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An Assessment of the U.S. Economy

Remarks by

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at

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Thank you for the opportunity to take part in this important and influential conference.¹ I would like to discuss my view of current economic conditions in the United States, provide an assessment of the sustainability of the current momentum in the economy, and then conclude with a look at some of the potential implications that would follow from a sustained upturn in economic growth. To preview my conclusions, I am fairly optimistic about the current state of the economy. Along many dimensions, it has been quite some time since the economic environment has looked as favorable as it does now. Real gross domestic product (GDP) growth through the final three quarters of 2017 averaged almost 3 percent, a considerable step-up over the 2 percent average annual pace recorded over the previous eight years. The sustainability of the recent upturn in growth will depend importantly on whether some of the factors that have been holding back growth for the past decade diminish, including weak investment and productivity. In some cases, I believe the data look encouraging--for example, the recent strength of investment--but in others, less so, particularly the continued softness of productivity growth. On balance, I am cautious, but I am also optimistic enough to believe that the factors that have been holding back growth need not be permanent and could turn, even fairly rapidly.

What would be the likely consequences if growth were to shift up on a sustained basis? Here I think it will be important to consider and observe the form that higher growth takes. In particular, it matters whether growth is embodied in a sustained increase in the productive capacity of the economy or, instead, is primarily the product of a boost to aggregate demand. The split between the two will likely have important implications

¹ The views I express here are my own and not necessarily those of the Federal Reserve Board or the Federal Open Market Committee.

for inflation and thus for how the stance of monetary policy will respond to higher growth. The Federal Reserve will, as always, seek to achieve its dual mandate of maximum employment and stable prices.

The Economy Appears to Be in a Good Spot

I will start with an assessment of current economic conditions. In my view, the economy appears to be in a good spot right now. This favorable position is particularly evident in the labor market. After peaking at 10 percent in October 2009, the unemployment rate has declined to 4.1 percent, its lowest level since the 1960s outside of a brief period from 1999 to 2000. With the unemployment rate below most estimates of its natural rate, wages appear to have accelerated a little of late after a period of relatively muted increases, and I expect a further modest step-up in the pace of wage gains. Another welcome development has been a break in recent years in the two-decade-long trend decline in the labor force participation rate.

The robust job market has likely spilled over to other aspects of the economy. Consumer confidence has returned to pre-crisis levels, which, together with solid income gains and rising household wealth, has supported strong growth in consumption expenditures. Likewise, surveys reveal increased business optimism, also evident in an acceleration in investment spending. Real expenditures on capital equipment increased at a double-digit pace in the second half of last year, providing early hope that the investment drought that has weighed on growth in recent years might finally be breaking.

The recent upturn in growth has not been confined to the United States. In its latest projection, the International Monetary Fund (IMF) forecasts global growth to run close to 4 percent in 2018, the fastest pace since the immediate post-crisis rebound in

2010 and 2011.² Even more notable is that the IMF has revised up global growth in its recent projections. These upgrades follow a prolonged period of depressingly regular serial downgrades in the IMF's outlook as the post-crisis recovery dragged on longer than many commentators and forecasters had anticipated. Stronger foreign growth has in turn supported U.S. growth, with exports in 2017 growing at the fastest pace in four years.

Inflation has run at a low and relatively stable rate throughout the crisis and the recovery. Recently, the low level of inflation has attracted considerable attention, as it continues to run on the soft side notwithstanding the apparent tightness of the labor market. Headline PCE (personal consumption expenditures) prices increased 1.7 percent in the 12 months ending in December, a few tenths of 1 percentage point below the Federal Open Market Committee's (FOMC) 2 percent longer-run inflation objective. That inflation has remained low even as activity has picked up and the labor market has tightened has led a number of commentators to question the relevance of the Phillips curve analytical framework that ties inflation to the strength of the economy.

In my view, it is premature to write off the Phillips curve. Indeed, I think it is likely that tightness in labor markets will eventually show up in wages and prices. I tend to agree with the view that the recent softness of inflation mostly reflects idiosyncratic and transitory factors, and I expect inflation to move back to 2 percent over the next year or so. Overall, I would characterize the recent weakness of inflation as something that should be expected to fade rather than as an enduring mystery that necessitates a change in our framework for assessing inflation.

² The IMF's most recent forecast was released in January and is available on its website at <https://www.imf.org/en/Publications/WEO/Issues/2018/01/11/world-economic-outlook-update-january-2018>.

To review, all in all, the state of the economy is good. The question now is how persistent this step-up in growth will prove to be. In the FOMC's most recent Summary of Economic Projections, released in December, growth was expected to remain fairly solid in 2018 before moving down toward a longer-run rate of 1-3/4 percent.³ I do not view this forecast as particularly optimistic, but it is as reasonable as any other if one conjectures that the factors that have held back growth in recent years will remain in effect. But now that the economy is coming off several quarters of relatively robust growth, I would like to examine the appropriate level of confidence in this conjecture and, in particular, identify what we might look for if, in actuality, some of the factors that have held back growth over the past decade begin to dissipate. Before doing so, let me first quickly review some of the most frequently cited explanations for the slow pace of growth in the post-crisis period.

Why Has Growth Been So Slow through Much of the Post-crisis Period?

Why has growth been so slow over much of the past decade? I will break down the explanations into two broad categories: those related to the lingering after-effects of the crisis--for example, increased uncertainty and precaution--and those that are more structural and less clearly linked to the crisis, such as demographics and low productivity growth.

It is certainly true--as pointed out most notably by Reinhart and Rogoff in 2009--that recoveries from severe financial crises can be very prolonged and painful.⁴ In the

³ The most recent Summary of Economic Projections, an addendum to the minutes of the December 2017 FOMC meeting, is available on the Board's website at <https://www.federalreserve.gov/monetarypolicy/fomcminutes20171213ep.htm>.

⁴ Reinhart and Rogoff (2009) document the lasting effect that downturns related to a financial crisis can have on economic growth.

aftermath of the most recent crisis, an increase in consumer caution, along with a tightening of credit conditions, helped boost saving, leading to a necessary deleveraging of households, but at the expense of consumption growth. As I mentioned earlier, investment has also been noticeably weak in recent years, likely reflecting increased restraint on the part of businesses unsure of the outlook for demand and their profits.

Another factor holding back U.S. growth has been repeated shocks to the global economy, sometimes amplified by vulnerabilities growing out of the crisis. The effects of a number of these shocks have spilled over to the United States, including those stemming from the euro-area debt crisis as well as occasional concerns about the strength and durability of emerging market growth, especially in China. These foreign developments contributed to a 15 percent appreciation of the broad dollar since mid-2014, which, along with weak foreign economic activity, weighed on U.S. export growth. Concern over the strength of foreign demand also contributed to a steep decline in the price of oil at around the same time. Historically, lower oil prices have been a positive for U.S. growth, but the tremendous rise in domestic shale oil production over the past decade has created a powerful counterweight that has offset some of the benefit of lower prices. In the immediate aftermath of the decline in oil prices, investment in the energy sector fell off precipitously, pushing down aggregate investment as well.

Regarding structural explanations for slow growth, demographics are likely playing a role. In a development that predates the crisis, relatively flat labor input, as measured by hours worked, has weighed on growth. In part, the sluggishness of labor input just reflects long-term demographic trends as baby boomers age and retire.⁵

⁵ See Aaronson and others (2014).

Perhaps most important in explaining the growth slowdown has been the lackluster increase of productivity in recent years. Labor productivity has averaged an annual growth rate of only 3/4 percent since 2011, far below the 2-1/4 percent pace prevalent over the two decades leading into the financial crisis. Why has productivity growth been so anemic? A number of theories have been raised, but there does not appear to be a clear answer--and certainly not a consensus answer.

One school of thought is that productivity growth has not slowed down much at all; rather, new technologies and products have made economic output harder to measure.⁶ It is not difficult to think of technological developments that have had a deep and pervasive effect on our daily lives (smartphone apps, for example) but perhaps in a manner that is difficult to describe in the existing vocabulary of economic statistics. However, the counter to this argument is that troubles in measuring “newness” are not especially new. Measuring the effect of new technologies has always been difficult, and there is little evidence to suggest that it has become more difficult.⁷

Others argue a somewhat pessimistic view that the slowdown reflects a paucity of new inventions--or at least new inventions that lead to more rapid productivity growth.⁸

In a break with the easy dichotomy I offered earlier, others tie the slowdown in productivity growth more tightly to developments related to the aftermath of the financial crisis. Slow investment growth--which, as already mentioned, had prevailed until recently--damps the contribution of new capital to worker productivity. It could also be

⁶ See Hatzius and others (2016) for an overview of some issues that new technologies and products may be introducing into the measurement of GDP and productivity.

⁷ See Syverson (2017) and Byrne, Fernald, and Reinsdorf (2016).

⁸ Gordon (2016) argues that recent technological advances have been relatively minor compared with the large advances that drove rapid increases in productivity in the past.

that new investment is a necessary step for the spread of new technologies, especially if technology is embodied in capital equipment. Spending on research and development, an important input for technological advances, has been fairly subdued following the crisis. Also, the aftermath of the crisis has been associated with a decrease in business dynamism--for example, the rate at which new start-up firms are being created has declined.⁹

Have We Reached a Turning Point?

Having laid out the standard explanations for the slow pace of growth, I will now speculate on what a shift to a higher growth path might look like and what I think we may want to watch for.

One factor that has certainly turned is fiscal policy. After subtracting from growth over much of the period from 2011 onward, the impetus from fiscal policy has turned distinctly positive with the passage of recent tax and budget legislation.¹⁰ Fiscal policy is likely to impart considerable momentum to growth over the next couple of years not only by increasing demand, but also by boosting, to some degree, the potential capacity of the economy.

Of course, while stimulative in the near run, deficit spending--and the associated large and growing federal government debt--can have negative effects on the economy over the longer term, in part by claiming a larger share of the nation's savings, driving up long-term interest rates, and crowding out productive private investment. These effects will require attention and difficult decisions at some point.

⁹ See Decker and others (2016).

¹⁰ For a historical measure of the fiscal policy's contribution to GDP growth, see the Hutchins Center Fiscal Impact Measure, available on the Brookings Institution website at <https://www.brookings.edu/interactives/hutchins-center-fiscal-impact-measure>.

How about the other factors that have been holding back growth? Looking at the data, I see encouraging signs that some drags may be lessening--for example, the recent pickup in investment--but less promising indicators elsewhere, especially productivity growth. In the end, I think it is too early to call a turning point, but it is a possibility that bears consideration and one that I will be watching for closely. Here are some of things I will be following:

Labor force participation. Given long-standing demographic trends, it would seem a heavy lift to expect labor force growth to contribute much to a pickup in GDP growth. However, it is encouraging that the downward movement in labor force participation has recently been on hiatus, a development that could possibly be prolonged by the recent tax legislation--which could, for example, give some workers an incentive to remain in or enter the workforce.

Capital investment. As I mentioned, the recent data on investment have been encouraging, with a noticeable pickup in capital equipment spending. As businesses become more confident in the sustainability of the upturn, investment could be further boosted. While the tax act is multifaceted and complex, lower corporate tax rates and other incentives will also likely boost investment and increase the capital stock.

Productivity. Though the quarterly numbers are volatile and should be treated cautiously, the nearly 1 percent decline in labor productivity recorded in the fourth quarter of 2017 would imply that a productivity turnaround is not yet upon us. Moreover, for 2017 as a whole, productivity increased only 3/4 percent, about the same as the average annual pace since 2011. That said, with no consensus on what has caused the productivity slowdown, a turnaround could come suddenly.

There are those who argue a more optimistic take on the prospects for technology developments to boost productivity growth.¹¹ For example, a number of new technologies, including artificial intelligence and genetic sequencing, appear on the cusp of breaking out, with widespread effects on economic activity.¹²

Also, it might be true that productivity growth will be nudged higher by the pace of economic activity. Tight labor markets might induce firms to invest more in robotics and other labor-saving technology.

External developments. With global growth picking up steam, the external environment is more favorable for U.S. growth than it has been in quite some time. In 2017, for example, the contribution of real exports to growth picked up markedly following two years in which exports provided no support to growth at all.

What Are the Consequences of Higher Growth?

Again, I think it is too soon to call a turning point in the long-run growth prospects of the economy, notwithstanding some encouraging signs that I have highlighted. All the same, I think it is worthwhile to acknowledge that there are some upside risks to the forecast and to think through what the consequences of those risks materializing might be.

One consequence might be that a sustained increase in growth could be associated with an increase in the natural rate of interest, a concept that has developed a prominent position in the lexicon of central banking in recent years. One conception of the natural rate of interest is the rate of interest necessary to sustain stable prices and full

¹¹ See Brynjolfsson and McAfee (2014) and Baily, Manyika, and Gupta (2013).

¹² Brynjolfsson, Rock, and Syverson (2017) argue that lags in the adoption of new technology could explain the paradox between apparent advances in technology and continued weak productivity growth. They are referring specifically to artificial intelligence, but the argument could also hold for other fields.

employment. In the eyes of many commentators, that inflation has remained so low through the post-crisis period even as interest rates have fallen to levels that historically would have been very stimulative to the economy suggests that the natural rate has fallen.

Why might the natural rate have fallen? There are a number of compelling narratives, including low productivity growth, demographic trends, increased uncertainty, and a higher demand for precautionary saving. If these narratives sound familiar, it is because they are more or less the same set of explanations put forward as reasons for the slow pace of growth in recent years. Thus, a lessening of any of these factors, such as a sustained increase in the pace of productivity growth, would likely push up the natural rate of interest as well as GDP growth.

What are the consequences of a higher natural rate of interest? As the natural rate moves up, any given level of the policy rate would be more accommodative, so the policy rate would also have to move up to continue the gradual removal of policy accommodation. It is important to point out that this higher policy path would be motivated by sustained stronger growth and improved economic conditions, not a greater desire to slow the economy.

Could there be a benefit from a higher natural rate of interest? In addition to its value in signaling that the economy is doing better, a higher rate could facilitate the conduct of monetary policy. A lower natural rate of interest can complicate the operation of conventional monetary policy. Since it is difficult to cut nominal interest rates below zero, conventional monetary policy is more likely to be constrained at low levels of the natural interest rate. The higher the natural interest rate, the more space central banks

have to cut policy rates in response to an economic downturn, easing the conduct of conventional policy.

Conclusion

So where does this discussion leave us? My assessment of the current state of the economy is optimistic. I also think there is a real possibility that some of the factors that have been holding back growth in recent years could shift, moving the economy onto a higher growth trajectory. That said, I currently see this shift more as a clear possibility than an unarguable reality. Importantly, we have not yet seen any sustained pickup in productivity growth. However, given that conditions could shift, it is fair to ask what a higher growth path might mean. As I discussed, it could mean a higher natural interest rate, which would increase the amount of accommodation provided at a given level of the Federal Reserve's policy interest rate. But what would it imply about the appropriate stance of policy?

It goes without saying, but always bears repeating, that at the Federal Reserve we are very focused on meeting our dual mandate of maximum sustainable employment and price stability. In assessing the effect of higher growth on monetary policy, I will be carefully watching how that growth aligns with our dual mandate.

It might seem reasonable to assume that faster growth would lead to firmer inflation. However, I think a lot remains to be seen. For one, the degree to which growth spurs inflation is likely to be determined by the underlying factors that are prompting the increase in growth. A demand-led increase can be expected to have a greater positive effect on prices than a step-up in the pace of potential growth. Growth led by an increase

in the economy's productive capacity, either through increased labor force participation or higher productivity growth, is likely to impart less upward pressure on prices.

I will be carefully watching indicators of economic activity and inflation and assessing the degree to which activity appears to be pushing up against the constraints of the economy, as opposed to being a reflection of the expansion of those constraints and the growth of the potential output of the economy.

At our January meeting, the FOMC decided to maintain its target range for the federal funds rate between 1-1/4 and 1-1/2 percent.¹³ In this range, monetary policy remains accommodative. With my current economic outlook, I anticipate that further gradual increases in the policy rate will be appropriate to both sustain a healthy labor market and stabilize inflation around our 2 percent objective. Of course, as I mentioned, I will keep a close eye on economic indicators--and their implications for the outlook for inflation and real activity--and adjust my views on the appropriate monetary policy accordingly.

¹³ See Board of Governors (2018).

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