Sample Morningstar Equity Research Reports

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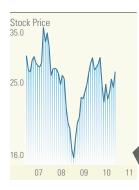
Last Price Fair Value Consider Buy Consider Sell Uncertainty **Economic Moat** Stewardship Morningstar Credit Rating Industry 28.66 USD 22.40 USD 32 00 USD 44 80 USD Medium Wide Α AAA Software - Infrastructure

Strong Start to 2011 for Microsoft

by Toan Tran Associate Director Analysts covering this company do not own its stock.

Pricing data through January 18, 2011. Rating updated as of January 18, 2011.

Currency amounts expressed with "\$" are in U.S. dollars (USD) unless otherwise denoted.



Analyst Note Oct. 28, 2010

Microsoft reported 13% year-over-year growth to \$16.2 billion of revenue for the first quarter of fiscal 2011 as the company's three main businesses performed very well. The Windows division continued to do well as the wave of corporate PC refreshes rolls through. The introduction of Office 2010 helped propel the business division to sales of \$5.1 billion, up 13.5% from \$4.5 billion in the first quarter of 2010. Another bright spot was the server & tool division, which recorded the second straight quarter of double-digit growth after being flat for the preceding six quarters.

There have been some significant executive departures recent months that raise uncertainty about Microsoft's strategic direction. Stephen Elop, head of Microsoft's business division, left to take the CEO position at Nokia. Ray Ozzie, who was Bill Gates' anointed successor as hief software architect, will be leaving the company. The hief software architect role will not be filled by a replacement. At its core, Microsoft is an extremely capable enterprise software company, an ability that rivals such as Google and Apple cannot match. We expect that Microsoft will be entrenched in enterprise for a very long time. However, the company has missed on very large apportunities such as search and mobile. Without a clear technical leader that is respected by the engineers at Microsoft, we believe the company will likely continue to ruggle outside of its three core businesses.

Thesis May 07, 2010

The disruptive change brought about by cloud computing will challenge Microsoft's core Windows and Office franchises, but it will also present the firm with an opportunity to capture a larger share of enterprise IT spending.

Cloud computing is a singular threat to Microsoft because

it allows users to access their information and applications from a multitude of hardware and software platforms. This strikes directly at the Windows platform, which is the foundation of Microsoft's moat. We have already seen early evidence of the cloud's effects in the consumer market, such as the resurgence of Apple's Macintosh and the growing popularity of new devices like the iPad. While we expect Microsoft to earn substantial profits from Windows and Office for many years to come, the arrival of alternatives will begin to erode the company's desktop-based moat.

A cloud computing world does challenge Microsoft, but it also presents new opportunities. Microsoft is one of the few firms with the financial and technical resources to build the massive datacenters that form the fabric of the cloud. In addition, Microsoft's existing ecosystem of third-party software developers is a valuable asset that helps get its Azure cloud computing platform off to a running start. If Microsoft can build Azure into a dominant cloud platform, a new avenue of growth will be opened, as the company moves from a being a mere software vendor to a provider of the entire enterprise IT infrastructure. Cloud datacenters can reap massive scale economies in hardware and personnel costs, and this is value that Microsoft can extract for shareholders.

On the other hand, Microsoft has thus far been reluctant to fully embrace the software-as-a-service model that is enabled by cloud computing. Understandably, the firm wants to protect the cash cows of Windows and Office, but this may prove to be a handicap against competitors unconstrained by the need to protect legacy assets. For example, Google Apps is currently priced at roughly half of Microsoft's hosted Exchange e-mail service.

Although Microsoft is positioning itself for the cloud, during the next few years, its financial performance will be driven by a strong product cycle. Windows 7 has performed well, and the end of mainstream technical support for Windows XP should help drive greater corporate adoption of Windows 7. Windows Server 2008 R2, which adds important virtualization technologies, was

Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat [™]	Stewardship	Morningstar Credit Rating	Industry
28.66 USD	32.00 USD	22.40 USD	44.80 USD	Medium	Wide	Α	AAA	Software - Infrastructure

Close Competitors	Currency(Mil)	Market Cap	TTM Sales	Oper Income	Net Income
Microsoft Corporation	USD	245,201	65,759	26,732	20,596
Apple, Inc.	USD	312,481	65,225	18,385	14,013
Google, Inc.	USD	204,538	27,555	9,880	7,936
Oracle Corporation	USD	159,303	31,993	9,831	6,776

Morningstar data as of January 18, 2011

released in late 2009, and Office 2010, the next version of the popular productivity suite, is scheduled to follow later in 2010.

Valuation, Growth and Profitability

Our fair value estimate for Microsoft is \$32 per share. have extended our explicit forecast for Microsoft out to 2019 to incorporate the decline of Windows and Office, as well as the growth of Windows Azure. We expect compound annual revenue growth of 1.9% over the decade. Given the cloud disruption, Windows and Office will be empty shells by 2019 and contribute immaterial amounts to revenue by 2019. The vast majority of Microsoft's revenue will come from Azure, which we believe will be a very profitable business. The very high echnical and financial barriers to entry to building a cloud, along with the massive returns to scale, point to an industry with a handful of very large players. While some cost savings will be shared with customers, we expect a significant portion of the economic profit to flow to the cloud providers.

Risk

The threat to Microsoft's core businesses of Windows and Office posed by cloud computing is the dominant risk. Google is a capable competitor that is intent on disrupting Microsoft's cash cows to restrict Microsoft's ability to disrupt Google's cash cow in Internet search. Regulatory and antitrust issues are also an issue.

Bulls Sav

- The release of Windows 7 should entice many enterprises and customers who skipped Windows Vista to finally upgrade from Windows XP.
- With a warchest of cash and an AAA debt rating, Microsoft is one of the few firms with the technical and financial resources to invest heavily in cloud computing.
- Windows Azure enjoys many inherited advantages such as Microsoft's existing base of third-party Windows developers.
- The Bing search engine is Microsoft's most viable effort in Internet search thus far, and its partnership with Yahoo gives both companies their best chance to chip away at Google's dominance.

Bears Say

- Cloud computing is a disruptive force, and Microsoft may be handicapped from competing fully by the need to protect its legacy businesses.
- The growth of netbooks and emerging markets will pressure the selling prices of Windows. Piracy is also a larger problem in emerging markets.
- Although Microsoft has settled a majority of its antitrust issues, the firm will continue to operate under a regulatory microscope. Such regulatory oversight may make it difficult for Microsoft to raise prices or further its market share dominance.

Financial Overview

Financial Health: Even after buying back \$60 billion of stock during the last five years, Microsoft's fortresslike balance sheet still boasts \$40 billion of cash and long-term investments against only \$39 billion in total liabilities.



Last Price Fair Value Consider Buy Consider Sell Uncertainty **Economic Moat** Stewardship Morningstar Credit Rating Industry 28.66 USD 32.00 USD 22.40 USD 44.80 USD Medium Wide Α AAA Software - Infrastructure

Company Overview

Profile: Microsoft develops the Windows operating system and the Office suite of productivity software. Windows and Office account for roughly 56% of Microsoft's revenue, with another 24% coming from software for enterprise servers. The firm's other businesses include the Xbox 360 video game console, Bing Internet search, business software, and software for mobile devices.

Management: CEO Steve Ballmer has done a capable job of managing Microsoft's growth over the last decade. However, it is clear Microsoft bas lost many intangibles ever since Bill Gates started disengaging from the company in the late 90's. Nonetheless, as evidenced by the firm's continuing record of excellent returns on invested capital, management has done a superb job of transitioning Microsoft from a hypergrowth company to a mature technology giant. Although returns have decline in recent years as the firm has entered new markets outside Windows and Office, Microsoft still earned a very respectable 53% ROIC in fiscal 2009. Management also takes corporate governance seriously. Gates and Ballmer own about 10% and 4% of Microsoft, respectively, and neither has taken any stock options in the past decade. We think this level of ownership clearly aligns management's interests with those of outside shareholders. Executive compensation is below that of other large technology firms. In addition, the replacement of employee stock options with restricted-stock grants earns Microsoft an excellent Stewardship Grade.



Microsoft Corporation MSFT IN

[Nasdaq



Consider Buy Consider Sell Uncertainty **Economic Moat** Stewardship Morningstar Credit Rating Industry **Fair Value** 28.66 USD 22.40 USD 32 00 USD 44 80 USE Medium Wide Α ΑΑΑ Software - Infrastructure

Analyst Notes

Oct. 28, 2010

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Oct. 11, 2010

Windows Phone 7 Puts Microsoft in the Smartphone Race

Microsoft finally unveiled the first wave of Windows Phone 7 (WP7) phones from hardware partners HTC, Dell, Samsung, and LG. The phones will be available in Europe on Oct. 21 and in the U.S. to AT&T and T-Mobile customers on Nov. 8.

While the new WP7 phones appear to be capable competitors to the existing iPhone-Android-Blackberry troika, Microsoft has a long climb ahead to effectively market and sell the devices to consumers. If Microsoft can spur significant user adoption of WP7, then it can leverage its greatest advantage in the smartphone race: an army of

third-party developers that is already accustomed to building applications in the Microsoft development environment. Microsoft wisely broke compatibility with previous Windows Mobile releases to center WP7 development on the company's Silverlight and XNA frameworks. The advantage is that developers are already familiar with these frameworks and Microsoft is providing additional tools to speed up WP7 app development. We believe the iPhone juggernaut is unstoppable at this point, but if Microsoft can ignite the virtuous cycle of developer and user adoption, then it has a chance to either beat back the onslaught of Android devices or take share away from Research in Motion.

Jul. 22, 2010

PC Growth Drives Microsoft's 40

A strong PC market helped propel Microsoft to a record fiscal fourth guarter. Revenue increased by 22%

year-over-year to \$16 billion, and operating income increased by 49% to \$5.9 billion. The high and low points of Microsoft's quarter were as expected. The Windows 7 and



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Analyst Notes (continued)

Office 2010 product cycle is now in full swing, with Windows and Office segment revenue increasing by 44% and 15%, respectively. We expect both segments will continue to perform well, as the PC refresh cycle continues to roll through the enterprise market. The server and tools segment, which had stalled out for the past two years, bounced back nicely with 14% growth. One theme that has emerged this earnings season is the strength of data center-related spending. The server and tools results are another collaborating data point.

The low points of the quarter remain the same. The online service division posted an operating loss of \$696 million,

bringing its full-year loss to \$2.4 billion. Bing continues to gain incremental search share, but we expect it to remain a distant second to Google. The entertainment and devices division also post a \$172 million operating loss due to charges resulting from the KIN debacle.

Over the next 12 months, we expect Microsoft's fortunes to closely track those of the PC market, but we believe both the Windows and Office franchises are in the early stages of a long decline. We continue to believe that the future of Microsoft lies in its Windows Azure enterprise cloud platform.



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Morningstar® Stock Data Sheet Pricing data thru Jan. 18, 2011 Rating updated as of Jan. 18, 2011 Fiscal year-end: June

Microsoft Corporation MSFT

Microsoft develops the Windows operating system and the Office suite of productivity software. Windows and Office account for roughly 56% of Microsoft's revenue, with another 24% coming from software for enterprise servers. The firm's other businesses include the Xbox 360 video game console, Bing Internet search, business software, and software for mobile devices.

One Microsoft Way Redmond, WA 98052

Phone: 1 425 882-8080 Website: http://www.microsoft.com

Growth Rates Compound Annual							
Grade: B	1 Yr	3 Yr	5 Yr	10 Yr			
Revenue %	6.9	6.9	9.4	10.5			
Operating Income %	18.3	9.2	10.6	8.1			
Earnings/Share %	29.6	13.9	13.4	9.5			
Dividends %	4.0	10.1	10.2	_			
Book Value/Share %	20.0	17.1	3.6	3.1			
Stock Total Return %	-5.3	-2.9	2.9	4.6			
+/- Industry	-15.3	-6.0	-5.1	1.2			
+/- Market	-19.3	-2.1	2.6	5.1			
Profitability Analysis							

B 65 1205 A 1 1				
Profitability Analysis				
Grade: A	Current	5 Yr Avg	Ind	Mkt
Return on Equity %	46.7	40.5	11.3	21.9
Return on Assets %	23.8	21.5	5.8	8.5
Fixed Asset Turns	8.6	11.7	9.2	7.2
Inventory Turns	10.6	11.7	17.6	14.0
Revenue/Employee USD K	738.9	664.8*	_	886.1
Gross Margin %	80.7	80.4	77.2	39.4
Operating Margin %	40.7	36.8	33.2	14.3
Net Margin %	31.3	28.0	9.3	9.5
Free Cash Flow/Rev %	36.6	30.5	29.0	0.1
R&D/Rev %	13.4	0.1	-	9.9
mr 1 1 m 1.1				

K&D/KeV %	13.4	0.1	3.9
Financial Position			
Grade: A	06-10	USD Mil	09-10 USD Mil
Cash		5505	8161
Inventories		740	1242
Receivables		13014	9646
Current Assets		55676	59581
Fixed Assets		7630	7771
Intangibles		13552	135 48
Total Assets		86113	91540
Payables		5281	6699
Short-Term Debt		1000	1000
Current Liabilities		26147	25857
Long-Term Debt		4939	9665
Total Liabilities		39938	44598
Total Equity		46175	46942

Valuation Analysis								
	Current	5 Yr Avg	Ind	Mkt				
Price/Earnings	12.3	17.0	18.6	16.3				
Forward P/E	10.6	_	_	15.3				
Price/Cash Flow	9.7	13.8	14.5	8.5				
Price/Free Cash Flow	10.6	15.8	15.7	17.0				
Dividend Yield %	1.9	_	1.1	1.7				
Price/Book	5.2	6.8	5.0	2.3				
Price/Sales	3.9	4.8	4.5	1.4				
PEG Ratio	1.0	_	_	1.7				

Sales USD Mil	Mkt Cap USD Mil
65,759	245,201

Industry Software - Infrastructure Sector Software

Morning: ★★★	star Ratin	•	Last Price 28.66		air Value 2.00		certainty edium		Economic Vide	Moat [™]	Stewardship Grade A
											per share prices in USD
38.08 21.44	35.31 20.70	30.00 22.55 _{2:1}	30.20 24.01	28.25 23.82	30.26 21.46	37.50 26.60	35.96 17.50	31.50 14.87	31.58 22.73	28.85 27.77	Annual Price High Low Recent Splits
րլ ^ա կո	_{լո} լոլիկո	լրոյո ^ր ը	որոնով։	40000	m _{late} e	դրորի	կ _{ուսոլ} ,	, intr	ւովհեր		Price Volatility Monthly High/Low Rel Strength to S&P 500
••••••								d _{un.}			52 week High/Low 31.58 - 22.73
										9.0	10 Year High/Low 38.08 - 14.87
	~~									2.0	Bear-Market Rank
			illilliil					Wilk		69.0 29.0	
2001	2002	2003	2004	2005	200 6	2007	2008	2009	2010	YTD	Stock Performance
52.8	-22.0	6.8	9.2	-0.9	15.6	20.6	-44.1	59.5	-6.6	2.7	Total Return %
65.8	1.4	-19.6	0.2	-3.9	2.0	17.1	-5.6	36.1	-19.4	-0.3	+/- Market
44.3	2.1	-6.6	1.4	1.9	-0.7	-5.8	-4.3	7.2	-16.3	0.3	+/- Industry
		0.6	0.6	1.2	1.2	1.1	2.4	1.7	2.0	1.9	Dividend Yield %
356914	276631	295937	290720	278358	293538	333054	172930	268559		245201	Market Cap USD Mil
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TTM	Financials
25296	28365	32187	36835	39788	44282	51122	60420	58437	62484	65759	Revenue USD Mil
86.3	81.7	82.3	81.8	84.4	82.7	79.1	80.8	79.2	80.2	80.7	Gross Margin %
11720	11910	13217	9034	14561	16472	18524	22492	20363	24098	26732	Oper Income USD Mil
46.3	42.0	41.1	24.5	36.6	37.2	36.2	37.2	34.8	38.6	40.7	Operating Margin %
7346	7829	9993	8168	12254	12599	14065	17681	14569	18760	20596	Net Income USD Mil
0.66	0.71	0,92	0.75	1.12	1.20	1.42	1.87	1.62	2.10	2.33	Earnings Per Share USD
_	_	0.08	0.16	0,32	0.34	0.39	0.43	0.50	0.52	0.52	Dividends USD
11148	11106	10882	10894	10906	10531	9886	9470	8996	8927	8855	Shares Mil
4.79	5.22	6.41	4.34	4.15	3.73	3.68	3.88	5.03	5.49	5.49	Book Value Per Share US
13422	14509	15797	14626	16605	14404	17796	21612	19037	24073	26160	Oper Cash Flow USD Mil
1103	-770	-891	-1109	-812	-1578	-2264	-3182	-3119	-1977	-2106	Cap Spending USD Mil
12319	13739	14906	13517	15793	12826	15532	18430	15918	22096	24054	Free Cash Flow USD Mil
2091	2002	2003	2004	2005	2006	2007	2008	2009	2010	TTM	Profitability
13.2	12.3	13.6	9.5	15.0	17.9	21.2	26.0	19.3	22.9	23.8	Return on Assets %
16.6	15.7	17.7	12.0	19.9	28.6	39.5	52.5	38.4	43.8	46.7	Return on Equity %
29.0	27.6	31.0	22.2	30.8	28.5	27.5	29.3	24.9	30.0	31.3	Net Margin %
0.45	0.45	0.44	0.43	0.49	0.63	0.77	0.89	0.78	0.76	0.76	Asset Turnover
1.3	1.3	1.3	1.2	1.5	1.7	2.0	2.0	2.0	1.9	2.0	Financial Leverage
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	09-10	Financial Health
28505	35832	44999	55597	31860	26568	16414	13356	22246	29529	33724	Working Capital USD Mil
_	_	_	_	_	_	_	_	3746	4939	9665	Long-Term Debt USD Mil
47289	52180	61020	74825	48115	40104	31097	36286	39558	46175	46942	Total Equity USD Mil
			_		_	_	_	0.09	0.11	0.21	Debt/Equity
2001				2005	2006		2008	2009	2010	TTM	Valuation
60.6	29.8	29.1	29.1	21.6	25.5	20.2	10.4	16.8	12.0	12.3	Price/Earnings
_	_	_	_	_	_	_	_	_	0.7	0.8	P/E vs. Market
13.7	9.2	8.7	7.6	6.9	6.7	5.9	2.9	4.7	3.8	3.9	Price/Sales
6.9	5.0	4.3	6.2	6.3	8.0	9.7	5.0	6.1	5.1	5.2	Price/Book

Quarterly Results				
Revenue USD Mil	Dec 09	Mar 10	Jun 10	Sep 10
Most Recent Period	19022.0	14503.0	16039.0	16195.0
Prior Year Period	16629.0	13648.0	13099.0	12920.0
Rev Growth %	Dec 09	Mar 10	Jun 10	Sep 10
Most Recent Period	14.4	6.3	22.4	25.4
Prior Year Period	1.6	-5.6	-17.3	-14.2
Earnings Per Share USD	Dec 09	Mar 10	Jun 10	Sep 10
Most Recent Period	0.74	0.45	0.51	0.62
Prior Year Period	0.47	0.33	0.34	0.40

20.4

18.3

22.1

15.5

8.8

13.0

Industry Peers by Market Cap								
N	1kt Cap USD Mil	Rev USD Mil	P/E	ROE%				
Microsoft Corporation	245201	65759	12.3	46.7				
Apple, Inc.	312481	65225	22.5	35.3				
Google, Inc.	204538	27555	31.6	20.6				

9.7 Price/Cash Flow

9.4

Major Fund Holders	
	% of shares
American Funds Growth Fund of Amer A	1.78
American Funds Invmt Co of Amer A	1.01
American Funds Capital World G/I A	1.01

TTM data based on rolling quarterly data if available; otherwise most recent annual data shown.





25.4

17.2

20.0

Morningstar's Approach to Rating Stocks

Our Key Investing Concepts

- ▶ Economic Moat[™] Rating
- ► Discounted Cash Flow
- ▶ Discount Rate
- ► Fair Value
- Uncertainty
- Margin of Safety
- Consider Buying/Consider Selling
- Stewardship Grades

At Morningstar, we evaluate stocks as pieces of a business, not as pieces of paper. We think that purchasing shares of superior businesses at discounts to their intrinsic value and allowing them to compound their value over long periods of time is the surest way to create wealth in the stock market.

We rate stocks 1 through 5 stars, with 5 the best and 4 the worst. Our star rating is based on our analyst's estimate of how much a company's business is worth per share. Our analysts arrive at this "fair value estimate" by forecasting how much excess cash--or "free cash flow"--the firm will generate in the future, and then adjusting the total for timing and risk. Cash generated next year is worth more than cash generated several years down the road, and cash from a stable and consistently profitable business is worth more than cash from a cyclical or unsteady business.

Stocks trading at meaningful discounts to our fair value estimates will receive high star ratings. For high-quality businesses, we require a smaller discount than for mediocre ones, for a simple reason. We have more confidence in our cash-flow forecasts for strong companies, and thus in our value estimates. If a stock's market price is significantly above our fair value estimate, it will receive a low star rating, no matter how wonderful we think the business is. Even the best company is a bad deal if an investor overpays for its shares.

Our fair value estimates don't change very often, but market prices do. So, a stock may gain or lose stars based

just on movement in the share price. If we think a stock's fair value is \$50, and the shares decline to \$40 without much change in the value of the business, the star rating will go up. Our estimate of what the business is worth hasn't changed, but the shares are more attractive as an investment at \$40 than they were at \$50.

Because we focus on the long-term value of businesses, rather than short-term movements in stock prices, at times we may appear out of step with the overall stock market. When stocks are high, relatively few will receive our highest rating of 5 stars. But when the market tumbles, many more will likely garner 5 stars. Although you might expect to see more 5-star stocks as the market rises, we find assets more attractive when they're cheap.

We calculate our star ratings nightly after the markets close, and issue them the following business day, which is why the rating date on our reports will always be the previous business day. We update the text of our reports as new information becomes available, usually about once or twice per quarter. That is why you'll see two dates on every Morningstar stock report. Of course, we monitor market events and all of our stocks every business day, so our ratings always reflect our analyst's current opinion.

Economic Moat[™] Rating

The Economic Moat[™] Rating is our assessment of a firm's ability to earn returns consistently above its cost of capital in the future, usually by virtue of some competitive advantage. Competition tends to drive down such

Morningstar Research Methodology for Valuing Companies

Competitive Analysis

⊂ Economic Moat[™]Rating



Analyst considers

company financial

competitive position

statements and

to forecast future









Analyst conducts company and industry research:

- Management interviews
- Conference calls
- Trade-show visits
- Competitor, supplier, distributor, and customer interviews
- The depth of the firm's competitive advantage is rated:
- None
 Narrow
- Wide
- Assumption

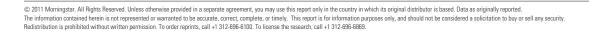
DCF model leads to the firm's Fair Value Estimate, which anchors the rating framework.

Assumptions are input into a discounted cash-flow

An uncertainty assessment establishes the margin of safety required for the stock rating



The current stock price relative to fair value, adjusted for uncertainty, determines the rating.





economic profits, but companies that can earn them for an extended time by creating a competitive advantage possess an Economic Moat. We see these companies as superior investments.

Discounted Cash Flow

This is a method for valuing companies that involves projecting the amount of cash a business will generate in the future, subtracting the amount of cash that the company will need to reinvest in its business and using the result to calculate the worth of the firm. We use this technique to value nearly all of the companies we cover.

Discount Rate

We use this number to adjust the value of our forecasted cash flows for the risk that they may not materialize. For a profitable company in a steady line of business, we'll use a lower discount rate, also known as 'cost of capital," than for a firm in a cyclical business with flerce competition, since there's less risk clouding the firm's future.

Fair Value

This is the output of our discounted cash-flow valuation models, and is our per-share estimate of a company's intrinsic worth. We adjust our fair values for off-balance sheet liabilities or assets that a firm might have—for example, we deduct from a company's fair value if it has issued a lot of stock options or has an under-funded pension plan. Our fair value estimate differs from a "target price" in two ways. First, it's an estimate of what the business is worth, whereas a price target typically reflects what other investors may pay for the stock. Second, it's a long-term estimate, whereas price targets generally focus on the next two to 12 months.

Uncertainty

To generate the Morningstar Uncertainty Rating, analysts consider factors such as sales predictability, operating leverage, and financial leverage. Analysts then classify their ability to bound the fair value estimate for the stock into one of several uncertainty levels: Low, Medium, High,

Very High, or Extreme. The greater the level of uncertainty, the greater the discount to fair value required before a stock can earn 5 stars, and the greater the premium to fair value before a stock earns a 1-star rating.

Margin of Safety

This is the discount to fair value we would require before recommending a stock. We think it's always prudent to buy stocks for less than they be worth. The margin of safety is like an insurance policy that protects investors from bad news or everly optimistic fair value estimates. We require larger margins of safety for less predictable stocks, and smaller margins of safety for more predictable stocks.

Consider Buying/Consider Selling

The consider buying price is the price at which a stock would be rated 5 stars, and thus the point at which we would consider the stock an extremely attractive purchase. Conversely, consider selling is the price at which a stock would have a 1 star rating, at which point we'd consider the stock overvalued, with low expected returns relative to its risk.

Stewardship Grades

We evaluate the commitment to shareholders demonstrated by each firm's board and management team by assessing transparency, shareholder friendliness, incentives, and ownership. We aim to identify firms that provide investors with insufficient or potentially misleading financial information, seek to limit the power of minority shareholders, allow management to abuse its position, or which have management incentives that are not aligned with the interests of long-term shareholders. The grades are assigned on an absolute scale--not relative to peers--and can be interpreted as follows: A means "Excellent," B means "Good," C means "Fair," D means "Poor," and F means "Very Poor."





Morningstar Credit Rating Last Price Industry Group Fair Value **Consider Buy** Consider Sell Uncertainty Economic Moat™ Moat Trend™ Stewardship 28.66 USD 32.00 USD 22.40 USD 44.80 USD Medium Application Software Wide Negative Α AAA

Strong Start to 2011 for Microsoft

See Page 2 for the full Analyst Note from 28 Oct 2010

Toan Tran Associate Director toan.tran@morningstar.com +1 (312) 696-6419

The primary analyst covering this company does not own its stock.

Research as of 28 Oct 2010 Estimates as of 28 Oct 2010 Pricing data through 18 Jan 2011 Rating updated as of 18 Jan 2011

Currency amounts expressed with "\$" are in U.S. dollars (USD) unless otherwise denoted

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Analyst's Perspective 07 May 2010

Microsoft can be thought of as two different businesses. On one side are the core Windows, Office, and serve software segments, which constitute 81% of Microsoft revenue and all of its operating income. We Microsoft's competitive position is defensible due to the powerful network effects associated with a widely adopted operating system and productivity suite, but it is n unassailable. The advent of cloud computing and Web apps strike directly at the Windows platform because they allow users to gain access to their applications from a multitude of software platforms. It is the disruption by the cloud that Microsoft's collection of noncore businesses, search and Windows Azure, seeks to hedge Although we remain skeptical of Microsoft's ability to make significant inroads against Google in search, Windows Azure has the potential to become a dominant enterprise cloud platform.

Key Investment Considerations

- Cloud computing is a threat to Windows and Office. We expect both businesses to decline during the next decade as users migrate to Web-based applications.
- The cloud is also an opportunity for Microsoft. The Windows Azure cloud platform, has the potential to be a large and profitable business. A decade from now, Azure may be Microsoft's primary business line.
- Apple's iPad and its progeny may become the default computing paradigm for many consumers, thus taking away large amounts of share from Windows in the consumer market.

			245,201				
			31.58				
		22.73					
			-5.4				
YTD Total Return %							
		30 .	Jun 2010				
			1.6				
			3.3				
~			0.90				
ecasts							
2009	2010	2011(E)	2012(E)				
14.4	10.9	11.9	11.2				
8.0	6.3	6.9	6.6				
9.0	7.0	7.7	7.3				
7.5	11.1	8.1	8.7				
2.1	2.3	1.9	1.9				
	2009 14.4 8.0 9.0	2009 2010 14.4 10.9 8.0 6.3 9.0 7.0	2009 2010 2011(E) 14.4 10.9 11.9 8.0 6.3 6.9 9.0 7.0 7.7				

Financial Summary	and Fore	casts (USD Mil)		
•	Fiscal Year:	2009	2010	2011(E)	2012(E)
Revenue	í	8,437	62,484	69,982	71,948
Revenue YoY %		-3.3	6.9	12.0	2.8
EBIT		20,693	24,157	27,056	28,420
EBIT YoY %		-8.0	16.7	12.0	5.0
Net Income, Adjusted	•	14,812	18,804	20,869	21,896
Net Income YoY %		-16.2	27.0	11.0	4.9
Diluted EPS		1.65	2.11	2.40	2.55
Diluted EPS YoY %		-11.8	27.9	13.9	6.1
Free Cash Flow		15,918	22,096	19,914	21,435
Free Cash Flow YoY % Source for forecasts in the da Analyst Note:	ata tables abo	-13.6 ve: Morni	38.8 ingstar Estima	-9.9 ites	7.6

Profile

Microsoft develops the Windows operating system and the Office suite of productivity software. Windows and Office account for roughly 56% of Microsoft's revenue, with another 24% coming from software for enterprise servers. The firm's other businesses include the Xbox 360 video game console, Bing Internet search, business software, and software for mobile devices.



Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Morningstar Credit Rating	Industry Group
28.66 USD	32.00 USD	22.40 USD	44.80 USD	Medium	Wide	Negative	Α	AAA	Application Software

Morningstar Analysis

Strong Start to 2011 for Microsoft 28 Oct 2010

Microsoft MSFT reported 13% year-over-year growth to \$16.2 billion of revenue for the first quarter of fiscal 2011 as the company's three main businesses performed very well. The Windows division continued to do well as the wave of corporate PC refreshes rolls through. The introduction of Office 2010 helped propel the business division to sales of \$5.1 billion, up 13.5% from \$4.5 billion in the first quarter of 2010. Another bright spot was the server & tool division, which recorded the second straight quarter of double-digit growth after being flat for the preceding six quarters.

There have been some significant executive departures in recent months that raise uncertainty about Microsoft's strategic direction. Stephen Elop, head of Microsoft's business division, left to take the CEO position at Nokia NOK . Ray Ozzie, who was Bill Gates' anointed successor as chief software architect, will be leaving the company. The chief software architect role will not be filled by a replacement. At its core, Microsoft is an extremely capable enterprise software company, an ability that rivals such as Google GOOG and Apple AAPL cannot match. We expect that Microsoft will be entrenched in enterprise for a very long time. However, the company has missed on very large opportunities such as search and mobile. Without a clear technical leader that is respected by the engineers at Microsoft, we believe the company will likely continue to struggle outside of its three core businesses.

Thesis 07 May 2010

The disruptive change brought about by cloud computing will challenge Microsoft's core Windows and Office franchises, but it will also present the firm with an opportunity to capture a larger share of enterprise IT spending.

Cloud computing is a singular threat to Microsoft because it allows users to access their information and applications

from a multitude of hardware and software platforms. This strikes directly at the Windows platform, which is the foundation of Microsoft's moat. We have already seen early evidence of the cloud's effects in the consumer market, such as the resurgence of Apple's Macintosh and the growing popularity of new devices like the iPad. While we expect Microsoft to earn substantial profits from Windows and Office for many years to come, the arrival of alternatives will begin to erode the company's desktop-based moat.

A cloud computing world does challenge Microsoft, but it also presents new opportunities. Microsoft is one of the few firms with the financial and technical resources to build the massive datacenters that form the fabric of the cloud. In addition, Microsoft's existing ecosystem of third-party software developers is a valuable asset that helps get its Azure cloud computing platform off to a running start. If Microsoft can build Azure into a dominant cloud platform, a new avenue of growth will be opened, as the company moves from a being a mere software vendor to a provider of the entire enterprise IT infrastructure. Cloud datacenters can reap massive scale economies in hardware and personnel costs, and this is value that Microsoft can extract for shareholders.

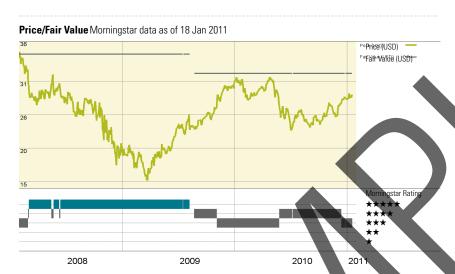
On the other hand, Microsoft has thus far been reluctant to fully embrace the software-as-a-service model that is enabled by cloud computing. Understandably, the firm wants to protect the cash cows of Windows and Office, but this may prove to be a handicap against competitors unconstrained by the need to protect legacy assets. For example, Google Apps is currently priced at roughly half of Microsoft's hosted Exchange e-mail service.

Although Microsoft is positioning itself for the cloud, during the next few years, its financial performance will be driven by a strong product cycle. Windows 7 has performed well, and the end of mainstream technical support for Windows XP should help drive greater corporate adoption of Windows

We think
Microsoft's
competitive
position is very
defensible, due to
powerful network
effects, but it is not
unassailable.



Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Morningstar Credit Rating	Industry Group
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7. Windows Server 2008 R2, which adds important virtualization technologies, was released in late 2009, and Office 2010, the next version of the popular productivity suite, is scheduled to follow later in 2010.

Valuation, Growth and Profitability 07 May 2010

Our fair value estimate for Microsoft is \$32 per share. We have extended our explicit forecast for Microsoft out to 2019 to incorporate the decline of Windows and Office, as well as the growth of Windows Azure. We expect compound annual revenue growth of 1.9% over the next decade. Given the cloud disruption, Windows and Office will be empty shells by 2019 and contribute immaterial amounts to revenue by 2019. The vast majority of Microsoft's revenue will come from Azure, which we believe will be a very profitable business. The very high technical and financial barriers to entry to building a cloud, along with the massive returns to scale, point to an industry with a handful of very large players. While some cost savings will be shared with customers, we expect a significant portion of the economic profit to flow to the cloud providers.

Scenario Analysis

The primary risk, both to the downside and upside, to our valuation revolves around our assumptions for Windows Azure. Our base case assumes that Azure grows to be a \$52 billion business by 2019, while the Windows, Office, and server software businesses will have all but vanished. Our margin assumptions are highly sensitive to the number of CPU cores available per server inside an Azure datacenter. Given the large proportion of fixed costs, this is the key point of operating leverage. For example, the shift from four cores per server to eight cores per server results in a nearly 4,000-basis-point increase in Azure's gross margin. Our bear case assumes that not only do Windows, Office, and server software go into slow decline, but that Azure fails to become a dominant platform. In this case, our fair value estimate is \$25. In our bull case, we continue to assume that Windows, Office, and server software fade away, but that Azure dominates cloud computing to the extent that Windows dominated the desktop. In this case, our fair value estimate is \$38.

Economic Moat

The moat around Microsoft's Windows and Office franchises remains wide. Windows became the dominant desktop operating system when the mutual attraction of users and developers toward a common platform reached critical mass. With an established developer ecosystem and massive installed base of applications, Windows is unlikely to be displaced by another desktop operating system. However, a new class of devices such as Apple's AAPL iPad that offer a simpler and arguably better user experience for consumers may transcend the need for Windows in the consumer market. The core of the moat around Office is the numerous business processes that have been built on its applications. The cost to switch would be significant for many enterprises. On the server software side, Microsoft has recruited a legion of IT staffers to train on its technologies. With a substantial amount of human capital invested in learning how to operate Microsoft server software, many IT staffers would be reluctant to consider



Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Morningstar Credit Rating	Industry Group
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software from other vendors.

Moat Trend

Microsoft's moat trend is negative. Both Windows and Office are very unlikely to be displaced in the current desktop-centric computing model, but the world is shifting toward the cloud. By severing the tie between applications and the software platform, cloud computing minimizes the importance of Windows. Cloud-based productivity competitors such as Google Docs may capture new users, but the large installed base of business processes built on Office will be difficult to overcome. On the server software side, Web-based offerings like Google Apps are viable competitors. Enterprises are unlikely to replace Office with Google Docs or Exchange with Google Apps in the near future, but the existence of alternatives could begin to eat into Microsoft's fat profit margins.

Although Microsoft's traditional moat may be in slow decline, the company has an opportunity to build another wide moat with the Windows Azure cloud platform. We expect cloud computing will be adopted by enterprises during the next decade, as the economic and technical advantages of the cloud over an internal datacenter are exceptionally compelling. Given this, Azure has the potential to be the best business Microsoft ever builds. The massive datacenters that form the fabric of the cloud will constitute the lowest-cost provider of computing infrastructure, and even though some of these cost savings will be shared with customers, we expect a substantial portion of the economic value created by Azure will be retained by Microsoft.

We believe the cloud computing industry will come to be dominated by one or two platforms that generate very attractive economics. The industry is characterized by high financial and technical barriers to entry, as well very large returns to scale. The early movers in the cloud platform race are Microsoft and Google, and it would be difficult for a

subscale entrant to succeed given the cost advantage enjoyed by Microsoft and Google in provisioning computing infrastructure. We expect this industry structure to lead to limited price competition between the potential dominant platforms. Given Azure's inherited advantage of an existing base of Windows .NET developers, we believe Azure may be one of the dominant cloud platforms.

We would revise our moat trend rating to stable if Windows Azure begins to score important victories in the nascent cloud platform race.



Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Morningstar Credit Rating	Industry Group
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Bulls Say/Bears Say

Bulls Say

- ► The release of Windows 7 should entice many enterprises and customers who skipped Windows Vista to finally upgrade from Windows XP.
- With a warchest of cash and an AAA debt rating, Microsoft is one of the few firms with the technical and financial resources to invest heavily in cloud computing.
- ► Windows Azure enjoys many inherited advantages such as Microsoft's existing base of third-party Windows developers.
- ➤ The Bing search engine is Microsoft's most viable effort in Internet search thus far, and its partnership with Yahoo gives both companies their best chance to chip away at Google's dominance.

Bears Say

- Cloud computing is a disruptive force, and Microsoft may be handicapped from competing fully by the need to protect its legacy businesses.
- The growth of netbooks and emerging markets will pressure the selling prices of Windows. Piracy is also a larger problem in emerging markets.
- ➤ Although Microsoft has settled a majority of its antitrust issues, the firm will continue to operate under a regulatory microscope. Such regulatory oversight may make it difficult for Microsoft to raise prices or further its market share dominance.

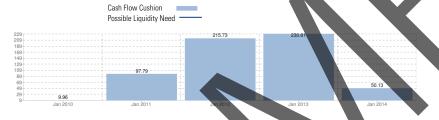


Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Morningstar Credit Rating	Industry Group
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Credit Analysis

Five Year Adjusted Cash Flow Forecast (USD Mil)					
	2011(E)	2012(E)	2013(E)	2014(E)	2015(E)
Cash and Equivalents (beginning of period)	44,542	59,685	76,542	92,380	99,177
Adjusted Free Cash Flow	20,368	21,773	20,754	11,713	14,857
Total Cash Available before Debt Service	64,910	81,458	97,296	104,093	114,034
Principal Payments	-2,000	0	0	0	-2,000
Interest Payments	-145	-140	-140	-140	-101
Other Cash Obligations and Commitments	4,370	693	311	311	174
Total Cash Obligations and Commitments	-6,515	-833	-451	-451	-2,275

Cumulative Annual Cash Flow Cushion



Adjusted Cash Flow Summary

	USD Millions	Commitments
Beginning Cash Balance	44,542	423.2
Sum of 5-Year Adjusted Free Cash Flow	89,466	850.1
Sum of Cash and 5-Year Cash Generation	134,008	1,273.3
Revolver Availability	3,000	28.5
Asset Adjusted Borrowings (Repayment)	0	0.0
Sum of Cash, 5-Year Cash Generation, Revolver and Adjustments	137,008	1,301.8
Sum of 5-Year Cash Commitments	-10,525	_

Credit Rating Pillars-Peer Group Comparison

	MSFT	Sector	Universe
Business Risk	1	5.0	5.4
Cash Flow Cushion	2	3.7	5.9
Solvency Score	1	3.1	4.7
Distance to Default	1	2.3	3.9
Credit Rating	AAA	А	BBB+

Source: Morningstar Estimates

Note: Scoring is on a scale 1-10, 1 being Best, 10 being Worst

Financial Health

Even after buying back \$60 billion of stock during the last five years, Microsoft's fortresslike balance sheet still boasts \$40 billion of cash and long-term investments against only \$39 billion in total liabilities.

Capital Structure

Microsoft's balance sheet is pristine. As of March 31, 2010, the company held \$40 billion of cash. Microsoft recently took advantage of the low-cost funding environment to issue \$3.75 billion of long-term debt at a 2.3% aftertax cost. Given Microsoft's low cost of debt and prodigious cash flow, we believe a greater mix of debt in the capital structure is more appropriate. The company has repurchased massive amounts of stock in recent years, and diluted shares outstanding have decreased by 17.5% during the last five years.

Enterprise Risk

The threat to Microsoft's core businesses of Windows and Office posed by cloud computing is the dominant risk. Google is a capable competitor that is intent on disrupting Microsoft's cash cows to restrict Microsoft's ability to disrupt Google's cash cow in Internet search. Regulatory and antitrust issues are also an issue.



Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Morningstar Credit Rating	Industry Group
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Management & Ownership

Management Activity

Name	Position	Shares Held	Report Date*	InsiderActivity
WILLIAM H. GATES,III	Founder/Chairman of the Board/ Director, Director	600,974,696	18 Nov 2010	20,000,000
STEVEN A. BALLMER	CEO/Director, Director	333,252,990	22 Nov 2010	75,000,000
DAVID F. MARQUARDT	Director	1,178,852	30 Dec 2010	
STEVEN SINOFSKY	President, Divisional	693,507	11 Jan 2011	688,891
CRAIG J. MUNDIE	Other Executive Officer	343,998	17 Dec 2010	248,037
MR. KURT DELBENE	Senior VP, Divisional	115,513	13 Jan 2011	137,302
HELMUT PANKE	Director	31,716	15 Nov 2010	#
RAYMOND V. GILMARTIN	Director	30,804	15 Nov 2010	
DR. MARIA KLAWE,PHD	Director	7,867	15 Nov 2010	_

^{*}Report date represents the date on which the owner's common shares held was audited.

Fund Ownership

Top Owners	Morningstar Rating	% of Shares Held	% of Fund Assets	Change (k)	Portfolio Date
VA CollegeAmerica Grth Fund of Amer 529F	****	1.56	2.33	-16,680	30 Sep 2010
VA CollegeAmerica Invmt Co of Amer 529E	****	1.02	3.86	1,675	30 Sep 2010
Vanguard US Total Market Shares (AU) ETF		0.98	1.51	1,773	30 Sep 2010
SPDR S&P 500	***	0.73	1.80	-538	14 Jan 2011
VA CollegeAmerica Cap World G/I 529E	****	0.81	2.33	-15,665	30 Sep 2010
Concentrated Holders		`			
DWS Disciplined Market Neutral A	***	0.00	29.99	186	30 Nov 2010
Highbridge Statistical Mkt Neutral A	***	0.01	20.32	287	30 Sep 2010
Software HOLDRs		0.00	17.57	0	31 Dec 2010
UBS Sect Port US Info Technol Telecom B	****	0.02	15.77	309	28 Feb 2010
Institutional Transactions				Shares	
Institutional Transactions Top 5 Buyers	Morningstar Rating	% of Shares Held	% of Fund Assets	Shares Bought/ Sold (k)	Portfolio Date
				Bought/	Portfolio Date 31 Dec 2009
Top 5 Buyers	Rating	Held	Assets	Bought/ Sold (k)	
Top 5 Buyers Amundi Actions Internationales Inc	Rating ★★★	Held 0.00	Assets 0.86	Bought/ Sold (k) 20,133	31 Dec 2009
Top 5 Buyers Amundi Actions Internationales Inc Oakmark Equity & Income	Rating ** ***	0.00 0.21	Assets 0.86 2.47	Bought/ Sold (k) 20,133 8,000	31 Dec 2009 30 Sep 2010
Top 5 Buyers Amundi Actions Internationales Inc Oakmark Equity & Income J Allianz NFJ Dividend Value Inst	Rating ** ***	0.00 0.21 0.06	Assets 0.86 2.47 2.07	Bought/ Sold (k) 20,133 8,000 4,029	31 Dec 2009 30 Sep 2010 31 Dec 2010
Top 5 Buyers Amundi Actions Internationales Inc Oakmark Equity & Income A Allianz NFJ Dividend Value Instl IVA Worldwide A	Rating	Held 0.00 0.21 0.06 0.07	Assets 0.86 2.47 2.07 2.43	Bought/ Sold (k) 20,133 8,000 4,029 3,661	31 Dec 2009 30 Sep 2010 31 Dec 2010 30 Sep 2010
Top 5 Buyers Amundi Actions Internationales Inc Oakmark Equity & Income J Allianz NFJ Dividend Value Inst IVA Worldwide A GMO Quality III	Rating	Held 0.00 0.21 0.06 0.07	Assets 0.86 2.47 2.07 2.43	Bought/ Sold (k) 20,133 8,000 4,029 3,661	31 Dec 2009 30 Sep 2010 31 Dec 2010 30 Sep 2010
Top 5 Buyers Amundi Actions Internationales Inc Oakmark Equity & Income A Allianz NFJ Dividend Value Inst IVA Worldwide A GMO Quality III Top 5 Sellers	Rating * *** **** ****	Held 0.00 0.21 0.06 0.07 0.37	Assets 0.86 2.47 2.07 2.43 5.58	Bought/ Sold (k) 20,133 8,000 4,029 3,661 3,327	31 Dec 2009 30 Sep 2010 31 Dec 2010 30 Sep 2010 31 Aug 2010
Top 5 Buyers Amundi Actions Internationales Inc Oakmark Equity & Income A Allianz NFJ Dividend Value Inst IVA Worldwide A GMO Quality III Top 5 Sellers Orbis SICAV Global Equity Inv	Rating	Held 0.00 0.21 0.06 0.07 0.37	Assets 0.86 2.47 2.07 2.43 5.58	Bought/ Sold (k) 20,133 8,000 4,029 3,661 3,327	31 Dec 2009 30 Sep 2010 31 Dec 2010 30 Sep 2010 31 Aug 2010 31 Dec 2009

Stewardship: A 07 May 2010

CEO Steve Ballmer has done a capable job of managing Microsoft's growth over the last decade. However, it is clear Microsoft has lost many intangibles ever since Bill Gates started disengaging from the company in the late 90's. Nonetheless, as evidenced by the firm's continuing record of excellent returns on invested capital, management has done a superb job of transitioning Microsoft from a hypergrowth company to a mature technology giant. Although returns have declined in recent years as the firm has entered new markets outside Windows and Office, Microsoft still earned a very respectable 53% ROIC in fiscal 2009. Management also takes corporate governance seriously. Gates and Ballmer own about 10% and 4% of Microsoft, respectively, and neither has taken any stock options in the past decade. We think this level of ownership clearly aligns management's interests with those of outside shareholders. Executive compensation is below that of other large technology firms. In addition, the replacement of employee stock options with restricted-stock grants earns Microsoft an excellent Stewardship Grade.



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Analyst Notes

Windows Phone 7 Puts Microsoft in the Smartphone

Race 11 Oct 2010

Microsoft MSFT finally unveiled the first wave of Windows Phone 7 (WP7) phones from hardware partners HTC, Dell DELL , Samsung, and LG. The phones will be available in Europe on Oct. 21 and in the U.S. to AT&T and T-Mobile customers on Nov. 8.

While the new WP7 phones appear to be capable competitors to the existing iPhone-Android-Blackberry troika, Microsoft has a long climb ahead to effectively market and sell the devices to consumers. If Microsoft can spur significant user adoption of WP7, then it can leverage its greatest advantage in the smartphone race: an army of third-party developers that is already accustomed to building applications in the Microsoft development environment. Microsoft wisely broke compatibility with previous Windows Mobile releases to center WP7 development on the company's Silverlight and XNA frameworks. The advantage is that developers are already familiar with these frameworks and Microsoft is providing additional tools to speed up WP7 app development. We believe the iPhone juggernaut is unstoppable at this point, but if Microsoft can ignite the virtuous cycle of developer and user adoption, then it has a chance to either beat back the onslaught of Android devices or take share away from Research in Motion RIMM.



Last Price Economic Moat™ Moat Trend™ **Morningstar Credit Rating Industry Group Fair Value Consider Buy** Consider Sell Uncertainty Stewardship 28.66 USD 32.00 USD 44.80 USD 22.40 USD Medium Wide Negative Α AAAApplication Software

Morningstar Analyst Forecasts

Financial Summary and Forecasts							
						Forecast	
Growth (% YoY)	3-Year Hist. CAGR	Jun 2008	Jun 2009	Jun 2010	Jun 2011	Jun 2012	5-Year Proj. CAGR
Revenue	6.9	18.2	-3.3	6.9	12.0	2.8	1.6
EBIT	9.3	21.4	-8.0	16.7	12.0	5.0	3.5
EBITDA	10.4	23.0	-5.3	15.4	12.3	4.8	3.3
Net Income	10.2	25.7	-16.2	27.0	11.0	4.9	3.3
Diluted EPS	14.0	31.2	-11.8	27.9	13.9	6.1	3.3
Earnings Before Interest, after Tax	9.9	22.6	-9.0	18.8	-0.2	5.0	1.1
Free Cash Flow to the Firm	13.3	-30.5	32.1	58.1	-11.4	7.8	-8.5
	3-Year						5-Year
Profitability	Hist. Avg	Jun 2008	Jun 2009	Jun 2010	Jun 2011	Jun 2012	Proj. Avg
Operating margin %	37.1	37.2	35.4	38.7	38.7	39.5	39.0
EBITDA margin %	41.1	40.6	39.8	42.9	43.1	43.9	43.4
Net margin %	28.2	29.3	25.4	30.1	29.8	30.4	30.1
Free Cash Flow to the Firm margin %	25.3	17.3	23.6	34.9	27.6	29.0	24.3
ROIC with Goodwill %	58.7	67.9	52.6	55.4	52.7	50.3	45.1
ROIC w/out Goodwill %	82.9	94.0	76.4	78.5	72.1	66.8	59.1
Return on Assets, pretax %	29.8	33.1	27.0	29.4	28.7	25.5	22.4
Return on Equity %	44.9	52.5	38.4	43.8	38.4	30.8	25.9
	3-Year						5-Year
Leverage	Hist. Avg	Jun 2008	Jun 2009	Jun 2010	Jun 2011	Jun 2012	Proj. Avg
Debt/Capital	0.08	0.00	0.13	0.11	0.08	0.07	0.06
Total Debt/EBITDA	0.16	0.00	0.25	0.22	0.19 0.18		0.19
EBITDA/Interest Expense	<u> </u>		42.91	<u> </u>	207.83	225.61	230.90

valu ation Su tilliary and r	orecasis			
	2009	2010	2011(E)	2012(E)
Price/Fair Value	0.95	0.87	_	_
Price/Earnings	14.4	10.9	11.9	11.2
EV/EBITDA	8.0	6.3	6.9	6.6
EV/EBIT	9.0	7.0	7.7	7.3
Free Cash Flow Yield %	7.5	11.1	8.1	8.7
Dividend Yield %	2.1	2.3	1.9	1.9

Key Valuation Drivers	
Cost of Equity %	10.0
Credit Spread for Debt %	1.0
Weighted Average Cost of Capital %	9.9
Long-Run Tax Rate %	25.0
Stage II EBI Growth Rate %	3.0
Stage II Investment Rate %	15.8
Perpetuity Year	16

Additional estimates and scenarios available for download at http://select.morningstar.com.

Discounted Cash Flow Valuation	n		
	USD Mil	Firm Value (%)	Per Share Value
Present Value Stage I	111,233	44.9	12.46
Present Value Stage II	44,014	17.8	4.93
Present Value of the Perpetuity	92,580	37.4	10.37
Total Firm Value	247,827	100.0	27.76
Cash and Equivalents	44,542	_	4.99
Debt	5,746	_	-0.67
Net balance sheet impact	38,603	_	4.32
Other Adjustments	0	_	0.00
Equity Value	286,430	_	32.97
Projected Diluted Shares	8,927		
Fair Value per Share (USD)	32.00		

The data in the table above represent base-case forecasts. When probability-weighted scenario analysis is performed, the sum of per share values may differ from the Fair Value Estimate.



Last Price Fair Value Economic Moat™ Moat Trend™ Stewardship Morningstar Credit Rating **Industry Group Consider Buy** Consider Sell Uncertainty 28.66 USD 32.00 USD 44.80 USD 22.40 USD Medium Wide Negative Α AAAApplication Software

Morningstar Analyst Forecasts

Organic Revenue Jan 2008 (Aug. 2008) Jan 2010 (Aug. 2008) Jan 2010 (Aug. 2008) Aug. 2011 (Aug. 2008) Aug. 2011 (Aug. 2008) Aug. 2011 (Aug. 2008) 7.7,468 (Aug. 2008)<	Pro Forma Income Statement (USD Mil)					
Organic Revenue 60,420 58,437 62,484 69,982 71,948 Acquired (Divested) Revenue 60,420 58,437 62,484 69,982 71,948 Cost of Goods Sold 11,598 12,155 92,355 13,882 13,814 Cost of Goods Sold 11,598 12,155 92,355 13,882 13,814 Selling, General & Administrative Expenses 5,127 3,700 4,004 4,484 4,533 Sesanch & Development Expenses (Incomet 13,039 22,879 13,214 14,800 15,109 Restructuring & Other Charges (Gainy) 0 330 59 0 0 Depreciation Expenses (Incomet 13,039 22,879 13,214 14,800 15,109 Restructuring & Other Charges (Gainy) 0 30 59 0 0 Depreciation Expenses (Incomet expanse) 0 0 0 0 0 Operating Income (EBIT) 22,492 20,343 38,386 42,926 43,529 Operating Income (EBIT) 22,49					Jun 2011 69,982 0 69,982 13,882 56,100 4,484 9,760 14,800 0 0 42,926 27,056 145 915 27,826 6,956 20,869 0	
Acquired (Divested) Revenue	Organic Revenue					
Cost of Goods Sold	ů .	•				
Selling General & Administrative Expenses 5,124 3,260 4,004 4,484 4,533 Research & Development Expenses 8,164 9,010 8,714 9,760 10,073 10,073 10,073 13,039 28,879 13,214 14,800 15,109 15,1		60,420	58,437	62,484	69,982	71,948
Selling General & Administrative Expenses 5,124 3,260 4,004 4,484 4,533 Research & Development Expenses 8,164 9,010 8,714 9,760 10,073 10,073 10,073 13,039 28,879 13,214 14,800 15,109 15,1	`					
Selling, General & Administrative Expenses 5,172 3,760 4,004 4,484 4,537	Cost of Goods Sold	11,598	12,155	12,395	13,882	13,814
Research & Development Expenses R, 164 9,010 8,714 9,760 10,073 Other Operating Expenses (Income) 13,039 2,879 13,214 14,800 15,109 Restructuring & Other Charges (Gains) 0 330 59 0 0 Depreciation Expense (If reported separately) 0 0 0 0 0 0 Amortization of Other Intangibles (if reported separately) 0 0 0 0 0 0 0 Amortization/Impairment of Goodwill 0 0 0 0 0 0 0 Total Expenses 37,928 38,074 38,386 42,926 43,529 Operating Income (EBIT) 22,492 20,363 24,098 27,056 28,420 Interest Expense 0 542 0 145 140 Interest Expense 0 542 0 145 915 915 Interest & Other Income (Expense) 1,322 0 915 915 915 Pre-Tax Income 23,814 19,821 25,013 27,826 29,195 Income Tax Expense (Benefit) 6,133 5,252 6,253 6,956 7,299 Income Tax Expense (Benefit) 6,133 5,252 6,253 6,956 7,299 Income Tax Expense (Benefit) 6,133 5,252 6,253 6,956 7,299 Income Tax Expense (Benefit) 6,133 5,252 6,253 6,956 7,299 Income Tax Expense (Benefit) 7,681 14,569 18,760 20,869 21,896 Minority Interest & Other After-Tax Operating Additions from Earnings Before Interest (Prefered Dividends) 0 0 0 0 0 After-Tax Non-Operating Income, Extraordinary Items (Losses) 0 0 0 0 0 Other Charles of Charles (Benefit) 9,470 8,996 8,927 8,927 8,927 Diluted Shares Outstanding (Mill) 9,470 8,996 8,927 8,927 8,927 Diluted EPS Including Charges (USD) 1,87 1,65 2,11 2,40 2,55 Diluted EPS Excluding Charges (USD) 1,87 1,65 2,11 2,40 2,55 Diluted PS Excluding Charges (USD) 1,87 1,65 2,11 2,40 2,55 Diluted EPS Excluding Charges (USD) 1,87 1,65 2,11 2,40 2,55 Diluted EPS Excluding Charges (USD) 1,87 1,65 2,11 2,40 2,55 Diluted EPS Excluding Charges (USD) 1,87 1,65 2,11 2,40 2,55 Diluted Shares Outstanding	Gross Profit	48,822	46,282	50,089	56,100	58,134
Research & Development Expenses R, 164 9,010 8,714 9,760 10,073 Other Operating Expenses (Income) 13,039 2,879 13,214 14,800 15,109 Restructuring & Other Charges (Gains) 0 330 59 0 0 Depreciation Expense (If reported separately) 0 0 0 0 0 0 Amortization of Other Intangibles (if reported separately) 0 0 0 0 0 0 0 Amortization/Impairment of Goodwill 0 0 0 0 0 0 0 Total Expenses 37,928 38,074 38,386 42,926 43,529 Operating Income (EBIT) 22,492 20,363 24,098 27,056 28,420 Interest Expense 0 542 0 145 140 Interest Expense 0 542 0 145 915 915 Interest & Other Income (Expense) 1,322 0 915 915 915 Pre-Tax Income 23,814 19,821 25,013 27,826 29,195 Income Tax Expense (Benefit) 6,133 5,252 6,253 6,956 7,299 Income Tax Expense (Benefit) 6,133 5,252 6,253 6,956 7,299 Income Tax Expense (Benefit) 6,133 5,252 6,253 6,956 7,299 Income Tax Expense (Benefit) 6,133 5,252 6,253 6,956 7,299 Income Tax Expense (Benefit) 7,681 14,569 18,760 20,869 21,896 Minority Interest & Other After-Tax Operating Additions from Earnings Before Interest (Prefered Dividends) 0 0 0 0 0 After-Tax Non-Operating Income, Extraordinary Items (Losses) 0 0 0 0 0 Other Charles of Charles (Benefit) 9,470 8,996 8,927 8,927 8,927 Diluted Shares Outstanding (Mill) 9,470 8,996 8,927 8,927 8,927 Diluted EPS Including Charges (USD) 1,87 1,65 2,11 2,40 2,55 Diluted EPS Excluding Charges (USD) 1,87 1,65 2,11 2,40 2,55 Diluted PS Excluding Charges (USD) 1,87 1,65 2,11 2,40 2,55 Diluted EPS Excluding Charges (USD) 1,87 1,65 2,11 2,40 2,55 Diluted EPS Excluding Charges (USD) 1,87 1,65 2,11 2,40 2,55 Diluted EPS Excluding Charges (USD) 1,87 1,65 2,11 2,40 2,55 Diluted Shares Outstanding						
Dither Operating Expenses (Income) 13,039 22,879 13,214 14,800 15,109 Restructuring & Other Charges (Cairis) 0 330 59 0 0 0 0 0 0 0 0 0	· ·			•	•	.,
Restructuring & Other Charges (Gains)	Research & Development Expenses	8,164		8,714	9,760	10,073
Depreciation Expense (if reported separately)	Other Operating Expenses (Income)	13,039	12,879	13,214	14,800	15,109
Amortization of Other Intangibles (if reported seperately)	Restructuring & Other Charges (Gains)	0	330	59	0	0
Amortization/Impairment of Goodwill 0 0 0 0 0 0 0 0 0	Depreciation Expense (if reported separately)	0	0	0	0	0
Total Expenses 37,928 38,074 38,386 42,926 43,529 Operating Income (EBIT) 22,492 20,363 24,098 27,056 28,420 Interest Expense	Amortization of Other Intangibles (if reported seperately)	0	0	0	0	0
Operating Income (EBIT) 22,492 20,363 24,098 27,056 28,420 Interest Expense Interest & Other Income (Expense) 1,322 0 915 915 915 Pre-Tax Income 23,814 19,821 25,013 27,826 29,195 Income Tax Expense (Benefit) 6,133 5,252 6,253 6,956 7,299 Income After Taxes 17,681 14,569 18,760 20,869 21,896 Minority Interest & Other After-Tax Operating Additions to (Subtractions from) Earnings Before Interest (Preferred Dividends) 0	Amortization/Impairment of Goodwill			0		0
Interest Expense 0 542 0 145 140 Interest & Other Income (Expense) 1,322 0 915 915 915 Pre-Tax Income 23,814 19,821 25,013 27,826 29,195 Income Tax Expense (Benefit) 6,133 5,252 6,253 6,956 7,299 Income After Taxes 17,681 14,569 18,760 20,869 21,896 Minority Interest & Other After-Tax experating Additions to (Subtractions from) Earnings Before Interest (Preferred Dividends) 0 0 0 0 0 After-Tax Non-Operating Income, Extraordinary Items (Losses), Discontinued Operations, Accounting Changes 17,681 14,569 18,760 20,869 21,896 Net Income (Loss) Excluding Charges 17,681 14,812 18,804 20,869 21,896 Diluted Shares Outstanding (Mil) 9,470 8,996 8,927 8,927 8,927 Diluted EPS Including Charges (USD) 1,87 1,62 2,10 2,40 2,55 Diluted EPS Excluding Charges (USD) 1,87 1,65 2,11 2,40 2,55 Dividends Per Common Share (USD) 0,00 0,50 0,51 0,51 0,51 EBITDA 24,548 22,925 26,771 30,135 31,585	Total Expenses	37,928	38,074	38,386	42,926	43,529
1,322	Operating Income (EBIT)	22,492	20,363	24,098	27,056	28,420
1,322						
Pre-Tax Income 23,814 19,821 25,013 27,826 29,195 Income Tax Expense (Benefit) 6,133 5,252 6,253 6,956 7,299 Income After Taxes 17,681 14,569 18,760 20,869 21,896 Minority Interest & Other After Tax Operating Additions to (Subtractions from) Earnings Before Interest (Prefered Dfvidends) 0 0 0 0 0 0 After-Tax Non-Operating Income, Extraordinary Items (Losses), Discontinued Operations, Accounting Changes 17,681 14,569 18,760 20,869 21,896 Net Income (Loss) Excluding Charges 17,681 14,812 18,804 20,869 21,896 Diluted Shares Outstanding (Mil) 9,470 8,996 8,927 8,927 8,927 Diluted EPS Including Charges (USD) 1,87 1,62 2,10 2,40 2,55 Diluted EPS Excluding Charges (USD) 1,87 1,65 2,11 2,40 2,55 Diluted EPS Excluding Charges (USD) 0,00 0,50 0,51 0,51 0,51 EBITDA 24,548 22,925 26,771 30,135 31,585	Interest Expense	0	542	0	145	140
Income Tax Expense (Benefit) 6,133 5,252 6,253 6,956 7,299 Income After Taxes 17,681 14,569 18,760 20,869 21,896 Minority Interest & Other After-Tax Operating Additions to (Subtractions from) Earnings Before Interest (Preferred Dividends) 0 0 0 0 0 0 After-Tax Non-Operating Income, Extraordinary Items (Losses), Discontinued Operations, Accounting Changes 17,681 14,569 18,760 20,869 21,896 Net Income (Loss) Excluding Charges 17,681 14,812 18,804 20,869 21,896 Diluted Shares Outstanding (Mil) 9,470 8,996 8,927 8,927 8,927 Diluted EPS Including Charges (USD) 1.87 1.62 2.10 2.40 2.55 Diluted EPS Excluding Charges (USD) 1.87 1.65 2.11 2.40 2.55 Diluted Shares Outstanding Charges (USD) 0.00 0.50 0.51 0.51 0.51 EBITDA 24,548 22,925 26,771 30,135 31,585	Interest & Other Income (Expense)	1,322	0	915	915	915
Income After Taxes 17,681 14,569 18,760 20,869 21,896 Minority Interest & Other After-Tax Operating Additions to (Subtractions from) Earnings Before Interest 0 0 0 0 0 (Preferred Dividends) 0 0 0 0 0 0 After-Tax Non-Operating Income, Extraordinary Items (Losses), Discontinued Operations, Accounting Changes 0 0 0 0 0 Net Income (Loss) 17,681 14,569 18,760 20,869 21,896 Net Income (Loss) Excluding Charges 17,681 14,812 18,804 20,869 21,896 Diluted Shares Outstanding (Mil) 9,470 8,996 8,927 8,927 8,927 Diluted EPS Including Charges (USD) 1.87 1.62 2.10 2.40 2.55 Dividends Per Common Share (USD) 0.00 0.50 0.51 0.51 0.51 EBITDA 24,548 22,925 26,771 30,135 31,585	Pre-Tax Income	23,814	19,821	25,013	27,826	29,195
Income After Taxes 17,681 14,569 18,760 20,869 21,896 Minority Interest & Other After-Tax Operating Additions to (Subtractions from) Earnings Before Interest 0 0 0 0 0 (Preferred Dividends) 0 0 0 0 0 0 After-Tax Non-Operating Income, Extraordinary Items (Losses), Discontinued Operations, Accounting Changes 0 0 0 0 0 Net Income (Loss) 17,681 14,569 18,760 20,869 21,896 Net Income (Loss) Excluding Charges 17,681 14,812 18,804 20,869 21,896 Diluted Shares Outstanding (Mil) 9,470 8,996 8,927 8,927 8,927 Diluted EPS Including Charges (USD) 1.87 1.62 2.10 2.40 2.55 Dividends Per Common Share (USD) 0.00 0.50 0.51 0.51 0.51 EBITDA 24,548 22,925 26,771 30,135 31,585						
Minority Interest & Other After-Tax Operating Additions to (Subtractions from) Earnings Before Interest (Preferred Dividends) 0 <th< td=""><td></td><td>· · · · · · · · · · · · · · · · · · ·</td><td>· · · · · · · · · · · · · · · · · · ·</td><td></td><td></td><td></td></th<>		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			
to (Subtractions from) Earnings Before Interest 0 0 0 0 0 0 (Preferred Dividends) 0 0 0 0 0 0 After-Tax Non-Operating Income, Extraordinary Items (Losses), Discontinued Operations, Accounting Changes 0 <td>Income After Taxes</td> <td>17,681</td> <td>14,569</td> <td>18,760</td> <td>20,869</td> <td>21,896</td>	Income After Taxes	17,681	14,569	18,760	20,869	21,896
to (Subtractions from) Earnings Before Interest 0 0 0 0 0 0 (Preferred Dividends) 0 0 0 0 0 0 After-Tax Non-Operating Income, Extraordinary Items (Losses), Discontinued Operations, Accounting Changes 0 <td>Minority Interest & Other After-Tax Operating Additions</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td>	Minority Interest & Other After-Tax Operating Additions	0	0	0	0	0
After-Tax Non-Operating Income, Extraordinary Items (Losses), Discontinued Operations, Accounting Changes 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <td></td> <td>_</td> <td></td> <td>_</td> <td></td> <td>_</td>		_		_		_
Discontinued Operations, Accounting Changes Net Income (Loss) 17,681 14,569 18,760 20,869 21,896 Net Income (Loss) Excluding Charges 17,681 14,812 18,804 20,869 21,896 Diluted Shares Outstanding (Mil) 9,470 8,996 8,927 8,927 8,927 Diluted EPS Including Charges (USD) 1.87 1.62 2.10 2.40 2.55 Diluted EPS Excluding Charges (USD) 1.87 1.65 2.11 2.40 2.55 Dividends Per Common Share (USD) 0.00 0.50 0.51 0.51 0.51 EBITDA 24,548 22,925 26,771 30,135 31,585						
Net Income (Loss) Excluding Charges 17,681 14,812 18,804 20,869 21,896 Diluted Shares Outstanding (Mil) 9,470 8,996 8,927 8,927 8,927 Diluted EPS Including Charges (USD) 1.87 1.62 2.10 2.40 2.55 Diluted EPS Excluding Charges (USD) 1.87 1.65 2.11 2.40 2.55 Dividends Per Common Share (USD) 0.00 0.50 0.51 0.51 0.51 EBITDA 24,548 22,925 26,771 30,135 31,585		0	0	0	0	0
Net Income (Loss) Excluding Charges 17,681 14,812 18,804 20,869 21,896 Diluted Shares Outstanding (Mil) 9,470 8,996 8,927 8,927 8,927 Diluted EPS Including Charges (USD) 1.87 1.62 2.10 2.40 2.55 Diluted EPS Excluding Charges (USD) 1.87 1.65 2.11 2.40 2.55 Dividends Per Common Share (USD) 0.00 0.50 0.51 0.51 0.51 EBITDA 24,548 22,925 26,771 30,135 31,585	Net Income (Loss)	17,681	14.569	18,760	20.869	21,896
Diluted EPS Including Charges (USD) 1.87 1.62 2.10 2.40 2.55 Diluted EPS Excluding Charges (USD) 1.87 1.65 2.11 2.40 2.55 Dividends Per Common Share (USD) 0.00 0.50 0.51 0.51 0.51 EBITDA 24,548 22,925 26,771 30,135 31,585		· ·	-	-	-	
Diluted EPS Including Charges (USD) 1.87 1.62 2.10 2.40 2.55 Diluted EPS Excluding Charges (USD) 1.87 1.65 2.11 2.40 2.55 Dividends Per Common Share (USD) 0.00 0.50 0.51 0.51 0.51 EBITDA 24,548 22,925 26,771 30,135 31,585						
Diluted EPS Including Charges (USD) 1.87 1.62 2.10 2.40 2.55 Diluted EPS Excluding Charges (USD) 1.87 1.65 2.11 2.40 2.55 Dividends Per Common Share (USD) 0.00 0.50 0.51 0.51 0.51 EBITDA 24,548 22,925 26,771 30,135 31,585	Diluted Shares Outstanding (Mil)	9,470	8,996	8,927	8,927	8,927
Dividends Per Common Share (USD) 0.00 0.50 0.51 0.51 0.51 EBITDA 24,548 22,925 26,771 30,135 31,585		1.87	1.62	2.10	2.40	2.55
EBITDA 24,548 22,925 26,771 30,135 31,585	Diluted EPS Excluding Charges (USD)	1.87	1.65	2.11	2.40	2.55
	Dividends Per Common Share (USD)	0.00	0.50	0.51	0.51	0.51
EBITDA without restructuring 24,548 23,255 26,830 30,135 31,585	EBITDA	24,548	22,925	26,771	30,135	31,585
	EBITDA without restructuring	24,548	23,255	26,830	30,135	31,585



Last Price Fair Value Economic Moat™ Moat Trend™ Stewardship **Morningstar Credit Rating Industry Group Consider Buy** Consider Sell Uncertainty 28.66 USD 32.00 USD 44.80 USD 22.40 USD Medium Wide Negative Α AAAApplication Software

Morningstar Analyst Forecasts

Pro Forma Balance Sheet (USD Mil)			_		
					recast
Assets	Jun 2008	Jun 2009	Jun 2010	Jun 2011	Jun 2012
Excess Cash & Investments	27,250	33,380	41,542	56,685	73,542
Operating Cash & Equivalents	3,000	3,000	3,000	3,000	3,000
Accounts Receivable	13,589	11,192	13,014	14,576	14,985
Inventory	985	717	740	829	825
Other Short Term Operating Assets	5,006	5,924	5,134	5,134	5,134
Total Current Assets	49,830	54,213	63,430	80,224	97,486
Property Plant & Equipment, Net	6,242	7,535	7,630	7,447	7,450
Property Plant & Equipment, Gross	12,544	15,082	16,259	19,155	22,324
(Accumulated Depreciation)	-6,302	-7,547	-8,629	-11,708	-14,874
Goodwill, Net	12,108	12,503	12,394	12,394	12,394
Other Intangibles	1,973	1,759	1,158	1,158	1,158
Other Long-Term Operating Assets	1,691	1,599	1,501	1,501	1,501
Deferred Tax Assets	949	279	0	0	0
Long-Term Non-Operating Assets, including Pension items	0	0	0	0	0
Total Assets	72,793	77,888	86,113	102,723	119,989
ALADES A					
Liabilities Accounts Payable	4,034	3,324	4,025	4,537	4,484
Short-Term Debt	0	2,000	1,000	2,000	2,000
Other Current Liabilities	25,852	21,710	21,122	21,122	21,122
Total Current Liabilities	29,886	27,034	26,147	27,659	27,606
John Guiller Education	27,000	27,001	20,117	27,007	27,000
Long-Term Debt	0	3,746	4,939	3,746	3,746
Incremental Debt Requirements	_	-		0	0,7 10
Total Long-Term Debt	0	3,746	4,939	3,746	3,746
		•	•	•	,
Long-Term Operating Liabilities	6,621	7,550	8,852	8,852	8,852
Deferred Tax Liabilities	0	0	0	0	0
Long Term Non-Operating Liabilities	0	0	0	0	0
Total Liabilities	36,507	38,330	39,938	40,257	40,204
Preferred Stock	0	0	0	0	0
Minority Interest	0	0	0	0	0
,					
Shareholders' Equity	, o o . c	/0.222	(0.05)	40.054	(0.0=
Common Stock	62,849	62,382	62,856	62,856	62,856
Additional Paid in Capital	0	0	0	0	0
Retained Earnings (Deficit)	-26,563	-22,824	-16,681	-390	16,928
(Treasury Stock)	0	0	0	0	0
Other Equity	0	0	0	0	0
Total Shareholders' Equity	36,286	39,558	46,175	62,466	79,784
Total Liabilities + Shareholders' Equity	72,793	77,888	86,113	102,723	119,989
Difference, from analyst adjustments and restatements	0	0	0	0	0



Last Price Fair Value Economic Moat™ Moat Trend™ Stewardship Morningstar Credit Rating **Industry Group Consider Buy** Consider Sell Uncertainty 28.66 USD 32.00 USD 44.80 USD 22.40 USD Medium Wide Negative Α AAAApplication Software

Morningstar Analyst Forecasts

Pro Forma Cash Flow (USD Mil)				_	
	Jun 2008	Jun 2009	Jun 2010	For Jun 2011	ecast Jun 2012
Net Income from Continuing Operations	17,681	14,569	18,760	20,869	21,896
Depreciation Expense	2,056	2,562	2,673	3,079	3,166
Amortization of Other Intangibles	0	0	0	0	0
Impairment of Goodwill	0	0	0	0	0
Other Non-Cash Adjustments to Operating Income	3,375	1,322	2,199	0	0
Deferred Income Taxes & Other Adjustments to Net Income	935	762	-220	0	0
Changes in Operating Assets and Liabilities					
(Increase) Decrease in Accounts Receivable	-1,569	2,215	-2,238	-1,562	-410
(Increase) Decrease in Inventory	0	0	0	-89	4
(Increase) Decrease in Prepayments, other Current Assets	55	-695	197	0	0
Increase (Decrease) in Accounts Payable	-748	-3,371	1,295	512	-52
Increase (Decrease) in Other Current Liabilities	-173	1,673	1,407	0	0
Cash from Operations	21,612	19,037	24,073	22,810	24,604
(Capital Expenditures)	-3,182	-3,119	-1,977	-2,896	-3,169
(Acquisitions)	-8,053	-868	-245	0	0
Asset Sales & Dispositions of Discontinued Operations	0	0	0	0	0
Other Investing Cash Flows (Outlays)	6,648	-11,783	-9,092	0	0
Cash from Investing	-4,587	-15,770	-11,314	-2,896	-3,169
Common Stock (Purchase) or Sale	-9,039	-8,774	-8,958	0	0
Common Stock (Dividends)	0	-4,468	-4,578	-4,578	-4,578
Preferred Stock Issue/(Purchase)/(Dividends)	0	0	0	0	0
Short Term Debt Issuance and (Retirement)	0	1,178	-991	1,000	0
Long Term Debt Issuance and (Retirement)	0	4,568	1,181	-1,193	0
Minority Interest Addback of Income (Loss) Distribution	0	0	0	0	0
Other Financing Cash Flows (Outlays)	-3,895	33	55	0	0
Cash From Financing	-12,934	-7,463	-13,291	-4,771	-4,578
Benefit (Loss) from Exchange Rates/Discontinued Operations, etc.	137	-67	-39	0	0
Net Change in Cash	4,228	-4,263	-571	15,143	16,857
Change in Cash on Balance Sheet	-3,278	6,130	8,162	15,143	16,857
Difference, from analyst adjustments and restatements	7,506	-10,393	-8,733	0	0



Last Price Fair Value Moat Trend™ Morningstar Credit Rating **Industry Group Consider Buy** Consider Sell Uncertainty Economic Moat™ Stewardship 28.66 USD 32.00 USD 44.80 USD 22.40 USD Medium Wide Negative Α AAAApplication Software

Comparable Company Analysis

These companies are chosen by the analyst and the data are shown by nearest calendar year in descending market capitalization order.

Valuation Analysis																
		Price/Ea	rnings		EV/EBITD	Α		Price/Fr	ee Cash Flo	W	Price/Bo	ok		Price/Sa	les	
Company/Ticker	Price/Fair Value	2010	2011(E)	2012(E)	2010	2011(E)	2012(E)	2010	2011(E)	2012(E)	2010	2011(E)	2012(E)	2010	2011(E)	2012(E)
Apple, Inc. AAPL US	NA	20.4	28.2	24.6	18.8	17.5	15.2	28.8	35.9	25.8	8.2	7.3	5.7	6.1	5.0	4.4
Google, Inc. GOOG US	1.04	23.4	25.1	21.4	17.5	13.9	11.9	23.2	25.6	21.6	5.5	4.6	3.8	8.3	7.2	6.1
Oracle Corporation ORCL US	0.90	NA	15.3	13.5	9.5	10.0	9.3	13.4	14.5	15.1	3.6	4.2	3.4	4.2	4.5	4.2
Sap AG SAP US	1.07	20.5	22.0	19.3	11.1	12.3	10.9	13.9	19.5	17.7	4.6	4.9	4.1	3.6	4.0	3.5
Sony Corporation SNE US	1.24	NM	<i>25.7</i>	18.1	13.0	7.9	6.6	15.5	NM	NM	1.3	1.1	1.0	0.6	0.4	0.4
Average		21.4	23.3	19.4	14.0	12.3	10.8	19.0	23.9	20.1	4.6	4.4	3.6	4.6	4.2	3.7
Microsoft Corporation MSFT US	0.90	10.9	11.9	11.2	6.3	6.9	6.6	9.0	12.3	11.4	4.3	3.9	3.1	3.2	3.5	3.4

Returns Analysis																
		ROIC wit	th Goodwill	%	ROIC wit	hout Goodv	vill %	Return or	1 Equity %		Return o	n Assets, P	retax %	Dividend	d Yield %	
Company/Ticker Apple, Inc. AAPL US	Last Historical Year Total Assets (Mil) 47,501 USD	2010 139.6	2011(E) 121.4	2012(E) 116.6	2010 144.0	2011(E) 124.1	2012(E) 118.7	2010 30.5	2011(E) 29.5	2012(E) 25.7	2010 28.1	2011(E) 29.6	2012(E) 27.2	2010 NA	2011(E) NA	2012(E) NA
Google, Inc. GOOG US	40,497 usp	42.3	39.0	39.2	54.0	48.7	47.5	20.3	18.2	17.5	23.0	22.2	21.3	NA	NA	NA
Oracle Corporation ORCL US	61,578 USD	28.5	28.9	28.8	59.6	56.8	56.2	21.8	22.0	20.8	16.6	17.5	17.9	0.9	0.6	0.6
Sap AG SAP US	13,374 EUR	20.2	19.7	20.4	30.9	33.1	37.1	22.4	23.0	22.8	19.0	18.4	17.5	1.5	1.2	1.2
Sony Corporation SNE US	6,522,837 JPY	6.2	5.6	7.4	6.2	5.6	7.4	-3.4	3.2	5.5	-1.8	2.2	3.4	0.7	0.9	0.9
Average		47.4	42.9	42.5	58.9	53.7	53.4	18.3	19.2	18.5	17.0	18.0	17.5	1.0	0.9	0.9
Microsoft Corporation MSFT US	86,113 USD	55.4	52.7	50.3	78.5	72.1	66.8	43.8	38.4	30.8	29.4	28.7	25.5	2.3	1.9	1.9

Growth Analysis																
	Last Historical Year	Revenue Growth %		EBIT Growth % E			EPS Growth %			Free Cas	h Flow Gro	wth %	Dividend/Share Growth %			
Company/Ticker	Revenue (Mil)	2010	2011(E)	2012(E)	2010	2011(E)	2012(E)	2010	2011(E)	2012(E)	2010	2011(E)	2012(E)	2010	2011(E)	2012(E)
Apple Inc. AAPL US	42,90 5 USD	14.4	45.3	14.9	41.0	33.9	14.9	33.9	32.9	14.6	6.0	-3.4	39.2	NA	NA	NA
Google, Inc. GOOG US	23,651 USD	8.5	20.8	17.5	25.3	20.5	16.7	37.1	-3.9	17.6	54.8	-6.2	18.6	NA	NA	NA
Oracle Corporation ORCL US	26 ,820 USD	15.3	31.9	7.3	15.0	23.6	7.8	16.2	23.3	13.5	9.4	30.2	-4.0	306.1	0.1	2.0
Sap AG SAP US	10,672 EUR	-7.8	13.3	13.5	0.9	10.4	15.0	0.3	15.5	14.2	53.4	-11.2	9.7	0.2	0.0	0.0
Sony Corporation SNE US	6,36 <mark>2,60</mark> 2 JPY	-11.5	5.0	4.5	-51.6	-421.3	33.5	-54.4	-403.2	41.8	-160.6	-150.9	-69.6	-41.1	0.0	0.0
Average		3.8	23.3	11.5	6.1	-66.6	17.6	6.6	-67.1	20.3	-7.4	-28.3	-1.2	88.4	0.0	0.7
Microsoft Corporation MSFT U	62,484 USD	6.9	12.0	2.8	16.7	12.0	5.0	27.9	13.9	6.1	38.8	-9.9	7.6	3.3	0.0	0.0



Last Price Fair Value Moat Trend™ Morningstar Credit Rating **Industry Group Consider Buy** Consider Sell Uncertainty Economic Moat™ Stewardship 28.66 USD 32.00 USD 22.40 USD 44.80 USD Medium Wide Negative Α AAAApplication Software

Comparable Company Analysis

These companies are chosen by the analyst and the data are shown by nearest calendar year in descending market capitalization order.

Profitability Analysis																
	Last Historical Year Net Income	Gross M	argin %		EBITDA I	Margin %		Operatin	g Margin 🦠		Net Mar	gin %		Free Cas	sh Flow Ma	rgin %
Company/Ticker	(Mil)	2010	2011(E)	2012(E)	2010	2011(E)	2012(E)	2010	2011(E)	2012(E)	2010	2011(E)	2012(E)	2010	2011(E)	2012(E)
Apple, Inc. AAPL US	8,235 USD	40.1	38.0	38.0	29.1	26.9	26.9	27.4	25.2	25.2	19.2	17.6	17.5	21.0	14.0	16.9
Google, Inc. GOOG US	8,536 USD	62.6	63.7	63.9	41.6	41.8	41.5	35.2	35.1	34.8	27.6	25.6	25.6	36.0	27.9	28.2
Oracle Corporation ORCL US	8,495 USD	78.5	74.6	75.2	45.2	42.4	42.5	36.7	34.4	34.5	25.0	23.4	23.9	31.5	31.1	27.9
Sap AG SAP US	1,894 EUR	66.6	66.9	68.3	30.8	29.8	29.8	26.1	25.5	25.8	17.8	18.1	18.2	26.1	20.5	19.8
Sony Corporation SNE US	-37,596 JPY	29.9	32.5	33.0	4.7	6.6	7.6	-1.2	3.6	4.6	-0.6	1.7	2.3	3.7	-1.8	-0.5
Average		55.5	55.1	55.7	30.3	29.5	29.7	24.8	24.8	25.0	17.8	17.3	17.5	23.7	18.3	18.5
Microsoft Corporation MSFT US	18,804 USD	80.2	80.2	80.8	42.9	43.1	43.9	38.7	38.7	39.5	30.1	29.8	30.4	35.4	28.5	29.8

Leverage Analysis																
		Debt/Equ	ıity %		Debt/Tota	l Cap %		EBITDA/I	nterest Ex	p.	Total Del	ot/EBITDA		Assets/E	quity	
Company/Ticker	Last Historical Year Total Debt (Mil)	2010	2011(E)	2012(E)	2010	2011(E)	2012(E)	2010	2011(E)	2012(E)	2010	2011(E)	2012(E)	2010	2011(E)	2012(E)
Apple, Inc. AAPL US	0 USD	0.0	0.0	0.0	0.0	0.0	0.0	NA	NA	NA	0.0	0.0	0.0	1.5	1.4	1.3
Google, Inc. GOOG US	0 USD	0.0	0.0	0.0	0.0	0.0	0.0	NA	NM	NM	0.0	0.0	0.0	1.1	1.1	1.1
Oracle Corporation ORCL US	14,655 USD	47.0	30.0	24.6	32.0	23.1	19.7	16.1	21.7	27.9	1.2	0.8	0.7	2.0	1.7	1.6
Sap AG SAP US	703 EUR	8.3	44.8	35.9	7.7	30.9	26.4	32.5	40.6	26.9	0.2	1.2	1.0	1.6	1.9	1.8
Sony Corporation SNE US	1,124,049 JPY	42.2	90.0	86.5	29.7	47.4	46.4	13.2	19.6	23.6	3.8	5.5	4.6	2.4	2.9	2.9
Average		19.5	33.0	29.4	13.9	20.3	18.5	20.6	27.3	26.1	1.0	1.5	1.3	1.7	1.8	1.7
Microsoft Corporation MSFT US	5,939 USD	12.9	9.2	7.2	11.4	8.4	6.7	NA	207.8	225.6	0.2	0.2	0.2	1.9	1.6	1.5

Liquidity Analysis				`												
	Market Cap	Cash pe	er Share		Net Casl	n per Share		CFO per	Share		Free Ca	sh Flow per	Share	Payout F	Ratio %	
Company/Ticker	(Mil)	2010	2011(E)	2012(E)	2010	2011(E)	2012(E)	2010	2011(E)	2012(E)	2010	2011(E)	2012(E)	2010	2011(E)	2012(E)
Apple, Inc. AAPL US	312,481 usp	37.48	47.08	61.98	37.48	47.08	61.98	11.20	11.70	15.62	9.94	9.60	13.36	0.0	0.0	0.0
Google, Inc. GOOG US	204,538 USD	76.00	100.74	130.08	76.00	100.74	130.07	28.92	32.23	37.20	26.40	24.78	29.37	0.0	0.0	0.0
Oracle Corporation ORCL US	159,303 USD	3.64	4.11	5.29	0.75	1.84	3.02	1.71	2.27	2.19	1.67	2.17	2.08	16.4	13.2	11.6
Sap AG SAPUS	64,621 USD	2.18	3.02	4.70	1.59	-0.72	1.12	2.54	2.31	2.54	2.35	2.09	2.29	33.9	28.0	23.9
Sony Corporation SNE US	36,034 USD	983.18	2,126.06	2,041.62	-135.12	-303.05	-387.49	567.31	236.05	333.87	230.99	-117.65	-35.76	-37.3	37.6	19.0
Average		220.5	456.2	448.7	-3.9	-30.8	-38.3	122.3	56.9	78.3	54.3	-15.8	2.3	2.6	15.8	10.9
Microsoft Corporation MST US	245,201 USD	4.99	6.69	8.57	4.32	6.04	7.93	2.70	2.56	2.76	2.48	2.23	2.40	24.4	21.9	20.9



Research Methodology for Valuing Companies

Components of Our Methodology

- ► Economic Moat[™] Rating
- ► Moat Trend™ Rating
- ► Moat Valuation
- ► Three-Stage Discounted Cash Flow
- Weighted Average Cost of Capital
- ► Fair Value Estimate
- ► Scenario Analysis
- ► Uncertainty Ratings
- ► Margin of Safety
- ► Consider Buying/Selling
- ► Stewardship Grades
- ► Financial Health Grades

The Morningstar Rating for stocks identifies companies trading at a discount or premium to our analysts' assessment of their fair value. A number of components drive this rating: (1) our assessment of the firm's economic moat, (2) our estimate of the stock's intrinsic value based on a discounted cash-flow model, (3) the margin of safety bands we apply to our Fair Value Estimate, and (4) the current stock price relative to our fair value estimate.

The concept of the Morningstar Economic Moat™ Rating plays a vital role not only in our qualitative assessment of a firm's investment potential, but also in our valuation process. We assign three moat ratings—none, narrow, or wide—as well as the Morningstar Moat Trend™ Rating—positive, stable, or negative—to each company we cover. There are two major requirements for firms to earn either a narrow or wide moat rating; (1) the prospect of earning above-average returns on capital; and (2) some competitive edge that prevents these returns from quickly enoding. The assumptions we make about a firm's moat determine the length of "economic outperformance" that we assume in

the latter stages of our valuation model. We also quantify the value of each firm's moat, which represents the difference between a firm's enterprise value and the value of the firm if no future net investment were to occur. Said differently, most value identifies the value generated by the firm as a result of any future net new investment. Our Moat Trend Rating reflects our assessment of whether each firm's competitive advantage is either getting stronger or weaker, since we think of moats as dynamic, rather than static.

At the heart of our valuation system is a detailed projection of a company's future cash flows. The first stage of our three-stage discounted cash flow model can last from 5 to 10 years and contains numerous detailed assumptions about various financial and operating items. The second stage of our model—where a firm's return on new invested capital (RONIC) and earnings growth rate implicitly fade until the perpetuity year—can last anywhere from 0 years (for no-moat firms) to 20 years (for wide-moat companies). In our third stage, we assume the firm's RONIC equals its weighted average cost of capital, and we calculate a con-

Morningstar Research Methodology for Valuing Companies

Fundamental Analysis Economic Moat™ Rating Company Valuation Fair Value Estimate Uncertainty Assessment **** *** ***

Analyst conducts company and industry research:

- ► Financial statement analysis
- ► Channel checks
- ► Trade-show visits
- ► Industry and company reports and journals
- ► Conference calls
- Management and site visits

Strength of competitive advantage is rated.
None, Narrow, or Wide

Advantages that confer an economic moat:

High Switching Costs (Microsoft)

Cost advantage (Wal-Mart)

Intangible assets
(Johnson & Johnson)

Network Effect (Mastercard) Analyst considers past financial results and focuses on competitive position and future prospects to forecast future cash flows.

Assumptions are entered into Morningstar's proprietary discounted cash-flow model.

Analyst uses a discounted cash-flow model to develop a Fair Value Estimate, which serves as the foundation for the Morningstar Star Rating.

The analyst then evaluates the range of potential intrinsic values for the company and assigns an uncertainty rating: Low, Medium, High, Very High, or Extreme.

The uncertainty rating determines the margin of safety required before we would recommend the stock. The higher the uncertainty, the wider the margin of safety.

The current stock price relative to Morningstar's Fair Value Estimate, adjusted for uncertainty, determines the Morningstar Rating for stocks.

The Morningstar Rating for stocks is updated each evening after the market closes.



Research Methodology for Valuing Companies

Detailed Methodology Documents and Materials*

- ► Comprehensive Equity Research Methodology
- ► Uncertainty Methodology
- ► Cost of Equity Methodology
- Morningstar DCF Valuation Model
- ► Stewardship Grade Methodology
- Stock Grade Methodology for Financial Health
- * Please contact a sales representative for more information.

tinuing value using a standard perpetuity formula. In deciding on the rate at which to discount future cash flows, we ignore stock-price volatility. Instead, we rely on a system that measures the estimated volatility of a firm's underlying future free cash flows, taking into account fundamental factors such as the diversity of revenue sources and the firm's fixed cost structure.

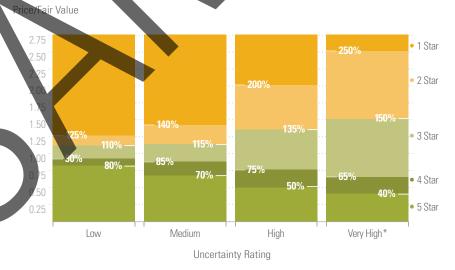
We also employ a number of other tools to augment our valuation process, including scenario analysis, where we assess the likelihood and performance of a business under different economic and firm-specific conditions. Our analysts typically model three to five scenarios for each company we cover, stress-testing the model and examining the distribution of resulting fair values.

The Morningstar Uncertainty Rating captures the range of these potential fair values, based on an assessment of a company's future sales range, the firm's operating and financial leverage, and any other contingent events that may impact the business. Our analysts use this range to assign

an appropriate margin of safety—or the discount/premium to a fair value we apply in setting our consider buying/consider selling prices. Firms trading below our consider-buying prices receive our highest rating of five stars, whereas firms trading above our consider-selling prices receive our lowest rating of one star.

Our Stewardship Grades show our assessment of a management's commitment to shareholders, and include an analysis of a firm's transparency, incentives and ownership. We also provide Financial Health Grades, which are quantitative measures based on firms' distance to default scores. Distance to default measures the distance between the market value of a company's assets and the book value of its liabilities (expressed in standard deviations of asset value). For our grades, A is equivalent to "Excellent," while F is "Very Poor."

Morningstar Margin of Safety and Star Rating Bands



^{*} Occasionally a stock's uncertainty will be too high for us to estimate, in which case we label it 'Extreme'.



Morningstar's Approach to Rating Corporate Credit

- Offers a new measure of the credit quality of companies on our coverage list.
- Encapsulates our in-depth modeling and quantitative work in one letter grade.
- Allows investors to rank companies by each of the four underlying components of our credit ratings, including both analyst-driven and quantitative measures.
- Provides access to all the underlying forecasts that go into the rating, available through our institutional service.

Purpose

The Morningstar Corporate Credit Rating measures the ability of a firm to satisfy its debt and debt-like obligations. The higher the rating, the less likely we think the company is to default on these obligations.

The Morningstar Corporate Credit Rating builds on the modeling expertise of our securities research team. For each company, we publish:

- ► Five years of detailed pro-forma financial statements
- ► Annual estimates of free cash flow
- ► Annual forecasts of return on invested capital
- Scenario analyses, including upside and downside cases,
- ► Forecasts of leverage, coverage, and liquidity ratios for five years
- ► Estimates of off balance sheet liabilities

These forecasts are key inputs into the Morningstar Corporate Credit Rating and are available to subscriber at select.morningstar.com.

Methodology

We feel it's important to perform credit analysis through different lenses—qualitative and quantitative, as well as fundamental and market-driven. We therefore evaluate each company in four broad categories.

Business Risk

Business Risk captures the fundamental uncertainty around a firm's business operations and the cash flow generated by those operations. Key components of the Business Risk rating include the Morningstar Economic Moat™ Rating and the Morningstar Uncertainty Rating.

Cash Flow Cushion™

Morningstar's proprietary Cash Flow Cushion™ ratio is a fundamental indicator of a firm's future financial health The measure reveals how many times a company's internal cash generation plus total excess liquid cash will cover its debt-like contractual commitments over the next rive years. The Cash Flow Cushion acts as a predictor of financial distress, bringing to light potential refinancing, operational, and liquidity risks inherent to the firm.

Morningstar Research Methodology for Determining Corporate Credit Ratings



industry research:Management interview

Conference calls

company and

- Trade show visitsCompetitor, supplier,
- distributor, and customer interviews
- Assign Economic Moat™ Rating

Cash-Flow Forecasts

Analyst considers company financia statements and competitive

dynamics to forecast future

free cash flows to the firm.

Analyst derives estimate of Cash-Flow Cushion™.

Scenario Analysis

Analysts run bull and bear cases through the model to derive alternate estimates of enterprise value.

Based on competitive analysis, cash-flow fore-casts, and scenario analysis, the analyst assigns

Business Risk

Quantitative Checks

We gauge a firm's health using quantitative tools supported by our own backtesting and academic research.

- Morningstar Solvency Score™
- · Distance to Default

Rating Committee

Senior personnel review each company to determine the appropriate final credit rating.

- Review modeling assumptions
- Approve company-specific adjustments



AAA Extremely Low Default Risk

AA Very Low Default Risk

A Low Default Risk

BBB Moderate Default Risk

BB Above Average Default Risk

B High Default Risk

CCC Currently Very High Default Risk

CC Currently Extreme Default Risk

C Imminent Payment Default

D Payment Default



Morningstar's Approach to Rating Corporate Credit

The advantage of the Cash Flow Cushion ratio relative to other fundamental indicators of credit health is that the measure focuses on the future cash-generating performance of the firm derived from Morningstar's proprietary discounted cash flow model. By making standardized adjustments for certain expenses to reflect their debt-like characteristics, we can compare future projected free cash flows with debt-like cash commitments coming due in any particular year. The forward-looking nature of this metric allows us to anticipate changes in a firm's financial health and pinpoint periods where cash shortfalls are likely to occur.

Morningstar Solvency Score™

The Morningstar Solvency Score™ is a quantitative score derived from both historical and forecasted financial ratios. It includes ratios that focus on liquidity (a company's ability to meet short term cash outflows), profita-bility (a company's ability to generate profit per unit of input), capital structure (how does the company finance its operations), and interest coverage (how much of profit is used up by interest payments).

Distance to Default

The Distance to Default rating is a quantitative, marketbased measure of a company's current financial health. (Distance to Default serves as the basis for Morningstar's Financial Health Grade.) The underlying model treats the equity of a firm as a call option on that firm's assets. Based on estimates of asset volatility and the Black-Scholes option-pricing model, we can estimate the likelihood that the value of the company's assets falls below the value of its liabilities, implying likely default.

For each of these four categories, we assign a score, which we then translate into a descriptive rating along the scale of Very Good / Good / Fair / Poor / Very Poor.

Overall Credit Rating

The four component ratings roll up into a single preliminary credit rating. To determine the final credit rating, a credit committee of at least five senior research personnel reviews each preliminary rating.

We review credit ratings on a regular basis and as events warrant. Any change in rating must be approved by the Credit Rating Committee.

Investor Access

Morningstar Corporate Credit Ratings are available on Morningstar.com, as are the four underlying ratings. Our credit research, including detailed cash-flow models that contain all of the components of the Morningstar Corporate Credit Rating, is available to subscribers at select.morningstar.com.

Morningstar Company Valuation Model Summary



COST OF CAPITAL CREDIT RATING OTHER MACROS
FX/ADR COMMON SIZE PRINT OPTIONS

Microsoft Corp. MSFT

Analyst:	Last Modified
Toan Tran	10/28/2010
312-696-6419	
toan.tran@morningstar.com	
Fair Value Estimate	
Consider Buying	23.51
Fair Value	33.59
Consider Selling	47.02
Moat Rating	Wide
Uncertainty Rating	Medium
Credit Spread for Debt Long-run Average Effective Tax Rate Weighted Average Cost of Capital Internal Rate of Return (IRR), 3-yr Insert Current Stock Price>	1.0% 25.0% 9.9% 19.8% 26.00
Forward Revenue CAGR, 5-yr	1.6%
Forward EPS CAGR, 5-yr	3.3%
Avg. Forward ROIC w/out goodwill, 5-yr.	59.1%
Stage II Return on New Invested Capital	7.9%
Stage II IROIC, v3.1	7.9%
Stage II EBI, FCFF Growth Rate	3.0%
Implied Beginning Stage II EBI growth, v3.1	3.0%
Stage II Investment Rate, actual	15.8%
Stage II Investment Rate, normalized	13.3%
Stage II Investment Rate, v3.1	15.8%

erpetuity Year

INCOME STATEMENT BALANCI	E SHEET	CASH FLO	OW STATEME	NT	ROIC	RATIOS
OPERATING ASSUMPTIONS	STAGE I FC	F	MOAT & ST	AGE II-III	STAGE II-II	I FCF
Valuation Summary		% of Firm	Per Share		Implied Valua	ation Metrics
Millions		Value	Value			
Present Value of Stage I	111,233	44.9%	12.46			
Present Value of Stage II	44,014	17.8%	4.93		Fair Value to I	Earnings
Present Value of the Perpetuity	92,580	37.4%	10.37		FV EV/EBITD	A, ex rest
Total Firm Value	247,827	100.0%	27.76		Fair Value to I	CFF
					FV to FCF (O	CF - maint)
Cash and Equivalents	44,542		4.99			F.
Short and Long-term Debt	(5,939)		(0.67)		Fair Value to I	Earnings
Net Balance Sheet Impact	38,603		4.32		FV EV/EBITD	A, ex rest
					Fair Value to I	FCFF
Other Adjustments	0		0.00		FV to FCF (O	CF - maint)
Estimated Mkt. Value of Preferred	0		0.00			
				- 4	Pair Value to I	Earnings
Total Equity Value	286,430				FV EV/EBITD	A, ex rest
* *					Fair Value to I	FCFF
Projected Diluted Shares Outstanding	8,927				FV to FCF (Q	CF - maint)
						Thurst Park

Scenario Analysis	Prob.	FV	COE Sensitivity
Bull Case	20%	25.00	COE
Base Case	70%	32.00	11.5% 28.77
Bear Case	10%	38.00	11.0% 30.19
			10.5% 31.78
			10.0% 33.59
			9.5% 35.64
			9.0% 37.99
			8.5% 40.71
			Interval 0.5%
Fair Value Estimate	(alternat	e valuation	
Dividend Discount N	lodel, 5yr.	short form	8.88
Residual Income Mo	del, 5 yr. s	short form	14.11
PEG Ratio (5-year e	xpected)		4.27

Implied Valuation Metrics					
	Jun ₂ 10	Jun-11	Jun-15	5yr. Avg.	Hist. Range
	Consider Buy				
Fair Value to Earnings	11.2	9.8	9.5		
FV EV/EBITDA, ex rest	6.4	5.7	5.4		
Fair Value to FCFF	9.6	10.9	14.9		
FV to FCF (OCF - maint)	9.1	9.8	11.5		
Fai	ir Value Estima	te			
Fair Value to Earnings	15.9	14.0	13.6		
FV EV/EBITDA, ex rest	9.7	8.7	8.3		
Fair Value to FCFF	13.7	15.5	21.4		
FV to FCF (OCF - maint)	13.0	14.0	16.5		
	Consider Sell				
Pair Value to Earnings	22.3	19.6	19.0		
FV EV/EBITDA, ex rest	14.2	12.6	12.1		
Fair Value to FCFF	19.2	21.7	29.9		
FV to FCF (QCF - maint)	18.2	19.6	23,1		
Stage 1 Exit Multiple, FV EV/	EBITDA, ex re	est	8.8		

	Sta	ge II EBI Grov	vth and WAC	C Sensitivity 1	able	
FV Sensitivity	_		W	ACC Assump	ibo	
	_	7.9%	8.9%	9.9%	10.9%	11.9%
-	6.0%	43.71	36.98	32.08	28.37	25.50
Stage	5.0%	43,39	36.87	32.09	28.47	25.64
88	4.0%	43.07	36,75	32.10	28.55	25.77
Annual k FCFF	3.0%	42.74	36.62	33.59	28.61	25.87
	2.0%	42.40	36.47	32.06	28.66	25.96
Avg.,	1.0%	42.07	35.32	32.02	28.69	26.04
Αm	0.0%	41.73	36.16	31.97	28.71	26.11
WACC Interval		1.0%		EBI growth Int	erval	1.0%

Financial Summary				$\overline{}$											
Millions			Historical	$\overline{}$		Year 1	. Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	Jun-06	Jun-07	Jun-08	Jun-09	Jun-10	Jun-11	Jun-12	Jun-13	Jun-14	Jun-15	Jun-16	Jun-17	Jun-18	Jun-19	Jun-2
Revenue	44.282	51.122	60.420	58.437	62,484	69.982	71.948	71.298	65.750	67.723	62.962	59.525	66.695	60.753	60.753
%growth	11.3%	15.4%	18.2%	(3.3%)	6.9%	12.0%	2.8%	(0.9%)	(7.8%)	3.0%	(7.0%)	(5.5%)	12.0%	(8.9%)	0%
EBIT	16,472	18.524	22.492	20.363	24.098	27.056	28.420	26.737	24,196	28,647	25.500	24.346	39.550	37,059	37.059
% margin	37.2%	36,2%	37.2%	34.8%	38.6%	38.7%	39.5%	37.5%	36.8%	42.3%	40.5%	40.9%	59.3%	61.0%	61.0%
EBITDA	17,375	19,964	24,548	22,925	26,771	30.135	31.585	29.874	27.089	31.627	28.270	26.965	42.485	39,732	39.732
% margin		39.1%	40.6%		42.3%	43.1%	43.9%	41.9%	41.2%	46.7%	44.9%	45.3%	63.7%	65.4%	65.4%
	39.2%			39:2%			21.896								
Net Income	12,599	14,065	17,681	14,569 (17-6%)	18,760	20,869		20,634	18,728	22,096	19,736	18,870	30,281	28,413	28,428
% growth	2.8% 1.20	11.6%	25.7%	1.65	28.8%	11.2% 2.40	4.9% 2.55	(5.8%) 2.31	(9.2%) 2.10	18.0% 2.48	(10.7%) 2.21	(4.4%) 2.11	60.5% 3.39	(6.2%) 3.18	0.1%
Dil. EPS, excluding charges			1.87		2.11										3.18
% growth	6.5%	18.9%	31,2%	(11.8%)	27.9%	13.9%	6.1%	(9.2%)	(9.2%)	18.0%	(10.7%)	(4.4%)	60.5%	(6.2%)	0.1%
EBI	13,889	15,319	18,785	17,103	20,323	20,292	21,315	20,052	18,147	21,485	19,125	18,259	29,663	27,794	27,794
%growth	1.5%	10.3%	22:6%	(9.0%)	18.8%	(0.2%)	5.0%	(5.9%)	(9.5%)	18.4%	(11.0%)	(4.5%)	62.5%	(6.3%)	0%
FCFF	16,509	15,026	10,450	13,808	21,833	19.337	20,854	19,835	10,794	14,040	14,013	13,459	23,143	23,947	23,260
% of sales	37.3%	29.4%	17.3%	23.6%	34.9%	27.6%	29.0%	27.8%	16.4%	20.7%	22.3%	22.6%	34.7%	39.4%	38.3%
ROIC with Goodwill	61.2%	67.1%	67.9%	52.6%	55.4%	52.7%	50.3%	46.4%	37.7%	38.3%	32.4%	30.0%	42.1%	38.3%	37.9%
ROA, pretax	23.5%	27.9%	38.1%	27.0%	29.4%	28.7%	25.5%	20.9%	17.4%	19.3%	16.1%	14.5%	21.4%	17.9%	16.2%
ROE ROE	28.6%	49.5%	52.5%	38.4%	43.8%	38.4%	30.8%	23.5%	18.2%	18.6%	14.6%	12.6%	17.8%	14.6%	13.0%
Debt to Capital	0.00	0.00	0.00	0.13	0.11	0.08	0.07	0.06	0.05	0.04	0.03	0.02	0.02	0.02	0.01
Total Debt / EBITDA	0,00	0.00	0.00	0.25	0.22	0.19	0.18	0.19	0.21	0.18	0.13	0.14	0.09	0.12	0.07
EBITDA Interest Expense				42.30		207.83	225.61	213.38	193.49	314.17	280.83	267.86	472.05	441.47	567.60
EBIT (Ex. Charges)	16.472	18.524	22.492	20.693	24,157	27.056	28.420	26.737	24.196	28.647	25.500	24.346	39.550	37.059	37,059
% margin	37.2%	36.2%	37.2%	35.4%	38.7%	38.7%	39.5%	37.5%	36.8%	42.3%	40.5%	40.9%	59.3%	61.0%	61.0%
%growth		12.5%	21.4%	(8.0%)	16.7%	12.0%	5.0%	(5.9%)	(9.5%)	18.4%	(11.0%)	(4.5%)	62.5%	(6.3%)	0%
EBITDA without restructuring	17,375	19,964	24,548	23,255	26,830	30,135	31,585	29,874	27,089	31,627	28,270	26,965	42,485	39,732	39,732
% mardia	39.2%	39.1%	40.6%	39.8%	42.9%	43.1%	43.9%	41.9%	41.2%	46.7%	44.9%	45.3%	63.7%	65.4%	65.4%
%arowth	12.7%	14.9%	23.0%	(5.3%)	15.4%	12.3%	4.8%	(5.4%)	(9.3%)	16.8%	(10.6%)	(4.6%)	57.6%	(6.5%)	0%
Net Income (True Forecast)	12.599	14.065	17.681	14.812	18.804	20.869	21.896	20.634	18.728	22.096	19.736	18.870	30.281	28.413	28,428
%arowth	2.8%	11.6%	25.7%	(16.2%)	27.0%	11.0%	4.9%	(5.8%)	(9.2%)	18.0%	(10.7%)	(4.4%)	60.5%	(6.2%)	0.1%
Dil. EPS (True Forecast)	1.20	1.42	1.87	1.65	2.11	2.40	2.55	2.31	2.10	2.48	2.21	2.11	3.39	3.18	3.18
%growth	6.5%	18.9%	31.2%	(11.8%)	27.9%	13.9%	6.1%	(9.2%)	(9.2%)	18.0%	(10.7%)	(4.4%)	60.5%	(6.2%)	0.1%
76Grown	0.5%	10.976	31.276	(11.0%)	21.9%	13.976	0.176	(9.2%)	(9.2%)	16.076	(10.7%)	(4.476)	00.376	(0.276)	U. 176
FCF (OCF - CapEx)	12,826	15,532	18,430	15,918	22,096	19,914	21,435	20,416	13,588	16,311	15,869	15,003	24,462	25,091	24,287
%growth		21.1%	18.7%	(13.6%)	38.8%	(9.9%)	7.6%	(4.8%)	(33.4%)	20.0%	(2.7%)	(5.5%)	63.0%	2.6%	(3.2%)
Fair Value Yield %	0%	0%	0%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
FCFF to Fair Value Yield %					7.3%	6.4%	7.0%	6.6%	3.6%	4.7%	4.7%	4.5%	7.7%	8.0%	7.8%
Fair Value/Free Cash Flow	27.58	21.38	17.26	18.98	13.57	15.06	13.99	14.69	22.06	18.38	18.89	19.98	12.26	11.95	12.34
Company Specific Summary Metrics															
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Microsoft Corp. Valuation Model															
Financial Statements	CF	ROIC F	RATIOS C	OMMON SIZ	Έ	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Millions	Jun-06	Jun-07	Jun-08	Jun-09	Jun-10	Jun-11	Jun-12	Jun-13	Jun-14	Jun-15	Jun-16	Jun-17	Jun-18	Jun-19	Jun-20
Income Statement															
										_					
Organic Revenue	44,282	51,122	60,420	58,437	62,484	69,982	71,948	71,298	65,750	67,723	62,962	59,525	66,695	60,753	60,753
Acquired Revenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Divested Revenue Total Revenue	0	0	0	58.437	0	0	71.948	71,298	0	0	0	0	0	0	0
	44,282	51,122	60,420		62,484	69,982	-		65,750	67,723	62,962	59,525	66,695	60,753	60,753
Cost of Goods Sold	7,650	10,693	11,598	12,155	12,395	13,882	13,814	13,689	13,150	11,987	11,018	10,179	8,470	6,683	6,683
Gross Profit	36,632	40,429	48,822	46,282	50,089	56,100	58,134	57,608	52,600	55,736	51,944	49,346	58,225	54,070	54,070
General & Administrative Expenses	3,758	3,329	5,127	3,700	4,004	4,484	4,533	4,492	3,945	3,386	4,407	4,167	2,001	1,823	1,823
Research & Development Expenses	6,584	7,121	8,164	9,010	8,714	9,760	10,073	10,695	9,994	10,158	9,444	8,929	6,669	6,075	6,075
Sales & Marketing Expenses (Income)	9,818	11,455	13,039	12,879	13,214	14,800	15,109	15,685	14,465	13,545	12,592	11,905	10,004	9,113	9,113
Other Operating Expenses (Income) Exploration Expenses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Impairment of Capitalized Exploration Assets	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Restructuring & Other Cash Charges (Gains)	0	0	0	330	59	0	0	0	0	0	0	0	0	0	0
Depreciation Expense (if reported separately)	0	0	0	0	0	0	0	0	0	0	, i	0	0	0	0
Amortization of Other Intangibles (if reported seperately)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Impairment of Goodwill (if reported separately)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Expenses	27,810	32,598	37,928	38,074	38,386	42,926	43,529	44,561	41,554	39,076	37,463	35,179	27,145	23,694	23,694
Operating Income (EBIT)	16,472	18,524	22,492	20,363	24,098	27,056	28,420	26,737	24,196	28,647	25,500	24,346	39,550	37,059	37,059
Interest Expense	0	0	0	542	0	145	140	140	140	101	101	101	90	90	70
Interest & Other Non-Operating Income (Expense)	1.790	1.577	1,322	0	915	915	915	915	915	915	915	915	915	915	915
Pre-Tax Income	18,262	20,101	23,814	19,821	25,013	27,826	29,195	27,512	24,971	29,461	26,314	25,160	40,375	37,884	37,904
Income Tax Expense (Benefit)	5,663	6,036	6,133	5,252	6.253	6.956	7,299	6,878	6,243	7,365	6,579	6,290	10,094	9,471	9,476
Income After Taxes	12,599	14,065	17,681	14,569	18,760	20,869	21,896	20,634	18,728	22,096	19,736	18,870	30,281	28,413	28,428
	0	0	0		10,700	0	0	0	0	0	0	0	0	0	0
(Minority Interest) Other After-tax Operating Additions or (Subtractions)	0	0	0	0		0	0	0	0	0	0	0	0	0	0
(Preferred Dividends)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
After-Tax Non-Operating Income, Extraordinary Items (Losses), Discontinued	Ü		· ·	· ·				, i	Ü	ŭ	· ·	ŭ	ŭ		· ·
Operations, Accounting Changes, etc.	0	0	0	0	Q	0	0	0	0	0	0	0	0	0	0
Net Income (Loss)	12,599	14,065	17,681	14,569	18,760	20,869	21,896	20.634	18,728	22,096	19,736	18,870	30,281	28,413	28,428
Net Income (Loss) Excluding Charges	12,599	14,065	17,681	14,812	18,804	20,869	21,896	20,634	18,728	22,096	19,736	18,870	30,281	28,413	28,428
Weighted Average Diluted Shares Outstanding	10,531	9,886	9,470	8,996	8,927	8,927	8,927	8,927	8,927	8,927	8,927	8,927	8,927	8,927	8,927
End of Year Shares Outstanding (column P only)					8,927	8,700		<< Cells in Years	s 1 and 2 used fo	or calculation of	"street compara	able" EPS estima	ate (not used in	valuation)	
Pension Expense re-adjustment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stock option expense re-adjustment (if necessary)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other adjustments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Net Income, Excluding Charges ("true forecast")	12,599	14,065	17,681	14,812	18,804	20,869	21,896	20,634	18,728	22,096	19,736	18,870	30,281	28,413	28,428
Diluted EPS Including Charges	1.20	1.42	1.87	1.62	2.10	2.40	2.55	2.31	2.10	2.48	2.21	2.11	3.39	3.18	3.18
Diluted EPS Excluding Charges	1.20	1.42	1.87	1.65	2.11	2.40	2.55	2.31	2.10	2.48	2.21	2.11	3.39	3.18	3.18
Diluted EPS, Excluding Charges ("true EPS forecast")	1.20	1.42	1.87	1.65	2.11	2.40	2.55	2.31	2.10	2.48	2.21	2.11	3.39	3.18	3.18
Dividends Per Common Share	0.00	0.00	0.00	0.50	0,51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51
EBITDA	17,375	19,964	24,548	22,925	26,771	30,135	31,585	29,874	27,089	31,627	28,270	26,965	42,485	39,732	39,732
EBITDA without restructuring	17,375	19,964	24,548	23,255	26,830	30,135	31,585	29,874	27,089	31,627	28,270	26,965	42,485	39,732	39,732
EBITDA without restructuring Growth	12.7%	14.9%	23.0%	(5.3%)	15.4%	12.3%	4.8%	(5.4%)	(9.3%)	16.8%	(10.6%)	(4.6%)	57.6%	(6.5%)	0%
EBITDAX	17,375	19,964	24,548	22,925	26,771	30,135	31,585	29,874	27,089	31,627	28,270	26,965	42,485	39,732	39,732
EBITDAX without restructuring	17,375	19,964	24,548	23,255	26,830	30,135	31,585	29,874	27,089	31,627	28,270	26,965	42,485	39,732	39,732

Microsoft Corp. Valuation Model	_														
Financial Statements	CF	ROIC R	RATIOS C	COMMON SIZ	Έ	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Millions	Jun-06	Jun-07	Jun-08	Jun-09	Jun-10	Jun-11	Jun-12	Jun-13	Jun-14	Jun-15	Jun-16	Jun-17	Jun-18	Jun-19	Jun-20
Balance Sheet										•					
ASSETS															
Total Cash & Equivalents	43,393	33,528	30,250	36,380	44,542	59,685	76,542	92,380	99,177	109,250	117,296	126,787	145,971	166,958	184,27
Non-operating, Excess Cash & Investments	40,393	30,528	27,250	33,380	41,542	56,685	73,542	89,380	96,177	106,250	114,296	123,787	142,971	163,958	181,27
Operating Cash & Equivalents	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,00
Accounts Receivable	9,316	11,338	13,589	11,192	13,014	14,576	14,985	14,850	13,694	14,105	13,114	12,398	13,891	12,653	12,65
Inventory	1,478	1,127	985	717	740	829	825	817	785	716	658	608	506	399	39
Other Short-Term Operating Assets	4,055	4,292	5,006	5,924	5,134	5,134	5,134	5,134	5,134	5,134	5,134	5,134	5,134	5,134	5,13
Total Current Assets	58,242	50,285	49,830	54,213	63,430	80,224	97,486	113,181	118,791	129,205	136,201	144,927	165,501	185,144	202,46
Property Plant & Equipment, Gross	7,223	9,487	12,544	15,082	16,259	19,155	22,324	25,780	29,537	33,610	38,016	42,770	47,891	53,396	59,30
(Accumulated Depreciation)	(4,179)	(5,137)	(6,302)	(7,547)	(8,629)	(11,708)	(14,874)	(18,011)	(20,904)	(23,884)	(26,654)	(29,273)	(32,208)	(34,881)	(37,55
Property Plant & Equipment, Net	3,044	4,350	6,242	7,535	7,630	7,447	7,450	7,769	8,633	9,727	11,362	13,497	15,683	18,515	21,75
Goodwill, Net	4,405	5,638	12,108	12,503	12,394	12,394	12,394	12,394	12,394	12,394	12,394	12,394	12,394	12,394	12,39
Other Intangibles	0	0	1,973	1,759	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,158	1,15
Other Long-Term Operating Assets	3,906	2,898	1,691	1,599	1,501	1,501	1,501	1,501	1,501	1,501	1,501	1,501	1,501	1,501	1,50
Deferred Tax Assets	0	0	949	279	0	0	0	0	0	0	U	0	0	0	
Long-Term Non-Operating Assets, including Pension BS items	(0.507	0	0	0	0	100 700	0	10(202	0	0	0	0	0	0	000.04
Total Assets	69,597	63,171	72,793	77,888	86,113	102,723	119,989	136,003	142,476	153,984	162,616	173,477	196,237	218,712	239,26
LIABILITIES															
Accounts Payable	2,909	3,247	4,034	3,324	4,025	4,537	4,484	4,443	4,260	3,870	3,559	3,289	2,717	2,135	2,170
Short-Term Debt	0	0	0	2,000	1,000	2,000	2,000	2,000	2,000	4,000	2,000	2,000	2,000	3,000	2,00
Other Short-Term Operating Liabilities	19,533	20,507	25,852	21,710	21,122	21,122	21,122	21,122	15,842	11,881	8,911	6,683	5,012	3,759	2,81
Total Current Liabilities	22,442	23,754	29,886	27,034	26,147	27,659	27,606	27,565	22,101	19 ,751	14,470	11,972	9,730	8,895	6,99
Long-Term Debt	0	0	0	3,746	4,939	3,746	3,746	3,746	3,746	1,746	1,746	1,746	1,746	1,746	74
Incremental Debt Requirements						0	0	0	0	0	0	0	0	0	-
Total Long-Term Debt	0	0	0	3,746	4,939	3,746	3,746	3,746	3,746	1,746	1,746	1,746	1,746	1,746	74
Long-Term Operating Liabilities	7,051	8,320	6,621	7,550	8,852	8,852	8,852	8,852	6,639	4,979	3,734	2,801	2,101	1,575	1,18
Deferred Tax Liabilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Long-Term Non-Operating Liabilities, including Pension BS items	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Liabilities	29,493	32,074	36,507	38,330	39,938	40,257	40,204	40,163	32,486	26,476	19,950	16,519	13,576	12,216	8,91
Preferred Stock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Minority Interest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
STOCKHOLDER'S EQUITY															
Common Stock	59,005	60,557	62,849	62,382	62,856	62,856	62,856	62,856	62,856	62,856	62,856	62,856	62,856	62,856	62,85
Additional Paid in Capital	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Retained Earnings (Deficit)	(18,901)	(29,460)	(26,563)	(22,824)	(16,681)	(390)	16,928	32,984	47,134	64,652	79,810	94,102	119,805	143,640	167,49
(Treasury Stock)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Other Equity, e.g. Accum. Comprehensive Income (Loss)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Shareholders' Equity	40,104	31,097	36,286	39,558	46,175	62,466	79,784	95,840	109,990	127,508	142,666	156,958	182,661	206,496	230,34
		(0.474	70 700						410.101	450.001	410 141	400 400	407.000	040 740	239,26
Total Liabilities + Shareholders' Equity Difference	69,597	63,171	72,793	77,888	86,113	102,723	119,989	136,003	142,476	153,984	162,616	173,477	196,237	218,712	239,20

Microsoft Corp. Valuation Model															
Financial Statements	CF	ROIC R	ATIOS C	OMMON SIZ	ĽΕ	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Millions	Jun-06	Jun-07	Jun-08	Jun-09	Jun-10	Jun-11	Jun-12	Jun-13	Jun-14	Jun-15	Jun-16	Jun-17	Jun-18	Jun-19	Jun-20
Cash Flow Statement															
Net Income from Continuing Ops	12,599	14,065	17,681	14,569	18,760	20,869	21,896	20,634	18,728	22,096	19,736	18,870	30,281	28,413	28,428
Depreciation Expense	903	1,440	2,056	2,562	2,673	3,079	3,166	3,137	2,893	2,980	2,770	2,619	2,935	2,673	2,673
Amortization of Other Intangibles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Impairment of Goodwill	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Non-Cash Adjustments to Operating Income	3,080	2,831	3,375	1,322	2,199	0	0	0	0	0	0	0	0	0	0
Deferred Income Taxes & Other Adjustments to Net Income	219	421	935	762	(220)	0	0	0	0	0	0	0	0	0	0
Changes in Operating Assets and Liabilities															
(Increase) Decrease in Accounts Receivable	(2,071)	(1,764)	(1,569)	2,215	(2,238)	(1,562)	(410)	136	1,155	(411)	992	716	(1,493)	1,238	0
(Increase) Decrease in Inventory	(1,405)	0	0	0	0	(89)	4	7	32	69	58	50	102	107	0
(Increase) Other Short-Term Operating Assets	(49)	(203)	55	(695)	197	0	0	0	0	0	0	0	0	0	0
Increase (Decrease) in Accounts Payable	(145)	(552)	(748)	(3,371)	1,295	512	(52)	(42)	(183)	(390)	(311)	(270)	(572)	(582)	35
Increase (Decrease) in Other Current Liabilities	1,273	1,558	(173)	1,673	1,407	0	0	. 0	(5,281)	(3,960)	(2,970)	(2,228)	(1,671)	(1,253)	(940)
Cash from Operations	14,404	17,796	21,612	19,037	24,073	22,810	24,604	23,872	17,345	20,384	20,274	19,757	29,582	30,596	30,196
(Capital Expenditures)	(1,578)	(2,264)	(3,182)	(3,119)	(1,977)	(2,896)	(3,169)	(3,456)	(3,757)	(4,073)	(4,406)	(4,754)	(5,121)	(5,505)	(5,909)
(Maintenance Capital Expenditures)	0	0	0	(2,119)	(977)	(1,343)	(1,539)	(1,744)	(1,960)	(2,186)	(2,424)	(2,674)	(2,936)	(3,211)	(3,500)
(Growth Capital Expenditures)	(1,578)	(2,264)	(3,182)	(1,000)	(1,000)	(1,553)	(1,630)	(1,712)	(1,797)	(1,887)	(1,981)	(2,080)	(2,185)	(2,294)	(2,408)
(Acquisitions)	(649)	(1,150)	(8,053)	(868)	(245)	0	0	0	0	0	0	0	0	0	0
Asset Sales & Disposals of Discontinued Operations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Investing Cash Flows (Outlays)	10,230	9,503	6,648	(11,783)	(9,092)	0	0	0	(2,213)	(1,660)	(1,245)	(934)	(700)	(525)	(394)
Cash from Investing	8,003	6,089	(4,587)	(15,770)	(11,314)	(2,896)	(3,169)	(3,456)	(5,970)	(5,733)	(5,650)	(5,688)	(5,821)	(6,030)	(6,303)
Common Stock (Purchase) or Sale	(17,106)	(20,793)	(9,039)	(8,774)	(8,958)	0	ø	0	0	0	0	0	0	0	0
Common Stock (Dividends)	0	0	0	(4,468)	(4,578)	(4,578)	(4,578)	(4,578)	(4,578)	(4,578)	(4,578)	(4,578)	(4,578)	(4,578)	(4,578)
Preferred Stock Issue / (Purchase) / (Dividends)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Short Term Debt Issuance and (Retirement)	0	0	0	1,178	(991)	1,000	0	0	0	2,000	(2,000)	0	0	1,000	(1,000)
Long Term Debt Issuance and (Retirement)	0	0	0	4,568	1,181	(1,193)	0	0	0	(2,000)	0	0	0	0	(1,000)
Minority Interest Addback of Income (Loss) Distribution	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Financing Cash Flows (Outlays)	(3,456)	(3,751)	(3,895)	33	55	0	0	0	0	0	0	0	0	0	0
Cash from Financing	(20,562)	(24,544)	(12,934)	(7,463)	(13,291)	(4,771)	(4,578)	(4,578)	(4,578)	(4,578)	(6,578)	(4,578)	(4,578)	(3,578)	(6,578)
Benefit (Loss) from Exchange Rates / Discontinued Ops., etc.	0	0	137	(67)	(39)	0	0	0	0	0	0	0	0	0	0
Net Change in Cash	1,845	(659)	4,228	(4,263)	(571)	15,143	16,857	15,838	6,797	10,073	8,046	9,491	19,183	20,987	17,316
Change in Cash on Balance Sheet	(5,362)	(9,865)	(3,278)	6,130	8,162	15,143	16,857	15,838	6,797	10,073	8,046	9,491	19,183	20,987	17,316
Difference	7,207	9,206	7,506	(10,393)	(8,733)	0	Q	0	0	0	0	0	0	0	0
Cash Taxes Paid	5,663	6,036	7.082	4582	5,974	6.764	7 105	6,684	6.049	7,162	6.375	6,086	9,888	9,265	9,265
Cash Interest Paid	0,003	0,030	7,082	542	0,974	145	140	140	140	101	101	101	9,000	9,200	70
Cash interest i aiu	U	U		542	U	143	140	140	140	101	101	101	70	70	70

Microsoft Corp. Valuation Model				_											
Financial Statements	CF	ROIC F	RATIOS C	COMMON SIZ	<u>ZE</u>	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 1
Millions	Jun-06	Jun-07	Jun-08	Jun-09	Jun-10	Jun-11	Jun-12	Jun-13	Jun-14	Jun-15	Jun-16	Jun-17	Jun-18	Jun-19	Jun-2
Peturn on Invested Capital															
Operating Cash & Equivalents included in Working Capital	3.000	3.000	3,000	3.000	3.000	3.000	3,000	3,000	3,000	3,000	3.000	3,000	3.000	3,000	3,00
Accounts Receivable	9.316	11,338	13,589	11.192	13,014	14,576	14,985	14,850	13 694	14,105	13.114	12,398	13,891	12,653	12,65
Inventory	1.478	1,127	985	717	740	829	825	817	785	716	658	608	506	399	31
Prepayments & Advances	4,055	4,292	5,006	5,924	5,134	5,134	5,134	5,134	5,134	5.134	5,134	5,134	5,134	5,134	5,1
Property Plant & Equipment, Net	3,044	4,350	6,242	7,535	7,630	7.447	7,450	7,769	8,633	9,727	11,362	13,497	15,683	18,515	21,7
Goodwill. Net	4,405	5.638	12.108	12.503	12.394	12.394	12.394	12,394	12,394	12.394	12,394	12,394	12,394	12,394	12.3
Other Intangibles	4,403	0,030	1,973	1,759	1,158	1,158	1,158	1,158	1,158	12,394	1,158	1,158	1,158	1,158	12,3
Other United Millions Other Long-Term Operating Assets	3,906	2,898	1,973	1,759	1,136	1,501	1,136	1,1501	1,501	1,100	1,130	1,150	1,501	1,501	1,1
										1,301					
Capitalized Lease Obligations, net	0	0	0	0	0	3,680	2,488	2,488	2,488	1,392	1,392	1,392	1,272	1,272	1,2
Capitalized Research and Development Expenses, net	25,625	26,816	28,573	30,634	32,012	34,134	36,285	38,490	39,408	40,079	39,752	38,846	35,651	32,303	29,5
Other Expenses to be Capitalized, net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Other Expenses to be Capitalized, net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Other Expenses to be Capitalized, net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LESS:															
Accounts Payable	2,909	3,247	4,034	3,324	4,025	4,537	4,484	4,443	4,260	3,870	3,559	3,289	2,717	2,135	2,1
Other Short-Term Operating Liabilities	19,533	20,507	25,852	21,710	21,122	21,122	21,122	21,122	15,842	11,881	8,911	6,683	5,012	3,759	2,8
Long Term Operating Liabilities	7,051	8,320	6,621	7,550	8,852	8,852	8,852	8,852	6,639	4,979	3,734	2,801	2,101	1,575	1,18
Invested Capital	25,336	27,385	36,660	42,279	42,584	49,341	50,761	53,184	61,455	68,475	67,581	71,605	75,267	76,245	78,39
Invested Capital excluding Goodwill	20,931	21,747	24,552	29,776	30,190	36,947	38,367	40,790	49,061	56,081	55,187	59,211	62,873	63,851	66,00
Earnings Before Interest, after taxes (before adjustments)	13,889	15,319	18,785	17,103	20,323	20,292	21,315	20,052	18,147	21,485	19,125	18,259	29,663	27,794	27,79
Rent Expense (operating leases)	0	0	0	0	0	460	311	311	311	174	174	174	159	159	1!
Incremental Depreciation	0	0	0	0	0	(123)	(83)	(83)	(83)	(46)	(46)	(46)	(42)	(42)	(4
Research and Development Expenses	6,584	7,121	8,164	9,010	8,714	9,760	10,073	10,695	9,994	10,158	9,444	8,929	6,669	6,075	6,0
Incremental Amortization	(3,661)	(3,831)	(4,082)	(4,376)	(4,573)	(4,876)	(5,184)	(5,499)	(5,630)	(5,726)	(5,679)	(5,549)	(5,093)	(4,615)	(4,2
Other Expenses to be Capitalized	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Incremental Amortization	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Other Expenses to be Capitalized	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Incremental Amortization	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Other Expenses to be Capitalized	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Incremental Amortization	0	0	0	0	0	D	0	0	0	0	0	0	0	0	
eturn on Average Invested Capital (ROIC):		1													
ROIC with Goodwill	61.2%	67.1%	67.9%	52.6%	55.4%	52.7%	50.3%	46.4%	37.7%	38.3%	32.4%	30.0%	42.1%	38.3%	37.9
ROIC without Goodwill	72.7%	82.8%	94.0%	76.4%	78.5%	72.1%	66.8%	60.9%	48.1%	47.4%	39.6%	36.5%	50.7%	45.7%	45.1
ROIC w/ Goodwill (3-yr avg.)	55.6%	61.7%	65.4%	62.5%	58.6%	53.6%	52.8%	49.8%	44.8%	40.8%	36.1%	33.6%	34.8%	36.8%	39.4
ROIC w/o Goodwill (3-yr avg.)	65.0%	73.8%	83.2%	84.4%	82.9%	75.7%	72.5%	66.6%	58.6%	52.1%	45.0%	41.2%	42.3%	44.3%	47.2
<u> </u>			_												
ROIC w/ Goodwill (5-yr avg.)	69.4%	61.3%	60.4%	61.1%	60.8%	59.1%	55.8%	51.5%	48.5%	45.1%	41.0%	37.0%	36.1%	36.2%	36.1
ROIC w/ Goodwill (5-yr avg.) ROIC w/o Goodwill (5-yr avg.)	69.4% 79.3%	61.3% 72.0%	60.4% 74.4%	61.1% 78.3%	60.8% 80.9%	59.1% 80.8%	55.8% 77.5%	51.5% 70.9%	48.5% 65.3%	45.1% 59.1%	41.0% 52.6%	37.0% 46.5%	36.1% 44.5%	36.2% 44.0%	36.1 43.5

Microsoft Corp. Valuation Model				_											
Financial Statements	<u>CF</u>	ROIC F	RATIOS C	COMMON SIZ	ZE	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Millions	Jun-06	Jun-07	Jun-08	Jun-09	Jun-10	Jun-11	Jun-12	Jun-13	Jun-14	Jun-15	Jun-16	Jun-17	Jun-18	Jun-19	Jun-20
Ratios															
Efficiency															
Inventory Turnover, avg. balances Average Days in Inventory Receivables Turnover, avg. balances Average Days in Receivables Payable Turnover, avg. balances Average Days Payables Outstanding	7.8 47 5.4 68 3.1 119	8.2 44 5.0 74 3.5 105	11.0 33 4.8 75 3.2 115	14.3 26 4.7 77 3.3 110	17.0 21 5.2 71 3.4 108	17.7 21 5.1 72 3.2 113	16.7 22 4.9 75 3.1 119	16.7 22 4.8 76 3.1 119	16.4 22 4.6 79 3.0 121	16.0 23 4.9 75 2.9 124	16.0 23 4.6 79 3.0 123	16.1 23 4.7 78 3.0 123	15.2 24 5.1 72 2.8 129	14.8 25 4.6 80 2.8 133	16.8 22 4.8 76 3.1 118
Operating Cycle, in days Cash Operating Cycle, in days	115 (4)	118 13	109 (6)	103 (8)	92 (16)	93 (20)	97 <mark>(22)</mark>	98 (21)	101 (19)	98 (26)	102 (21)	101 (22)	96 (33)	104 (28)	98 (20)
Working Capital Turnover Fixed Asset Turnover Total Asset Turnover	(11.8) 16.4 0.6	(11.9) 13.8 0.8	(10.7) 11.4 0.9	(10.2) 8.5 0.8	(16.8) 8.2 0.8	(26.0) 9.3 0.7	(38.0) 9.7 0.6	(41.6) 9.4 0.6	175.8 8.0 0.5	13.9 7.4 0.5	7.6 6.0 0.4	5.8 4.8 0.4	5.1 4.6 0.4	4.0 3.6 0.3	3.9 3.0 0.3
Other Efficiency Ratio Other Efficiency Ratio															
Liquidity Current Ratio Quick Ratio Cash Ratio	2.6 2.3 1.9	2.1 1.9 1.4	1.7 1.5 1.0	2.0 1.8 1.3	2.4 2.2 .7	2.9 2.7 2.2	3.5 3.3 2.8	4.1 3.9 3.4	5.4 5.1 4.5	6.5 6.2 5.5	9.4 9.0 8.1	12.1 11.6 10.6	17.0 16.4 15.0	20.8 20.2 18.8	29.0 28.2 26.4
Free Cash Flow (OCF - CapEx) as % of Revenue Free Cash Flow (OCF - CapEx) as % of Operating Income	29.0% 77.9%	30.4% 83.8%	30.5% 81.9%	27.2% 78.2%	35.4% 91.7%	28.5% 73.6%	29.8% 75.4%	28.6% 76.4%	20.7% 56.2%	24.1% 56.9%	25.2% 62.2%	25.2% 61.6%	36.7% 61.8%	41.3% 67.7%	40.0% 65.5%
Other Liquidity Ratio Other Liquidity Ratio															
Leverage Debt to Capital Debt to Capital, including operating leases Debt to Equity at Book Value	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.13 0.13 0.15	0.11 0.11 0.13	0.08 0.13 0.09	0.07 0.09 0.07	0.06 0.08 0.06	0.05 0.07 0.05	0.04 0.05 0.05	0.03 0.03 0.03	0.02 0.03 0.02	0.02 0.03 0.02	0.02 0.03 0.02	0.01 0.02 0.01
Net Debt (including excess cash) to Capital Net Debt (operating cash only) to Capital	(1.08) (0.07)	(1.08) (0.10)	(0.83)	(0.68) 0.06	(0.74) 0.06	(0.79) 0.04	(0.83) 0.03	(0.85) 0.03	(0.81) 0.02	(0.78) 0.02	(0.78) 0.01	(0.77) 0.00	(0.76) 0.00	(0.77) 0.01	(0.78) (0.00)
Total Debt / EBITDA Total Debt / EBITDA without restructuring Total Assets/Total Equity	0.00 0.00 1.74	0.00 0.00 2.03	0.00 0.00 2.01	0.25 0.25 1.97	0.22 0.22 1.86	0.19 0.19 1.64	0.18 0.18 1.50	0.19 0.19 1.42	0.21 0.21 1.30	0.18 0.18 1.21	0.13 0.13 1.14	0.14 0.14 1.11	0.09 0.09 1.07	0.12 0.12 1.06	0.07 0.07 1.04
Other Leverage Ratio Other Leverage Ratio			1												
Coverage EBIT / Interest Expense EBITDA / Interest Expense EBITDA without restructuring / Interest Expense EBITDAR without restructuring / Interest Expense + Rent Expense	1			37.6 42.3 42.9 42.9		186,6 207.8 207.8 50.6	203.0 225.6 225.6 70.7	191.0 213.4 213.4 66.9	172.8 193.5 193.5 60.8	284.6 314.2 314.2 115.8	253.3 280.8 280.8 103.6	241.8 267.9 267.9 98.8	439.4 472.1 472.1 171.3	411.8 441.5 441.5 160.2	529.4 567.6 567.6 174.2
Free Cash Flow (OCF - CapEx) / Debt Free Cash Flow (OCF - CapEx) / Cash Interest				2.8 29.4	3.7	3.5 137.3	3.7 153.1	3.6 145.8	2.4 97.1	2.8 162.0	4.2 157.6	4.0 149.0	6.5 271.8	5.3 278.8	8.8 347.0

Microsoft Corp. Valuation Model	_			_											
Financial Statements	<u>CF</u>	ROIC F	RATIOS C	COMMON SIZ	_	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Millions	Jun-06	Jun-07	Jun-08	Jun-09	Jun-10	Jun-11	Jun-12	Jun-13	Jun-14	Jun-15	Jun-16	Jun-17	Jun-18	Jun-19	Jun-20
Profitability, Returns & DuPont Analysis															
EBIT Growth	13.1%	12.5%	21.4%	(9.5%)	18.3%	12.3%	5.0%	(5.9%)	(9.5%)	18.4%	(11.0%)	(4.5%)	62.5%	(6.3%)	0%
Revenue Growth EBIT Change % / Revenue Change %	11.3% 116.2%	15.4% 80.6%	18.2% 117.8%	(3.3%) 288.4%	6.9% 264.9%	12.0% 102.3%	2.8% 179.4%	(0.9%) 654.7%	(<mark>7.8%)</mark> 122,1%	3.0% 612.9%	(7.0%) 156.3%	(5.5%) 82.9%	12.0% 518.5%	(8.9%) 70.7%	0%
Net Income Growth, ex charges	2.8%	11.6%	25.7%	-16.2%	27.0%	11.0%	4.9%	-5.8%	-9.2%	18.0%	-10.7%	-4.4%	60.5%	-6.2%	0.1%
•	28.5%	27.5%	29.3%	24.9%	30.0%	29.8%	30.4%	28.9%	28.5%	32.6%	31.3%	31.7%	45.4%	46.8%	46.8%
Earnings / Revenue (Net Margin) Revenue / Average Assets	0.63	0.77	0.89	0.78	0.76	0.74	0.65	0.56	0.47	0.46	0.40	0.35	0.36	0.29	0.27
Average Assets / Average Equity at Book Value	1.59	1.86	2.02	1.99	1.91	1.74	1.57	1.46	1,35	1.25	1.17	1.12	1.09	1.07	1.05
ROE	28.6%	39.5%	52.5%	38.4%	43.8%	38.4%	30.8%	23.5%	18.2%	18.6%	14.6%	12.6%	17.8%	14.6%	13.0%
EBIT, ex charges / Revenue (Operating Margin)	37.2%	36.2%	37.2%	35.4%	38.7%	38.7%	39.5%	37.5%	36.8%	42.3%	40.5%	40.9%	59.3%	61.0%	61.0%
EBIT / Revenue (Operating Margin)	37.2%	36.2%	37.2%	34.8%	38.6%	38.7%	39.5%	37.5%	36.8%	42.3%	40.5%	40.9%	59.3%	61.0%	61.0%
Incremental/(Decremental) Operating Margin 3-year Normalized Incremental/(Decremental) Operating Margin	42.5% 72.9%	30.0% 86.6%	42.7% 38.4%	107.4% 60.0%	92.3% 80.8%	39.4% 79.7%	69.4% 67 .0 %	258.6% 122.5%	45.8% 124.6%	225.6% 176.7%	66.1% 112.5%	33.6% 108.4%	212.1% 103.9%	41.9% 95.8%	#DIV/0!
5-year Normalized Incremental/(Decremental) Operating Margin	27.9%	56.4%	58.3%	81.9%	63.0%	62.4%	70.2%	113.4%	101.1%	127.8%	133.1%	125.9%	116.6%	115.8%	
ROA	17.9%	21.2%	26.0%	19.3%	22.9%	22.1%	19.7%	16.1%	13.5%	14.9%	12.5%	11.2%	16.4%	13.7%	12.4%
EBITDA Margin, without restructuring	39.2%	39.1%	40.6%	39.8%	42.9%	43.1%	43.9%	41.9%	41.2%	46.7%	44.9%	45.3%	63.7%	65.4%	65.4%
EBITDAR Margin, without restructuring	39.2%	39.1%	40.6%	39.8%	42.9%	43.7%	44.3%	42.3%	41.7%	47.0%	45.2%	45.6%	63.9%	65.7%	65.7%
EBITDAX Margin, without restructuring	39.2%	39.1%	40.6%	39.8%	42.9%	43.1%	43.9%	41.9%	41.2%	46.7%	44.9%	45.3%	63.7%	65.4%	65.4%
Net Margin, ex charges	28.5%	27.5%	29.3%	25.3%	30.1%	29.8%	30.4%	28.9%	28.5%	32.6%	31.3%	31.7%	45.4%	46.8%	46.8%
FCFF Margin	37.3%	29.4%	17.3%	23.6%	34.9%	27.6%	29.0%	27.8%	16.4%	20.7%	22.3%	22.6%	34.7%	39.4%	38.3%
ROIC (calculated with average balances) with Goodwill	61.2%	67.1%	67.9%	52.6%	55.4%	52.7%	50.3%	46.4%	37.7%	38.3%	32.4%	30.0%	42.1%	38.3%	37.9%
ROIC without Goodwill	72.7%	82.8%	94.0%	76.4%	78.5%	72.1%	66.8%	60.9%	48.1%	47.4%	39.6%	36.5%	50.7%	45.7%	45.1%
Normalized ROIC with Goodwill, 3 yr.	55.6%	61.7%	65.4%	62.5%	58.6%	53.6%	52.8%	49.8%	44.8%	40,8%	36.1%	33.6%	34.8%	36.8%	39.4%
Normalized ROIC without Goodwill, 3yr.	65.0%	73.8%	83.2%	84.4%	82.9%	75.7%	72.5%	66.6%	58.6%	52.1%	45.0%	41.2%	42.3%	44.3%	47.2%
Dividend Payout Ratio	0%	0%	0%	30.7%	24.4%	21.9%	20.9%	22.2%	24.4%	20.7%	23.2%	24.3%	15.1%	16.1%	16.1%
Dividend per Share Growth					3.3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Other Ratios Other Ratios				`			1								
Per-Share Amounts															
Revenue per Share	4.20	5.17	6.38	6.50	7.00	7.84	8.06	7.99	7.37	7.59	7.05	6.67	7.47	6.81	6.81
EBITDA per Share	1.65	2.02	2.59	2.55	3.00	3.38	3.54	3.35	3.03	3.54	3.17	3.02	4.76	4.45	4.45
Operating Income (EBIT) per Share	1.56	1.87	2.38	2.26	2,70	3.03	3.18	3.00	2.71	3.21	2.86	2.73	4.43	4.15	4.15
EBI per Share Operating Cash Flow per Share	1.32 1.37	1.80	1.98	1.90 2.12	2.28 2.70	2.27 2.56	2.39 2.76	2.25 2.67	2.03 1.94	2.41 2.28	2.14 2.27	2.05 2.21	3.32 3.31	3.11 3.43	3.11 3.38
Free Cash Flow (OCF - CapEx) per Share	1.37	1.57	1.95	1.77	2.48	2.23	2.40	2.07	1.52	1.83	1.78	1.68	2.74	2.81	2.72
FCFF per Share	1.57	1.52	1.10	1,53	2.45	2.17	2.34	2.22	1.21	1.57	1.57	1.51	2.59	2.68	2.61
Cash per Share (including excess cash)	4.12	3.39	3.19	4.04	4.99	6.69	8.57	10.35	11.11	12.24	13.14	14.20	16.35	18.70	20.64
Cash per Share (operating cash only)	0.28	0.30	0.32	0.33	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34
Net Cash per Share	4.12	3.39	3.19	3.41	4.32	6.04	7.93	9.70	10.47	11.59	12.72	13.78	15.93	18.17	20.33
Other Ratios															
Other Ratios															
Altman															
Working Capital/Total Assets	-0.11	-0.15	-0.17	-0.13	-0.12	-0.09	-0.08	-0.07	-0.02	0.02	0.04	0.06	0.07	0.07	0.07
Retained Earnings/Total Assets	-0.27	-0.47	-0.36	-0.29	-0.19	0.00	0.14	0.24	0.33	0.42	0.49	0.54	0.61	0.66	0.70
EBIT/Total Assets Market Value Equity/Total Liabilities	0.24	0.29	0.31	0.26	0.28	0.26 7.12	0.24 7.12	0.20 9.08	0.17 12.17	0.19 16.19	0.16 23.30	0.14 30.50	0.20 40.23	0.17 48.46	0.15 71.97
Book Value of Equity/Total Liabilities	1.36	0.97	0.99	1.03	1.16	1.55	1.98	2.39	3.39	4.82	7.15	9.50	13.45	16.90	25.83
Sales/Total Assets	0.64	0.81	0.83	0.75	0.73	0.68	0.60	0.52	0.46	0.44	0.39	0.34	0.34	0.28	0.25
Valuation															
FV/Earnings					15.9	14.0	13.2	14.5	16.0	13.6	15.2	15.9	9.9	10.6	10.5
FV EV/EBITDA					9.7	8.7	8.3	8.7	9.6	8.3	9.2	9.7	6.1	6.6	6.6
FV/FCFF					13.7	15.5	14.4	15.1	27.8	21.4	21.4	22.3	13.0	12.5	12.9
FV/Book FV/Sales					6.5 4.8	4.8 4.3	3.8 4.2	3.1 4.2	2.7 4.6	2.4 4.4	2.1 4.8	1.9 5.0	1.6 4.5	1.5 4.9	1.3 4.9
			•		4.0	4.3	4.2	4.2	4.0	4.4	4.6	0.0	4.3	4.9	4.9
Other Metrics	4.507	10.00	00.401	(0.000)	40.001	(0.000)	E 00'	(F.001)	(0 F0°)	10.401	(44.001)	(4.500)	(0.50)	(/ 001)	001
EBI Growth Rate EBITDA Growth Rate	1.5% 12.7%	10.3% 14.9%	22.6% 23.0%	(9.0%) (6.6%)	18.8% 16.8%	(0.2%) 12.6%	5.0% 4.8%	(5.9%) (5.4%)	(9.5%) (9.3%)	18.4% 16.8%	(11.0%) (10.6%)	(4.5%) (4.6%)	62.5% 57.6%	(6.3%) (6.5%)	0% 0%
Free Cash Flow (FCFF) Growth Rate	12.7%	(9.0%)	(30.5%)	32.1%	58.1%	(11.4%)	4.8% 7.8%	(5.4%)	(9.3%) (45.6%)	30.1%	(0.2%)	(4.6%)	72.0%	3.5%	(2.9%)
Free Cash Flow (CFO-capex) Growth Rate	(18.8%)	21.1%	18.7%	(13.6%)	38.8%	(9.9%)	7.6%	(4.8%)	(33.4%)	20.0%	(2.7%)	(5.5%)	63.0%	2.6%	(3.2%)
Return on New Invested Capital (RONIC)	1.5%	446.6%	47.0%	(55.6%)	(229.8%)	(40.5%)	151.9%	(707.6%)	(27.8%)	48.0%	(47.7%)	(23.9%)	276.1%	(58.2%)	(10.8%)
Investment Rate, includes acquisitions	(18.9%)	1.9%	44.4%	19.3%	(7.4%)	4.7%	2.2%	1.1%	40.5%	34.7%	26.7%	26.3%	22.0%	13.8%	16.3%
3-Year Average Investment Rate, includes acquisitions	(14.4%)	(12.1%)	9.1%	21.8%	18.7%	5.5%	(0.2%)	2.7%	14.6%	25.4%	34.0%	29.2%	25.0%	20.7%	17.4%
5-Year Average Investment Rate, includes acquisitions	(8.8%)	(5.8%)	0.6%	5.5%	7.9%	12.6%	12.6%	4.0%	8.2%	16.6%	21.0%	25.9%	30.0%	24.7%	21.0%



General Motors Co

S-1 Date Most Recent S-1/A Fair Value Uncertainty Economic Moat Industry Sector

08-18-2010 10-25-2010 44 USD High None Auto Manufacturers Industrials

We think GM shares are cheap.

by David Whiston, CFA, CPA, CFE Stock Analyst

Analysts covering this company do not own its stock.

Report updated on November 04, 2010.

Currency amounts expressed with "\$" are in U.S. dollars (USD) unless otherwise denoted.



Offer Date
Offer Price
Price Range
Shares Offered
Shares Outstanding

Selling Shareholders
United States Treasury
Department
Canada GEN Investment
Corporation
UAW Retiree Medical
Benefits Trust
Motors Liquidation
Company

Selling Shareholders

912,394,068
175,105,932
262,500,000
150,000,000

Underwriters

Morgan Stanley & Co. Incorporated J.P. Morgan Securities LLC BofA Merrill Lynch Citigroup Global Markets Inc. Barclays Capital Inc. Credit Suisse Securities (USA) LLC Deutsche Bank Securities Inc. Goldman, Sachs & Co. RBC Capital Markets Corporation

Post-IPO Shareholders

Thesis Nov. 04, 2010

Although the "Government Motors" stigma is likely to hang over General Motors Company for years, we think GM's car models have their best quality and design in decades. The company is already a leader in truck models so a fully competitive lineup, combined with a much smaller cost base, leads us to think that GM will be printing money as vehicle demand recovers.

We think GM's earnings potential is excellent because the firm finally has a healthy North American unit, and can focus its U.S. marketing efforts on four brands instead of eight. The most critical cost-saving measure was setting up a voluntary employees' beneficiary association for the retiree health care costs of the United Auto Workers. This move saves GM about \$3 billion a year, and other wage and benefit concessions have drastically lowered GM's North American break-even point to about 10.5 million to 11 million vehicles. The actual point varies based on mix and incentive levels. We think normative demand for U.S. light vehicles is about 16 million to 17 million units, so we expect GM to report excellent earnings growth as vehicle demand comes back over the next few years.

Pramatically better pricing has helped GM be profitable at volume levels that would have meant billions in losses a few years ago. The new Buick LaCrosse, for example, sells for about \$7,800 more per unit compared with 2009. Simply put, GM makes products that consumers are willing to pay more for than they once did. GM no longer has to overproduce to attempt to cover high labor costs, and then dump cars into rental fleets (which hurts residual values). It now operates in a demand-pull model, where it can produce only to meet demand, and is structured to break even at the bottom of an economic cycle. We think the largest threat to profitability is Europe, which has been losing money for a long time. The S-1 gives planned GM Europe capacity reduction and annual labor cost reduction targets of 20% and \$323 million, respectively.

GM stockholders have to consider politics as long as the U.S. Treasury, Canadian and Ontario governments, and an affiliate of the UAW own targe amounts of GM stock. We think this ownership will be an overhang on the stock for some time, since the U.S. government is likely to sell off its stake gradually in order to get the highest possible share price to get its money back. We also expect the VEBA to reduce its stake over time, since it needs to monetize its holdings to pay retiree health-care claims. Although these concerns are valid, we see them as short-term issues. We think the company is about to see the upside to having a high degree of operating leverage.

GM repaid all of its government loan obligations in April, so long-term debt, excluding preferred stock at June 30, was just \$2.6 billion, mostly from balances on credit lines or international operations. In October, GM announced a new \$5 billion secured credit line, but expects it will remain generally undrawn. It also said it paid off the \$2.8 billion VEBA note obligation, which was in short-term debt. We like this move since it is a gesture of good faith with the UAW, and the new credit facility probably has a much lower interest rate than the implied 9% rate on the VEBA notes. Including short-term debt, we calculate annualized debt/EBITDA for the first half of 2010 to be 0.56 times, versus our calculation of 2.38 times for Ford's automotive segment. Preferred stock is now part of the capital structure, and including the nearly \$7 billion of Series A preferred stock at June 30, gives a debt/equity ratio of 0.63. In October, GM announced that, after the IPO, it will redeem all of the \$2.1 billion of the U.S. Treasury's Series A preferred shares. GM also has large underfunded pension and other postemployment benefits balances at June 30 of \$26.4 billion and \$9.3 billion, respectively. GM said that, after the IPO, it will fund the pension with \$4 billion in cash and \$2 billion in GM common stock. We have assumed this stock will be issued at \$27.50 per share in our valuation model, which is about 72.7 million shares.

The share structure of GM is common stock and two series of preferred stock. The current ownership of the 1.5 billion shares of outstanding common stock is 60.8% to

General Motors Co

S-1 Date	Most Recent S-1/A	Fair Value	Uncertainty	Economic Moat	[™] Industry	Sector
08-18-2010	10-25-2010	44 USD	High	None	Auto Manufacturers	Industrials

Close Competitors	Morningstar Rating	P/E Ratio	Market Cap
General Motors Co	_	_	_
Ford	***	8.41	48.6 B
Toyota	***	18.84	110.4 B
Honda	***	9.98	65.2 B

Morningstar data as of November 04, 2010.

the U.S. Treasury, 17.5% to the VEBA, 11.7% to an entity controlled by the governments of Canada and Ontario, 10% to Motors Liquidation Company. Approximately another 318.2 million common shares can be issued via warrants to Motors Liquidation and the VEBA. Per GM's S-1, the warrant exercise breaks out as follows: Motors Liquidation can acquire about 136.36 million shares of GM common stock at a \$10 per share strike price any time before July 10, 2016, and it can acquire anothe approximately 136.36 million shares at a \$18.33 per share strike price any time before July 10, 2019. The VEBA can acquire about 45.45 million shares of GM common stock any time before Dec. 31, 2015, at a strike price of \$42.31 per share. Motors Liquidation also may receive up to 30 million more common shares (the adjustment shares) depending on the amount of general unsecured claims gainst it exceeding \$35 billion, as estimated by a bankruptcy judge. GM has already determined that at least 8.6 million more shares will probably be issued to Motors Liquidation under this arrangement, which is a purchase price adjustment for the 363 sale to allow GM to emerge from old GM's Chapter 11. We calculate that as many as 23 million shares may be issued to management to settle restricted stock units already awarded. Our calculations put the maximum number of common shares at about 1.944 billion. Before old GM became distressed, its diluted share count was 1.698 billion after adjusting for new GM's 3 for 1 common stock split announced in November 2010

The 9.0% Series A preferred stock is recorded at just under \$7 billion as of June 30. but is redeemable at \$9

billion (360 million shares times \$25 per share liquidation value). The value will be less shortly after the IPO, since GM plans to redeem all of the U.S. Treasury's Series A for \$2.1 billion. Per the S-1, 260 million of the Series A shares are held by the VEBA, about 83.9 million by the U.S. Treasury, and about 16.1 million by an entity controlled by the Canadian and Ontario governments. The dividends are cumulative, and the preferred shares also prohibit a common share cash dividend unless all accrued and unpaid preferred dividends have been paid.

The IPO introduces a new class of mandatory convertible junior preferred shares (Series B). The Series B preferred shares are not redeemable, but will be convertible into GM common stock. The exact conversion rate and dividend has not been determined, and the S-1 indicates a mandatory conversion sometime in 2013. Neither class of preferred stock has voting rights except for issues relating to changes in the terms of the preferred share class.

IPO Motivation

GM is going public in order for the stakeholders who supported the bankruptcy to start monetizing their investment. The largest stakeholder is the U.S. Treasury, which owns 60.8% of the common equity. Depending on the overallotment, the Treasury will own between 43.26% and 40.62% of the common stock after the IPO.

Valuation

Our preliminary fair value estimate for General Motors Company is \$44 per share after factoring in the 3 for 1 common stock split. The Series A preferred were not split. We are modeling \$3 billion of Series B preferred stock to be issued.

Total industry North American light-vehicle production is a critical input to our valuation. We have long believed that



General Motors Co

S-1 Date Most Recent S-1/A Fair Value Uncertainty Economic Moat Most Industry Sector

08-18-2010 10-25-2010 44 USD High None Auto Manufacturers Industrials

2009 volume was well below normative levels of demand. We model 2011 North American production of 13 million units, and then 18.5 million in 2012. We model operating margins peaking at 11% in 2012, with the critical midcycle operating margin in the last year of our explicit forecast period at 9.5%. We model capital expenditures at 5.5% of revenue, on average. We model GM Financial at AmeriCredit's June 30 book value, but have made no other adjustments for possible future captive finance expansion. Our weighted average cost of capital is 10%, and we are deducting \$9.9 billion in preferred stock from our common stock valuation. Our diluted share count is about 1.944 billion to reflect additional shares from warrants, restricted stock units, and equity issuances to fund the pension.

Our base and upside scenarios model 2011 volume higher than 2010, as well as a dramatic increase in 2012, as the industry absorbs pent-up demand. The base case forecasts peak North American light-vehicle production of 18.5 million, while the upside (\$69 fair value) models 20 million, and a midcycle margin of 11.5% compared with 9.5% in the base case. The base-case U.S. market share is forecast to gradually decline to 17.5% by year five of our forecast period. The downside fair value of \$13 models a much slower rate of recovery in volume, market share falling below 17% by year five, and a midcycle operating margin of 7%.

Our fair value estimate could change dramatically because of the extreme sensitivity of our discounted cash-flow model to key inputs such as North American light-vehicle production, midcycle margin, and the WACC. Our fair value estimate declines 27.2% to \$32 if we raise the WACC to 10.5%, lower the midcycle margin 100 basis points, and lower our year-five North American production figure by 1 million units. Our fair value uncertainty is high, to account for the wide possibilities in GM's fair value, given its high degree of operating leverage.

Risk

The biggest risk to GM would be a scenario where too many Americans refuse to buy its vehicles because of animosity over the taxpayer-financed bailout, and the government's continued ownership of the company. If sales were to decline for many years, GM would probably go bankrupt. We consider the likelihood of this scenario occurring to be nearly zero. GM can break even at ear-depression-like sales volume, and it is selling more units in the U.S. with four brands than old GM did with eight brands in 2009. Another risk comes from GM disclosing it has a material weakness in its internal controls over financial reporting. This issue has been a problem for several years now. Although we think that GM is close to correcting the deficiency, poor internal controls raise the inherent risk for problems, such as a material restatement of results due to error or fraud. Another important risk is GM's underfunded pension. The plan was underfunded by \$26.4 billion as of June 30. Management does not expect to be forced to make a material contribution until 2014, but that assertion is only an estimate. On Oct. 28, GM announced that, after the IPO, it will contribute \$4 billion in cash to the pension, and another \$2 billion in GM stock.

Bulls Say

- GM's break-even point is drastically lower than it was under old GM. The company's earnings should grow rapidly as vehicle sales rebound from 2009 levels.
- The VEBA saves GM billions of dollars in cash every year.
- New models such as the Buick LaCrosse have been very successful. GM can charge thousands of dollars more per vehicle than it used to in certain vehicle segments. Higher prices allow GM to achieve greater margin per vehicle, which helps mitigate the severe decline in light-vehicle sales.
- Models such as the Chevrolet Malibu and Chevrolet



General Motors Co

S-1 Date Most Recent S-1/A Fair Value Uncertainty Economic Moat Industry Sector
08-18-2010 10-25-2010 44 USD High None Auto Manufacturers Industrials

Cruze show that GM can make a vehicle to compete directly with the car models produced by Japanese and European automakers.

 GM already is a top player in critical emerging markets such as Brazil and China. It sells about 70% of its vehicles outside North America.

Bears Sav

- The cadence of a recovery in global vehicle demand is very uncertain.
- The collective bargaining agreement with the UAW expires in September 2011. Although the UAW has agreed not to strike, it is still looking to get back some of what it gave up during the bankruptcy.
- The U.S. auto market is becoming more crowded each year. Hyundai and Volkswagen are likely to capture more share over time from existing players such as GM
- Some American consumers will never buy another GM vehicle because of their anger over GM receiving taxpayer loans.

Financial Overview

Growth: We are very optimistic about GM's growth prospects. As U.S. light-vehicle demand keeps improving from what we believe was the bottom in 2009, we see the firm posting over a 9% revenue compound annual growth rate over our five-year explicit forecast period.

Profitability: As global light-vehicle demand recovers, we expect GM's earnings to grow considerably, thanks to a dramatically lower cost base than old GM. We model return on invested capital to peak at nearly 21% before coming down to about 13% at the end of our forecast period.

Financial Health: GM's balance sheet and liquidity remains

very strong at June 30, apart from \$35.7 billion in underfunded pension and OPEB obligations. Cash and investments was \$31.5 billion, and available credit lines (including a new \$5 billion secured facility announced in October) provide another \$6.1 billion in funds if needed. Pro forma liquidity at June 30 was about \$24 billion. GM's S-1 stated that the company does not expect a material mandatory pension contribution until 2014, and we think the planned \$6 billion pension funding after the IPO helps mitigate that risk.

Company Overview

Profile: General Motors Company emerged from the bankruptcy of General Motors Corporation (old GM) in July 2009. GM has 12 brands and operates under three egments: General Motors North America, General Motors Europe, and General Motors International Operations. The United States now has four brands (Chevrolet, GMC, Buick, and Cadillac) instead of eight under old GM. The company remains the market leader in the U.S. with about 19% share.

Strategy: GM seeks to have the best vehicles in every segment it competes in. The company's traditional strength is in pickups and sport-utility vehicles, but it now also makes car models such as the Chevrolet Cruze that can go head to head with the volume import brands. Taking back lost car segment market share is critical to GM's success, especially if gas prices return to 2008 levels.

Management: GM's leadership has undergone tremendous change during the restructuring. CEO and soon-to-be chairman Dan Akerson is already the third CEO since the company emerged from old GM's bankruptcy. Akerson is a telecommunications veteran, and was at the Carlyle Group before becoming CEO. CFO Chris Liddell joined GM in January following his tenure as CFO of Microsoft. Liddell



General Motors Co

S-1 Date Most Recent S-1/A Fair Value Uncertainty Economic Moat Industry Sector

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was also CFO of International Paper. The board has also changed dramatically from old GM, with two thirds of its members new to the company, and we see only vice chairman Steve Girsky having significant prior automotive experience. Girsky was appointed to the board by the VEBA.

Although one can question this lack of automotive experience, we think the industry outsiders are qualified to do their jobs. All of these individuals have extensive experience in other industries, and are not novices when is comes to making hard decisions. We like having new leadership, since it removes any element of the arrogand and resistance to change that hindered the old regime, in our opinion. Furthermore, we think critics do not understand that the capable junior executives at GM are all auto industry veterans. We see GM now having leadership composition similar to Ford. Ford is run le auto outsider. Alan Mulally, who is supported by several auto veterans such as CFO Lewis Booth, marketing chief Jim Farley, who earned his stripes at Toyota, and president of the Americas Mark Fields. This structure has worked very well at Ford. We think it can work well at GM too, provided that Akerson has the right vision. Still, we have to give GM a low grade because of the significant influence exerted by the VEBA and U.S. Treasury, and for not separating the CEO and chairman roles.

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Morningstar's Approach to Rating Stocks

Our Key Investing Concepts

- Economic Moat[™] Rating
- ► Discounted Cash Flow
- ► Discount Bate
- ► Fair Value
- Uncertainty
- Margin of Safety
- Consider Buying/Consider Selling
- ► Stewardship Grades

At Morningstar, we evaluate stocks as pieces of a business, not as pieces of paper. We think that purchasing shares of superior businesses at discounts to their intrinsic value and allowing them to compound their value over long periods of time is the surest way to create wealth in the stock market.

We rate stocks 1 through 5 stars, with 5 the best and 1 the worst. Our star rating is based on our analyst's estimate of how much a company's business is worth per share. Our analysts arrive at this "fair value estimate" by forecasting how much excess cash--or "free cash flow"--the firm will generate in the future, and then adjusting the total for timing and risk. Cash generated next year is worth more than cash generated several years down the road, and cash from a stable and consistently profitable business is worth more than cash from a cyclical or unsteady business.

Stocks trading at meaningful discounts to our fair value estimates will receive high star ratings. For high-quality businesses, we require a smaller discount than for mediocre ones, for a simple reason. We have more confidence in our cash-flow forecasts for strong companies, and thus in our value estimates. If a stock's market price is significantly above our fair value estimate, it will receive a low star rating, no matter how wonderful we think the business is. Even the best company is a bad deal if an investor overpays for its shares.

Our fair value estimates don't change very often, but market prices do. So, a stock may gain or lose stars based

just on movement in the share price. If we think a stock's fair value is \$50, and the shares decline to \$40 without much change in the value of the business, the star rating will go up. Our estimate of what the business is worth hasn't changed, but the shares are more attractive as an investment at \$40 than they were at \$50.

Because we focus on the long-term value of businesses, rather than short-term movements in stock prices, at times we may appear out of step with the overall stock market. When stocks are high, relatively few will receive our highest rating of 5 stars. But when the market tumbles, many more will likely garner 5 stars. Although you might expect to see more 5-star stocks as the market rises, we find assets more attractive when they're cheap.

We calculate our star ratings nightly after the markets close, and issue them the following business day, which is why the rating date on our reports will always be the previous business day. We update the text of our reports as new information becomes available, usually about once or twice per quarter. That is why you'll see two dates on every Morningstar stock report. Of course, we monitor market events and all of our stocks every business day, so our ratings always reflect our analyst's current opinion.

Economic Moat[™] Rating

The Economic MoatTM Rating is our assessment of a firm's ability to earn returns consistently above its cost of capital in the future, usually by virtue of some competitive advantage. Competition tends to drive down such

Morningstar Research Methodology for Valuing Companies

Competitive Analysis

⊂ Economic Moat[™]Rating







An uncertainty



Analyst conducts company and industry research:

- Management interviews
- Conference calls
- Trade-show visits
- Competitor, supplier, distributor, and customer interviews

The depth of the firm's competitive advantage is rated:

- NoneNarrow
- Wide

Analyst considers company financial statements and competitive position to forecast future cash flows

Assumptions are input into a discounted cash-flow

DCF model leads to the firm's Fair Value Estimate, which anchors the rating

framework.

assessment
establishes the
margin of
safety required for
the stock rating.



The current stock price relative to fair value, adjusted for uncertainty, determines the rating.



economic profits, but companies that can earn them for an extended time by creating a competitive advantage possess an Economic Moat. We see these companies as superior investments.

Discounted Cash Flow

This is a method for valuing companies that involves projecting the amount of cash a business will generate in the future, subtracting the amount of cash that the company will need to reinvest in its business and using the result to calculate the worth of the firm. We use this technique to value nearly all of the companies we cover.

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This is the discount to fair value we would require before recommending a stock. We think it's always prudent to buy stocks for less than they be worth. The margin of safety is like an insurance policy that protects investors from bad news or everly optimistic fair value estimates. We require larger margins of safety for less predictable stocks, and smaller margins of safety for more predictable stocks.

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We evaluate the commitment to shareholders demonstrated by each firm's board and management team by assessing transparency, shareholder friendliness, incentives, and ownership. We aim to identify firms that provide investors with insufficient or potentially misleading financial information, seek to limit the power of minority shareholders, allow management to abuse its position, or which have management incentives that are not aligned with the interests of long-term shareholders. The grades are assigned on an absolute scale--not relative to peers--and can be interpreted as follows: A means "Excellent," B means "Good," C means "Fair," D means "Poor," and F means "Very Poor."



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S-1 Date: This is the day the firm first filed documents with the SEC usually under form S-1, but sometimes F-1, S-11, or SB-2 to start the process of issuing shares to the public. This document is then amended over time (S-1/A) as new information becomes available leading up to the offering.

Offer Date: This is the day the company expects the IPO to occur, and it is subject to change. If the IPO has already occurred, this was the first day the shares were traded by the public.

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across the country to talk about the firm and determine large investors' interest in buying its stock. The level of interest expressed by these investors determines at what price and in what amount the shares are offered.

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Shares Offered: The number of shares sold to the public.

Selling Shareholders: In most offerings, the firm itself will be issuing new shares to the public. Sometimes insiders sell existing shares at the IPO as well. This list includes all selling shareholders and the shares each is offering.

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Post-IPO Shareholders: We list all major shareholders and executives here with the number of shares they continue to hold after the offering. Comparing these figures with the total number of shares outstanding and the number of shares each party sold at the offering often provides clues regarding the incentives and motivation of the people who will have the biggest influence over the firm's success.

Lockup Period: During the lock-up period, certain existing shareholders agree not to sell their shares. The amount of shares subject to lockup and the date the lockup expires is important because the stock price can fall dramatically if insiders sell a large portion of their shares simultaneously.





Higher One Holdings, Inc. ONE [NYSE] | ***

Last Price **Fair Value Consider Buy** Consider Sell Uncertainty **Economic Moat** Stewardship Morningstar Credit Rating Industry 19.71 USD 50.00 USD С 25 00 USD 12 50 USD High **Business Services** None

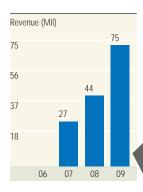
Higher One's business model should generate superior returns over the next several years.

by Michael Gaiden, CFA, CPA Stock Analyst

Analysts covering this company do not own its stock.

Pricing data through November 18, 2010. Rating updated as of November 18, 2010.

Currency amounts expressed with "\$" are in U.S. dollars (USD) unless otherwise denoted.



Offer Date	06-17-2010
Offer Price	12.00
Price Range	15.00 - 17.00

Underwriters

Lead Goldman, Sachs & Co. Co-Manager UBS Securities LLC Co-Manager Piper Jaffray & Co. Co-Manager Raymond James &

Co-Manager William Blair & Company, L.L.C.

Co-Manager JMP Securities LLC

 Shares Offered
 9 000,000

 Shares Outstanding
 56,071,499

 Shares Subject to Lock-up
 45,916,498

 Date of Lock-up Release
 12-14-2010

Selling Shareholders

Issuer Higher One Holdings
Investor Lightyear Capital
Investor Hanseatic Americas LDC
Investor Club Circle Partners

Thesis Jun. 29, 2010

Higher One is a juggernaut in college payment processing, and its differentiated offering should produce strong growth and healthy economic returns for the company and its shareholders for years to come.

Targeting postsecondary educational institutions and students, Higher One offers technology-based transaction and banking services. We think its offerings are particularly compelling because of their potential to increase convenience and speed for students as well as reduce cost and risk for universities. The company's core institutional offering automates tuition billing and payment as well as financial aid disbursement--a high-value proposition in an area that continues to be dominated by manually intensive business processes. Higher One uses its incumbent position serving a given college with convenient on-campus banking services, allowing students to make or receive payments or request money online. Fees related to the firm's banking offering compose roughly 80% of Higher One's revenue.

We like the firm's business model and see a strong market opportunity for its products. Higher One generates a significant amount of recurring revenue in the form of ongoing banking fees and long-term software agreements, which helps lower the volatility of its operations. The technology-centric nature of the business creates low capital needs and helped generate an 80% return on invested capital in 2009. We also think Higher One's target market looks ripe for continued adoption of the firm's unique services, reinforcing our optimistic growth forecast. College institutions are increasingly seeking to trim costs from budgets strained by weakened state budgets and endowments. Furthermore, we believe students and their parents want easy, proven banking services centered on transparency to address the unique needs of young adult college attendees.

While the overall backdrop for Higher One is positive, the firm faces a few risks. Transaction processors and banks may compete directly with Higher One in the coming years, attracted by the company's strong economic returns. Additionally, this upstart entrepreneurial venture faces operational and strategic challenges as it grows in size and maturity.

Despite these risks, we feel confident that Higher One can generate strong results for the next several years. We believe its consistent 60%-80% annual revenue growth over each of the past four years, along with a 97% customer retention rate since 2003, speaks volumes about the value-add and likely longevity of its overall service offering.

IPO Motivation

Higher One will use the approximately \$50 million of gross primary proceeds to repay an \$11 million line of credit, settle \$8 million of postclosing costs related to its 2009 CASHNet acquisition, and beef up funds available for general corporate purposes.

IPO Supply and Demand

Higher One offered 9 million shares at \$12 each, significantly below its stated offer range of \$15-\$17 per share. However, shares have rebounded on the secondary market, reaching more than \$15 in the weeks since the IPO.

Valuation, Growth and Profitability

Our fair value estimate is \$25 per share. We assume revenue growth will decelerate from its torrid pace of more than 100% expected in 2010 to around 20% by 2014 as the business matures. We estimate that these projections roughly equate to the firm achieving a 50% institutional market share 10 years forward. Our model also incorporates a 20% step-down in revenue per account beginning in 2011 as a result of looming regulations that threaten to reduce debit card interchange

Higher One Holdings, Inc. ONE [NYSE] | ***

Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat [™]	Stewardship	Morningstar Credit Rating	Industry
19.71 USD	25.00 USD	12.50 USD	50.00 USD	High	None	С	_	Business Services

Close Competitors	Currency(Mil)	Market Cap	TTM Sales	Oper Income	Net Income
Higher One Holdings, Inc.	USD	1,101	127	36	21
Wells Fargo Company	USD	144,393	86,412	_	8,794
U.S. Bancorp	USD	47,977	17,597	_	2,961
Nelnet, Inc.	USD	1,056	774	_	163

Morningstar data as of November 18, 2010.

and bounced check fees. We estimate Higher One's operating margin will expand from 30% currently to roughly 35% by the fifth year of our forecast on the basis of economies of scale that should drive 70% incremental gross margins. We have assigned Higher One a high uncertainty rating, and we estimate a cost of equity of 10.5% for the firm.

Risk

Higher One will probably face increasing competitive pressure over the long term from banks and payment processors anxious to gain the attractive economic returns currently enjoyed by the company. The firm also faces secondary risks related to the potential breach of confidential client information, system failures, and integration issues related to the 2009 purchase of CASHNet.

Bulls Say

- Higher One's business model results in regularly recurring revenue in the form of banking and software fees from the rather noncyclical higher education market.
- Higher One generates attractive economic profits with 50%-plus returns on invested capital expected for years to come.
- Higher One has increased sales 60%-80% in each of the past three years and is on pace for similar expansion through the first guarter of 2010.

Bears Sav

- Intense competition looms from banks and technology firms, which could temper returns and growth prospects.
- Higher One has a limited record as a large national service provider.
- Like all upstart entrepreneurial ventures, Higher One will face new operational and strategic challenges as its business grows.

Financial Overview

Financial Health. Higher One has sound financial health anchored by its zero net debt position, roughly 30% operating margins, and strong free cash flow representing 90%-100% of operating profit in each of the past three years.

Company Overview

Profile: Higher One provides technology-based payment services to the higher education industry and related banking services to college students. Founded in 2000, the firm has experienced rapid growth since inception and now serves more than 400 campuses and 1.2 million bank account holders.

Management: We think Higher One has a fair corporate stewardship profile. It has a veteran team of senior managers with solid financial services and technology industry experience, led by president and CEO Dean Hatton and chairman and CFO Mark Volcheck. Higher One also boasts a notable private equity backer, Lightyear Capital, founded by Donald Marron, a key architect behind building PaineWebber and its eventual sale to UBS in 2000. Lightyear's other notable portfolio firms include Collegiate Funding Services, a firm providing student loans that was sold to J.P. Morgan Chase for about \$660 million in 2006. From a stewardship perspective, we have a slight



Higher One Holdings, Inc. ONE [NYSE] | ***



Disclaimers & Disclosures

No Morningstar employees are officers or directors of this company. Morningstar Inc. does not own more than 1% of the shares of this company. Analysts covering this company do not own its stock. The information contained herein is not represented or warranted to be accurate, correct, complete, or timely. This report is for information purposes only, and should not be considered a solicitation to buy or sell any security.



Services

Sector Business Services

YTD

TTM

127

66.6

28.0

21

0.35

1.31

TTM

20.1

29.4

16.9

1.19

1.5

27

TTM

56.2 3.7

9.5

15.1

09-10

36 -7

36

Financials

Revenue USD Mil Gross Margin %

Oper Income USD Mil

Operating Margin %

Net Income USD Mil

Dividends USD

Shares Mil

Profitability

Earnings Per Share USD

Book Value Per Share USD

Oper Cash Flow USD Mil

Cap Spending USD Mil

Return on Assets %

Return on Equity %

Net Margin %

Asset Turnover

Financial Health

Financial Leverage

Working Capital USD Mil

Long-Term Debt USD Mil

Total Equity USD Mil Debt/Equity

Valuation Price/Earnings

P/E vs. Market

Price/Cash Flow

Price/Sales Price/Book

Free Cash Flow USD Mil

2009

67.6

30.0

0.27

14

53

21

-2

18

2009

39.3

18.8

2.09

8.3

2009

-30

0

7

2009

23

63.0

22.6

0.00

10

-2

8

2008

46.7

14.5

3.22

2008

19

-12

2008

10

6

76

Stock Performance

Total Return %
+/- Market
+/- Industry
Dividend Yield %

Market Cap USD Mil

Higher One Holdings, Inc. ONE

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Economic Moat[™] **Morningstar Rating Last Price Fair Value** Uncertainty Stewardship Grade per share prices in USD Annual Price High Recent Splits Price Volatility Monthly High/Low
- Rel Strength to S&P 500 52 week High/Low 21.58 - 10.79 10 Year High/Low 4.0 21.58 - 10.79 Bear-Market Rank 0 (10=worst) Trading Volume Thousand

2006

2006

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2006

2006

2006

2007

2007

2007

2007

Sales USD Mil Mkt Cap USD Mil Industry

25 Science Park New Haven, CT 06511

Phone: 1 203 776-7776Website: http://www.higherone.com/

2000

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05

1 Yr	3 Yr	5 Yr	10 Yr
			10 11
71.6	_		_
127.9	_	_	_
_	_	_	_
_	_	_	_
_	_	_	_
_	_	_	_
	_		_
	_		_
	,	, 1.0	, 1.0

Profitability Analysis				
Grade:	Current	5 Yr Avg	Ind	Mkt
Return on Equity %	29.4	_	2.6	22.3
Return on Assets %	20.1	_	0.9	8.6
Fixed Asset Turns	14.2	_	7.9	7.1
Inventory Turns	_	_	31.5	13.9
Revenue/Employee USD K	334.3	*	_	872.1
Gross Margin %	66.6		36.4	39.7
Operating Margin %	28.0	_	11.9	14.3
Net Margin %	16.9		1.2	9.6
Free Cash Flow/Rev %	23.0		10.2	0.1
R&D/Rev %	2.5		-	10.0
Place and the Library School				

Financial Position		
Grade: A	12-09 USD Mil	09-10 USD Mil
Cash	3	22
Inventories	_ \	
Receivables	6	8
Current Assets	14	57
Fixed Assets	4	9
Intangibles	37	35
Total Assets	59	107
Payables	12	11
Short-Term Debt	18	0
Current Liabilities	44	30
Long-Term Debt	0	_
Total Liabilities	52	34
Total Equity	7	73

Valuation Analysis				
	Current	5 Yr Avg	Ind	Mkt
Price/Earnings	56.2	_	13.8	15.3
Forward P/E	27.6	_	_	14.1
Price/Cash Flow	33.2	_	12.0	7.8
Price/Free Cash Flow	41.1	_	15.4	15.7
Dividend Yield %	_	_	1.3	1.8
Price/Book	15.1	_	3.3	2.1
Price/Sales	9.5	_	1.6	1.3
PEG Ratio	1.0	_	_	1.6

*3Yr Avg data is displayed in place of 5Yr Avg

				-
				_
Quarterly Results				
Revenue USD Mil	Dec 09	Mar 10	Jun 10	Sep 10
Most Recent Period	25.3	37.6	26.9	37.2
Prior Year Period	_	17.2	12.5	20.5
Rev Growth %	Dec 09	Mar 10	Jun 10	Sep 10
Most Recent Period	_	117.9	116.2	81.6
Prior Year Period	_	_	_	_
Earnings Per Share USD	Dec 09	Mar 10	Jun 10	Sep 10
Most Recent Period	0.10	0.15	0.03	0.11
Prior Year Period	_	0.00	0.01	0.09

Industry Peers by Market Cap						
Mkt C	ap USD Mil	Rev USD Mil	P/E	ROE%		
Higher One Holdings,	1101	127	56.2	29.4		
Wells Fargo Company	144393	86412	12.0	8.6		
U.S. Bancorp	47977	17597	16.3	11.6		
Major Fund Holders	· .					

Major Fund Holders	
	% of shares
Lord Abbett Developing Growth A	0.94
Fidelity Advisor Equity Growth I	0.75
TIAA-CREF Mid-Cap Growth Retire	0.51

TTM data based on rolling quarterly data if available; otherwise most recent annual data shown



Morningstar's Approach to Rating Stocks

Our Key Investing Concepts

- Economic Moat[™] Rating
- ► Discounted Cash Flow
- ► Discount Bate
- ► Fair Value
- Uncertainty
- Margin of Safety
- Consider Buying/Consider Selling
- ► Stewardship Grades

At Morningstar, we evaluate stocks as pieces of a business, not as pieces of paper. We think that purchasing shares of superior businesses at discounts to their intrinsic value and allowing them to compound their value over long periods of time is the surest way to create wealth in the stock market.

We rate stocks 1 through 5 stars, with 5 the best and 1 the worst. Our star rating is based on our analyst's estimate of how much a company's business is worth per share. Our analysts arrive at this "fair value estimate" by forecasting how much excess cash--or "free cash flow"--the firm will generate in the future, and then adjusting the total for timing and risk. Cash generated next year is worth more than cash generated several years down the road, and cash from a stable and consistently profitable business is worth more than cash from a cyclical or unsteady business.

Stocks trading at meaningful discounts to our fair value estimates will receive high star ratings. For high-quality businesses, we require a smaller discount than for mediocre ones, for a simple reason. We have more confidence in our cash-flow forecasts for strong companies, and thus in our value estimates. If a stock's market price is significantly above our fair value estimate, it will receive a low star rating, no matter how wonderful we think the business is. Even the best company is a bad deal if an investor overpays for its shares.

Our fair value estimates don't change very often, but market prices do. So, a stock may gain or lose stars based

just on movement in the share price. If we think a stock's fair value is \$50, and the shares decline to \$40 without much change in the value of the business, the star rating will go up. Our estimate of what the business is worth hasn't changed, but the shares are more attractive as an investment at \$40 than they were at \$50.

Because we focus on the long-term value of businesses, rather than short-term movements in stock prices, at times we may appear out of step with the overall stock market. When stocks are high, relatively few will receive our highest rating of 5 stars. But when the market tumbles, many more will likely garner 5 stars. Although you might expect to see more 5-star stocks as the market rises, we find assets more attractive when they're cheap.

We calculate our star ratings nightly after the markets close, and issue them the following business day, which is why the rating date on our reports will always be the previous business day. We update the text of our reports as new information becomes available, usually about once or twice per quarter. That is why you'll see two dates on every Morningstar stock report. Of course, we monitor market events and all of our stocks every business day, so our ratings always reflect our analyst's current opinion.

Economic Moat[™] Rating

The Economic MoatTM Rating is our assessment of a firm's ability to earn returns consistently above its cost of capital in the future, usually by virtue of some competitive advantage. Competition tends to drive down such

Morningstar Research Methodology for Valuing Companies

Competitive Analysis

⊂ Economic Moat[™]Rating







An uncertainty



Analyst conducts company and industry research:

- Management interviews
- Conference calls
- Trade-show visits
- Competitor, supplier, distributor, and customer interviews

The depth of the firm's competitive advantage is rated:

- NoneNarrow
- Wide

Analyst considers company financial statements and competitive position to forecast future cash flows

Assumptions are input into a discounted cash-flow

DCF model leads to the firm's Fair Value Estimate, which anchors the rating

framework.

assessment
establishes the
margin of
safety required for
the stock rating.



The current stock price relative to fair value, adjusted for uncertainty, determines the rating.



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Caution is always warranted when assessing IPOs. As Warren Buffett once pointed out, "It's almost a mathematical impossibility that, out of the thousands of things for sale on a given day, the most attractively priced is the one being sold by a knowledgeable seller." That's why we employ our traditional analysis, including an assessment of economic moat, business risk, and required margin of safety, as well as IPO-specific research to dig through the chatter and establish a reasonable fair value estimate.

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Morningstar® Stock Data Sheet Pricing data thru Jan. 18, 2011 Rating updated as of Jan. 18, 2011 Fiscal year-end: June

Microsoft Corporation MSFT

Microsoft develops the Windows operating system and the Office suite of productivity software. Windows and Office account for roughly 56% of Microsoft's revenue, with another 24% coming from software for enterprise servers. The firm's other businesses include the Xbox 360 video game console, Bing Internet search, business software, and software for mobile devices.

One Microsoft Way Redmond, WA 98052

Phone: 1 425 882-8080 Website: http://www.microsoft.com

Growth Rates Compo	und Annual			
Grade: B	1 Yr	3 Yr	5 Yr	10 Yr
Revenue %	6.9	6.9	9.4	10.5
Operating Income %	18.3	9.2	10.6	8.1
Earnings/Share %	29.6	13.9	13.4	9.5
Dividends %	4.0	10.1	10.2	_
Book Value/Share %	20.0	17.1	3.6	3.1
Stock Total Return %	-5.3	-2.9	2.9	4.6
+/- Industry	-15.3	-6.0	-5.1	1.2
+/- Market	-19.3	-2.1	2.6	5.1
Profitability Analysis				

B 65 1205 A 1 1				
Profitability Analysis				
Grade: A	Current	5 Yr Avg	Ind	Mkt
Return on Equity %	46.7	40.5	11.3	21.9
Return on Assets %	23.8	21.5	5.8	8.5
Fixed Asset Turns	8.6	11.7	9.2	7.2
Inventory Turns	10.6	11.7	17.6	14.0
Revenue/Employee USD K	738.9	664.8*	_	886.1
Gross Margin %	80.7	80.4	77.2	39.4
Operating Margin %	40.7	36.8	33.2	14.3
Net Margin %	31.3	28.0	9.3	9.5
Free Cash Flow/Rev %	36.6	30.5	29.0	0.1
R&D/Rev %	13.4	0.1	-	9.9
mr 1 1 m 1.1				

K&D/KeV %	13.4	0.1	3.9
Financial Position		- 7	
Grade: A	06-10	USD Mil	09-10 USD Mil
Cash		5505	8161
Inventories	•	740	1242
Receivables		13014	9646
Current Assets		55676	59581
Fixed Assets		7630	7771
Intangibles		13552	135 48
Total Assets		86113	91540
Payables		5281	6699
Short-Term Debt		1000	1000
Current Liabilities		26147	25857
Long-Term Debt		4939	9665
Total Liabilities		39938	44598
Total Equity		46175	46942

Valuation Analysis				
	Current	5 Yr Avg	Ind	Mkt
Price/Earnings	12.3	17.0	18.6	16.3
Forward P/E	10.6	_	_	15.3
Price/Cash Flow	9.7	13.8	14.5	8.5
Price/Free Cash Flow	10.6	15.8	15.7	17.0
Dividend Yield %	1.9	_	1.1	1.7
Price/Book	5.2	6.8	5.0	2.3
Price/Sales	3.9	4.8	4.5	1.4
PEG Ratio	1.0	_	_	1.7

Sales USD Mil	Mkt Cap USD Mil
65,759	245,201

Industry Software - Infrastructure Sector Software

Morning: ★★★	star Ratin	•	Last Price 28.66		air Value 2.00		certainty edium		Economic Vide	Moat [™]	Stewardship Grade A
											per share prices in USD
38.08 21.44	35.31 20.70	30.00 22.55 _{2:1}	30.20 24.01	28.25 23.82	30.26 21.46	37.50 26.60	35.96 17.50	31.50 14.87	31.58 22.73	28.85 27.77	Annual Price High Low Recent Splits
րլ ^ա կո	_{լո} լոլիկո	լասորու	որոնով։	40000	m _{late} e	_{դրուր} ի	կ _{ուսոլ} ,	, intr	ւովհեր		Price Volatility Monthly High/Low Rel Strength to S&P 500
••••••								400			52 week High/Low 31.58 - 22.73
										9.0	10 Year High/Low 38.08 - 14.87
	~~									2.0	Bear-Market Rank
			illilliil					Wilk		69.0 29.0	
2001	2002	2003	2004	2005	200 6	2007	2008	2009	2010	YTD	Stock Performance
52.8	-22.0	6.8	9.2	-0.9	15.6	20.6	-44.1	59.5	-6.6	2.7	Total Return %
65.8	1.4	-19.6	0.2	-3.9	2.0	17.1	-5.6	36.1	-19.4	-0.3	+/- Market
44.3	2.1	-6.6	1.4	1.9	-0.7	-5.8	-4.3	7.2	-16.3	0.3	+/- Industry
		0.6	0.6	1.2	1.2	1.1	2.4	1.7	2.0	1.9	Dividend Yield %
356914	276631	295937	290720	278358	293538	333054	172930	268559		245201	Market Cap USD Mil
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TTM	Financials
25296	28365	32187	36835	39788	44282	51122	60420	58437	62484	65759	Revenue USD Mil
86.3	81.7	82.3	81.8	84.4	82.7	79.1	80.8	79.2	80.2	80.7	Gross Margin %
11720	11910	13217	9034	14561	16472	18524	22492	20363	24098	26732	Oper Income USD Mil
46.3	42.0	41.1	24.5	36.6	37.2	36.2	37.2	34.8	38.6	40.7	Operating Margin %
7346	7829	9993	8168	12254	12599	14065	17681	14569	18760	20596	Net Income USD Mil
0.66	0.71	0,92	0.75	1.12	1.20	1.42	1.87	1.62	2.10	2.33	Earnings Per Share USD
_	_	0.08	0.16	0,32	0.34	0.39	0.43	0.50	0.52	0.52	Dividends USD
11148	11106	10882	10894	10906	10531	9886	9470	8996	8927	8855	Shares Mil
4.79	5.22	6.41	4.34	4.15	3.73	3.68	3.88	5.03	5.49	5.49	Book Value Per Share US
13422	14509	15797	14626	16605	14404	17796	21612	19037	24073	26160	Oper Cash Flow USD Mil
1103	-770	-891	-1109	-812	-1578	-2264	-3182	-3119	-1977	-2106	Cap Spending USD Mil
12319	13739	14906	13517	15793	12826	15532	18430	15918	22096	24054	Free Cash Flow USD Mil
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TTM	Profitability
13.2	12.3	13.6	9.5	15.0	17.9	21.2	26.0	19.3	22.9	23.8	Return on Assets %
16.6	15.7	17.7	12.0	19.9	28.6	39.5	52.5	38.4	43.8	46.7	Return on Equity %
29.0	27.6	31.0	22.2	30.8	28.5	27.5	29.3	24.9	30.0	31.3	Net Margin %
0.45	0.45	0.44	0.43	0.49	0.63	0.77	0.89	0.78	0.76	0.76	Asset Turnover
1.3	1.3	1.3	1.2	1.5	1.7	2.0	2.0	2.0	1.9	2.0	Financial Leverage
2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	09-10	Financial Health
28505	35832	44999	55597	31860	26568	16414	13356	22246	29529	33724	Working Capital USD Mil
_	_	_	_	_	_	_	_	3746	4939	9665	Long-Term Debt USD Mil
47289	52180	61020	74825	48115	40104	31097	36286	39558	46175	46942	Total Equity USD Mil
			_		_	_	_	0.09	0.11	0.21	Debt/Equity
2001				2005	2006		2008	2009	2010	TTM	Valuation
60.6	29.8	29.1	29.1	21.6	25.5	20.2	10.4	16.8	12.0	12.3	Price/Earnings
_	_	_	_	_	_	_	_	_	0.7	0.8	P/E vs. Market
13.7	9.2	8.7	7.6	6.9	6.7	5.9	2.9	4.7	3.8	3.9	Price/Sales
6.9	5.0	4.3	6.2	6.3	8.0	9.7	5.0	6.1	5.1	5.2	Price/Book

Quarterly Results				
Revenue USD Mil	Dec 09	Mar 10	Jun 10	Sep 10
Most Recent Period	19022.0	14503.0	16039.0	16195.0
Prior Year Period	16629.0	13648.0	13099.0	12920.0
Rev Growth %	Dec 09	Mar 10	Jun 10	Sep 10
Most Recent Period	14.4	6.3	22.4	25.4
Prior Year Period	1.6	-5.6	-17.3	-14.2
Earnings Per Share USD	Dec 09	Mar 10	Jun 10	Sep 10
Most Recent Period	0.74	0.45	0.51	0.62
Prior Year Period	0.47	0.33	0.34	0.40

20.4

18.3

22.1

15.5

8.8

13.0

Industry Peers by Market Cap							
N	1kt Cap USD Mil	Rev USD Mil	P/E	ROE%			
Microsoft Corporation	245201	65759	12.3	46.7			
Apple, Inc.	312481	65225	22.5	35.3			
Google, Inc.	204538	27555	31.6	20.6			

9.7 Price/Cash Flow

9.4

Major Fund Holders	
	% of shares
American Funds Growth Fund of Amer A	1.78
American Funds Invmt Co of Amer A	1.01
American Funds Capital World G/I A	1.01

TTM data based on rolling quarterly data if available; otherwise most recent annual data shown.





25.4

17.2

20.0