prices) from quotes sent to your Bloomberg messages and MSG1 groups.

For more: Bloomberg Quote Recap.

• BCurve: Imports a Bloomberg or custom curve from the Interest Rate Curves (ICVS) function.

For more: BCurve (Curve Data).

• BCurveStrip: Strips a Bloomberg or custom curve and creates a curve object for use in BView, BCurveInt, and BCurveFwd formulas.

For more: BCurveStrip (Curve Stripping).

• BView: Imports the values contained in a curve object created by the BCurveStrip formula.

For more: BView (Stripped Curve Data).

• BCurveInt: Imports interpolated points on a curve object created by the BCurveStrip formula.

For more: <u>BCurveInt (Interpolation)</u>.

• BCurveFwd: Imports forward rates for a curve object created by the BCurveStrip formula.

For more: BCurveFwd (Forward Rates).

BTH and BTP: Imports technical analysis data for a selected security, so you can analyze statistics generated by market
activity.

For more: Bloomberg Technical Points.

- BDS and BDP for Portfolios: Imports portfolio data for portfolios created with the Portfolio Administration (PRTU) function.
 For more: BDP & BDS: Portfolio Data.
- **BUploadCDE**: Uploads custom data to pre-created Custom Data Editor (CDE) fields for the securities you specify, so you can analyze, track, and share the data in the Bloomberg Terminal and API.

For more: BUploadCDE (Upload Custom Data).

• **BChain**: Imports a list of bonds or loans distributed by a single issuer and optionally filter the results, e.g., by coupon, maturity, or type.

For more: BChain (Security Chains).

- B-Links: Allows you to create hyperlinks in your emails or documents that launch Bloomberg functions, so you can easily
 direct your colleagues or clients to specific Bloomberg screens from materials outside the Bloomberg Terminal.
 For more: B-Links (Links to Bloomberg).
- **BSettings**: Displays your Bloomberg Excel Add-In settings directly in Excel, such as the current add-in version, the current Excel version(s) installed on the system, and the active Bloomberg ribbon profile.

For more: BSettings (User Settings).

• **BFieldInfo**: Displays information about Bloomberg data fields directly in your spreadsheet, so you can determine whether the fields provide you with the data you need.

For more: BFieldInfo (Field Definitions).

• **Terminal Connect**: Allows you to launch Bloomberg Terminal functions directly from your spreadsheet, as well as synchronize with Bloomberg Launchpad®, a customizable workspace designed for clients.

For more: Terminal Connect.

Note: You must be a Bloomberg Anywhere® subscriber to use the following formulas in the Derivatives Library API:

• BStructure: Included in the Derivatives Library API. Allows you to structure derivative deals.

For more: BStructure (Structuring a Deal).

• BPrice: Included in the Derivatives Library API. Allows you to price derivative deals.

For more: BPrice (Pricing a Deal).

• **BView**: Included in the Derivatives Library API. Imports the valuation output of a deal in a Price ID created by the BPrice formula or the economic details of a deal in Deal Structure ID created by the BStructure formula.

For more: BView (Deal Details).

BParam: Included in the Derivatives Library API. Provides valid input and output parameters for other Derivatives Library API formulas.

For more: BParam (Overrides and Outputs).

• BMarketParam: Included in the Derivatives Library API. Provides a list of the valid market overrides for a given Structure ID. These overrides can be used in BPrice formulas.

For more: BMarketParam (Market Overrides).

BSave: Included in the Derivatives Library API. Allows you to save the output of a BStructure formula (a Structure ID) or a
BPrice formula (a Price ID).

For more: BSave (Saving a Structure ID).

Note: You must be a Bloomberg Anywhere subscriber to use the following formulas in the FX Toolkit API:

• **BFXCurve**: Calculates a matrix of forward rates for the standard settlement dates traded in the FX forwards market. For more: BFXCurve (Forward Curve).

• BFXForward: Calculates rates for specific dates, so you can price forwards for terms that are not in the standard forward curve.

For more: BFXForward (Broken Dates).

BFXSwap: Calculates rates for FX swaps, so you can independently verify the forward points between any valid start (near)
and end (far) dates.

For more: BFXSwap (Forward Forwards).

Note: You must be permissioned to use the following formulas (for more information, contact your Bloomberg sales representative):

• BTSM: Imports prices, positions, and other security data for selected trading books/funds.

For more: BTSM (Trading Systems Data).

BPUB and BPUP: Allows you to contribute data to Bloomberg or distribute it locally, including page-based data (e.g., GPGX monitors).

For more: Publishing/Contributor Pricing.

PowerPoint and Word

With the Bloomberg Add-In, you can simplify the process of creating and maintaining your Microsoft® Office presentations with Bloomberg Professional® service data. You can download data from Bloomberg into Microsoft® Excel to fuel your analytical models, then seamlessly connect the models to your Microsoft® PowerPoint presentations and Microsoft® Word documents. By simply clicking a *Refresh* button, you can ensure that the data in each file is accurate and up-to-date. Additional tools help you

audit and format your models, so you can easily confirm data accuracy and create professional-quality documents and presentations.

Note: You must be a Bloomberg Anywhere® subscriber to import data to PowerPoint and Word.

For more: PowerTools, Bloomberg PowerPoint Add-In Help Page, Bloomberg Word Add-In Help Page.

Equity and Fund Screening

Overview

The Equity and Fund Screening tool lets you screen for companies that meet a customized set of criteria and select the data you want to analyze, then import the results of the screen to your Microsoft® Excel spreadsheet for offline analysis.

The Equity Screening panel builds BQL formulas on your spreadsheet.

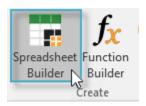
For more information on BQL formulas, see BQL Builder.

Equity and Fund Screening

You can use the Equity and Fund Screening tool to import securities based on criteria you specify.

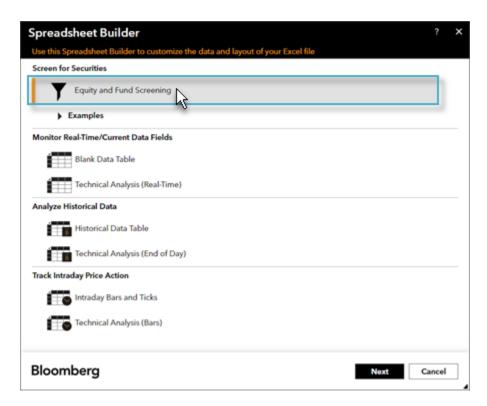
To screen for securities:

1. From the Bloomberg ribbon, click the Spreadsheet Builder button.



The Spreadsheet Builder window appears.

2. Select Equity and Fund Screening.

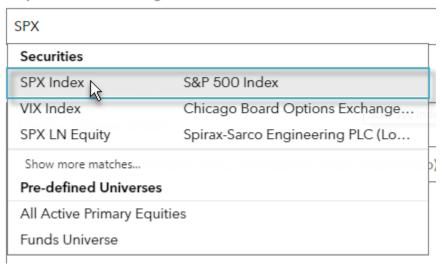


3. At the bottom of the window, click the **Next** button.



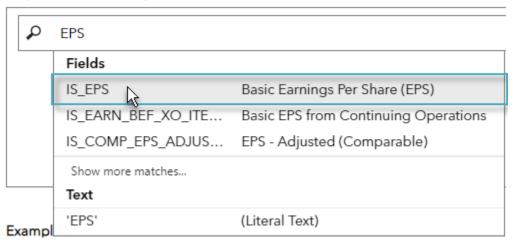
4. In the *Define Screening Universe* section, start typing the name of a security, index, or universe, then select it from the list that appears. For example, *SPX Index*.

Step 1: Define Screening Universe

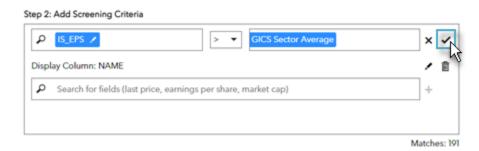


5. In the Add Screening Criteria section, start typing the name of a field, then select it from the list that appears. For example, IS EPS.

Step 2: Add Screening Criteria

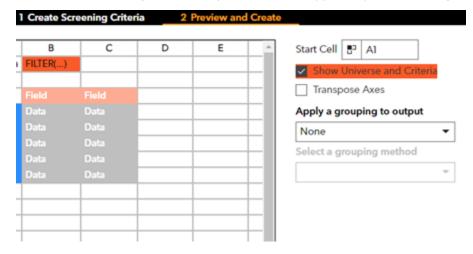


6. Specify the criteria you want to apply to your selected field, then click the check icon. For example, to screen for companies with Basic EPS greater than their sector average, in the comparison drop-down menu, select greater than, then in the right-hand field, enter GICS Sector Average.



Note: To display a field rather than using it as a screening criterion, in the comparison drop-down menu, select **Display**Only. For example, to see the names of companies that match your screening criteria, add the *Name* field as display only.

- 7. If you want to add more fields and criteria, repeat the steps above.
- 8. Click the **Next** button. If you want to adjust how the data appears, update the settings:



- Start Cell: Choose where you want to insert the data in your spreadsheet.
- Transpose Axes: Display the securities in columns and the study data in rows, or vice versa.
- Apply a grouping to output: Group the securities by country, sector, or universe.

The securities matching your screen are imported into Excel.

Definitions

Term	Definition		
#N/A N/A	Indicates that "#N/A N/A" appears in place of a value for non-trading days in the historical data time series you are creating with the <i>Spreadsheet Builder</i> .		
Accounting Standard	A principle that guides and standardizes accounting practices. The Generally Accepted Accounting Principles (GAAP) are a group of accounting standards that are widely accepted as appropriate to the field of accounting. Accounting standards are necessary so that financial statements are meaningful across a wide variety of businesses; otherwise, the accounting rules of different companies would make comparative analysis almost impossible.		
Analytic Criteria	The criteria that was created for the equity screen on the <i>Equity Screening</i> (EQS) function using data fields. The data fields could include comparative analysis, mathematical operators, formulas, growth, trend, or revision analysis. For more information on analytical criteria and EQS, see the <u>EQS Help Page</u> .		
Authors	The author (or authors) of your content. You can enter by name or Bloomberg Research Publisher (BRP) ID.		
BEst Leading Indicator (28 Days)	The consensus estimate, calculated by Bloomberg using all qualifying broker estimates in the BEst Standard consensus that have been changed or maintained in the last 28 calendar days.		
BEst Post Event	The consensus estimate, calculated by Bloomberg using all qualifying broker estimates in the BEst Standard consensus that have been changed or maintained since a company has made either an earnings announcement (which can be displayed on the Earnings History (ERN) function), or, by the end of Q1, a profit warning (which can be displayed on the Bloomberg Guidance (GUID) function). For more information on ERN, see the ERN Help Page. For more information on GUID, see the GUID Help Page.		
BEst Standard	The consensus estimate, calculated by Bloomberg from all qualifying broker estimates.		
Blank	Indicates that the cells appear blank for non-trading days in the historical data time series you are creating with the <i>Spreadsheet Builder</i> .		
Capital Changes	Allows you to select whether to adjust imported historical pricing and volume to reflect: Spin-Offs, Stock Splits/Consolidations, Stock Dividend/Bonus, Rights Offerings/Entitlement. For more information on these adjustments, see the DPDF Help Page.		
Carry Over Last Value	Indicates that the value of the last trading day appears for non-trading days in the historical data time series you are creating with the <i>Spreadsheet Builder</i> .		
Cash Adjustment Abnormal	Allows you to select whether to adjust imported historical pricing to reflect abnormal cash dividends: Special Cash, Liquidation, Capital Gains, Long-Term Capital Gains, Short-Term Capital Gains, Memorial, Return of Capital, Rights Redemption, Miscellaneous, Return Premium, Preferred Rights Redemption, Proceeds/Rights, Proceeds/Shares, Proceeds/Warrants. For more information on these adjustments, see the DPDF Help Page .		
Cash Adjustment Normal	Allows you to select whether to adjust imported historical pricing to reflect normal cash dividends: Regular Cash, Interim, 1st Interim, 2nd Interim, 3rd Interim, 4th Interim, 5th Interim, Income, Estimated, Partnership Distribution, Final, Interest on Capital, Distribution, Prorated. For more information on these adjustments, see the		

Term	Definition		
Cash Changes	Allows you to select whether to adjust imported historical pricing and volume to reflect: Spin-Offs, Stock Splits/Consolidations, Stock Dividend/Bonus, Rights Offerings/Entitlement. For more information on these adjustments, see the DPDF Help Page .		
Cell Reference	A pair of letter(s) and a number (for example, C4) that pinpoint a specific cell on the spreadsheet. The letter(s) reference a column on the spreadsheet, while the number references a row. The opposite of a cell reference is a literal reference, in which the specific parameter is included in the formula.		
Chart ID	The numerical ID of the saved chart.		
Chart Name	The name of the saved chart.		
Chart Type	The type of chart. Only <i>MULTIH</i> charts (historical multiple security) are supported in Excel at this time.		
Classes	Allows you to select the class designation assigned to the newswire, which privileges the wire to all subscribers or to a specific subset of paying subscribers. Classes are defined by your Bloomberg Research Publisher administrator. For more information, see the BRP Help Page .		
Codes	The unique contributor items such as menu codes (for contributor pages) and contributor–specific tags by which you want to classify story content for the research you are publishing. For more information, see the BRP Help Page .		
Configuration	Allows you to select a saved configuration of selected tickers, topics, or other classification criteria on the <i>Publish</i> tool. You can create custom configurations and save them with the <i>Bloomberg Research Publisher</i> (BRP) function. For more information, see the BRP Help Page .		
Conversion Area	Allows you to select the location of the formulas that you want to convert to the latest format. Options include: Entire Workbook, All Workbooks, Current Sheet, or Current Selection.		
Custom	Indicates that your custom text appears in place of a value for non-trading days in the historical data time series you are downloading with the <i>Spreadsheet Builder</i> . When this option is selected, you must enter a custom string of text in the field that appears.		
Data Source	Indicates the data on which you are performing the technical analysis, i.e., a Bloomberg data field. You can search for fields to use with the <i>Find Fields</i> tool or the <i>Field Search</i> (FLDS) function. For more information on finding fields, see <u>Find Fields</u> or the <u>FLDS Help Page</u> .		
DataSets	Indicates a data field that imports multiple cells of static data points at once.		
EQS	In the Find Fields tool, indicates custom fields created in the Equity Screening (EQS) function. For more information on creating these fields, see EQS Help Page > Formulas.		
Excel #N/A	Indicates that "#N/A" appears in place of a value for non-trading days in the historical data time series you are creating with the <i>Spreadsheet Builder</i> .		
Factor By	Allows you to enter a value by which to scale the entire time series.		
Field Layout	Allows you to choose the orientation for the fields that you paste into your spreadsheet with the <i>Find Fields</i> tool.		
Headline	The headline for the content you are publishing.		

Term	Definition		
Historical	Indicates a data field that can be used to import a time series of historic data.		
Identifier Type	The type of security identifier you are supplying, such as Ticker, CUSIP, or ISIN.		
In-House	Indicates a custom data field created by you or your firm in the <i>Custom Data Editor</i> (CDE) function. For more information on CDE, see the <u>CDE Help Page</u> .		
Input Properties	Indicates the values that define the parameters of the technical analysis study.		
Intraday Tick Data	The raw stream of quote data for a security from the security's exchange.		
Literal Reference	The specific parameter you want to use in the formula. For example, the Bloomberg formula =BDP("AAPL US EQUITY", "PX LAST") contains literal references to the security and data field in the formula. The opposite of a literal reference is a cell reference, in which a pointer to the cell that contains the parameter is used in the formula.		
Market Sector	The asset class of the security. The market sectors correspond to the yellow keys on your Bloomberg keyboard. For example, "Corp" = corporate bonds, loans, interest rate swaps, and credit default swaps; "Comdty" = Commodity, etc.		
No Normalization	Indicates that the <i>Spreadsheet Builder</i> will not perform normalization on the time series.		
Option1	The first optional parameter you want to include in the formula.		
Output Fields	Indicates the data that is imported to your spreadsheet for the technical analysis study, based on the security, Data Source(s), and Input Properties.		
Override Field	A field that allows you to provide an input, which is used to recalculate the value for a specific data field.		
RealTime	Indicates a data field that updates its value in real-time, i.e., continuously.		
Rebase Series To	Allows you to enter the level to which you want to rebase the entire time series.		
Security Identifier	The identifier or issuer of the security.		
Start Date	The beginning date of the period.		
Static	Indicates a data field that can be used to import a single, current data point.		
Tickers	The ticker symbol (or symbols) by which you want to classify the content that you are publishing.		
Topics	The NI (News by Topic) topic by which you want to classify the content that you are publishing (e.g. GEN or General News). These codes include keywords, industries/sectors, and countries/regions.		
Universe Criteria	The criteria used for the screen on the <i>Equity Screening</i> (EQS) function to establish the group of securities before the Analytic Criteria is applied. For more information on EQS, see the <u>EQS Help Page</u> .		
Wire	The newswire source code to which you want to publish your content. The drop-down menu displays the choices defined by your Bloomberg Research Publisher administrator. For more information, see the BRP Help Page .		

Frequently Asked Questions

Get answers to the most commonly asked questions.

Global Data » Additional FAQs » Global Data

Why do I see data in the INDUSTRY_SUBGROUP field in FLDS, but not in the BICS_LEVEL_3_INDUSTRY_NAME field?

BICS_LEVEL_3_INDUSTRY_NAME is part of the Bloomberg Industry Classification System (BICS), while INDUSTRY_SUBGROUP is part of an older classification scheme known as Legacy BICS. Legacy BICS fields return three industry levels regardless of asset class. BICS fields return anywhere from two levels (for bonds and loans) to between three and eight levels (for equities).

For example, BICS_LEVEL_3_INDUSTRY_NAME is blank for BBG00J7C8T39 < Corp>, but returns "Personal Care Services" for BBG00J7C8T39 < Equity>. The Legacy BICS field INDUSTRY_SUBGROUP returns "Commercial Services" regardless of asset class.

- For a full list of BICS fields by asset class: DOCS 2072224
- For a list of description fields and their corresponding code fields: ICS Help Page: Descriptions v. Codes

Why do my FLDS or API fields return different industry classification results than Bloomberg Terminal® functions?

Bloomberg uses more than one scheme to classify securities. Most Terminal functions, such as CCB, ICS, and DES, use the Bloomberg Industry Classification System (BICS), which encompasses fields BI001 to BI047. The names of these fields begin with BICS (e.g., BICS_LEVEL_1_SECTOR_NAME). Fields that are not preceded by BICS, such as INDUSTRY_SECTOR (DS199), INDUSTRY_GROUP (DS201) and INDUSTRY_SUBGROUP (DS202), are part of an older scheme known as Legacy BICS. BICS and Legacy BICS are different classification schemes with their own hierarchies and methodologies.

- For a full list of BICS fields by asset class: DOCS 2072224
- For a list of description fields and their corresponding code fields: ICS Help Page > Descriptions v. Codes

Additional FAQs

How can I account for corporate actions and dividends when downloading historical stock prices to a spreadsheet?

To download historical equity prices to Excel, use a Bloomberg Data History (BDH) formula with the field PX_LAST.

The general syntax for a BDH formula is: =BDH("Ticker", "Field", "Start Date", "End Date", "optional parameter=X", "optional parameter=X", ...)

By default, BDH formulas use your settings from the *Corporate Action Settings* (DPDF) function for corporate actions and dividends. To override these settings, you can include optional parameters in your BDH formula:

- UseDPDF: Set this parameter equal to "N" to ignore your <u>DPDF <GO></u> settings.
- CapChg: Set this parameter equal to "Y" to adjust historical pricing and volume to reflect: Spin-Offs, Stock Splits/Consolidations, Stock Dividend/Bonus, Rights Offerings/Entitlement. Set this parameter equal to "N" to leave prices unadjusted.
- CshAdjNormal: Set this parameter equal to "Y" to adjust historical pricing to reflect: Regular Cash, Interim, 1st Interim, 2nd Interim, 3rd Interim, 4th Interim, 5th Interim, Income, Estimated, Partnership Distribution, Final, Interest on Capital, Distribution, Prorated. Set this parameter equal to "N" to leave prices unadjusted.
- CshAdjAbnormal: Set this parameter equal to "Y" to adjust historical pricing to reflect: Special Cash, Liquidation, Capital Gains, Long-Term Capital Gains, Short-Term Capital Gains, Memorial, Return of Capital, Rights Redemption, Miscellaneous, Return Premium, Preferred Rights Redemption, Proceeds/Rights, Proceeds/Shares, Proceeds/Warrants. Set this parameter equal to "N" to leave prices unadjusted.

For example, this formula downloads the price of IBM from 1/1/15 through 1/1/16, adjusting for normal and abnormal dividends, but not adjusting for capital change: =BDH("IBM US Equity", "PX_LAST", "1/1/15", "1/1/16", "UseDPDF=N", "CshAdjNormal=Y", "CshAdjAbnormal=Y", "CapChg=N")

For more information, see the spreadsheet template DOCS #2073344 <GO>.

How can I calculate the two-month price change for a stock in Excel?

You can calculate the price change over a custom time period using the data field INTERVAL_PERCENT_CHANGE or INTERVAL_NET_CHANGE in a Bloomberg Data Point (BDP) formula. You must also include the CALC_INTERVAL override.

The basic syntax for a BDP formula with an override is: =BDP("Ticker", "Data Field", "Data Field Override=Value")

For example, to download the percent change in price for IBM for the last two months: =BDP("IBM US Equity", "INTERVAL_PERCENT_CHANGE", "CALC_INTERVAL=2M")

For more on BDP override formulas, see the DAPI Help Page: <u>BDP & BDS: Overrides</u>.

How can I download CDS data from CDSW into a spreadsheet?

The Field Search (FLDS) function lets you find data fields you can use to download data about a credit default swap (CDS) contract from the Credit Default Swap Valuation (CDSW) function.

To find the fields, enter the CDS contract ticker followed by FLDS SW <GO>. For example, enter SP9W12JP <Corp> FLDS SW <GO> (where "SP9W12JP" is the ID assigned to your saved CDS contract). All applicable fields that appear in the search results start with "SW", such as SW_PAY_NOTL_AMT.

You can use the fields you find to download current data by creating Bloomberg Data Point (BDP) formulas.

The basic syntax of a BDP formula is:

=BDP("Ticker", "Field")

For example, to download the principal amount used to determine the CDS interest payments:

=BDP("SP9W12JP Corp", "SW_PAY_NOTL_AMT")

For more on BDP formulas, see the DAPI Help Page: BDP (Current/Real-time Data).

How can I download a security's or currency's bid or ask price to my spreadsheet?

You can download the current bid or ask price for a security or currency using the PX_BID or PX_ASK field in a Bloomberg Data Point (BDP) formula.

The basic syntax for a BDP formula is:

=BDP("Ticker", "Field")

For example, to download the bid price for USDJPY <Curncy>:

=BDP("USDJPY Curncy", "PX_BID")

To download the ask price:

=BDP("USDJPY Curncy", "PX_ASK")

You can also download prices that continuously update in real time on your spreadsheet using the BID or ASK fields. For example, to download the real-time bid price:

=BDP("USDJPY Curncy", "BID")

For more on BDP formulas, see the DAPI Help Page: BDP (Current/Real-Time Data).

For more on real-time data fields, see the DAPI Help Page: Finding Real-Time Fields.

How can I download the principal shareholders of a security in Excel?

To download the principal shareholders of a security, you can use the data field ALL_HOLDERS_PUBLIC_FILINGS or TOP_20_HOLDERS_PUBLIC_FILINGS in a Bloomberg Data Sets (BDS) formula.

The general syntax of a BDS formula is: =BDS("Ticker", "Bulk Data Field", [optional parameters])

You can look up bulk data fields using <u>FLDS <GO></u>. In your search results, any field that displays *Show Bulk Data* in the *Value* column is a bulk data field.

For example, to download the top 20 shareholders of Apple, Inc., as reported by public filings: =BDS("AAPL US Equity", "TOP_20_HOLDERS_PUBLIC_FILINGS")

For more on BDS formulas, see the DAPI Help Page: BDS (Data Sets).

How can I see a bond quoted in decimal format instead of fractional format?

For bonds quoted in fractions, you can see pricing in decimals on the All Quotes (ALLQ) function.

To change the quote format:

- 1. Enter the ticker followed by ALLQ <GO>. For example, enter T 2.75 02/15/28 <Govt> ALLQ <GO>.
- 2. From the toolbar, select Settings > ALLQ Settings.
- 3. From the *Composite Pricing Panel* section, under Price *Display Format Type*, select Decimal. Click the Close button.

For more: ALLO Help Page > Customizing Quote Display.

Alternatively, you can download the price for the security to Microsoft® Excel using the data field PX_LAST in a Bloomberg Data Point (BDP) formula. Prices always appear in decimal format in Excel.

The basic syntax for a BDP formula is: =BDP("Ticker", "Field")

For example:

=BDP("T 2.75 02/15/28 Govt", "PX_LAST")

For more on BDP formulas: <u>DAPI Help Page > BDP (Current/Real-Time Data)</u>.

How do I calculate the yield to next call using a custom price?

You can calculate the yield to next call for a bond in the *Yield and Spread Analysis* (YAS) function and customize the variables used in the calculation, such as settlement date or price.

To calculate the yield to next call using a custom price:

- 1. Enter the bond ticker followed by YAS <GO>. For example, enter AN206325 <Corp> YAS <GO>.
- 2. In the *Price* field, enter a custom price.
- 3. From the drop-down menu next to the Yield field, select Next Call.
- 4. Press <GO>.

The Yield field updates to display the recalculated yield to next call.

For more on calculating yields, see the YAS Help Page.

You can also calculate the yield to next call using a custom price in Microsoft(R) Excel with a BDP override formula. You can use the YLD_YTC_ASK, YLD_YTC_BID, or YLD_YTC_MID field and the override YAS_BOND_PX.

For example:

```
=BDP("AN206325 Corp", "YLD_YTC_ASK", "YAS_BOND_PX=100")
```

For more on creating BDP override formulas, see Overrides Description on the DAPI Help Page.

How do I construct option tickers?

To load an option ticker, in the command line, enter the following syntax:

```
TICKER MM/YY OPTION TYPE <C or P> STRIKE <Yellow Key> <GO>
```

For example, to display an IBM January 2013 Call Option with a 95 strike, enter:

IBM 1/13 C95 < Equity > < GO >

How do I download bulk data into Excel?

Bloomberg Data Set (BDS) is a formula type created by Bloomberg to download multi-cell descriptive data in Microsoft® Excel. For example, you can use BDS to download index members, company descriptions, and call schedules.

```
The basic syntax for a BDS formula is:
```

```
=BDS("Ticker", "Bulk Data Field", [optional parameters])
```

You can look up bulk data fields by entering <u>FLDS <GO></u> to access the *Field Search* function. In your field search results, any field that displays *Show Bulk Data* in the *Value* column is a bulk data field.

For example, to download the option chain for IBM using a BDS formula:

```
=BDS("IBM US Equity","OPT_CHAIN")
```

For more on BDS formulas, see the DAPI Help Page: BDS (Data Sets).

How do I download real-time data to a spreadsheet via the Bloomberg API?

You can download data that continuously updates by using a real-time data field in a Bloomberg Data Points (BDP) formula.

The general syntax for a BDP formula is:

```
=BDP("Ticker", "Field")
```

The Field Search (FLDS) function provides you with a list of all API data fields. To find real-time data fields, from FLDS <GO>.

- 1. In the amber field in the upper left corner, enter the ticker of the security. For example, enter "IBM US Equity".
- 2. In the amber "Enter Query" field directly below the ticker field, enter the type of data you want to download. For example, enter "Price".
- 3. From the "Source" drop-down menu, select "API".
- 4. From the "Field Type" drop-down menu, select "Real Time Only", then press <GO>. The search results update to show real-time data fields that match your criteria.

Note: In all FLDS search results, real-time data fields appear in white. Static fields appear in amber. For more on BDP formulas, see the <u>DAPI Help Page: BDP Description</u>.

For more on searching for data fields, see the FLDS Help Page: Searching for Fields.

How do I download the USD swap curve to a spreadsheet?

You can download a USD swap curve (e.g., USD (30/360, S/A vs. 3M LIBOR)) using a BCurve formula in a Microsoft® Excel spreadsheet.

```
The basic syntax for a BCurve formula is: =BCurve("Curve ID", [optional parameters]) where "Curve ID" is the curve number (e.g., s23) or curve profile (e.g., USD.3m).
```

For example, to download the curve USD (30/360, S/A vs. 3M LIBOR) with rates that update in real time: =BCurve("s23")

To download a static snapshot of the curve that updates every time you refresh your spreadsheet: =BCurve("s23", "CurveDate=Today")

For more on BCurve formulas, see the DAPI Help Page: <u>BCurve (Curve Data)</u>. For a list of curve IDs, see the DAPI Help Page: <u>Curve Profiles</u>.

How do I download the VWAP of an equity over a custom time period?

To download the VWAP for a stock over a custom time period, you can create a Bloomberg Data Point (BDP) formula using the data field EQY_WEIGHTED_AVG_PX along with overrides that set the custom time period. You can find this and other data fields by searching on the *Field Search* (FLDS) function.

The syntax for BDP override formulas is:

=BDP("Security", "Data Field", "Override1=Value", "Override2=Value", ...)

For example:

=BDP("IBM US Equity", "EQY_WEIGHTED_AVG_PX", "VWAP_START_TIME= 10:00:00", "VWAP_END_TIME=12:00:00")

Note: You can find overrides for a field in your FLDS search results. To see the overrides, click the data field you want to use. For example, enter <u>IBM US <Equity> FLDS VWAP <GO></u>, then click "EQY_WEIGHTED_AVG_PX". The overrides appear at the bottom of the screen.

For more on BDP override formulas, see Overrides Description on the DAPI Help Page.

For more on looking up data fields, see <u>Searching for Fields</u> on the FLDS Help Page.

How do I download the analyst consensus for a security to my spreadsheet?

You can import the current analyst consensus for a security into your Microsoft® Excel spreadsheet by using the EQY_REC_CONS data field in a Bloomberg Data Point (BDP) formula.

The basic syntax for a BDP formula is:

=BDP("Ticker", "Field")

For example, to download the consensus for IBM:

=BDP("IBM US Equity", "EQY_REC_CONS")

You can also use the EQY_REC_CONS data field in a Bloomberg Data History (BDH) formula to download the historical consensus values.

The basic syntax for a BDH formula is:

=BDH("Ticker", "Field", "Start Date", "End Date")

For example, to download the daily analyst consensus for IBM between January 10 through 31:

=BDP("IBM US Equity", "EQY_REC_CONS", "1/10/2017", "1/31/2017")

For more on Bloomberg API formulas, see the DAPI Help Page: Constructing Formulas.

How do I download the average of the last five daily price values in Excel?

You can download the average of the last five daily values (such as last price) into a Microsoft Excel® spreadsheet using the INTERVAL_AVG data field in a Bloomberg Data Point (BDP) formula. The formula must also include the overrides MARKET_DATA_OVERRIDE and CALC_INTERVAL.

MARKET_DATA_OVERRIDE allows you to specify the type of data you want to average (e.g., the last price). CALC_INTERVAL allows you to specify the amount of time over which you want to calculate the average (e.g., the last five days).

```
The syntax for a BDP override formula is: =BDP("Ticker", "Field", "Override1=X", "Override2=x"...)
```

For example, to download the average price of IBM over the last five days: =BDP("IBM US Equity", "INTERVAL_AVG", "MARKET_DATA_OVERRIDE=PX_LAST", "CALC_INTERVAL=5D")

Note: To see more about the INTERVAL_AVG field and the overrides you can use, enter a ticker followed by FLDS AVERAGE <GO>. For example, enter IBM US <Equity> FLDS AVERAGE <GO>. Then, click the INTERVAL_AVG field. The overrides you can use appear at the bottom of the screen. You can click an override to read its definition.

For more on BDP override formulas, see the DAPI Help Page: <u>Overrides Description</u>. For more on finding data fields in FLDS, see the FLDS Help Page: <u>Searching for Fields</u>.

How do I download the call date for a bond via the Bloomberg API?

To download the call date for a bond to Microsoft® Excel, you can create a simple BDP formula using the data field NXT_CALL_DT.

The syntax for BDP formulas is: =BDP("Ticker", "Data Field")

For example:

=BDP("459200AM3 Corp", "NXT_CALL_DT")

For more on BDP formulas, see the DAPI Help Page: BDP (Current/Real-Time Data).

How do I download the daily price change for a security to Excel?

You can download the daily price change into a Microsoft Excel® spreadsheet using the CHG_PCT_1D or CHG_NET_1D data field in a Bloomberg Data History (BDH) formula.

The basic syntax for a BDH formula is: =BDH("Ticker", "Field", "Start Date", "End Date")

For example, to find the daily percent change in price of IBM between January 1 and 31, 2017:

=BDH("IBM US Equity", "CHG_PCT_1D", "1/1/2017", "1/31/2017")

To find the daily net change in price:

=BDH("IBM US Equity", "CHG_NET_1D", "1/1/2017", "1/31/2017")

Note: To find other percent change data fields, enter a ticker in the command line followed by FLDS PERCENT CHANGE <GO>. For example, enter IBM US <Equity> FLDS PERCENT CHANGE <GO>. In the search results that appear, click a field to read its definition and find out if it is the field you want to use.

For more on BDH formulas, see the DAPI Help Page: BDH Description.

For more on finding fields in FLDS, see the FLDS Help Page: Searching for Fields.

How do I download the dates for the third Wednesday of every month (i.e., LME's monthly prompt dates)?

You can download the dates for the third Wednesday of every month to a Microsoft® Excel spreadsheet using a BAddPeriods formula. BAddPeriods formulas are used to import unknown dates based on a known date, a specified number of periods, and additional parameters, such as day count convention.

The basic syntax for a BAddPeriods formula is:

=BAddPeriods("Start Date", [optional parameters])

For example, to download the date of the third Wednesday of every month in 2018, you would use the *EndDate, Per,* and *Wed3* parameters:

=BAddPeriods("12/31/2017", "EndDate=12/31/18", "per=M", "Wed3=True")

For more on BAddPeriods formulas, see the DAPI Help Page: BAddPeriods Description.

How do I download the governing law of a bond via the Bloomberg API?

To download the governing law of a bond to Microsoft® Excel, you can create a simple Bulk Data Set (BDS) formula using the bulk data field GOVERNING_LAW. You can find this and other data fields by searching on the *Field Search* (FLDS) function.

The syntax for BDS formulas is:

=BDS("Security", "Bulk Data Field")

For example:

=BDS("459200AM3 Corp", "GOVERNING_LAW")

Note: You can determine whether a field is a bulk data field in your search results on FLDS. If a field displays the value "Show Bulk Data" in the *Value* column, then it is a bulk data field and you must use a BDS formula to download the field's data.

For more on BDS formulas, see the DAPI Help Page: BDS Description.

For more on looking up data fields, see the FLDS Help Page: Searching for Fields.

How do I download the list of brokers covering a stock to Excel?

You can download the list of brokers covering a stock and their current recommendations to a Microsoft® Excel spreadsheet using the data field BEST_ANALYST_RECS_BULK in a Bloomberg Data Set (BDS) formula. You can also add the optional parameter "Headers=Y" to show the headers for the table of data you are downloading.

The basic syntax for a BDS formula is: =BDS("Ticker", "Bulk Data Field", [optional parameters])

For example:

=BDS("F US EQUITY", "BEST_ANALYST_RECS_BULK", "HEADERS=Y")

Note: You can look up bulk data fields using <u>FLDS <GO></u>. In your field search results, any field that displays Show Bulk Data in the Value column is a bulk data field.

For more on BDS formulas, see the DAPI Help Page: BDS (Data Sets).

How do I download the price of a discount-quoted security to my spreadsheet?

You can download the price of a discount quoted security using the data fields PX_DISC_BID (bid price), PX_DISC_ASK (ask price), or PX_DISC_MID (mid price) in a Bloomberg Data Point (BDP) formula.

The basic syntax for a BDP formula is:

=BDP("Ticker", "Data Field")

For example, to download the discount bid price of a U.S. Treasury Bill:

=BDP("B 0 03/08/18 Govt", "PX_DISC_BID")

For more on BDP formulas, see the DAPI Help Page: BDP (Current/Real-Time Data).

How do I download the weekly price change for a security to Excel?

You can download the weekly price change of a security into a Microsoft Excel® spreadsheet using the INTERVAL_PERCENT_CHANGE or INTERVAL_NET_CHANGE data field in Bloomberg Data Point (BDP) formulas. You must also use the END_DATE_OVERRIDE and CALC_INTERVAL overrides in each formula, and change the end date for each formula.

END_DATE_OVERRIDE allows you to specify the end date of the interval over which you want to calculate the change. CALC_INTERVAL allows you to specify the amount of time over which you want to calculate the change (e.g., WTD - the last week from the end date).

Note: Values for the END_DATE_OVERRIDE must be in the format YYYYMMDD.

The basic syntax for a BDP override formula is: =BDP("Ticker", "Field", "Override1=X", "Override2=x"...)

For example, to find the percent change in price of IBM over the week ending July 22, 2017: =BDP("IBM US Equity", "INTERVAL_PERCENT_CHANGE", "END_DATE_OVERRIDE=20170722", "CALC_INTERVAL=WTD")

To find the week's net change in price:

=BDP("IBM US Equity", "INTERVAL_NET_CHANGE", "END_DATE_OVERRIDE=20170722", "CALC_INTERVAL=WTD")

Note: To find the weekly change over a historical time period longer than one week, you must create a separate BDP override formula for each week's end date.

For more on BDP override formulas, see the DAPI Help Page: <u>Overrides Description</u>. For more on finding fields in FLDS, see the FLDS Help Page: <u>Searching for Fields</u>.

How do I download yesterday's closing price to my spreadsheet?

You can import yesterday's closing price for a security into your Microsoft® Excel spreadsheet by using the PX_YEST_CLOSE data field in a Bloomberg Data Point (BDP) formula.

The basic syntax for a BDP formula is:

=BDP("Ticker", "Field")

For example, to download yesterday's closing price for IBM:

=BDP("IBM US Equity", "PX_YEST_CLOSE")

For more on BDP formulas, see the DAPI Help Page: BDP Description.

How do I export CDS into Excel?

To export CDS spreads to Excel, you can:

- Load the CDS ticker in your Bloomberg panel and export a history of spreads directly from the Historical Price Table (HP) function. For more on exporting, see the HP Help Page: <u>Excellintegration</u>.
- Create a Bloomberg formula in your spreadsheet. You can create a BDP formula for the current price or a BDH formula for historical prices. For more on creating formulas, see the <u>DAPI Help Page</u>.

If after exporting or creating formulas you are receiving an #N/A N/A error in Excel, this may be due to your pricing source default settings. You cannot download CMA pricing data (including CMAN, CMAL, CMAT, CMAI, and CMAQ) into Excel without an additional subscription. See $\underline{\text{CMA}} < \underline{\text{GO}} >$ for information on subscribing.

To download CDS spreads without a CMA subscription, you must select another pricing provider. To see all the providers that are available to you, load the CDS ticker and run $\underline{ALLQ} < \underline{GO} >$. For example, enter $\underline{|BM/| < Corp > ALLQ < GO >}$. You can then use $\underline{PCS} < \underline{GO} >$ to set the chosen provider as your default.

You can also simply specify another pricing source in the BDP or BDH formula itself. The pricing source abbreviation gets added to the CDS ticker. For example, to specify the CBIN source:

- For Current Values: =BDP("BOFA CDS USD SR 5Y CBIN Corp", "PX_LAST")
- For Historical Values: =BDH("BOFA CDS USD SR 5Y CBIN Corp","PX LAST","start date","end date")

Note: To set default pricing sources for an entire CDS market sector and currency, enter <u>CDSD <GO></u> and select Pricing Source Defaults. For more on setting CDS defaults, see the <u>CDSD Help Page</u>.

How do I find the Bloomberg Unique ID for a security?

You can find the Bloomberg Unique ID by entering the ticker followed by FLDS ID_BB_SECURITY <GO> to run a search in the *Field Search* (FLDS) function. For example, enter <u>AAPL 1 05/03/18 Corp FLDS ID_BB_SECURITY <GO></u>. In the search results, the entry for the data field ID_BB_SECURITY shows the Bloomberg Unique ID.

To download the ID to a Microsoft® Excel spreadsheet, you can use ID_BB_SECURITY in a Bloomberg Data Point (BDP) formula.

The basic syntax of a BDP formula is:

=BDP("Ticker", "Field")

For example:

=BDP("AAPL 1 05/03/18 Corp", "ID_BB_SECURITY")

For more on BDP formulas: <u>DAPI Help Page > BDP (Current/Real-Time Data)</u>.

How do I import analyst recommendations to a spreadsheet?

You can import buy/hold/sell recommendations for a stock from the *Analyst Recommendations* (ANR) function to a spreadsheet.

To import analyst recommendations from ANR:

- 1. Enter the company ticker followed by ANR <GO>. For example, enter EFC US <Equity> ANR <GO>.
- 2. From the toolbar, select Actions > Output to Excel. For more information on importing analyst recommendations, see the ANR Help Page: Exporting Data.

You can also import analyst recommendations using the Bloomberg API:

- To import historical data, use a BDH formula. For example, this formula downloads EFC's total analyst recommendations from 1/1/14-12/31/14:
 - =BDH("EFC US Equity", "TOT_ANALYST_REC", "1/1/14", "12/31/14")
- To import the Analyst Recommendations table, as seen on ANR, use the field BEST_ANALYST_RECS_BULK in a BDS formula. For example, this formula downloads EFC's analyst recommendations:
 - =BDS("EFC US Equity", "BEST_ANALYST_RECS_BULK")

How do I know if a Fannie Mae issued mortgage security is REMIC eligible?

To see whether a security is eligible for real estate mortgage investment conduit (REMIC) status, use the field REMIC ELIGIBLE in a BDP formula.

For example, the following formula returns Y, indicating that this Fannie Mae mortgage is REMIC eligible:

=BDP("FNR 2017-29 PB Mtge", "REMIC_ELIGIBLE")

For more information on building BDP formulas, see the DAPI Help Page: BDP Description.

How do I launch Excel while using Bloomberg Anywhere?

To use the Bloomberg Excel Add-In while logged in through the BLOOMBERG ANYWHERE® website, before you click the Launch button to open Bloomberg Anywhere, select Launch Excel (with Bloomberg Add-In).

How do I look up a security ticker in Excel?

You can use the Bloomberg Spreadsheet Builder to look up tickers directly in Microsoft® Excel.

To look up tickers, in Excel:

- 1. On the Bloomberg ribbon, click Spreadsheet Builder.
- 2. In the window that appears, select Blank Data Table, then click the Next button.
- 3. In the *All Securities* field, start typing a company or issuer name, then select from the list that appears. You can use this field to search for as many tickers as you need.

You can then continue using the *Spreadsheet Builder* to download the data you need and automatically format it in a new table. For more information on using the *Spreadsheet Builder*, see the <u>Spreadsheet Builder Topic</u> in the Bloomberg Excel Add-In Help Page.

How do I resolve slowness with the Bloomberg Excel Add-In?

If you are experiencing slowness with the Bloomberg API in Microsoft® Excel, please complete the following troubleshooting steps:

- From the Bloomberg ribbon in Excel, click Diagnostics.
 Note: If you are using the advanced ribbon, select Live Help > Diagnostics.
- 2. Close Excel, Word, and PowerPoint.
- 3. In the upper left corner of the *Bloomberg API Diagnostics* window, click the Start button.

 The diagnostic tool checks your system, displaying a progress bar at the top of the window. The process can take up to a minute to complete. When the process completes, a confirmation window appears.
- 4. Click the OK button.
- 5. In the upper left corner of the window, if the *Repair* button is enabled, click the Repair button. The diagnostics tool attempts to correct the issue(s).

If the steps above do not fix the issue, please contact the Bloomberg Help Desk by pressing the <Help> key twice.

How do I retrieve historical VSV maturity values?

To retrieve historical maturity values from the *Variance Swap Rates* (VSV) function, you can use the Bloomberg API. The relevant calcroute fields in the API are VL277 (VAR_SWAP_1M_LV) through VL 300 (VAR_SWAP_24M_LV). For more on using the Bloomberg API, see the <u>DAPI Help page</u>.

How do I see the historical change on day for a stock, excluding dividends?

You can find the historical change on day for an equity, excluding dividends, by creating a Bloomberg Data History (BDH) formula in Microsoft® Excel. To do so, use the data field *CHG_PCT_1D* with the parameters "CshAdjAbnormal=Y" and "CshAdjNormal=Y." When set to "Y," these parameters adjust the price of the stock to exclude dividend payments.

For example, to see the change on day for IBM, excluding dividends, between January 5 through 31, 2017, you can use the formula:

=BDH("IBM US Equity", "CHG_PCT_1D", "1/5/17", "1/31/17", "CshAdjAbnormal=Y", "CshAdjNormal=Y")

For more on BDH formulas, see <u>LPHP DAPI:0:1 2754266 <GO></u>.

For more on the "CshAdjAbnormal" and "CshAdjNormal" parameters, see <u>LPHP DAPI:0:1 2754277 <GO></u> and <u>LPHP DAPI:0:1 2754278 <GO></u>.

How do I sort dates or perform other non-Bloomberg-related tasks in Microsoft Excel®?

For questions about non-Bloomberg-related Excel functionality, please refer to Microsoft® Excel Help.

How do I stop the real-time Bloomberg data in my spreadsheet from automatically refreshing?

If you want to stop real-time data from automatically refreshing in your spreadsheet, from the Bloomberg ribbon, de-select Real-Time Updates.

Formore on auto refresh, see the DAPI Help Page: Enabling Updates.

How do I use a security's ISIN to download a price via the Bloomberg API?

You can use a variety of security identifiers to download data to Microsoft® Excel, including ISINs.

The security identifier syntax for ISINs is "(ISIN number) ISIN". For example, "XS1169843007 ISIN".

To download the security's price, you can create a simple BDP formula using the PX_LAST data field.

For example:

=BDP("XS1169843007 ISIN", "PX_LAST")

For more on security syntax for API formulas, see the DAPI Help Page: Security Syntax.

How do I use an equity ticker to see all the bonds outstanding for an issuer?

To download a list of a company's outstanding bonds using the company's equity ticker, you can create a BChain formula in a Microsoft® Excel spreadsheet.

The basic syntax for a BChain formula is:

=BChain("Ticker", "Chain Type", [optional filters])

For example, to download all of IBM's outstanding bonds:

=BChain("IBM US Equity", "Bonds")

To download all of IBM's bonds that are maturing on or before 12/31/35:

=BChain("IBM US Equity", "Bonds", "MATURITY <= 2035-12-31")

For more on BChain formulas, see the DAPI Help Page: BChain (Security Chains).

How do I use overrides in the Bloomberg API?

When downloading data from Bloomberg into a Microsoft® Excel spreadsheet, you can choose to override certain fields with a calculation override.

BDP and BDS override formulas allow you to customize the output of a BDP or BDS formula. For example, where there is a relationship between two or more financial variables (such as price and yield), you can override or set a value for one of the variables and see the outcome that this produces in the other variable.

For example, =BDP("VZ 5.15 09/15/23 Corp", "YAS BOND PX", "YAS BOND YLD", "5") imports the price of the Verizon Communications bond, calculated using a yield of 5.

For more on using overrides, see the DAPI Help Page: Adding Overrides, BDP & BDS: Overrides, and Overrides Examples.

What is financial leverage and how do I find it for a company?

Financial leverage measures the average assets to average equity. It is calculated as:

Average Total Assets / Average Total Common Equity

Note: Average is the average of the beginning period balance and the ending balance of the same period.

You can see the financial leverage ratio for a company on the Financial Analysis (FA) function.

To see the ratio:

- 1. Enter the company's equity ticker, then FA <GO>. For example, enter IBM US <Equity> FA <GO>.
- Select the Ratios tab, then select the DuPont Analysis sub-tab.
 The "Leverage Ratio" field shows the financial leverage of the company.

If you want to download the value to Microsoft(R) Excel using the Bloomberg API, create a simple BDP formula using the data field FNCL_LVRG. You can find this and other data fields by searching on the *Field Search* (FLDS) function.

The syntax for BDP formulas is: =BDP("Ticker", "Data Field")

For example:

=BDP("IBM US Equity", "FNCL_LVRG")

For more on BDP formulas, see <u>BDP Description</u> on the DAPI Help Page.

For more on looking up data fields, see Searching for Fields on the FLDS Help Page.

What is the maximum data history that I can download with BQR/BQRP formulas?

BQR and BQRP formulas can return up to 13 days of historical data, though more historical data is sometimes available.

For more on BQR/BQRP, see the DAPI Help Page: Bloomberg Quote Recap.

What overrides can I use to recalculate the BEst EPS estimate?

If you are downloading the BEst EPS estimate to Microsoft® Excel, you can use overrides to recalculate the value based on customized variables.

The overrides you can use are:

- BST_BRK_PD_OVR (BEst Broker And Period Override)
- BEST_REVISION_INTERVAL_OVERRIDE (BEst Revision Interval Override)
- BEST_CONSENSUS_STAT_OVERRIDE (BEst Consensus Statistic Override)
- BEST_FPERIOD_OVERRIDE (BEst Fiscal Period Override)
- BEST_DATA_SOURCE_OVERRIDE (BEst Data Source Override)
- BEST_CONSOLIDATED_OVERRIDE (BEst Consolidated Override)
- EQY_FUND_CRNCY (Currency Override)

To see the overrides you can use for any data field:

- 1. In the command line, enter the ticker followed by FLDS <GO> to access the *Field Search* (FLDS) function. For example, enter AAPL Equity FLDS <GO>.
- 2. In FLDS, in the amber field on the left below the ticker, enter the metric you want to download, then press <GO>. For example, enter BEST EPS <GO>.
- 3. In the search results, click the corresponding data field. A description of the data field appears. At the bottom of the screen, the overrides you can use appear.
- 4. To see a description and the type of values you can specify, click an override.

Why are all my QMGR quotes not downloading via my BQR/BQRP formula?

There are several possible reasons all your quotes from the *Quotes Manager* (QMGR) function are not downloading into Microsoft® Excel:

- The quotes downloaded via BQR/BQRP appear in the *Quote Recap* (QR) function, not the *Inventory & Pricing* (IMGR) function or QMGR. IMGR/QMGR show every quote received via MSG, RUNZ, and IB. However, not all of these prices are included in QR or the MSG1 pricing source. Inventory quotes, unvalidated quotes, quotes sent to non-contributing members, non-forwardable messages, firms or individuals on a "black list", firms or individuals not on a "white list", validated spreads that do not have prices, and outgoing messages are not included in MSG1.
- A black list is enforced on all major sell-side dealer MSG1 groups to prevent the dissemination of competitor quotes via MSG1. For a full list, see the BMIN Help Page: <u>Blacklist/Whitelist</u>.
- You are not a contributor to the MSG1 group, which you can confirm with the administrator of your MSG1 group. If
 you only "view" messages from your colleagues and do not contribute to the MSG1 group, you can see pricing in
 QMGR that was sent to your inbox, but the pricing is not included in the MSG1 group.

For more on BQR/BQRP, see the DAPI Help Page: Bloomberg Quote Recap.

Why does my BQR/BQRP formula show #N/A Invalid Security?

The Bloomberg Quote Recap toolkit for the Bloomberg API is aimed at helping you download quotes for securities where the MSG1 pricing source is available. To use the BQR and BQRP formulas, you must first be set up for Bloomberg Message Mining. You must also explicitly state the MSG1 pricing source in the ticker of your security. For example:

- CDS: VOD/ MSG1 Corp
- Bond: VOD 5 06/04/2018 @MSG1 Corp

For more on specifying a pricing source for fixed income securities, see the DAPI Help Page: <u>Security Syntax</u>. For more on the Bloomberg Quote Recap toolkit, see the DAPI Help Page: <u>Bloomberg Quote Recap</u>. For more on message mining, see <u>BMIN <GO></u>.

Why doesn't the yield of a bond in Excel match the yield that appears on the Terminal?

If the yield of a bond you downloaded to Microsoft® Excel does not match the yield of the bond that appears on the Bloomberg Terminal®, consider the following troubleshooting suggestions:

- Ensure the API formula in your spreadsheet does not include a specific pricing source. For example, the identifier "DIS 7 03/01/32@BGN Corp" specifies that the pricing source BGN is used by the formula for capturing pricing data. Removing the "@BGN" (i.e., "DIS 7 03/01/32 Corp") instructs the formula to use the default pricing source specified for the bond on the *Pricing Sources* (PCS) function.
- Ensure the function showing the yield is not applying a pricing source override. For example, on the Historical
 Pricing Table (HP) function, you can enter a pricing source in the Source field without changing the default pricing
 source for the bond.
- Check that you are comparing the same type of yield. For example, you may have downloaded Yield to Maturity to your spreadsheet (using the field YLD_YTM_BID), but may be looking at Yield to Worst on the Terminal.

If the suggestions above do not fix the issue, contact the Bloomberg Help Desk by pressing the <Help> key twice.

Take the next step.

For additional information, press the <HELP> key twice on the Bloomberg Terminal®.

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