Economic Growth and Monetary Policy: Is There a New Normal?

The George Washington University and Princeton University's
Griswold Center for Economic Policy Studies

Philadelphia, PA

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Highlights

- President Charles Plosser gives his views on the debate about a new normal for economic growth in the U.S. economy.
- While some economists believe we are in a secular stagnation with low growth and reduced productivity that may persist for some time, President Plosser sides with those who think it is impossible to predict the state of future technology.
- President Plosser notes, though, that monetary policy is not a tool that can fix such a secular stagnation in any case.

Introduction

I would like to thank George Washington University and Princeton University's Griswold Center for Economic Policy Studies for organizing this event. I also am delighted to be here with my fellow panelists, Frank Schorfheide of the University of Pennsylvania, who is a regular visiting scholar at the Philadelphia Fed, Neal Soss of Credit Suisse, and, of course, our moderator, Binyamin Appelbaum of the *New York Times*. As usual, I should remind everyone that my remarks today are my own views and not necessarily those of the Federal Reserve System or my colleagues on the Federal Open Market Committee (FOMC).

The question of whether we are facing the prospect of some sort of new economic normal or steady state growth path is a challenging one. Some have pondered whether the severity of the financial crisis and recession, or perhaps even the policy responses to these events, have ushered in a period of low growth and reduced productivity that may persist for some time.

Others have suggested the seeds of a secular decline in growth predate the recession. This view stresses an evolving secular decline arising from a weakening in the rate of innovation and the productivity gains that such innovation often fosters. This view also points to demographic factors, such as an aging population, that will strain government programs that transfer resources from workers to the elderly.

The evolution of longer-run growth also has implications for the longer-term real interest rate, which is largely determined by the growth in per capita consumption and the growth rate in population. In turn, the growth in per capita consumption depends on productivity gains and the share of the population engaged in production. The implications of these factors on the real interest rate is, of course, relevant for central bankers as they seek to set a policy rate to stabilize prices and promote sustainable growth. Yet, it is important to note that monetary policy is not capable of reversing or mitigating such secular slowdowns. Consequently, it is at best tangential to the efforts of a nation seeking to address secular declines in growth.

In my brief time, I will highlight some of the issues underlying the views of a secular slowdown. That said, however, I want to emphasize that it is very hard to determine with any precision the longer-term growth rate of the economy. It often takes many years of data to establish any degree of confidence in asserting a change in a trend. As a result, it should come as no surprise that I do not have an answer for the question whether we are facing a new normal. Instead, I will offer observations on what I believe are some of the key issues that make such assessments so challenging.

Long-Run Trends

Let me start with the question of future productivity growth, since it is the most fundamental determinant of economic prosperity. Recently, Robert Gordon has advanced the notion that we are in for a bout of long-term secular stagnation.[1] His writings reflect the idea, also

[1] See Gordon, "Is U.S. Economic Growth Over? Faltering Innovation Confronts the Six Headwinds" and "The Demise of U.S. Economic Growth: Restatement, Rebuttal, and Reflections."

proposed by Tyler Cowen, that all the low-hanging fruit has been picked and that technological advances will become increasingly more difficult.[2] On the other hand, scholars such as Joel Mokyr, Erik Brynjolfsson, and Andrew McAfee do not see any reason to anticipate a long-lasting decline in human ingenuity.

Gordon has produced some provocative research concerning the demise of economic growth in this country. He describes a number of headwinds, four of which are relevant for my discussion: slowing innovation, reduced growth in human capital due to a dysfunctional education system, slower population growth, and the associated changing age distribution. These four components are important because economic growth and the natural level of the real interest are directly affected by growth in total factor productivity. Further, slower growth in population or declines in participation rates due to aging, other things being equal, can reduce the natural or long-run real rate of interest and lower per-capita economic growth.

Gordon's view of stagnation is based on his evaluation of data over a long sweep of economic history. He has noted a decrease in total factor productivity, a decline in the growth rate of human capital, reduced hours per worker, and a decline in labor force participation rates. He dates the beginning of stagnation in these factors to 1972. For the 80 years before then, Gordon asserts that economic growth was sparked by three great inventions: the electric light bulb, the internal combustion engine, and wireless signals. He noted that these three inventions eventually led to rounds of spinoffs that transformed society. Gordon sees no such round of spinoffs from the IT revolution, biotech, or such advances as 3-D printing.[3]

Economic historians such as Joel Mokyr are a bit more cautious, believing much as I do that it is

[2] See Cowen, *The Great Stagnation: How America Ate All the Low-Hanging Fruit of Modern History, Got Sick, and Will (Eventually) Feel Better*.

[3] Gordon believes that future developments from existing or even yet-to-be-invented technologies are reasonably predictable, for instance, citing Jules Verne as one such visionary. I don't see why he then chooses to ignore the imagination of Gene Roddenberry: Think iPhones, needleless injections, and touch-screen computers, to name a few.

nearly impossible to predict the state of future technology.[4] He notes that the 20th century experienced considerable technological advancement, even in the face of considerable headwinds, including two world wars, a cold war, and the Great Depression. Some might argue, however, that the world wars were not a headwind but a boost to technological advancement.

It also may be that some impediments to innovation are not endemic to the nature or science of technological progress, but instead they are created by governments and thus can be reversed. For example, does increased regulation make the development of new drugs more costly and risky? Could the significant increase in financial regulation after the financial crisis reduce the productivity of intermediation and thus impede investment and possibly the rate of growth? Or have increased taxes on the returns to saving and investment to support transfer programs potentially reduced productivity growth? Regulatory and tax burdens can often act to reduce entrepreneurial activity and innovation and thus retard productivity growth. Such costs must be weighed against any perceived benefits of such burdens.

Brynjolfsson and McAfee are very optimistic about the future. They believe that we are at an inflection point and that a substantial period of more robust economic growth awaits us in the not-too-distant future.[5] They point out that many revolutionary discoveries, such as DNA sequencing, occurred by creatively stringing together prior scientific procedures. They point out that the improvements in computational speeds and algorithmic developments are making computers capable of stringing together ideas, which could result in significant improvements in productivity.

I believe technological advancement and the increased productivity it can foster is the overwhelming driving force behind economic growth. Demographic factors that may drive

[4] See Mokyr, "The Next Age of Invention."
[5] See Brynjolfsson and McAfee, *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*.

hours per worker and labor force participation are relatively insignificant when compared with innovation's effects on productivity. After all, the remarkable growth of the 20th century occurred with a significant decline in the workweek from 60 hours to less than 40, as well as a significant increase in vacation or leisure time. It is hard to envision a decline of similar magnitude going forward. Thus, I continue to have faith in the promise of human ingenuity and do not envision the dire outcomes envisioned by Gordon.[6] That does not mean that we won't experience spurts of unusually high- and low-productivity growth, but those periods are likely to be identified and understood only well after the fact.

The arguments presented by both sides of the secular stagnation debate highlight that the future could unfold in very different ways. I think there is no doubt that longer-term growth rates can and do vary, and thus, longer-term real interest rates also vary. Yet, such movements tend to occur gradually and are very difficult to assess with any precision in real time. As my discussion suggests, we should focus on policies designed to enhance innovation and productivity if we are to continue to improve per capita consumption and general economic welfare.

Monetary Policy

How do variations in the longer-term growth rate of the economy, and thus the longer-term real rate of interest, affect monetary policy? First, I want to reiterate that long-term growth is primarily determined by productivity growth. Monetary policy is not an appropriate tool for addressing perceived declines in productivity. However, assessments of long-run potential growth can influence the setting of monetary policy because they influence the steady-state or long-run real interest rate. If steady-state real rates are lower, then the so-called "neutral setting of monetary policy" would also be lower. That is, the neutral funds rate would be lower.

[6] Summers in "U.S. Economic Prospects: Secular Stagnation, Hysteresis, and the Zero Lower Bound" offers different concerns. He argues that the real rate of interest may have declined to very low, or even negative, levels leading to the possibility of an inefficient equilibrium and a form of secular stagnation.

The debate about a secular decline in growth today thus translates into a discussion of where, or how high, the neutral policy rate should be. So, the higher it is relative to the current funds rate, the more aggressive policy might have to be and vice versa. But there are other factors that could complicate the policy path. If potential output is lower in the future than previously thought, then there is likely to be less "slack" in the current economy than one might think. So, "output gaps" are likely to be smaller, which in many policy rules would suggest higher interest rates, other things being equal. While a lower steady-state real rate may act to shift down the neutral rate, the effects on the dynamic path of policy as it returns to the neutral are somewhat more complex.

While the expected neutral funds rate is something that may be relevant, estimating and communicating a value with any confidence would be challenging. Measuring longer-run trends is a difficult and delicate issue. Because expectations about monetary policy are important, particularly in financial markets, it may be useful for the FOMC to indicate what ranges are likely for the neutral federal funds rate. But given the uncertainties, this may be difficult and conveying a false sense of precision may prove to be counterproductive.

So, I believe, adjustments to the perceived neutral funds rate should be done with great care and discipline. They should not be done in response to the typical cyclical fluctuations in real rates. Our ability to truly assess a significant shift in the longer-term real rate is quite limited, and, in the presence of such uncertainty and measurement error, one should be careful not to confuse the public.

Conclusions

In summary, there is a lively debate about the future of innovation and other factors that shape our prospects for growth. My own view is that human ingenuity and innovation will continue to be a source of productivity growth. But that does not mean we should be complacent about our future. Productivity is the ultimate means to economic prosperity and we should

undertake policies that promote innovation and technological progress and eliminate practices that discourage such progress.

Monetary policy has a limited role to play in this endeavor except as it can promote a stable environment to allow these long-run forces to succeed. Yet, the appropriate setting of monetary policy can be affected by the longer-term trends. Failure to adjust to such trends can lead to deviations from a central bank's inflation target. Yet, distinguishing short-run or transitory fluctuations from more permanent or persistent movements in growth and real interest rates is a tricky and difficult task. It is near impossible in real time. These considerations lead me to believe that monetary policymakers should take great care in making significant adjustments in their view of the neutral policy rate.

We live in a constantly changing world and one that will hopefully be full of surprising new developments that enhance economic welfare.

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