Lael Brainard: The economic outlook and implications for monetary policy

Speech by Ms Lael Brainard, Member of the Board of Governors of the Federal Reserve System, at the Council on Foreign Relations, Washington DC, 3 June 2016.

* * *

These remarks represent my own views, which do not necessarily represent those of the Federal Reserve Board or the Federal Open Market Committee

In recent months, financial conditions have eased, and there are encouraging signs that consumption has regained momentum. On the other hand, there are tentative signs of slowing in the labor market and risks remain. We cannot take the resilience of our recovery for granted.

Recent developments

As we consider the appropriate posture of policy going forward, the most immediate question is whether the data provide confidence that domestic economic activity has strengthened notably following two disappointing quarters. This is critical for making progress on the Committee's dual mandate objectives of full employment and 2 percent inflation. The data in today's labor market report on balance suggest that the labor market has slowed. Nonfarm payroll employment increased at an average monthly pace of 116,000 over the last three months – well below the 220,000 per month average pace over the preceding twelve months. The unemployment rate moved lower, reaching 4.7 percent, a new low in the current recovery, but involuntary part-time employment increased and the labor force participation rate declined.

Even so, there are reasons to expect that the labor supply still has room to respond if labor demand increases. Importantly, the employment to population ratio for prime-age workers still remains 1-3/4 percentage points below pre-crisis levels. The recent data on wage inflation suggest a similar conclusion. Although there have been some signs of increasing wage growth recently, the step-up has been modest, and growth in the broad measures of wages remains quite low. For example, the average change over the past year across the three most commonly cited wage measures was about 2-1/2 percent, compared with an average change from the end of 2009 to the end of 2014 of 2 percent.[1]

The recent news on inflation – the second leg of our dual mandate – has also been mixed. The price of oil has rebounded significantly from the lows reached earlier in the year on expectations that supply and demand are likely to come into better alignment. Over the same period, the dollar has receded a bit, on net, from its peak in January, though it is still about 15 percent above the level in mid-2014 in inflation-adjusted trade-weighted terms. As a result, non-oil import prices look likely to stabilize this quarter after a year and a half of declines. Still, it should be noted that these developments coincided with the easing in financial conditions since mid-February and are likely due, at least in part, to expectations of more gradual U.S. monetary policy tightening. If those expectations were to shift materially, the conditions supporting higher inflation could diminish.

While there are thus signs that inflation will move higher over the medium term, measures of core inflation have yet to convincingly exceed the low levels that have prevailed over much of the recovery. The 12-month change in core personal consumption expenditure (PCE) prices, a reasonable proxy for the underlying trend in inflation, was only 1.6 percent in April. This is

---

1 The three commonly cited measures of wages are the private-industry employment cost index, compensation per hour in the business sector, and average hourly earnings

still noticeably below our target and is roughly equal to the average change in core and total PCE inflation from the end of 2009 to the end of 2014.

We cannot rule out that stubbornly low inflation may be having an effect on inflation expectations. Market-based measures of inflation compensation – which reflect inflation risk and liquidity premiums, as well as inflation expectations – remain extremely low. For example, inflation compensation at the five-year, five-year-ahead horizon is currently around 1.5 percent, 1-1/4 percentage points below levels prevailing prior to mid-2014. Some survey-based measures of inflation expectations are also somewhat below historical norms. Median 5- to 10-year inflation expectations in the University of Michigan Surveys of Consumers, for example, over the past year have been on average about 1/4 percentage point below the average over the 10 years from 2005 to 2014.

Thus, although some signs point to a firming of inflation going forward, I view the persistently low level of inflation during the recovery together with some signs of a deterioration in inflation expectations as suggesting that the risks to the return of inflation to our 2 percent target over the medium term are weighted to the downside.

Progress toward our goals of full employment and 2 percent inflation will depend importantly on solid growth in aggregate demand. Following disappointing gross domestic product (GDP) growth in the fourth quarter of last year and the first quarter of this year that averaged only 1.1 percent, I have been very attentive to incoming data, especially on consumption, which point to a pick-up in growth this quarter.[2] In particular, consumer expenditures rose a strong 0.6 percent in April, and auto sales edged higher in May. These are encouraging signs, but the data relevant for second-quarter growth are still relatively sparse.

In general, demand growth in recent quarters has benefited from a relatively strong household sector – buoyed by a recovering labor market, reduced oil prices, and low interest rates – and has been pulled down by weak business investment and net exports. Indeed, consumption and housing investment can more than account for the 2 percent increase in GDP over the past four quarters. By contrast, business investment and net exports together subtracted ¼ percentage point. The rise in the dollar and decline in foreign growth reduced demand for American exports, as well as profits and investment at U.S. firms, which were also adversely affected by declines in the price of oil. Over the twelve months ending in April, manufacturing output increased only 0.4 percent, while total industrial production, which also includes the drilling for, and extraction of, oil and gas, fell 1.1 percent. Although the most recent indicators suggest that weakness in investment and net exports has persisted into the current quarter, if the easing in financial conditions since mid-February and the recent firmness in oil prices were to continue, along with stabilization of the dollar, business investment and exporters would benefit.

Risks to the outlook

Of course, there are risks to the projection that future GDP growth will be strong enough to deliver progress on inflation and employment. Most immediately, there is important uncertainty surrounding the United Kingdom's June 23 "Brexit" referendum on whether to leave the European Union (EU). The International Monetary Fund has noted that a vote in favor of Brexit could unsettle financial markets and create a period of uncertainty while the relationship between the United Kingdom and the EU is renegotiated. Although the economic effects of this uncertainty and the costs of adjusting to altered trade and financial ties are difficult to quantify, we cannot rule out a significant adverse reaction to such an outcome in the near term, such as a substantial jump in financial risk premiums. Because international financial markets are

[2] Growth in gross domestic income (GDI) has not slowed as much as GDP growth recently. However, the average of GDP and GDI growth has still slowed recently from an average annual rate of 2-1/2 percent from the third quarter of 2013 to the third quarter of 2015 to an average of 1-1/2 percent in the past two quarters.

tightly linked, an adverse reaction in European financial markets could affect U.S. financial markets, and, through them, real activity in the United States.

In addition, we should not dismiss the possible reemergence of risks surrounding China and emerging market economies (EMEs) more broadly. In recent months, capital outflows in China have moderated as pressures on the exchange rate have eased. Should exchange rate pressures reemerge, we cannot rule out a recurrence of financial stress, which would affect not only China but also other emerging markets that are linked to China via supply chains or commodity exports and, ultimately, conditions here. China is making a challenging transition from export- to domestic demand-led growth, and the cost of reallocating resources from excess capacity sectors to more dynamic sectors could further impair growth in the near term. While China has taken policy steps to limit the extent of the slowdown, there is an evident tension in policy between reform and stimulus, and the effect of the stimulus may already be waning. Vulnerabilities – such as excess capacity, elevated corporate debt, and risks in the shadow banking sector – appear to be building, and could pose continued risks over the medium term.

The fragility of the global economic environment is unlikely to resolve any time soon. Growth in the advanced economies remains dependent on extraordinary unconventional monetary policy accommodation, while conventional policy continues to be constrained by the zero lower bound. Conventional policy, whose efficacy is more tested and better understood than unconventional policies, can respond readily to upside surprises to demand, but presently would be constrained in adjusting to downside surprises. This asymmetry in the capability of policy effectively skews risks to the outlook to the downside.

It also may amplify the sensitivity of exchange rates. Indeed, the evidence suggests that over the past year, dollar exchange rate movements have become considerably greater in response to U.S. monetary policy surprises than previously.[3] The evidence that the sensitivity of exchange rate movements has been elevated lately is consistent with recent research suggesting that cross border financial transmission is likely to be amplified at near-zero interest rates where the ability to provide additional support through domestic channels in response to negative shocks may be viewed as limited.[4]

In this environment, markets have become quite sensitive to the possibility of a prolonged period of low growth, low inflation, and economic underperformance. One possible example of this sensitivity is the current negative term premium for 10-year Treasury notes, or the difference between the yield on the 10-year Treasury and expected risk-free short rates over the next 10 years. Prior to the Great Recession, the term premium was positive, as bond investors seem to have been most concerned about the risk that inflation would be higher than expected. But since the Great Recession, the term premium has been persistently negative, suggesting that investors have instead been focused on the risk of prolonged lower-than-expected inflation in the context of low growth and underperformance.[5]

Thus, while the easing in financial conditions since mid-February is very welcome, it is important to recognize that some of the conditions underlying recent bouts of turmoil largely remain in place, and an important reason for the fading of this turbulence was the expectation

---

3 Recent research by Federal Reserve staff suggests that over the past year, a surprise of 25 basis points in the Federal Funds rate following FOMC announcements has triggered dollar appreciation of over 5 percent, although the confidence interval is extremely large, and the coefficient has varied substantially over time, including intervals when the relationship has been negative.

4 See Caballero, Farhi, and Gourinchas (2015).

5 See Chen, Engstrom, Grishchenko (2016). Another factor affecting the term premium is Federal Reserve asset purchases. In addition, some have suggested the low term premium could reflect an "insurance" value that investors attach to Treasury securities because the price of Treasuries would be expected to rise if there are adverse shocks to the global economy.

of more gradual U.S. monetary policy tightening.[6] Should an event trigger renewed fears about global growth or a reassessment of the policy reaction function in the United States, turbulence could well return.

Policy implications

On balance, recent developments have signaled continued progress toward our goals. While signs of weakness in business investment and global demand remain, consumption and residential investment have held firm, and the labor market has moved closer to full employment. At the same time, the relative stabilization in the dollar and oil prices in recent months has boosted somewhat the likelihood of a return to 2 percent inflation over the medium term. However, the data on progress toward our inflation objective are equivocal. Measures of underlying inflation have yet to convincingly signal a move back to 2 percent, and inflation expectations appear low, as I noted earlier.

I want to emphasize that monetary policy is data dependent and is not on a preset course. In this regard, I look forward to hearing the deliberations of the Committee. Recognizing the data we have on hand for the second quarter is quite mixed and still limited, and there is important near-term uncertainty, there would appear to be an advantage to waiting until developments provide greater confidence. Prudent risk-management would suggest the risks from waiting until the totality of the data provides greater confidence in a rebound in domestic activity, and there is greater certainty regarding the “Brexit” vote, seem lower than the risks associated with moving ahead of these developments. This is especially true since the feedback loop through exchange rate and financial market channels appears to be elevated. In light of this amplified feedback loop, when conditions are appropriate for a policy move, it will be important that it be understood that any subsequent moves would be conditioned on further evidence confirming continued progress toward our objectives and not as inevitable steps on a preset course.

Indeed, several factors suggest that the appropriate path to return monetary policy to a neutral stance could turn out to be quite shallow and gradual in the medium term. In particular, it appears likely that the medium-term neutral rate, or the real federal funds rate consistent with the economy remaining at full employment and 2 percent inflation, may be quite low. With productivity running very low, substantial overcapacity and disinflationary pressures abroad, and less favorable demographics, the neutral rate may be lower and today’s federal funds rate closer to neutral than previously anticipated. Although we cannot observe the neutral rate directly, a variety of models suggests that it is currently very low relative to historical norms. Earlier in the recovery it seemed likely that the low level of the neutral rate was largely due to temporary factors, such as tight credit, weak consumer confidence, and the loss in household wealth following the crisis. However, with the recovery well into its seventh full year, credit in many markets is widely available, while consumer confidence and household net worth are at high levels. As a result, it appears more likely that much of the decline in the neutral rate is likely to prove persistent, consistent with a variety of estimates.[7]

One likely explanation for this persistence is the sharp drop-off in potential output growth since the Great Recession. From 1953 to 2003, potential output growth varied between 3 and 4-1/2 percent, with one brief exception, according to the Congressional Budget Office. Over the recovery, it has averaged only 1-1/4 percent. One contributor to this decline has been a reduction in the labor force participation rate due to population aging. Another has been a

---

6 For an estimate of the role of U.S. monetary policy in offsetting the recent tightening in financial conditions, see Del Negro, Giannoni, and Smith (2016).

7 See, for example, Laubach and Williams (2015); the estimates from the dynamic stochastic general equilibrium models cited in Yellen (2015); the median estimated neutral rate from the Federal Reserve Bank of New York’s most recent Survey of Market Participants (Federal Reserve Bank of New York, 2016); and Johannsen and Mertens (2016).

marked slowing in productivity growth. Over the six years from the end of 2009 to the end of 2015, productivity grew only a little over 1/2 percent per year, compared with average growth of 2-1/4 percent over the 50 years prior to the Great Recession.[8]

The reasons for such a dramatic slowing in productivity growth are not clear. Possible explanations include the fading of a one-time boost to productivity from information technology in the late 1990s and early 2000s; the reduced movement of resources from the least productive to the most productive firms, including new businesses, perhaps due to greater financial constraints for new and small businesses; and a delay between the introduction of new technologies, such as robotics, genetic sequencing, and artificial intelligence, and their effect on new production processes and products.[9]

To conclude, recent economic developments have been mixed, and important downside risks remain. In this environment, prudent risk management implies there is a benefit to waiting for additional data to provide confidence that domestic activity has rebounded strongly and reassurance that near-term international events will not derail progress toward our goals. In addition, because the depressed level of the neutral rate of interest reflects forces that are likely to persist, the appropriate path of policy is likely to remain shallow for several years.

References

Baily, Martin Neil, James Manyika, and Shalabh Gupta (2013). "U.S. Productivity Growth: An Optimistic Perspective," *International Productivity Monitor,* no. 25, pp. 3–12.

Byrne, David M., John G. Fernald, and Marshall B. Reinsdorf (2016). "Does the United States Have a Productivity Slowdown or a Measurement Problem? (PDF)" *Brookings Papers on Economic Activity,* BPEA Conference Draft, March 10–11.

Caballero, Ricardo J., Emmanuel Farhi, and Pierre-Olivier Gourinchas (2015). "Global Imbalances and Currency Wars at the ZLB," NBER Working Paper Series 21670. Cambridge, Mass.: National Bureau of Economic Research, October.

Chen, Andrew, Eric Engstrom, and Olesya Grishchenko (2016). "Has the Inflation Risk Premium Fallen? Is It Now Negative?" FEDS Notes. Washington: Board of Governors of the Federal Reserve System, April 4.

Decker, Ryan A., John Haltiwanger, Ron Jarmin, and Javier Miranda (2016). "The Decline of High-Growth Entrepreneurship," VoxEU.org. London: Centre for Economic Policy Research, March 19.

——— (2014). "The Role of Entrepreneurship in U.S. Job Creation and Economic Dynamism," *Journal of Economic Perspectives*, vol. 28 (Summer), pp. 3–24.

Del Negro, Marco, Marc Giannoni, and Micah Smith (2016). "The Macro Effects of the Recent Swing in Financial Conditions," Federal Reserve Bank of New York, *Liberty Street Economics* (blog), May 25.

Federal Reserve Bank of New York, Markets Group (2016). Responses to Survey of Market Participants, April (PDF).

---

8 Since the end of 2007, the average annual gain in productivity has been 1.1 percent.

9 For more on the recent slowing in productivity growth and its possible causes, see Fernald (2014), Decker and others (2014, 2016), and Zarutskie and Yang (forthcoming). For an investigation into whether mismeasurement may be responsible for some of the slowing in productivity growth, see Byrne, Fernald, and Reinsdorf (2016) and Syverson (2016). For an optimistic outlook on future productivity growth, see Baily, Manyika, and Gupta (2013).

Fernald, John (2014). "Productivity and Potential Output before, during, and after the Great Recession," NBER Working Paper Series 20248. Cambridge, Mass.: National Bureau of Economic Research, June.

Johannsen, Benjamin K., and Elmar Mertens (2016). "The Expected Real Interest Rate in the Long Run: Time Series Evidence with the Effective Lower Bound," FEDS Notes. Washington: Board of Governors of the Federal Reserve System, February 9.

Laubach, Thomas, and John C. Williams (2015). "Measuring the Natural Rate of Interest Redux (PDF)," Working Paper Series 2015–16. San Francisco: Federal Reserve Bank of San Francisco, October.

Syverson, Chad (2016). "Challenges to Mismeasurement Explanations for the U.S. Productivity Slowdown," NBER Working Paper Series 21974. Cambridge, Mass.: National Bureau of Economic Research, February.

Yellen, Janet (2015). "The Economic Outlook and Monetary Policy," speech delivered at the Economic Club of Washington, Washington, December 2.

Zarutskie, Rebecca, and Tiantian Yang (forthcoming). "How Did Young Firms Fare during the Great Recession? Evidence from the Kauffman Firm Survey," in John Haltiwanger, Erik Hurst, Javier Miranda, and Antoinette Schoar, eds., *Measuring Entrepreneurial Businesses: Current Knowledge and Challenges.* NBER Book Series Studies in Income and Wealth. Chicago: University of Chicago Press.