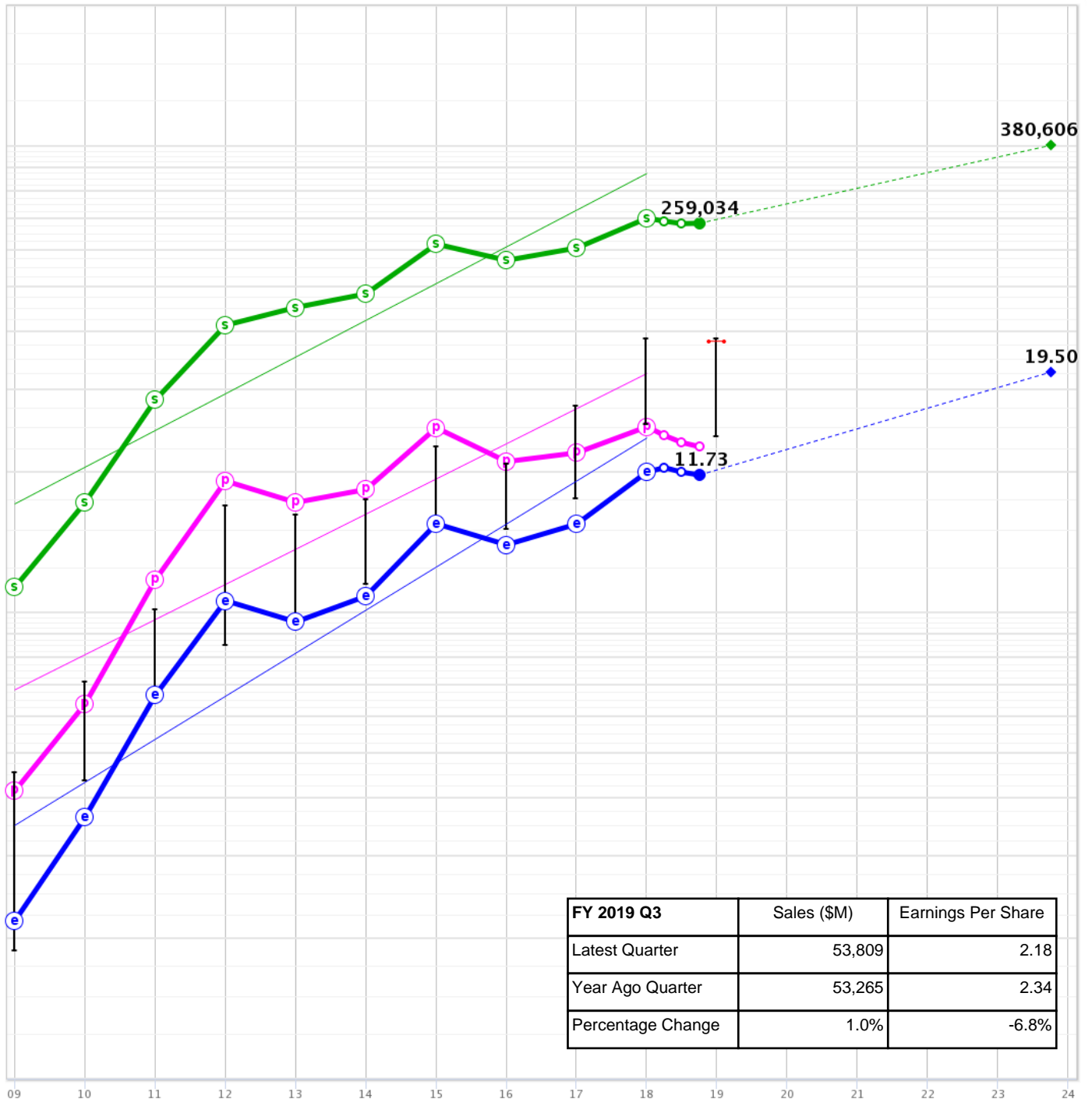


Company	Apple		Date	10/09/19	
Prepared by	Fitts		Data taken from	BI Stock Data	
Where traded	NAS		Industry	Consumer Electronics	
Capitalization --- Outstanding Amounts	Reference				
Preferred (\$M)	0.0	% Insiders	% Institution		
Common (M Shares)	4,601.4	0.2	80.6		
Debt (\$M)	108,418.0	% to Tot Cap	52.9	% Pot Dil	0.7

Stock Selection Guide

Symbol: AAPL

1 VISUAL ANALYSIS of Sales, Earnings, and Price



- | | | | |
|-----------------------------------|-------|--|-------|
| (1) Historical Sales Growth | 19.9% | (3) Historical Earnings Per Share Growth | 23.7% |
| (2) Estimated Future Sales Growth | 8.0% | (4) Estimated Future Earnings Per Share Growth | 10.7% |

2 EVALUATING Management

Apple

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Last 5 Year Avg.
Pre-tax Profit on Sales	28.1%	28.4%	31.6%	35.6%	29.3%	29.3%	31.0%	28.5%	28.0%	27.4%	28.8%
% Earned on Equity	25.8%	29.0%	33.6%	37.1%	29.0%	31.3%	40.9%	35.0%	35.7%	49.3%	38.4%
% Debt To Capital	0.0%	0.0%	0.0%	0.0%	12.1%	24.0%	35.1%	40.4%	46.3%	51.7%	39.5%

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 227.03 (10/09/19)

HIGH THIS YEAR 229.93

LOW THIS YEAR 142.00

	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
2014	103.7	68.3	6.45	16.1	10.6	1.81	28.1	2.7
2015	134.5	92.0	9.22	14.6	10.0	1.98	21.5	2.2
2016	123.8	89.5	8.31	14.9	10.8	2.18	26.2	2.4
2017	164.5	104.1	9.21	17.9	11.3	2.40	26.1	2.3
2018	229.7	150.2	11.91	19.3	12.6	2.72	22.8	1.8
AVERAGE		100.8		16.5	11.1		24.9	
CURRENT/TTM			11.73			3.08	26.3	
AVERAGE PRICE EARNINGS RATIO: 13.8				CURRENT PRICE EARNINGS RATIO: 19.4				

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 13.0 X Estimate High Earnings/Share 19.50 = Forecasted High Price \$ 253.5

B LOW PRICE - NEXT 5 YEARS

(a) Avg. Low P/E 13.0 X Estimate Low Earnings/Share 11.73 = Forecasted Low Price \$ 152.5

(b) Avg. Low Price of Last 5 Years 100.8

(c) Recent Market Low Price 104.1

(d) Price Dividend Will Support $\frac{\text{Indicated Dividend}}{\text{High Yield}} = \frac{3.08}{2.65\%} = 116.2$

Selected Forecasted Low Price \$ 152.5

C ZONING using 25%-50%-25%

Forecasted High Price 253.5 Minus Forecasted Low Price 152.5 = 101.0 Range. 25% of Range 25.3

Buy Zone 152.5 to 177.8

Hold Zone 177.8 to 228.3

Sell Zone 228.3 to 253.5

Present Market Price of 227.03 is in the **HOLD** Zone

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

$\frac{\text{High Price} - \text{Present Price}}{\text{Present Price} - \text{Low Price}} = \frac{253.5 - 227.03}{227.03 - 152.5} = \frac{26.47}{74.53} = 0.4$ To 1

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

$\frac{\text{High Price}}{\text{Closing Price}} = \frac{253.5}{227.03} = 1.1166$ X 100 = 111.66 - 100 = 11.7 % 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 $\frac{\text{Indicated Annual Dividend}}{\text{Closing Price}} = \frac{2.72}{227.03} = 0.0136 = 1.4\%$ Current Yield

B AVERAGE YIELD - USING FORECAST HIGH P/E

$\frac{\text{Avg. \% Payout}}{\text{Forecast High PE}} = \frac{24.9\%}{13.00} = 1.9\%$

AVERAGE YIELD - USING FORECAST AVERAGE P/E

$\frac{\text{Avg. \% Payout}}{\text{Forecast Average PE}} = \frac{24.9\%}{13.00} = 1.9\%$

C COMPOUND ANNUAL RETURN - USING FORECAST HIGH P/E

Annualized Appreciation 2.2 %
Average Yield 1.9 %
Annualized Rate of Return 4.1 %

COMPOUND ANNUAL RETURN - USING FORECAST AVG P/E

Annualized Appreciation 2.2 %
Average Yield 1.9 %
Annualized Rate of Return 4.1 %

Notes: AAPL 10/10/19

Date	Subject	Description	Type
04/24/19	change in judgments	My Sales growth estimate is the average b/w VL and MI estimate $(9.5 \text{ and } 6.4)/2 = 8$ My EPS growth estimate is preferred procedure changed taxes back to 18.3 default and outstanding shares to VL 4000 estimate. Pre-tax profit margin is 27 to follow downward trend. High and Low P/E's are trending upward...No outliers. Low price calculated at 80% of current price.	Community
01/07/19	Apple update	Apple Products: -iPhones, iPads, App Store, Apple Watch, Apple Pay, iTunes, smart-home products, plus more. -Apple allows Samsung to feature iTunes video content on smart tv's + Airplay 2 (ability to instantly mirror your IOS, i.e. macbook, iPhone) -China isn't performing as well as expected, why? Per Bloomberg, slow economy, high prices, and less consumers taking short-term loans. Chinese competitors, Huawei Tech. and Xiaomi Corp. have offered cheaper phones that have made an impact on iPhone sales in China. Growth opportunity: -streaming video-service with original content; not sure if this is through Apple TV or will be available on multiple platforms -self-driving car project -AR (augmented reality) -Apple Pay -EPS expected to increase from 11.91 to 13.65 per value line -15.9% increase in sales from 2017 to 2018 -2.72 dividend, expected to increase to 3.12 for 2019 -\$147.93 1/7/19 closing price	Community
12/29/18	New VL Dec 2018 Update	December 2018 - VL 12/18 T2 S2 Note the Services margin & growth rate! * Zone: BUY * Forecasted High Price: 373.0 * Forecasted Low Price: 150.0 * Closing Price (12/28/18): 156.23 * Upside Downside Ratio: 34.8 To 1 * Potential Price Appreciation: 138.8% * Total Return (High P/E): 20.1% * Projected Return (Avg P/E): 14.7% * Buy price to satisfy US/DS of 3 to 1 and 15% total return: 194.2 * Buy Below price based on zoning selection: 205.9 * RELATIVE VALUE Current PE: 13.2 / Average 5 Year PE: 13.8 X 100 = 95.3% * PROJECTED RELATIVE VALUE Projected PE: 11.6 / Forecast Average P/E: 13.3 X 100 = 87.2% * PEG Ratio Projected PE: 11.6 / Forecast EPS Growth Rate: 13.0% = 0.9	Community
12/22/18	RE Ratio	Lowered PE to 14	Community