Two Cheers For Productivity

Do not form your opinion of productivity by looking around your place of work in despair. The simple and undeniable fact of the matter is we as a society have been increasing our economic output per unit of labor, of land and of capital for a long time. And it is fair to say that no economic datum enjoys such a good press. If you are long bonds, if you are long stocks, if you are long real estate and yes, if you are long cash instruments exposed to inflation, you should hope productivity trends higher.

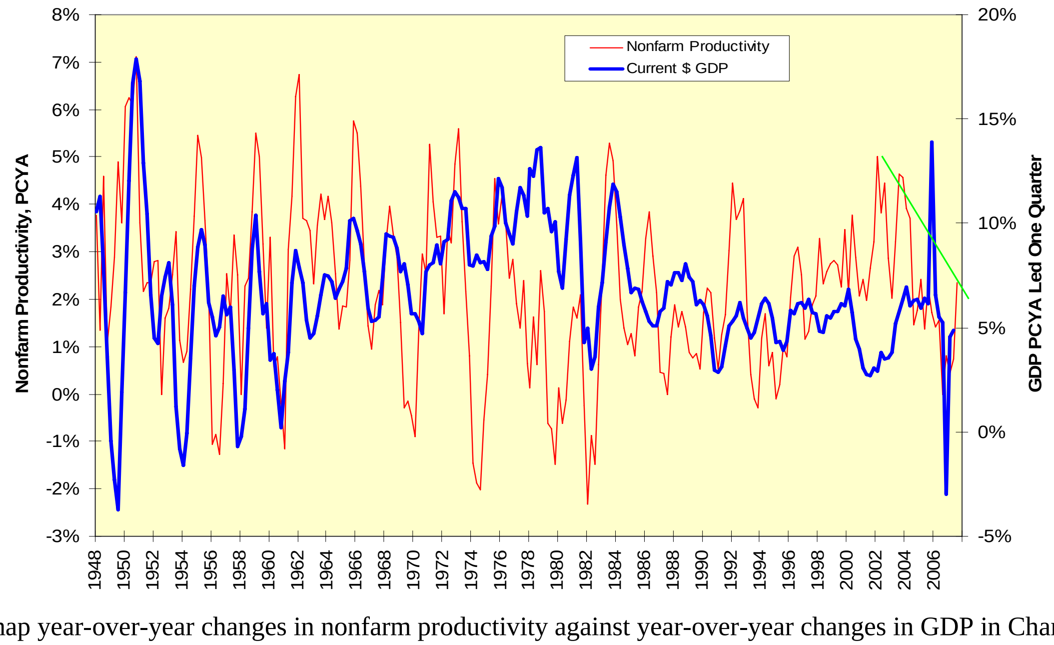
Much of the current opinion on productivity is colored by the experiences of the 1970s. Those who did not experience stagflation firsthand surely have heard the stories. Inflation, which in the minds of many could not occur in a slowing economy, soared to double digit levels while both real growth rates and unemployment moved to uncomfortably low and high levels, respectively. By 1980, the country was ready to roll the dice on a radical economic experiment, a combination of high short-term interest rates to break the back of inflation and sharp cuts in marginal tax rates to stimulate output and investment.

Call it supply-side economics, call it Reaganomics or call it whatever, it worked. Lost in the collective amnesia is the question of what Plan B was had this grand experiment failed.

Productivity And Growth

The business and economic literature of the time was filled with lamentations over slow or even negative growth in productivity; most of this was written with the typically self-satisfied point of view other people were not working hard enough (Disagree? Hang around a sales manager for five minutes). But this simple view ignores the many reasons why productivity stagnated in the 1970s. These include the mismanagement of the global currency system as the world adjusted to the costs of hedging floating exchange rates, accommodation of much higher oil prices and the integration of huge numbers of new workers into the labor force. Not only did the Baby Boomer generation enter the workforce en masse, so did millions of women. New workers are, almost by definition, less productive even if they do not recognize it at the time.

Chart 1: Growth And Productivity Not Strongly Linked



If we map year-over-year changes in nonfarm productivity against year-over-year changes in GDP in Chart 1, a couple of interesting patterns emerge. First, the two measures match very closely from the end of World War II until the early 1960s; the United States was much more dependent on manufacturing then, and what was good for General Motors was in fact good for the country. The 1970s productivity recession is clearly visible. Then after the aforementioned turnaround in the 1980s, productivity growth began to trend higher until 2002. This coincided with better integration of information technology, the maturation of workers who entered the labor force in the 1970s and declining real energy prices.

The years after 2002, which coincide with the phenomenal growth of China, India and other emerging markets have seen a renewed downturn in productivity growth, as marked by the green trendline. Exacerbating these international developments has been a move away from low marginal tax rates in the U.S. In spite of the 2003 tax cuts, stealth tax increases as diverse as higher real energy prices and the alternative minimum tax which effectively rescinded the 2003 tax cuts for many.

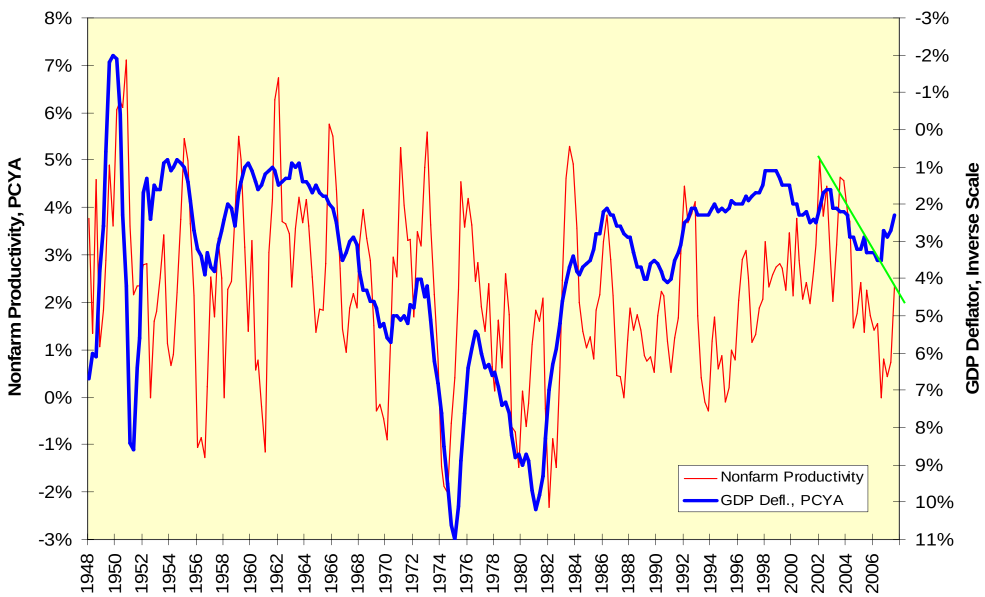
Over the entire sample period, the connection between the rates of change for productivity and GDP has been surprisingly weak. The r-squared, or percentage of variance explained, is a mere 13.3%. In other words, the higher productivity growth does not live up to its good press as an economic elixir.

Inflation And Productivity

If the link between productivity and growth is not strong, is the link between productivity and the other half of stagflation, inflation, any more solid? One might assume greater output of goods and services would put downward pressure on prices as all that money now has more to chase.

Remember what they say about "assume." As we can see in Chart 2, the productivity-inflation connection is an asymmetric one. Declines in productivity growth are accompanied by higher inflation, but the opposite is not true; high productivity growth does not lead to declines in the pace of inflation. The slowing rate of productivity growth post-2002 has yet to produce an upturn in inflation, perhaps because the U.S. now imports so much of its goods, and it appears likely productivity growth would have to collapse going forward to induce significantly higher inflation.

Chart 2: Productivity Does Not Drive Inflation

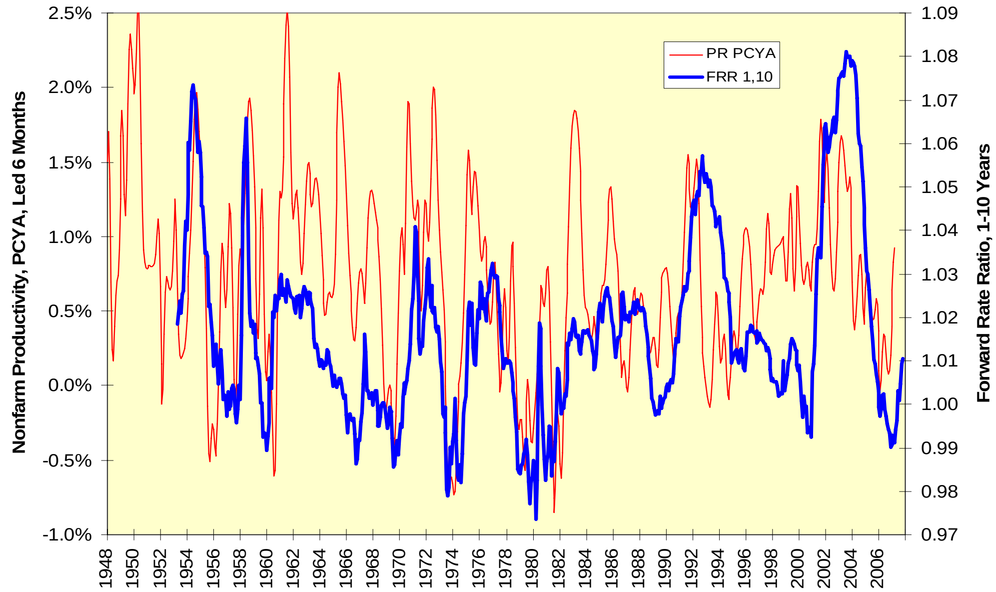


Productivity And Monetary Policy

Traders are always on the lookout for anything that might give the Federal Reserve reason to ease. Why this might be given the poor performance of markets during the 2001-2003 easing period and the strong performance after tightening began in mid-2004, but we digress. The initial reaction to monetary ease always is bullish.

As noted above, it is assumed slower productivity growth is inflationary, so the opposite case of strong productivity growth should be viewed as disinflationary and therefore an inducement for the Federal Reserve to ease. The exact opposite mechanism is suggested by the data displayed in Chart 3. 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, actually leads changes in productivity by about six months on average. For sake of completeness, we should note the quarterly productivity data were interpolated to monthly data for this analysis.

Chart 3: Monetary Policy And Productivity

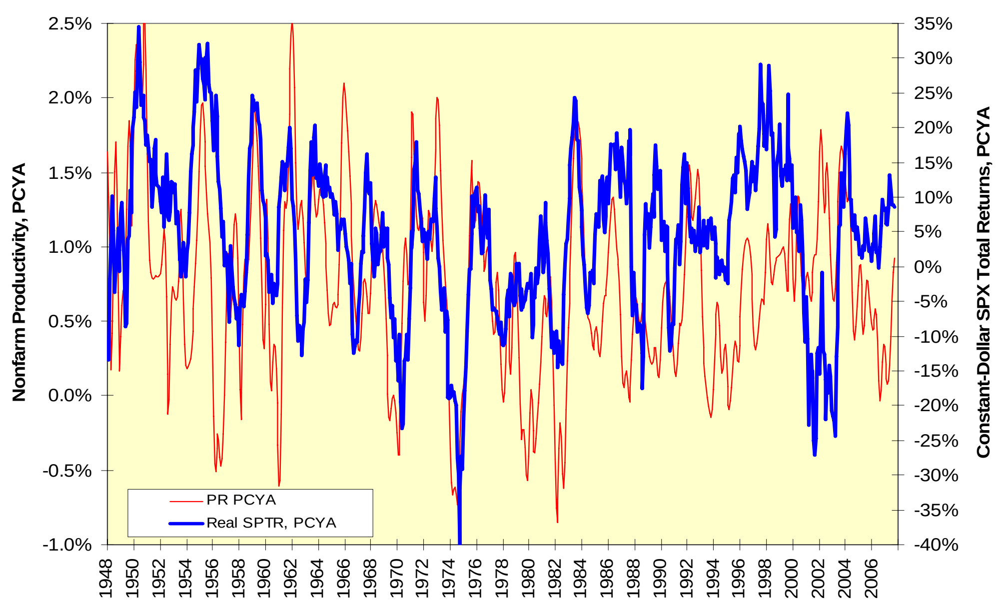


Why might this be? The yield curve can steepen by virtue of lower short-term rates, a Federal Reserve ease, or it can steepen by virtue of strong demand for long-term investment capital. Neither one really should increase the output of goods and services inside of the six-month horizon indicated. Another, less flattering, explanation is offered: A steeper yield curve produced by easier money can create what is termed "monetary illusion," which is individuals and firms treating new liquidity as real before they realize it is simply extra money and a potential driver of future inflation.

Productivity And Investment Returns

Those frustrated by now that higher productivity growth does not do all of the things it is purported to do must be saying, "Yes, but higher productivity must drive real investment returns." Umm, no: Let's map year-over-year changes in productivity against year-over-year changes in the constant-dollar total return for the S&P 500. The r-squared in this relationship is only .147, and as we can see in Chart 4, the quality of the fit is deteriorating over time.

Chart 4: Productivity And Stocks



The reason behind this deteriorating fit is similar to that noted for the GDP-productivity relationship. As the economy transformed from one where output was dominated by tangible goods to one where output was dominated by services, productivity became an increasingly less-direct measure. Stand over someone at an assembly line and counting their output is simple. Stand over a typical white-collar worker in a service industry and good luck in trying to assess how productive their activities are.

The fact we have a hard time linking productivity to GDP, to inflation, to monetary policy or to real investment returns does not mean we should collectively aspire to slacker status. Over time, wealth is best defined as our capacity to consume, and each and every one of us has to produce something in order to consume more and raise our collective standard of living.

As long as we mentioned Ronald Reagan earlier, let's return to the famous question he posed to the nation during his debates with Jimmy Carter: Are you better off now than you were four years ago? In the low-productivity 1970s, few could answer that question affirmatively and the nation's vote in 1980 reflected that sentiment. As global productivity has increased over the past quarter-century, more and more people around the world feel their lives are improving, and that tells us better than any economic data or market reading the value of productivity.