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Is the Stock Market stuck in Neutral, and the Global Economy rolling downhill?

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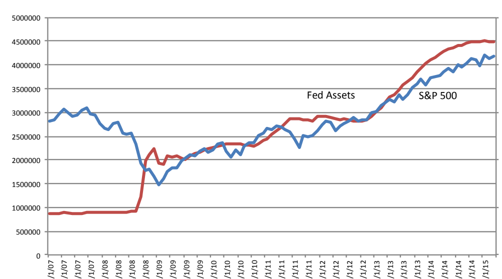
Will stock prices rise without profit growth?

In my January 2016 (^CAMRI Global Perspectives, Issue 30) article written in the midst of the international stock markets rout, I showed that stock market declines do not necessarily imply that economies will necessarily fall immediately into a recession. Now my attention turns this concept 180 degrees around. I instead ask: can stock prices appreciate if economies (mainly in developed markets) cannot produce new profit growth?

Monetary creation and stock price appreciation

As is usually the case in economics, the answer is: it depends. One of the critical factors that drove stock prices tremendously higher during the recent economic recovery and expansion following the great recession was the humongous expansion of the developed world's central bank balance sheets. As shown in the first chart, stock prices in the US appreciated spectacularly

Stocks Rise with the Fed Balance Sheet

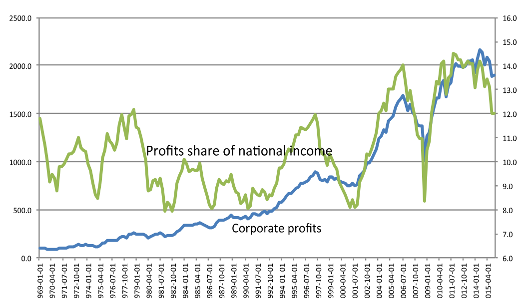


along with the enormous and simultaneous expansion of the Fed's balance sheet. To be sure, the historically low level of interest rates set by the central banks, and the massive expansion of their balance sheets, contributed importantly to the recovery and expansion in most developed economies. Nevertheless, the post 'great recession' economic expansion in the US and other major developed economies has been the weakest in modern economic history. For the past year and a half monetary expansion by the Federal Reserve has stopped, and the economy has sputtered.

The US economy's momentum has slowed to a crawl

The US current business cycle expansion appears to have matured. Economic growth has decelerated slowly and steadily. In Q1 2016 growth slumped to an annualized rate of just 0.9%. Annual growth is predicted by a near unanimous array of forecasters to continue decelerating in future quarters. The latest economic predictions are for US growth to slow to 1.5% to 2% in 2016. Moreover, there is little hope for US to benefit from greater global economic growth. The IMF has repeatedly reduced its global forecast for 2016 and currently they expect growth of just 2.4%, down from 2.9% projected three months ago. In the past the IMF has declared that global economic growth below 3% constituted a recession.

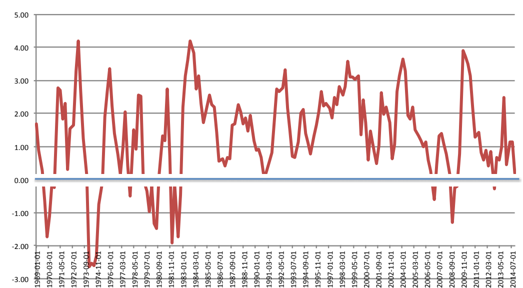
Corporate Profits Headed Down



Full employment and no profits

The US economy has cheerfully climbed back into a position of full-employment; however, the progress of new jobs growth has deteriorated recently. Corporate profitability traditionally soars during the early phases of business cycle expansions when economic growth accelerates and unemployment is prevalent. This happened vigorously in the first five years (2009-2014) of this economic cycle when corporate profitability increased by 11.8% per annum. Rapid profits growth drove its share of national income to a historic high of 14.5%. Needless to say, stock prices appreciated scintillatingly and coincidentally.

Labor Productivity Growth is negligible



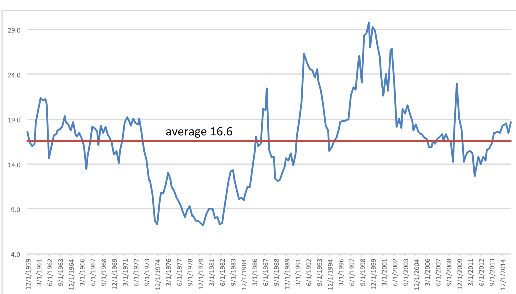
Investment has started to decline

In contrast, during the past two years, as job growth accelerated and the economy reached its estimated full employment level, corporate profits decreased by 5.75%. As a consequence, businesses began to invest less and less in spite of record low borrowing costs. This is because their projected rates of return on investment dwindled. When business investment contracts, as is happening now, productivity improvements will not materialize to improve the profit outlook. As a result, the present investment outlook for corporate profitability is essentially flat.

Non residential Fixed Investment is headed downward

Moreover, whenever non-residential investment drops, as it has for the past three quarters, it has always been followed by a business cycle recession.

S&P 500/Earnings ratio above average

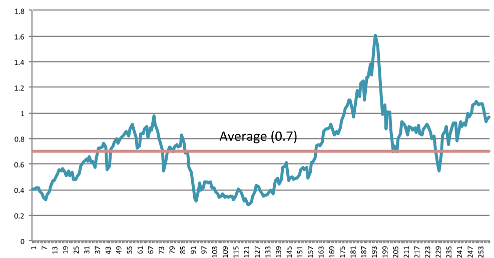


US stock prices are overvalued

At its present level the US equity market is overvalued by nearly all historic metrics. For example: the P/E ratio for the S&P 500 index is presently 18.7, well above its historic average of 16.6.

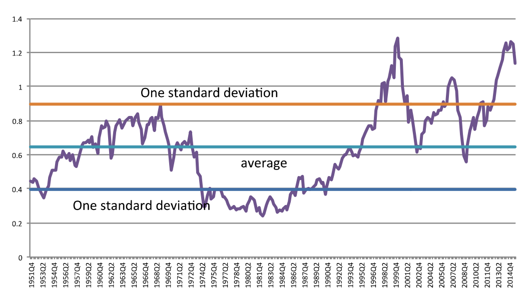
Tobin's Q, the late Nobel-winning economist's contribution to investment valuation, implies that the present price of aggregate corporate equity is well above the underlying value of the corporations. This valuation metric indicates that present stock prices are 40% overvalued.

Tobin's Q relative to it's average



The relation between the S&P index and US GDP reveals that household equity holdings relative to nominal GDP is well above this ratio's historic average of 0.7. As seen in the chart, when the ratio of stock prices relative to GDP rises one or two standard deviations above its average relationship to the economy, stock prices soon fall. The latest level of this ratio is nearly two standard deviations above its average, and comparable with the 2000 stock market bubble.

Relationship of HH equity to GDP



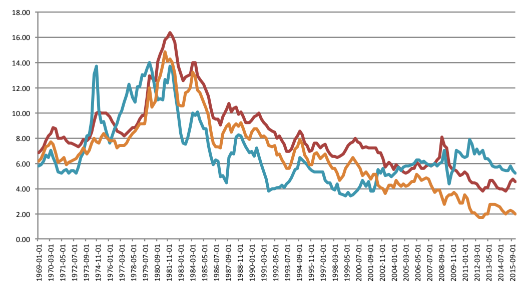
Finally, the 'Fed model', the equilibrium relationship between forward earnings yield on the S&P 500 and bond yields, indicates that forward stock earnings yield has increased well above their traditional valuation equilibrium through most of the post 'great recession' era. Originally the Fed model was constructed using the Treasury 10-year yield as the risk free rate. This model suffered in the era of ultra-low interest rates after the 'great recession'. Consequently, the 10-year Treasury yield has been replaced by the after-tax Baa corporate bond rate.

This restructuring of the Fed's original equilibrium model was suggested by Jan Timmer.[#] The rationale behind this substitution was a change in securities regulations that permitted corporate financial managers to buy back their own shares to temporarily boost equity values. The stronger form of the 'Fed Model' does improve the fit through the last few years relative to its original specification.

As shown in the chart below, the forward earnings yield on stocks has diminished recently and is now approaching the corporate bond after-tax rate. As the competing yields reach their equilibrium, it implies that investors have will have little to choose from between bonds versus stocks.

Institutional investment funds have been overcommitted to equities in the past few years as bond yields have plummeted. As the improved Fed model reveals forward equity yields have exceeded both Treasury and corporate bond yields since the last recession. However, in a 'Fed model' equilibrium, it is highly unlikely that there will be a sudden shift from equities into bonds.

'The Fed Model' is presently above AT Baa rates and 10yr. Treasury rates



Investment strategy in a neutral world

In the current investment environment, professional investment managers and individual investors need to perhaps turn their attention towards stock picking and turn away from investing in broad market indexes. Investment style will therefore have to return to active management with a focus on value investing. Investors such as Warren Buffet, the chairman of Berkshire Hathaway, have been very successful in picking stocks and following the principles of value investing. He has followed the traditional valuation techniques initially promulgated in 1934 by Professors Graham and Dodd in their seminal book "Security Analysis". Value investing typically requires expertise and stock picking skills. It is therefore more costly than passively investing in broad market indexes. Nevertheless, in this environment it may be the most prudent thing to do. The challenge, as academic studies have pointed out, is finding active or value managers with the right skills and performance after fees.

Conclusion: The twin pillars of support for equities have disappeared.

When the central banks stop buying the party is mainly over. Casual research* suggests that the massive asset purchases by most major central banks in the world coincided with healthy stock price appreciation in their respective economies. The positive association between central bank asset acquisition and stock price appreciation also strongly implies that once the central banks stop expanding their balance sheets, the brisk stock price appreciation will subside.

In the US the Federal Reserve stopped adding to its balance sheet at the end of 2014. Consequently, future stock price appreciation will depend more heavily upon economic performance and profit projections than in the recent past, when stock market investors in the US, Japan and UK experienced a gold rush.

The second critical pillar of support for equities has crumbled

Unfortunately, the profits outlook for the US is grim. US profit growth has already turned negative and it is unlikely to reverse direction soon. Moreover, global economic forecasts have been consistently revised downward over the past two years. The IMF recently reduced their global economic growth outlook to just 2.4%. In comparison they had been forecasting global economic growth in 2016 at 3.7% one year earlier.

Therefore, because two critical pillars of support for stock valuation have crumbled, broad equity indexes like the S&P 500 are likely to continue drifting, as they have in the past year, without clear direction. In this investment environment, investors could potentially turn to active value investing instead of passive investing in broad market indexes.

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References:

^CAMRI Global Perspectives, Issue 30, February 2016, "On a swing and a prayer: Are financial markets trying to tell us something," by Brian Fabbri

#Jan H Timmer, Jan (2011). "Understanding the Fed Model, Capital Structure, and then Some".

*CAMRI Global Perspectives, Issue 25, June 2015, "Where Have All the Good Wads Gone?" by Brian Fabbri.

	KEY INDICATORS TABLE (AS OF 31 May 2016)							
INDEX	**LEVEL (LC)**	**%1MO (LC)**	**%1MO (USD)**	**%1YR (LC)**	**%1YR (USD)**	**INDEX**	**LEVEL**	**%1YR**
S&P500	2096.96	1.80%	1.80%	1.71%	1.71%	3MO LIBOR	0.69	141.69
FTSE	6230.79	0.32%	-0.44%	-7.18%	-11.78%	10YR UST	1.85	-12.99
NIKKEI	16666.05	3.41%	1.23%	-14.64%	-4.28%	10YR BUND	0.14	-71.53
HANG SENG	20815.09	-0.50%	-0.66%	-21.16%	-21.33%	10YR SPG	1.43	-19.85
STI	2791.06	-0.99%	-3.20%	-14.73%	-16.46%	10YR SGS	2.24	-7.43
EUR	1.11	-2.79%		1.33%		US ISM	51.30	-3.40
YEN	110.73	3.97%		-10.81%		EU PMI	51.50	-1.30
CMCI	1056.10	0.86%		-8.02%		JP TANKAN	7.00	0.00
Oil	49.10	6.93%		-18.57%		CHINA IP	6.00	-1.60

Source: Bloomberg

APPENDIX

GLOSSARY OF KEY TERMS (Source: Bloomberg, with tickers in parenthesis. In US$ where applicable)
S&P500: capitalization-weighted index of the prices of 500 US large-cap stocks (SPX)
FTSE: capitalization-weighted index of the prices of the 100 largest LSE-listed stocks (UKX)
NIKKEI: capitalization-weighted index of the largest 225 stocks of the Tokyo Stock Exchange (NKY)
HANG SENG: capitalization-weighted index of companies from the Hong Kong Stock Exchange (HSI)
STI: cap-weighted index of the top 30 companies listed on the Singapore Exchange (FSSTI)
EUR: USD/EUR exchange rate: 1 EUR = xx USD (EUR)
YEN: YEN/USD exchange rate: 1 USD = xx YEN (JPY)
CMCI: Constant Maturity Commodity Index (CMCIPI)
Oil: West Texas Intermediate prices, $ per barrel (CLK1)
3MO LIBOR: interbank lending rate for 3-month US dollar loans (US0003M)
10YR UST: 10-year US Treasury yield (IYC8 – Sovereigns)
10YR BUND: 10-year German government bond yield (IYC8 – Sovereigns)
10YR SPG: 10-year Spanish government bond yield, proxy for EU funding problems (IYC8 – Sovereigns)
10YR SGS: 10-year Singapore government bond yield (IYC8 – Sovereigns)
US ISM: US business survey of more than 300 manufacturing firms by the Institute of Supply Management that monitors employment, production inventories, new orders, etc. (NAPMPMI)
EU PMI: Purchasing Managers' index for the 17 country EU region (PMITMEZ)
JP TANKAN: Bank of Japan business survey on the outlook of Japanese capital expenditures, employment and the overall economy, quarterly index (JNTGALLI)
CHINA IP: China's Industrial Production index, with 1-month lag (CHVAIOY)
LC: Local Currency