



ANALYTICS INVESTMENT ADVISORS, LLC

Investing in a Slow Growth Economy – Part 2

Richard C. Hoyt

October 5, 2016

What?

- The July 5, 2016 Analytics Investment Advisor quarterly newsletter detailed that during the 6 year period between 2010 and 2015 of the Obama administration, the average annual U.S. growth rate was 2%, 44% less than the average U.S. GDP growth rate of 3.6% between 1933 and 2008 for the previous 12 presidential tenures.
- Chart 1 shows a similar trend in the compound annual growth rate of U.S. real GDP by decade between 1950 and 2015.
- Chart 2 summarizes the results of a statistically significant linear regression model which estimates the impact of changes in U.S. GDP growth on S&P earnings since 1970, the conclusion of which are: 1) U.S. GDP growth explains approximately 50% of the variability in S&P 500 earnings ($R^2 = .47$); and, 2) for every 1% reduction in yearly GDP growth (t-1) there has historically been a corresponding 2% decline in S&P 500 earnings ($a=1.95$).
- These data are consistent with the profit slump for the S&P 500 which is projected to decline for the sixth consecutive quarter (3Q16).

Why?

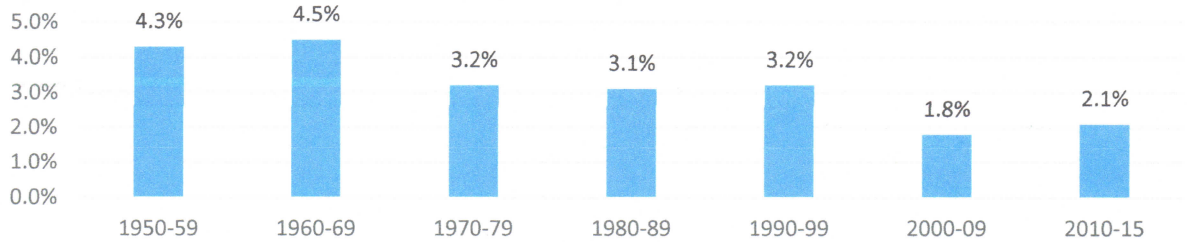
- Productivity growth, a critical indicator of competitiveness and impetus to economic and wage growth, is well below long-term levels.
- Business investment is also lagging due to uncertainty, and new business formation has declined markedly since 1980.
- Annual growth rate of quarterly private investment in intellectual property, structures and equipment remains weak.
- Job growth in the U.S. continues to be slow by historical standards, and low workforce participation, one effect of job creation, has fallen to levels not seen since 1982, the impact of which is to reduce median household income, consumption, aggregate demand, and thus U.S. GDP.
- The U.S. economy does not have a national economic strategy with an integrated set of priorities that requires action by business, state and local governments, and the federal government. This leadership is lacking mostly at the federal level which has recently attempted to restore competitiveness exclusively through the Federal Reserve and monetary policy.¹

How?

- Given the systemic faltering of U.S. economic performance and the long term circumstances that have led to this situation, the charts and statistical analysis attendant hereto seem compelling and lend credibility to an investment strategy which utilizes exchange traded funds for making allocation/sector positioning based on growth expectations, a subject that will be addressed in the January 2017 newsletter.

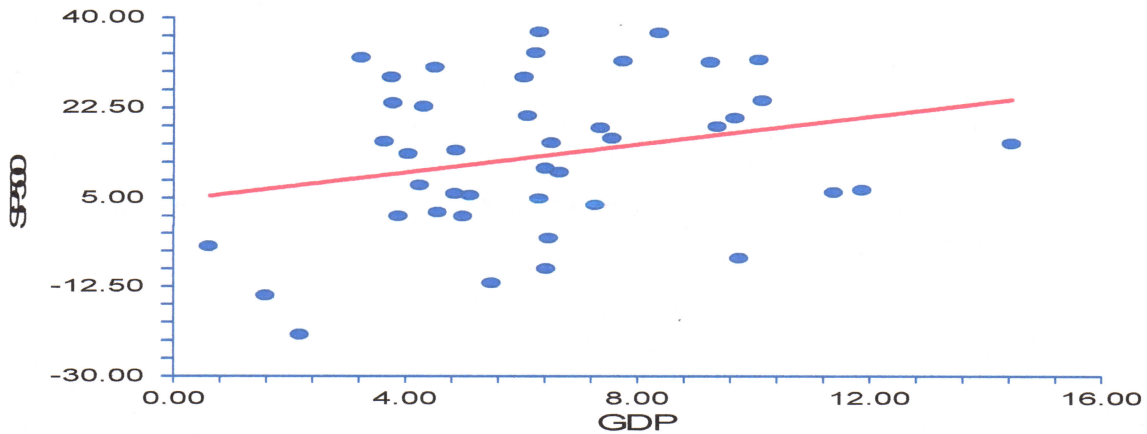
¹ See "Problems Unsolved and a Nation Divided, The State of U.S Competitiveness 2016", *Harvard Business School Survey*, September 2016, pp 1- 67, for an in depth analysis of the U.S. economy in an era of political paralysis.

**Chart 1:
Economic Growth Rate by Decade**



Source: Bureau of Economic Analysis

Chart 2: S&P 500 v. GDP(t-1)



$SP500 = 1.95 \times GDP(t-1)$; $R^2 .47$; $t\text{-value } GDP(t-1) = 6.07$; $N = 42$; $Mean = 13.19$.

Performance Summary

	Average*	YTD*					
	2013 - 2015	9/30/2016	%AUM	Alpha**	Beta**	R2**	SD**
S&P 500	13.81%	6.08%					
Barclay US TR	1.13%	5.80%					
Cautious	11.7%	-0.74%	< 1%	-2.64	1.05	0.52	4.87
Moderate	16.3%	-1.43%	30%	-0.68	1.32	0.86	4.75
Assertive 1	19.4%	-4.81%	32%	-0.98	1.40	0.75	5.41
Assertive 2	24.4%	-3.95%	26%	-0.45	1.54	0.88	6.05
Aggressive	25.6%	-10.01%	11%	-1.19	2.64	0.85	10.34

* Net Size Weighted Returns, PortfolioCenter, Schwab Portfolio Technologies. Returns are net of fees, which are negotiable and range between 50 and 125 basis points.

**Risk Return Statistics, Analytics Investment Advisors, LLC; most recent 12 months.