GETTING STARTED WITH BLOOMBERG CHARTS
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IT’S ALL ABOUT INNOVATION
The goal of Bloomberg chart day is to provide insightful presentations relating to technical analysis, data visualization and real time market analysis while using the tools offered on the Bloomberg Professional® service. These presentations are designed to provide educational material on a variety of investment and trading strategies with explanations on how to do the analysis on Bloomberg. Accordingly, the goal of this document is to provide a guide to navigating some of the analytics you may see throughout the day.

Awarded the Best Technical Analysis Platform 2013 by The Technical Analyst
THE CHART INTERFACE, TIPS AND TRICKS

Typing SPX <Index> GPO <GO> reveals a bar chart of the S&P500. This chart is full of rich features and analytics to help you analyze markets. The following will explain many areas of the chart.

The horizontal area highlighted in area 1 is the chart’s navigation bar. The ticker box, which currently says “SPX Index” can be used to change the security, add additional securities or ratios and much more. For example, to add a security to this chart, you could type; EUR <Currency> and press <GO>. For a guide of capabilities, enter a question mark in the box and press <GO>.

The “95) Save As” button allows you to save the chart you’ve created in your G <GO> function. Not having to recreate your work saves time and frees you to address other tasks. Remember, when prompted while saving, give your chart a descriptive title so you know what it is later.

The “96) Actions” button provides you with a variety of options, including exporting the image to a PDF or printing it.

The “97) Edit” button provides options to edit the chart. Features include changing the data, normalizing the graph, copying the image to your clipboard and accessing system-wide defaults.

The “98) Table” option toggles the graph from a table of data, allowing you to see the values in the chart and then return to the graph.
The horizontal area highlighted in area 2 provides quick and easy access to a variety of different features. It opens with two date range boxes so you can enter a specific date range. The next box allows you to toggle or search for other datasets to chart relative to the loaded security. The next option is to toggle the chart from a bar to a line or other type of graph.

In the center of this row is the “11) Compare” button. Clicking this will open a dialogue box in front of the chart that will allow you to add another security, normalize it, add a dataset relating to the security in the chart or create a spread or ratio.

The next three boxes provide quick and easy access to add up to three simple moving averages to the chart. In this example, a 34, 89 and 144 day moving average is entered.

The box to the right of that permits toggling of popular data (e.g., volume or open interest) below the price chart.

Finally, the “USD” box allows you to value the data series in a different currency historically.

This row of tabular buttons provides a quick way of toggling between different time frames, allowing you to analyze different periods of trend. Toward the end of the row is a “Max” button that will pull in all of the available data we have for the security. The last button, which in this example says “Daily,” allows you to choose from a larger matrix of time periods, change the shortcuts or customize the period, including lagging data.

The “<<” button opens and closes the side panel to the chart. The “Security/Study” button opens a panel that permits you to add, toggle or remove securities, data and studies from the chart. Where applicable, it also allows you to create alerts on a study. The “Event” button provides a default list of events related to the security in the chart that you may want to toggle on and off to understand more of the why behind the trend. Last is a cog wheel, which provides temporary adjustment of some settings to the chart, e.g., grid lines or a data distribution.

The legend box is highlighted on the top left of the chart. The legend displays data relating to the chart and defaults to what is selected in your TDEF5 <GO> settings. You can click on and drag the legend to a different place; you can also right click on it for a variety of features—font size, location, docking and editing the contents, etc.

The toolbar located in the top center of the chart has four buttons. The first is a “Track” button that provides a vertical and horizontal line that will follow the mouse on the chart, drawing a line to each axis. The “Annotate” button opens a palette of tools on the left-hand side of chart to draw trend lines, Fibonacci, percent change, regressions and much more. When you click the “News” button and then select a bar or point on the chart, a news panel will open displaying the historical news on that given day. Last, the “Zoom” button allows you to highlight an area of the chart to zoom in on. Double-click on the chart background to reset it. With the mouse pointer on the chart, you can also press Ctrl+Up arrow to zoom in, down arrow to zoom out, left and right arrows to directionally scroll.

The Y-axis recognizes your mouse click and dragging. Clicking on it causes a horizontal line to appear. Click and drag the mouse up and down to stretch or squeeze the price data. If you right click on it, you’ll find options such as log chart or inverting the data.

The X-axis also recognizes your mouse click and dragging. Clicking on it causes a vertical line to appear; click and drag will stretch and squeeze the axis. If you squeeze a lot, you may see no data on the left side. Give the chart a couple seconds and the data will automatically populate.
G <GO> CHARTS MANAGER

Debatably one of the most useful single-letter functions on Bloomberg, G <GO> stores, organizes and allows you to create new charts to help you visualize financial markets. You can build many different charts, thus you will need to organize them with tags, sort them by name or type and much more. The function is described in more detail below.

1. The red toolbar has three buttons. The first, “Create Chart,” provides options to create a variety of chart types using a step-by-step wizard. The second, “Actions,” provides options to create and edit chart color themes, import some samples and edit the columns displayed. You can use the “Actions” button to share, tag, delete, create a report or apply a theme. The “Bulk Mode” allows the selection of multiple charts to apply changes to a group of charts.

2. The “View” section permits you to access charts shared with and by you. Clicking “Shared Charts” will load a list of charts others have given you; clicking “My Charts” will return you to your charts.

3. The “Tags” section lists the tags you have created. (In this case, many tags have been made.) To create a tag, click into “<Create New Tag>” and type a title and press <GO>. Then drag and drop a chart from the right onto the tag and you’ll see the “Tags” column update. In this example, we are viewing the charts in the “BRIEF Charts” tag.

4. This section provides a variety of information about each chart, making a specific chart easier to find. For example, the title, type of chart, when it was viewed last, the number of securities in it, the periodicity of the chart and the tags you have given it. Each column is sortable. In this example, the “Last Viewed” column is showing the charts most recently used.
TECHNICAL INDICATORS

One of the best ways to explore the wide variety of studies available on the system is TECH <GO>. Pictured below, this page organizes all of the available studies on Bloomberg into categories. A similar screen is used when adding a study to an existing chart. It breaks down into five sections.

Section 1 of the screen allows you to search for a study by a keyword. For example, type “average” and press <GO>—all studies relating to average will be listed in the center column.

Section 2 categorizes the studies. In this example, “Popular” is selected—the studies in this category are displayed in the center column. This is also a place where you can scroll through the studies you have created in STDY <GO> by selecting “User Defined.”

The center column (Section 3) is showing the studies in a selected category. Click one of the studies and the area to the right will display its image and give a brief description. The blue links are shortcut functions. For example, if you were to type SPX <Index> GPC MAOSC <GO>, a moving average oscillator would load on a candle chart.

Section 4 displays an image and brief description of the study selected in Section 3.

Section 5 lists the other categories the selected study is tagged in and provides buttons to launch a historical or intraday with the study on the chart.
MARKET BREADTH

Market breadth analyzes the members of an index to understand the health of its trend and likeliness for reversion. This type of analysis starts with the function GPO ADL <GO>. This function, pictured below, loads a Cumulative Advance Decline Line on supported indexes. At this time, we support more than 50 equity indexes across a wide variety of measures. For more information on these indexes and measures, type DOCS 2068663 <GO> on your Bloomberg terminal.

Follow these steps to build your own market breadth chart.

1. Type SPX <Index> GPO ADL <GO>.
2. This will open the chart below with the Cumulative Advance Decline line.
3. Click “Security/Study” to open the right-side panel.
4. Click “+Add Field.” In the amber box that appears, type BREADTH and select from the fields that are listed. If you do not see the field you are looking for, try typing an additional word, e.g., RSI. Select the field from the list that appears and the data will be added to the chart.
5. Adjust your chart as you see fit and click “95) Save As” to give your chart a title and save it to G <GO>.
RELATIVE ROTATION GRAPH

Knowing what groups of securities are starting to outperform or underperform your benchmark is crucial for staying ahead. The Relative Rotation Graph provides a fast and comprehensive analysis of the cyclical shift in leadership within your universe of securities.

A scatter plot has two intersecting axes that create four quadrants. In RRG, the upper-right quadrant is defined as “Leading;” the lower left as “Weakening;” the lower right as “Lagging” and the upper right as “Improving.” The X-axis represents the JdK RS-Ratio, which is a measure of a security’s out- or underperformance vs. a benchmark. Similarly, the Y-axis is the JdK RS-Momentum. The direction of the curved line is most important for anticipating where it is headed. For example, the SSUTIL sector has been heading northeast over the past 12 weeks and will likely enter the leading quadrant in the next couple of weeks.

1. To change the group of securities in the chart, click into the Source Regions dropdown. For example, choose Equity Screen (EQS).

2. The option to the right will change to show the names of the saved searches you have in EQS <GO>. Select a search and the results will appear in the rotation.

3. Click “Save to G” and you’ll be able to access it later through G <GO>.

4. To change the benchmark, click into the “Base” box and type in the security followed by its yellow key and press <GO>.

5. The options on the top right offer the ability to back date the rotation by clicking the bullet next to the greyed out date, increase or decrease the length of history for each rotation, look at different periods such as daily or monthly and turn off all the trails.

6. The grey toolbar offers features such as zooming, track mouse and copy image.

7. The panel on the right permits the option to toggle specific trails on or off the chart. You can also click on the most recent marker of a line, the rectangle, to turn the trail on and off for a security.
KASE BARS

A free and unique offering of the Bloomberg Professional service, the KASE Bar chart adjusts a price series for volatility and thus prints a bar when a specific high-low range is met. To load a template chart, type KBAR <GO>. By default, the chart will wake to about two days with the target range of each bar equaling 10% of the Average True Range. You may notice that each bar has the same high-low range and thus represents the advantage of the chart.

In slow markets, fewer bars will print; in faster markets, more bars will print. This is a great advantage for futures that trade around the clock and for any security whose price tends to experience shifts in volatility. The technical indicators you apply, such as moving averages, RSI or MACD, will generate signals at different times when compared with a time-based chart, for example, a 10-minute chart.

To add studies, click on the “Security/Study” button. Check the studies you would like to see or choose “+Add Study” and type in the one you’re looking for or click “Browse” to look for more. When finished, click the red “Save As” button to save it to G <GO>. You can access it again with the provided number. In this scenario, we have added two moving averages, RSI and MACD.
MARKET PICTURE

Market picture is a type of chart that shows the trading range of a given time period, such as 30 minutes, by designating a letter for each time frame. In this case, the letter A represents the first 30 minutes of trading at 8:00 as specified by the amber time box. To select a default time for the letter A and other features, type TDEF22 <GO>.

The section highlighted with a 1 provides the option to change the security on the fly, open the chart in Launchpad, hide the settings options and Edit some of the deeper settings of the chart. To edit the settings permanently, visit TDEF22 <GO>.

Area 2 marks a gray toolbar that provides a variety of features to interact with the chart. The first button, “Track,” provides crosshairs for your mouse and data in a legend based on where your mouse is placed. The “Legend” button toggles the legend on and off. The “Split” button has three options: Split, Split All and Split Session. Split allows you to divide a profile once; Split All separates all the TPOs; Split Session will split the day and night session of the security. The “Join” button allows you to highlight multiple profiles and merge them to see if a bigger distribution is forming. The “Zoom” button simply zooms you in. “Period/Range” is a quick way to toggle between different time frames such as daily.

Area 3 highlights some capabilities of the Y-axis. Right click on the axis to see a variety of options such as increase or decrease scale size, add a horizontal line and split sessions.
Many people are using the CS.Lite capabilities to create their own studies. To do so, click Create New, select CS.Lite and click Continue. The screen above will open without any text inputs. The screen breaks down into four areas. Let’s pretend we would like to include the value of RSI in a study we are creating. Section 1 allows the defining of a Parameter for a study. In this case, I have named the parameter Period and given it a default of 14. Section 2 is the expression, or code, of the study. A line of code has four sections. Line Name = Study(Data, Duration)[Output];. In this example, we named the line of code Study. We set that equal to RSI (Bloomberg Syntax) and selected C for closing prices and Period for the default 14 in the Input section. Since RSI has only one output, nothing more is necessary. If we were calculating MACD, we might enter [Signal]; to output the signal line from the MACD calculation. Section 3 lets us choose which lines from our expression to put on the chart. In this case, we named the line RSI and chose the variable Study from the Expression section. Section 4 is a help guide for understanding the different studies and mathematics we support. Upon completion of writing, choose “Preview” on the red tool bar. If the study is what you intended, close the window that appeared and choose Publish to save it to your system.
Customized strategy design, testing and optimization are available through BT <GO>. The red toolbar highlighted in section 1 provides a button to create a new strategy, see a tutorial and/or discuss a strategy on our forum. Section 2 provides three tabs with varying buttons below them. The “Strategies” tab lists all of the strategies you have designed. It also provides a button for “Sample Strategies,” which is a good place to start by copying a strategy and editing it. Section 3 lists the strategies you have designed and allows you to sort the columns or search by keyword.

To build your own strategy, click “New Strategy”. A screen similar to the one above will appear. Here, we have shown where to:

1. Title the strategy
2. Select a factor
3. Optional – click the pencil to edit the settings of the selected factor
4. Create the strategy rules

Upon completion of creating the strategy, click 5) “Save” and then 6) “Analyze”.

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**Backtesting A Study In BT <GO>**


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<thead>
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<th>Description</th>
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**Chart User Guide // 11**
The results of this strategy are shown in chart form as well as statistical form. The strategy generated 22 trades. A profit of 1.53% was realized over a two-year time frame. Area displays the profitability of the strategy and many statistics describing the outcome such as Max Loss and Sharpe ratio, to help you further evaluate the strategy. Area displays four tabs. Through the “Simulation Control” tab you can increase the test’s time frame to show up to 25 years of daily data as well as many other periodicities. The fourth tab, “Parameter Optimization,” allows you to select the studies in the strategy to optimize as well as the range of periods you would consider for each study. For this example, we might try the 10–60-day moving average to see if a different period worked better. Shown below are the results of the optimization. Click the “Total” column to sort descending. The results suggest the most profitable period is the 42-day moving average, which yields a return of 18.71%. Click the line highlight as area to analyze the strategy like we did above.
MICROSOFT OFFICE INTEGRATION

The option to incorporate G charts and technical analysis data in excel is available through Bloomberg.

1. To access all Bloomberg Excel capabilities, click on the “Bloomberg” ribbon in excel
2. To add or create Bloomberg charts in excel click on “Chart Library”
3. To download real-time, historical and intraday technical analysis data into Excel, click on “Data Navigation” to open the panel on the right or “Import Data > Technical Analysis.”
CAPTURING MARKET BUZZ

Utilize Bloomberg’s News Heat scores to identify a mismatch between stocks where a large number of users are searching for news but the story flow is very quiet or nonexistent. Eliminate innocent explanations for this mismatch one by one.

1. Enter `{LPSV <GO>}` into the command line of the terminal to open the Sample Views Manager component. Next, on the top left of the Sample Views Manager type 'buzz' and press <GO>. 2. Click on “Market Buzz” and then 3. “Add to Current” to insert the page into your launchpad.

The component opening in the Launchpad View at the bottom left of the screen is a Custom Function Window. This means there are multiple functions for analysis within one location. 4. Use the tabs along the bottom to open the different functions. The choices here are Peers (RV <GO>), Supply Chain (SPLC <GO>), Events (EVT <GO>). Securities will automatically be loaded in each of these functions by left-clicking on any of the securities in the 5. Market Buzz monitor.
The monitor alone is very powerful with its event icons to the left of each security. To open just the monitor or to browse other sample monitors, follow the steps below.

1. Type ‘SAMPLE’ into the command line of the terminal and view the list that appears (do not hit <GO>). Autocomplete will reveal the choice of Sample Monitors and you should click “Sample Monitors”.

2. The Sample Monitor component will open as shown below and there will be an amber box on the top left to keyword search for a monitor.

3. Enter any keyword here to help search for available Sample Monitors else type the name or key word for specific Sample Monitor to open.

4. Select a monitor and read its description to the right.

5. Click on ‘Launch Monitor, middle right, when the chosen Sample Monitor is displayed in the manager.
The founding vision in 1982 was to create an information services, news, and media company that provides business and financial professionals with the tools and data they need on a single, all-inclusive platform. The success of Bloomberg is due to the constant innovation of our products, unrivalled dedication to customer service and the unique way in which we constantly adapt to an ever-changing marketplace. The Bloomberg Professional service is a powerful and flexible tool for financial professionals—whatever their needs—in cash and derivatives markets as diverse as equities, currencies, commodities, money markets, government and municipal securities, mortgages, indices, insurance, and legal information. The Bloomberg Professional service seamlessly integrates the very best in real-time data, news, and analytics.

In addition, Bloomberg users benefit from on-demand multimedia content, extensive electronic trading capabilities, and a superior communications platform. Bloomberg customers include influential decision makers in finance, business, and government. Business and financial professionals recognize the Bloomberg Professional service as the definitive tool for achieving their goals because it offers unparalleled assistance and functionality on a single platform for a single price.