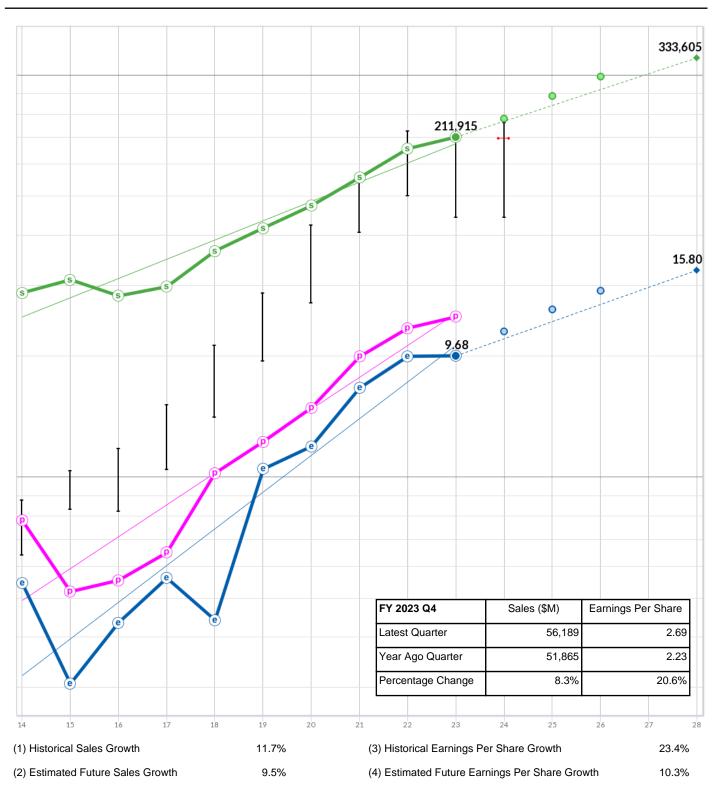


Stock Selection Guide

Company Microsoft Date 08/01/23													
Prepared by LEWIS	Data taken from BI Stock Data												
Where traded NAS Industry Software - Infrastructure													
Capitalization Outstanding Amounts Reference													
Preferred (\$M)	0.0 % Insiders % Institution												
Common (M Shares) 7,466.0 6.2 56.2													
Debt (\$M) 59,965.0 % to Tot 0	Cap 22.5 % Pot Dil 0.4												

Symbol: MSFT

VISUAL ANALYSIS of Sales, Earnings, and Price



2 EVALUATING Management

ent Micros													
	2015	2016	2017	2018	2019	2020	2021	2022	2023	Last 5 Year Avg.			
	19.8%	23.1%	25.7%	33.1%	34.7%	37.1%	42.3%	42.2%	42.1%	39.7%			

% Pre-tax Profit on Sales	32.0%	19.8%	23.1%	25.7%	33.1%	34.7%	37.1%	42.3%	42.2%	42.1%	39.7%
% Earned on Equity	24.8%	13.2%	21.9%	30.0%	20.6%	40.8%	38.1%	45.0%	44.2%	37.0%	41.0%
% Debt To Capital	20.1%	30.6%	42.7%	54.4%	49.7%	43.4%	37.5%	32.3%	26.9%	22.5%	32.5%

3 PRICE-EARNINGS HISTORY as an indicator of the future

2014

This shows how stock prices have fluctuated with earnings and dividends. It is building block for translating earnings into future stock prices.CLOSING PRICE336.34 (08/01/23)52-WEEK HIGH366.7852-WEEK LOW213.43

	А	В	С	D	E	F	G	Н
Year	Pri	ice	Earnings	Price Earn	ings Ratio	Dividend	% Payout	% High Yield
	High	Low	Per Share	High A / C	Low B / C	Per Share	F / C * 100	F / B * 100
2019	138.4	94.0	5.06	27.4	18.6	1.80	35.6	1.9
2020	204.4	130.8	5.76	35.5	22.7	1.99	34.5	1.5
2021	271.7	196.3	8.05	33.7	24.4	2.19	27.2	1.1
2022	349.7	241.5	9.65	36.2	25.0	2.42	25.1	1.0
2023	351.5	213.4	9.68	36.3	22.0	2.66	27.5	1.2
AVERAGE		175.2		35.4	23.5		30.0	
CURRENT/TTM			9.69	37.9	22.0	2.72	28.1	
AVERAGE PRICE EA	RNINGS RATIO	29.5	CURRENT PRICE EARNINGS RATIO: 34.7					

4 EVALUATING RISK and REWARD over the next 5 years

Assuming one recession and one business boom every 5 years, calculations are made of how high and how low the stock might sell. The upside-downside ratio is the key to evaluating risk and reward.

•	,	0									
A HIGH PRICE - NEXT 5 YE	ARS										
Avg. High P/E	25.0	X Estim	ate High Earn	ings/S	Share		15.8	= 0	Foreca	asted High Price	\$ 395.0
B LOW PRICE - NEXT 5 YE	ARS										
(a) Avg. Low P/E	20.0	X Estim	ate Low Earni	ngs/S	hare		9.69 = For			asted Low Price	\$ 193.8
(b) Avg. Low Price of	Last 5 Years	175.	2								
(c) Recent Market Lo	v Price	213.	4								
(d) Price Dividend Wi	l Support	Indicat	ed Dividend				2.72			142.0	
(u) Flice Dividend Wi	Support	Hię	gh Yield	=	-		1.92%		=	142.0	
								Selec	ted Foreca	asted Low Price	\$ 193.8
C ZONING using 25%-50%	6-25%										
Forecasted High Price	e 395.0	Minus Fo	precasted Low	Price	e 1	93.8	=	201.2	Range.	25% of Rang	ge 50.3
	Buy Zone		193.8		to		244.1				
	Hold Zone		244.1		to		344.7				
	Sell Zone		344.7		to		395.0				
Present Ma	arket Price of	:	336.34		is	in the		HC)LD	Zone	
D UPSIDE DOWNSIDE RAT	IO (POTENT	IAL GAIN	VS. RISK OR		S)						
High Price	395.0	Minus	s Present Price	e	336	.34		58	8.66		
Present Price	336.34	Min	us Low Price		193	8.8	- =	14	2.54	= 0.4	To 1
E PRICE TARGET (Note: T	his shows the	potential r	narket price ap	precia	tion o	ver the	next fiv	ve years i	in simple i	nterest terms.)	
High Price	395.0										
Closing Price	336.34		1.1744	Х	100	=	117.4	14 -	100 =	= 17.4	% Appreciation

5 5-YEAR POTENTIAL

This combines price appreciation with dividend yield to get an estimate of total return. It provides a standard for comparing income and growth stocks.

Α	Indicated Annual Dividend	2.66	
	Closing Price	336.34 = 0.008	= 0.8 % Current Yield
B AV	ERAGE YIELD - USING FORE	CAST HIGH P/E	AVERAGE YIELD - USING FORECAST AVERAGE P/E
	<u> </u>	<u>1.6 %</u> = 1.2 %	$\frac{\text{Avg. \% Payout}}{\text{Forecast Average PE}} = \frac{30.6 \%}{22.50} = 1.4 \%$
C CC	MPOUND ANNUAL RETURN -	USING FORECAST HIGH P/E	COMPOUND ANNUAL RETURN - USING FORECAST AVG P/E
	Annualized Appreciation	3.3 %	Annualized Appreciation 1.1 %
	Average Yield	1.2 %	Average Yield 1.4 %
	Annualized Rate of Return	4.5 %	Annualized Rate of Return 2.5 %



Company: Microsoft Symbol: MSFT

Notes: MSFT 5/24/22 Janet Lewis updat

Date	Subject	Description	Туре
08/02/23	4th QTR Report Aug 2 2023 J Lewis	FY 2023-04 Quarterly report for Microsoft: MSFT Date: (8-04-23 Value Line) Report Aug 2, 2023 Janet Lewis Percentage change in Sales from year ago quarter 8.3%. Driven by Azure and other cloud services, the Intelligent Cloud segment continued to grow about 20% and accounted for roughly 43% of total revenue. Microsoft's other segments, Productivity and Business Processes (33% of total revenue) and More Personal Computing (25% of total revenue) were 10% higher and 3% lower, respectively. Revenue from LinkedIn rose 5%. (Value Line) Percentage change in Earnings per Share from year ago quarter 20.6% * Is company meeting our target sales & earnings estimates? YES Pre-tax Profit on sales trend? UP. (39.7%) Return on equity trends? Down in 2023, but well above 20 average 41%) (Debt? DOWN (22.5%) Current PE is 34.7 (8/01/2023) Signature PE is 29.5 PEG is 3.1 too high Where does it fall in my estimated High/low range of PE's ? High End. High TTM = 37.9 Club cost basis for this stock is \$25.44. latest valuation. (\$307.26 as of 08/2/23). Current price is \$336.34, as of 08/02/23 Current fair value: Morningstar: \$360 CFRA (S&P) \$338.37 on July 28 = strong buy (12 month Target price = \$407) Value Line 18 Month Target Price Range (\$265.5517; micpoint=\$391) Timeliness 2 at \$345 so Iby Zone Morningstar: We believe revenue growth will be driven by Azure, Office 365, Dynamics 365, LinkedIn, and emerging Al adoption. Azure, in particular, is the single most critical revenue driver over the next 10 years, in our view, as hybrid environments (where Microsoft excels) drive mass cloud adoption. We believe the combination of Azure, DBMS, Dynamics 365, and Office 365 will drive above-market growth as Clos continue to consolidate vendors. We believe the combination of Azure, DBMS, Dynamics 365, and Office 365 will drive above-market growth as Clos continue to consolidate vendors. We believe Microsoft weight of the adoption. We believe Microsoft office (ac, 365), Dynamics, Teams, and, of course, Azure infrastructure courd services. Rev	Study
05/01/23	Third Quarter Report done on May 1 2023 - J Lewis	FY 2023-Q3 Quarterly report for Microsoft: Date: (05-05-23 Value Line) May 1, 2023 Janet Lewis Percentage change in Sales from year ago quarter 7.1%. Driven by Azure and other cloud services, the Intelligent Cloud segment grew 27% and accounted for roughly 42% of total revenue. Microsoft's other segments, Productivity and Business Processes (33% of total revenue) and More Personal Computing	Study

(25% of total revenue) were 10% higher and 9% lower, respectively. (Value Line) Percentage change in Earnings per Share from year ago quarter 10.4% "...An unfavorable impact of foreign exchange hurt the bottom line, slimmer advertising market and drop in demand for personal computers.' Is company meeting our target sales & earnings estimates? YES Pre-tax Profit on sales trend? UP Return on equity trends? STABLE OVER LAST 5 YEARS Debt? DOWN (38%) Current PE is 33.3 (4/28/2023) Where does it fall in my estimated High/low range of PE's ? High End. High TTM = 33.2 Signature PE 27.9 Club cost basis for this stock is \$25.44. latest valuation. (\$307.26 as of 04/28/23). Current price is \$307.26, as of 04/28/23 CFRA (S&P) \$317- strong buy (12 Current fair value: Morningstar: \$325 month Target price = \$330) Value Line 18 Month Target Price Range (\$209-\$426; midpoint=\$318) My SSG Total Return is 5.4% Projected Average Return is 3.3% Microsoft is about 10.3% of our portfolio and Upside downside ratio is 1.5:1 with my conservative judgements. What will drive further growth? per Value Line Microsoft laid off roughly 10,000 employees in the fiscal third quarter. This amount represents roughly 5% of the company's headcount. The job cuts could shift resources to other areas of the business, as the company has plans to stretch its reach. Expansion plans include the planned acquistion of video game maker Activision. However, one roadblock preventing the close of the transaction is the lawsuit filed by the Federal Trade Commission (FTC), challenging the software giant's \$69 billion deal. The suit expresses concern that Microsoft (which owns the Xbox brand) could make Activision's games exclusive to its Xbox and stifle competition. Microsoft's partnership with OpenAl has potential to ignite a firestorm of change. MSFT is making a multibillion dollar investment in OpenAI, the organization that launched ChatGPT (Chat Generative Pre-trained Transformer). The chatbot technology employed by ChatGPT has the potential to rival and replace current search engines. With this partnership, Microsoft plans to incorporate ChatGPT into its products. The ripple effect could be far and wide, creating potential significant upside for the software company Results from this will take time though. In the meantime, the company is still dealing with issues like slowing demand for personal computers. We anticipate revenue from Windows OEM and Devices to decline in the June guarter, as channel inventory still appears to be elevated. These shares offer broad appeal. MSFT holds our top grades for Price Growth Persistence & Financial Strength. Kathleen Uckert May 5, 2023 Recommend: Hold Company Profile : (BetterInvesting) Microsoft develops and licenses consumer and enterprise software. It is known for its Windows operating systems and Office productivity suite. The company is organized into three equally sized broad segments: productivity and business processes (legacy Microsoft Office, cloud-based Office 365, Exchange, SharePoint, Skype, LinkedIn, Dynamics), intelligence cloud (infrastructure- and platform-as-a-service offerings Azure, Windows Server OS, SQL Server), and more personal computing (Windows Client, Xbox, Bing search, display advertising, and Surface laptops, tablets, and desktops). Sector: Technology Industry: Software-Infrastructure

02/05/23	Feb 3 2023 2nd Quarterly	FY 2023-Q2 Quarterly report for Microsoft: Date: 02-03-23	Study
	Report	Percentage change in Sales from year ago quarter 2.0%. Intelligent Cloud segment was 40% of that, while Productivity and business segments were 32% and Personal Computers only 27%.	
		Percentage change in Earnings per Share from year ago quarter -11.3% "An unfavorable impact of foreign exchange hurt the bottom line, slimmer advertising market and drop in demand for personal computers."	
		Is company meeting our target sales & earnings estimates? NO, not this quarter, but yes for year.	
		Pre-tax Profit on sales trend? UP OVER LAST 5 YEARS, BUT DOWN OVER LAST 12 MONTHS,	
		Return on equity trends? STABLE OVER LAST 5 YEARS	
		Debt? DOWN (38%)	
		Current PE is 29.4	
		Where does it fall in my estimated High/low range of PE's ? High End, but coming down (from 37).	
		Signature PE 24.5	
		Club cost basis for this stock is 25.44 . latest valuation. (285.26 as of $04/11/22$).	
		Current price is \$264.60, as of 02/28/23	
		Current fair value: Morningstar: \$310 (at 15% discount) CFRA (S&P) \$317- strong buy Value Line 18 Month Target Price Range (\$125-272; midpoint=\$199)	
		My SSG Total Return is 8.0% Projected Average Return is 5.9%	
		Microsoft is about 10.3% of our portfolio and Upside downside ratio is 1.5:1 with my conservative judgements.	
		What will drive further growth? Microsoft is trying to buy Activision if they can get past the lawsuit filed by the FTC blocking it under concerns that it will require Xbox and "stifle competition".	
		Investment in OpenAI giving them "the potential to rival and replace current search engines.	
		Recommend: Buy More, Hold, Sell	
		Company Profile : Microsoft Corporation is a technology company that develops, licenses, and supports a range of software products, services and devices. The Company's segments include Productivity and Business Processes, Intelligent Cloud, More Personal Computing, and Gaming.	
		 Bulls Say Public cloud is widely considered to be the future of enterprise computing, and Azure is a leading service that benefits the evolution to first to hybrid environments, and then ultimately to public cloud environments. Shift to subscriptions accelerates growth after the initial growth pressure, and the company has passed the margin inflection point now such that margins are increasing again and have returned to pre-Nokia and pre-"cloud" levels. Microsoft has monopoly like positions in various areas (OS, Office) that serve as cash cows to help drive Azure growth. Bears Say Momentum is slowing in the ongoing shift to subscriptions, particularly in Office, which is generally considered a mature product. Microsoft lacks a meaningful mobile presence. Microsoft is not the top player in its key sources of growth, notably Azure and Dynamics. 	

11/05/22	1st quarter Report 2022 submitted Nov 5 2022	1st 2023 Quarterly report for Microsoft: Quarter Ending 9/30/22, VL Report Filed NOV 4, 2022. Janet Lewis MSFT	Community								
		Percentage change in Sales from year ago quarter 10.6%.									
		Percentage change in Earnings per Share from year ago quarter -13.3%									
		Is company meeting our target sales & earnings estimates? YES (Greater than 5-7% for a large company.)									
		Pre-tax Profit on sales trend? UP									
		Return on equity trends? UP.									
		Debt? Down									
		Current PE is 23.9 @ \$221.39 on NOV 4 2022 close of business.									
		Where does it fall in my estimated High/low range of PE's ? Within my range of 22.7-33.2									
		Signature PE is 27.9 (But Value Line projects average of 23 during 2025-2027)									
		Club cost basis for this stock is \$25.44 per share. Current price is \$221.39 on 11/4/22.									
		Current fair value: Morningstar: \$320 (strong buy & 4 star CFRA has \$376 (12 Month target price, from July 29, 2022) – strong buy Value Line 18 Month Target Price Range (\$225-\$443; midpoint=\$334) 5yr range \$320 - \$390									
		My SSG Total Return is 12.6% Projected Average Return is 10.4%									
		Microsoft is a large holding at 10.3% of our 14 stocks portfolio and Upside downside ratio is 6.3:1.									
		Recommend: IT IS IN THE buy range, but it is already a large holding, so I recommend HOLD									



Quarterly Growth Trend Data

Company: Microsoft Symbol: MSFT

Graph: Trailing 4 Quarters, Last 5 Years of Data



			Qı	uarterly	/ Data				Last 12 Months Data										
Period	E	PS	Pr	e-Tax Pr	ofit			Income Tax Rate	EPS	PS Pre-Tax Profit		Sales	Income Tax		%Change				
	\$	%Change	\$ Mil	%Sales	%Change	\$ Mil	%Change		\$	\$ Mil	%Sales		\$ Mil	%Rate	EPS	Pre-Tax Profit	Sales		
06/23	2.69	20.6	24,727.0	44.0	20.7	56,189.0	8.3	18.8	9.69	89,311.0	42.1	211,915.0	16,955.7	19.0	0.5	6.7	6.9		
03/23	2.45	10.4	22,673.0	42.9	12.3	52,857.0	7.1	19.3	9.23	85,071.0	41.0	207,591.0	16,044.4	18.9	-3.7	2.9	7.8		
12/22	2.20	-11.3	20,339.0	38.6	-9.7	52,747.0	2.0	19.2	9.00	82,588.0	40.5	204,094.0	15,134.3	18.3	-4.2	3.6	10.4		
09/22	2.35	-13.3	21,572.0	43.0	5.1	50,122.0	10.6	18.6	9.28	84,764.0	41.7	203,075.0	14,986.3	17.7	3.8	12.3	15.2		
06/22	2.23	2.8	20,487.0	39.5	5.6	51,865.0	12.4	18.3	9.64	83,716.0	42.2	198,270.0	10,922.8	13.0	19.8	17.7	18.0		
03/22	2.22	9.4	20,190.0	40.9	17.1	49,360.0	18.4	17.2	9.58	82,634.0	42.9	192,557.0	10,141.3	12.3	30.5	26.9	20.4		
12/21	2.48	22.2	22,515.0	43.5	22.8	51,728.0	20.1	16.7	9.39	79,680.0	43.1	184,903.0	8,418.2	10.6	39.9	31.2	20.6		

(S) Sales (e) Earnings



Quarterly Growth Trend Data

Graph: Trailing 4 Quarters, Last 5 Years of Data

Quarterly Data									Last 12 Months Data									
Period	E	PS	Pi	re-Tax Pi	rofit	Sal	les	Income Tax Rate	EPS	Pre-Ta	ax Profit	Sales	Income	e Tax	%Change			
	\$	%Change	\$ Mil	%Sales	%Change	\$ Mil	%Change		\$	\$ Mil	%Sales		\$ Mil	%Rate	EPS	Pre-Tax Profit	Sales	
09/21	2.71	48.9	20,524.0	45.3	27.3	45,317.0	22.0	0.1	8.94	75,502.0	42.8	176,251.0	7,789.9	10.3	44.4	33.7	19.8	
06/21	2.17	48.6	19,405.0	42.0	44.6	46,152.0	21.3	15.2	8.05	71,102.0	42.3	168,088.0	9,780.1	13.8	40.0	34.1	17.5	
03/21	2.03	45.0	17,236.0	41.3	34.2	41,706.0	19.1	10.3	7.34	65,119.0	40.7	159,969.0	9,176.9	14.1	22.3	24.7	15.3	
12/20	2.03	34.4	18,337.0	42.6	30.2	43,076.0	16.7	15.7	6.71	60,726.0	39.6	153,284.0	9,462.6	15.6	16.9	21.8	14.2	
09/20	1.82	31.9	16,124.0	43.4	27.1	37,154.0	12.4	13.8	6.19	56,474.0	38.4	147,114.0	9,028.8	16.0	16.6	22.4	13.3	
06/20	1.46	-14.6	13,422.0	35.3	6.6	38,033.0	12.8	16.5	5.75	53,036.0	37.1	143,015.0	8,743.0	16.5	13.4	21.4	13.6	
03/20	1.40	22.8	12,843.0	36.7	22.5	35,021.0	14.6	16.3	6.00	52,210.0	37.6	138,699.0	5,835.8	11.2	33.3	25.0	13.5	
12/19	1.51	39.8	14,085.0	38.2	35.6	36,906.0	13.7	17.3	5.74	49,853.0	37.1	134,249.0	5,536.2	11.1	33.2	24.9	13.3	
09/19	1.38	21.1	12,686.0	38.4	24.1	33,055.0	13.7	15.8	5.31	46,153.0	35.6	129,814.0	5,313.4	11.5	120.3	19.2	13.0	
06/19	1.71	50.0	12,596.0	37.4	17.9	33,717.0	12.1	-4.7	5.07	43,688.0	34.7	125,843.0	4,793.7	11.0	140.3	19.8	14.0	
03/19	1.14	20.0	10,486.0	34.3	21.4	30,571.0	14.0	16.0	4.50	41,772.0	34.2	122,211.0	6,840.2	16.4	150.0	33.3	18.0	
12/18	1.08	231.7	10,385.0	32.0	13.3	32,471.0	12.3	18.9	4.31	39,927.0	33.7	118,459.0	6,347.4	15.9	195.2	39.5	19.8	
09/18	1.14	35.7	10,221.0	35.1	28.0	29,084.0	18.5	13.7	2.41	38,711.0	33.7	114,906.0	20,652.3	53.4	-18.0	50.0	22.2	
06/18	1.14	37.3	10,680.0	35.5	92.6	30,085.0	29.0	16.9	2.11	36,474.0	33.1	110,360.0	19,820.9	54.3	-21.9	57.6	22.7	
03/18	0.95	55.7	8,641.0	32.2	46.1	26,819.0	21.4	14.1	1.80	31,339.0	30.3	103,592.0	14,336.8	45.7	-20.4	49.6	18.7	
12/17	-0.82	-224.2	9,169.0	31.7	44.1	28,918.0	20.0	168.7	1.46	28,614.0	28.9	98,863.0	13,431.4	46.9	-31.1	42.6	15.4	
09/17	0.84	40.0	7,984.0	32.5	49.9	24,538.0	20.0	17.6	2.94	25,808.0	27.4	94,035.0	2,407.2	9.3	41.3	31.9	10.1	
06/17	0.83	112.8	5,545.0	23.8	65.7	23,317.0	13.1	-17.5	2.70	23,149.0	25.7	89,950.0	1,828.2	7.9	31.7	17.2	5.4	
03/17	0.61	29.8	5,916.0	26.8	17.5	22,090.0	7.6	18.9	2.26	20,951.0	24.0	87,247.0	2,921.1	13.9	79.4	43.0	0.4	
12/16	0.66	6.5	6,363.0	26.4	8.7	24,090.0	1.2	18.3	2.12	20,071.0	23.4	85,688.0	3,128.1	15.6	51.4	24.4	-2.7	
09/16	0.60	5.3	5,325.0	26.0	-3.4	20,453.0	0.4	11.9	2.08	19,563.0	22.9	85,394.0	2,870.9	14.7	39.6	7.9	-5.9	
06/16	0.39	197.5	3,347.0	16.2	290.6	20,614.0	-7.1	6.7	2.05	19,751.0	23.1	85,320.0	3,109.8	15.7	40.4	6.7	-8.8	
03/16	0.47	-23.0	5,036.0	24.5	-22.7	20,531.0	-5.5	25.4	1.26	14,648.0	16.9	86,886.0	-940.8	-6.4	-47.7	-45.4	-8.3	
12/15	0.62	-12.7	5,855.0	24.6	-25.4	23,796.0	-10.1	14.6	1.40	16,129.0	18.3	88,084.0	-1,112.9	-6.9	-43.5	-40.9	-5.7	
09/15	0.57	5.6	5,513.0	27.1	-6.5	20,379.0	-12.2	16.2	1.49	18,124.0	20.0	90,758.0	-767.1	-4.2	-41.6	-33.6	-0.8	
06/15	-0.40	-172.7	-1,756.0	-7.9	-126.7	22,180.0	-5.1	-82.0	1.46	18,507.0	19.8	93,580.0	-468.7	-2.5	-44.5	-33.5	7.8	
03/15	0.61	-10.3	6,517.0	30.0	-6.3	21,729.0	6.5	23.5	2.41	26,840.0	28.3	94,782.0	6,824.1	25.4				
12/14	0.71	-9.0	7,850.0	29.7	-0.4	26,470.0	8.0	25.3	2.48	27,280.0	29.2	93,456.0	6,603.8	24.2				
09/14	0.54	-12.9	5,896.0	25.4	-8.0	23,201.0	25.2	23.0	2.55	27,308.0	29.8	91,505.0	6,026.9	22.1				
06/14	0.55		6,577.0	28.1		23,382.0		29.9										
03/14	0.68		6,957.0	34.1		20,403.0		18.6										



Quarterly Growth Trend Data

Graph: Trailing 4 Quarters, Last 5 Years of Data

			Qı	uarterly	/ Data							Last	12 Month	s Data			
Period			Pre-Tax Profit				Income Tax Rate	EPS	Pre-Tax Profit		Sales	Income Tax		%Change			
	\$	%Change	\$ Mil	%Sales	%Change	\$ Mil	%Change		\$	\$ Mil	%Sales		\$ Mil	%Rate	EPS	Pre-Tax Profit	Sales
12/13	0.78		7,878.0	32.1		24,519.0		16.8									
09/13	0.62		6,408.0	34.6		18,529.0		18.2									