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Common Issues

- Make sure that the add-in has been activated IN EXCEL.
- Make sure you enable ALL macros.
- Refer to the Install_Manual_FAQ pdf if you get an error such as "1155: File C:\Users\OSV\AppData\Local\Temp{8DB131 SMF blah blah .msi not found." when running the exe file.
- Refer to the extensive documentation pdf included in the download. Also watch the installation videos on Oldschoolvalue.com if you are having trouble.

Microsoft Corp (MSFT)

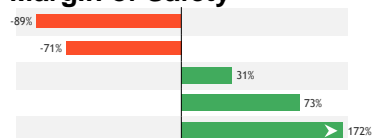
Company Overview

Microsoft Corporation is engaged in developing, licensing and supporting a range of software products and services. The Company also designs and sells hardware, and delivers online advertising to the customers. It operates in five segments: Windows & Windows Live Division (Windows Division), Server and Tools, Online Services Division (OSD), Microsoft Business Division (MBD), and Entertainment and Devices Division (EDD). The Company's products include operating systems for personal computers (PCs), servers, phones, and other intelligent devices; server applications for distributed computing environments; productivity applications; business solution applications; desktop and server management tools; software development tools; video games, and online advertising. It also designs and sells hardware, including the Xbox 360 gaming and entertainment console and Xbox 360 accessories. Its cloud-based computing services include Bing and Windows Live Essentials suite.

Valuation

Current Price	\$ 24.72
NCAV	\$ 2.78
Total Net Reprod. Cost	\$ 7.23
Earnings Power Value (EPV)	\$ 32.41
Discounted Cash Flow (DCF)	\$ 42.77
Ben Graham Formula	\$ 67.24

Margin of Safety




Key Statistics

Mkt Cap (\$M)	\$ 207,110.00
52 Wk High	\$ 29.46
52 Wk Low	\$ 23.32
% off 52Wk Low	6.0%





Valuation Ratios

P/E(TTM)	8.9
P/S(TTM)	2.9
P/Tang BV(MRQ)	4.6
FCF/EV (TTM)	9.3%
P/FCF(TTM)	10.3
Earnings Yld (TTM)	18.0%
Piotroski (TTM)	4
Altman (MRQ)	3.18
Beneish (TTM)	-2.65







Cash Flows

Free Cash Flow	
5 yr FCF Growth	12.2%
10 yr FCF Growth	5.8%

Effectiveness

CROIC	
Avg	36.8%
FCF/S	
Avg	30.4%
ROA	
Avg	21.8%
ROE	
Avg	40.6%

Margins & Profitability

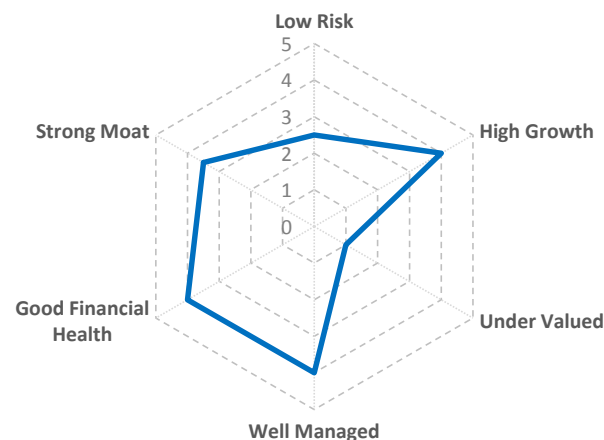
Gross	
Gross Margin	
Operating	
Operating Margin	
Net Profit	
Net Margin	

Financial Strength (MRQ)

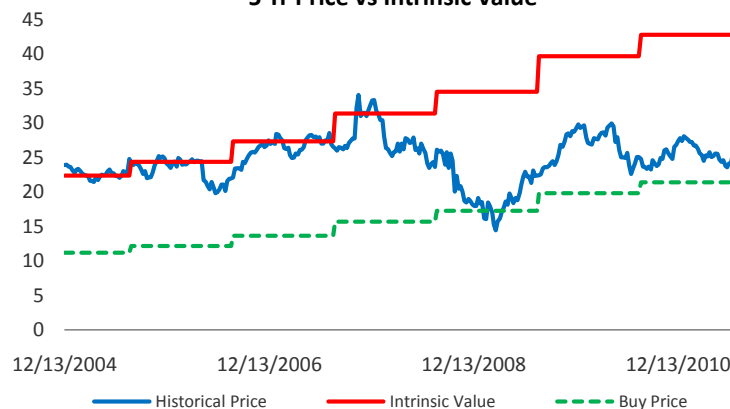
Quick Ratio(MRQ)	2.6
Current Ratio(MRQ)	2.6
LTD/Eq(MRQ)	20.9
Tot D/Eq(MRQ)	20.9

Efficiency

Rec Turnover(TTM)	5.0
Inv Turnover(TTM)	14.8
Asset Turnover(TTM)	0.7



5 Yr Price vs Intrinsic Value



Balance Sheet

Cash and Equiv	\$ 52,772.00
Short-Term Investments	\$ -
Accts Rec	\$ 14,987.00
Inventory	\$ 1,372.00
Total Current Assets	\$ 77,385.00
Net PP&E	\$ 8,162.00
Intangibles	\$ 13,325.00
Total Assets	\$ 111,171.00
Total Current Liabilities	\$ 28,774.00
Long-Term Debt	\$ 11,921.00
Total Liabilities	\$ 51,621.00

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	TTM
Income Statement											
Revenue	\$ 28,365.0	\$ 32,187.0	\$ 36,835.0	\$ 39,788.0	\$ 44,282.0	\$ 51,122.0	\$ 60,420.0	\$ 58,437.0	\$ 62,484.0	\$ 69,943.0	\$ 69,943.0
% change from prev year		13.5%	14.4%	8.0%	11.3%	15.4%	18.2%	-3.3%	6.9%	11.3%	0.0%
Cost of Revenues	\$ 4,107.0	\$ 4,247.0	\$ 5,530.0	\$ 5,345.0	\$ 6,747.0	\$ 9,253.0	\$ 9,542.0	\$ 9,593.0	\$ 9,722.0	\$ 12,811.0	\$ 12,811.0
COGS (%)	14.5%	13.2%	15.0%	13.4%	15.2%	18.1%	15.8%	16.4%	15.6%	18.3%	18.3%
Gross Profit	\$ 24,258.0	\$ 27,940.0	\$ 31,305.0	\$ 34,443.0	\$ 37,535.0	\$ 41,869.0	\$ 50,878.0	\$ 48,844.0	\$ 52,762.0	\$ 57,132.0	\$ 57,132.0
Gross Profit (%)	85.5%	86.8%	85.0%	86.6%	84.8%	81.9%	84.2%	83.6%	84.4%	81.7%	81.7%
Operating Expenses											
Selling, General & Admin. Expenses	\$ 6,957.0	\$ 8,625.0	\$ 13,306.0	\$ 12,843.0	\$ 13,576.0	\$ 14,784.0	\$ 18,166.0	\$ 16,909.0	\$ 17,277.0	\$ 18,162.0	\$ 18,162.0
SG&A (%)	24.5%	26.8%	36.1%	32.3%	30.7%	28.9%	30.1%	28.9%	27.7%	26.0%	26.0%
Research & Development	\$ 4,307.0	\$ 4,659.0	\$ 7,779.0	\$ 6,184.0	\$ 6,584.0	\$ 7,121.0	\$ 8,164.0	\$ 9,010.0	\$ 8,714.0	\$ 9,043.0	\$ 9,043.0
R&D (%)	15.2%	14.5%	21.1%	15.5%	14.9%	13.9%	13.5%	15.4%	13.9%	12.9%	12.9%
EBITDA	\$ 12,994.0	\$ 14,656.0	\$ 10,220.0	\$ 15,416.0	\$ 17,375.0	\$ 19,964.0	\$ 24,548.0	\$ 22,925.0	\$ 26,771.0	\$ 29,927.0	\$ 29,927.0
EBITDA (%)	45.8%	45.5%	27.7%	38.7%	39.2%	39.1%	40.6%	39.2%	42.8%	42.8%	42.8%
Other Special Charges	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Depreciation & Amortization	\$ 1,084.0	\$ 1,439.0	\$ 1,186.0	\$ 855.0	\$ 903.0	\$ 1,440.0	\$ 2,056.0	\$ 2,562.0	\$ 2,673.0	\$ 2,766.0	\$ 2,766.0
D&A (%)	3.8%	4.5%	3.2%	2.1%	2.0%	2.8%	3.4%	4.4%	4.3%	4.0%	4.0%
Operating Income	\$ 11,910.0	\$ 13,217.0	\$ 9,034.0	\$ 14,561.0	\$ 16,472.0	\$ 18,524.0	\$ 22,492.0	\$ 20,363.0	\$ 24,098.0	\$ 27,161.0	\$ 27,161.0
Operating Income (%)	42.0%	41.1%	24.5%	36.6%	37.2%	36.2%	37.2%	34.8%	38.6%	38.8%	38.8%
Other Income and Expense											
Interest Expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 151.0	\$ 295.0	\$ 295.0
Other Income	\$ (2,067.0)	\$ (120.0)	\$ 3,187.0	\$ 2,067.0	\$ 1,790.0	\$ 292.0	\$ 434.0	\$ (1,248.0)	\$ 223.0	\$ 305.0	\$ 305.0
Earnings Before Taxes	\$ 9,843.0	\$ 13,097.0	\$ 12,221.0	\$ 16,628.0	\$ 18,262.0	\$ 18,816.0	\$ 22,926.0	\$ 19,115.0	\$ 24,170.0	\$ 27,171.0	\$ 27,171.0
Income Taxes/(Credit)	\$ 3,684.0	\$ 4,733.0	\$ 4,028.0	\$ 4,374.0	\$ 5,663.0	\$ 6,036.0	\$ 6,133.0	\$ 5,252.0	\$ 6,253.0	\$ 4,921.0	\$ 4,921.0
Tax Rate %	37.4%	36.1%	33.0%	26.3%	31.0%	32.1%	26.8%	27.5%	25.9%	18.1%	18.1%
Earnings After Taxes	\$ 6,159.0	\$ 8,364.0	\$ 8,193.0	\$ 12,254.0	\$ 12,599.0	\$ 12,780.0	\$ 16,793.0	\$ 13,863.0	\$ 17,917.0	\$ 22,250.0	\$ 22,250.0
Minority Interest	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Income From Continuing Operations	\$ 7,829.0	\$ 9,993.0	\$ 8,168.0	\$ 12,254.0	\$ 12,599.0	\$ 14,065.0	\$ 17,681.0	\$ 14,569.0	\$ 18,760.0	\$ 23,150.0	\$ 23,150.0
Net Income From Discontinued Operator	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Income From Total Operations	\$ 7,829.0	\$ 9,993.0	\$ 8,168.0	\$ 12,254.0	\$ 12,599.0	\$ 14,065.0	\$ 17,681.0	\$ 14,569.0	\$ 18,760.0	\$ 23,150.0	\$ 23,150.0
Net Income (%)	27.6%	31.0%	22.2%	30.8%	28.5%	27.5%	29.3%	24.9%	30.0%	33.1%	33.1%
Shares and EPS											
Total Basic EPS	\$ 0.73	\$ 0.93	\$ 0.76	\$ 1.13	\$ 1.21	\$ 1.44	\$ 1.90	\$ 1.63	\$ 2.13	\$ 2.73	\$ 2.73
Fully Diluted EPS	\$ 0.71	\$ 0.92	\$ 0.75	\$ 1.12	\$ 1.20	\$ 1.42	\$ 1.87	\$ 1.62	\$ 2.10	\$ 2.69	\$ 2.68
Basic Shares Outstanding	10,724.7	10,745.2	10,747.4	10,844.2	10,412.4	9,767.4	9,305.8	8,938.0	8,807.5	8,479.9	8,380.0
Diluted Shares Outstanding	11,026.8	10,862.0	10,890.7	10,941.1	10,499.2	9,904.9	9,455.1	8,993.2	8,933.3	8,605.9	
User Defined Shares Outstanding											
Balance Sheet											
											MRQ
Assets											
Cash & Equivalents	\$ 3,016.0	\$ 6,438.0	\$ 15,982.0	\$ 4,851.0	\$ 6,714.0	\$ 6,111.0	\$ 10,339.0	\$ 6,076.0	\$ 5,505.0	\$ 9,610.0	\$ 9,610.0
Short-Term Investments	\$ 35,636.0	\$ 42,610.0	\$ 44,610.0	\$ 32,900.0	\$ 27,447.0	\$ 17,300.0	\$ 13,323.0	\$ 25,371.0	\$ 31,283.0	\$ 43,162.0	\$ 43,162.0
Net Receivables	\$ 5,129.0	\$ 5,196.0	\$ 5,890.0	\$ 7,180.0	\$ 9,316.0	\$ 11,338.0	\$ 13,589.0	\$ 11,192.0	\$ 13,014.0	\$ 14,987.0	\$ 14,987.0
% change from prev year		1.3%	13.4%	21.9%	29.7%	21.7%	19.9%	-17.6%	16.3%	15.2%	49.4%
Inventories	\$ 673.0	\$ 640.0	\$ 421.0	\$ 491.0	\$ 1,478.0	\$ 1,127.0	\$ 985.0	\$ 717.0	\$ 740.0	\$ 1,372.0	\$ 1,372.0
% change from prev year		-4.9%	-34.2%	16.6%	201.0%	-23.7%	-12.6%	-27.2%	3.2%	85.4%	29.9%
Other Current Assets	\$ 4,122.0	\$ 4,089.0	\$ 3,663.0	\$ 3,315.0	\$ 4,055.0	\$ 4,292.0	\$ 5,006.0	\$ 5,924.0	\$ 5,134.0	\$ 5,787.0	\$ 5,787.0
Total Current Assets	\$ 48,576.0	\$ 58,973.0	\$ 70,566.0	\$ 48,737.0	\$ 49,011.0	\$ 40,168.0	\$ 43,242.0	\$ 49,280.0	\$ 55,676.0	\$ 74,918.0	\$ 74,918.0
Fixed Assets	\$ 2,268.0	\$ 2,223.0	\$ 2,328.0	\$ 2,346.0	\$ 3,044.0	\$ 4,350.0	\$ 6,242.0	\$ 7,535.0	\$ 7,630.0	\$ 8,162.0	\$ 8,162.0
Intangible Assets	\$ 1,669.0	\$ 3,512.0	\$ 3,684.0	\$ 3,808.0	\$ 4,405.0	\$ 5,638.0	\$ 14,081.0	\$ 14,292.0	\$ 13,552.0	\$ 13,325.0	\$ 13,325.0
Other Long-Term Assets	\$ 15,133.0	\$ 14,863.0	\$ 15,813.0	\$ 15,924.0	\$ 13,138.0	\$ 13,015.0	\$ 9,228.0	\$ 6,811.0	\$ 9,255.0	\$ 12,299.0	\$ 12,299.0
Total Long-Term Assets	\$ 19,070.0	\$ 20,598.0	\$ 21,823.0	\$ 22,078.0	\$ 20,587.0	\$ 23,003.0	\$ 29,551.0	\$ 28,608.0	\$ 30,437.0	\$ 33,786.0	\$ 33,786.0
Total Assets	\$ 67,646.0	\$ 79,571.0	\$ 92,389.0	\$ 70,815.0	\$ 69,597.0	\$ 63,171.0	\$ 72,793.0	\$ 77,888.0	\$ 86,113.0	\$ 108,704.0	\$ 108,704.0
Liabilities & Stockholders' Equity											
Accounts payable	\$ 1,208.0	\$ 1,573.0	\$ 1,717.0	\$ 2,086.0	\$ 2,909.0	\$ 3,247.0	\$ 4,034.0	\$ 5,008.0	\$ 4,207.0	\$ 5,405.0	\$ 5,405.0
Short-Term Debt	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000.0	\$ 1,000.0	\$ -	\$ -
Taxes Payable	\$ 1,145.0	\$ 1,416.0	\$ 1,339.0	\$ 1,662.0	\$ 1,938.0	\$ 2,325.0	\$ 2,934.0	\$ 3,156.0	\$ 3,283.0	\$ 3,575.0	\$ 580.0
Accrued Liabilities	\$ 1,145.0	\$ 1,416.0	\$ 1,339.0	\$ 1,662.0	\$ 1,938.0	\$ 2,325.0	\$ 2,934.0	\$ 3,156.0	\$ 3,283.0	\$ 3,575.0	\$ 3,575.0
Other Current Liabilities	\$ 11,536.0	\$ 12,401.0	\$ 13,252.0	\$ 14,791.0	\$ 17,976.0	\$ 20,507.0	\$ 25,852.0	\$ 20,026.0	\$ 20,940.0	\$ 23,369.0	\$ 23,369.0
Total Current Liabilities	\$ 12,744.0	\$ 13,974.0	\$ 14,969.0	\$ 16,877.0	\$ 22,442.0	\$ 23,754.0	\$ 29,886.0	\$ 27,034.0	\$ 26,147.0	\$ 28,774.0	\$ 28,774.0
Long-Term Debt	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,746.0	\$ 4,939.0	\$ 11,921.0	\$ 11,921.0
Other Liabilities	\$ 2,324.0	\$ 2,846.0	\$ 2,595.0	\$ 5,823.0	\$ 7,051.0	\$ 8,320.0	\$ 6,621.0	\$ 7,550.0	\$ 8,223.0	\$ 9,470.0	\$ 9,470.0
Deferred Income Taxes	\$ 398.0	\$ 1,731.0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 229.0	\$ 1,456.0	\$ 1,456.0
Minority Interest	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Long-Term Liabilities	\$ 2,722.0	\$ 4,577.0	\$ 2,595.0	\$ 5,823.0	\$ 7,051.0	\$ 8,320.0	\$ 6,621.0	\$ 11,296.0	\$ 13,791.0	\$ 22,847.0	\$ 22,847.0
Total Liabilities	\$ 15,466.0	\$ 18,551.0	\$ 17,564.0	\$ 22,700.0	\$ 29,493.0	\$ 32,074.0	\$ 36,507.0	\$ 38,330.0	\$ 39,938.0	\$ 51,621.0	\$ 51,621.0
Retained Earnings	\$ 20,533.0	\$ 25,676.0	\$ 18,428.0	\$ (12,298.0)	\$ (20,130.0)	\$ (31,114.0)	\$ (26,563.0)	\$ (23,793.0)	\$ (16,681.0)	\$ (6,332.0)	\$ (6,332.0)
Preferred Equity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Equity	\$ 52,180.0	\$ 61,020.0	\$ 74,825.0	\$ 48,115.0	\$ 40,104.0	\$ 31,097.0	\$ 36,286.0	\$ 39,558.0	\$ 46,175.0	\$ 57,083.0	\$ 57,083.0
Total Liabilities & Equity	\$ 67,646.0	\$ 79,571.0	\$ 92,389.0	\$ 70,815.0	\$ 69,597.0	\$ 63,171.0	\$ 72,793.0	\$ 77,888.0	\$ 86,113.0	\$ 108,704.0	\$ 108,704.0
Cash Flows Statement											
											TTM
Cash Flows From Operating Activities											
Net Income	\$ 7,829.0	\$ 9,993.0	\$ 8,168.0	\$ 12,254.0	\$ 12,599.0	\$ 14,065.0	\$ 17,681.0	\$ 14,569.0	\$ 18,760.0	\$ 23,150.0	\$ 23,150.0
Depreciation & Amortization	\$ 1,084.0	\$ 1,439.0	\$ 1,186.0	\$ 855.0	\$ 903.0	\$ 1,440.0	\$ 2,056.0	\$ 2,562.0	\$ 2,673.0	\$ 2,766.0	\$ 2,766.0
Deferred Taxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2.0
Other	\$ 6,012.0	\$ 4,029.0	\$ 6,751.0	\$ 3,675.0	\$ 683.0	\$ 1,870.0	\$ 940.0	\$ 1,144.0	\$ 2,860.0	\$ 1,076.0	\$ 1,076.0
Net Cash From Operating Activities	\$ 14,509.0	\$ 15,797.0	\$ 14,626.0	\$ 16,605.0	\$ 14,404.0	\$ 17,796.0	\$ 21,612.0	\$ 19,037.0	\$ 24,073.0	\$ 26,994.0	\$ 26,994.0
Cash Flows From Investing Activities											
Capital Expenditures	\$ (770.0)	\$ (891.0)	\$ (1,109.0)	\$ (812.0)	\$ (1,578.0)	\$ (2,264.0)	\$ (3,182.0)	\$ (3,119.0)	\$ (1,977.0)	\$ (2,355.0)	\$ (2,355.0)
Acquisitions	\$ -	\$ (1,063.0)	\$ (4.0)	\$ (207.0)	\$ (649.0)	\$ (1,150.0)	\$ (8,053.0)	\$ (868.0)	\$ (245.0)	\$ (71.0)	\$ (71.0)
Sale of Assets	\$ (10,075.0)	\$ (6,322.0)	\$ (1,636.0)	\$ 15,839.0	\$ 9,581.0	\$ 8,353.0	\$ (1,405.0)	\$ (11,783.0)	\$ (9,337.0)	\$ (12,190.0)	\$ (12,190.0)
Net Cash From Investing Activities	\$ (10,845.0)	\$ (7,213.0)	\$ (2,745.0)	\$ 15,027.0	\$ 8,003.0	\$ 6,089.0	\$ (4,587.0)	\$ (15,770.0)	\$ (11,314.0)	\$ (14,616.0)	\$ (14,616.0)
Cash Flows From Financing Activities											
Issuance of Capital Stock	\$ 1,497.0	\$ 2,120.0	\$ 2,748.0	\$ 3,109.0	\$ 2,101.0	\$ 6,782.0	\$ 3,494.0	\$ 631.0	\$ 2,311.0	\$ 2,422.0	\$ 2,422.0
Repurchase of Capital Stock	\$ (6,069.0)	\$ (6,486.0)	\$ (3,383.0)	\$ (8,057.0)	\$ (19,207.0)	\$ (27,575.0)	\$ (12,533.0)	\$ (9,353.0)	\$ (11,269.0)	\$ (11,555.0)	\$ (11,555.0)
Net Issuance of Stock	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Issuance of Debt	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,974.0	\$ 4,167.0	\$ 6,774.0	\$ 6,774.0
Repayment of Debt	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (228.0)	\$ (2,986.0)	\$ (814.0)	\$ (814.0)
Net Issuance of Debt	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,746.0	\$ 1,181.0	\$ 6,000.0	

2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

Financial Statistics & Ratios

Profitability Ratios

P/E (cash adjusted)		22.49	18.14	21.56	17.37	15.26	18.44	11.51	11.83	9.96	7.89
P/S		7.57	7.15	6.42	6.30	5.11	5.53	3.76	3.49	3.58	3.37
P/BV		4.11	3.77	3.16	5.21	5.65	9.09	6.26	5.15	4.84	4.12
P/Tang BV		4.25	4.00	3.33	5.65	6.34	11.11	10.23	8.06	6.86	5.38
P/CF		25.78	23.72	34.28	21.99	19.66	21.75	13.24	12.56	10.99	9.48
P/FCF		15.63	15.45	17.51	15.86	17.66	18.21	12.33	12.80	10.12	9.56
ROE		15.0%	16.4%	10.9%	25.5%	31.4%	45.2%	48.7%	36.8%	40.6%	40.6%
ROA		11.6%	12.6%	8.8%	17.3%	18.1%	22.3%	24.3%	18.7%	21.8%	21.3%
ROIC		13.6%	12.9%	7.8%	19.9%	24.1%	31.9%	38.4%	29.0%	29.8%	27.8%
CROIC		25.0%	22.7%	17.5%	29.3%	27.2%	39.4%	43.0%	31.3%	36.8%	30.8%
GPA (Gross Profitability to Assets)		35.9%	35.1%	33.9%	48.6%	53.9%	66.3%	69.9%	62.7%	61.3%	52.6%
Book to Market		24.3%	26.5%	31.6%	19.2%	17.7%	11.0%	16.0%	19.4%	20.6%	24.2%

Solvency

Quick Ratio		3.76	4.17	4.69	2.86	2.12	1.64	1.41	1.80	2.10	2.56
Current Ratio		3.81	4.22	4.71	2.89	2.18	1.69	1.45	1.82	2.13	2.60
Total Debt/Equity Ratio		0.30	0.30	0.23	0.47	0.74	1.03	1.01	0.97	0.86	0.90
Long Term Debt/Equity Ratio		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.11	0.21
Short Term Debt/Equity Ratio		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.02	0.00

Efficiency Ratios

Asset Turnover		0.42	0.40	0.40	0.56	0.64	0.81	0.83	0.75	0.73	0.64
Cash % of Revenue		10.6%	20.0%	43.4%	12.2%	15.2%	12.0%	17.1%	10.4%	8.8%	13.7%
Receivables % of Revenue		18.1%	16.1%	16.0%	18.0%	21.0%	22.2%	22.5%	19.2%	20.8%	21.4%
SG&A % of Revenue		24.5%	26.8%	36.1%	32.3%	30.7%	28.9%	30.1%	28.9%	27.7%	26.0%
R&D % of Revenue		15.2%	14.5%	21.1%	15.5%	14.9%	13.9%	13.5%	15.4%	13.9%	12.9%

Liquidity Ratios

Receivables Turnover		1.53	1.94	1.47	1.88	1.53	1.36	1.42	1.18	1.55	1.65
Days Sales Outstanding		66.0	58.9	58.4	65.9	76.8	81.0	82.1	69.9	76.0	78.2
Inventory Turnover		6.10	6.47	10.42	11.72	6.85	7.10	9.04	11.27	13.35	12.13
Average Age of Inventory (Days)		59.81	56.42	35.01	31.14	53.26	51.38	40.39	32.38	27.35	30.09
Intangibles % of Book Value		3.2%	5.8%	4.9%	7.9%	11.0%	18.1%	38.8%	36.1%	29.3%	23.3%
Inventory % of Revenue		2.4%	2.0%	1.1%	1.2%	3.3%	2.2%	1.6%	1.2%	1.2%	2.0%

Capital Structure Ratios

LT-Debt as % of Invested Capital		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.4%	8.2%	14.9%
ST-Debt as % of Invested Capital		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.9%	1.7%	0.0%
LT-Debt as % of Total Debt		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.8%	12.4%	23.1%
ST-Debt as % of Total Debt		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.2%	2.5%	0.0%
Total Debt % of Total Assets		22.9%	23.3%	19.0%	32.1%	42.4%	50.8%	50.2%	49.2%	46.4%	47.5%
Working Capital % of Price		16.7%	19.5%	23.5%	12.7%	11.7%	5.8%	5.9%	10.9%	13.2%	19.6%

Microsoft Corp (MSFT)

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Shares Out.	8,380.00	M.O.S	50%	Growth	9.0%	Discount %	12.0%	Terminal %	3%	Select FCF	FCF	Adjust 2011 FCF
Current Price	\$24.72	Fair Value	\$42.77	Buy Under	\$21.38	Actual M.O.S	42%	52 Wk High	\$29.46	52 Wk Low	\$23.32	

Fiscal Year	Trend	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	TTM
Cash Flow Data												
Cash from Operations		\$14,509.0	\$15,797.0	\$14,626.0	\$16,605.0	\$14,404.0	\$17,796.0	\$21,612.0	\$19,037.0	\$24,073.0	\$26,994.0	\$26,994.0
Capex		\$770.0	\$891.0	\$1,109.0	\$812.0	\$1,578.0	\$2,264.0	\$3,182.0	\$3,119.0	\$1,977.0	\$2,355.0	\$2,355.0
Cash Flow		\$8,327.1	\$9,709.6	\$6,903.1	\$11,392.5	\$11,521.4	\$13,000.1	\$17,156.3	\$16,222.2	\$20,361.0	\$24,843.4	\$24,843.4
Free Cash Flow		\$13,739.0	\$14,906.0	\$13,517.0	\$15,793.0	\$12,826.0	\$15,532.0	\$18,430.0	\$15,918.0	\$22,096.0	\$24,639.0	\$24,639.0
YOY% Change			8.5%	-9.3%	16.8%	-18.8%	21.1%	18.7%	-13.6%	38.8%	11.5%	0.0%

Margins												
Gross Margin		85.5%	86.8%	85.0%	86.6%	84.8%	81.9%	84.2%	83.6%	84.4%	81.7%	81.7%
Operating Margin		42.0%	41.1%	24.5%	36.6%	37.2%	36.2%	37.2%	34.8%	38.6%	38.8%	38.8%
Net Margin		27.6%	31.0%	22.2%	30.8%	28.5%	27.5%	29.3%	24.9%	30.0%	33.1%	33.1%

EPS & Tax												
Diluted EPS		\$0.71	\$0.92	\$0.75	\$1.12	\$1.20	\$1.42	\$1.87	\$1.62	\$2.10	\$2.69	\$2.68
Tax Rate		37.4%	36.1%	33.0%	26.3%	31.0%	32.1%	26.8%	27.5%	25.9%	18.1%	18.1%

Efficiency & Profitability												
CROIC		25.0%	22.7%	17.5%	29.3%	27.2%	39.4%	43.0%	31.3%	36.8%	30.8%	30.8%
FCF/Sales		48.4%	46.3%	36.7%	39.7%	29.0%	30.4%	30.5%	27.2%	35.4%	35.2%	35.2%
Inventory Turnover		6.1	6.5	10.4	11.7	6.9	7.1	9.0	11.3	13.3	12.1	9.3
Return On Assets (ROA)		11.6%	12.6%	8.8%	17.3%	18.1%	22.3%	24.3%	18.7%	21.8%	21.3%	21.3%
Return On Equity (ROE)		15.0%	16.4%	10.9%	25.5%	31.4%	45.2%	48.7%	36.8%	40.6%	40.6%	40.6%

Debt Related												
Debt to Equity		29.6%	30.4%	23.5%	47.2%	73.5%	103.1%	100.6%	96.9%	86.5%	90.4%	90.4%
Capitalization Ratio		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.7%	9.7%	17.3%	17.3%
FCF to Total Debt		88.8%	80.4%	77.0%	69.6%	43.5%	48.4%	50.5%	41.5%	55.3%	47.7%	47.7%
FCF to Short Term Debt									795.9%	2209.6%		
FCF to Long Term Debt									424.9%	447.4%	206.7%	206.7%

5 Year Multi-Year Performance	2006-2010	2007-2011	2006-2009	2007-2010	2008-2011	2006-2008	2007-2009	2008-2010	2009-2011	Median
Tang Shareholder Equity	-2.2%	14.5%	-10.8%	8.6%	25.4%	-21.1%	-0.3%	21.2%	31.5%	8.6%
Free Cash Flow	14.6%	12.2%	7.5%	12.5%	10.2%	19.9%	1.2%	9.5%	24.4%	12.2%
CROIC	36.8%	36.8%	35.4%	38.1%	34.1%	39.4%	39.4%	36.8%	31.3%	36.8%
FCF/Sales	30.4%	30.5%	29.7%	30.4%	32.9%	30.4%	30.4%	30.5%	35.2%	30.4%
ROA	21.8%	21.8%	20.5%	22.0%	21.5%	22.3%	22.3%	21.8%	21.3%	21.8%
ROE	40.6%	40.6%	41.0%	42.9%	40.6%	45.2%	45.2%	40.6%	40.6%	40.6%
Gross Margin	84.2%	83.6%	83.9%	83.9%	83.9%	84.2%	83.6%	84.2%	83.6%	83.9%
Operating Margin	37.2%	37.2%	36.7%	36.7%	37.9%	37.2%	37.2%	37.2%	37.2%	37.2%
Net Margin	28.5%	29.3%	28.0%	28.4%	29.6%	28.5%	27.5%	29.3%	30.0%	28.5%
Revenue Growth	9.0%	8.2%	9.7%	6.9%	5.0%	16.8%	6.9%	1.7%	9.4%	8.2%
Earnings Growth	15.0%	17.3%	10.5%	13.9%	12.9%	24.8%	6.8%	6.0%	28.9%	13.9%
Cash from Ops Growth	13.7%	11.0%	9.7%	10.6%	7.7%	22.5%	3.4%	5.5%	19.1%	10.6%

10 Year Multi-Year Performance	2002-2009	2003-2010	2004-2011	2002-2007	2003-2008	2004-2009	2005-2010	2006-2011	2002-2011	Median
Tang Shareholder Equity	-9.4%	-7.8%	-6.7%	-12.8%	-17.3%	-18.7%	-5.9%	4.2%	-2.8%	-7.8%
Free Cash Flow	2.1%	5.8%	9.0%	2.5%	4.3%	3.3%	6.9%	13.9%	12.4%	5.8%
CROIC	28.2%	30.3%	31.1%	26.1%	28.2%	30.3%	34.1%	34.1%	36.8%	30.3%
FCF/Sales	33.6%	32.9%	32.9%	38.2%	33.6%	30.4%	30.4%	30.4%	35.3%	32.9%
ROA	17.7%	18.4%	20.0%	14.9%	17.7%	18.4%	20.2%	21.5%	18.4%	18.4%
ROE	28.4%	34.1%	38.7%	20.9%	28.4%	34.1%	38.7%	40.6%	34.1%	34.1%
Gross Margin	84.9%	84.6%	84.3%	85.3%	84.9%	84.5%	84.3%	83.9%	84.6%	84.6%
Operating Margin	36.9%	36.9%	36.9%	36.9%	36.9%	36.9%	36.9%	37.2%	37.2%	36.9%
Net Margin	28.0%	28.9%	28.9%	28.0%	28.9%	28.0%	28.9%	28.9%	28.9%	28.9%
Revenue Growth	10.9%	9.9%	9.6%	12.5%	13.4%	9.7%	9.4%	9.6%	19.8%	9.9%
Earnings Growth	12.5%	12.5%	20.0%	14.9%	15.2%	16.7%	13.4%	17.5%	30.5%	15.2%
Cash from Ops Growth	4.0%	6.2%	9.1%	4.2%	6.5%	5.4%	7.7%	13.4%	13.2%	6.5%

Projection of future Free Cash Flow	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Yearly Growth Input Field	9%									
Terminal Growth	3%									
9%	\$26,857.97	\$29,276.78	\$31,913.42	\$33,652.05	\$36,379.66	\$39,328.35	\$42,516.04	\$43,276.53	\$46,433.46	\$49,820.69
2022	\$2023	\$2024	\$2025	\$2026	\$2027	\$2028	\$2029	\$2030	\$2031	
3%	\$ 51,315.31	\$ 52,854.77	\$ 54,440.41	\$ 56,073.62	\$ 57,755.83	\$ 59,488.51	\$ 61,273.16	\$ 63,111.36	\$ 65,004.70	\$ 66,954.84

Calculation	
Total Cash	\$ 52,772.00
MAX(0,Current Liabilities-Current Assets)	\$ -
Excess Cash	\$ 52,772.00
Adding some Intangibles	\$ -
Present Value	\$ 358,400.97
Shares Outstanding	8380
Per Share Value	\$ 42.77
Desired Margin of Safety	50%
Purchase Price	\$ 21.38
Current Price	\$ 24.72
Margin of Safety	42%

Sensitivity Matrix: Growth vs Discount Rate					
Growth Rates	Discount Rates				
	10%	11%	12%	13%	14%
5%	\$ 40.54	\$ 38.05	\$ 35.82	\$ 33.84	\$ 32.06
7%	\$ 44.51	\$ 41.65	\$ 39.10	\$ 36.83	\$ 34.80
9%	\$ 48.95	\$ 45.68	\$ 42.77	\$ 40.17	\$ 37.86
11%	\$ 53.93	\$ 50.19	\$ 46.86	\$ 43.90	\$ 41.26
13%	\$ 59.51	\$ 55.23	\$ 51.44	\$ 48.07	\$ 45.06

Sensitivity Matrix: Margin of Safety %					
Growth Rates	Discount Rates				
	10%	11%	12%	13%	14%
5%	39.0%	35.0%	31.0%	26.9%	22.9%
7%	44.5%	40.6%	36.8%	32.9%	29.0%
9%	49.5%	45.9%	42.2%	38.5%	34.7%
11%	54.2%	50.7%	47.3%	43.7%	40.1%
13%	58.5%	55.2%	51.9%	48.6%	45.1%

Variable Fields	
Intangibles% add to DCF	0%
Decay Rate (Yr4E-Yr7E)	10%
Extra Decay (Yr8E-Yr10E)	10%

Microsoft Corp (MSFT)

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Shares Out.	M.O.S	Growth	Projection	EPS	Corp Bond
8,380.00	66%	15.6%	Forecast	\$2.34	4.65

Current Price	Intrinsic \$	Buy Under	Actual M.O.S	52 Wk High	52 Wk Low
\$24.72	\$67.24	\$22.86	63%	\$29.46	\$23.32

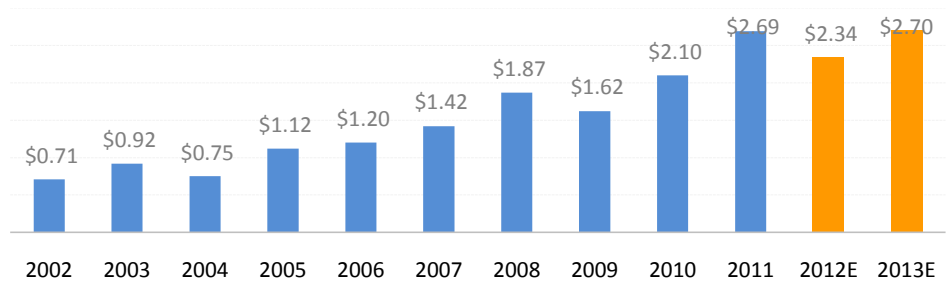
5 Yr EPS Growth	2006-2010	2007-2011	2006-2009	2007-2010	2008-2011	2006-2008	2007-2009	2008-2010	2009-2011	Median
	15.0%	17.3%	10.5%	13.9%	12.9%	24.8%	6.8%	6.0%	28.9%	13.9%

10 Yr EPS Growth	2002-2009	2003-2010	2004-2011	2002-2007	2003-2008	2004-2009	2005-2010	2006-2011	Median
	12.5%	12.5%	20.0%	14.9%	15.2%	16.7%	13.4%	17.5%	15.2%

Diltued EPS	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	TTM
	\$ 0.71	\$ 0.92	\$ 0.75	\$ 1.12	\$ 1.20	\$ 1.42	\$ 1.87	\$ 1.62	\$ 2.10	\$ 2.69	\$ 2.68
	2012E	2013E									
Forecast Method	\$ 2.34	\$ 2.70									
Linear Regression Method	\$ 2.36	\$ 2.73									

Graham Value Calculation

Normal Earnings	\$ 2.34
Growth Rate	15.60%
Corp Bond Rate	4.65
Per Share Value	\$ 67.24
MOS	66%
Purchase Price	\$ 22.86
Current Price	\$24.72
Actual Discount	63%



Microsoft Corp

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Figures in Millions except per share values

Shares Out.	Source	Normalized Income	Discount Rate	R&D Years	SG&A %
8,380.00	MSN	\$22,888.59	9%	3	25%

Current Price	EPV	Net Reproduction Value	EPV MOS	NCAV	52 Wk High	52 Wk Low
\$24.72	\$32.41	\$7.23	23.7%	\$2.09	\$29.46	\$23.32

Asset Valuation Section

Data: Asset Valuation

Shares Outstanding	8380.0
Balance Sheet Assets	\$ 111,171.0
Adjusted Assets	\$ 111,171.0
Total Liabilities	\$ 51,621.0
Total Equity	\$ 59,550.0
Average SGA %	28.3%
Marketing/Brand Value	\$ 19,799.2
R&D Value	\$ 20,710.4
Cash Needed for Business	\$ 699.4
Interest Bearing Debt	\$ 11,921.0
Non Interest Bearing Debt	\$ 39,700.0
Excess Cash	\$ 51,373.1

Calculation: Asset Valuation

	Total	Per Share
Tangible BV	\$ 46,225	\$ 5.52
Adjusted BV	\$ 59,550	\$ 7.11
NCAV	\$ 17,510	\$ 2.09
Reprod. Cost of Assets	\$ 151,681	\$ 18.10
Reprod. Cost of Assets BV	\$ 100,060	\$ 11.94
Total Net Reprod. Cost	\$ 60,607	\$ 7.23

Quarterly numbers based on:

Adjustments:

Assets

	Book Value	Fixed BV	Multiplier	Reproduction Asset Value
Cash & Equivalents	\$ 52,772.0			\$ 52,772.0
Marketable Securities	\$ -			\$ -
Accounts Receivable - Gross	\$ 14,987.0			\$ 14,987.0
Other Receivable	\$ -			\$ -
Receivables	\$ 14,987.0			\$ 14,987.0
<i>Inventories: Raw Materials</i>	\$ 232.0			
<i>Inventories: Work in Progress</i>	\$ 56.0			
<i>Inventories: Purchased Components</i>	\$ -			
<i>Inventories: Finished Goods</i>	\$ 1,084.0			
<i>Inventories: Other</i>	\$ -			
Inventories -- Total	\$ 1,372.0			\$ 1,372.0
Prepaid Expenses	\$ -			\$ -
Current Defered Income Taxes	\$ 2,467.0			\$ 2,467.0
Other Current Assets	\$ 5,787.0			\$ 5,787.0
Total Current Assets	\$ 77,385.0			\$ 77,385.0
Goodwill, Net	\$ 12,581.0			\$ 12,581.0
Intangibles, Net	\$ 744.0			\$ 744.0
Intangibles	\$ 13,325.0			\$ 13,325.0
Property/Plant/Equipment - Net	\$ 8,162.0			\$ 8,162.0
Long Term Investments	\$ 10,865.0			\$ 10,865.0
Note Receivable - Long Term	\$ -			\$ -
Other Long Term Assets, Total	\$ 1,434.0			\$ 1,434.0
Total Assets	\$ 111,171.0			\$ 111,171.0

EPV Valuation Section

Values for Normalized Income

2011 Free Cash Flow	\$ 24,639.0
Normalized Income	\$ 22,888.6
Avg Adj. Income 5 yrs	\$ 22,244.9
TTM Adjusted Income	\$ 28,312.6

Data: EPV

Cost of Capital	9.0%
Normalized Adjusted Income	\$ 22,888.6
Average Maintenance Capex	\$ 2,057.5
Interest Bearing Debt	\$ 11,921.0
1% of sales	\$ 699.4
Cash & Equiv	\$ 52,772.0
Cash - Debt	\$ 40,151.6
Shares	8380.00

Calculation: EPV

Cost of Capital Rates	EPV	Per Share	+ Cash - Debt	Per Share
5%	\$ 416,622.6	\$ 49.72	\$ 456,774.1	\$ 54.51
7%	\$ 297,587.5	\$ 35.51	\$ 337,739.1	\$ 40.30
9%	\$ 231,457.0	\$ 27.62	\$ 271,608.5	\$ 32.41
11%	\$ 189,373.9	\$ 22.60	\$ 229,525.5	\$ 27.39
13%	\$ 160,239.4	\$ 19.12	\$ 200,391.0	\$ 23.91

Adjustments:

Liabilities & Equity

	Book Value	Fixed BV	Multiplier	Reproduction Liability Value
Accounts Payable	\$ 4,197.0			\$ 4,197.0
Accrued Expenses	\$ 3,575.0			\$ 3,575.0
Accrued Liabilities	\$ -			\$ -
Notes Payable/Short Term Debt	\$ -			\$ -
Current Port. of LT Debt/Capital Leases	\$ -			\$ -
Other Current Liabilities	\$ 21,002.0			\$ 21,002.0
Total Current Liabilities	\$ 28,774.0			\$ 28,774.0
Long-Term Debt	\$ 11,921.0			\$ 11,921.0
Capital Lease Obligations	\$ -			\$ -
Deferred Income Taxes	\$ 1,456.0			\$ 1,456.0
Minority Interest	\$ -			\$ -
Total Other Liabilities	\$ 9,470.0			\$ 9,470.0
Total Liabilities	\$ 51,621.0			\$ 51,621.0
Common Stock Equity	\$ 57,083.0			\$ 57,083.0
Retained Earnings	\$ (6,332.0)			\$ (6,332.0)
Total Capitalization	\$ 69,004.0			\$ 69,004.0
Total Equity	\$ 57,083.0			\$ 59,550.0
Total Liabilities & Equity	\$ 108,704.0			\$ 108,704.0

Microsoft Corp (MSFT)

8/24/2011

Current Price	NNWC	NNWC %	NCAV	NCAV %	Data
\$24.72	\$1.56	0.0%	\$2.78	0.0%	Statements

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Numbers as of **2011/06**

(go to SEC for accurate numbers)

Figures in Millions except per share values

	BV	CLEAR	BV Multiplier	Net Net Value
Cash & Equivalents	\$ 9,610.00		100%	\$ 52,772.00
<i>Marketable Securities</i>	\$ 43,162.00			
<i>Accounts Receivable</i>	\$ 14,987.00		75%	
<i>Other Receivable</i>	\$ -			
Receivables	\$ 14,987.00			\$ 11,240.25
<i>Inventories: Raw Materials</i>	\$ -		50%	
<i>Inventories: Work in Progress</i>	\$ -			
<i>Inventories: Purchased Components</i>	\$ -			
<i>Inventories: Finished Goods</i>	\$ -			
<i>Inventories: Other</i>	\$ -			
Inventories -- Total	\$ 1,372.00			\$ 686.00
Current Assets - Total	\$ 74,918.00			\$ 74,918.00
Total Liabilities	\$ 51,621.00			\$ 51,621.00
Shares Outstanding	8,380.00			8,380.00

	Total (\$m)	Per Share
Total Current Assets	\$ 74,918.00	\$ 8.94
Market Cap & Share Price	\$ 207,110.00	\$ 24.72
Net Net Working Capital	\$ 13,077.25	\$ 1.56
<i>Discount to NNWC</i>		0%
Net Current Asset Value	\$ 23,297.00	\$ 2.78
<i>Discount to NCAV</i>		0%

**Microsoft Corp
(MSFT)**

8/24/2011

Piotroski Score

A discrete score between 0-9 which reflects nine criteria used to determine the strength of a firm's financial position. The Piotroski score is used to determine the best value stocks, nine being the best. The score was named after Chicago Accounting Professor, Joseph Piotroski who devised the scale according to specific criteria found in the financial statements. For every criteria (below) that is met the company is given one point, if it is not met, then no points are awarded. The points are then added up to determine the best value stocks.

Profitability

- * Positive return on assets in the current year (1 point)
- * Positive operating cash flow in the current year (1 point)
- * Higher return on assets (ROA) in the current period compared to the ROA in the previous year (1 point)
- * Cash flow from operations are greater than ROA (1 point)

Leverage, Liquidity and Source of Funds

- * Lower ratio of long term debt to in the current period compared value in the previous year (1 point)
- * Higher current ratio this year compared to the previous year (1 point)
- * No new shares were issued in the last year (1 point)

Operating Efficiency

- * A higher gross margin compared to the previous year (1 point)
- * A higher asset turnover ratio compared to the previous year (1 point)

Piotroski F Scores	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	TTM
	6	7	4	6	6	6	7	5	7	5	4
Piotroski 1: Net Income	1	1	1	1	1	1	1	1	1	1	1
Piotroski 2: Operating Cash Flow	1	1	1	1	1	1	1	1	1	1	1
Piotroski 3: Return on Assets	1	1	0	1	1	1	1	0	1	0	0
Piotroski 4: Quality of Earnings	1	1	1	1	1	1	1	1	1	1	1
Piotroski 5: LT Debt vs Assets	0	0	0	0	0	0	0	0	0	0	0
Piotroski 6: Current Ratio	1	1	1	0	0	0	0	1	1	1	0
Piotroski 7: Shares Outstanding	1	1	0	0	1	1	1	1	1	1	1
Piotroski 8: Gross Margin	0	1	0	1	0	0	1	0	1	0	0
Piotroski 9: Asset Turnover	0	0	0	1	1	1	1	0	0	0	0

Altman Z Score

The Z-score formula may be used to predict the probability that a firm will go into bankruptcy within two years.

Z-scores are used to predict corporate defaults and an easy-to-calculate control measure for the financial distress status of companies in academic studies. The Z-score uses multiple corporate income and balance sheet values to measure the financial health of a company.

The main problem with the Altman Z formula is that the formula is not suited for many industries. Industries that operate with high leverage, such as radio and utilities will show a higher risk of bankruptcy.

Also, industries with negative working capital, such as many retail and restaurant companies will also exhibit the same high level of bankruptcy.

(Wikipedia http://en.wikipedia.org/wiki/Z-Score_Financial_Analysis_Tool)

$$Z = 1.2 * X1 + 1.4 * X2 + 3.3 * X3 + 0.6 * X4 + 1.0 * X5$$

There is also a revised Altman Z score which is adjusted for non manufacturing corporations. The revised formula is:

$$Z = 6.56 * X1 + 3.26 * X2 + 6.72 * X3 + 1.05 * X4$$

- X1 = Working Capital/Total Assets
- X2 = Retained Earnings/Total Assets
- X3 = EBITDA/Total Assets
- X4 = Market Value of Equity/Total Liabilities
- X5 = Net Sales/Total Assets

	2002/06	2003/06	2004/06	2005/06	2006/06	2007/06	2008/06	2009/06	2010/06	2011/06	MRQ	MRQ Edit
Working Capital	\$ 35,832	\$ 44,999	\$ 55,597	\$ 31,860	\$ 26,568	\$ 16,414	\$ 13,356	\$ 22,246	\$ 29,529	\$ 46,144	\$ 46,144	
Total Assets	\$ 67,646	\$ 79,571	\$ 92,389	\$ 70,815	\$ 69,597	\$ 63,171	\$ 72,793	\$ 77,888	\$ 86,113	\$ 108,704	\$ 108,704	
Total Liabilities	\$ 15,466	\$ 18,551	\$ 17,564	\$ 22,700	\$ 29,493	\$ 32,074	\$ 36,507	\$ 38,330	\$ 39,938	\$ 51,621	\$ 51,621	
Retained Earnings	\$ 20,533	\$ 25,676	\$ 18,429	\$ (12,298)	\$ (20,130)	\$ (31,114)	\$ (26,563)	\$ (23,793)	\$ (16,681)	\$ (6,332)	\$ (6,332)	
EBITDA	\$ 9,843	\$ 13,097	\$ 12,221	\$ 16,628	\$ 18,262	\$ 18,816	\$ 22,926	\$ 19,115	\$ 24,321	\$ 27,466	\$ 6,144	
Market Value of Equity	\$ 208,679	\$ 228,345	\$ 236,031	\$ 245,259	\$ 217,037	\$ 267,799	\$ 219,899	\$ 201,855	\$ 217,047	\$ 207,110	\$ 207,110	
Net Sales	\$ 28,365	\$ 32,187	\$ 36,835	\$ 39,788	\$ 44,282	\$ 51,122	\$ 60,420	\$ 58,437	\$ 62,484	\$ 69,943	\$ 17,367	
Normal Altman Z Score	10.06	9.46	9.90	8.12	5.97	6.42	5.19	4.63	5.06	4.31	3.18	
Revised Altman Z Score	19.61	18.79	19.60	15.31	11.05	10.87	8.46	8.06	9.22	8.51	7.19	

	Altman Z Score		Revised Altman Z Score	
	Annual	MRQ	Annual	MRQ
X1	0.42	0.42		
X2	(0.06)	(0.06)		
X3	0.25	0.06		
X4	4.01	4.01		
X5	0.64	0.16		
			4.31	3.18
			8.51	7.19

Original Altman Z Score

When Z is 3.0 or more, the firm is most likely safe based on the financial data. However, be careful to double check as fraud, economic downturns and other factors could cause unexpected reversals.

When Z is 2.7 to 3.0, the company is probably safe from bankruptcy, but this is in the grey area and caution should be taken.

When Z is 1.8 to 2.7, the company is likely to be bankrupt within 2 years. This is the lower portion of the grey area and a dramatic turnaround of the company is needed.

When Z is below 1.8, the company is highly likely to be bankrupt. If a company is generating lower than 1.8, serious studies must be performed to ensure the company can survive.

Revised Altman Z Score

When Z is 2.6 or more, the firm is most likely safe based on the financial data. However, be careful to double check as fraud, economic downturns and other factors could cause unexpected reversals.

When Z is 1.1 to 2.6, the company is probably safe from bankruptcy, but this is in the grey area and caution should be taken.

When Z is below 1.1, the company is highly likely to be bankrupt. If a company is generating lower than 1.8, serious studies must be performed to ensure the company can survive.

The Beneish Model - M Score Variables

DSRI = Days' Sales in Receivables Index. Measured as the ratio of days' sales in receivables in year t to year t-1. A large increase in DSR could be indicative of revenue inflation.

GMI = Gross Margin Index. Measured as the ratio of gross margin in year t-1 to gross margin in year t. Gross margin has deteriorated when this index is above 1. A firm with poorer prospects is more likely to manipulate earnings.

AQI = Asset Quality Index. Asset quality is measured as the ratio of non-current assets other than plant, property and equipment to total assets. AQI is the ratio of asset quality in year t to year t-1.

SGI = Sales Growth Index. Ratio of sales in year t to sales in year t-1. Sales growth is not itself a measure of manipulation. However, growth companies are likely to find themselves under pressure to manipulate in order to keep up appearances.

DEPI = Depreciation Index. Measured as the ratio of the rate of depreciation in year t-1 to the corresponding rate in year t. DEPI greater than 1 indicates that assets are being depreciated at a slower rate. This suggests that the firm might be revising useful asset life assumptions upwards, or adopting a new method that is income friendly.

SGAI = Sales, General and Administrative expenses Index. The ratio of SGA expenses in year t relative to year t-1.

LVGI = Leverage Index. The ratio of total debt to total assets in year t relative to year t-1. An LVGI >1 indicates an increase in leverage

TATA - Total Accruals to Total Assets. Total accruals calculated as the change in working capital accounts other than cash less depreciation.

The Beneish M Score Formula

The eight variables are then weighted together according to the following:

$$M = -4.84 + 0.92 \cdot DSRI + 0.528 \cdot GMI + 0.404 \cdot AQI + 0.892 \cdot SGI + 0.115 \cdot DEPI - 0.172 \cdot SGAI + 4.679 \cdot TATA - 0.327 \cdot LVGI$$

A score greater than -2.22 indicates a strong likelihood of a firm being a manipulator. In his out of sample tests, Beneish found that he could correctly identify 76% of manipulators, whilst only incorrectly identifying 17.5% of non-manipulators.

The 5 Variable Version of the Beneish Model

The five variable version excludes SGAI, DEPI and LEVI which were not significant in the original Beneish model.

$$M = -6.065 + 0.823 \cdot DSRI + 0.906 \cdot GMI + 0.593 \cdot AQI + 0.717 \cdot SGI + 0.107 \cdot DEPI$$

A score greater than -2.22 indicates a strong likelihood of a firm being a manipulator.

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	TTM
M Score - 5 Variable	NA	-2.98	-2.84	-2.55	-2.72	-2.64	-2.75	-3.15	-2.82	-2.84	-2.92
M Score - 8 Variable	NA	-2.85	-2.73	-2.56	-2.46	-2.53	-2.57	-2.96	-2.61	-2.54	-2.65
DSRI	0.89	0.99	1.13	1.17	1.05	1.01	0.85	1.09	1.03	1.00	0.00
GMI	0.99	1.02	0.98	1.02	1.03	0.97	1.01	0.99	1.03	1.00	0.00
AQI	0.93	0.91	1.32	0.90	1.17	1.08	0.84	0.98	0.89	1.00	0.00
SGI	1.13	1.14	1.08	1.11	1.15	1.18	0.97	1.07	1.12	1.00	0.00
DEPI	0.82	1.16	1.26	1.17	0.92	1.00	0.98	0.98	1.02	1.00	0.00
SGAI	1.09	1.35	0.89	0.95	0.94	1.04	0.96	0.96	0.94	1.00	0.00
TATA	-0.07	-0.07	-0.06	-0.03	-0.06	-0.05	-0.06	-0.06	-0.04	-0.04	0.00
LVGI	0.93	0.92	1.47	1.35	1.17	1.09	0.96	0.91	1.04	1.00	0.00

Microsoft Corp (MSFT)

8/24/2011

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EV/EBITDA(TTM)

Enter Competitor Tickers

	MSFT	HPQ	DELL	AAPL	GOOG	YHOO
Sorted Data						
Stock Price	\$ 518.82	\$ 373.60	\$ 13.35	\$ 24.72	\$ 14.68	\$ 24.54
Mkt Cap (\$M)	\$ 167,520.00	\$ 346,360.00	\$ 16,860.00	\$ 207,110.00	\$ 27,690.00	\$ 50,900.00
EV	\$ 134,540.00	\$ 317,970.00	\$ 13,700.00	\$ 168,880.00	\$ 19,880.00	\$ 61,140.00
52 Wk High	\$ 642.96	\$ 404.50	\$ 18.84	\$ 29.46	\$ 17.60	\$ 49.39
52 Wk Low	\$ 447.65	\$ 235.56	\$ 11.09	\$ 23.32	\$ 11.34	\$ 22.75
% off 52Wk Low	15.9%	58.6%	20.4%	6.0%	29.5%	7.9%
Multiples						
P/E(TTM)	18.0	14.1	14.6	8.9	7.5	5.7
P/S(TTM)	4.8	3.3	2.9	2.9	0.4	0.4
P/Tang BV(MRQ)	3.7	4.9	1.9	4.6	25.5	0.0
P/CF	15.2	13.1	11.0	7.8	5.9	3.5
P/FCF(TTM)	20.1	11.4	31.3	10.3	5.6	6.2
EV/EBITDA(TTM)	10.5	9.9	9.6	5.6	3.6	3.3
Dividends						
Div Yld	0.0%	0.0%	0.0%	2.7%	0.0%	2.0%
Div Yld - 5yr avg	0.0%	0.0%	0.0%	1.9%	0.0%	0.7%
Div 5yr Grth	0.0%	0.0%	0.0%	12.8%	0.0%	0.0%
Payout Ratio(TTM)	0.0%	0.0%	0.0%	23.3%	0.0%	9.0%
Growth Rates						
Sales(MRQ) v 1yr ago	32.4%	82.0%	-23.2%	8.3%	0.8%	1.5%
Sales(TTM) v 1yr ago	4.8%	3.3%	2.9%	2.9%	0.4%	0.4%
Sales 5yr Grth	36.7%	36.2%	3.8%	9.6%	2.0%	7.8%
EPS(MRQ) v 1yr ago	34.7%	122.2%	18.1%	34.6%	71.1%	24.1%
EPS(TTM) v 1yr ago	20.5%	90.2%	44.4%	28.3%	135.8%	18.9%
EPS 5yr Grth	39.3%	57.8%	-6.7%	17.6%	-1.7%	35.0%
Balance Sheet						
Quick Ratio(MRQ)	0.0	1.7	0.0	2.6	1.4	1.0
Current Ratio(MRQ)	6.0	1.8	3.1	2.6	1.5	1.2
LTD/Eq(MRQ)	5.7	0.0	1.1	20.9	77.1	49.0
Tot D/Eq(MRQ)	8.1	0.0	1.1	20.9	92.9	66.2
Margins						
Gross %(TTM)	65.2%	39.8%	64.3%	77.7%	21.5%	24.2%
Gross % 5yr	62.0%	36.9%	58.0%	79.4%	18.0%	23.9%
Op %(TTM)	32.1%	30.4%	14.2%	38.8%	7.3%	9.5%
Op % 5yr avg	32.2%	23.9%	8.4%	37.5%	5.2%	8.5%
Net %(TTM)	27.0%	23.5%	14.0%	33.1%	5.8%	7.3%
Net % 5yr avg	26.0%	17.9%	6.5%	29.2%	4.1%	6.9%
Returns						
ROA(TTM)	16.0%	27.5%	5.3%	23.8%	9.2%	7.7%
ROA 5yr avg	17.7%	20.0%	3.3%	22.7%	8.4%	7.7%
ROE(TTM)	19.5%	42.0%	9.4%	44.8%	49.4%	23.0%
ROE 5yr avg	20.1%	31.9%	6.9%	43.7%	50.1%	19.6%
Efficiency						
Rec Turnover(TTM)	8.6	21.0	5.9	5.0	9.3	6.5
Inv Turnover(TTM)	0.0	65.9	0.0	14.8	35.7	13.3
Asset Turnover(TTM)	0.6	1.2	0.4	0.7	1.6	1.1

Free Cash Flow



Stock Price



FCF / Sales



Cash Return on Invested Capital (CROIC)



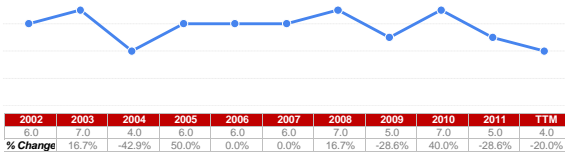
Magic Formula Investing -- Earnings Yield



Gross Margin



Piotroski F Score



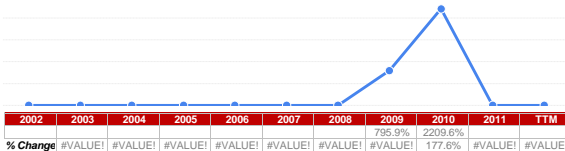
Beneish M Score - 8 Variable Version



Debt to Equity



FCF to Short Term Debt



Owner Earnings



Diluted EPS



Price / FCF



FCF Yield



Magic Formula Investing -- Return on Capital



Net Profit Margin



Original Altman Z Score



Tax Rate



FCF to Total Debt



FCF to Long Term Debt

