Special Commentary — May 17, 2024

Do We Have Potential?: An Analysis of U.S. Potential Economic Growth

Part I - Introduction

Summary

- An economy's long-run sustainable rate of economic growth—the rate at which it can grow over a long period of time at a constant inflation rate—is determined by underlying supply factors, specifically by its labor force growth rate and its underlying rate of labor productivity growth.
- The potential rate of economic growth in the United States has trended lower over the past few decades as labor force growth has slowed considerably. Productivity growth has waxed and waned over that period, but it is slower today than it was in the 1950s and 1960s. The Congressional Budget Office estimates that potential economic growth in the United States is only 2.2% per annum today.
- Potential economic growth can have important real world consequences. An economy that grows in excess of its potential growth rate for a long enough period of time will likely experience rising inflation. Conversely, an economy that consistently falls short of potential economic growth could experience a downward spiral of falling prices and rising defaults among borrowers.
- Furthermore, differences in potential GDP growth compound over time, affecting a country's ability to project economic and military power.
- In a series of five reports, we will analyze the outlook for potential economic growth in the United States. We will address U.S. labor force growth in Part II before turning to the two factors that determine growth in labor productivity. Part III will focus on changes in the capital stock while we will discuss total factor productivity in Part IV. We will offer concluding thoughts in Part V.

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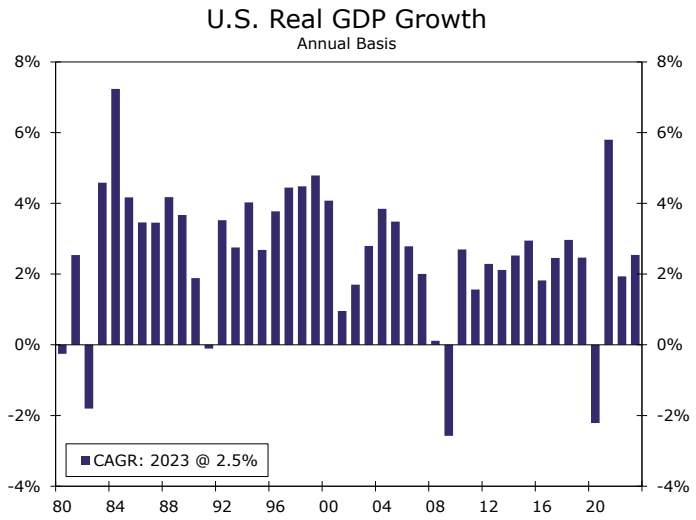
Potential Economic Growth is An Economy's Sustainable Rate of Real GDP Growth

The U.S. economy has grown at a solid rate over the past few years (Figure 1). Real GDP in the United States shot up nearly 6% in 2021, its strongest annual average growth rate since 1984. Of course, this robust rate of real GDP growth in 2021 reflects, at least in part, a rebound from the pandemic-distorted year of 2020. That noted, the 2.5% growth rate that the economy notched in 2023, which was largely free of pandemic-related distortions, was in line with the average per annum growth rate of 2.4% that the U.S. economy registered during the long economic expansion of 2010-2019.

As Figure 1 makes clear, real GDP can grow at essentially any rate in any given year due to changes in economic policies and shocks (e.g., pandemics, natural disasters, wars, etc.). But an economy's long-run sustainable rate of economic growth—the rate at which it can grow over a long period of time at a constant inflation rate—is determined by underlying supply factors. Economic theory posits that this so-called "potential rate of economic growth" is determined by growth in an economy's labor force and its underlying (i.e., secular) rate of productivity growth.[1] That is, an economy can potentially produce more goods and services if it has more workers to do so. Even if the labor force is not growing, an economy can potentially produce more goods and services if each worker can produce more. It is important to note than an economy's potential economic growth rate is not directly observable as its GDP growth rate is during any quarter. Although labor force growth is readily observable, productivity growth must be estimated as the difference between growth in output and growth in aggregate hours worked. The implied rate of productivity growth can be volatile on a quarter-by-quarter basis, and past estimates of productivity growth are often revised considerably. Therefore, an economy's underlying productivity growth rate must be estimated.

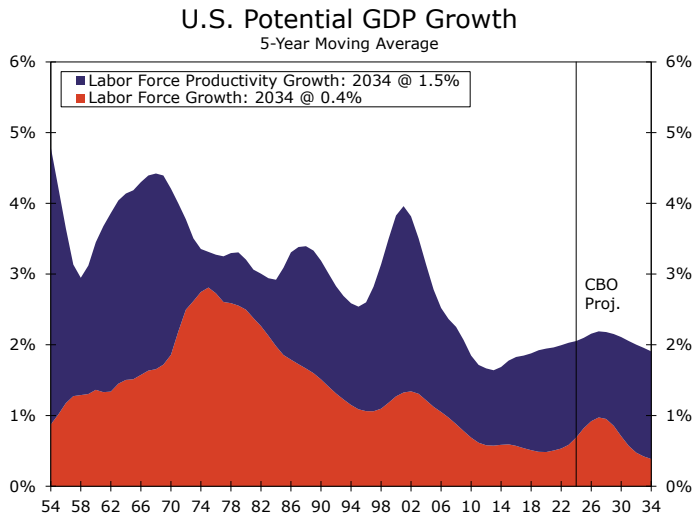
An economy's long-run sustainable rate of economic growth is determined by underlying supply factors.

Figure 1



Source: U.S Department of Commerce and Wells Fargo Economics

Figure 2



Source: Congressional Budget Office and Wells Fargo Economics

The Congressional Budget Office (CBO) has decomposed the U.S.'s potential rate of economic growth into its two underlying factors (Figure 2). According to the CBO, the economy's potential growth rate averaged roughly 4% per annum through the 1950s and 1960s, and real GDP actually grew at an annual average rate of 4.4% over that 20-year period. Not only was productivity growth generally strong over those two decades, but the entry of Baby Boomers into the workforce starting in the mid-1960s lifted the labor force growth rate. Additionally, an increasing number of women entered the workforce around that time, which also boosted the labor force growth rate.

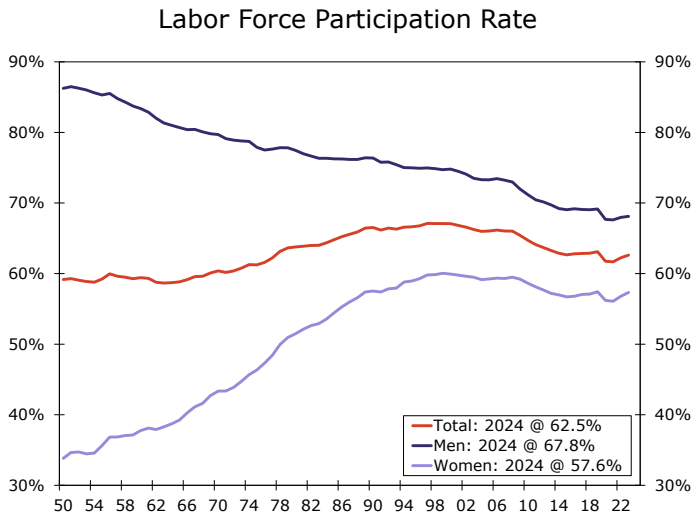
U.S. Potential Economic Growth Has Trended Lower in Recent Decades

The potential growth rate of the U.S. economy trended lower between the late-1960s until the mid-1990s as growth in labor productivity and growth in the labor force both slowed. Although the labor force participation rate among women continued to rise during this period (Figure 3), the demographic lift provided by Baby Boomers entering the workforce started to ebb in the mid-1970s. Consequently, growth in the American labor force, which rose to as high as 3% per annum in the early

CBO estimates that the potential growth rate of the U.S. economy is only 2.2% per annum at present.

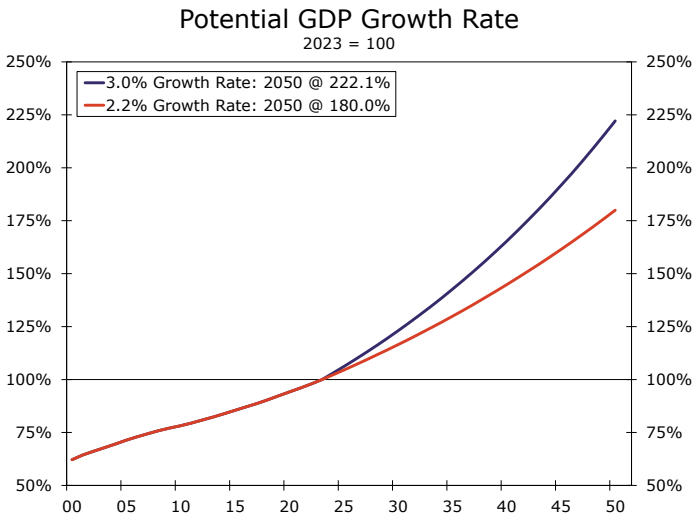
1970s, downshifted to only 1% per annum by the mid-1990s. The rate of potential economic growth subsequently rebounded in the late 1990s as growth in the labor force picked up a bit. Furthermore, the widespread adoption of the internet and the networking of computers had a profound influence on the rate of U.S. productivity growth, which we described in more detail in the series we published last year on artificial intelligence. The rate of potential economic growth downshifted anew in the early 21st century due to deceleration in productivity and slowing growth in the labor force. CBO estimates that the potential growth rate of the U.S. economy is only 2.2% per annum at present.

Figure 3



Source: U.S. Department of Labor and Wells Fargo Economics

Figure 4



Source: Congressional Budget Office and Wells Fargo Economics

Discussion of an economy's potential rate of growth may seem like an academic exercise to many readers. However, potential economic growth can have some important real world consequences. An economy that grows in excess of its potential growth rate for a long enough period of time likely will experience rising inflation. This phenomenon occurred in the mid- to late-1960s as federal spending on the Great Society programs and the Vietnam War boosted real GDP growth to above-potential rates. Conversely, an economy that consistently falls short of potential economic growth could experience a downward spiral of falling prices (i.e., deflation) and rising defaults among borrowers. The 26% plunge in U.S. real GDP between 1929 and 1933 was associated with a 25% decline in U.S. consumer prices that occurred during that period.

The Power of Compounding

Differences in potential GDP growth compound over time.

Furthermore, differences in potential GDP growth compound over time. As noted above, CBO estimates that the potential growth rate of the U.S. economy is presently 2.2% per annum. If the economy continues to grow at this rate between 2024 and 2050, then the American economy in mid-century will be 80% larger than it is today (Figure 4). If, however, it were to grow 3.0% per annum, which CBO estimates was the average rate of potential economic growth between the cyclical peak of 1981 and the cyclical peak of 2007, then the economy would be more than 120% larger in 2050 than it is today. The 3.0% growth economy would be 23% larger in mid-century than the 2.2% growth economy. In geopolitical terms, the faster-growing economy would be better able to project economic and military power, everything else equal, than the slower-growing economy.

Revisiting Figure 2 shows that CBO forecasts that the rate of potential economic growth in the United States will downshift from 2.2% per annum at present to only 1.8% in 2034. Is the U.S. economy destined for a slow growth environment? Not necessarily. But an uplift in potential economic growth will require some combination of stronger labor force growth and/or productivity acceleration. We will address the outlook for U.S. labor force growth in the second installment in this series before turning to productivity growth.

As discussed in Fernald (2014), growth in labor productivity can be further disaggregated into three components: growth in the capital stock, changes in labor "composition" (i.e., labor quality) and growth in total factor productivity (TFP, i.e., changes in technology and other processes).[2] Growth in the

capital stock and changes in TFP have accounted for the vast majority of the total increase in U.S. labor productivity in the post-World War II era. Therefore, we will eschew discussion of changes in labor "composition" in this series. We will analyze the potential for stronger growth in capital accumulation in Part III, and we will discuss the outlook for total factor productivity (TFP) in Part IV. Part V will offer some concluding thoughts.

Endnotes

1 – For further reading, see a report we wrote in 2021 on potential GDP growth in the United States. (Return)

2 – Fernald, John, "A Quarterly, Utilization-Adjusted Series on Total Factor Productivity," Federal Reserve Bank of San Francisco Working Paper 2012-19, April 2014. (Return)

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