

Hacking Excel for Better Investing

by Bonnie Biafore

Why Use Excel?

- Access Web information
- Manage portfolio of stocks and funds
- Calculate financial ratios
- Calculate performance

Useful Excel Features

- Hyperlinks
 - Navigate to Web pages or other documents
- Web queries
 - Download data from tables on the Web
- Conditional formatting
 - Highlight cells based on values or formulas
- Built-in financial functions
- Charts

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How Hyperlinks Work

The image illustrates how a hyperlink in an Excel spreadsheet works. It shows a Microsoft Excel spreadsheet with a table of company tickers. A blue arrow labeled "Click link" points to the "AFL" ticker in the "Company" column. Another blue arrow labeled "Web page appears" points to the browser window that displays the stock information for AFLAC INC (NYS) after the link is clicked. The browser window shows the stock price at 41.09, a change of 0.10 (0.24%), and a risk alert for AFLAC. The browser window also displays a Fidelity Active Trader Services advertisement for \$8 flat fee trade.

Company	Ticker	FYE	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Next Rep.
Aflac	AFL						
Amgen	AMGN						
Cisco	CSCO						
General Electric	GE						
Harley Davidson	HDI						
Home Depot	HD						
Inhal	INTC						
Johnson & Johnson	JNJ						
Merck	MRK						
Microsoft	MSFT						
Oracle	ORCL						
Pepsico, Inc.	PEP						
Pfizer	PFE						
Walgreen's	WAG						
Wal-Mart	WMT						

What to Do with Hyperlinks

- Pop up a web page with stock info
- Display a document with your notes about a stock
- Display a spreadsheet with prices or performance

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Create a hyperlink

The screenshot shows two windows. The top window is Microsoft Excel, displaying a spreadsheet titled 'Earnings Reporting Schedule'. The spreadsheet has columns for 'Company', 'Ticker', 'FYE', '1st Qtr', '2nd Qtr', '3rd Qtr', '4th Qtr', and 'Next Rep'. The bottom window is Internet Explorer, displaying a stock page for AFLAC. The browser's address bar shows the URL 'http://www.aflac.com/stock/stock.asp?stock=aflac'. Blue arrows indicate the process of copying the URL from the browser and pasting it into the Excel spreadsheet.

1. Open Web page in browser
2. Select URL
3. Press Ctrl+C to copy
4. Select cell in Excel
5. Choose Insert → Hyperlink
6. And then...

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Insert hyperlink

Text to display

Click to browse

Ctrl+V to paste URL

Select a file

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Company	Ticker	FYE	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Next Rep
Aflac	AFL	12/30/02	5/14/03	8/14/03	11/14/03	3/29/04	03/29/04
Amgen	AMGN	12/31/02	5/15/03	8/14/03	11/14/03	3/30/04	03/30/04
Cisco	CSCO	1/1/03	5/16/03	8/15/03	11/15/03	3/31/04	03/31/04
General Electric	GE	12/31/02	5/15/03	8/14/03	11/14/03	3/30/04	03/30/04
Harley Davidson	HDI						
Home Depot	HD						
Intel	INTC						
Johnson & Johnson	JNJ						
Merck	MRK						
Microsoft	MSFT						
Oracle	ORCL						
Pepsico, Inc.	PEP						
Pfizer	PFE						
Walgreen's	WAG						
Wal-Mart	WMT						

Follow hyperlink

- Click cell to follow hyperlink
- Click and hold to select cell

Company	Ticker
Aflac	AFL
Amgen	AMGN
Cisco	CSCO
General Electric	GE
Harley Davidson	HDI
Home Depot	HD
Intel	INTC
Johnson & Johnson	JNJ
Merck	MRK
Microsoft	MSFT
Oracle	ORCL
Pepsico, Inc.	PEP
Pfizer	PFE
Walgreen's	WAG
Wal-Mart	WMT

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Download data with Web Queries

- Download financial data to calculate financial ratios
- Download prices for performance tracking

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How Web Queries Work (Excel 2003)

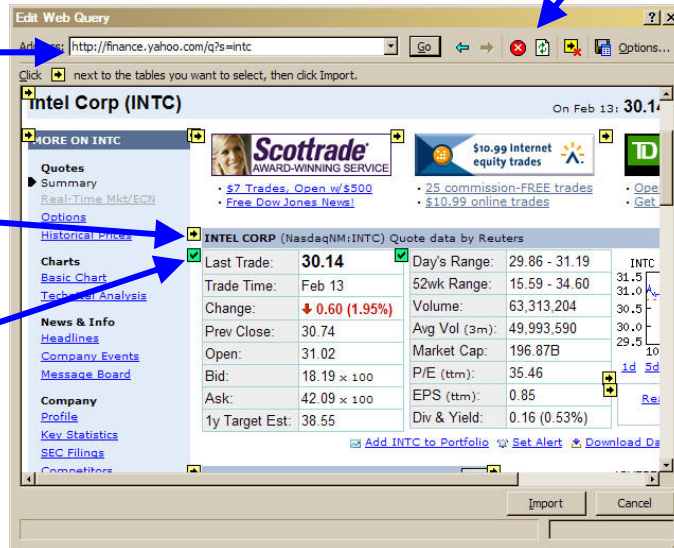
- Data→Import External Data→New Web Query
- Navigate to page with data
- Use browser commands in dialog box
 - Address
 - Go
 - Back
 - Forward

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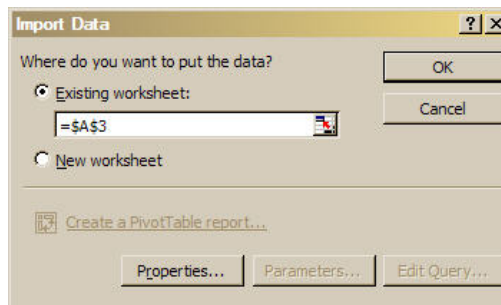
New Web Query dialog

1. Type or browse to URL
2. Browse within window
3. Click yellow arrow to select table
4. Selected table displays green check
5. Click Import to import data



Import data into worksheet

- Import Data options:
 - Existing worksheet: specify cell
 - New worksheet (good for keeping data separate)
- Click OK



Query Results

	A	B
1	hd	
2		
3	Last Trade:	30.14
4	Trade Time:	13-Feb
5	Change:	Down 0.60 (1.95%)
6	Prev Close:	30-Jan
7	Open:	31-Jan
8	Bid:	18.19 x 100
9	Ask:	42.09 x 100
10	1y Target Est:	7-Feb
11		
12	Day's Range:	29.86 - 31.19
13	52wk Range:	15.59 - 34.60
14	Volume:	#####
15	Avg Vol (3m):	#####
16	Market Cap:	196.87B
17	P/E (ttm):	4-Feb
18	EPS (ttm):	0-Jan
19	Div & Yield:	0.16 (0.53%)
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Sheet1 / Sheet2 /

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Web Queries with Parameters

- Basic approach
 - Edit Query and save it as a .iqy file
 - Edit the file with notepad
 - Replace ticker with parameter string
 - Use query file in spreadsheet pointing query to cell that contains value for parameter

Editing Query File

- Replace ticker with parameter string
- Choose File→Save

```
Web Query.igry - Notepad
File Edit Format View Help
WEB
1
http://finance.yahoo.com/q?s=INTC
Selection=22,24
Formatting=None
PreFormattedTextToColumns=True
ConsecutiveDelimitersAsOne=True
SingleBlockTextImport=False
DisableDateRecognition=False
DisableRedirections=False

Web Query.igry - Notepad
File Edit Format View Help
WEB
1
http://finance.yahoo.com/q?s=[\"symbol\", \"Enter Symbol\"]
Selection=22,24
Formatting=None
PreFormattedTextToColumns=True
ConsecutiveDelimitersAsOne=True
SingleBlockTextImport=False
DisableDateRecognition=False
DisableRedirections=False
```

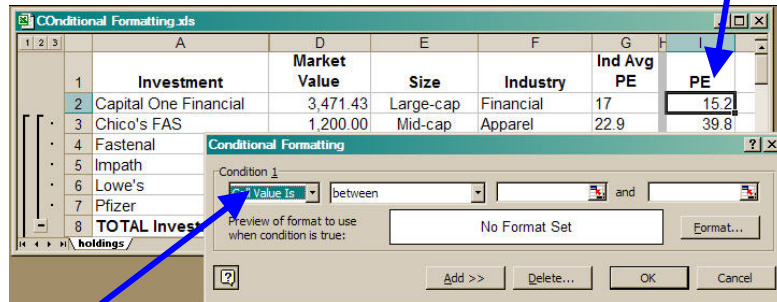
(c)

Conditional Formatting

- Highlight good and bad values with colors
- Highlight stocks when quarterly report is available

Conditional Formatting

- Select cell
- Choose Format→Conditional Formatting



First formatting test

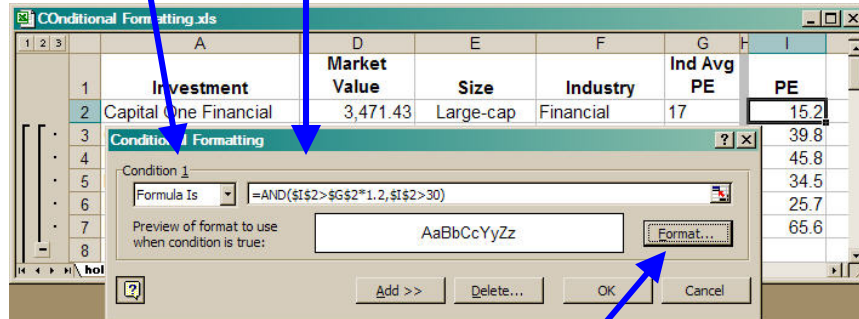
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Anatomy of a condition

Evaluate cell value or formula

Formula is PE greater than 120% of industry average PE and greater than 30



Click to specify formatting

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Formatting

Format font, border, color, or pattern

Investment	Market Value	Size	Industry	Ind Avg PE	PE
Capital One Financial	3,471.43	Large-cap	Financial	17	15.2
Chico's FAS	1,200.00	Mid-cap	Apparel	22.9	39.8
					45.8
					34.5
					25.7
					65.6

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Conditions evaluated in order

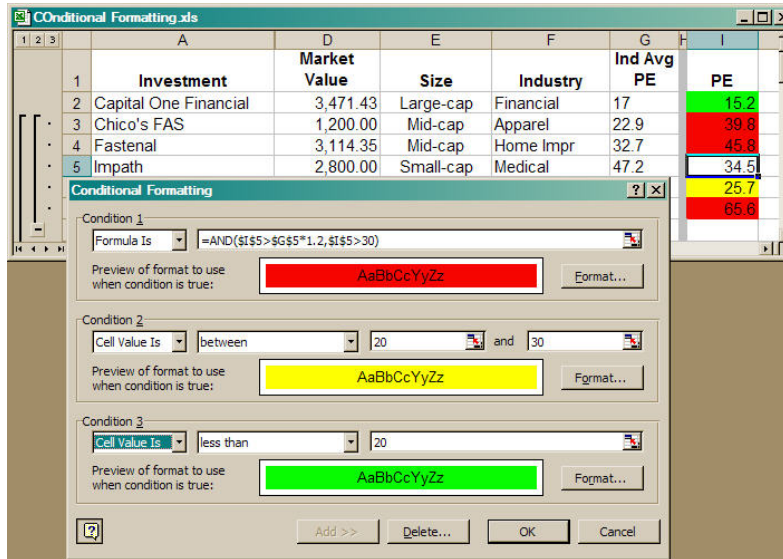
Conditions evaluated in order

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					45.8
					34.5
					25.7
					65.6

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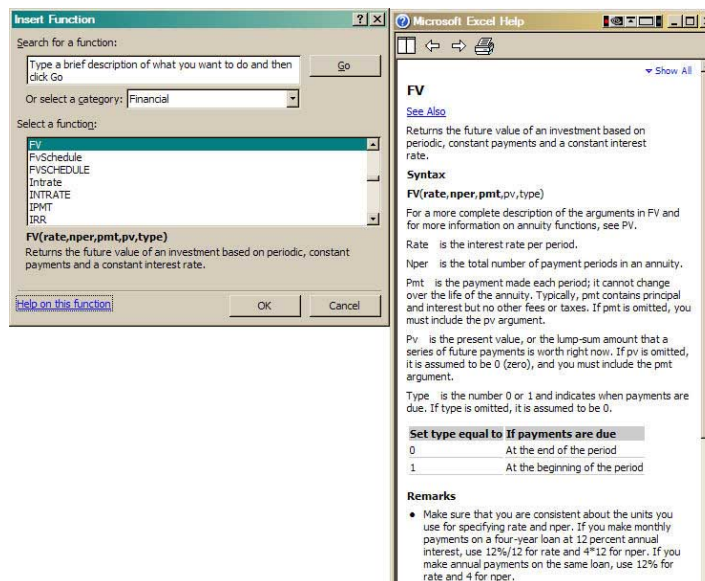
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Unhandled Conditions



Financial Functions

- Choose category
- Choose function
- Click Help on this function links



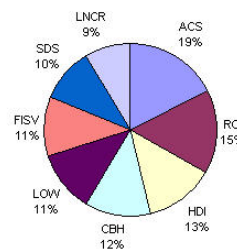
Charts

- Show growth graphs
- Display diversification

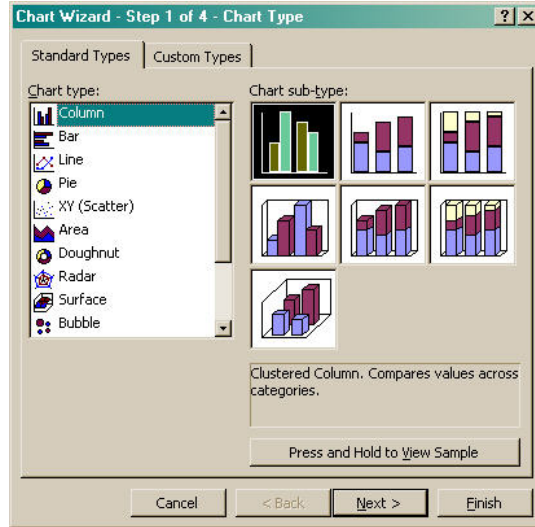
How Charts Work

Shares	Name	Ticker	Current	
			\$ Value	% Value
300.0	Affiliated Comp Svcs	ACS	\$16,518	17.7%
450.0	Renal Care Group Inc	RCI	\$14,450	15.5%
200.0	Harley-Davidson	HDI	\$12,000	12.9%
200.0	Commerce Bancorp (VL)	CBH	\$11,000	11.8%
200.0	Lowe's Cos.	LOW	\$10,000	10.7%
300.0	Fiserv Inc	FISV	\$10,000	10.7%
400.0	Sungard Data Systems Inc	SDS	\$9,000	9.6%
270.0	Lincare Holdings Inc	LNCR	\$8,000	8.5%
			\$93,000	

Current Stock Value Diversification



The Excel Chart Wizard



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Bob Adam's Annual Report Spreadsheet

- <http://bob-adams.home.comcast.net>
- Click Annual Report for Mfg.

ANALYZING THE ANNUAL REPORT --		version 9j	Intel	INTC 2003
The cheaper the paper, the more valuable the information -- Peter Lynch		(Company)	(Symbol)	(Year of report)
Press Ctrl+D to delete current data. Ctrl+I to insert ODS data. See the bottom of the form for instructions.				
Accounts Receivable	Change: 15%	Days - Wrong direction (increasing)		
Days waiting for payment this year = 36	If Inventories are also increasing: Caution			
Days waiting for payment prior year = 35	Rising Accts. Rec. means customers aren't paying their bills			
Below 60 is good - below 45 is superb	which may mean they aren't satisfied with the product			
Inventories	Change: 11%	Wrong, wrong direction (increasing)		
Inventories Turnover Days this year = 70	CAUTION -- Both Accts. Receivable & Inventories are increasing			
Compare with other companies in the industry	If Inventories are rising faster than sales, competition or pricing are likely the problem			
Sales or Revenues	Change: 13%	Way to GO! (increasing)		
Sales to Accts Receivable Ratio.....	Caution - Accts Receivables growing faster than sales			
Sales to Inventories Ratio.....	This ratio is OK (Sales growing faster than Inventories)			
Plant & Equipment	Change: 7%	Caution - The investment in PP&E is flat or decreasing		
(Sales should be increasing or flat or faster)	Way to GO! Sales are growing faster			
Long-term Debt	Change: 1%	Wrong direction (increasing)		
	A small change isn't considered a serious negative.			
	Debt to Equity Ratio is OK.			
Total Interest Coverage	Pretax exceeds interest X times	127 Large numbers aren't as useful as small.		
(Pretax Profit + Total Interest Paid / Total Interest Paid)	This company appears to be in good shape financially.			

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Jim Thomas' Portfolio Spreadsheet

- <http://www.bivio.com/irw/files/Public%20Files/Toolkit4/>
- TK4Portfolio.xls

The screenshot shows an Excel spreadsheet with the following data:

Shares	Name	Ticker	Z	Y	R	Q	AD	V	X	Y	
			Sp. Total Return	Risk Ratio	Future Relative Value	Big Below	Current Price	46 Price	PE10	Proj. EPS Growth Rate	
11	200.0	Commerce Bancorp (V.L.)	CBH	26.9%	12%	89.9	\$74.4	\$56.35	\$175.0	0.80	28.0%
12	200.0	Lowe's Cos.	LOW	24.6%	12%	81.8	\$63.2	\$53.84	\$158.5	1.17	07.0%
13	270.0	Lincoln Holdings Inc.	LINC	27.8%	12%	78.6	\$48.5	\$70.9	\$99.0	0.71	16.0%
14	300.0	Fiserv Inc.	FI	19.1%	12%	87.6	\$42.4	\$35.45	\$84.0	1.23	16.0%
15	300.0	Affiliated Comp Svcs	ACS	19.3%	10%	84.7	\$61.8	\$55.06	\$132.0	0.90	18.0%
16	200.0	Harley-Davidson	HAI	19.1%	12%	95.4	\$44.4	\$80.49	\$140.5	1.36	16.0%
17	400.0	Sungard Data Systems Inc.	SDS	15.1%	10%	99.2	\$24.8	\$22.70	\$49.1	1.12	16.0%
18	450.0	Rental Care Group Inc.	RCI	13.2%	11%	110.7	\$29.9	\$32.0	\$59.7	1.25	16.0%
Overall Portfolio:				26.4%	11%	91.6					
<i>The following four rows should be ignored. They're experimental.</i>											
22	379	Commerce Bancorp (V.L.)	CBH	26.9%	12%	89.9	\$74.4	\$56.35	\$158.00	0.85	28.0%
23	379	Howe Sp EPS Est.	CBH	26.9%	12%	89.9	\$74.4	\$56.35	\$175.03	0.80	28.0%
24	379	ACE Sp EPS Est.	CBH	21.3%	16%	85.4	\$65.4	\$56.35	\$173.83	0.85	28.0%
25	379	Toolkit SSG		28.7%	13%	85.1			\$58.00		

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Questions?

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