

AAPL P/E, PEG EVOLUTION STUDY

It seems that Wall Street cannot keep up with Apple's pace of growth. Of course, every time someone fights the market, he/she loses money and stirs laughter. I'm not going to make any prediction about the share price of Apple, my aim is simply to look back and try to understand the link between share price, earnings and their respective growth.

The formal definition of P/E (price per earnings) is the number obtained by dividing the share price by company's earnings per share for the previous twelve months. This number should give a hint about the cost of 1\$ of annual earnings to investors. Equivalently, it is the number of years the company needs to earn its market capitalization, assuming zero growth. However, when the company has significant cash on hand or debt, the P/E number may be misleading. Indeed, cash could be used for dividends, and debt has to be paid at some point, and we do not even take into account the interest that it may accumulate. I would argue that if we discard the cash / share (or add the debt / share) from the share price, the P/E is a better indicator. Let's use the notation P-\$/E for this quantity.

The PEG number relates the P/E to the year/year growth of earnings. Instead of earnings, EPS (earnings per share) seems better as the number of shares may vary over time. That is, PEG is obtained by dividing P/E by the growth in percentages. This number is used to normalize the values of the P/E indicator, as a company which grows faster should be better rewarded by its investors for 1\$ of earnings. It is a good enough indicator and historically an important one. It is considered that shares with PEG lower than 1 are "cheap" and conversely a PEG larger than 1 suggest that the share price is "inflated".

Let us also consider P-\$/EG which is obtained by dividing the P-\$/E number by the annual growth.

Apple's case

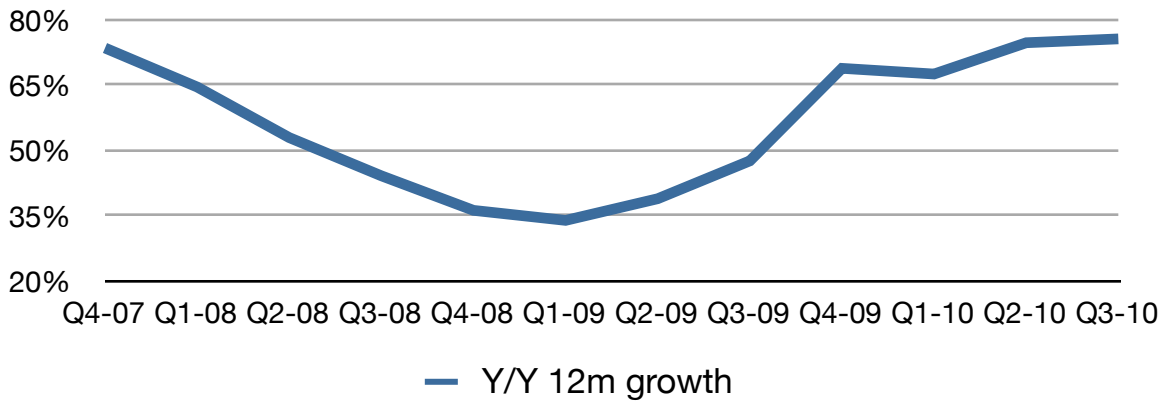
We all know that Apple's share price, AAPL, went to absurdly low levels during the financial crisis. The fact that it went up 357% in about 18 months is a good enough proof for that. P/E went from a high of 51.5 in Q4-07 to a low of 12.8 in Q1-09. Even more striking, for P-\$/E during the same period, the extremes are 47.1 and 7.7. The charts "AAPL P/E" and "AAPL P-\$/E" illustrate the evolution of those indicators during the last four years. They are not as low now as during the worst period of the recession but not significantly higher either.

The share price soared but so did Apple's earnings. In fact, the lowest year/year growth (computed every quarter) was at 34% in Q1-09. It is now at 76%, the highest level in four years, see the "Apple EPS Y/Y Growth" chart. So to the question "is the growth sustainable", given the size of the company, I answer that the data shows it is accelerating. Of course, not even 1% growth can be sustained indefinitely, as our world is finite.

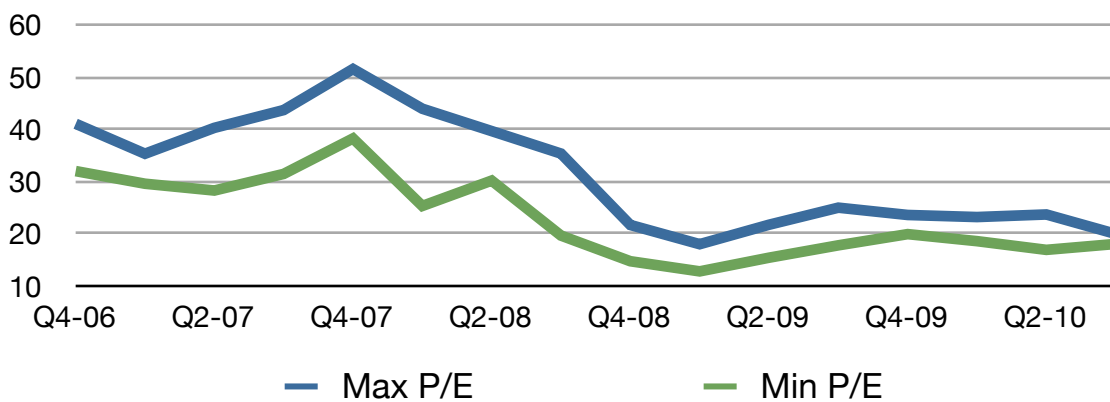
Finally, the **most interesting** part of this study is the evolution of Apple's PEG. Remember, empirically tested over a period of a hundred years, it suggests that the value 1 is the boundary between "cheap" and "expensive" stocks. So how did it evolve during the last three years ? Has it also bottomed during the worst time of the recession ?

Well, by this indicator, AAPL is **cheapest now**, for a three year period. The PEG is about 0.25 and the P-\$/EG is about 0.2. So you thought AAPL was on sale during January '09 ? What about now ?

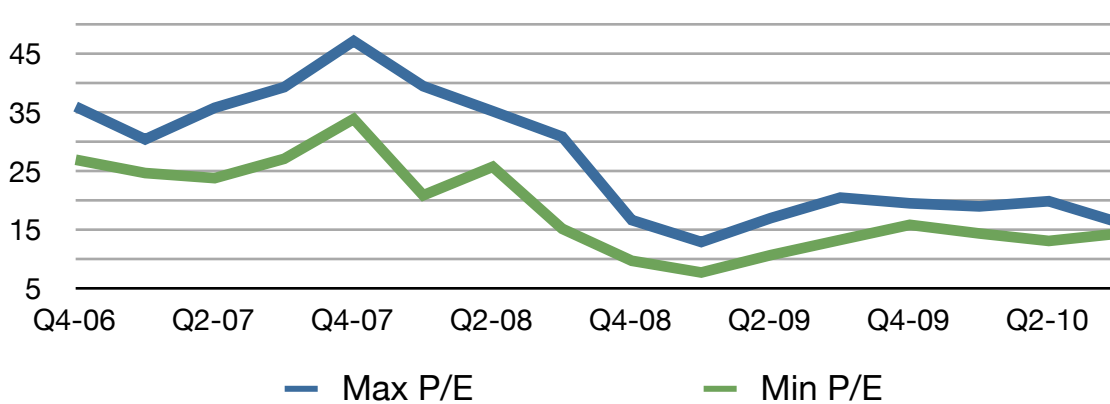
Apple EPS Y/Y Growth

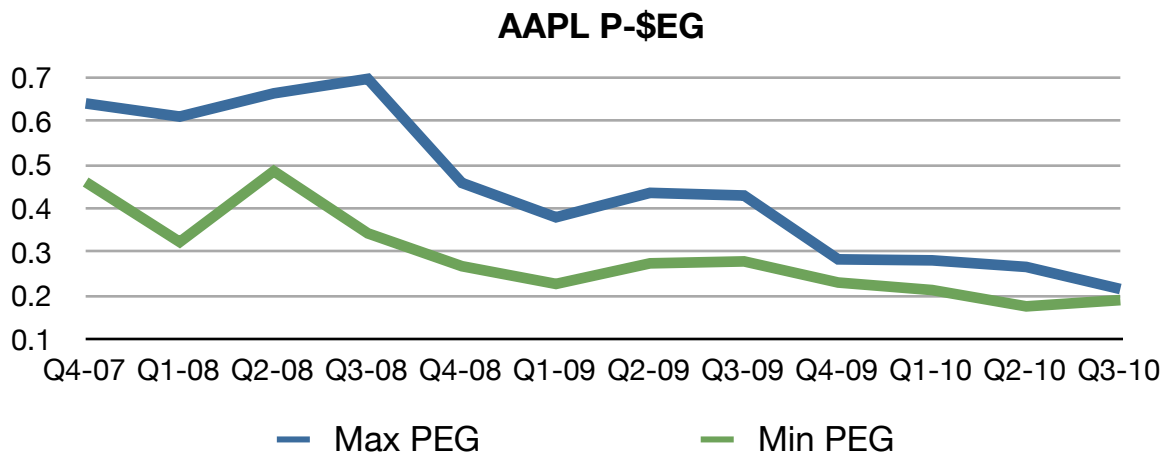
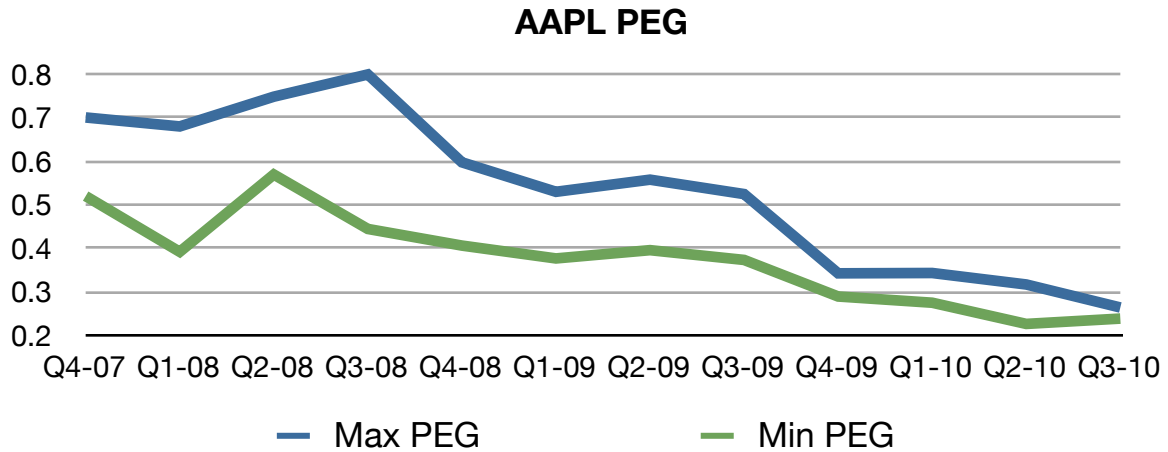


AAPL P/E



AAPL P-\$/E





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