

APPLE INC (AAPL-O)

Technology Equipment / Computers, Phones & Electr. / Computer Hardware

STOCKREPORTS+ DETAILED STOCK REPORT

Report Date: 2016 October 28

Last Close 114.48 (USD)	Avg Daily Vol 31.8M	52-Week High 123.82	Trailing PE 13.4	Annual Div 2.28	ROE 39.1%	LTG Forecast 8.7%	1-Mo Return 1.2%
2016 October 27 NASDAQ Exchange	Market Cap 628.3B	52-Week Low 89.47	Forward PE 13.1	Dividend Yield 2.0%	Annual Rev 227.5B	Inst Own 57.8%	3-Mo Return 11.2%

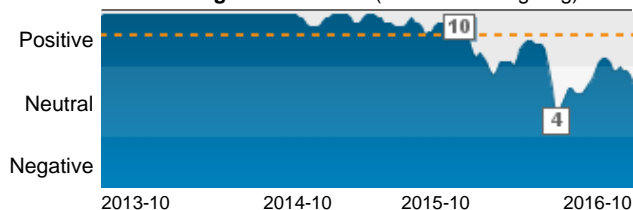
AVERAGE SCORE

AVERAGE
SCORE

6

NEUTRAL OUTLOOK: AAPL's current score is relatively in-line with the market.

Average Score Trend (4-Week Moving Avg)



Computers, Phones & Electr. Group:	4.3	Mega Market Cap:	6.8
Technology Equipment Sector:	5.1	S&P 500 Index:	6.4

Peers	-6M	-3M	-1M	-1W	Current	1Y Trend
AAPL	7	6	8	6	6	
HPE	5	5	6	6	6	
STX	2	5	4	6	6	
HPQ	5	5	6	7	4	
DVMT	NR	NR	NR	NR	NR	

HIGHLIGHTS

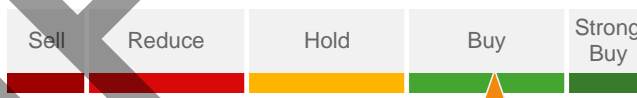
- The score for Apple Inc last changed from 8 to 6 on 2016-10-02.
- The recent change in the Average Score was due to a decline in the Earnings, Risk, and Relative Valuation component scores.

THOMSON REUTERS I/B/E/S MEAN

Buy

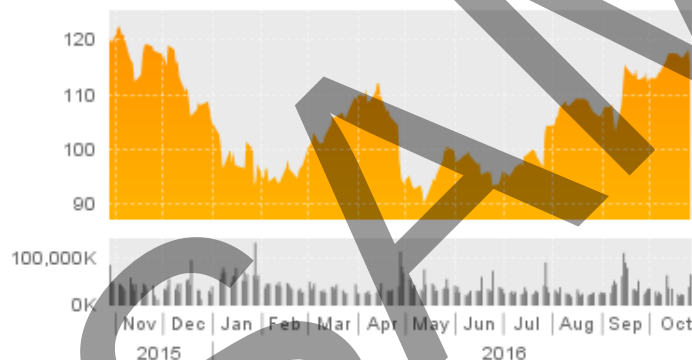
48 Analysts

Mean recommendation from all analysts covering the company on a standardized 5-point scale.

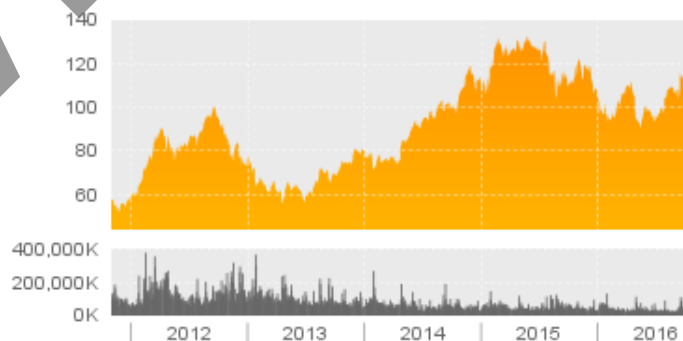


PRICE AND VOLUME CHARTS

1-Year Return: -0.1%



5-Year Return: 98.0%



BUSINESS SUMMARY

Apple Inc. designs, manufactures and markets mobile communication and media devices, personal computers and portable digital music players and sells a variety of related software, services, peripherals, networking solutions and third-party digital content and applications. The Company's products and services include iPhone, iPad, Mac, iPod, Apple TV, a portfolio of consumer and professional software applications, the iOS and OS X operating systems, iCloud and a variety of accessory, service and support offerings. The Company offers a range of mobile communication and media devices, personal computing products and portable digital music players, as well as a variety of related software, services, peripherals, networking solutions and third-party hardware and software products. The Company's primary products include iPhone, iPad, Mac, iPod, iTunes, Mac App Store, iCloud, Operating System Software, Application Software and Other Application Software.

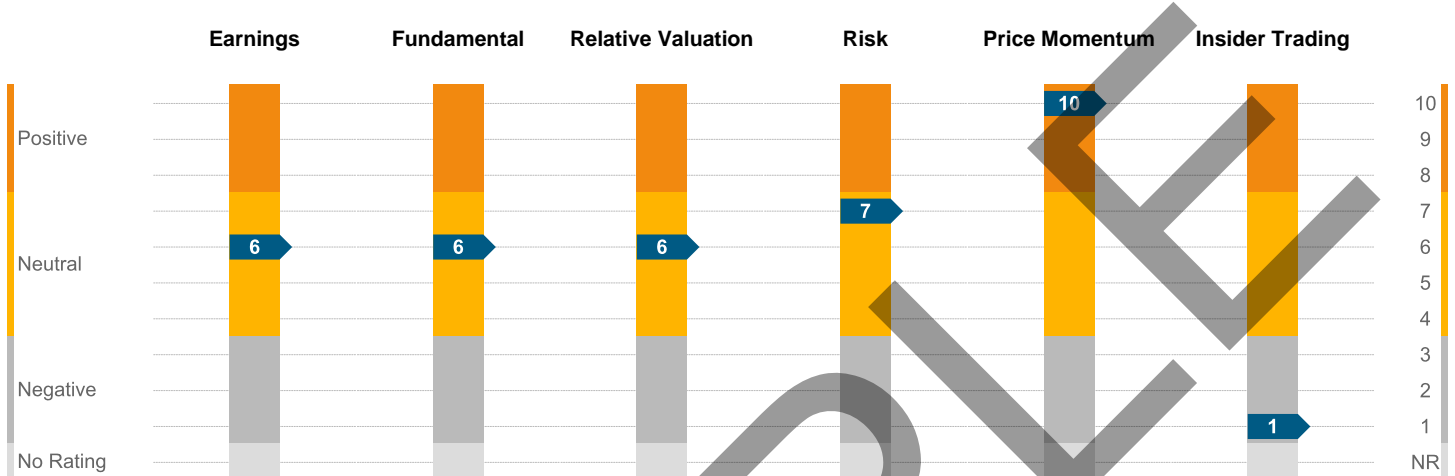


INDICATOR COMPONENTS

AVERAGE SCORE

6

The **AVERAGE SCORE** combines the quantitative analysis of six widely-used investment decision making tools: Earnings, Fundamental, Relative Valuation, Risk, Price Momentum and Insider Trading. A simple average of the underlying component ratings is normally distributed to rank stocks on a 1-10 scale (10 being awarded to the most favorable). These factors may be evaluated differently using alternative methodologies and the importance of individual factors varies across industries, market capitalization and investment styles. Additional criteria should always be used to evaluate a stock.



OPTIMIZED SCORE

OPTIMIZED SCORE

6

Historically, companies with an optimized score of 6 have tended to perform in-line with the market over the following 12-month period.



As an alternative approach to equally weighting each of the six factors, independent research firm, Verus Analytics, conducted a backtest to empirically determine the optimal factor blend. Results and weighting vary across four different market capitalization categories. For large cap stocks, price momentum and insider trading historically provided the most explanatory power among the six factors and are weighted heavily in the current optimized score. Among the small cap universe, the earnings and fundamental factors joined with insider trading and price momentum to explain returns.

PEER ANALYSIS

Currency in USD

Average Score	Ticker	PRICE MOMENTUM				VALUATION		FUNDAMENTAL		ANALYSTS		# of Analysts	
		Price (2016-10-27)	1-Mo Return	3-Mo Return	1-Yr Return	Market Cap	Trailing PE	Forward PE	Dividend Yield	Net Margin	LTG Forecast		I/B/E/S Mean
6	AAPL	114.48	1.2%	11.2%	-0.1%	628.3B	13.4	13.1	2.0%	20.8%	8.7%	Buy	48
6	HPE	22.19	-3.2%	9.0%	41.1%	36.0B	9.2	10.9	1.0%	2.5%	1.7%	Buy	26
4	HPQ	13.99	-8.8%	0.0%	12.3%	23.6B	7.5	9.1	3.6%	5.4%	2.8%	Buy	25
NR	DVMT	48.33	1.1%	--	--	10.5B	--	--	--	--	--	--	--
6	STX	34.24	-10.9%	6.8%	-12.7%	10.3B	27.2	9.1	7.4%	-0.8%	8.5%	Hold	32
4	LXK	39.56	14.9%	6.1%	27.9%	2.5B	--	15.8	3.6%	-4.9%	--	Hold	6
6	SYNA	67.70	16.4%	26.3%	-19.9%	2.4B	35.6	13.0	--	5.1%	13.3%	Buy	17
5	EFII	42.91	-12.8%	-3.4%	-5.5%	2.0B	75.3	16.5	--	0.8%	17.7%	Strong Buy	11
7	KN	14.67	6.5%	4.0%	-14.3%	1.3B	--	14.9	--	-15.9%	15.0%	Buy	9
8	MRCY	27.28	18.6%	5.2%	58.3%	954M	49.6	33.9	--	6.9%	10.0%	Buy	6
8	SCSC	35.80	-0.9%	-14.1%	-7.6%	911M	15.0	12.4	--	1.8%	9.5%	Buy	4
6	Average	41.92	2.0%	5.1%	8.0%	65.4B	29.1	14.9	3.5%	2.2%	9.7%	Buy	18.4

PEER COMPANIES

HPE	Hewlett Packard Enterprise Co	SYNA	Synaptics Inc
HPQ	HP Inc	EFII	Electronics for Imaging Inc
DVMT	Dell Technologies Inc	KN	Knowles Corp
STX	Seagate Technology	MRCY	Mercury Systems Inc
LXK	Lexmark International Inc	SCSC	ScanSource Inc



EARNINGS

EARNINGS

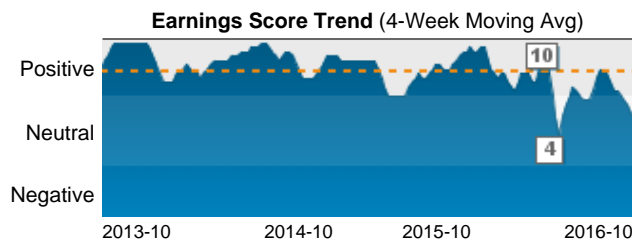
6

Currency in USD

NEUTRAL OUTLOOK: Mixed earnings expectations and performance.

Earnings Score Averages

Computers, Phones & Electr. Group: **6.0** Mega Market Cap: **7.0**
Technology Equipment Sector: **6.4** S&P 500 Index: **6.6**



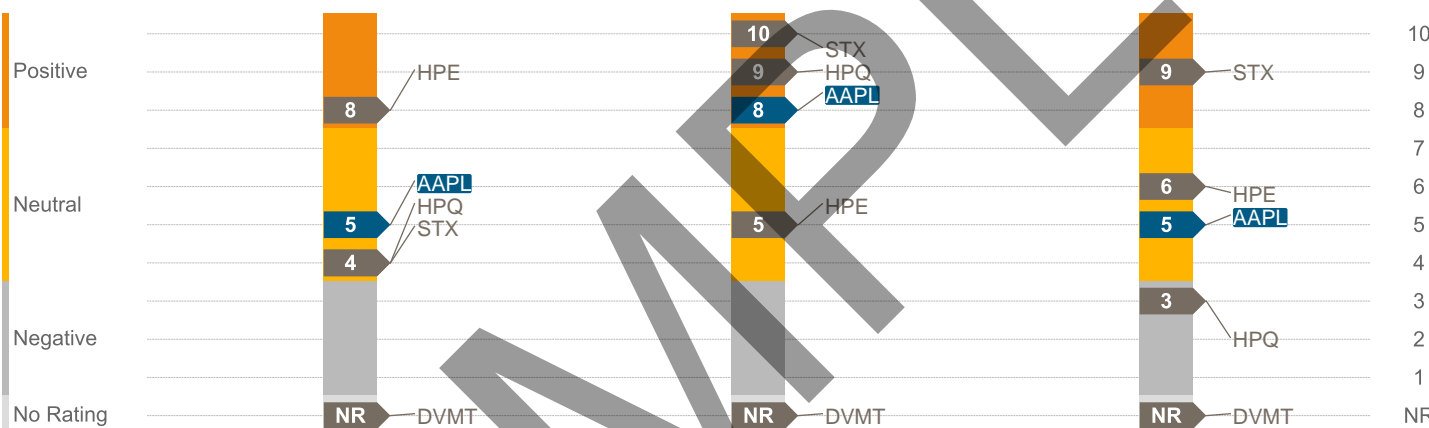
Peers	-6M	-3M	-1M	-1W	Current	1Y Trend
STX	3	8	9	10	10	
HPE	9	9	8	8	8	
AAPL	9	7	7	5	6	
HPQ	2	6	4	6	5	
DVMT	NR	NR	NR	NR	NR	

EARNINGS INDICATORS

Earnings Surprises (33.3% weight)

Estimate Revisions (33.3% weight)

Recommendation Changes (33.3% weight)



Last 4 Quarters

# Positive Surprises (> 2%)	1
# Negative Surprises (< -2%)	1
# In-Line Surprises (within 2%)	2
Avg Surprise	0.1%

Last 4 Weeks

# Up Revisions	22
# Down Revisions	11
Avg Up Revisions	45.8%
Avg Down Revisions	-22.9%

Last 120 Days

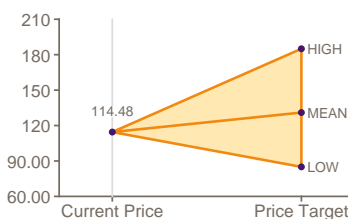
# Broker Upgrades	1
# Broker Downgrades	7

HIGHLIGHTS

- Apple Inc currently has a relatively neutral Earnings Rating of 6. The average Earnings Rating for its Computer Hardware industry is 6.4 and the S&P 500 index average is 6.6.
- On 2016-10-25, the company announced quarterly earnings of 1.67 per share, relatively in-line with the consensus 1.66. Over the past 4 quarters, the company has reported 1 positive, 1 negative, and 2 in-line surprises. The average surprise for this time period has been 0.1%.
- AAPL's current quarter consensus estimate has increased over the past 90 days from 3.10 to 3.23, a rise of 4.3%. Consensus estimates for the Computer Hardware industry have moved an average 0.0% during the same time period.

PRICE TARGET

The chart indicates where analysts predict the stock price will be within the next 12 months, as compared to the current price.



12-Month Price Target

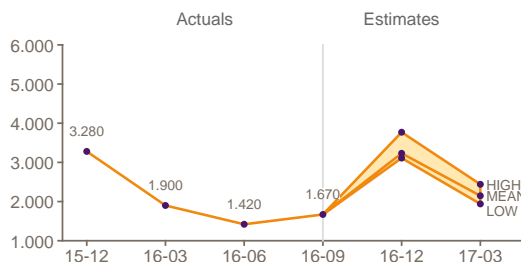
Mean	131.00
High	185.00
Low	85.00
Target vs. Current	14.4%
# of Analysts	43



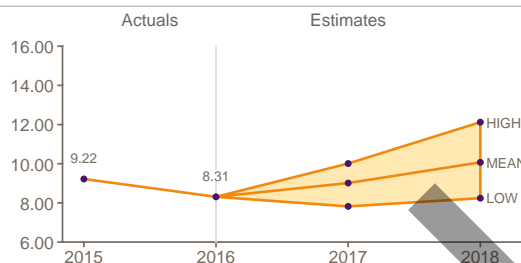
EARNINGS PER SHARE

Earnings per share (EPS) is calculated by dividing a company's earnings by the number of shares outstanding. Analysts tend to interpret a pattern of increasing earnings as a sign of strength and flat or falling earnings as a sign of weakness.

The charts provide a comparison between a company's actual and estimated EPS, including the high and low forecasts.



Quarterly	16-12	17-03
Mean	3.232	2.148
High	3.770	2.440
Low	3.110	1.940
# of Analysts	37	37



Annual	2017	2018
Mean	9.013	10.070
High	10.010	12.120
Low	7.820	8.240
# of Analysts	46	36

MEAN ESTIMATE TREND

	Q 16-12	Q 17-03	Y 2017	Y 2018	Price Target
Current	3.232	2.148	9.013	10.070	131.00
30 Days Ago	3.162	2.159	8.952	10.110	126.00
90 Days Ago	3.098	2.146	8.901	10.070	124.00
% Change (90 Days)	4.3%	0.1%	1.3%	0.0%	5.6%

Current Fiscal Year End: 17-09

Next Expected Report Date: 2017-01-24

ANALYST RECOMMENDATIONS

Thomson Reuters I/B/E/S Mean: Buy (48 Analysts)

Strong Buy	13
Buy	27
Hold	6
Reduce	1
Sell	1

EARNINGS SURPRISES

Comparing a company's actual earnings to the mean expectation of analysts results in a difference referred to as a 'positive' or 'negative' surprise. Research has shown that when a company reports a surprise, it is often followed by more of the same surprise type.

Surprise Summary (Last 12 Quarters)

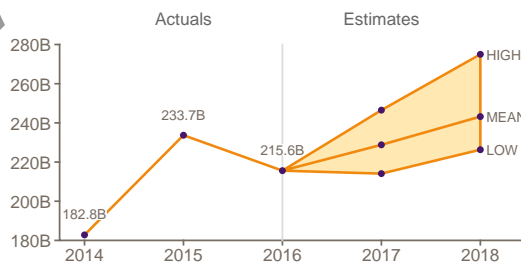
Surprise Type	Amount	Percent
Positive Quarters (> 2%)	9	75.0%
Negative Quarters (< -2%)	1	8.3%
In-Line Quarters (within 2%)	2	16.7%

Surprise Detail (Last 6 Periods)

Surprise Type	Announce Date	Period End Date	Actual EPS	Mean EPS	Surprise (%)
In-Line	2016-10-25	2016-09-30	1.670	1.656	0.8%
Positive	2016-07-26	2016-06-30	1.420	1.384	2.6%
Negative	2016-04-26	2016-03-31	1.900	1.998	-4.9%
In-Line	2016-01-26	2015-12-31	3.280	3.227	1.6%
Positive	2015-10-27	2015-09-30	1.960	1.880	4.3%
Positive	2015-07-21	2015-06-30	1.850	1.811	2.2%

ANNUAL REVENUE

A pattern of increasing sales in conjunction with a rising EPS may influence a buy recommendation, while flat or falling sales and faltering earnings may explain a sell recommendation. A rising EPS with flat or falling sales may result from increased cost efficiency and margins, rather than market expansion. This chart shows the sales forecast trend of all analysts and the highest and lowest projections for the current and next fiscal year.



	2017	2018
Mean	228.8B	243.2B
High	246.5B	275.0B
Low	214.1B	226.3B
Forecasted Growth	6.1%	12.8%
# of Analysts	43	33



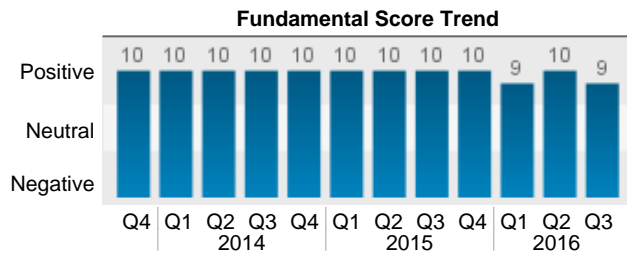
FUNDAMENTAL



NEUTRAL OUTLOOK: Fundamentals relatively in-line with the market.

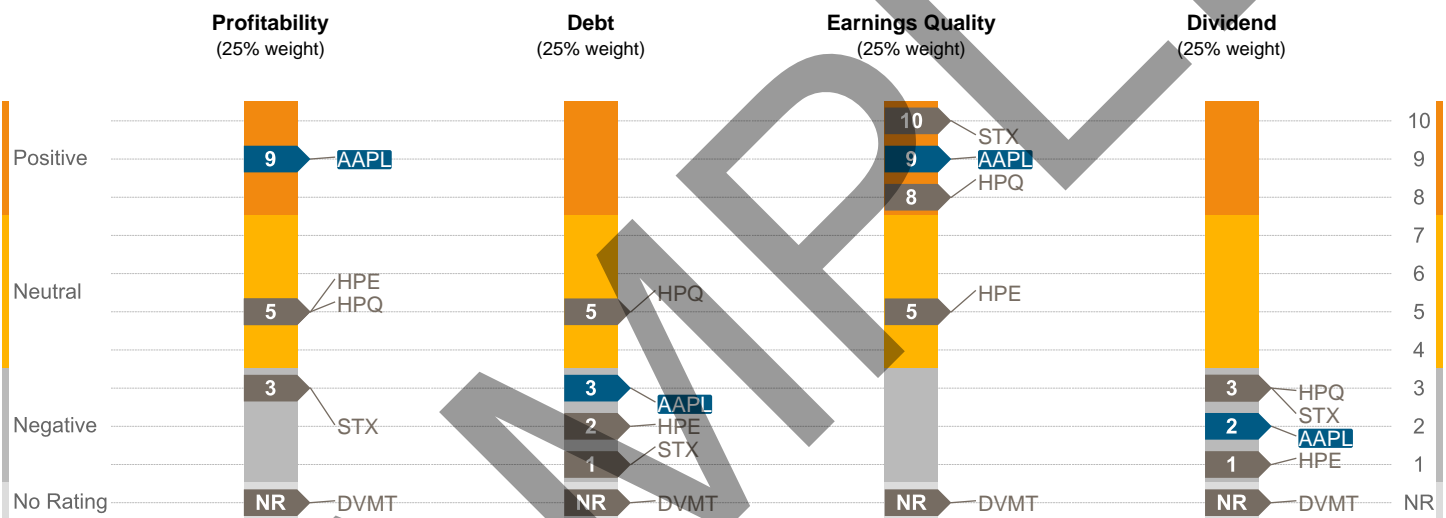
Fundamental Score Averages

Computers, Phones & Electr. Group:	4.5	Mega Market Cap:	6.5
Technology Equipment Sector:	4.9	S&P 500 Index:	6.4



Peers	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Current	3Y Trend
AAPL	10	9	10	9	6	10 9 8 7 6 5 4 3 2 1 0
HPQ	10	10	9	9	5	10 9 8 7 6 5 4 3 2 1 0
STX	10	9	9	8	3	10 9 8 7 6 5 4 3 2 1 0
HPE	4	4	4	4	2	10 9 8 7 6 5 4 3 2 1 0
DVMT	NR	NR	NR	NR	NR	10 9 8 7 6 5 4 3 2 1 0

FUNDAMENTAL INDICATORS



Revenue Growth For year over year ending 2016-03	7.2%	Current Ratio For year over year ending 2016-03	1.3	Days Sales In Inv. For period ending 2015-09	6.3	Div. Growth Rate For year over year ending 2016-03	10.6%
Gross Margin For trailing 4 qtrs ending 2016-03	39.4%	Debt-to-Capital For trailing 4 qtrs ending 2015-09	30.9%	Days Sales In Rec. For period ending 2015-09	44.9	Dividend Funding For trailing 4 qtrs ending 2016-03	29.9%
Return On Equity For trailing 4 qtrs ending 2016-03	39.1%	Interest Funding For trailing 4 qtrs ending 2016-03	2.7%			Dividend Coverage For trailing 4 qtrs ending 2015-09	6.0
Net Margin For trailing 4 qtrs ending 2016-03	20.8%	Interest Coverage For trailing 4 qtrs ending 2016-03	45.1			Current Div. Yield For trailing 4 qtrs ending 2016-07	2.0%

HIGHLIGHTS

- The Fundamental Rating for Apple Inc declined significantly over the last quarter from a bullish 10 to a relatively neutral 6. The average Fundamental Rating for its Computer Hardware industry is 4.8 and the S&P 500 index average is 6.4.
- The company's net margin has been higher than its industry average for each of the past five years.
- The company's current ratio has been lower than its industry average for each of the past five years.
- The Fundamental Rating for Apple Inc declined significantly over the last quarter from a bullish 10 to a relatively neutral 6. The average Fundamental Rating for its Computer Hardware industry is 4.8 and the S&P 500 index average is 6.4.
- The company's net margin has been higher than its industry average for each of the past five years.



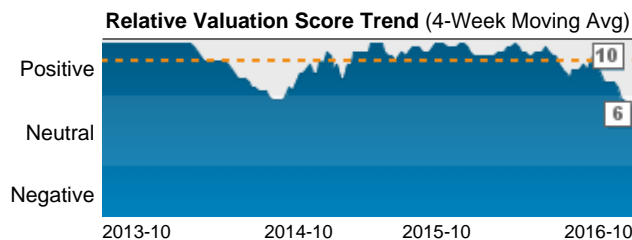
RELATIVE VALUATION



NEUTRAL OUTLOOK: Multiples relatively in-line with the market.

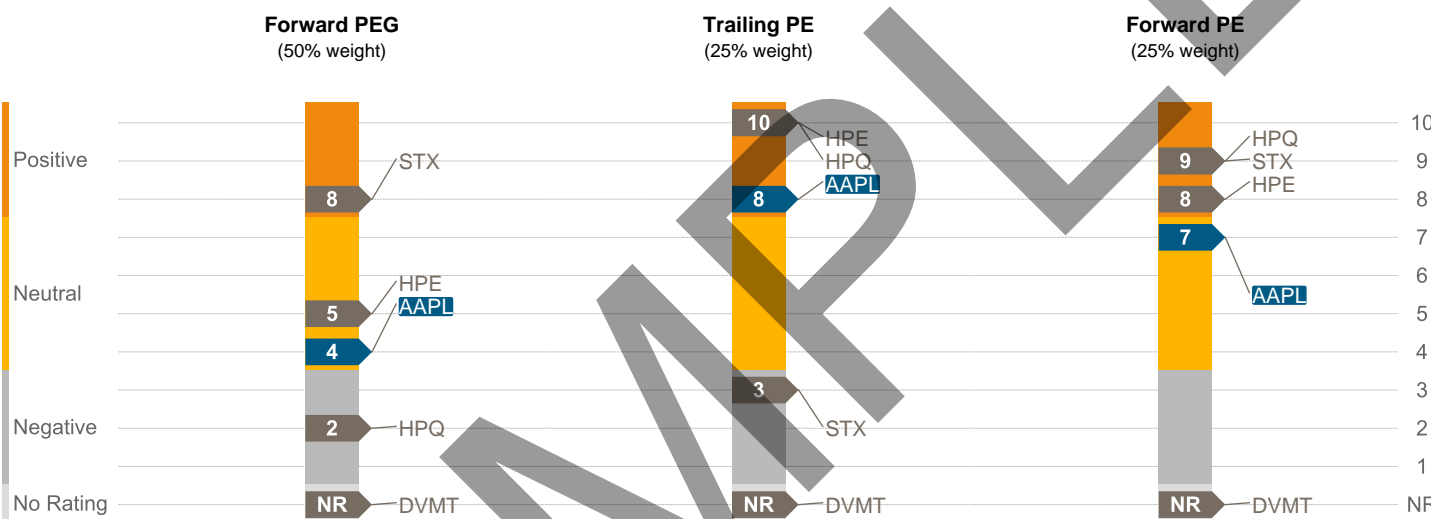
Relative Valuation Score Averages

Computers, Phones & Electr. Group:	5.8	Mega Market Cap:	5.2
Technology Equipment Sector:	5.5	S&P 500 Index:	5.2



Peers	-6M	-3M	-1M	-1W	Current	1Y Trend
HPE	10	9	7	6	8	
STX	10	9	7	6	8	
AAPL	10	9	7	6	6	
HPQ	10	9	7	6	5	
DVMT	10	9	7	6	NR	

RELATIVE VALUATION INDICATORS



Indicator	Value	5-Yr Average	Rel. to 5-Yr Avg.	S&P 500 Index	Value	5-Yr Average	Rel. to 5-Yr Avg.
Forward PEG	1.7	0.9	94% Premium	17.3	13.1	12.3	7% Premium
Trailing PE	13.4	13.6	1% Discount	24.4	17.3	17.3	0% Premium
Forward PE	13.1	12.3	7% Premium	17.3	17.3	17.3	0% Premium
Rel. to S&P 500	10% Premium	45% Discount	24% Discount				

HIGHLIGHTS

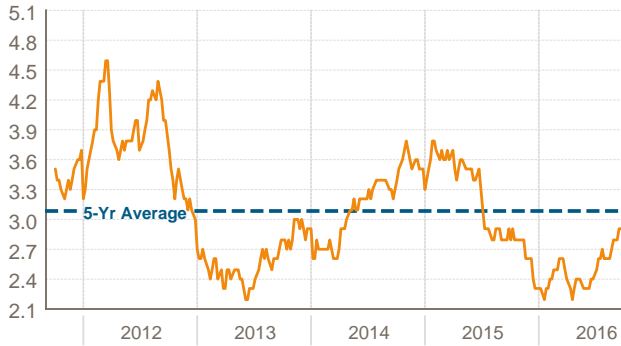
- Apple Inc currently has a Relative Valuation Rating of 6 while the S&P 500 index has an average rating of 5.5.
- AAPL's 1.7 Forward PEG is currently at the high end of its 5-year range (lowest 0.4 to highest 1.7).
- Apple Inc currently has a Relative Valuation Rating of 6 while the S&P 500 index has an average rating of 5.5.
- AAPL's 1.7 Forward PEG is currently at the high end of its 5-year range (lowest 0.4 to highest 1.7).



PRICE TO SALES

The most recent week's close price divided by the revenue per share.

Price to Sales: 2.8
5-Year Average: 3.1
S&P 500 Index Average: 1.8
Computer Hardware Industry Average: 1.9



TRAILING PE

The most recent week's close price divided by the sum of the four most recently reported quarterly earnings.

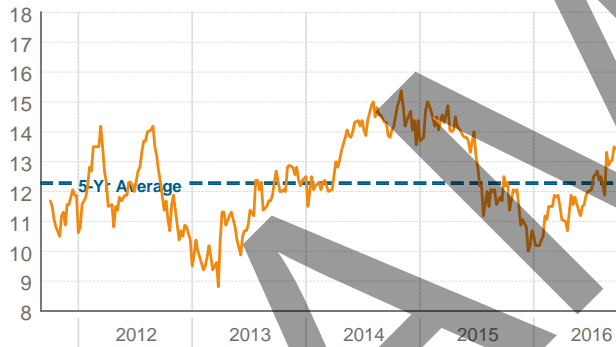
Trailing PE: 13.4
5-Year Average: 13.6
S&P 500 Index Average: 24.4
Computer Hardware Industry Average: 14.5



FORWARD PE

The most recent week's close price divided by the sum of the four upcoming quarterly consensus estimates.

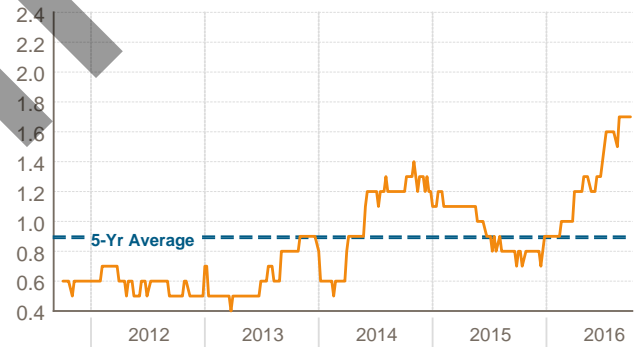
Forward PE: 13.1
5-Year Average: 12.3
S&P 500 Index Average: 17.3
Computer Hardware Industry Average: 13.1



FORWARD PEG

The Forward P/E divided by the five-year forecasted growth rate.

Forward PEG: 1.7
5-Year Average: 0.9
S&P 500 Index Average: 1.5
Computer Hardware Industry Average: 0.8



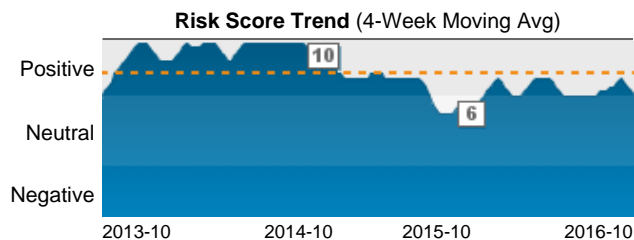
RISK

RISK
7

NEUTRAL OUTLOOK: Moderate risk (medium volatility).

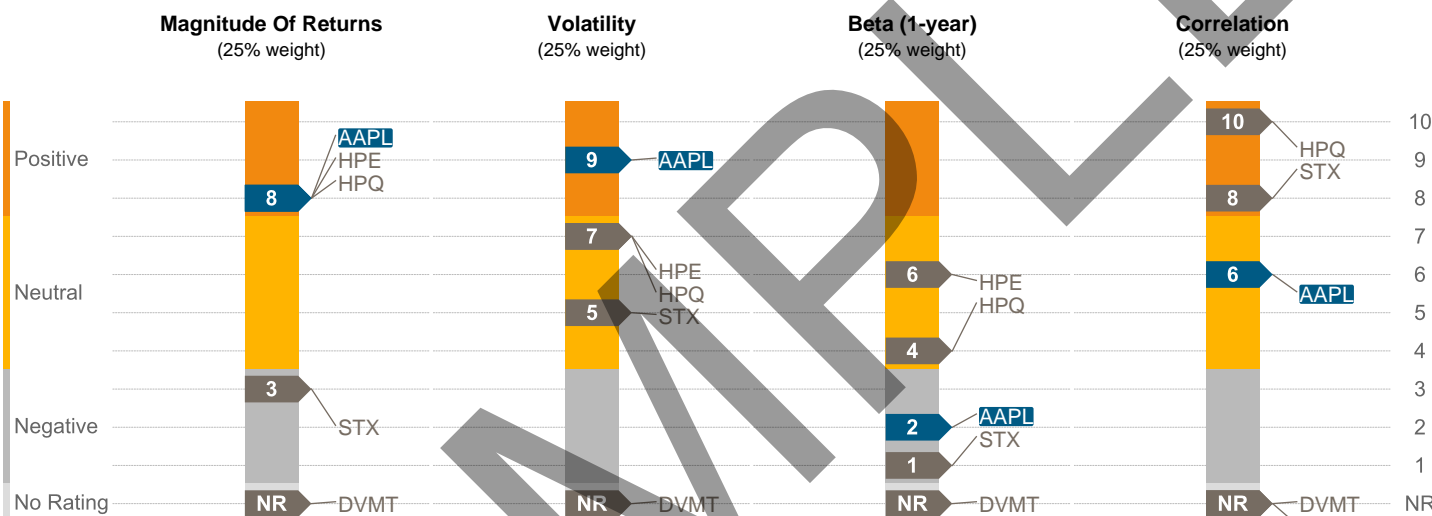
Risk Score Averages

Computers, Phones & Electr. Group:	3.8	Mega Market Cap:	8.8
Technology Equipment Sector:	4.7	S&P 500 Index:	8.1



Peers	-6M	-3M	-1M	-1W	Current	1Y Trend
HPQ	6	6	8	9	8	
AAPL	8	7	8	7	7	
HPE	6	6	6	7	7	
STX	3	2	3	4	4	
DVMT	NR	NR	NR	NR	NR	

RISK INDICATORS



Daily Returns (Last 90 Days)		Standard Deviation		Beta vs. S&P 500		Correlation vs. S&P 500	
Best	3.5%	Last 90 Days	1.16	Positive Days Only	1.34	Last 90 Days	43%
Worst	-2.6%	Last 60 Months	7.76	Negative Days Only	1.02	Last 60 Months	47%
Monthly Returns (Last 60 Months)		Intra-Day Swing (Last 90 Days)		Beta vs. Group		Correlation vs. Group	
Best	18.8%	Average	1.3%	Positive Days Only	0.82	Last 90 Days	35%
Worst	-14.4%	Largest	4.0%	Negative Days Only	0.76	Last 60 Months	31%

HIGHLIGHTS

- Apple Inc currently has a Risk Rating of 7 while the S&P 500 index has an average rating of 8.1.
- On days when the market is up, AAPL tends to outperform the S&P 500 index. On days when the market is down, the stock generally performs in-line with the index.
- In both short-term and long-term periods, AAPL has shown high correlation (≥ 0.4) with the S&P 500 index. Thus, this stock would provide only low levels of diversification to a portfolio similar to the broader market.
- Over the last 90 days, AAPL shares have been less volatile than the overall market, as the stock's daily price has fluctuated less than 85% of S&P 500 index firms.

RISK ANALYSIS

Peers	Last 90 Days				Last 60 Months		
	Best Daily Return	Worst Daily Return	# Days Up	# Days Down	Largest Intra-Day Swing	Best Monthly Return	Worst Monthly Return
AAPL	3.5%	-2.6%	34	30	4.0%	18.8%	-14.4%
DVMT	5.7%	-2.6%	16	16	10.8%	--	--
HPE	3.6%	-3.2%	36	28	8.6%	33.6%	-9.5%
HPQ	3.1%	-4.4%	31	33	6.5%	22.0%	-18.8%
STX	5.9%	-7.6%	34	30	11.4%	57.2%	-35.6%
S&P 500	1.5%	-2.5%	27	36	2.0%	10.8%	-7.2%



PRICE MOMENTUM

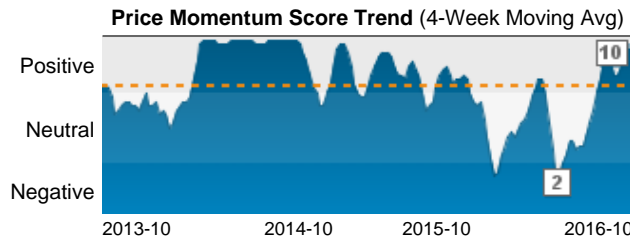
PRICE
MOMENTUM
10

Currency in USD

POSITIVE OUTLOOK: Strong recent price performance or entering historically favorable seasonal period.

Price Momentum Score Averages

Computers, Phones & Electr. Group:	5.4	Mega Market Cap:	5.8
Technology Equipment Sector:	5.9	S&P 500 Index:	5.5



Peers	-6M	-3M	-1M	-1W	Current	1Y Trend
AAPL	4	5	10	10	10	
HPE	7	9	10	9	8	
STX	1	7	9	7	7	
HPQ	5	8	10	10	5	
DVMT	NR	NR	NR	NR	NR	

PRICE MOMENTUM INDICATORS

Relative Strength (70% weight)

Seasonality (30% weight)



Relative Strength Indicator (Scale from 1 to 100)

	AAPL	Industry Avg
Last 1 Month	54	46
Last 3 Months	55	49
Last 6 Months	52	49

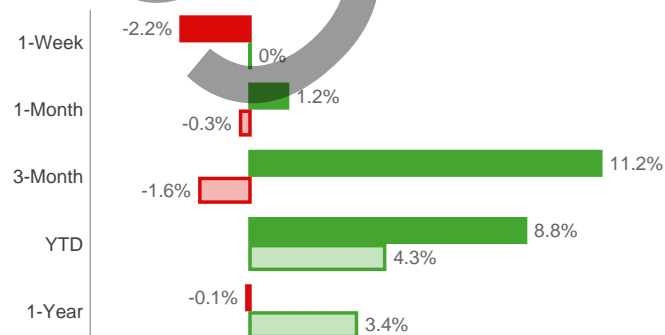
Average Monthly Return (Last 10 Years)

	OCT	NOV	DEC
Company Avg	5.1%	1.7%	-1.0%
Industry Avg	1.1%	-0.2%	4.0%
Industry Rank	62 of 118	51 of 118	36 of 118

PRICE PERFORMANCE

Daily close prices are used to calculate the performance of the stock as compared to a relevant index over five time periods.

■ AAPL
■ DJIA



	AAPL	DJIA
Close Price (2016-10-27)	114.48	18,170
52-Week High	123.82	18,636
52-Week Low	89.47	15,660

- The Price Momentum Rating for Apple Inc is at its 3-year high of 10.
- On 2016-10-27, AAPL closed at 114.48, 7.5% below its 52-week high and 28.0% above its 52-week low.
- AAPL shares are currently trading 2.1% above their 50-day moving average of 112.13, and 10.9% above their 200-day moving average of 103.19.



INSIDER TRADING

INSIDER TRADING

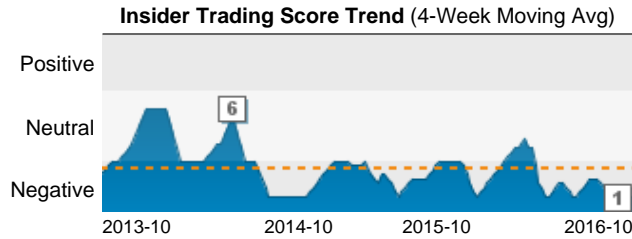
1

Currency in USD

NEGATIVE OUTLOOK: Recent or longer-term trend of selling by company insiders.

Insider Trading Score Averages

Computers, Phones & Electr. Group:	4.3	Mega Market Cap:	3.6
Technology Equipment Sector:	4.2	S&P 500 Index:	4.0

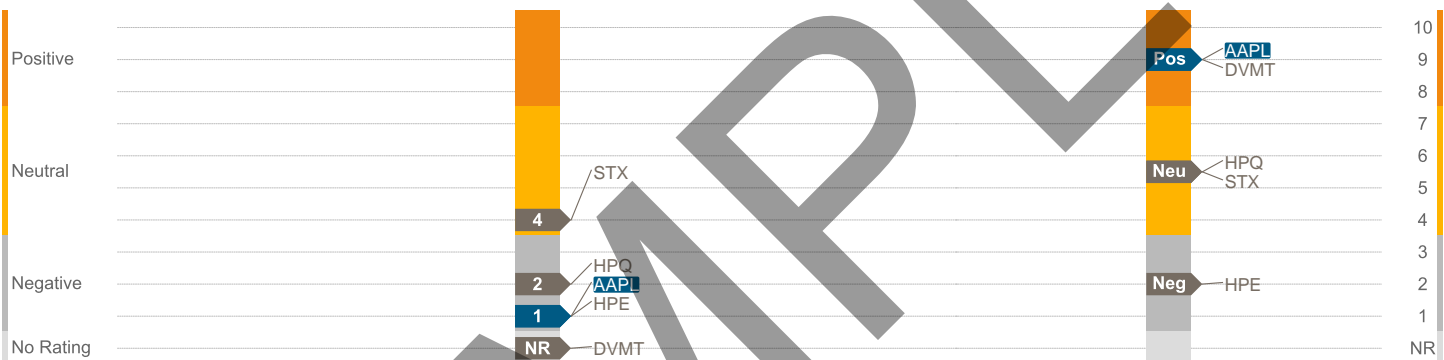


Peers	-6M	-3M	-1M	-1W	Current	1Y Trend
DVMT	NR	NR	NR	8	8	
STX	9	8	3	3	4	
HPQ	4	2	2	2	2	
AAPL	1	2	1	1	1	
HPE	4	1	1	1	1	

INSIDER TRADING INDICATORS

Short-Term Insider (70% weight)

Long-Term Insider (30% weight)



Most Recent Buys and Sells (Last 90 Days)

Insider Summary (Last 6 Months)

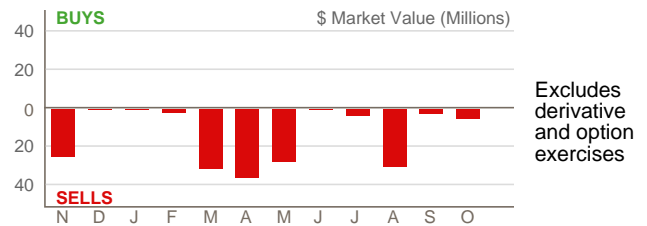
Insider Name	Role	Tran Date	Tran Type	Shares
Williams, Jeffrey E	CO	2016-10-03	S	43,769
Riccio, Daniel J Jr	O	2016-09-21	S	22,381
Cook, Timothy D	CEO	2016-08-25 - 2016-08-31	S	603,883

Total Shares Acquired	3,063,723
Total Shares Disposed	2,781,976
Net Shares	281,747
Sector Average	153,920

HIGHLIGHTS

- Apple Inc currently has an Insider Trading Rating of 1, which is significantly more bearish than both the Computer Hardware industry average of 4.44 and the Computers, Phones & Electr. industry group average of 4.29.
- Since the beginning of the current quarter, sales by Apple Inc executives have totaled \$4,927,952. Over the past five years, the average sell total for Q4 has been \$31,577,778.

MONTHLY BUYS AND SELLS



TOP INSTITUTIONAL HOLDERS

Institution Name	Inst. Type	% O/S	Shares Held	Reported Date
The Vanguard Group Inc	Inv Mgmt	6.2%	331M	2016-06-30
BlackRock Institutional	Inv Mgmt	4.0%	214M	2016-06-30
State Street Global	Inv Mgmt	3.9%	209M	2016-06-30
Fidelity Management	Inv Mgmt	2.4%	130M	2016-06-30
T. Rowe Price Associates	Inv Mgmt	1.1%	58.5M	2016-06-30

Updated daily as of 2016-10-27

TOP EXECUTIVE HOLDERS

Insider Name	Role	Direct Shares	Value	Reported Date
Levinson, Arthur D	D	1.13M	133M	2016-08-11
Cook, Timothy D	CEO	1.04M	122M	2016-08-31
Federighi, Craig	O	0.51M	60.0M	2016-09-30
Gore, Albert A Jr	D	0.44M	52.1M	2016-02-01
Sewell, Durward Bruce	GC	0.24M	27.7M	2016-09-30

Updated monthly as of 2016-10-16



DETAILED STOCK REPORT TIPS

The Thomson Reuters Stock Report is a comprehensive, company-specific analysis that includes a proprietary Stock Rating along with underlying component indicators and supportive data elements. The report is updated daily, although some of the data elements and the ratings are updated weekly.

Average Score

The Average Score combines a quantitative analysis of six widely-used investment decision making tools - Earnings, Fundamental, Relative Valuation, Risk, Price Momentum, and Insider Trading. First, a simple average of the six underlying component ratings is calculated. Then, a normal distribution is used to rank each stock across the market on a scale of 1 to 10, with 10 being most favorable. A score of 8 to 10 is considered positive, 4 to 7 is neutral, and 1 to 3 is negative. These six factors may be evaluated differently using alternative methodologies, and the importance of individual factors varies across groups, market capitalization and investment styles. Additional criteria should always be used to evaluate a stock.

A company must have sufficient data available for at least four of the six component indicators in order to receive an overall Average Score. Approximately 85% of the stocks within the coverage universe meet the criteria to generate a score.

Optimized Score

As an alternative to the average score, the Stock Report includes an Optimized Score generated by independent research firm, Verus Analytics. It uses the same six component ratings, but rather than equally weighting each of the factors, the weighting varies by market capitalization of the underlying security based on backtesting research. These scores are also updated weekly and distributed normally on a 1 to 10 scale, with 10 being best. The variable size is assigned monthly by ranking the market capitalization and assigning the appropriate category as follows:

- Large - Top 5.55%
- Mid - Next 13.87%
- Small - Next 34.68%
- Micro - Remaining 45.9%

Indicator Components

The six indicators that comprise the stock rating are displayed. Like the stock rating, the component rating scale is 1 to 10, with 10 being best. A company will receive an 'NR' for No Rating if the required data elements or criteria are not met. A detailed section for each component is included in the report.

Indicator Trends

Within each component section, historical score trends are displayed, typically using a 4-week moving average over a timeframe of the past three years. The dotted orange line indicates the average of the scores over those three years. The most recent occurrences of the best and worst scores are also displayed on the chart in grey boxes to put the current score into historical context.

Next to the trend chart for the company, current score averages are included, along with peer company comparisons of values from 6 months ago, 3 months ago, 1 month ago, the most recent value from 1 week ago, and the current score. The four closest industry peers are presented based on similar market capitalization.

Peer Analysis

The Thomson Reuters Business Classification (TRBC) system is used for industry comparisons. It is designed to track and display the primary business of a corporation by grouping together correlated companies that offer products and services into similar end markets. The system includes 10 Economic Sectors, 28 Business Sectors, 54 Industry Groups, and 136 Industries.

The Peer Analysis section of the report compares the company to its ten closest peers. The peers are selected from the industry based on similar market capitalization. The peer listing may have fewer than ten companies if there are fewer than ten companies classified within that industry.

Highlights

The Thomson Reuters proprietary automated text-generation system creates highlights summarizing the most noteworthy data. The bullets will vary by company and will change from week to week as different criteria are met.

Earnings

The Earnings Rating is based on a combination of three factors: earnings surprises, estimate revisions, and recommendation changes. Each factor is equally weighted. Then, equal deciles are used to rank each stock across the market on a scale of 1 to 10, with 10 being most favorable. A stock needs to have at least two of the three earnings factors in order to receive a score.

Earnings Surprises - The number of positive and negative surprises within the last 4 quarters.

Estimate Revisions - The number of up and down revisions and the average percentage change of those revisions within a 4 week period.

Recommendation Changes - The number of broker upgrades and downgrades in the last 120 days.

Price Target

The price target is based on the predictions of analysts covering the stock and shows the high, low and mean price expected within the next 12 months.

Earnings Per Share

The quarterly and annual earnings per share are presented when available, along with the mean, high and low. Quarterly data is displayed for the past 4 quarters (actual) and the next 2 quarters (estimated). Annual data is displayed for the past 2 years (actual) and the next 2 years (estimated).

Mean Estimate Trend

The mean estimates show how the consensus has changed over the past 30 days and 90 days for the upcoming two quarters and two years. The percentage change is calculated for the company as a means for comparison by measuring the difference between the current consensus estimate and that of 90 days ago.

Analyst Recommendations

The I/B/E/S Mean is the mean recommendation of all analysts covering the stock, as provided by Thomson Reuters I/B/E/S (Institutional Brokers Estimate System). The recommendations are presented on a five-point standardized scale: strong buy, buy, hold, reduce, and sell.

Earnings Surprises

The surprise summary includes the total number of quarters (and percentage) in the past 12 quarters in which earnings surprises were positive, negative, or in-line. In order to be recognized as a positive or negative surprise, the percent must be greater than 2% above or 2% below the consensus, respectively.

The surprise detail section includes a listing of the company's quarterly earnings reported for the most recent 6 quarters. The consensus analyst estimate is provided to determine if the actual earnings report represented a positive surprise, negative surprise, or in-line result.

Fundamental

The Fundamental Rating is based on a combination of four factors: profitability, debt, earnings quality, and dividend. Companies that do not pay a dividend are not penalized. Each factor is equally weighted. Then, equal deciles are used to rank each stock across the market on a scale of 1 to 10, with 10 being most favorable. A stock needs to have at least three of the four fundamental factors present for a given fiscal quarter in order to receive a score.

Profitability is comprised of four data elements.

- Revenue Growth: (Net Sales – Previous Net Sales) / Previous Net Sales
- Gross Margin: Gross Profit / Net Sales
- Return on Equity: Net Income / Total Equity
- Net Margin: Net Profit / Net Sales

Debt is comprised of four data elements.

- Current Ratio: Current Assets / Current Liabilities
- Debt-to-Capital: Total Debt / Total Capital
- Interest Funding: Interest Expense / Operating Cash Flow
- Interest Coverage: (Pre-Tax Income + Interest Expense) / Interest Expense

Earnings Quality is comprised of two data elements.

- Days Sales in Inventory: 365 / (Cost of Goods Sold / Inventory)
- Days Sales in Receivables: 365 / (Net Sales (Revenues) / Receivables)

Dividend is comprised of four data elements. The company must have a current dividend yield.

- Dividend Growth Rate: (Dividends per Share – Previous Dividends per Share) / Previous Dividends per Share
- Dividend Funding: Dividends / Operating Cash Flow
- Dividend Coverage: (Pre-Tax Income + Interest Expense) / (Interest Expense + Dividends)
- Dividend Yield: Annual Dividends per Share / Current Market Price per Share

Indicator Trend

The fundamental indicator trend displays quarterly scores over the past three years. The best and worst scores over that timeframe can be easily determined from the values shown on the chart for each quarter.



Relative Valuation

The Relative Valuation Rating is based on a combination of three factors: Forward PEG (50% weight), Trailing P/E (25% weight), and Forward P/E (25% weight). After the weightings are considered to combine individual factors, equal deciles are used to rank each stock across the market on a scale of 1 to 10, with 10 being most favorable. These common valuation metrics are evaluated against the overall market, the index, and the company's own historic 5-year averages. A stock needs to have at least one of the three relative valuation factors in order to receive a score.

Trailing P/E: Close Price / Most Recent 4 Quarters of Earnings
Forward P/E: Close Price/ Upcoming 4 Quarters of Earnings
Forward PEG: Forward P/E / Long-Term Forecasted Growth Rate

Valuation Averages

Negative values are excluded when calculating the averages. A maximum value of 100 is placed on Trailing P/E and Forward P/E, a maximum value of 5 is placed on Forward PEG, and a maximum value of 20 is placed on Price to Sales when calculating the averages. Higher values are rounded down to the maximum for the averages.

Valuation Multiples

The valuation multiples provide the Trailing P/E, Forward P/E, Forward PEG, and Price to Sales for the company and the S&P 500 index average. In addition, a comparison of the current company's values to its 5-year average and an industry average are presented. A discount occurs when the company's ratio is valued more favorably (lower) than that to which it is compared.

Risk

The Risk Rating displays stocks on a scale of 1 to 10 with 10 being awarded to the least risky stocks. It is derived by looking at a series of long-term (5-year) and short-term (90-day) stock performance measures including volatility, magnitude of returns, beta, and correlation. Each factor is equally weighted. Then, equal deciles are used to rank each stock across the market. A stock needs to have at least two of the four risk factors in order to receive a score.

Magnitude of Returns – The best / worst daily returns in the past 90 days and the best / worst monthly returns in the past 60 months.

Volatility – The standard deviation of the stock price over the last 90 days and last 60 months, along with the average and largest intra-day stock swing.

Beta – Measures the tendency of a security's returns to respond to swings in the market, based on the beta of the company versus the relevant index.

Correlation – Determines how closely the returns of the stock and the relevant index move together, measured over the last 90 days and last 60 months.

Risk Analysis

Price analysis for the company and the S&P 500 is provided over two time periods. Daily analysis is provided for the last 90 days, whereas monthly statistics are used for the last 60 months.

Price Momentum

The Price Momentum Rating is based on a combination of two technical performance factors: relative strength (70% weight) and seasonality (30% weight). After the weightings are considered to combine individual factors, equal deciles are used to rank each stock across the market on a scale of 1 to 10, with 10 being most favorable. A stock needs to have data for the relative strength factor in order to receive a score.

Relative Strength – The relative strength of the company for the last 1 month, 3 months, and 6 months on a scale of 1 to 100.

Seasonality – The average monthly return (price performance) for the current month and next 2 months for the company and industry, over the past 10 years. A lower industry rank indicates a higher return.

Price Performance

Daily close prices are used to calculate the price performance of the stock. The performance of the S&P 500 is also displayed as a means of comparison.

Insider Trading

The Insider Trading Rating is based on short-term (70% weight) and long-term (30% weight) legal insider trading behavior. After the weightings are considered to combine individual factors, a function similar to a normal distribution is used to rank each stock across the market on a scale of 1 to 10, with 10 being most favorable. A stock needs to have at least one of the two insider trading factors in order to receive a score.

Short-Term Insider – Uses insider buy and sell transactions within the past 90 days. This factor is based on the Thomson Reuters quantitative insider trading model that considers the insider's role, consensus, number of shares, market capitalization of the company, and the historic stock performance following trades by the given insider.

Long-Term Insider – Looks at buying, selling and option exercise decisions over the past six months relative to other stocks within the same business sector. The net shares are presented alongside the business sector average as a means of comparison.

Monthly Buys and Sells

The total market value of open-market buying and selling is displayed by month in the chart for easy comparison. Transactions by trusts and corporations are excluded, along with buys greater than \$10 million and sales greater than \$50 million. Transactions for the exercise of derivatives and option exercises are excluded from the totals.

Institutional Holders

The top five institutional holders of the company are listed in descending order, based on their total share holdings. Possible values for the institution type include Brokerage, Funds, Inv Mgmt, or Strategic.

Executive Holders

The top five executive insiders of the company are listed in descending order, based on their total direct common share holdings (options are not considered). Indirect holdings are excluded, as the owner may not actually have investment discretion over these shares. This table is updated monthly. Insiders who have not filed any transactions or holdings over the past two years are excluded as this may indicate that the individual is no longer associated with the company. Additionally, direct shares held must be greater than 1,000 to be considered.

Insider Roles

These role codes may appear in the data for recent insider buys and sells or top executive holders:

- | | |
|----------------------------------|---------------------------------|
| AF - Affiliate | IA - Investment Advisor |
| AI - Affiliate of Advisor | MC - Member of Committee |
| B - Beneficial Owner | MD - Managing Director |
| C - Controller | O - Officer |
| CB - Chairman | OB - Officer / Beneficial Owner |
| CEO - Chief Executive Officer | OD - Officer / Director |
| CFO - Chief Financial Officer | OE - Other Executive |
| CI - Chief Investment Officer | OS - Officer of Subsidiary |
| CO - Chief Operating Officer | OT - Officer / Treasurer |
| CT - Chief Technology Officer | OX - Divisional Officer |
| D - Director | P - President |
| DO - Director / Beneficial Owner | R - Retired |
| DS - Indirect Shareholder | S - Secretary |
| EC - Member of Exec Committee | SH - Shareholder |
| EVP - Exec Vice President | SVP - Senior Vice President |
| FO - Former | T - Trustee |
| GC - General Counsel | UT - Unknown |
| GP - General Partner | VC - Vice Chairman |
| H - Officer / Director / Owner | VP - Vice President |

DISCLAIMER

Thomson Reuters content ("TR Content") is the intellectual property of Thomson Reuters or its third party content providers. The copying, republication or redistribution of TR Content, including by framing or similar means is expressly prohibited without the prior written consent of Thomson Reuters. The TR content in this report does not constitute a recommendation to buy or sell securities of any kind or constitute investment advice. Past performance is not a guarantee of future results.

All information in this report is assumed to be accurate to the best of our ability. Thomson Reuters excludes all liability, to the maximum extent permitted by law, for any inaccuracies in the TR Content or for the consequences of your reliance on the TR Content. Investors should consider this report as only a single factor when making an investment decision.

