

Productivity Is Overrated

“Work you fingers to the bone and what do you get? Bony fingers, bony fingers” – Hoyt Axton

Productivity is like mass transit or wearing seatbelts in New Jersey: It is great for the other guy, and you will take it under consideration for yourself.

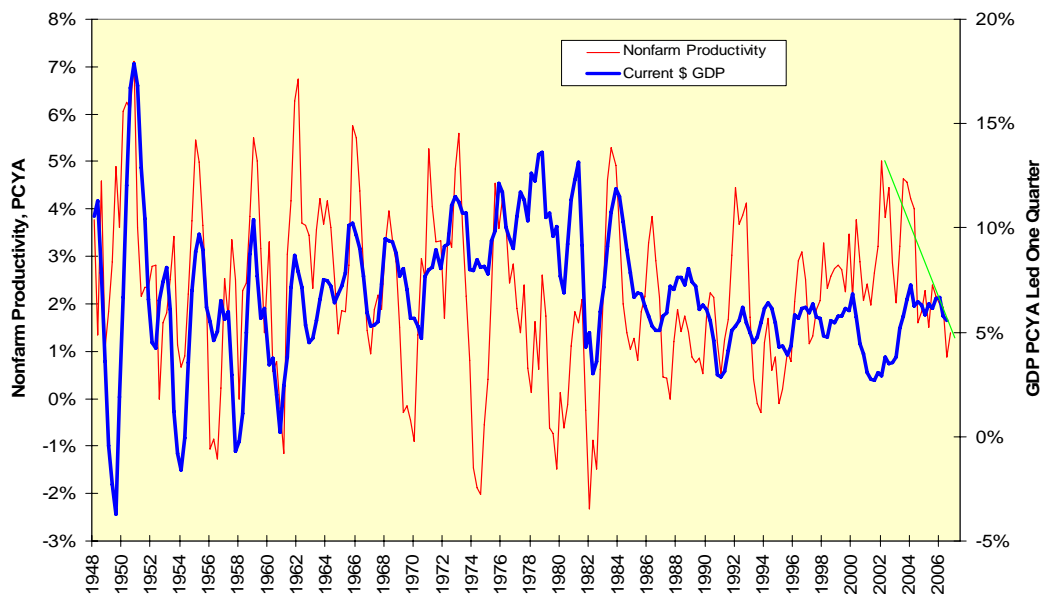
But is there another economic datum that enjoys a better press? Let’s face it; even as Americans grind away in what the rest of the world is starting to regard as a workaholic spectacle, we extol the virtues of cranking it out even faster.

Some of this is no doubt a reflection of the 1970s experience wherein nonfarm productivity either grew slowly or declined on a year-over-year basis. As the forces of inflation were already on the loose – remember, Richard Nixon imposed wage and price controls in August 1971, well before that unhappy decade’s surge in grain prices and the first oil shock of 1973-1974 – the decline in productivity growth became associated with stagflation.

Several other forces were more to blame, including high marginal tax rates, mismanagement of the global currency system and the integration of vast numbers of new workers into the labor force. We take a gender-balanced labor force for granted today, but this was new in the 1970s, and newer entrants into the labor force are almost by definition less productive. In addition, the Baby Boomer generation, the parents of today’s Boomees, arrived in the force during that decade.

Productivity growth trended higher from the early 1980s to the early part of this decade. We can, to a large extent, attribute this secular trend to a combination of better integration of technology, maturation of new entrants into the labor force and declining real energy prices. In recent years, as highlighted by the green line in the chart below, it has been trending downward. Overall, the connection between growth in nonfarm productivity and growth in current dollar GDP since 1948 has been a weak one, with an r-squared or percentage of variance explained of only 5.5%.

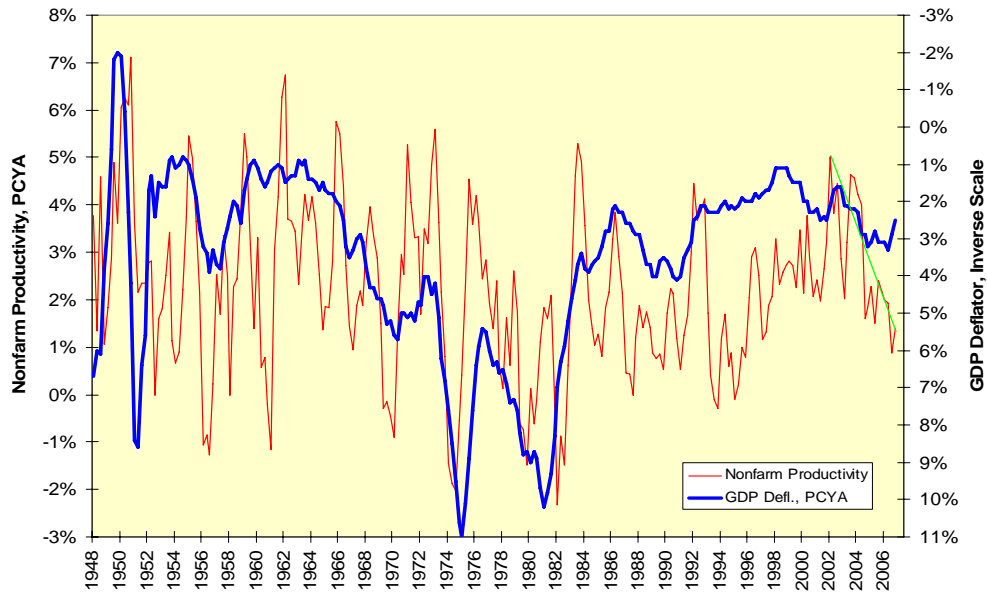
The Productivity-Growth Link Not Strong



What About Inflation?

Well, you snort, if higher productivity growth is not linkable to higher GDP then surely it is linkable to lower inflation. More goods and services for all that money to chase must place downward pressure on inflation, right? First, stop snorting. Second, look at the data. If we plot the GDP deflator’s year-over-year change inversely, against year-over-year productivity growth, we do see the expected directional relationship, but the r-squared here is only 13.6%. Moreover, the recent decline in productivity growth has not done much to reignite inflation. If the postwar experience holds, we would have to see a much more rapid decline in productivity to push inflation higher.

Productivity-Inflation Link Not Strong



Does It Affect Monetary Policy?

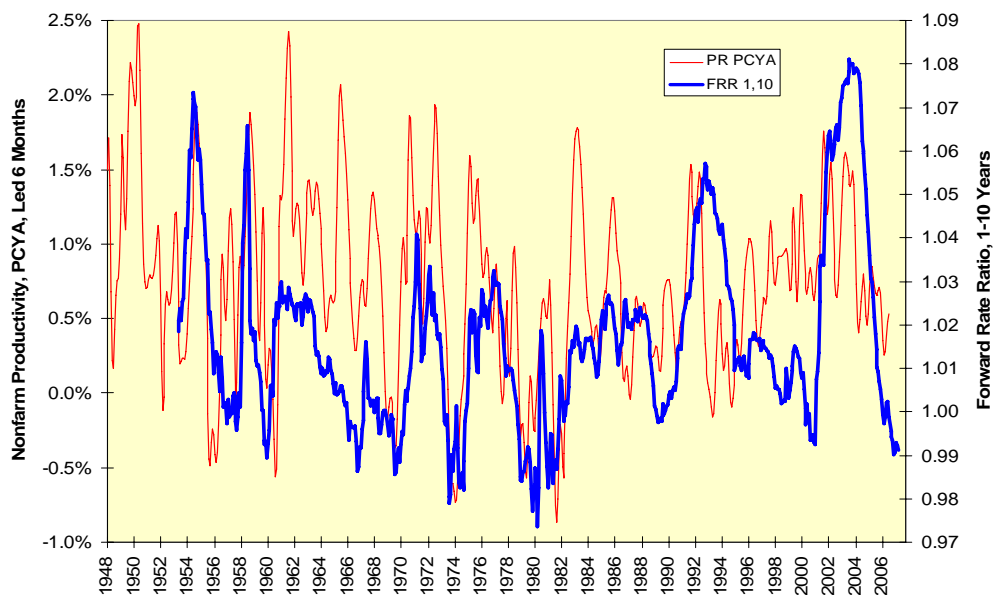
The Federal Reserve claims to pay attention to productivity; of course, given enough time, the Federal Reserve will claim to pay attention to everything. Alan Greenspan cited the productivity growth of the late 1990s as a key to the Federal Reserve's accommodation of the stock market bubble then extant.

As an aside, what is important to the Federal Reserve is the living embodiment of a mathematical concept called the Ergodic Principle. This is best visualized by banging the cue ball so hard into the assembled billiard balls that eventually one of them will roll into a pocket.

We digress.

The data do not suggest the Federal Reserve remains in accommodation in reaction to higher productivity; no, rather the opposite. A steeper yield curve as measured by the forward rate ratio between one and ten years, the rate at which we can lock in borrowing for nine years starting one year from now divided by the ten-year rate itself, leads changes in productivity by six months on average. The productivity data were interpolated from quarterly to monthly for this analysis.

Does Monetary Policy Affect Productivity?



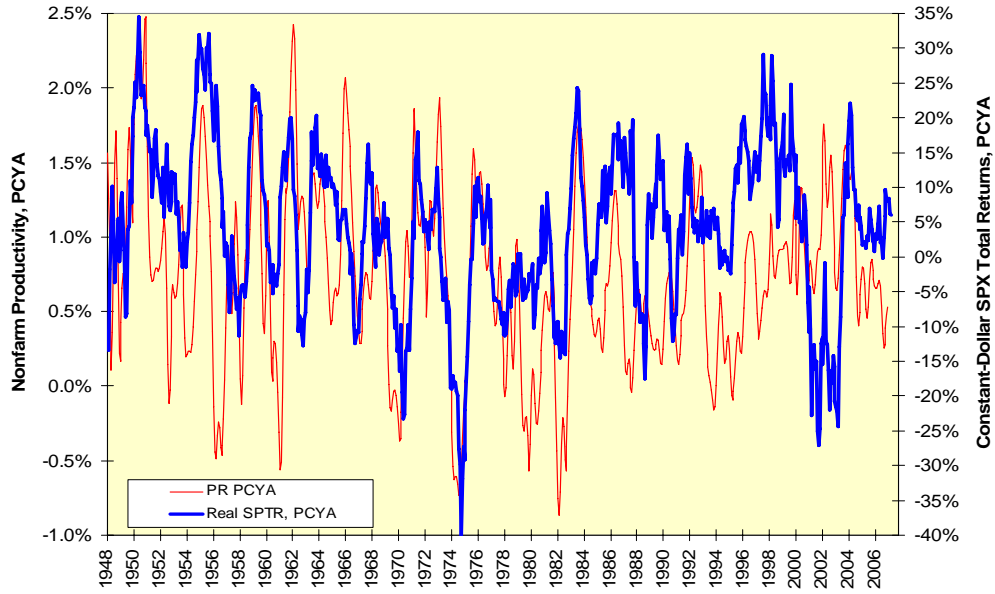
What would drive this relationship? Two suggestions are offered. First, a steeper yield curve produced by lower short-term interest rates could increase productivity in six months by a relief mechanism. Second, a steeper yield curve by virtue of higher long-term rates could represent long-term capital investments whose rewards are about to be realized. However, productivity gains following a steepening of the yield curve could represent nothing more than a form of monetary illusion, as businesses treating new liquidity as real in value before realizing it might simply be inflationary.

What About Stocks?

Now let's ask the ultimate question, does productivity growth affect stock market returns? The answer appears to be a resounding, "No." If we map inflation-adjusted year-over-year changes in the S&P 500's total returns against year-over-year changes in productivity growth, we find another non-relationship. The r-squared here is a measly 14.5%.

Even more interesting is how this relationship used to be far more direct than it is today. Nonfarm productivity in an industrial economy is measured readily by someone at the end of the assembly line counting widgets. Nonfarm productivity in a financial, services and information-economy is far more difficult to measure. All jokes aside, how many of you reading this could give an accurate and direct answer to the question of your output for today?

Productivity And Real Equity Returns



So there we have it. We cannot link productivity to growth, inflation, monetary policy or stock market returns. We really cannot link it to much other than our feelings a higher number must be better. That is no reason at all for focusing on the data as they are released along with GDP every quarter and drawing some deeper and more meaningful conclusion.