Thank you for having me. I very much appreciate the opportunity to speak to this distinguished group and look forward to my discussion with Greg Ip. Now almost exactly a year into my appointment as Vice Chairman for Supervision, I have, as might be expected, spoken publicly most often about banking and the financial system more generally. However, supervision and regulation are not all that I do at the Federal Reserve, and I welcome this opportunity to speak to another part of my day job, as a member of the Federal Open Market Committee (FOMC). Today I would like to offer my take on the economic outlook, which is optimistic, and explain how I view my optimism as consistent with the continued gradual pace of policy tightening that many Committee participants have projected. In particular, I will explain how my views on potential growth help shape my outlook, both for the economy and for the appropriate path of monetary policy. Relatedly, I will discuss the uncertainties that arise when a central element of the outlook—in this case, the potential capacity of the economy—is unknown and largely unobservable. Such uncertainty can complicate policymaking in even what appears to be a very healthy economy, providing a further argument for gradualism.

Where We Are Now

In previous remarks on the economic outlook, delivered at a National Association for Business Economics conference in February, I characterized the U.S. economy as being in a "good spot" and asked if the economy had reached a positive turning point following an extended period of post-crisis slow growth. I argued that while it might be too soon to call a turning point, there was a definite possibility of an upside surprise.

So now that we are fairly deep into 2018, where do we stand overall? My view has not changed all that much from February. While many other forecasters had to revise up their forecasts over the course of the year, my own outlook is basically unchanged, because the economy is evolving essentially as I expected at the outset of the year. The economy remains in a good spot. Gross domestic product increased a robust 31/4 percent in the first half of the year, and indicators suggest continued strong growth through the summer. Economic conditions are as close to meeting the Federal Reserve's dual mandate for monetary policy—maximum sustainable employment and price stability—as they have been in a long time. Inflation is in line with the Committee's 2 percent objective, and the unemployment rate is at nearly a 50-year low.

How long can this strong growth be sustained? The answer depends largely on what form growth takes. Growth that is supported by increases in the productive capacity of the economy should be durable. However, if growth primarily reflects strong demand that stretches production beyond its sustainable capacity, the economy will run into constraints that will result in slower growth, higher prices, or a potentially destabilizing buildup of financial imbalances. So, which is it? Unfortunately, it is very difficult to tell. I will return to that question shortly.

That said, I see many reasons to be optimistic about the growth of the potential capacity of the economy over the next few years. In part, my optimism is rooted in the view that many of the factors that have been weighing on potential growth since the financial crisis could be lifting. So, have we reached the turning point? While I believe the issue remains unresolved, the recent evidence is encouraging.
Have We Reached a Turning Point?

Why am I optimistic about the economy’s supply potential? The growth of potential can, at the most basic level, be broken down into two factors: the supply of labor and the productivity of that labor. Productivity, in turn, is importantly affected by changes in the stock of capital—that is, machines and factories—as well as technological advances and improved production methods. I see reasons to be hopeful about both factors.

Let us start with labor. For some time, the contribution of the labor force to potential growth has been held down by the predictable drag of baby boomers moving into retirement. However, the decline in labor force participation following the financial crisis exceeded even what might be expected given this long-standing downward trend— in particular, as the participation of prime-age workers (those between the ages of 25 and 54) fell and teenagers exited the workforce in droves. The reasons behind the fall in participation among non-retirement-age workers have been the subject of much debate. However, I see little reason to assume that it will be permanent, and we have already seen some signs of a turnaround. Thus, I think there is some potential for labor force participation to move up, perhaps as workers respond to the incentives of plentiful job opportunities and higher wages, thereby adding to the productive capacity of the economy and pushing back the constraints on growth.

Some recent labor force trends have been promising. For example, the two-decade-long trend increase in the population not in the labor force on account of disability peaked in 2014 and has started to move down quite rapidly—again, for reasons that defy easy explanation but may reflect the general improvement in labor market opportunities.

I will now turn to productivity. Labor productivity has averaged an annual growth rate of only 3/4 percent since 2011, far below the 2-1/4 percent pace that prevailed in the two decades before the financial crisis. Although there are competing theories, the productivity decline is not well understood, and a consensus explanation has yet to emerge. As such, the slowdown could reverse unpredictably as well. The most recent data have been moving in the right direction, but only haltingly, with labor productivity increasing about 1-1/4 percent over the past year.

There are reasons that productivity growth could shake off some of its recent torpidity. I would like to start with the capital stock. After a few years of abysmal business-sector investment spending, it appears as though the drought has broken. After picking up in 2017, business fixed investment climbed a robust 10 percent at an annual rate in the first half of this year, likely supported by lower corporate tax rates and other incentives in last year’s tax bill. Also, indicators for investment, including orders and shipments of nondefense capital goods, point toward continued strength, and survey evidence points to high business optimism and solid capital expenditure plans. More capital should allow labor to be more productive.

I am also a bit of a techno-enthusiast. We are in the early stages of a more widespread application of a wave of new technologies, such as 5G communications, AI (artificial intelligence) and machine learning, and 3-D printing. It might be that the productivity gains associated with these and other new technologies are embodied in new capital equipment and will only now start to become apparent as the investment drought of recent years comes to an end. A tighter economy could also create incentives for firms to revamp their production methods to save on scarce labor resources.

To summarize, the economy has been doing very well. Whether this performance is sustained will be importantly determined by whether growth is supported by increases in the economy’s potential. I am hopeful that potential growth, and particularly productivity, could accelerate from its relatively anemic pace of late, sustaining growth without overheating the economy. The more the economy’s potential growth increases, the more gradual we can be in our removal of monetary policy accommodation. Thus, an assessment of the pace of potential growth will be an important
input into what I view as the appropriate path of policy to achieve our objectives of maximum sustainable employment and price stability.

The Difficulty in Identifying Potential

The tricky thing, as I pointed out earlier, is that potential output is unobserved and can only be inferred from the behavior of other measured economic indicators. Traditionally, as taught in Econ 101, inflation provides a signal on whether the economy is operating above or below its potential level. If inflation moves up in a sustained manner, not just because of temporary shocks, then the economy is likely operating above its productive capacity, as firms have the leeway to raise prices given the strength of demand. Likewise, if inflation moves down persistently, then the economy is likely operating with some slack, as firms restrain prices to sell their products in the face of weak demand.

If inflation is the primary indicator of the economy's position relative to potential, how confident can we be in the quality of the signal? It has been noted—quite frequently, I might add—that the relationship between inflation and the tightness of the economy has gotten weaker, which is to say that inflation appears to be less affected by movements in economic slack or tightness, traditionally measured by the unemployment rate, than in the past. As the role of slack in explaining inflation has diminished, inflation expectations have assumed greater importance. However, it is reasonable to ask, if inflation is, in fact, now largely a reflection of inflation expectations, is inflation still a good indicator of the cyclical state of the economy? Or, more directly, can we count on inflation to warn us in time if the economy is overheating?

To be a little controversial, perhaps what we are witnessing with inflation is an application of what has been called Goodhart's law, named after Charles Goodhart, the distinguished scholar of central banking at the London School of Economics. The law can be summarized as the idea that if an indicator becomes a target of policy, that indicator loses its value as a gauge of the state of the economy. Rather, the indicator becomes a signal of the public's belief in the competence and commitment of the government agency that is targeting the indicator.

Something along these lines could be happening to inflation, especially given the important role of expected inflation in the behavior of actual inflation. Perhaps inflation is just sending a signal of people's trust in the Fed's ability to meet its inflation objective. If so, no complaints here. That is a good thing. However, a problem does arise if the Fed remains reliant on inflation as our only gauge of the economy's position relative to its potential. There are risks in pushing the economy into a place it does not want to go if we limit ourselves to navigating by what might be a faulty indicator. Anchored inflation expectations might mask the inflation signal coming from an overheated economy for a period, but I have no doubt that prices would eventually move up in response to resource constraints. The ultimate price, from the perspective of the dual mandate, would be an unanchoring of inflation expectations.

Of course, I view this more as a risk than my baseline expectation. As I have said, I am optimistic about potential growth, and I expect that even relatively strong growth can be met without running into economic constraints. However, I also think that we should pay attention to other indicators of tightness and overheating in addition to inflation. There are other signs of potential besides inflation, including, but not limited to, direct measures of labor utilization or indications of shortages and bottlenecks in production.

Policy Considerations

How should these thoughts affect monetary policy? I began my remarks by noting that there may be reason to think that the productive capacity of our economy could be accelerating, which would allow a more gradual withdrawal of accommodation without overheating. But I have noted as well that there may be reason to think that resource constraints could be more binding than
current inflation measures would traditionally indicate, which would call for a more athletic response. Moreover, there is today a higher degree of uncertainty about many of these factors—measures of labor slack, the relation between labor slack and inflation, the sensitivity of current inflation measures to actual resource constraints, and the future growth of productivity, to name a few—than there has been for many years. In such an environment, some have argued that this greater uncertainty leaves policymakers without a clear guide and market participants without a firm anchor, meaning policy itself could drift—perhaps dangerously.

I do not think that is the case at all. Instead, I think this situation reinforces and supports the importance of a clear, steady strategy and a gradual, predictable approach to the removal of accommodation as we continue to monitor the data. The analogy I frequently use is the old pilot’s adage of "Don't chase the needles." The control panel of any airplane has an instrument to guide your course: a circular gauge with a vertical bar, or "needle," running through the center of it. If the bar moves sideways to the left, you are drifting off course and should change course to the left until the bar comes back into the center of the circle; if it moves to the right, you change course to the right. Today these instruments get their inputs from the plane’s GPS (Global Positioning System) and are fairly sensitive and accurate, but decades ago, when I was a young man first learning to fly in the clouds, they got their information from radio beacons stationed on the ground and were quite squirrely. The bar could wander from side to side for a while for any of a number of reasons—distance from the beacon, the angle you were approaching it from, interference from other instruments on the panel, sunspots, or rain—and because of this uncertainty, the first rule taught to us as young pilots was, "Don't chase the needles."

Precisely because of the uncertainty around the course inputs, the right strategy was to set a course based on your knowledge of the destination, winds, and performance of your plane; communicate that course clearly to air traffic control so everyone knew what you were doing; and then stick to that course steadily even as the course needle might waver from side to side across your instrument. If the needle moved to one side substantially and stayed there pretty consistently, then you would make a small, firm correction—but even then, only gradually and with clear communication about what you were doing. In a world where you had great confidence in the sensitivity of your instrument, such as in today's GPS-based avionics, you could respond immediately to moment-to-moment changes in your course readings, but in the world of radio beacons and sunspots, "chasing the needles" would at best lead to inefficient fishtailing across the sky, and at worst to a substantial deviation from your destination.

Today uncertainty around many of the macroeconomic inputs to monetary policy decisions argues for just the same approach to navigation. Rather than meaning that policy will drift because of this uncertainty, it means that policymakers should chart a course that is stable, gradual, and predictable; communicate it clearly; and then follow that course through the temporarily shifting and sometimes conflicting signs from the economy unless some strong and steady signal requires a firm but moderate correction. Given that the economy has performed fundamentally as I expected at the outset of this year, the right strategy is to maintain the gradual course that I have thought appropriate for some time now. Put another way, while I think that there is enough reason to think that the productive capacity of our economy might be increasing so that we should not feel compelled to accelerate our pace, I also think there is enough doubt about current inflation as an infallibly reliable measure of current resource constraints that the continued gradual removal of accommodation is appropriate. Like pilots back in the days of radio beacons, don’t chase the needles.

1 The views I express here are my own and not necessarily those of the Board of Governors of the Federal Reserve System. Return to text
