The Keynesian Growth Approach to Macroeconomic Policy and Productivity

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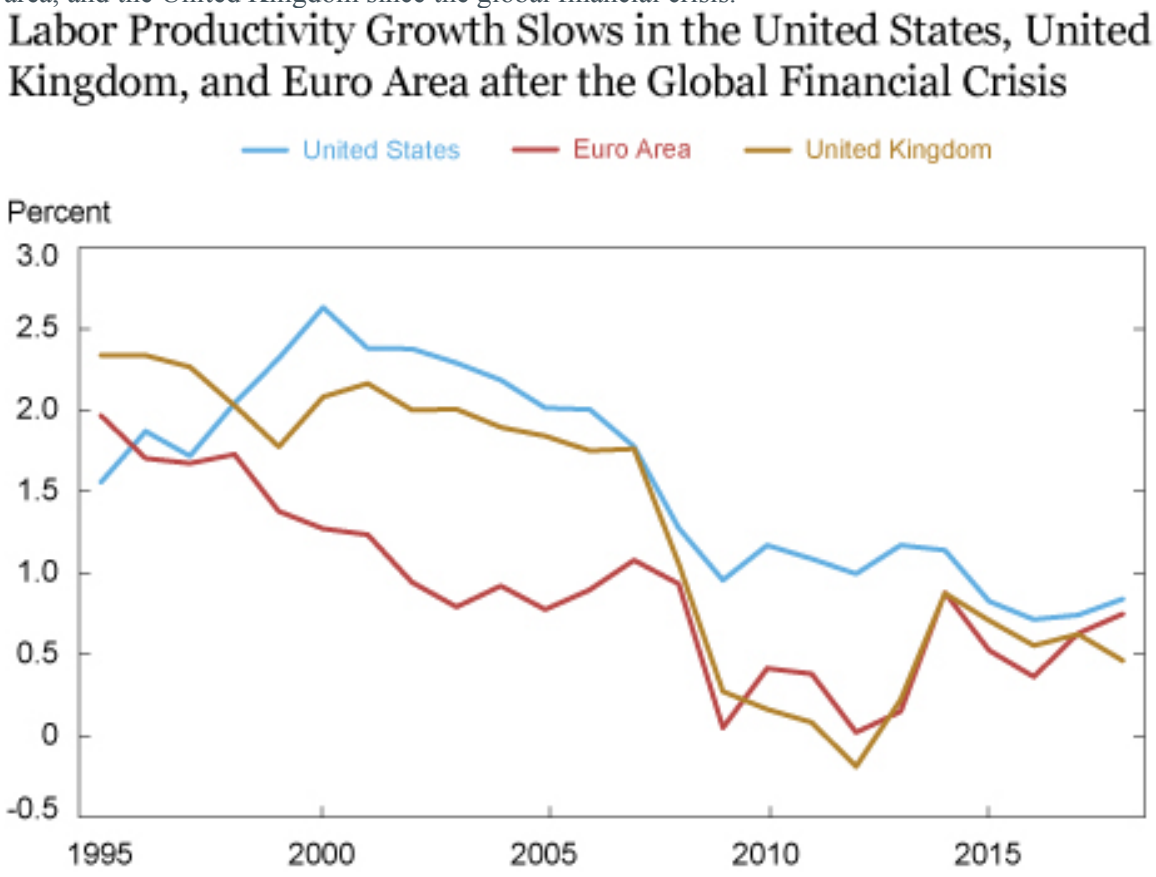
Productivity is one of the key determinants of potential output—that is, the trend level of production consistent with stable inflation. A productivity growth slowdown has occurred in several advanced economies in the aftermath of the global financial crisis, raising concerns about long-term growth. In response, a variety of supply-side policy options have been proposed, such as reforms to increase labor and product market flexibility. In this blog post, we consider the role of demand-side policies in raising trend productivity growth.

Supply and Demand Drivers of Productivity

The chart below illustrates the decline in labor productivity growth in the United States, the euro area, and the United Kingdom since the global financial crisis.

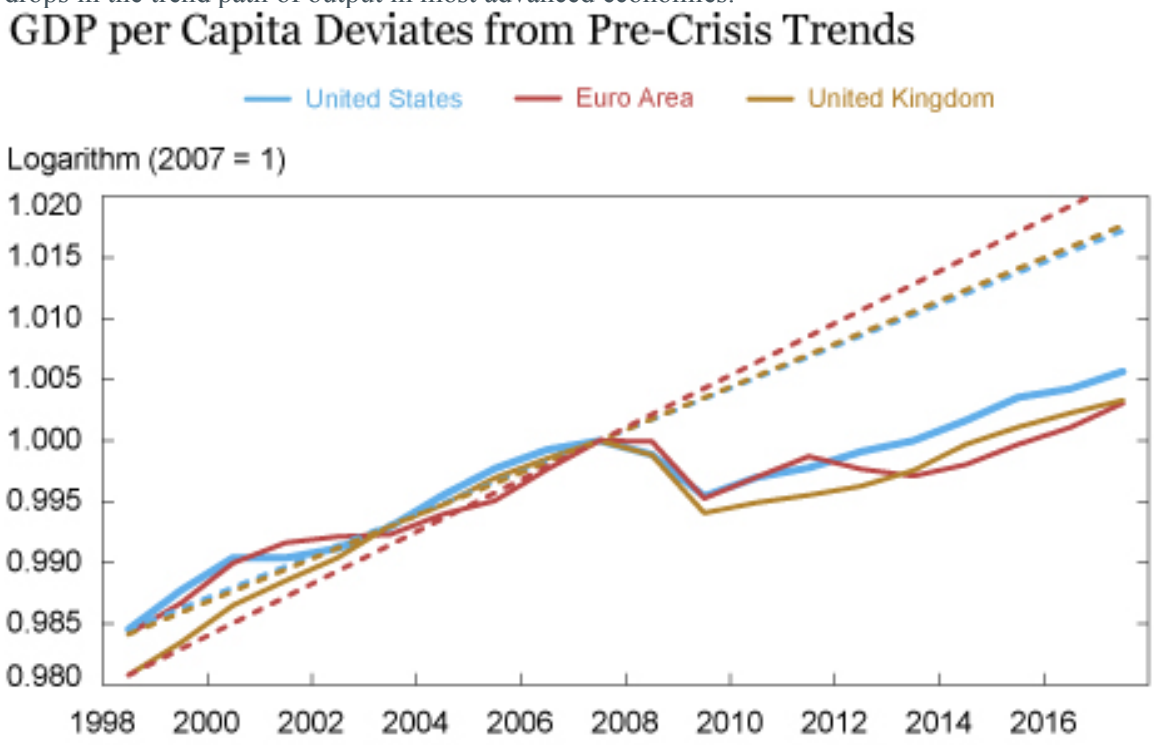


Source: Total Economy Database.

A view deeply entrenched in mainstream macroeconomics is that trend productivity growth is the outcome of technological and institutional factors and can be treated essentially as an exogenous force, unresponsive to business cycles or monetary policy actions. The workhorse macroeconomic models used by international organizations and central banks are built upon this notion.

This view, however, struggles to explain some key empirical facts. For instance, Blanchard et al. (2015) show that recessions tend to be followed by prolonged slowdowns in productivity growth,

causing persistent deviations of output from prerecession trends. This evidence suggests that recessions have an impact on long-run output, a phenomenon known as hysteresis. In a similar vein, Ball (2014) has emphasized how the Great Recession has been associated with permanent drops in the trend path of output in most advanced economies.



Source: World Bank—World Development Indicators.

Notes: Series shown in logs, undetrended, centered around 2007. The linear trends are computed over the period 1998-2007.

These facts, as pointed out by several economists (Fatas and Summers,Kocherlakota, Krugman, Smith, Wren-Lewis), suggest that the conventional wisdom might be incomplete and that trend productivity responds to changes in aggregate demand. In turn, this suggests that traditional views on the link between monetary policy and long-term growth need to be re-evaluated.

The Keynesian Growth Framework

In Benigno and Fornaro (2018), we propose an approach that we call "Keynesian Growth," in which the demand and supply sides of the economy are intrinsically linked, so that cyclical fluctuations and long-term trends are interdependent. By providing a theory of long-run growth that builds upon a Keynesian approach to economic fluctuations, our approach brings together the Keynesian insight that falling demand causes recessions with the notion, developed in the endogenous growth literature, that productivity growth is the result of investment in innovation and new technologies by profit-maximizing firms. Thus, departing from the neoclassical framework, in which productivity is determined by exogenous forces, our approach treats productivity growth as an endogenous phenomenon.

In this framework, aggregate demand is one of the key determinants of business investment spending and productivity growth. For example, companies have little appetite for investing in

new technologies during a recession, because they anticipate that the profits derived from this investment will be low. As a result, future productivity growth falls and the economy's potential output drops. Through this channel, temporary recessions can have persistent adverse consequences for long-run output.

At the same time, low future growth prospects can depress current demand. For instance, a slowdown in the growth rate of labor productivity lowers households' expected future income and thereby restrains current consumption.

Our model thus suggests that healthy productivity growth is tied to the resiliency of the economy to business cycle shocks. Effective aggregate demand management yields long-term economic benefits by spurring business investment, which then supports current demand, creating a positive feedback loop.

Policy Implications

As a corollary, our model also suggests that counter-cyclical monetary policy can play a key role in supporting trend productivity growth. Three aspects of this relationship are worth emphasizing.

- First, in the Keynesian Growth framework, monetary policy expansions support investment spending and capital deepening by lowering the cost of credit and increasing the profitability of investing in future productive capacity. Empirical evidence presented by Aghion et al. (2018) and Moran and Queralto (2018) indicates that monetary policy expansions lead to higher investment in innovation and productivity growth.
- Second, productivity growth should be considered part of the tradeoff that monetary authorities face. As a thought experiment, consider the case in which an economy enjoys near full employment and price stability while struggling with low productivity growth. In our model, deviations of the monetary stance from neutral would facilitate higher future productivity.
- The third aspect concerns the limits to monetary policy. Monetary policy cannot always provide the necessary stimulus to stabilize the economy during a recession—for instance, because of the zero lower bound on interest rates. In such cases, our Keynesian Growth framework acknowledges that constraints on monetary policy incur long-term costs, which stem from a lower trajectory for trend productivity growth. In this context, the social losses from insufficient accommodation in the short term may get amplified by a long-term fall in potential output stemming from a lack of productivity-boosting investment spending.