

Bloomberg Excel Add-in Tutorial

October 3, 2013



Chris Bulla

Energy Analyst



This presentation is for informational purposes only, and is not an offer to buy or sell or a solicitation to buy or sell any securities, investment products or other financial product or service, an official confirmation of any transaction, or an official statement of Limestone Capital Investment Club. Any views or opinions presented are solely those of the author and do not necessarily represent those of Limestone Capital.

Table of Contents

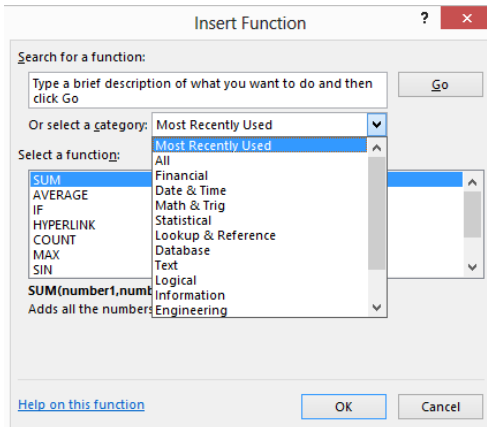
Tutorial Overview

- **Importing Data**
- **Searching for Field Mnemonics**
- **Bloomberg Syntax**
- **Populating a Table**
- **Building a Comparables Universe**
- **Building a Chart Book**

Importing Data

Importing Data

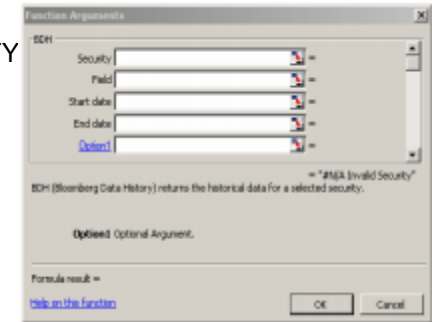
- Step 1: Locate Formulas Tab and Click “Insert Function”:
- Step 2: Open “or select a category” tab; click “Bloomberg”



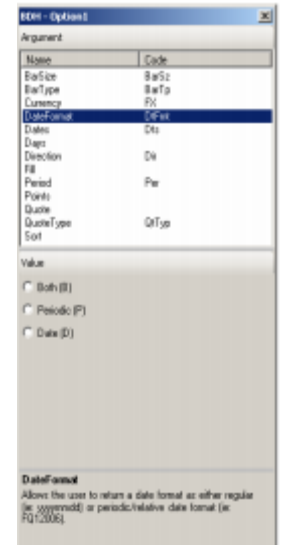
- Step 3: Select Data Type:
 - BDP (Bloomberg Data Point):** provides current data and descriptive real-time or streaming data
 - =BDP (security, field)
 - Example: =BDP(“IBM US Equity”, “PX_LAST”)
 - BDH (Bloomberg Data History):** provides historical end-of-day and historical intra-day data
 - Formula: =BDH (security, field(s), start date, end date, [optional argument(s)])
 - Example: =BDH(“IBM US Equity”, “PX_Last”, “01/01/2008”, “10/02/2013”, “Sort=d”, Per=cm”)

Searching for a Field Mnemonic

- Step 4: Fill necessary data into “New Function Builder”
 - Security Example:
 - IBM US EQUITY
 - Field Example:
 - “PX_LAST”
 - Start Date Example:
 - 01/01/2008
 - End Date Example:
 - 10/03/2013



- Step 5: Select “Option1, Option 2,...” to insert an additional parameter
 - Example Parameters:
 - Sort Descending: “Sort=d”
 - Calculated Monthly: “Per=cm”
 - Hide Dates: “Dts=h”
 - Currency: “Fx=USD”



- Step 6: Click “Ok” when ready
- Step 7: Format Data as Needed

Searching for Field Mnemonics

Bloomberg Terminal

- Step 1: Enter a security into the task bar; hit <GO>
 - Ex: "IBM US EQUITY"
- Step 2: Type "FLDS" into task bar; hit <GO>
- Step 3: Input Search Text
 - Example: "Market Cap"

The screenshot shows the Bloomberg Terminal interface with the following data:

	MPC US Equity	Source	API	98) Save	99) Opt
	market cap	View	Ranked	Filter	Equity
		Mnemonic		Ovrd	
1)	RR902 CUR_MKT_CAP				20378.00
2)	FD115 FUND_MKT_CAP_FOCUS				
3)	RR910 CRNCY_ADJ_MKT_CAP				20378.00
4)	RR233 CURRENT_MARKET_CAP_SHARE_CLASS				20378.00
5)	RR702 DILUTED_MKT_CAP				21089.16
6)	RR263 DEBT_TO_MKT_CAP				0.17

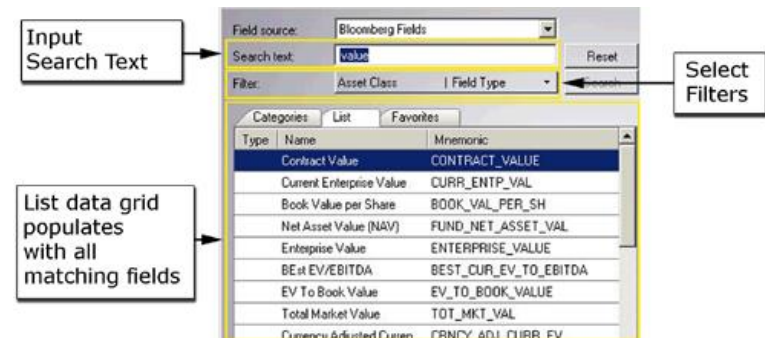
- Step 4: Select the search result that corresponds to the exact data you want.
- Step 5: Copy Mnemonic
 - Example: Dividend Yield = "DIV_YIELD"
- Step 6: Paste Pneumonic into formula builder

Excel Spreadsheet

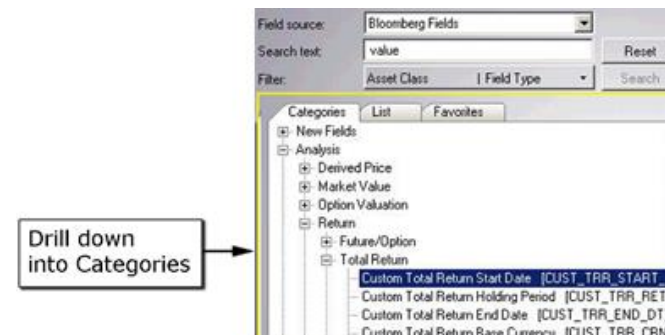
- Step 1: Select **field search** tool from Bloomberg menu, or Click icon on toolbar



- Step 2: Searching for a Field Mnemonic



- Step 3: Selecting a Field from the Category List



Bloomberg Syntax and Populating a Table

Security Syntax

Type	Syntax	Type	Syntax
Govt	CT10 Govt	Equity	IBM US Equity
Corp	035229AL7 Corp Cusip	Mtge	03072sge Mtge
Comdty	CLZ7 Comdty	M-Mkt	SOALA LNST M-Mkt
Index	SPX Index	Muni	01069DBZ9 Muni
Crncy	JPY Crncy	Pfd	EP003025 Pfd

Argument Syntax

- Using Absolute Values

- Ex: =BDP("IBM US EQUITY", "PX_LAST")

SUM X ✓ ✖ =BDP("IBM Equity", "PX_LAST")					
	A	B	C	D	E
1		PX_LAST			
2	IBM Equity	=BDP("IBM			

- Using Cell References

- Ex: =BDP(\$A2, B\$1)

SUM X ✓ ✖ =BDP(\$A2, B\$1)					
	A	B	C	D	
1		PX_LAST			
2	IBM Equity	=BDP(\$A2			

Populate Table Function

- The **Populate Table** function builds an automatically updating data table from *row* and *column* headers
- Step 1: Insert the Securities and Fields of interest in your comparables table; click upper right cell when ready.

	A	B	C	D
		PX_ASK	PX_BID	PX_LAST
2	XRX US Equity			
3	MSFT US Equity			
4	T US Equity			

- Step 2: Select **Populate Data** from the Bloomberg menu, or Click on the Populate Table icon on the toolbar



- Step 3: Make necessary formatting adjustments.

	A	B	C	D
1		PX_ASK	PX_BID	PX_LAST
2	XRX US Equity	17.56	16.56	17.03
3	MSFT US Equity	30.62	30.62	30.6
4	T Us Equity	36.68	36.4	36.4

Building a Comparables Universe

Proper Entry

	A	B	C	D	E
1					
2					
3			SECURITY_NAME	PX_Last	Cur_Mkt_Cap
4		MPC US EQUITY	=BDP(\$B4, C\$3)		
5		VLO US EQUITY			
6		HFC US EQUITY			
7		NOV US EQUITY			
8		PSX US EQUITY			
9					
10					

Common Error:

- Failure to lock "Security" Column, and "Field" Row
- Ex: =BDP(\$B4, C\$4)

Completed Table - Unformatted

	A	B	C	D	E
1					
2					
3			SECURITY_NAME	PX_Last	Cur_Mkt_Cap
4		MPC US EQUITY	Marathon Petroleum Corp	65.08	20374869141
5		VLO US EQUITY	Valero Energy Corp	34.13	18503332031
6		HFC US EQUITY	HollyFrontier Corp	41.61	8316051758
7		NOV US EQUITY	National Oilwell Varco Inc	78.58	33594390625
8		PSX US EQUITY	Phillips 66	58.9301	36008089844
9					
10					

- Drag formula to complete table

Completed Table - Formatted

Residential REIT						
(CDN\$ millions, except per share data)						
Company	Unit Price	Equity Value	Enterprise Value	LTM FFO	FY1 FFO	FY2 FFO
Boardwalk REIT	\$56.91	\$2,724.4	\$5,105.3	17.1x	17.9x	16.8x
CAP REIT	\$20.25	\$2,085.6	\$4,601.2	14.0x	12.7x	12.4x
InterRent REIT	\$5.46	\$312.1	\$661.6	18.6x	13.3x	12.1x
Milestone Apartments REIT	\$9.50	\$350.1	\$1,166.0	28.7x	9.6x	9.2x
Morguard NA Residential	\$9.23	\$270.2	\$1,380.7	10.9x	12.3x	10.5x
Pure Multi-Family REIT LP	\$4.50	\$108.4	\$259.0	22.0x	11.5x	9.2x
True North Apartment REIT	\$8.43	\$156.1	\$479.5	14.9x	11.7x	10.5x
Average				18.0x	12.7x	11.5x

W	X	Y	Z	AA	AB	AC	AD	AE
#N/A Invalid Security				#N/A Invalid Security				
FFO								
LFY	LQ	LQ-1	LTM	FY1 (per unit)	FY2 (per unit)	LFY	LQ	L
\$150.3	\$81.8	\$72.5	\$159.6	\$3.18	\$3.39	\$134.5	\$73.4	
\$129.2	\$77.2	\$57.2	\$149.2	\$1.59	\$1.63	\$122.1	\$72.5	
\$13.5	\$8.9	\$5.6	\$16.8	\$0.41	\$0.45	\$11.7	\$7.6	
-	\$12.2	-	\$12.2	\$0.99	\$1.03	-	\$9.9	
\$19.7	\$14.6	\$9.5	\$24.8	\$0.75	\$0.88	\$18.8	\$13.4	
\$1.7	\$3.2	-	\$4.9	\$0.39	\$0.49	\$1.6	\$3.0	
\$3.7	\$6.8	-	\$10.5	\$0.72	\$0.80	\$3.4	\$6.3	

Building a Chart Book

Building a Macro Chart

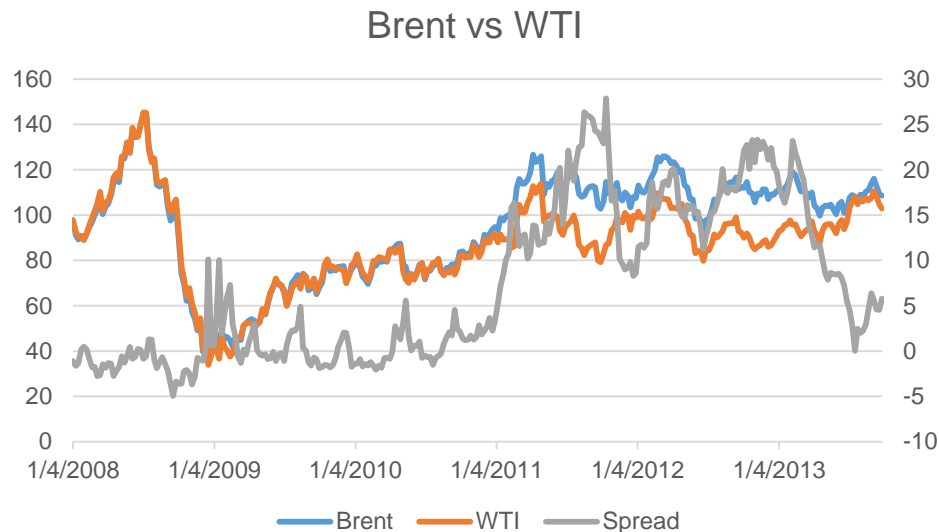
- Step 1: Insert Start Date in Cell B1; drag across sheet
- Step 2: Insert End Date function “=today()” in Cell C1; drag across.
- Step 3: Insert Securities of interest in B3,C3,D3,...
- Step 4: Insert Field of interest in B4,C4,D4,...
- Step 5: Insert **BDH (Bloomberg Data History)** function in cell A5
 - Formula: =BDH(Security, Field, Start, End, “Option 1”, “Option 2”,...)
 - Ex: =BDH(B3,B4,B1,B2, “Sort=D”, “Per=cw”)

A5	:	X	✓	f _x	=BDH(B3,B4,B1,B2, Sort=d, per=cw)
	A	B	C	D	E
1		1/1/2008	1/1/2008	1/1/2008	1/1/2008
2		10/3/2013	10/3/2013	10/3/2013	10/3/2013
3		CO1 Comdty	CL1 Comdty	Spread	NG1 Comdty
4		PX_LAST	PX_LAST	PX_LAST	PX_LAST
5		=BDH(B3,B4,B1,B2, Sort=d, per=cw)			
6					

	A	B	C	D	E
1		1/1/2008	1/1/2008	1/1/2008	1/1/2008
2		10/3/2013	10/3/2013	10/3/2013	10/3/2013
3		CO1 Comdty	CL1 Comdty	Spread	NG1 Comdty
4		PX_LAST	PX_LAST	PX_LAST	PX_LAST
5	9/27/2013	108.63	102.87	5.76	3.589
6	9/20/2013	109.22	104.67	4.55	3.687

Building a Macro Chart

- Step 1: Select Data
- Step 2: Format Data



Why is this Useful?

- Automatically updating macroeconomic charts.
- Can be linked directly to PowerPoint presentation
- Professional Limestone branding