Janet Yellen: The goals of monetary policy and how we pursue them

Speech by Ms Janet L Yellen, Chair of the Board of Governors of the Federal Reserve System, at the Commonwealth Club, San Francisco, California, 18 January 2017.

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Good afternoon. It is a pleasure to join all of you at the Commonwealth Club today, not the least because the club and the Federal Reserve have a few things in common. Both organizations, as it happens, have a board of governors and a chair. And both the club's and the Fed's histories extend back more than a century. The club, as many here know, was founded in 1903, and the Federal Reserve a decade later. Perhaps because of our shared origins in the Progressive Era, a period of reform in American life, we hold certain values in common. According to your website, the club is nonpartisan and dedicated to the impartial discussion of issues important to your community and the nation. At the Fed, we too are nonpartisan and focused squarely on the public interest. We strive to conduct our deliberations impartially and base our decisions on factual evidence and objective analysis. This afternoon I will discuss some challenges we've faced in our recent deliberations and may face in the next few years.

Perhaps, though, it is best to start by stepping back and asking, what is—and, importantly, what isn't—our job as the nation's central bank? And how do we go about trying to accomplish it? The Federal Reserve has an array of responsibilities. I'll mention our principal duties and then focus on one—monetary policy, the responsibility that gets the most public attention.

In addition to monetary policy, we—in collaboration with other regulatory agencies at both the federal and state levels—oversee banks and some other financial institutions to ensure they operate safely and soundly and treat their customers fairly. We monitor the financial system as a whole and promote its stability to help avoid financial crises that could choke off credit to consumers and businesses. We also reliably and safely process trillions of dollars of payments for the nation's banks and the federal government and ensure that banks have an ample supply of currency and coin to meet the demands of their depositors. And we work with communities, nonprofit organizations, lenders, educators, and others to encourage financial and economic literacy, promote equal access to credit, and advance economic and community development.

But, as I noted, monetary policy draws the most headlines. What is monetary policy, exactly? Simply put, it consists of central bank actions aimed at influencing interest rates and financial conditions more generally. Its purpose is to help foster a healthy economy. But monetary policy cannot, by itself, create a healthy economy. It cannot, for instance, educate young people, generate technological breakthroughs, make workers and businesses more productive, or address the root causes of inequality. Fundamentally, the energy, ingenuity, and know-how of American workers and entrepreneurs, along with our natural resources, create prosperity. Regulatory policy and fiscal policy—the decisions by the Administration and the Congress about how much and how the government spends, taxes, and borrows—can influence these more fundamental economic pillars.

I've said what monetary policy cannot do. But what can it do? It can lean against damaging fluctuations in the economy. Nearly 40 years ago, the Congress set two main guideposts for that task—maximum employment and price stability. We refer to these assigned goals as our dual mandate. When the economy is weak and unemployment is on the rise, we encourage spending and investing by pushing short-term interest rates lower. As you may know, the interest rate that we target is the federal funds rate, the rate banks charge each other for overnight loans. Lowering short-term rates in turn puts downward pressure on longer-term interest rates, making credit more affordable—for families, for instance, to buy a house or for businesses to expand. Similarly, when the economy is threatening to push inflation too high down the road, we increase

interest rates to keep the economy on a sustainable path and lean against its tendency to boom and then bust.

But what exactly do the terms "maximum employment" and "price stability" mean? Does maximum employment mean that every single person who wants a job has a job? No. There are always a certain number of people who are temporarily between jobs after having recently lost a job or having left one voluntarily to pursue better opportunities. Others may have just graduated and have started looking for a job or have decided to return to working—for instance, when their child starts school. This so-called frictional unemployment is evident even in the healthiest of economies.

Then there is structural unemployment—a difficult problem both for the people affected and for policymakers trying to address it. Sometimes people are ready and willing to work, but their skills, perhaps because of technological advances, are not a good fit for the jobs that are available. Or suitable jobs may be available but are not close to where they and their families live. These are factors over which monetary policy has little influence. Other measures—such as job training and other workforce development programs—are better suited to address structural unemployment.

After taking account of both frictional and structural unemployment, what unemployment rate is roughly equivalent to the maximum level of employment that can be sustained in the longer run? The rate can change over time as the economy evolves, but, for now, many economists, including my colleagues at the Fed and me, judge that it is around 4-3/4 percent. It's important to try to estimate the unemployment rate that is equivalent to maximum employment because persistently operating below it pushes inflation higher, which brings me to our price stability mandate.

Does price stability mean having no inflation whatsoever? Again, the answer is no. By "price stability," we mean a level of inflation that is low and stable enough that it doesn't need to figure prominently into people's and businesses' economic decisions. Based on research and decades of experience, we define that level as 2 percent a year—an inflation objective similar to that adopted by most other major central banks.¹ Individual prices, of course, move up and down by more than 2 percent all the time. Such movements are essential to a well-functioning economy. They allow supply and demand to adjust for various goods and services. By "inflation," we mean price changes as a whole for all of the various goods and services that households consume.

No one likes high inflation, and it is easy to understand why. Although wages and prices tend to move in tandem over long periods, inflation erodes household purchasing power if it is not matched with similar increases in wages, and it eats away the value of households' savings. So, then, why don't we and other central banks aim for zero inflation? There are several technical reasons, but a more fundamental reason is to create a buffer against the opposite of inflation— that is, deflation. Deflation is a general and persistent decline in the level of prices, a phenomenon Americans last experienced during the Great Depression of the 1930s and one that Japan has confronted for most of the past two decades. Deflation can feed on itself, leading to economic stagnation or worse. It puts pressure on employers to either cut wages or cut jobs. And it can be very hard on borrowers, who find themselves repaying their loans with dollars that are worth more than the dollars they originally borrowed. I am sure we all remember learning in school about farm families in the Great Depression who couldn't pay their mortgages and lost their homes and their livelihoods when crop prices fell persistently.

Another important reason to maintain a modest inflation buffer is that too low inflation impairs the ability of monetary policy to counter economic downturns. When inflation is very low, interest rates tend to be very low also, even in good times. And when interest rates are generally very low, the Fed has only limited room to cut them to help the economy in bad times.

In a nutshell, the Fed's goal is to promote financial conditions conducive to maximum employment and price stability. And I have offered broad-brush definitions of each of those objectives. So where is the economy now, in relationship to them? The short answer is, we think it's close. The economy has come a long way since the financial crisis. As you know, the crisis marked the start of a very deep recession. It destroyed nearly 9 million jobs, and it's been a long, slow slog to recover from it. Unemployment peaked at 10 percent late in 2009, a level unseen for more than 25 years, and didn't move below 8 percent for nearly three years. Falling home prices put millions of homeowners "underwater," meaning they owed more on their mortgages than their homes were worth. And the stock market plunged, slashing the value of 401(k) retirement nest eggs.

The extraordinarily severe recession required an extraordinary response from monetary policy, both to support the job market and prevent deflation. We cut our short-term interest rate target to near zero at the end of 2008 and kept it there for seven years. To provide further support to American households and businesses, we pressed down on longer-term interest rates by purchasing large amounts of longer-term Treasury securities and government-guaranteed mortgage securities. And we communicated our intent to keep short-term interest rates low for a long time, thus increasing the downward pressure on longer-term interest rates, which are influenced by expectations about short-term rates.

Now, it's fair to say, the economy is near maximum employment and inflation is moving toward our goal. The unemployment rate is less than 5 percent, roughly back to where it was before the recession. And, over the past seven years, the economy has added about 15–1/2 million net new jobs. Although inflation has been running below our 2 percent objective for quite some time, we have seen it start inching back toward 2 percent last year as the job market continued to improve and as the effects of a big drop in oil prices faded. Last month, at our most recent meeting, we took account of the considerable progress the economy has made by modestly increasing our short-term interest rate target by 1/4 percentage point to a range of 1/2 to 3/4 percent. It was the second such step—the first came a year earlier—and reflects our confidence the economy will continue to improve.

Now, many of you would love to know exactly when the next rate increase is coming and how high rates will rise. The simple truth is, I can't tell you because it will depend on how the economy actually evolves over coming months. The economy is vast and vastly complex, and its path can take surprising twists and turns. What I *can* tell you is what we expect—along with a very large caveat that our interest rate expectations will change as our outlook for the economy changes. That said, as of last month, I and most of my colleagues—the other members of the Fed Board in Washington and the presidents of the 12 regional Federal Reserve Banks—were expecting to increase our federal funds rate target a few times a year until, by the end of 2019, it is close to our estimate of its longer-run neutral rate of 3 percent.

The term "neutral rate" requires some explaining. It is the rate that, once the economy has reached our objectives, will keep the economy on an even keel. It is neither pressing on the gas pedal to make the car go faster nor easing off so much that the car slows down. Right now our foot is still pressing on the gas pedal, though, as I noted, we have eased back a bit. Our foot remains on the pedal in part because we want to make sure the economic expansion remains strong enough to withstand an unexpected shock, given that we don't have much room to cut interest rates. In addition, inflation is still running below our 2 percent objective, and, by some measures, there may still be some room for progress in the job market. For instance, wage growth has only recently begun to pick up and remains fairly low. A broader measure of unemployment isn't quite back to its pre-recession level. It includes people who would like a job but have been too discouraged to look for one and people who are working part time but would rather work full time.

Nevertheless, as the economy approaches our objectives, it makes sense to gradually reduce the level of monetary policy support. Changes in monetary policy take time to work their way into the economy. Waiting too long to begin moving toward the neutral rate could risk a nasty surprise down the road—either too much inflation, financial instability, or both. In that scenario, we could be forced to raise interest rates rapidly, which in turn could push the economy into a new recession.

The factors I have just discussed are the usual sort that central bankers consider as economies move through a recovery. But a longer-term trend—slow productivity growth—helps explain why we don't think dramatic interest rate increases are required to move our federal funds rate target back to neutral. Labor productivity—that is, the output of goods and services per hour of work—has increased by only about 1/2 percent a year, on average, over the past six years or so and only 1-1/4 percent a year over the past decade. That contrasts with the previous 30 years when productivity grew a bit more than 2 percent a year. This productivity slowdown matters enormously because Americans' standard of living depends on productivity growth. With productivity growth of 2 percent a year, the average standard of living will double roughly every 35 years. That means our children can reasonably hope to be better off economically than we are now. But productivity growth of 1 percent a year means the average standard of living will double only every 70 years.

Economists do not fully understand the causes of the productivity slowdown. Some emphasize that technological progress and its diffusion throughout the economy seem to be slower over the past decade or so. Others look at college graduation rates, which have flattened out after rising rapidly in previous generations. And still others focus on a dramatic slowing in the creation of new businesses, which are often more innovative than established firms. While each of these factors has likely played a role in slowing productivity growth, the extent to which they will continue to do so is an open question.²

Why does slow productivity growth, if it persists, imply a lower neutral interest rate? First, it implies that the economy's usual rate of output growth, when employment is at its maximum and prices are stable, will be significantly slower than the post-World War II average. Slower economic growth, in turn, implies businesses will see less need to invest in expansion. And it implies families and individuals will feel the need to save more and spend less. Because interest rates are the mechanism that brings the supply of savings and the demand for investment funds into balance, more saving and less investment imply a lower neutral interest rate. Although we can't directly measure the neutral interest rate, it is something that can be estimated in retrospect. And, as we have increasingly realized, it has probably been trending down for a while now. Our current 3 percent estimate of the longer-run neutral rate, for instance, is a full percentage point lower than our estimate just three years ago.

You might be thinking, what does this discussion of rather esoteric concepts such as the neutral rate mean to me? If you are a borrower, it means that, although the interest rates you pay on, say, your auto loan or mortgage or credit card likely will creep higher, they probably will not increase dramatically. Likewise, if you are a saver, the rates you earn could inch higher after a while, but probably not by a lot. For some years, I've heard from savers who want higher rates, and now I'm beginning to hear from borrowers who want lower rates. I can't emphasize strongly enough, though, that we are not trying to help one of those groups at the expense of the other. We're focused very much on that dual mandate I keep mentioning. At the end of the day, we all benefit from plentiful jobs and stable prices, whether we are savers or borrowers—and many of us, of course, are both.

Economics and monetary policy are, at best, inexact sciences. Figuring out what the neutral interest rate is and setting the right path toward it is not like setting the thermostat in a house: You can't just set the temperature at 68 degrees and walk away. And, because changes in monetary policy affect the economy with long lags sometimes, we must base our decisions on

our best forecasts of an uncertain future. Thus, we must continually reassess and adjust our policies based on what we learn.

That point leads me to repeat what I said when I began: Like the Commonwealth Club, the Federal Reserve was created more than a century ago during an era of government reform to serve the public interest. The structure established for the Federal Reserve back then intentionally insulates us from short-term political pressures so we can focus on what's best for the American economy in the longer run. I promise you, with the sometimes imperfect information and evidence we have available, we will do just that by making the best decisions we can, as objectively as we can.

Thank you. I welcome your questions.

¹ Our objective is 2 percent inflation as measured by the annual change in the price index for personal consumption expenditures published by the Commerce Department's Bureau of Economic Analysis.

Other factors depressing the neutral rate include housing construction and lackluster exports. Housing still hasn't fully recovered from the financial crisis, in part because mortgage-qualification standards remain tight. Weak growth abroad in Europe, China, and elsewhere, some of which is related to their own productivity challenges, has hurt sales of U.S. goods.