# Slow Economic Growth as a Phase in a Policy Performance Cycle

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Why has economic growth been so disappointing in the United States in recent years? While debate over the question is raging among economists, many, including Cochrane (2015), Davis (2015), Herkenhoff and Ohanian (2012), McGrattan and Prescott (2012), Mulligan (2015) and I (2008, 2014) have offered evidence that the poor performance of the economy during the past decade —the Great Recession and the Not-So-Great Recovery—is largely due to poor economic policies. Whether you call it a Great Deviation from the First Principles of economics, as I have, or an Era of Great Forgetting of what policy works well, as John Cochrane has, there is empirical evidence that a shift in a wide array of policies has been a significant cause of the poor economic performance. Further evidence comes from the prior two decades when policy moved toward a greater adherence to economic principles, and economic growth and stability improved. Indeed, during the past 50 years, policy and performance appear to have swung back and forth with a frequency somewhat longer than typical business cycles, but much shorter than a long swing of supposed secular stagnation (Taylor (2015)).

In my view, these historical experiences when interpreted with basic economic theory tell us the types of policies that produce good performance: tax reforms to lower tax rates on

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people and businesses and thus reduce disincentives to work and invest; regulatory reforms to scale back and prevent regulations that fail cost-benefit tests; free trade agreements to open markets, entitlement reforms to prevent a debt explosion and improve incentives, and monetary reform to improve predictability and create output stability along with price stability.

One barrier to implementing such policies is a skepticism that such reforms will restart or restore economic growth. It's too late, some say; the economy missed the typical rebound at the start of the recovery, and we can't make it up now. Or there is a new secular stagnation, which can only be addressed by another round of countercyclical stimulus spending (Summers (2014), Stiglitz (2015)). Why bother putting these reform ideas into action if they are not going to make much difference?

But the U.S. economy is currently in a situation where a change in policy can both remove downside vulnerabilities and create an increase in growth. Because the economy has grown from the start of this recovery at a pace no greater than the pre-recession trend, it has left a gap of unrealized potential that can and should be closed with faster economic growth. In several key ways the U.S. economy resembles an economy at the bottom of a recession, ready for a restart, even though the unemployment rate is near 5 percent. In effect, as I show in this paper, the economy is at phase—in particular a trough phase—of what appears to be a policy-performance cycle and ready to recover if policy turns.

As a matter of simple arithmetic, the growth rate of the economy equals the sum of (1) the growth of labor productivity and (2) the growth of employment or hours of work. So if you want to understand why economic growth is slow and whether it is amenable to a change in economic policy, you need to consider these two factors. Let's start with productivity growth and then consider employment growth.

## **Labor Productivity Growth**

Figure 1 shows labor productivity in the non-farm private business sector on a quarterly basis since the late 1940s. Even when computed over four quarter intervals there is a lot of volatility in the growth rare. Nevertheless, one can see clear longer term swings, which I have sketched in the picture, including the productivity slowdown in the 1970s, the resurgence in the 1990s and the recent productivity slowdown

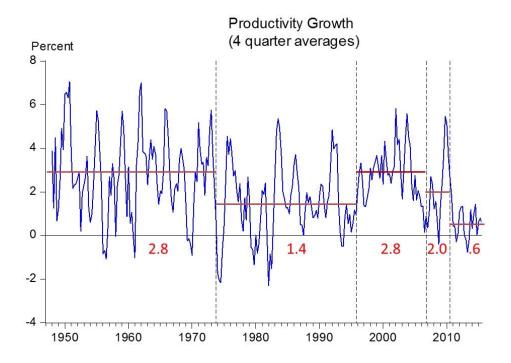


Figure 1. Ups and Downs in Labor Productivity Growth

Smoothing out these high-frequency fluctuations with a five-year moving average or a Hodrick-Prescott trend—as in Figure 2—provides a better sense of these lower-frequency movements. Productivity growth has swung up and down roughly in tandem with the swings in policy noted in the references above, giving some evidence of an economic policy cycle. There was a trough around 1980, a pick-up which gained much steam in the 1990s, and a subsequent

decline into what might be another trough today. Productivity growth is now unusually low and has been falling. It is only 0.6 percent per year for the past 5 years, which is only ½ of the 2.3 percent rate of the previous 20 years.

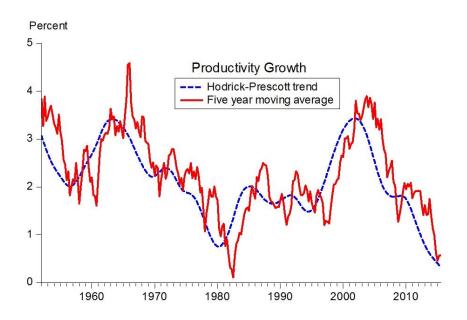


Figure 2. Smoothed Labor Productivity Growth

Some of the proximate causes for this unusual falloff can be obtained from a Solow growth accounting framework. Compare, for example, the pre-crisis years 1996-2005 with the post-crisis years from 2011-2014. Based on annual data from the most recent study by the Bureau of Labor Statistics (2015), labor productivity growth fell from 2.99 percent per year during the years 1996-2005 to 0.65 percent during the years 2011-2014, or by 2.34 percentage points. Over those same two periods, the growth rate of capital services per hour fell from 3.69 percent to an amazingly low -.53 percent per year. Assuming for simplicity a capital share of 1/3 implies a reduction in the contribution of capital from 1.22 percent to -.17 percent. Computing

total factor productivity growth as a residual, then implies that it fell from 1.77 percent to .82 percent per year. These developments are shown graphically in Figure 3.

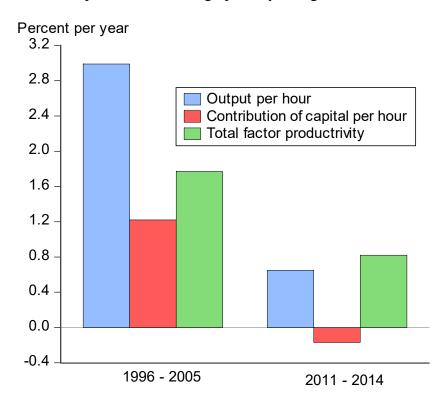


Figure 3. Growth Rate of Labor Productivity and Its Determinants

These BLS data suggest that lower growth of both capital services per hour of work and total factor productivity are causal factors. Simply restoring these two contributors to growth to their pre-crisis levels would give a 2.4 percent per year boost to productivity growth going forward far above the forecasts of economists who have written off the kinds of pro-growth reforms that might bring this about.

The decline in capital services growth, which includes both physical capital and intellectual property assets, is quite striking. It is computed directly by BLS—rather than as a residual. Its time series path—shown in Figure 4—reveals the important role of investment in physical capital and intellectual property in the slowdown in productivity.

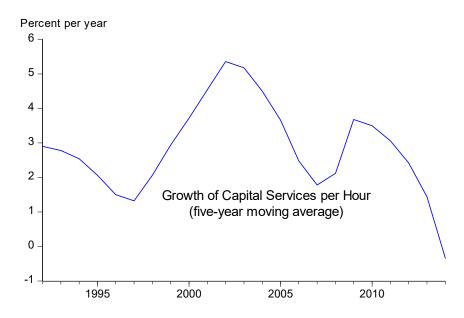


Figure 4. Growth Rate of Capital Services per Hour in the Nonfarm Business Sector

The negative growth rate is highly unusual—unprecedented in the BLS data as shown in the chart—and it has persisted below zero for 5 years. Even assuming the "low hanging fruit have already been picked" story of technological progress and thus a continuation of low total factor productivity growth, we could get a 1.4 percent increase in labor productivity growth to around 2 percent through more private investment which would raise the capital stock and services of both physical and intellectual capital. Tax and regulatory reforms would be expected to do just that.

## **Labor Force Participation Rate**

Next consider employment and the growth of hours of work. With the unemployment rate around 5%, future increases in the employment to population ratio must come mainly from increases in the labor force participation rate. The recent behavior of the overall labor force participation rate is shown in Figure 5.

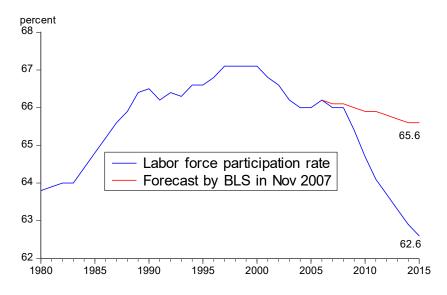


Figure 5. Labor Force Participation Rate

Note the very sharp drop in this rate in the past few years, especially during the years of slow growth since the end of the recession. Some of the recent decline in the labor force participation rate is due to the baby boom generation retiring, but the decline is very large for teenagers and young adults, for females age 24-54, and it even increased for those of retirement age. More research is needed, but clearly non-demographic factors are playing a role, including the disappointing job prospects due to the low overall growth rate.

As explained by Erceg and Levin (2014), a straightforward way to separate the demographic factors from other factors is to compare projections made by BLS *before* the Great Recession—which take projected demographics into account—with what has actually happened since then. The November 2007 BLS forecast is shown in Figure 2. The economists and statisticians at BLS forecast that the labor force participation rate would decline slightly due to the retirement of the baby boomers to 65.6 percent in 2015. But this is far in excess of the actual participation rate of 62.6 percent for 2015. This three percentage point difference is what could

reasonably be attributed to non-demographic factors including the slow pace of economic growth.

The BLS forecast was not the only forecast of labor force participation rates made back before the crisis. Aaronson, Fallick, Figure, Pingle, and Wascher (2006) put out a forecast which actually predicted the decline in participation rates quite well. Their forecast apparently incorporated projected changes in labor force participation by age and sex categories due to projections of various factors in the economy that affect participation. It is quite possible, however, that those factors were endogenous to the economy or to policy changes, for example, tax policies which affect incentives.

In any case, there is no reason to assume that the decline in labor force participation is a secular development with the participation rate unresponsive to incentives from policy reforms, such as those which encourage firms to expand and hire. Rather the sharp recent decline suggests a reversal is possible which would have large effects on economic growth. Indeed, the recent sharp decline in labor force participation over at the right side of Figure 5 is similar to the recent sharp decline in productivity in the right hand side of Figure 2. There is nothing secular about either and so there is nothing secular about the combination of the two which shows the potential for a reversal.

A three percentage point reversal in the labor force participation rate from 62.6 percent back up to 65.6 percent would mean a 5 percent increase in the labor force. Over 5 years it would mean a 1 percentage point rise in the growth rate. Over ten years it would mean a .5 percent per year rise which would double the .5 percent per year now forecast by the BLS. Assuming no change in the unemployment rate, employment growth would also rise from .5 percent per year to 1 percent per year. The percentage of the working-age population that is actually working

would grow from the 59.5 percent in December 2015 level (about the same as the 59.4 percent at the trough of recession in June 2009) to 62.1 percent.

Going forward BLS now forecasts that the labor force participation rate will decline by .3 percent per year from 2014 to 2024; the supposed change would reverse that decrease to an increase of .2 percent per year. Adding in .8 percent population growth, as the BLS now projects, gives the 1 percent per year employment growth. If these effects were front end loaded, then we could have 1.5 percent for five years and .5 percent for the next five years. When added to the productivity growth changes discussed above the economic growth scene in the United States would completely change from the disappointing conditions today.

#### **Conclusion**

Critics of proposals for tax, regulatory, trade, entitlement or monetary reform often say that they do little to boost economic growth in the short run. At best, it is said, these reforms work in the long-run taking many years to show real effects. The economist's lag becomes the politician's nightmare, as George Shultz explains the problem.

This long lag pattern is found in simulations of many of the econometric models used to analyze reforms. In contrast many of these same models find that short-run fiscal stimulus packages have larger and more visible immediate effects than the more permanent reforms. This asymmetry tends to tilt policy decisions to so-called "temporary, targeted, and timely" packages and away from more "permanent, pervasive, and predictable" institutional reforms (Taylor (2012)). This is particularly true during times of slow economic growth, or anticipated recession, when there are loud calls to do something that shows quick results.

In this paper I have examined evidence that under current economic conditions, more permanent reforms would likely have large short-run effects on economic growth to go along with their sustained long-run growth effects. They would also help to counteract any short-run depressing effects which may develop in the economy and add a degree of stability.

The unusual recent swing down in labor productivity growth, along with the unusually low contribution from capital services, suggests that it could turn up again if boosted by reforminduced incentives. Similarly, the large drop in labor force participation, along with evidence that it is not all demographics, suggests that it too would revert with reforms.

Thus, policy reforms would not only raise the long-run growth rate of the economy, they would also likely bring an extra boost to growth in the short run, much as in a normal recovery from a recession when growth surges at first before settling into an expansionary mode. Since the economy missed that surge in this recovery, in effect we would be restarting the recovery all over again.

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