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### **Assessing the New Normal(s)**

Good morning. I represent the 12<sup>th</sup> Federal Reserve District, and that covers a lot of territory—in fact over a third of the country. An important part of my job is to travel across the western United States, meeting with people and getting grassroots information about how the economy is doing. But, I'll admit that once in a while it's nice to give a speech closer to home and be able to sleep in my own bed tonight. That is to say, it's a pleasure to be here today.

I'm going to talk about where I see the U.S. economy going and what that means for monetary policy. In addition to the usual reading of the tea leaves about the near-term economic outlook, I will take a longer-term perspective and focus on how the new normal for the U.S. economy is shaping up. Before I proceed, I should note that the views I express here are mine alone and do not necessarily reflect those of anyone else in the Federal Reserve System.

#### **The dual mandate**

As a Fed policymaker, I tend to see virtually everything through the lens of our dual mandate goals of maximum employment and price stability, and I'll describe economic developments through that lens.

I'll begin with employment. Our goal is not to have an unemployment rate of zero. Instead, it's to be near what economists call the "natural rate" of unemployment: That's the rate we can expect to see in a healthy "Goldilocks" economy—one that's running neither too hot nor too cold. It's impossible to know exactly what that magic number is, but it's generally thought to

be between 4¾ and 5 percent today.<sup>1</sup> By the way, that's about the same number that economists thought before the recession, so this is one case where the new normal *is* the same as the old. As I'll note later in my remarks, this is more the exception than the norm.

With the unemployment rate at 5 percent, we're very close to that goal. Of course, the unemployment rate isn't the only measure of labor market health, and it's reassuring that a range of indicators have been improving and are sending similar signals. In particular, one labor market indicator that I look to measures what regular people—by that, I mean not just economists—say when they are asked how hard it is to find a job. Those responses are currently right in line with, or in fact even a little better, than the signal we're getting from the unemployment rate.<sup>2</sup>

That's great news about the job market, and it means that we won't need as much job growth going forward as we've seen in the past few years. Because we're pretty much at full employment now, the future is less about creating an ever stronger labor market than about maintaining a healthy one, which means creating enough new jobs to keep up with the increase in the size of the labor force. That number depends on things like the number of people retiring this year or graduating from school and entering the workforce.

These factors can change a lot over time. During the 1960s and 1970s, the growing youth population and rapid labor force entry by women pushed up labor force growth and the rate of job growth needed to keep up. It reached a peak of about 160,000 jobs per month in 1980 and stayed close to that level through the 1990s. Since then, with labor force growth slowing due to an aging population, stabilization in women's participation, and other factors, required job

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<sup>1</sup> In the September 2016 Summary of Economic Projections, the central tendency of estimates of the long-run level of the unemployment rate ranged between 4.7 and 5 percent (Board of Governors 2016b). The Congressional Budget Office estimates the natural rate to be 4¾ percent as of August (CBO 2016). The median estimate from the Survey of Professional Forecasters in August 2016 was 4.8 percent (<https://www.philadelphiafed.org/research-and-data/real-time-center/survey-of-professional-forecasters/2016/survq316>). The Blue Chip Economic Indicators estimate is 4.8 percent as of October 2016.

<sup>2</sup> Data are from the Conference Board Consumer Confidence Survey (<https://www.conference-board.org/data/consumerconfidence.cfm>). See Weidner and Williams (2011).

growth slowed substantially. I put it at around 80,000 a month currently. Looking ahead, estimates that take account of potential labor force trends imply a range from 50,000 to a little over 100,000.<sup>3</sup>

So this year's pace of job gains of about 180,000 jobs a month is more than twice as fast as we need to keep up with the trend in labor force growth and, quite honestly, is unsustainable in the long run. With job gains continuing to far outpace labor force growth, I expect the unemployment rate to edge down over the next year, bottoming out somewhere between 4½ and 4¾ percent—a very strong labor market by any standard. Under these conditions, we should expect the pace of job gains to slow, and no one should be alarmed when it does—we should only be alarmed, frankly, if we *don't* see that necessary slowdown.

This slowdown in labor force growth also has important implications for the new normal for economic growth. In the long run, two factors determine the speed at which the economy can grow in a balanced manner: the size of the labor force and labor productivity. The Congressional Budget Office projects that the labor force in the U.S. will grow at about ½ percent per year over the next decade.<sup>4</sup> As I mentioned, the transition of women to the labor force is long complete and the baby boomers are already retiring. This is a considerable drop from the pace experienced over the past 40 years. This means that, unlike in the 1970s and '80s, demographics will hinder rather than boost potential output growth.

We have also seen a significant slowdown in productivity growth. Over the past 40 years total-economy productivity growth, or GDP per hour, has typically averaged between 1 and 1¼ percent per year. Since the 1970s, we've only deviated from this pace during the information technology boom of the late 1990s and early 2000s. Therefore, a reasonable

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<sup>3</sup> Bidder, Mahedy, and Valletta (forthcoming). See also Aaronson, Brave, and Kelley (2016).

<sup>4</sup> CBO (2016).

benchmark is that total-economy productivity growth in the range of 1 to 1¼ percent represents normal, incremental growth. This view is consistent with research by leading experts.<sup>5</sup> Moreover, since educational attainment per worker is unlikely to rise the way it did during much of the 20th century, the future pace of productivity growth will likely be at the lower end of the historical range, that is, not much above 1 percent.<sup>6</sup>

Putting these two ingredients together, demographics and productivity, in my view the trend growth rate of the U.S. economy is between 1½ and 1¾ percent per year.<sup>7</sup> This is, admittedly, a far cry from the 3 percent rates ingrained in our memories from the 1980s and 1990s. Demographic and productivity trends are difficult to bend. In many ways the die has already been cast.

Of course, there may be a revolutionary invention or technology just around the corner. Our crystal ball is hazy about when the next technological revolution will arrive. In the meantime, it's more likely than not that slow growth is both real and here to stay. And while the days of 3 percent growth are behind us, at least for the foreseeable future, it isn't the end of the world. We can still run a strong economy. GDP increased about 2 percent last year, yet we added 2¾ million jobs, and 2016 looks to be a lot like 2015, with continued moderate GDP growth and solid job gains.

Turning to our second mandate of price stability, the Fed's monetary policy committee—the Federal Open Market Committee or FOMC for short—has set a long-run goal of 2 percent inflation.<sup>8</sup> Inflation has been running persistently below that goal for several years. Over the past couple of years, the strengthening of the dollar and declines in energy prices have pushed

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<sup>5</sup> Byrne, Fernald, and Reinsdorf (2016) and Gordon (2016).

<sup>6</sup> Fernald (2016).

<sup>7</sup> Fernald (2016).

<sup>8</sup> Board of Governors (2016a).

inflation down, but these influences should fade over time. To cut through some of the noise, it's useful to look at measures of inflation that strip out volatile prices and provide a clearer view of the underlying trend. These suggest that underlying inflation is running about 1¾ percent. So, we're not quite at our target yet, but we're getting pretty darn close. The combination of fading transitory factors and a strong economy should help us get back to our 2 percent goal in the next year or two.

To sum up, the economic expansion remains on the right track. The labor market is strong, the economy has good forward momentum, and inflation is moving towards our 2 percent goal.

### **What it means for interest rates**

So, what does this mean for interest rates? In the context of a strong economy with good momentum, it makes sense to get back to a pace of gradual rate increases, preferably sooner rather than later. Let me be clear: In arguing for a gradual increase in interest rates, I'm not trying to stall the economic expansion. It's just the opposite: My aim is to keep it on a sound footing so that it can be sustained for a long time.<sup>9</sup>

History teaches us that an economy that runs too hot for too long can generate imbalances, potentially leading to excessive inflation, asset market bubbles, and ultimately economic correction and recession. A gradual process of raising rates reduces the risks of such an outcome. It also allows a smoother, more calibrated process of normalization that gives us space to adjust our responses to any surprise changes in economic conditions. If we wait too long to remove monetary accommodation, we hazard allowing imbalances to grow, requiring us to play catch-up, and not leaving much room to maneuver. Not to mention, a sudden reversal of policy could be disruptive and slow the economy in unintended ways.

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<sup>9</sup> See Williams (2016a) for further discussion.

As I said, my goal is to sustain the strong economy for as long as possible. The best way to accomplish this is by supporting a moderate pace of growth that is consistent with the new normal pace of GDP and jobs growth and that will keep the unemployment rate near the natural rate. I fear that if we allow the economy to overshoot this mark by too much, eventually we will need to reverse course to bring the economy back on track. The experience of past business cycles shows that this is a hard, if not impossible, act to pull off, and ultimately ends in recession. A gradual process of removing monetary accommodation reduces this risk.

### **How low can rates stay?**

So far, I have talked a lot about the new normal for the labor market and economic growth. What about interest rates? Like job growth and GDP growth, the new normal for interest rates is likely much lower than we are used to. There is growing evidence of a significant decline in the natural rate of interest, or  $r^*$  (r-star), over the past quarter-century to historically low levels. The natural interest rate is the short-term real (inflation-adjusted) interest rate that balances monetary policy so that it is neither accommodative nor contractionary in terms of growth and inflation. While a central bank sets its short-term interest rate,  $r^*$  is a function of factors beyond its influence.

A variety of economic factors have pushed natural interest rates very low, and they appear poised to stay that way.<sup>10</sup> This is the case not just for the United States but for other economies as well. In a recent paper, Kathryn Holston, Thomas Laubach, and I estimated the inflation-adjusted natural rate for four major economies: the United States, Canada, the euro area, and the United Kingdom.<sup>11</sup> In 1990, estimates ranged from about 2½ to 3½ percent. By

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<sup>10</sup> See Williams (2015), Hamilton et al. (2015), Kiley (2015), Lubik and Matthes (2015), and Laubach and Williams (2016).

<sup>11</sup> Holston, Laubach, and Williams (2016). Estimates are available at: [http://www.frbsf.org/economic-research/economists/jwilliams/Holston\\_Laubach\\_Williams\\_estimates.xlsx](http://www.frbsf.org/economic-research/economists/jwilliams/Holston_Laubach_Williams_estimates.xlsx)

2007, on the eve of the global financial crisis, these had all declined to between 2 and 2½ percent. Since then, all four estimates have dropped sharply, to slightly below 1½ percent for Canada and the United Kingdom, about ½ percent for the United States, and well below zero for the euro area.

The underlying determinants for these declines are related to the global supply and demand for funds, including shifting demographics, slower trend productivity and economic growth, emerging markets seeking large reserves of safe assets, and a more general global savings glut.<sup>12</sup> The key takeaway from these global trends is that interest rates are going to stay lower than we've come to expect in the past. This does not mean they will be zero, but when juxtaposed with pre-recession normal short-term interest rates of, say, 4 to 4½ percent, it may be jarring to see the underlying r-star guiding us towards a new normal of 3 to 3½ percent—or even lower. Importantly, this future of low interest rates is not due to easy monetary policy; instead, it is the rate expected to prevail when the economy is at full strength and the stance of monetary policy is neutral.

## **Conclusion**

Although it has been a long, hard road back from the recession, the American economy is in good shape and headed in the right direction. We're essentially at full employment, and inflation is well within sight of and on track to reach our target. Given the progress we have made and signs of continued solid momentum in the economy, and consistent with our agreed-upon monetary policy approach, it makes sense for the Fed to gradually move interest rates toward more normal levels.

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<sup>12</sup> Council of Economic Advisers (2015), International Monetary Fund (2014), Rachel and Smith (2015), and Caballero, Farhi, and Gourinchas (2016).

This policy path should be viewed in the context of an economy that has mostly cleared the Great Recession but faces a future that looks very different from the past in important ways. Although the natural rate of unemployment appears close to what it was a decade ago, demographic trends and a sustained productivity slowdown have pushed down the normal growth rates of jobs and GDP and have lowered the normal rates of interest. These developments will shape the economic landscape for years to come.

Thank you.



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