

## **Daniel K Tarullo: Unemployment, the labor market, and the economy**

Speech by Mr Daniel K Tarullo, Member of the Board of Governors of the Federal Reserve System, at the World Leaders Forum, Columbia University, New York, 20 October 2011.

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I appreciate the opportunity to be at Columbia this evening to discuss the American economy and, in particular, the employment situation.<sup>1</sup> Mindful of the trend of public discourse toward hyperbole, I hesitated in deciding whether to characterize that situation as a crisis. But it is hard to justify characterizing in any less urgent fashion the circumstances of the nearly 30 million Americans who are officially unemployed, out of the labor force but wanting jobs, or involuntarily working only part time.

This situation reflects acute problems in labor markets, created by the financial crisis and the recession that followed. But we also confront chronic labor market problems. In my remarks this evening, I will outline both sets of problems. In my observations on policy responses, however, I will concentrate on the acute problems – in part to join the debate on their origins, in part because they call for the most immediate response, and in part because they are most relevant to my monetary policy responsibilities as a member of the Federal Open Market Committee (FOMC) of the Federal Reserve. That said, I hope you will not think the chronic problems any less important for the briefer treatment they receive tonight.

Most of what I have to say can be summarized in three points. First, the acute problems are largely, though not completely, the result of a shortfall of aggregate demand following the financial crisis and recession. As such, they can be addressed through measures designed to increase total investment and consumption spending in the economy.

Second, because the recession arose from a financial crisis, which itself followed a buildup of asset bubbles and unsustainable debt in important areas such as housing, the policies likely to be most effective at increasing aggregate demand may be somewhat different from those associated with a more typical recession and, even so, are not likely to work as quickly.

Third, if labor market conditions remain this unfavorable for a long period, the problems I have described as acute could transform into another chronic problem. I refer not just to the despair and desperation that workers and their families must feel as weeks of unemployment stretch into months and even years, which alone should be enough to elicit a policy response, but also to what occurs when the ranks of the unemployed remain so great for so long – the erosion of skills and labor market attachment may affect the productive capacity of the economy as a whole.

### **The state of the labor market today**

Let me start with some basic statistics that summarize the current state of the labor market. The most familiar of these is the unemployment rate, which, except for a couple of months earlier this year, has been at or above 9 percent since mid-2009. This is only the second time since the Great Depression that the jobless rate has been so high, and it is the first time since the 1930s that it has been so high for so long. Unemployment rates are exceptionally elevated for certain subgroups of the population: Nearly 15 percent for workers without a high school education, 16 percent among African Americans, about 25 percent among all

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<sup>1</sup> The views presented here are my own and not necessarily those of other members of the Board of Governors of the Federal Reserve System or the Federal Open Market Committee. William Wascher, Bruce Fallick, Christopher Nekarda, and Christopher Smith of the Board's staff provided substantial assistance over many months in the research for, and crafting of, these remarks.

teenagers, and nearly 50 percent for African American teenagers. Even among college graduates, whose unemployment rate is much lower than that of the population as a whole, the rate has doubled since the onset of the recession.

As familiar as the unemployment rate is, both as a measure of economic slack and as an indicator of the pain experienced by American households, it does not tell the whole story. About 9 million workers who would like a full-time job can find only part-time work. Millions of others are working at jobs for which they are likely overqualified and earning less than in their previous jobs. Meanwhile, another 6 million people who are not officially counted among the unemployed say that they would like a job but have stopped looking for one, in many cases because they have become discouraged by the poor state of the job market.

This effect can also be seen in the labor force participation rate, which has dropped sharply since 2007. The proportion of the U.S. population that is employed now stands at about 58 percent, the lowest level since 1983. Finally, more than 6 million workers – nearly one-half of all the unemployed – have been jobless for more than six months. The long-term unemployment rate is by far the highest it has been since data on the duration of unemployment began to be collected in 1948.

Even more dispiriting than this snapshot of the employment picture is that there is so little momentum toward improvements in labor market conditions. The level of payroll employment fell by nearly 9 million during and just after the recession. To date, only about one-fourth that number of jobs has been restored. The pace of job growth in recent quarters has been barely enough to absorb the increase in the labor force and wholly insufficient to produce meaningful declines in unemployment. The number of new claims for unemployment insurance suggests only modest gains in employment in coming months, while measures of job vacancies seem to have turned down.

### **Longer-term concerns for the U.S. labor market**

Persistent employment weakness during an economic recovery, even such a tepid one, raises the important question of whether it is symptomatic of longer-run changes in the labor market. Indeed, in some respects the recent weakness resembles the “jobless” recoveries that followed the 1990 and 2001 recessions. In both of those episodes, job growth remained weak well after the downturn in real gross domestic product (GDP) ended, and the unemployment rate continued to rise, though from lower levels than we have today. One might reasonably ask if these similarities suggest that structural changes have placed the labor market on a permanently lower growth path.

A first response is that there are important differences between this recovery and the recoveries that followed those earlier recessions. In particular, some explanations offered for the weak labor market recovery following the past two recessions are clearly not relevant today. Both the 1990 and 2001 recessions were relatively shallow downturns. This factor may have allowed more of the employment adjustment to occur through attrition, which can be spread over a longer period than layoffs. And both of those recessions followed long expansions, which may have permitted a buildup of productive inefficiencies that gave businesses scope to increase output in the subsequent recovery without expanding employment.<sup>2</sup>

That said, there *are* some discouraging longer-term trends. Even before the recession, the labor market seemed to be on a slower trajectory than in previous decades. Between the business cycle peak in early 2001 and the peak in late 2007, the number of payroll jobs rose an average of only about 0.6 percent per year, compared with job growth of 1.8 percent per

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<sup>2</sup> See Michael W. L. Elsby, Bart Hobijn, and Aysegül Sahin (2010), “The Labor Market in the Great Recession (PDF),” *Brookings Papers on Economic Activity* (Spring), pp. 1–69.

year in both the 1980s and 1990s. Similarly, the labor force participation rate and the percentage of the population employed each peaked around 2000 and have been on a downtrend path since then. It is true that a good part of this change can be accounted for by demographic factors – notably, lower population growth, the aging of the baby boom, and the leveling off of participation rates among women. But other, more disquieting factors are also at work.

Two tendencies in particular suggest that the U.S. labor market has lost some of the dynamism that had long contributed to its resilience. First, it is apparent that job reallocation – that is, the sum of the jobs created at some businesses and lost in others – has been in secular decline since the late 1990s. It may seem counterintuitive to include lost jobs in a measure of labor market health, and on its own it is obviously not such an indicator. But when combined with new jobs, it forms part of the dynamic of job reallocation, an important part of the “creative destruction” that contributes to long-run economic growth – for example, as jobs shift from less-productive firms to more-productive ones.

Second, the amount of employee movement across jobs has fallen over time. Specifically, the rate at which workers move from one firm to another has declined. So has the rate at which workers quit jobs, an indication of the degree to which they believe there are better jobs available for them. In what may be a related trend, geographic mobility across counties and states has decreased.<sup>3</sup>

Longer-term patterns in the types of jobs being created have also contributed to a widening gap in wages and income between the richest and poorest Americans. Adjusting for inflation, earnings for a worker in the middle of the wage distribution have risen about 10 percent since 1980, while earnings for a highly paid worker at the 90th percentile of the wage distribution have risen more than 30 percent during the same period. Earnings for workers near the low end of the distribution – those around the 10th percentile – have risen only about 5 percent after taking inflation into account. Thus, as has been widely observed, the gains from economic growth over the past three decades have disproportionately accrued to the highest wage earners.

To some degree, growing wage inequality reflects rising returns to education. Since 1980, the average wage for college graduates has increased from about one and a half times the average wage for workers with only a high school degree to about two times their wage. The good news is that this rise has encouraged more young Americans to enroll in college. The fraction of 18- and 19-year-old high school graduates who are enrolled in college rose from around 50 percent in 1980 to nearly 70 percent today. Even the good news must be qualified, however, since half this rise took place in the 1980s, and the pace of increase has slowed since then. The bad news is that less-educated adults with significant work experience and younger, inexperienced adults who are ill prepared for, or unable to afford, college may be increasingly excluded from future economic gains.

This widening inequality has been described as the result of a broader trend toward “occupational polarization.”<sup>4</sup> This theory posits that the diffusion of computer-related

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<sup>3</sup> To date, researchers have been hard-pressed to uncover an explanation for all these declines in worker mobility. See, for example, Andrea Bassanini and Pascal Marianna (2009), “Looking Inside the Perpetual-Motion Machine: Job and Worker Flows in OECD Countries (PDF),” IZA Discussion Paper Series 4452 (Bonn: Institute for the Study of Labor, September). It may be that there are greater impediments to workers changing jobs (for example, job lock related to health insurance or pensions) or that workers have become more risk averse. In principle, these trends could also reflect improving efficiencies in the labor market, such as screening and hiring techniques that result in better matches between firms and workers, though this more benign explanation strikes me as less likely against the overall backdrop of labor markets in the past decade.

<sup>4</sup> See, for example, David H. Autor, Lawrence F. Katz, and Melissa S. Kearney (2006), “The Polarization of the U.S. Labor Market,” *American Economic Review*, vol. 96 (May), pp. 189–94; and David H. Autor (2010), “The Polarization of Job Opportunities in the U.S. Labor Market: Implications for Employment and Earnings (PDF),” white paper (Washington: Center for American Progress and The Hamilton Project, April).

technologies, the related automation of routine work, and an increased capability for firms to move their activities offshore have combined to concentrate job creation in the poles of either high-skill, high-wage employment or low-skill, low-wage work. The high-skill occupations increasingly require at least a bachelor's degree. Demand has shifted away from traditional middle-class occupations. The kinds of workers who would have been employed in a traditional manufacturing or administrative job now often end up in lower-paying jobs.

Younger workers have historically filled many of the lower-paying service-sector jobs that are now more likely to be taken by less-educated adults. Thus, occupational polarization may be responsible for some of the rapid decline in employment and labor force participation among young people over the past decade. While part of this decline is likely attributable to the pursuit of additional education, employment and participation rates have also fallen for those youth who are not attending school, suggesting that education-related explanations are not the whole story. Indeed, research by the Federal Reserve Board's staff has found that greater crowding-out from adults can account for much of the decline in youth participation.<sup>5</sup> This crowding-out may have undesirable long-term consequences for the current generation of younger adults, as some research finds that poor job opportunities early in one's working life can lead to lower employment and wage rates in the future.<sup>6</sup>

### **The aggregate demand shortfall**

To this point, I have portrayed a labor market still disabled by the trauma of the financial crisis and the recession that followed, but also beset by chronic maladies whose symptoms predate the crisis. In considering the nature and magnitude of appropriate policy responses, an important question is the extent to which the current high level of unemployment reflects a shortfall in aggregate demand rather than additional structural problems arising from the recession. If the high level of unemployment is predominantly structural in origin, then the increase in aggregate demand intended by various monetary and fiscal policies would presumably be of limited efficacy.

Although structural problems likely account for some of the high jobless rate, I believe the evidence points to aggregate demand as clearly the more important explanation. On its face, the sheer magnitude of the decline in the number of jobs during the recession, the speed of the increase in unemployment, and the halting nature of the economic recovery together create a fairly strong presumption that insufficient aggregate demand is the most significant factor. Moreover, one thing that the current episode has in common with the previous two "jobless" recoveries is a slow rebound in aggregate economic activity. Over the first eight quarters of all three recoveries, real GDP grew at an average annual rate of 3 percent or less, compared, for example, with more than 5 percent in the two years following the 1975 and 1982 recessions. Even taking into account differences in trends across time, the slower pace of overall economic growth following recent recessions is striking.

Various arguments have been advanced in an effort to rebut the presumption that an aggregate demand shortfall accounts for much or most of the increased unemployment. The

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<sup>5</sup> See Christopher L. Smith (2011), "Polarization, Immigration, Education: What's Behind the Dramatic Decline in Youth Employment?" Finance and Economics Discussion Series 2011-41 (Washington: Board of Governors of the Federal Reserve System, October).

<sup>6</sup> See, for example, Christopher Ruhm (1997), "Is High School Employment Consumption or Investment?" *Journal of Labor Economics*, vol. 15 (October), pp. 735-76; and Thomas A. Mroz and Timothy H. Savage (2006), "The Long-Term Effects of Youth Unemployment," *Journal of Human Resources*, vol. 41 (Spring), pp. 259-93. For a dissenting view regarding the effect of high-school employment, see Joseph V. Hotz, Lixin Colin Xu, Marta Tienda, and Avner Ahituv (2002), "Are There Returns to the Wages of Young Men from Working While in School?" *Review of Economics and Statistics*, vol. 84 (May), pp. 221-36.

most common argument is that the deep recession created serious difficulties in matching available workers to available jobs, resulting in a big increase in structural unemployment.

The mismatches in question could develop for a number of reasons. First, some have suggested that the traditional willingness of American workers to move from weaker labor markets to stronger ones has been impeded by the sharp decline in residential property prices and especially by the large number of mortgages that are now greater than the values of the properties securing them. But research to date suggests that such “house lock” has probably not had more than a small effect on structural unemployment thus far.<sup>7</sup> As noted earlier, migration rates have been falling for some time. But the declines during the recession have not been larger for homeowners than for renters. Nor has migration declined more in areas where workers are more likely to have underwater mortgages because of particularly large declines in housing prices.

A second factor, the one most often cited in support of the structural unemployment hypothesis, is skills mismatch. While it is quite plausible that certain features of the current labor market reflect some skills mismatch contributing to a rise in structural unemployment during the recession, closer examination reveals that they explain less of this increase than might first appear.

One such labor market feature is the sharp reduction in employment in sectors related to the housing bubble, such as residential construction and some parts of financial services. The contention is that the skills of workers in these sectors do not readily transfer to other sectors, and thus they will have a particularly difficult time finding new jobs. But in every recession, certain industries and occupations are hit particularly hard, resulting in significant permanent job losses. Yet previous recessions do not seem to have been accompanied by notable increases in structural unemployment. Thus, those who believe the mismatch problem specifically created by the recession – as distinguished from more-secular trends – is either more prevalent or more persistent now than in the past would need to identify some additional source of rigidity that has further hampered labor market adjustment.

Some have also pointed to the high level of long-term unemployment as evidence that mismatch is a major factor keeping the unemployment rate high. The claim is that those without the skills sought by employers will take longer, on average, to find new employment. However, the data do not back this claim, at least to date. If high unemployment durations were the result of mismatch, the probability of finding a new job should have declined proportionately more for the long-term unemployed than for the recently unemployed. In fact, reemployment probabilities during the recession fell by similar amounts for all durations of unemployment and have edged up by similar increments in the recovery. Again, this pattern is more consistent with weak aggregate demand being the most important cause of high unemployment.

Another argument for the structural unemployment hypothesis is that the relationship between job vacancies and unemployment has recently changed. Generally, job vacancies bear an inverse relationship to the unemployment rate; that is, when the unemployment rate is low, vacancies are relatively plentiful, and when unemployment is high, vacancies are scarce. The pattern of these changes over time has been plotted on what is commonly referred to as the Beveridge curve. A stylized interpretation is that movements along the downward-sloping Beveridge curve are generally caused by changes in aggregate demand. Persistent shifts of the curve closer to, or further away from, the vertical and horizontal axes may reflect structural changes in the labor market.

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<sup>7</sup> See Raven Molloy, Christopher L. Smith, and Abigail Wozniak (2011), “Internal Migration in the United States,” Finance and Economics Discussion Series 2011-30 (Washington: Board of Governors of the Federal Reserve System, May).pdf.

Much has been made of the fact that the Beveridge curve appears to have shifted out in the past couple of years. The argument is that the shift reflects an increase in job mismatch, with the vacancies going unfilled because of structural reasons such as lack of geographic mobility or appropriate skills.

I think far too much has been made of this argument. In the first place, the Bureau of Labor Statistics data series from which the Beveridge curve is constructed began only in 2000. Researchers at the Federal Reserve Banks of Cleveland and San Francisco used other data sources to draw what we might call “approximate Beveridge curves” for the post-World War II period.<sup>8</sup> They found that, during and immediately after the serious recessions from 1973 to ‘75 and from 1981 to ‘82, the curve also shifted out noticeably, but in both cases it shifted back inward during the recovery. Why this occurred is not so clear. The big increase in job loss during the recession is probably a factor, as sharp increases in layoffs overwhelm the matching process. It may also be that during serious downturns, more workers who would have given up looking for a job continue to look in order to qualify for extended and emergency unemployment benefits, or that employers take longer to fill vacancies when the labor market is weak.<sup>9</sup>

An analysis by Federal Reserve Board economists that decomposes the shift in the Beveridge curve into its various components does point to some increase in structural unemployment related to a reduction in the efficiency with which unemployed workers are matched to vacant jobs – that is, mismatch.<sup>10</sup> However, the estimated increase is fairly modest – on the order of 1 percentage point – relative to the total increase in the unemployment rate experienced in recent years. The remainder appears mainly related to the delays in filling open positions that I mentioned a moment ago.

Economists at the Federal Reserve Bank of New York conducted a broader study of the mismatch issue. By examining imbalances between the occupations, industries, and geographic locations in which vacancies are concentrated and those in which unemployment is concentrated, they constructed an index of potential mismatch. They, too, concluded that mismatches accounted for only a small amount of the increase in the unemployment rate during the recession – on the order of 3/4 to 1–1/2 percentage points.<sup>11</sup>

In sum, I do not think arguments suggesting that structural factors account for most of the increase in unemployment are persuasive, either individually or collectively. Our efforts to quantify the increase in structural unemployment since the onset of the recession find that it accounts for less than one-fourth of the difference between today’s unemployment rate and that which prevailed in the pre-crisis years.

Before leaving this subject, I want to mention a different version of the structural unemployment argument, which is the concern that high unemployment today will result in an increase in structural unemployment in the future – a form of the phenomenon known as

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<sup>8</sup> See John Lindner and Murat Tasci (2010), “Has the Beveridge Curve Shifted?” Federal Reserve Bank of Cleveland, *Economic Trends*, August 10; and Robert Valletta and Katherine Kuang (2010), “Is Structural Unemployment on the Rise? (PDF)” Federal Reserve Bank of San Francisco, *FRBSF Economic Letter* 2010-34 (November 8).

<sup>9</sup> On the effects of unemployment benefits, see Robert Valletta and Katherine Kuang (2010), “Extended Unemployment and UI Benefits (PDF),” Federal Reserve Bank of San Francisco, *FRBSF Economic Letter* 2010-12 (April 19). On the lag between job vacancies and hiring, see Steven J. Davis, R. Jason Faberman, and John C. Haltiwanger (2010), “The Establishment-Level Behavior of Vacancies and Hiring,” NBER Working Paper Series 16265 (Cambridge, Mass.: National Bureau of Economic Research, August).

<sup>10</sup> See Regis Barnichon and Andrew Figura (2010), “What Drives Movements in the Unemployment Rate? A Decomposition of the Beveridge Curve,” Finance and Economics Discussion Series 2010-48 (Washington: Board of Governors of the Federal Reserve System, August).

<sup>11</sup> See Aysegül Sahin, Joseph Song, Giorgio Topa, and Giovanni L. Violante (2011), “Measuring Mismatch in the U.S. Labor Market (PDF),” unpublished paper, Federal Reserve Bank of New York, July.

hysteresis. The unusually long duration of unemployment spells and high fraction of the labor force unemployed for more than six months raise the prospect that the long-term unemployed will become progressively less employable as their skills, reputations, and networks deteriorate. That is, the distinction between cyclical and structural unemployment may begin to blur. In the aggregate, such effects could result in a persistently higher level of structural unemployment, a persistently lower rate of labor force participation, and a concomitant decline in the level of potential output of the entire economy. Whole cadres of workers, whether younger people leaving school at a time of high unemployment or older workers losing long-time jobs, might never regain the career trajectory on which they were headed.

In the past, such effects do not appear to have been very significant in the United States, and there is little evidence that they have taken hold today. But the current unprecedented durations of unemployment may reduce the relevance of historical experience. Even if the rise in structural unemployment is relatively modest to date, the longer the labor market remains weak, the greater the risk that structural unemployment will become more of a problem. Of course, if anything, this possibility argues for more-aggressive policies to reduce unemployment sooner.<sup>12</sup>

### **Effective policy responses**

The policy issues presented by today's labor market problems are challenging, to say the least. There is need, and ample room, for additional measures to increase aggregate demand in the near to medium term, particularly in light of the limited upside risks to inflation over the medium term.

Unlike in the aftermath of the steep recessions of the mid-1970s and early 1980s, demand growth has not become sufficiently self-sustaining to produce the strong recovery that followed those earlier episodes. Of the nine quarters that have passed since positive GDP growth reappeared in the third quarter of 2009, the rate of growth was significantly above trend in only three – the fourth quarter of 2009 and the first two quarters of 2010. These quarters were probably the first to benefit significantly from the effects of the American Recovery and Reinvestment Act, passed earlier in 2009.

Up until quite recently, the dominant metaphor one heard for the economy was that it was on its way to a healthy recovery but was hitting occasional "soft patches." This reading of the data always seemed to me quite optimistic. Now, I believe, nearly everyone has toned down their expectations. I think the better metaphor is of an economy slogging through the mud and occasionally hitting stretches of dry pavement, which may well have been associated with the peak effects of fiscal and monetary policy initiatives. The economy's difficulty in gaining traction is, of course, due in no small part to the continued high levels of unemployment and underemployment, which constrain demand through both direct effects on household income and indirect effects in sapping consumer confidence.

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<sup>12</sup> Another line of argument is that the sluggish recovery in the labor market, and in the economy more generally, is a result of wage rigidity. According to this view, prospective workers are unwilling to accept wage rates low enough to induce businesses to hire and increase production. However, it is hard to see why this phenomenon would be any stronger now than in earlier recessions, when a greater fraction of the U.S. workforce was covered by collective-bargaining agreements. Moreover, there would seem to be little indication in the wage data to support the idea that wage rigidity is having a major influence on unemployment. Wage rates have decelerated across a broad range of industries and occupations, and unit labor costs have fallen sharply. A simple histogram of the distribution of nominal wage changes in recent years does show a spike at zero, indicating some resistance to reductions in nominal wage rates, but the spike does not seem particularly large relative to those in earlier recessions. In any case, because the difficulties suggested by this argument arise from the interaction between nominal wage rigidity and a deficiency of aggregate demand, the most straightforward way to overcome problems caused by nominal wage rigidity would be to expand aggregate demand.

Yet it seems quite likely that there is something at work beyond an adverse feedback loop involving personal consumption expenditures, investment, and employment. The obvious candidate for that additional factor is the high amount of debt – particularly household debt – that accumulated before the financial crisis. With the bursting of the housing bubble, debt levels that may have looked manageable to consumers who believed their homes were appreciating suddenly appeared burdensome as house prices declined. In some parts of the country, this decline was dizzyingly rapid. There has been some progress in working off or writing down some forms of debt, such as credit card balances. But housing continues to hang like an albatross around the necks of homeowners and the economy as a whole, with millions of underwater mortgages, a staggering inventory of foreclosed homes, and depressed levels of sales.

What, then, are the policies best suited to increase aggregate demand? It must first be said that neither monetary nor fiscal policy will be able to fill the whole aggregate demand shortfall quickly. But appropriate policies could surely boost output and employment. There have also been suggestions that attempts to boost aggregate demand will be unsuccessful when the amount of debt overhang is significant. I agree that without more effective efforts to address the manifold problems affecting the housing market, there is a good chance that the recovery will lack strong momentum for some time to come. But aggregate demand policies are still important. For one thing, debts will surely be less burdensome as incomes rise. Moreover, the confluence of housing debt and aggregate demand problems suggests that particular attention should be paid to policies that could buttress aggregate demand while addressing at least some housing market problems.

As you know, the FOMC has maintained the federal funds rate near zero for almost three years in response to the extraordinary economic and financial problems faced by the country. With short-term rates already about as low as they can go, the FOMC has also taken some unconventional measures to provide additional monetary accommodation. The combined effect of these monetary policies helped stabilize financial markets in 2009, hold deflation at bay in 2010, and support a modest recovery. But, in the absence of favorable developments in the coming months, there will be a strong case for additional measures.

Some have argued that monetary policy should do no more, and that the political branches of government should adopt fiscal or other policies to encourage increased economic activity and job creation. I certainly do not disagree that well-conceived policies by other parts of the government could produce gains in employment, investment, and spending. But the absence of such policies cannot be an excuse for the Federal Reserve to ignore its own statutory mandate. The Federal Reserve Act requires that the FOMC promote the goals of maximum employment and stable prices. The statute does not qualify that mandate by saying that we should promote these goals only if all parts of the government – or, for that matter, the private sector – are acting just the way we think they should. In other words, we have to take the world as we find it and adjust our actions accordingly. Sometimes that will mean tighter monetary policy to offset the inflationary effects of other policies. Sometimes, as at present, it will mean more accommodative policies, even when we know that monetary policy alone cannot solve all the economy's problems.

Within the FOMC and in the broader policy community, there has been considerable discussion of possible additional accommodative measures, from communication strategies such as forward guidance on the likely path of the federal funds rate to additional balance sheet operations. I believe we should move back up toward the top of the list of options the large-scale purchase of additional mortgage-backed securities (MBS), something the FOMC first did in November 2008 and then in greater amounts beginning in March 2009 in order to provide more support to mortgage lending and housing markets.

In November 2010, when the FOMC initiated another large-scale asset purchase program, only U.S. Treasury securities were involved, in large part because of a desire to return, once the recovery was well established, as quickly as possible to a Federal Reserve balance

sheet that did not contain other kinds of assets. A related concern of some was that the purchase of MBS was a form of credit allocation, rather than simply monetary policy that lowered long-term rates for all borrowers. For similar reasons, the proceeds of agency securities accumulated pursuant to the first large-scale asset purchase program were reinvested in Treasury securities rather than in other agency securities.

At the September FOMC meeting, we changed our reinvestment policy so that the proceeds of maturing agency securities will now be reinvested in new MBS. Yields on longer-duration Treasury securities had trended down appreciably in the late summer in response to market demand, safe-haven flows, and diminishing expectations for growth. Even though nominal MBS rates had also declined somewhat, spreads to Treasury yields had, over the course of the year, widened noticeably. Since this announced change in reinvestment policy, spreads on lower-coupon MBS have narrowed, but they remain higher than they were early this year.

A large-scale MBS purchase program has many of the benefits associated with purchases of longer-duration Treasury securities, such as inducing investors to shift to other assets, including bonds and equities. But it could also have more direct effects on the housing market. By increasing demand for MBS, such a program should reduce the effective yield on those MBS, which in turn should put downward pressure on mortgage rates. The aggregate demand effect should be felt not just in new home purchases, but also in the added purchasing power of existing homeowners who are able to refinance. Indeed, homeowners who refinance get the equivalent of a permanent tax cut.<sup>13</sup> Concerns about central banks making sectoral credit allocation decisions are understandable in general. But here we are talking about a widely traded instrument in a sector that appears, now more than ever, to be central to the slow pace of recovery.

Now, I should note that the mortgage market is quite segmented. One relatively small group of borrowers has extremely good credit and funds for sizable down payments. That group can readily obtain a mortgage. The other, much larger group lacks one or both advantages, and it faces much greater hurdles in the mortgage market. So there is some chance that the principal effect of renewed MBS purchases would be to allow those in the first group who have already refinanced to do so once again or to buy a new home at a somewhat lower mortgage rate. These outcomes would be helpful, but the effectiveness of an MBS purchase program would be amplified, perhaps significantly, if certain nonmonetary policies were changed.

Proposals for promoting refinancing have been made by many academics, policymakers, and policy analysts. Any proposals that could sensibly and effectively be implemented would increase the effect of an MBS purchase program. For example, action could be taken to bring the benefits of refinancing to underwater borrowers. In principle, borrowers with mortgages that are guaranteed by government-sponsored enterprises (GSEs) such as Fannie Mae and that have loan-to-value ratios of up to 125 percent can refinance through the Home Affordable Refinance Program. In practice, though, numerous obstacles have kept the program from helping many potentially eligible borrowers. Underwater borrowers whose loans are not guaranteed by GSEs are essentially unable to refinance at all. Policy changes directed at this last, larger group of homeowners would have to be carefully designed so as not to transfer credit risk from private investors to the government, and could well require legislation.

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<sup>13</sup> Of course, the income gained by consumers is lost to the holders of the mortgages that are prepaid as homeowners refinance. But there are two reasons to believe that aggregate demand would increase. First, the marginal propensity to consume of the average homeowner is almost surely higher than that of the average holder of a mortgage-backed security. Second, to the extent that MBS are held by central banks or foreign investors, the decreased income would not translate into reduced spending.

Needless to say, though, an MBS repurchase program will not cure all that ails the housing market, much less fill the whole aggregate demand shortfall. There is a host of other problems, including continuing issues in mortgage servicing, uncertainty as to when house prices will have bottomed out in local markets, ambiguity about the scope of putback risk for securitized mortgages, and the substantial part of the underwater mortgage problem that cannot be solved by refinancing. But I believe that MBS purchases are worth considering as a monetary policy option precisely because they carry the promise of addressing the feature of the current aggregate demand shortfall that differs from typical recessions and recoveries.

## **Conclusion**

Many labor market problems took years to develop, and they will not be remedied quickly. The employment situation we hope for will require an extended commitment over many years. As I said earlier, I am not even going to try to do justice to the longer-term employment policy agenda. It is easy to echo the nearly universal call for improvements in education, innovation in retraining, and other more effective labor market policies. It is harder to specify what those policies are, much less how to fund them. But I do want to emphasize that the challenge is more than determining which education and training policies are both effective and affordable.

The nation needs a model for economic growth that will generate innovation and productivity enhancements that will, in turn, generate the kinds of jobs for which we hope we are educating and training our people. For much of the past decade, the implicit growth model was too heavily dependent on the assumption of ever-rising home prices. Needless to say, that model did not work out so well. Elements of the needed model include a healthy macroeconomic environment and a well-functioning financial system. But there should also be a premium on measures that expand the growth potential of the country even as they support near-term economic activity.

Even the acute problems reflected in today's grim employment picture cannot be reversed as quickly as in past recoveries, precisely because the recent recession arose from a financial crisis that was in turn the result of asset bubbles and high levels of unsustainable debt. But the fact that these problems cannot be solved quickly does not mean there is nothing to be done. Without more, the harm to the unemployed and their families continues, and the risks of longer-term harm increase – both to the unemployed and to the country as a whole. A shortfall of aggregate demand is the most important factor behind those dismal statistics. Particularly if we take account of the unusual nature of the current shortfall in fashioning policy responses, there is much that government policy – including monetary policy – can still do.