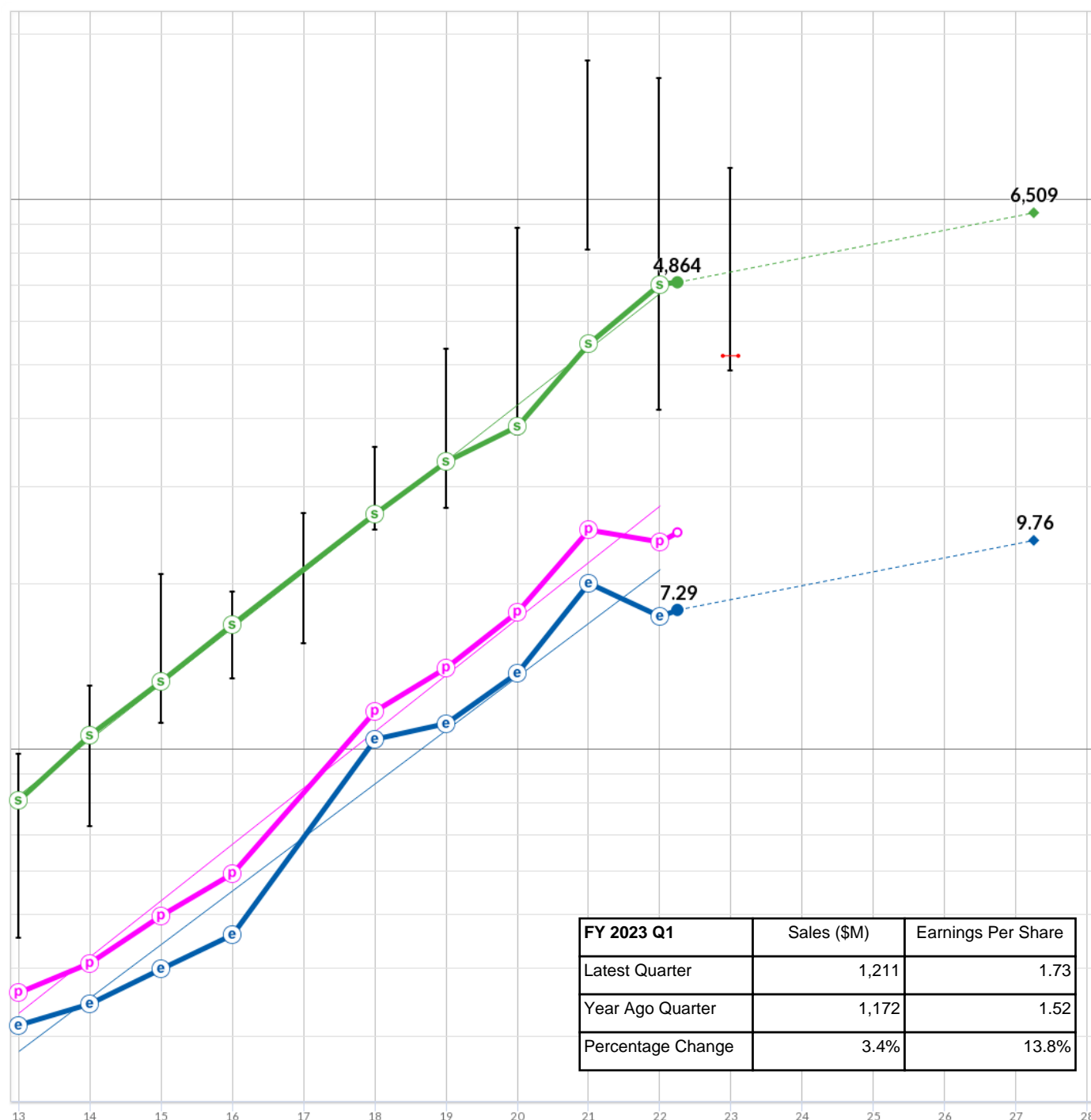


## Stock Selection Guide

Company	EPAM Sys		Date	06/09/23	
Prepared by	BASKAR		Data taken from	BI Stock Data	
Where traded	NYS	Industry	Information Technology Services		
Capitalization --- Outstanding Amounts	Reference				
Preferred (\$M)	0.0	% Insiders	% Institution		
Common (M Shares)	59.3		2.5	91.0	
Debt (\$M)	187.1	% to Tot Cap	5.6	% Pot Dil	2.8

Symbol: EPAM

### 1 VISUAL ANALYSIS of Sales, Earnings, and Price



- |                                   |       |  |       |
|-----------------------------------|-------|--|-------|
| (1) Historical Sales Growth       | 26.3% | (3) Historical Earnings Per Share Growth       | 25.1% |
| (2) Estimated Future Sales Growth | 6.0%  | (4) Estimated Future Earnings Per Share Growth | 6.0%  |

## 2 EVALUATING Management

EPAM Sys

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Last 5 Year Avg.
% Pre-tax Profit on Sales	13.8%	11.9%	11.6%	10.9%	12.0%	13.6%	13.1%	14.2%	14.2%	10.5%	13.1%
% Earned on Equity	17.0%	15.2%	14.2%	12.7%	7.1%	19.2%	16.8%	16.9%	19.8%	14.8%	17.5%
% Debt To Capital	0.0%	0.0%	5.4%	3.1%	2.5%	1.9%	14.2%	11.8%	8.8%	6.0%	8.5%

## 3 PRICE-EARNINGS HISTORY as an indicator of the future

This shows how stock prices have fluctuated with earnings and dividends. It is building block for translating earnings into future stock prices.

**CLOSING PRICE** 211.33 (06/09/23)

**52-WEEK HIGH** 462.99

**52-WEEK LOW** 197.99

	A	B	C	D	E	F	G	H
Year	Price		Earnings	Price Earnings Ratio		Dividend	% Payout	% High Yield
	High	Low	Per Share	High A / C	Low B / C	Per Share	F / C * 100	F / B * 100
2018	144.2	102.0	4.24	34.0	24.1	0.00	0.0	0.0
2019	217.0	111.4	4.53	47.9	24.6	0.00	0.0	0.0
2020	360.9	152.0	5.60	64.4	27.1	0.00	0.0	0.0
2021	725.4	328.9	8.15	89.0	40.4	0.00	0.0	0.0
2022	675.3	168.6	7.09	95.3	23.8	0.00	0.0	0.0
AVERAGE		172.6		48.8	24.9		0.0	
CURRENT/TTM			7.29	63.5	27.2	0.00	0.0	
AVERAGE PRICE EARNINGS RATIO: 36.8					CURRENT PRICE EARNINGS RATIO: 29.0			

## 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.

### A HIGH PRICE - NEXT 5 YEARS

Avg. High P/E 45.0 X Estimate High Earnings/Share 9.76 = Forecasted High Price \$ 439.0

### B LOW PRICE - NEXT 5 YEARS

(a) Avg. Low P/E 23.0 X Estimate Low Earnings/Share 7.29 = Forecasted Low Price \$ 167.7

(b) Avg. Low Price of Last 5 Years 172.6

(c) Recent Market Low Price 168.6

(d) Price Dividend Will Support  $\frac{\text{Indicated Dividend}}{\text{High Yield}} = \frac{0.00}{0.00\%} = 0.0$

Selected Forecasted Low Price \$ 167.7

### C ZONING using 25%-50%-25%

Forecasted High Price 439.0 Minus Forecasted Low Price 167.7 = 271.3 Range. 25% of Range 67.8

Buy Zone 167.7 to 235.5

Hold Zone 235.5 to 371.2

Sell Zone 371.2 to 439.0

Present Market Price of 211.33 is in the **BUY** Zone

### D UPSIDE DOWNSIDE RATIO (POTENTIAL GAIN VS. RISK OR LOSS)

$\frac{\text{High Price} - \text{Present Price}}{\text{Present Price}} = \frac{439.0 - 211.33}{211.33} = 1.08$   
 $\frac{\text{High Price} - \text{Present Price}}{\text{Present Price} - \text{Low Price}} = \frac{439.0 - 211.33}{211.33 - 167.7} = 5.2$  To 1

### E PRICE TARGET (Note: This shows the potential market price appreciation over the next five years in simple interest terms.)

$\frac{\text{High Price} - \text{Closing Price}}{\text{Closing Price}} = \frac{439.0 - 211.33}{211.33} = 2.0773$  X 100 = 207.73 - 100 = 107.7 % 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.

A  $\frac{\text{Indicated Annual Dividend}}{\text{Closing Price}} = \frac{0.00}{211.33} = 0.0000 = 0.0\%$  Current Yield

### B AVERAGE YIELD - USING FORECAST HIGH P/E

$\frac{\text{Avg. \% Payout}}{\text{Forecast High PE}} = \frac{0.0\%}{45.00} = 0.0\%$

### AVERAGE YIELD - USING FORECAST AVERAGE P/E

$\frac{\text{Avg. \% Payout}}{\text{Forecast Average PE}} = \frac{0.0\%}{34.00} = 0.0\%$

### C COMPOUND ANNUAL RETURN - USING FORECAST HIGH P/E

Annualized Appreciation 15.7 %  
 Average Yield 0.0 %  
 Annualized Rate of Return 15.7 %

### COMPOUND ANNUAL RETURN - USING FORECAST AVG P/E

Annualized Appreciation 9.4 %  
 Average Yield 0.0 %  
 Annualized Rate of Return 9.4 %

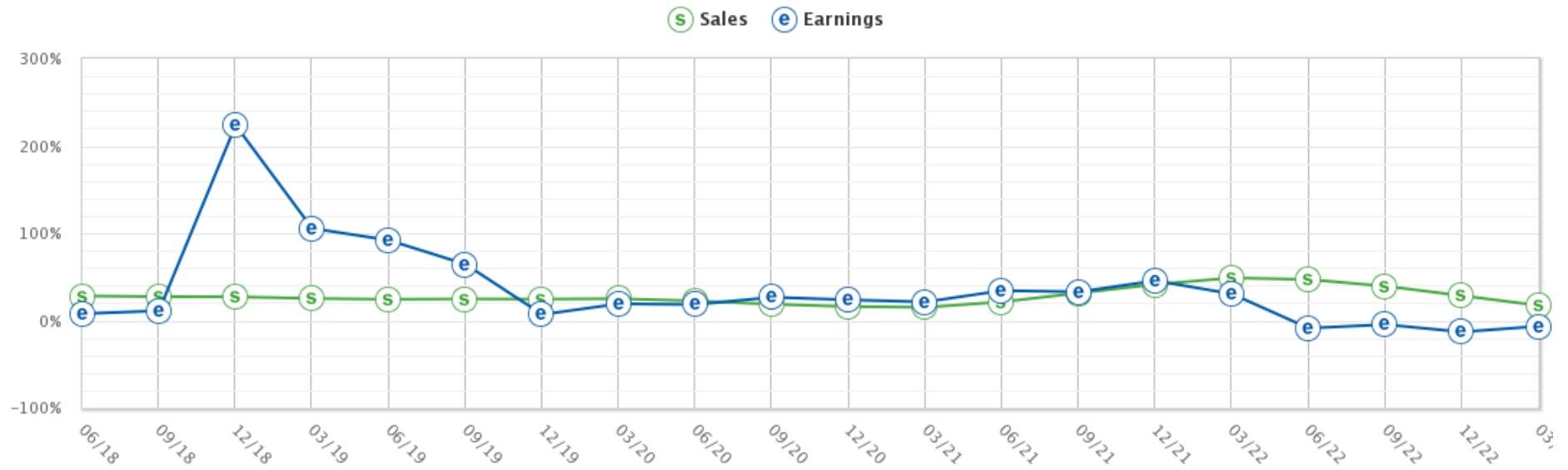
**Notes: NEW STOCK-EPAM-Baskar-8/28/20**

Date	Subject	Description	Type
06/12/23	HOLD	<p>Company sales and earnings has increased compared to year ago quarter. Q2 earnings report earnings calls - company says many of their clients are reducing the budget spent and as a result, the next 2 quarters and 2023 estimates are reduced.</p> <p>Sales estimate: 6% from 10%            EPS Estimate: 6% from 10%            High P/E: 45 from 50            Low P/E: 23 from 25</p> <p>SSG is still a BUY. I recommend to HOLD and watch since the company's Management section is good with ROE. Sales is not impacted so far and company is preparing itself for the economic conditions.</p>	Study
03/12/23	EPAM is a BUY/HOLD	<p>Modified the average high p/e estimate from 63.8 to 60.4. Removed the 2022 high p/e as an outlier (93) which brought down the average to 60.4. Used it as a high p/e estimate. Modified the 5 year avg low p/e from 32 to 24.9. EPAM is still a BUY with it's current price of \$282. EPAM lowered it's Sales &amp; Earnings estimates for 2023.</p> <p>CFRA: HOLD. Valueline: HOLD but 5 year growth potential is very high. Morningstar does not have any analysts covering it. But Quantitative rating fair value price is \$344. Company announced shares buyback in the next 1-2 years upto \$500M.</p> <p>My recommendation is to consider BUY ing if planning to hold for longer time as it's current price is attractive.</p>	Study
01/02/23	Positive Comments on Dec. Manifest Investing RT	<a href="https://www.youtube.com/watch?v=psjVJJ5nkjQ&amp;t=927s">https://www.youtube.com/watch?v=psjVJJ5nkjQ&amp;t=927s</a>	Community
11/13/22	EPAM is HOLD	<p>Adjusted the High P/E to 63.6 which is the 5 year average. Used 32.8 as Low P/E which is 5-yrs average. With it's current price of \$360, EPAM shows as HOLD with US/DS of 2.5:1. Total return of 14.3%. CFRA: Strong BUY and VL: Good recovery stock for the next 12-18 months. Recommend to HOLD. If price drops to \$300, consider BUY.</p>	Study
08/16/22	Stock Update 16Aug2022: EPAM is SELL	<p>No changes to estimates. Sales: 10, EPS: 10, High P/E: 49 Low P/E: 32.8 Current P/E is 72.5. We bought it for \$ and with current price of \$448.53, EPAM is a SELL based on my SSG.</p>	Study
05/30/22	EPAM May 2022	<p>Recently EPAM has been adversely impacted b geopolitical conflicts - 58% of EPAM staff were locate in Ukraine and Belarus. EPAM has wound down headcount in troubled areas and shifted work to India and South America. The shares have tanked and recovered slightly - even though the company expects a full return to growth in the second half of 2022.</p> <p>Operating margins during the transition are expected to contract a bit as they stand up new delivery areas. The company has a solid balance sheet with more than \$1 Billion in cash and \$300 million of FCF in 2022</p>	Community

02/06/22	EPAM 2/7/22	<p>4th Qtr results to be announced 2/17/22  EPAM formed in 1993, went public in 2012 Market cap is \$26.6B</p> <p>2 purchases announced in last 3 moths Emakina Group --A Digital Agency  Optiva Media --Professional Services  These are on top of 5 purchases made in 2021</p> <p>Value Line expects 31% YOY revenue &amp; earnings in 2022  EPAM is in 40 countries across 5 continents.</p> <p>Revenue comes from North America 60%  Europe 33.1%  Baltic Region 4.3%  APAC (Asia) 2.6%</p> <p>Listed among top 15 companies in IT Services on Fortune 1000  Top IT services company on Fortunes 100 Fastest Growing Co  for last 3 years</p>	Community
01/09/22	EPAM - watch the stock for now	<p>EPAM has shown significant and consistent growth in the past, and as a result stock has had a considerable run up.</p> <p>- PE has run up from a five year low of 27.36 in 2018 to an all time high of 79 in recent days (end of 2021).</p> <p>- Prices to sales ratio has gone from 3 in 2016/2017 to 9.7 in 2021! Thus the stock has gone into stratosphere briefly trading at \$717 in 12/2021, but is now receding back to reality trading recently at \$557.</p> <p>- Yet, there is still more for it to come down. Buy below \$328, and hold below \$525. At \$557, the stock still has ways to go before it becomes attractive.</p> <p>If Fed decides to taper down, stock will likely turn south and then there might be a true buying opportunity</p>	Community
12/05/21	EPAM	<p>EPAM is a consulting &amp; engineering business that helps clients stay relevant &amp; up to date with emerging technologies. To provide this service, they partner with software &amp; cloud service providers like Adobe, Salesforce, Amazon &amp; Microsoft.</p> <p>Plans revealed to acquire German digital agency Emakina Group who offers advertising, analytics, consulting content creation, data science, marketing and platform development through 26 offices in 18 countries. Its customers include Nike, Honda &amp; Kitchen Aid.</p> <p>3rd Qtr Results Sales +51.6%, Earnings +46.7%  Forecast revenue +40%, Earnings +38.6%</p> <p>Conservative Buy Below 710.00 (Top 5 Stock Pick Nov)</p>	Community
11/29/20	PTG.TO removed from peer listing	The "Refresh Study Data" function removed PTG.TO from peer listing as of 11-29-2020 because it is no longer covered in the BetterInvesting stock data.	Study

**Quarterly Growth Trend Data**

Graph: Trailing 4 Quarters, Last 5 Years of Data



Quarterly Data									Last 12 Months Data								
Period	EPS		Pre-Tax Profit			Sales		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	
03/23	1.73	13.8	127.3	10.5	19.7	1,210.9	3.4	19.6	7.29	528.3	10.9	4,864.0	-71.3	-13.5	-6.7	0.7	17.2
12/22	2.61	8.8	201.2	16.3	25.8	1,231.3	11.2	22.9	7.08	507.3	10.5	4,824.7	-73.6	-14.5	-13.1	-4.9	28.4
09/22	2.63	34.9	191.1	15.6	41.2	1,226.9	24.1	18.4	6.87	466.0	9.9	4,700.9	-81.4	-17.5	-4.7	-2.0	39.3
06/22	0.32	-83.5	8.7	0.7	-93.0	1,194.9	35.6	-114.9	6.19	410.3	9.2	4,462.5	-75.6	-18.4	-8.8	-7.6	46.9
03/22	1.52	-18.3	106.3	9.1	-7.5	1,171.6	50.1	15.6	7.81	524.8	12.6	4,149.0	63.1	12.0	30.4	32.2	48.8
12/21	2.40	64.4	159.9	14.4	56.8	1,107.5	53.1	11.1	8.15	533.4	14.2	3,758.1	50.2	9.4	45.5	40.9	41.3
09/21	1.95	27.5	135.4	13.7	30.2	988.5	51.6	14.6	7.21	475.5	14.1	3,374.2	50.8	10.7	32.8	31.6	31.4

**Quarterly Growth Trend Data**

Graph: Trailing 4 Quarters, Last 5 Years of Data

Quarterly Data									Last 12 Months Data								
Period	EPS		Pre-Tax Profit			Sales		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
06/21	1.94	70.2	123.2	14.0	61.9	881.4	39.4	6.9	6.79	444.1	14.6	3,037.9	46.8	10.5	34.2	31.7	21.3
03/21	1.86	26.5	114.9	14.7	19.2	780.8	19.9	5.1	5.99	397.0	14.2	2,788.9	47.3	11.9	21.3	19.7	15.1
12/20	1.46	13.2	102.0	14.1	20.3	723.5	14.3	16.2	5.60	378.5	14.2	2,659.5	50.9	13.5	23.6	26.4	15.9
09/20	1.53	31.9	104.0	15.9	30.0	652.2	10.9	14.0	5.43	361.3	14.1	2,568.8	44.9	12.4	26.6	23.1	18.6
06/20	1.14	11.8	76.1	12.0	7.9	632.4	14.6	12.4	5.06	337.3	13.5	2,504.6	43.9	13.0	18.2	20.7	22.4
03/20	1.47	38.7	96.4	14.8	50.1	651.4	24.9	11.3	4.94	331.7	13.7	2,423.8	46.6	14.1	19.0	24.6	24.9
12/19	1.29	22.9	84.8	13.4	7.7	632.8	25.3	12.1	4.53	299.5	13.1	2,293.8	37.7	12.6	6.8	19.9	24.5
09/19	1.16	0.9	80.0	13.6	21.2	588.1	25.6	16.2	4.29	293.5	13.6	2,166.0	45.6	15.5	64.4	31.6	24.7
06/19	1.02	14.6	70.5	12.8	23.4	551.6	23.8	16.6	4.28	279.5	13.7	2,046.0	32.5	11.6	91.9	34.6	24.3
03/19	1.06	-7.8	64.3	12.3	34.1	521.3	22.9	5.4	4.15	266.1	13.7	1,940.1	27.9	10.5	105.4	37.5	25.2
12/18	1.05	281.0	78.8	15.6	51.3	504.9	26.5	23.9	4.24	249.8	13.6	1,842.9	1.2	0.5	223.7	43.3	27.1
09/18	1.15	49.4	66.0	14.1	30.4	468.2	24.0	0.6	2.61	223.1	12.8	1,737.3	76.6	34.3	11.1	44.6	27.3
06/18	0.89	30.9	57.1	12.8	32.7	445.6	27.7	12.0	2.23	207.7	12.6	1,646.6	79.2	38.1	7.7	51.7	28.1
03/18	1.15	161.4	47.9	11.3	67.5	424.1	30.6	-34.5	2.02	193.6	12.5	1,549.9	74.4	38.4	9.2	55.1	27.0
12/17	-0.58	-226.1	52.1	13.0	62.5	399.3	27.4	159.3	1.31	174.3	12.0	1,450.4	89.6	51.4	-29.6	37.8	25.0
09/17	0.77	57.1	50.6	13.4	52.2	377.5	26.6	15.7	2.35	154.3	11.3	1,364.7	26.6	17.2	22.4	19.5	23.3
06/17	0.68	47.8	43.0	12.3	39.2	349.0	23.0	13.2	2.07	136.9	10.7	1,285.4	25.5	18.6	10.7	9.9	23.1
03/17	0.44	-2.2	28.6	8.8	-5.5	324.7	22.7	17.3	1.85	124.8	10.2	1,220.3	25.7	20.6	3.9	5.7	24.7
12/16	0.46	-11.5	32.1	10.2	-7.7	313.5	20.5	22.7	1.86	126.5	10.9	1,160.1	27.2	21.5	14.8	19.2	26.9
09/16	0.49	11.4	33.2	11.1	15.9	298.3	26.4	21.3	1.92	129.1	11.7	1,106.9	27.0	20.9	30.6	34.6	29.3
06/16	0.46	24.3	30.9	10.9	26.5	283.8	30.3	21.0	1.87	124.6	11.9	1,044.6	25.7	20.7	32.6	39.0	28.5
03/16	0.45	55.2	30.3	11.4	66.0	264.5	32.2	21.0	1.78	118.1	12.1	978.6	24.5	20.7	32.8	41.3	27.1
12/15	0.52	40.5	34.7	13.3	41.3	260.3	28.7	20.4	1.62	106.1	11.6	914.1	21.5	20.3	15.7	22.0	25.2
09/15	0.44	15.8	28.7	12.1	28.1	236.0	22.5	20.2	1.47	95.9	11.2	856.1	20.6	21.5	4.3	11.9	24.9
06/15	0.37	23.3	24.4	11.2	32.8	217.8	24.7	21.3	1.41	89.6	11.0	812.8	18.0	20.1	2.9	7.1	28.4
03/15	0.29	-17.1	18.2	9.1	-15.6	200.0	24.7	19.3	1.34	83.6	10.9	769.7	16.4	19.7	-1.5	1.1	30.2
12/14	0.37	-2.6	24.6	12.2	5.4	202.2	28.3	25.1	1.40	87.0	11.9	730.0	17.2	19.8	9.4	13.3	31.5
09/14	0.38	11.8	22.4	11.6	9.9	192.8	37.5	14.9	1.41	85.7	12.5	685.4	15.7	18.4			
06/14	0.30	3.4	18.4	10.5	5.5	174.7	31.2	19.5	1.37	83.7	13.2	632.8	16.3	19.5			
03/14	0.35	29.6	21.6	13.5	37.8	160.4	29.1	19.6	1.36	82.7	14.0	591.3	16.0	19.3			
12/13	0.38		23.3	14.8		157.6		19.5									

**Quarterly Growth Trend Data**

Graph: Trailing 4 Quarters, Last 5 Years of Data

Quarterly Data									Last 12 Months Data									
Period	EPS		Pre-Tax Profit			Sales		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	
09/13	0.34		20.4	14.5		140.2		19.3										
06/13	0.29		17.4	13.1		133.2		19.0										
03/13	0.27		15.7	12.6		124.2		19.1										