# First Cut Stock Study Report

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|---|---|---|---|
| **Company Name:** | Apple Inc. | **Ticker:** | AAPL |
| **Date of Study:** | 2/14/2017 | **Price:** | $ 133.290 (2/13/17) |
| **Your Name:** | Ann Cuneaz | | |
| **Email address:** | annc@betterinvesting.org | | |
| **City:** | Madison Heights | **State:** | MI |
| **Chapter Name (if applicable):** | BetterInvesting Staff | | |

My investment club owns Apple stock, and I am the stock watcher for AAPL. This report summarizes my quarterly review of the stock after their report of 1st Q 2017 results. There were no recommended changes to the judgments on the Club SSG for Apple. This is an update of the December, 2016 First Cut and additions are notated as "Feb, 2017 update."

**Discuss why you consider this to be a high quality, growth company that should be investigated further. Please include comments on historical sales and EPS growth, pre-tax profit margin, return on equity, and debt.**

AAPL has had a decade of phenomenal growth, largely due to the successful launch of the iPhone in 2007. The decline in sales and EPS from 2015 to 2016 is a concern and is a sign that the product lines are maturing and there has not been a big new blockbuster product developed/launched to boost the future growth of the company. This is a trend that needs to be monitored to evaluate how the company manages as it transitions from the growth phase of its life cycle.

While pre-tax profit margin is down to 28.5% in FY2016, margins have been fairly stable around 29.5% over the last 4 years. Return on equity is stable. After years of carrying no debt, Apple currently has 40.4% debt to capital. While this is higher than the "rule of thumb" to keep debt to about 1/3 of the capital, or 33%, the interest coverage is in excess of 40. This indicates that Apple can easily pay the interest on their debt, and the debt does not appear to place a large financial burden on Apple.

**<u>Feb, 2017 update</u>**: Apple achieved positive growth in quarterly sales and EPS in the 1st Q of 2017 for the first time since the 1st Q of 2016. Since sales and EPS have been declining for the past year, the lower level of sales and EPS will help Apple realize positive growth in the short term. Sales growth of 3% was primarily driven by 5% growth in iPhone sales (69% of Q sales) and 18% growth in Services (9% of sales), offset by a 22% decline in iPad (7% of sales). Pre-tax profit margin continued to dropped to 28%, and less pre-tax profit and net income were earned in the current Q than 1 year ago. Research and development expenses rose to 4% of sales vs. 3% of sales 1 year ago, funding future development as Apple searches for their next big thing. The EPS increased due mainly to Apple reducing the number of shares outstanding through their share repurchase program.

**Briefly describe how the company makes money:**

Apple makes and sells iPhone smartphones (63% of 2016 revenue), iPad tablet devices (10% of revenue), Mac computers (11% of revenues), services, including iTunes, App store, Apple Pay (11% of revenues) and other products such as Apple Watch, Apple TV, accessories (5% of revenue).

**Projected growth rate for sales**: 6**%**
**Why did you select this rate? Discuss from where future growth will come.**
Current research shows that most analysts are expecting 5-6% sales growth over the next 2 years. The Morningstar analyst expects 4% long-term rev growth. Value Line seems to be a bit of an outlier, projecting 9.5% over the next 3 to 5 years.

I am satisfied to leave the sales growth rate at 6%, although an adjustment down to 5% would not be out of line. One problem is that there are no big growth drivers apparent on the horizon that would push growth levels higher. And while this seems like a low estimate, it is actually in line with the 5% to 7% sales growth that we hope to see from a high quality, large company. With $215B in 2016 sales, Apple is a very large company.

**Feb, 2017 update**: Current research continues to support 5-6% sales growth over the next 5 years, so the selected rate of 6% is still reasonable.

**Projected growth rate for earnings per share**: 5.2**%**
**Why did you select this rate?**
Current research indicates that most analysts are expecting profit margins to shrink as competition increases for the existing products. Pre-tax profit margin in 2016 dropped to 28.5%, the lowest level since 2010. The Morningstar analyst is predicting the operating margin (a close proxy for pre-tax profit margin) to deteriorate from 28% in fiscal 2016 to mid-20% in the long-run. I agree that with no prospect of a new product which would command high prices and profit margins, the company will become somewhat less profitable.

Looking to the preferred procedure, I adjusted the pre-tax profit margin down to 25%. My previous judgment of PTPM 29% from a year ago now seems high. The most recent FY was 28.5%. Leaving the tax rate at 2016 levels, and the expected shares at 5000M (current is 5400M), results in a 5.2% EPS growth rate.

EPS growth of 5.2% is lower than the analyst long term estimates, which currently range from 6%-11%, and I'm happy to be on the conservative side of the analysts.

**Feb, 2017 update**: Again, the current analyst estimates for EPS have not changed much, so the selected rate of 5.2% is still reasonable.

**Projected High P/E**: 14
**Why did you select this value?**

High P/Es have been modestly trending down for 5 years. Prior to this update the projected high P/E was 14, and I see no reason to make an adjustment.

**Feb, 2017 update**: The current P/E has risen to about 16 while the stock price has risen to all-time highs. Investors are currently paying more for the company's earnings, but we see no compelling reason to increase our high P/E even though our projection is lower than the current P/E. In this judgment we are attempting to forecast the average high P/E over the next 5 years, not necessarily the absolute high P/E over the next 5 years. We are satisfied to leave the forecast at 14.

**Projected Low P/E**: 9
**Why did you select this value?**

The 5-year average low P/E is 9.8. Prior to this update the projected low P/E was 9, and this still seems reasonable, so no change is recommended.

**Feb, 2017 update**: Again, we see no compelling reason to make a change.

**Projected Low Price**: $75.30
**Why did you select this value?**

The general consensus is that EPS is now close to a low point before modest growth of EPS returns. Seeing as lower EPS figures are no longer expected in the near term, we are using 4B(a) (projected low P/E times EPS from the trailing twelve months) for the projected low price. On this SSG the low price is calculated to be $74.60.

**Feb, 2017 update**: The low price is updated to reflect the current TTM EPS of $8.37.

**At the current price, the stock is a (check one):**

☐ **Buy** or ☐ **Hold** or ☒ **Sell**

**At the current price, the upside-downside ratio is:** 0.3 **to 1**

**Compound Annual Return – Using Forecast High P/E:** 4.3**%**

Your final recommendation (check one):

☐Buy or ☒Hold or ☒Sell

**Explain:**

The outlook continues to be murky for Apple. They continue to face a number of challenges, and it is not apparent how things will ultimately play out. Based on the historical performance of the company one might assume that Apple will figure it out in the end, and get back on track. On the other hand, one could look at the current situation as Tim Cook's first big challenge. One could argue that until now, Cook has been managing the initiatives that Steve Jobs put into place. Now that Steve Jobs is gone, does Apple still have the vision to continue to grow? That is the question I continue to have.

At this point we own plenty of Apple in our club and are not considering adding to the position. The current dividend yield is 2.1%. The balance sheet is pretty strong, and I'm satisfied with the overall quality of the company. Growth is weak. The forecast return is only marginally acceptable.

I recommend that we continue to hold AAPL, but consider this holding as available for cash if a high-quality, growth candidate that is likely to provide a better return is identified.

My final recommendation is always to do your own research, complete your own stock study and make sure you are comfortable with your forward-looking projections before making any buy or sell decisions.

**Feb 2017 update**: AAPL finally saw growth return, though at a lackluster level. Sales of the iPhone 7 exceeded most analyst projections.

Depending on the day of the week, U.S policies, as defined by the current administration, are perceived to be either a burden (immigration reform/import tax policies) or a boon (corporate tax reform, cash repatriation policies) to Apple. At this point, we just don't know what to expect, so I am watching but not including future policy changes in my stock analysis.

Apple is selling at an all-time high. As of 2/13/17, this SSG has AAPL in the Sell zone with the potential return estimated to be between 0.7% (PAR) and 4.3%, including dividends.

Apple is the club's largest holding and likely to return only modest gains. I do believe this is still a quality company, but at the current price there seems to be more downside risk than upside reward. Therefore, I recommend that we sell half of our Apple stock to lock in profits and reduce the size of this holding. We continue to hold half of our shares because high quality, slow growing stocks can outperform the expectations on the SSG. In addition, we have seen firsthand the benefit to “let your winners run.” However, we prefer to see how this all plays out with a smaller position.

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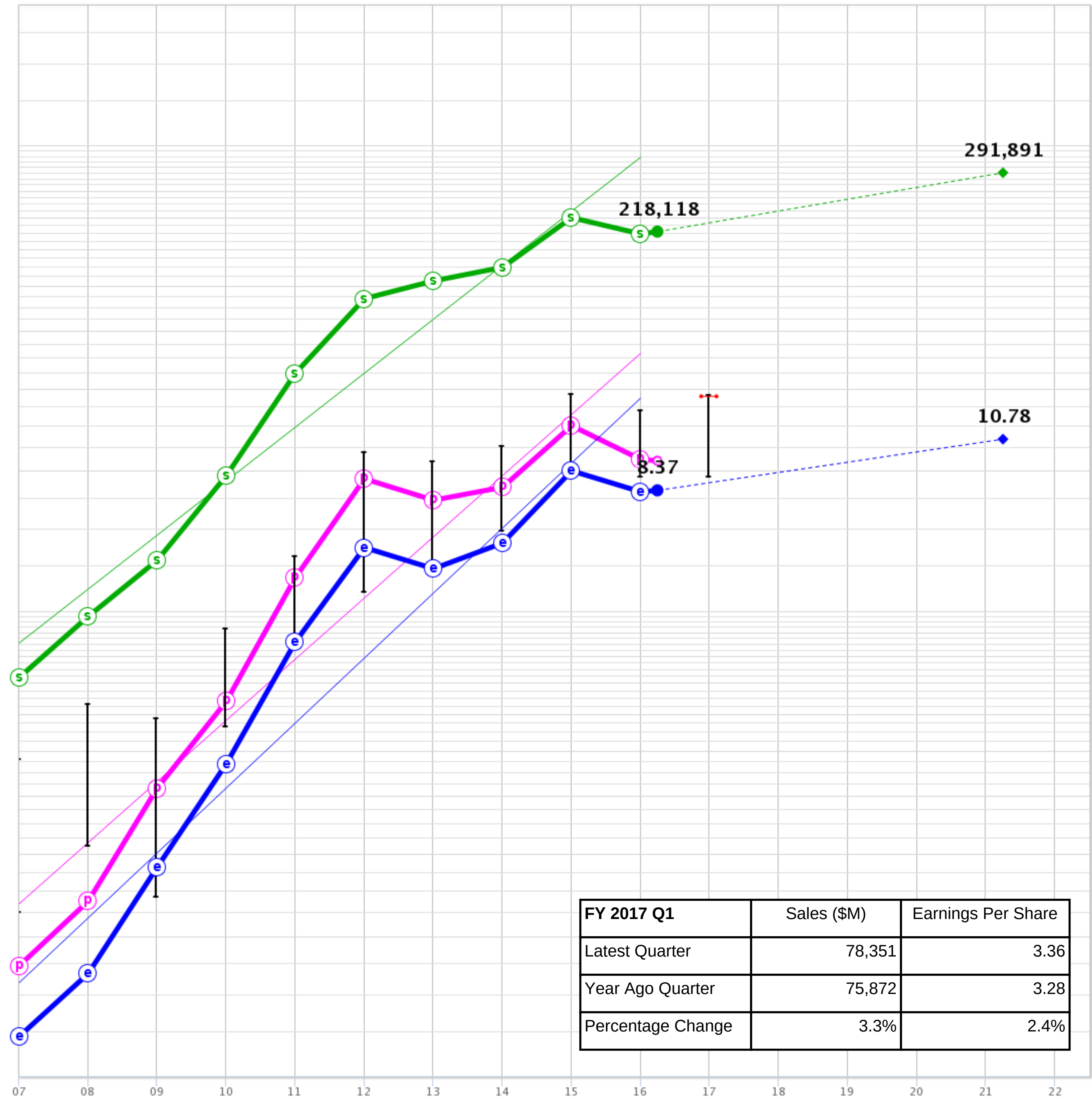
# Stock Selection Guide

| | | | | | |
|---|---|---|---|---|---|
| Company | Apple | | | Date | 02/13/17 |
| Prepared by | CUNEAZ | | | Data taken from | BI Stock Data |
| Where traded | NAS | | | Industry | Consumer Electronics |
| Capitalization --- Outstanding Amounts | | | | Reference | |
| Preferred ($M) | 0.0 | | | % Insiders | % Institution |
| Common (M Shares) | 5,328.0 | | | 0.2 | 62.3 |
| Debt ($M) | 87,549.0 | % to Tot Cap | 39.8 | % Pot Dil | 0.6 |

**Symbol: AAPL**

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




| FY 2017 Q1 | Sales ($M) | Earnings Per Share |
|---|---|---|
| Latest Quarter | 78,351 | 3.36 |
| Year Ago Quarter | 75,872 | 3.28 |
| Percentage Change | 3.3% | 2.4% |

| | | | |
|---|---|---|---|
| (1) Historical Sales Growth | 30.6% | (3) Historical Earnings Per Share Growth | 37.9% |
| (2) Estimated Future Sales Growth | 6.0% | (4) Estimated Future Earnings Per Share Growth | 5.2% |

## 2 EVALUATING Management

**Apple**

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | Last 5 Year Avg. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Pre-tax Profit on Sales | 20.9% | 21.2% | 28.1% | 28.4% | 31.6% | 35.6% | 29.3% | 29.3% | 31.0% | 28.5% | 29.5% |
| % Earned on Equity | 25.6% | 22.6% | 25.8% | 29.0% | 33.6% | 37.1% | 29.0% | 31.3% | 40.9% | 35.0% | 34.7% |
| % Debt To Capital | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 12.1% | 24.0% | 35.1% | 40.4% | 22.3% |

## 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** 133.29 (02/13/17) **HIGH THIS YEAR** 133.82 **LOW THIS YEAR** 89.47

| | 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 |
| 2012 | 100.7 | 50.6 | 6.31 | 16.0 | 8.0 | 0.38 | 6.0 | 0.7 |
| 2013 | 96.3 | 55.0 | 5.68 | 17.0 | 9.7 | 1.63 | 28.7 | 3.0 |
| 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 |
| AVERAGE | | 71.1 | | 15.7 | 9.8 | | 26.1 | |
| CURRENT/TTM | | | 8.37 | | | 2.28 | 27.2 | |
| AVERAGE PRICE EARNINGS RATIO: 12.8 | | | | | CURRENT PRICE EARNINGS RATIO: 15.9 | | | |

## 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 14.0 X Estimate High Earnings/Share 10.78 = Forecasted High Price $ 151.0

**B LOW PRICE - NEXT 5 YEARS**

(a) Avg. Low P/E 9.0 X Estimate Low Earnings/Share 8.37 = Forecasted Low Price $ 75.3

(b) Avg. Low Price of Last 5 Years 71.1

(c) Recent Market Low Price 89.5

(d) Price Dividend Will Support $\frac{\text{Indicated Dividend}}{\text{High Yield}} = \frac{2.18}{2.96\%} = 73.6$

Selected Forecasted Low Price $ 75.3

**C ZONING** using 25%-50%-25%

Forecasted High Price 151.0 Minus Forecasted Low Price 75.3 = 75.7 Range. 25% of Range 18.9

| | | | |
|---|---|---|---|
| Buy Zone | 75.3 | to | 94.2 |
| Hold Zone | 94.2 | to | 132.1 |
| Sell Zone | 132.1 | to | 151.0 |

Present Market Price of 133.29 is in the **SELL** Zone

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

$\frac{\text{High Price}}{\text{Present Price}} \quad \frac{151.0}{133.29} \quad \frac{\text{Minus Present Price}}{\text{Minus Low Price}} \quad \frac{133.29}{75.3} = \frac{17.69}{57.99} = 0.3$ To 1

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

$\frac{\text{High Price}}{\text{Closing Price}} \quad \frac{151.0}{133.29} = 1.1328 \times 100 = 113.28 - 100 = 13.3$ % 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** $\frac{\text{Indicated Annual Dividend}}{\text{Closing Price}} \quad \frac{2.18}{133.29} = 0.0171 = 1.7$ % Current Yield

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

$\frac{\text{Avg. \% Payout}}{\text{Forecast High PE}} = \frac{25.0\ \%}{14.00} = 1.8$ %

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

$\frac{\text{Avg. \% Payout}}{\text{Forecast Average PE}} = \frac{25.0\ \%}{11.50} = 2.2$ %

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

| | |
|---|---|
| Annualized Appreciation | 2.5 % |
| Average Yield | 1.8 % |
| Annualized Rate of Return | 4.3 % |

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

| | |
|---|---|
| Annualized Appreciation | -1.4 % |
| Average Yield | 2.2 % |
| Annualized Rate of Return | 0.7 % |