

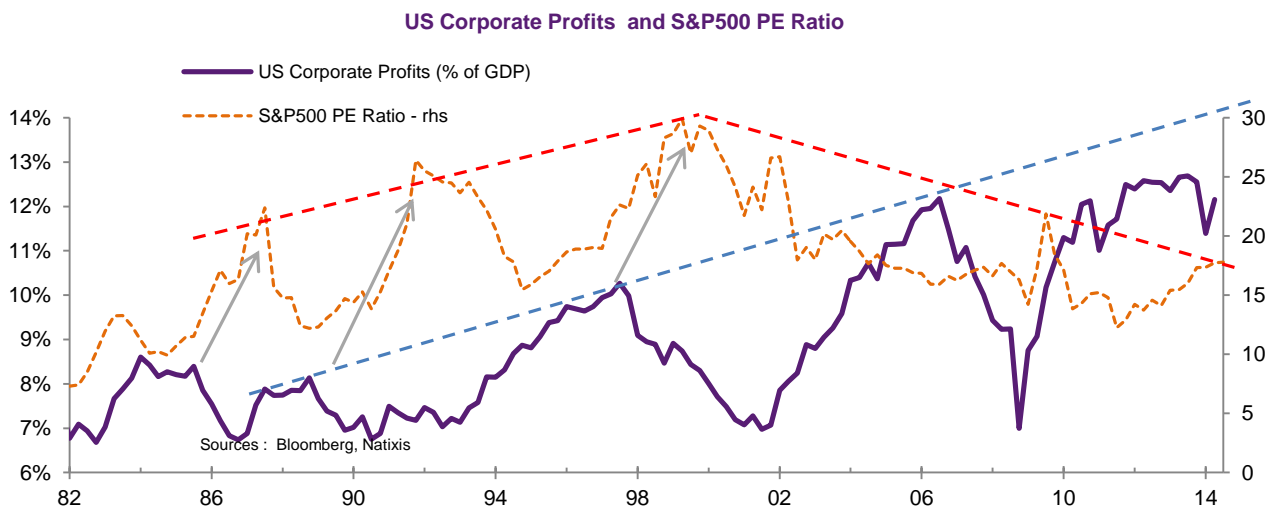
# MACRO RESEARCH: THE RECORD

## ECONOMIC RESEARCH

October 21, 2014

### Macro Profits and Stock Returns

The relationship between macro profits and PER is not straightforward. Not only has it changed drastically since the early 2000's but the lessons to be drawn can be surprising.



The chart above shows that:

1. Since the mid-eighties each new peak in the profit share of GDP has been higher than during the previous cycle (after tax data would be even more impressive). This means that the wage share of GDP has structurally declined. This explains why more debt was required for households to maintain a constant share of consumption in total GDP. We have also showed in a previous Record that this equilibrium was sub-optimal since: 1/ it created bubble 2/ it turned U.S. businesses into net lenders (investment < profits), which weakened the strength of the recovery.
2. Until 2001, peaks in the PER would follow peaks in the profit share of GDP by several quarters (grey arrows). This is not really surprising: a fall in the profit share of GDP suggests that wages are rising hence topline sales for businesses are growing (a fall in the GDP ratio does not mean that profits are falling, they are just rising at a pace that is lower than that of the GDP).

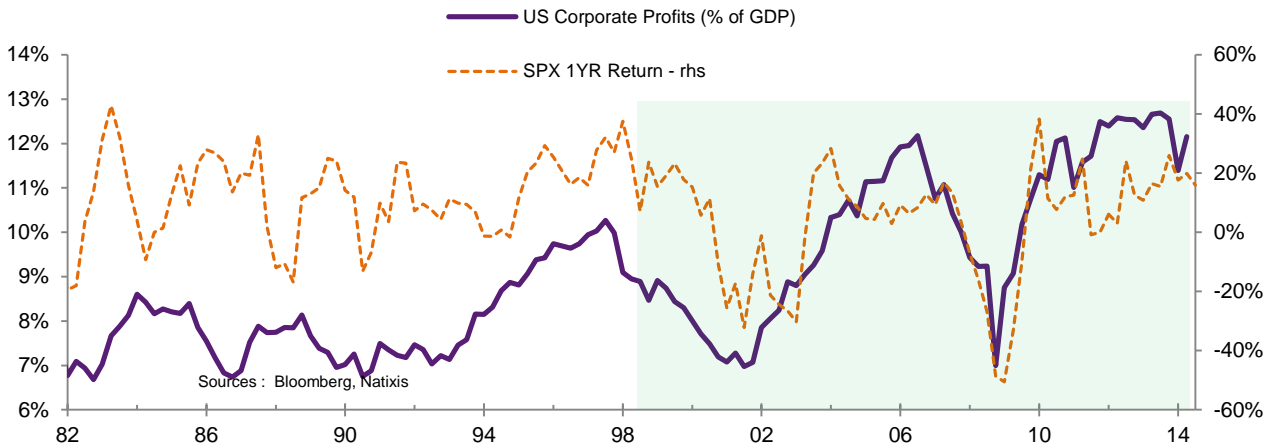
This might also be linked to accounting factors. Profits drawn from National Accounts might differ from reported earnings of listed companies for matters linked to capital depreciation and other fiscal/accounting discrepancies. The most telling example is the 2 and a half gap between the 1997 peak for macro profits and the mid-1999 peak of reported earnings. Interestingly enough, this gap has been visible only ex post, when NIPA accounts were revised significantly. The divergence was not that strong at the time, as any U.S. economist of the time could tell our readers.

*(Note: According to BEA, "although long term trends in NIPA profits measures and S&P earnings measures are broadly similar, short-term annual and quarterly growth rates can differ dramatically. For example, both S&P500 earnings measures (reporting and operating) fell by larger percentages during recessions than the NIPA profits measures and then rise faster to converge back toward NIPA profits trends".)*

- Since 2001 the link has broken down. The downward trend in the PER does not match the fluctuations in the profit share of GDP. The structural fall in PERs does not match the structural, albeit more volatile, rise in macro-profitability.

Interestingly enough, at the very time when the link between PER and profits weakened, the relationship between stock market returns and the profit share of GDP seems to have risen significantly.

US Corporate Profits and S&P500 1YR Return



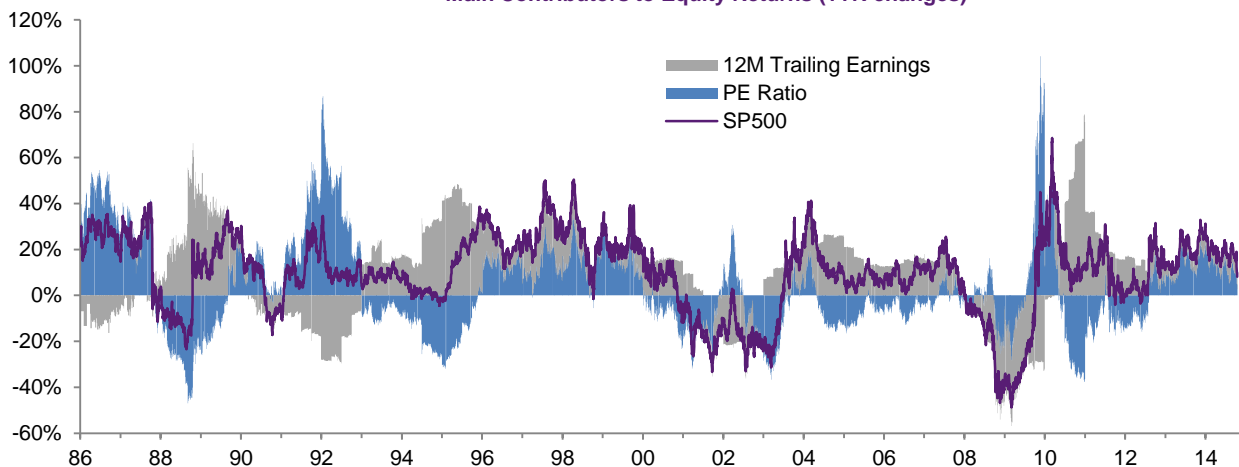
A closer look at the chart above shows yet that returns have above all followed the profit share of GDP during recession (99/00 ; 08/09). In more “normal” phases of the economic cycle the link is not straightforward.

What took place after the crash of 2001 was a re-combination of the relative contributions to stock returns of 1/ the change in PER 2/ the growth of earnings (we don't take account here of the dividend yield and of share buybacks even though the later have played a significant role since 2010).

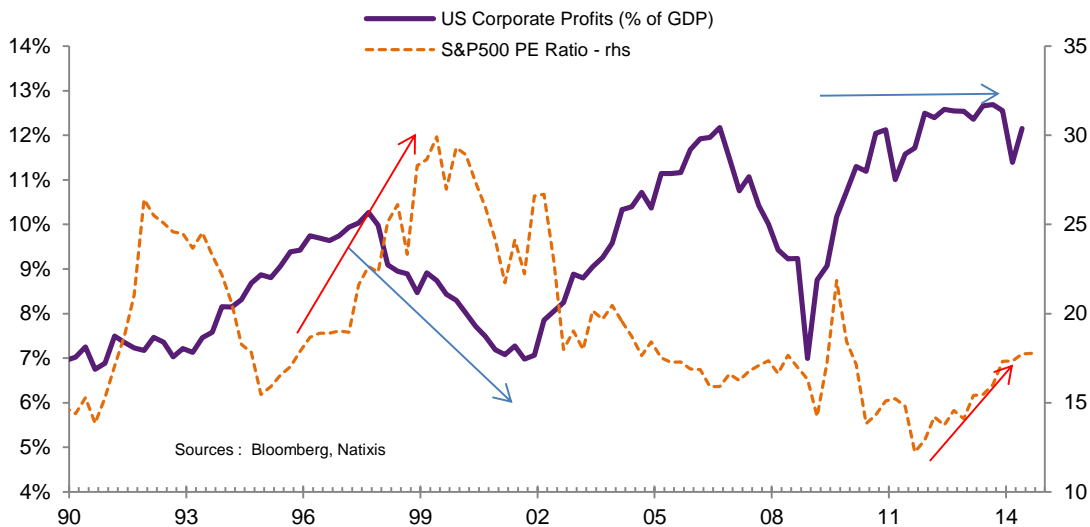
The chart below shows that in the 80s and 90s, earnings growth would drive equity return when the profit share of GDP would rise and then PER growth would take over in the second phase of the economic cycle. Something we have seen above.

During 2000-2008, the contribution of PER to equity returns has been mainly negative, with earnings growth being the key driver of stock returns. This is completely consistent with the upward drift in the Equity Risk Premium that followed the stock market crash of 2008.

Main Contributors to Equity Returns (1YR changes)



In the post 2008 era, the recovery in stock returns has also been driven by earnings growth, until 2012 H2 at least. Since then, PER took over, a scenario that looks like the pre-Internet Bubble scheme with a big difference though: PER growth used to come along with a fall in the profit-to-GDP ratio. Here the PER has increased while the profit share of GDP has remained stable at a high level (the fall in the ratio in late 2013 is due to an [exceptional adjustment](#) carried out by the *Bureau of Economic Analysis*, linked to the expiry of a stimulus measure - bonus depreciation - that allowed companies to depreciate their productive capital faster, the goal being to support investment).



The situation is thus as follows:

1. The profit share of GDP is still close to its historical peak. A fall in the ratio would be a good news for the U.S. economy since it would mean more wages, a non-leveraged economic recovery (since consumption would be driven by wages, not debt or wealth effects), and decent topline sales growth for businesses.
2. It would not be a bad signal for stock returns if we were in the eighties or nineties, since a lower profit-to-GDP ratio was subsequently followed by a rise in PER.
3. Yet, a glimpse at the chart above could frighten many investors concerned by an equity bubble: even if today's starting point for the profit-to-GDP ratio is much higher than the inflexion point of 1997 (12.5% vs. 10%), at 17x the level of PER cannot be considered cheap.
4. Ultimately, the question of how far PER can rise is linked to the "equilibrium" level of the Equity Risk Premium

$$\text{Equity Return} - \text{Treasury yield} = \Delta(\text{PER}) + \Delta(E) + \frac{\text{Div}}{P} - \% \Delta S - i$$

Where  $\% \Delta S$  is the share of buybacks as a percentage of the outstanding of stocks.

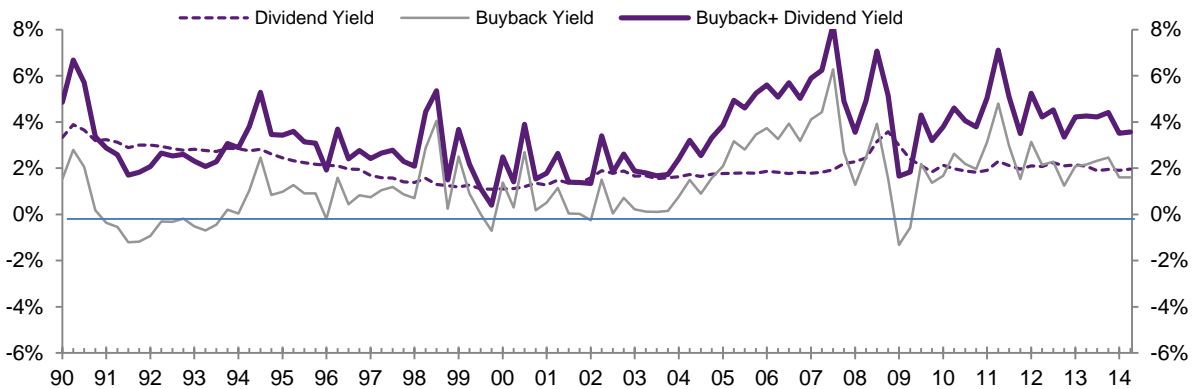
The current level of long term U.S. yields might suggest that the ERP is historically too high. But if the low level of yields is justified by the risk of secular stagnation, then the associated downward revision of future earnings growth would call for a structurally higher equity risk premium, leaving a little room for much higher PER.

The math is simple here: secular stagnation calls for real yields close to 1%. The sum of the dividend yield and the buyback yield is close to 4%. If the growth of earnings is slightly above potential growth, that is around 1.5%, a rise in PER would imply a level of ERP much above the historical average.

5. For 1-year horizon forecasts, we should therefore remain cautious and use a simple decomposition of equity returns: no growth in PER, a rise in earnings slightly below that of GDP (assuming then a limited fall in the profit share of GDP) and a 4% target for the combination of dividend and buybacks yields.

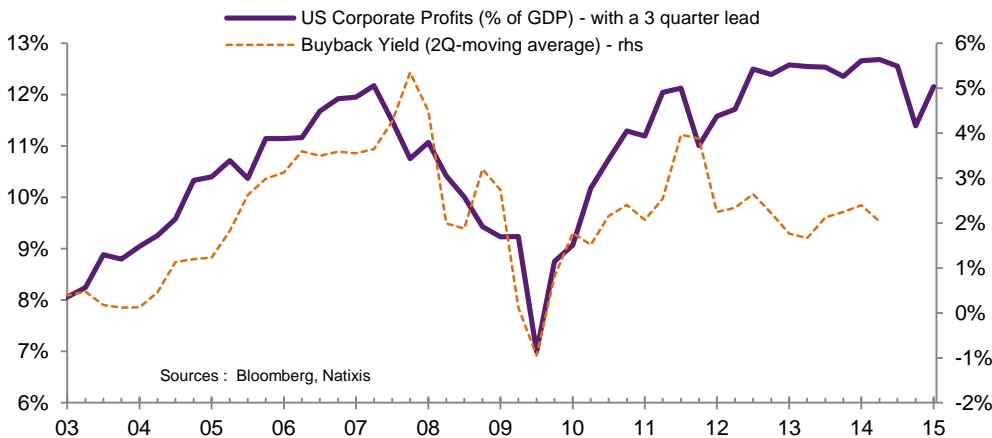
The trend decline in dividend yield as profit's share of GDP went up in the 1990s reflects the structural change as companies replaced dividends with share repurchases due to tax reasons, flexibility and executive compensation. While the buyback yield has at times exceeded dividend yield, it tends to be less persistent than dividend yield -- more difficult to cut dividends than to reduce buybacks.

This adds up to a single digit but positive return for stock indexes.



**Bottom Line:** Given the diversity of the sources of equity returns (change in PER, earnings growth, dividend yields and share buybacks), the profit share of GDP is only marginally helpful when it comes to forecasting stock returns. Assumptions on the future level of the profit-to-GDP ratio can provide some insight on the likely pace of growth of EPS and the underlying behavior of margins (productivity gains, cost adjustment or rise in topline sales for instance). But the information content is rather limited. At times, the profit to GDP ratio can provide information on other less traditional sources of return (buybacks mostly, as shown in the chart below) but the overall link with equity earnings remains very loose. It is clearly visible in the chart below where the buyback yield fell in spite of an almost unchanged level of macro profitability.

**Corporate Profits and Buybacks**



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