

Impressive, Incomplete, and Under Threat

Janet Yellen's Legacy at the Federal Reserve

Report • by Josh Bivens and Jordan Haedtler • August 3, 2017



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Introduction and executive summary

The Great Recession had a devastating impact on the livelihood of tens of millions of American families. It also brought renewed public attention to the role that the Federal Reserve plays in managing our economy. Throughout the Great Recession and its aftermath, Janet Yellen has helped determine the Fed's response, first as San Francisco Federal Reserve Bank president during the crash; then as vice chair of the Federal Reserve Board of Governors in Washington, D.C., from 2010 to 2014; and then as chair of the Board of Governors for the past three and a half years. Yellen has been at the center of this vital economic policymaking institution during one of the most turbulent periods in its history. With Yellen's first term as chair set to expire in February 2018, it is worth examining the impact the Federal Reserve has had on the economy during her tenure.

In this paper, we provide evidence that:

- **Extraordinary actions taken by the Federal Reserve made the Great Recession shorter, and the recovery from the recession more rapid, than it would otherwise have been.**
- **Yellen and the Fed were actively trying to engineer recovery with monetary policy tools while fiscal policymakers were erecting roadblock after roadblock.** It was the constraints outside of the Fed's control—especially more austere fiscal policy than during previous recoveries—that measurably reduced the pace of recovery. Therefore, Yellen and the Fed deserve more credit for the economic recovery than does any other policymaker or institution.
- **Despite strong pressure, Yellen has stayed focused on boosting economic growth and improving the labor market.** Especially since taking over as Fed chair in January 2014, Yellen has rightly rejected evidence-free warnings that low interest rates and large-scale asset purchases would spark runaway inflation and damage the economy. Economic outcomes—substantial and noninflationary

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improvements in employment and wages since the beginning of 2014—have vindicated her decisions.

- **Yellen has also made modest progress on making the Federal Reserve System leadership more diverse and more representative of the general public**, though the Fed’s leadership remains disproportionately white, male, and from corporate and financial backgrounds.
- **Despite the Fed’s efforts to engineer a complete recovery, the economy has not attained the genuine full employment** that the Fed, by statute, is mandated to attain.¹ Reaching full employment will be hard enough, but it will be even harder if the Fed follows through on projected interest rate increases over the coming years.
- **The Fed, as an institution, faces enormous pressure and threats from a Congress and executive branch hostile to the Fed’s full employment mandate.** In the coming year, President Trump will likely attempt to fill three vacancies on the Federal Reserve Board of Governors. Since taking office, Trump has shown a willingness to appoint people who do not believe in the missions of the agencies they are tasked with leading. In the case of the Fed, that may translate into sudden monetary tightening, extreme regulatory rollbacks, or even the elimination of the Fed’s ability to pursue full employment or make discretionary decisions about monetary policy.
- **Janet Yellen should stay because her work is not complete.** Full employment is within reach and governance problems at the Fed are getting attention, but the progress in both areas is insufficient. With the Federal Reserve facing dire institutional threats, Janet Yellen has an opportunity—and even a duty—to guard against worst-case scenarios. To protect the economy, her legacy, and the institution to which she has devoted her career, Janet Yellen should seek another four-year term as chair. If she is not reappointed as chair, she should remain on the Board of Governors until her 14-year board term expires in 2024. The same threats should compel Yellen’s three peers on the Board of Governors to serve the remainders of their terms as well. The stakes in this decision are huge; failure to reliably pin the U.S. economy at full employment is possibly the single largest reason why wages for the vast majority of American workers have lagged so far behind productivity growth in recent decades, and this growing wedge between typical workers’ wages and productivity is the root cause of rising inequality in this period.

Janet Yellen’s Great Recession legacy: Spurring recovery while fiscal policymakers put up roadblocks

The Federal Reserve, led first by Ben Bernanke and then by Janet Yellen, took extraordinary policy actions over the past decade to spur a faster and full recovery from the Great Recession. The Great Recession was an extraordinary economic and financial crisis caused by the bursting of a \$7 trillion bubble in the nation’s housing market, which began in 2006 and 2007 and resulted in a full-fledged financial crisis by September 2008.

This burst bubble caused a negative shock to private-sector spending that was larger than the collapse in demand that sparked the Great Depression of the early 1930s.

From its peak in 2007 to its trough in 2009, real gross domestic product (GDP) fell 4.3 percent and the net worth of U.S. households and nonprofit organizations fell \$14 trillion. The unemployment rate, which was 5.0 percent in December 2007, rose to 9.5 percent in June 2009 and peaked at 10.0 percent in October 2009.²

While Congress responded by enacting fiscal stimulus programs (in 2008 and 2009), the Federal Reserve moved first to try to stabilize the economy in the face of the coming recession, reducing short-term interest rates from 5.25 percent in July 2007 to zero by the end of 2008. As the economy continued to contract even after the Fed's conventional short-term rates were moved to zero, the Fed reached for new tools to end the recession and aid recovery. For example, it attempted to avoid financial panics by introducing new lending facilities, and it pushed down longer-term public and private borrowing rates by implementing large-scale asset purchase (LSAP) programs. The Fed also provided clear signals that the zero federal funds rate would be long-lasting; and it was—this rate was kept at essentially zero until the end of 2015.

The Fed's actions from mid-2007 to the end of 2016 provided crucial aid to the economy, despite countervailing contractionary forces, namely the relative austerity of public spending relative to spending in past recessions. The Great Recession was shorter and the recovery more rapid than it otherwise would have been because of the Fed's efforts. The Fed's actions are particularly noteworthy given the political blowback it had to fight: over much of this period, ill-informed and politically motivated critics kept insisting that the Fed was laying the groundwork for dangerous increases in inflation and should pull back its support of the economic recovery.³

Chair Yellen deserves particular credit for continuing the Fed's support for recovery past 2013, when critics became particularly loud in claiming that it was time for the Fed to prioritize keeping inflation low rather than making further progress toward full employment. To be sure, inflation hawks were criticizing the Fed between 2009 and 2013, but it was easier to ignore them when the headline unemployment rate still exceeded 7 percent—far above what any reasonable analyst could call full employment. In more recent years, however, as the headline unemployment rate approached pre-recession levels, broader measures of labor market slack needed to be examined to appreciate the enduring damage left by the Great Recession. To Yellen's credit, even in this later period, Fed officials recognized that these broader measures of slack indicated that a rapid reversal of monetary stimulus would obstruct a return to full employment.

This section presents evidence that Yellen—through her staunch support of the Fed's extraordinary actions in the early phases of recovery from the Great Recession and her continuing commitment to pursuing a full recovery despite phantom inflationary pressures—helped engineer an ongoing recovery that might not otherwise have taken place. It makes the following points:

- The Fed's actions since 2007, including the Fed's unprecedented purchase of long-term assets, clearly aided recovery.

- The recovery been historically slow despite the Fed's actions because of contractionary fiscal policy that has put a sharp drag on growth since mid-2011.
- By rejecting calls to begin quickly withdrawing support for the economy in early 2014, Yellen helped sustain the recovery.

Both conventional and unconventional monetary policy helped shorten the recession and speed the recovery

As noted above, during and after the onset of the Great Recession, the Federal Reserve slashed the federal funds rate to zero and essentially kept it there; it launched credit easing programs; and it implemented large-scale asset purchase (LSAP) programs. This set of actions, consisting of both “traditional” policy action (lowering the federal funds rate) and “nontraditional” policy actions (credit easing programs and LSAPs) constitute “expansionary monetary policy,” or “monetary loosening,” whereby the central bank sets low interest rates and takes other actions so that borrowing is easier for businesses and consumers, which stimulates investment and consumption spending (particularly of durable goods that often need to be financed by debt).

It is important to note that while cutting the federal funds rate directly affects only very short-term interest rates, these cuts in short-term rates eventually put downward pressure on long-term rates, and these lower long-term rates are what spur household and business spending.

Since 2007, critics of the Fed's actions sometimes point to the slowness of the recovery from the Great Recession to assert that the Fed's actions did not help restore economic health. This is clearly wrong. The economic evidence is overwhelming that the Fed's actions went in the right direction, though there is substantial uncertainty about *how* effective they were.

Conventional short-term rate cuts

The less controversial part of the case that Fed action helped shorten the Great Recession simply rests on the fact that the Fed's *conventional* monetary policy action—lowering the federal funds rate to lower interest rates paid by companies and consumers—is widely agreed to have increased output and employment relative to a scenario in which it did not cut rates. For example, there is near unanimity among macroeconomists that the Great Recession would have been worse, perhaps much worse, had the Fed kept interest rates at the 5.25 percent rate of July 2007—the last month before it became evident that a global financial crisis was in the making. As far as we know, between July 2007 and June 2009 (the official end of the recession) not a single economist argued that the Fed should *not* have lowered its conventional policy rate as the recession approached.

Loosening interest rates as a recession approaches—as the Fed did with the support of then San Francisco Fed president Yellen—is the proper course of action. For example,

lower interest rates on auto, credit card, and even some mortgage loans can provide households that have lost a lot of housing wealth with the means to pay down debt and, often, even refinance. And in the past, monetary loosening has clearly been a key ingredient in spurring rapid economic recovery, even from severe recessions. For example, Christina Romer, a former chair of the Council of Economic Advisers in the Obama administration, finds that expansionary monetary policy was a key ingredient in helping the U.S. economy escape from the Great Depression in the 1930s.⁴

By sharply reducing rates at the onset of the Great Recession, Fed policymakers were acting on evidence from previous downturns that monetary easing can be an important part of economic recovery. An examination of the acute (though thankfully brief) recession of 1981–1982 provides clear evidence of the efficacy of traditional expansionary monetary policy. The unemployment rate in December 1982 actually peaked at 10.8 percent—higher than at any point in the Great Recession. Yet 12 months later payroll employment was back to its pre-recession level. What contributed to this extraordinarily rapid recovery in jobs and unemployment? The simplest answer is rapid output growth: GDP grew in the two years following the trough in 1982 at an annual average rate of 6.7 percent. Conversely, in the six quarters after the trough of the Great Recession, growth rates averaged well under half this pace.⁵

The rapid output growth after 1982, in turn, was driven in part by an extraordinary degree of monetary easing: the policy rate controlled by the Fed fell nearly *10 percentage points* between the business cycle peak of 1981 and the recession’s trough of November 1982. The Fed continued cutting rates for the next six months following this trough, and by November 1983 payroll employment had completely recovered its pre-recession level.

Unconventional monetary policy

Because the Fed reached the limits of reducing the federal funds rate halfway through the Great Recession, and because the economy remained deeply damaged, Fed officials searched for other ways to boost output and employment.

Fortunately, because long-term rates are generally higher than short-term rates, this means that even when short-term rates are at zero there is still room for long-term rates to fall. This leads to the realization that the Fed can directly push down longer-term rates by buying longer-maturity assets even after the short-term rate sits at zero. This is all that *quantitative easing* (QE) really is—using money creation to purchase long-term, not just short-term, assets. “Money creation” refers to how the Fed does this: it buys Treasuries from its member banks and pays them by adding an equivalent credit to their books.⁶

And this is exactly what the Fed did in the Great Recession. The first set of asset purchases—commonly called QE1—was launched in March 2009 and added \$1.75 trillion to the Fed’s balance sheet. QE2 began in November 2010 and added another \$600 billion.⁷ QE3, which started in September 2012, was open-ended in its final target additions to the Fed balance sheet, with \$85 billion in purchases each month being made at its height. By October 2014, when the Fed ceased adding to its balance sheet, it had grown to more than \$3.5 trillion, as compared with less than \$900 billion in August 2007.

Table 1

Financial market effects of large-scale asset purchases (LSAPs)

Financial yield or price	Assumed LSAP effect	General range in survey literature
10-year Treasury interest rates	100 basis-point decrease	38–150 basis points for QE1; more mixed results for QE2; very few direct estimates of QE3 extant.
10-year mortgage-backed security rates	150 basis-point decrease	Gagnon et al. (2011) and Krishnamurthy and Vissing-Jorgensen (2011) find larger impacts on non-Treasury rates. Rough ratios from their papers are applied to Treasury rate above.
10-year bond prices	9–14 percent increase	Price increase estimate is given a starting interest rate of 3 percent on a 10-year bond, then assumes a 100–150 basis point decline.
Equity prices	5 percent increase	Price increase estimates range from <3 percent in Dobbs et al. (2013) to 8.5 percent in Engen (2014).
Home prices	7 percent increase	Estimate is constructed from existing literature on elasticity of home prices to long-term rates. Also in line with Dobbs et al. (2013) finding.

Source: Adapted from Josh Bivens, “[Gauging the Impact of the Fed on Inequality During the Great Recession](#),” Hutchins Center on Fiscal & Monetary Policy at Brookings, Working Paper no. 12, June 2015. For sources referred to in the table, refer to “Extended source” in the online version of this table.

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To think that the “unconventional” monetary policy of QE somehow failed to work, one must claim either that conventional monetary policy does not work or that somehow buying long-term assets directly has no effect on their prices and returns. Neither is true.

The previous discussion provided the evidence for the efficacy of conventional monetary policy. Here we present the evidence that QE and LSAPs have important effects on both economic output and employment and on distributional outcomes.

Table 1 presents estimates of the LSAP effects on interest rates and asset prices (specifically, stocks and homes). The price and the return (or rate, or yield) of assets are inversely related; anything that reduces a return increases the price. Since the estimates for other asset price or return changes tend to be derived from historic relationships between these and Treasury yields, we use the assumed LSAP effect on long-term Treasury yields in row 1 to estimate the percent change in prices and yields for other assets.

A rough summary of these estimates is that the combined LSAPs reduced long-term Treasury yields by an average of 100 basis points since their introduction in March 2009, though these effects are not uniform over time (they tend to spike upon announcement of the LSAP and then fade).⁸ Further, the impact of LSAPs hinges crucially on the overall state of financial markets at times of announcement and implementation, with LSAPs thought to

be particularly effective in changing interest rates during periods of keen financial market distress. As financial markets stabilized over the 2009–2014 period, it is possible that even more and larger asset purchases were needed to provide continued downward pressure on interest rates.

The empirical research on the impacts of LSAPs on long-term Treasury yields is generally consistent. Most studies find a significant non-zero effect of LSAPs, and all of these agree clearly on the *direction* of LSAPs' effects (i.e., they reduce long-term Treasury rates). The estimates for the first round of purchases (QE1) are quite large—tending to fall in the 30- to 150-basis-point range following initial announcement. QE2 (which began after Janet Yellen was confirmed as vice chair of the Board of Governors) is generally estimated to have been less effective, likely because it was undertaken during a period of less financial market distress than the period covered by QE1, included Treasuries (as opposed to mortgage-back securities), and was limited in size. This strongly suggests that the market stabilization effects of LSAPs are a key channel through which they boost bond prices and reduce yields and that the expectation effects of LSAPs are bolstered if they are more open-ended.

Importantly, QE3 included Treasuries and other purchases and was open-ended: no *total* value of purchases was specified by the Fed. Given this, and given estimates by the Federal Reserve Board that the macroeconomic impact of the combined LSAPs reached its peak only in 2016, this suggests that the combined effects of the three rounds of LSAPs were large and long-lasting.⁹

Finally, research by JPMorgan Chase provides a sense of the potential of this quantitative easing for spurring purchasing power in the U.S. economy. Analysts at JPMorgan Chase estimate that if all mortgage holders guaranteed by the federal government (through Fannie Mae and Freddie Mac) had been able to refinance when 30-year rates dropped to nearly 4 percent, this could have added an economic stimulus of more than \$50 billion per year to the economy. Further, since this stimulus effectively would have been permanent (with each mortgage holder facing lower mortgage payments for the life of the refinanced mortgage), the extra economic output spurred would likely have been very large. As we note below, much of this potential was squandered by failures in other policymaking realms, but through no fault of the Fed.

We have established that the actions the Fed took by reducing rates and implementing large-scale asset purchase programs helped stimulate the economy. It is worth acknowledging that the Fed's power to facilitate economic recovery is not limitless. There is a school of thought (to which we're sympathetic) that argues that while the Fed has great power to rein in an overheating economy through interest rate increases, it actually has considerably less power to spur spending in an economy that is deflating. The vivid metaphor often used to explain this asymmetry is "pushing on a string."

And there are reasons to think the Fed's conventional tools were especially ill-suited to the fallout of the Great Recession. For example, increased housing activity is a key channel through which interest rate cuts spur economic activity. Given the massive overbuilding and plummeting home prices resulting from the burst housing bubble, it was always very

unlikely that anything the Fed did would pull the U.S. economy out of the recession by increasing activity in the housing sector.

But, again, there can be no question that the Fed's interventions were helpful. By pushing down rates in 2009 and 2010, the Fed fully accommodated the welcome fiscal expansion of those years. By not raising rates after 2011, the Fed avoided making the recovery even slower than it was. (Still, as we demonstrate below, the Fed's actions could have been even more effective had they been matched by better decisions made by fiscal policymakers and other agencies in the executive branch.) Importantly, much of the debate in the crucial period since the end of 2013 has not been about whether the Fed was ably spurring recovery, it was about whether the Fed should actively begin slowing this recovery to forestall potential inflation.

Federal and state fiscal austerity blocked a more robust recovery

If, as we have shown, the Fed's monetary actions aided recovery, why has the recovery been so slow? The answer is simple: Since the recession's end in June 2009, *fiscal* policy has been historically contractionary (i.e., government spending has been historically low) relative to other post–World War II recoveries. This fiscal drag, combined with the extraordinary damage of the Great Recession, can fully explain the relative slowness of recovery.

While the federal American Recovery and Reinvestment Act (ARRA), passed at the beginning of 2009, provided a welcome fiscal boost that helped end the recession by June of 2009, the ARRA stopped boosting recovery by the beginning of 2011. Since then, federal spending has been cut back enough that a *de facto* anti-stimulus act even larger than the ARRA has essentially been in effect since 2012.

Figure A compares spending at all levels of government over the current recovery relative to previous recoveries. The recovery since the Great Recession is a clear outlier, despite the fact that the preceding recession was deeper and longer than any other previous recession, meaning that the economy needed a fiscal boost, not contraction.

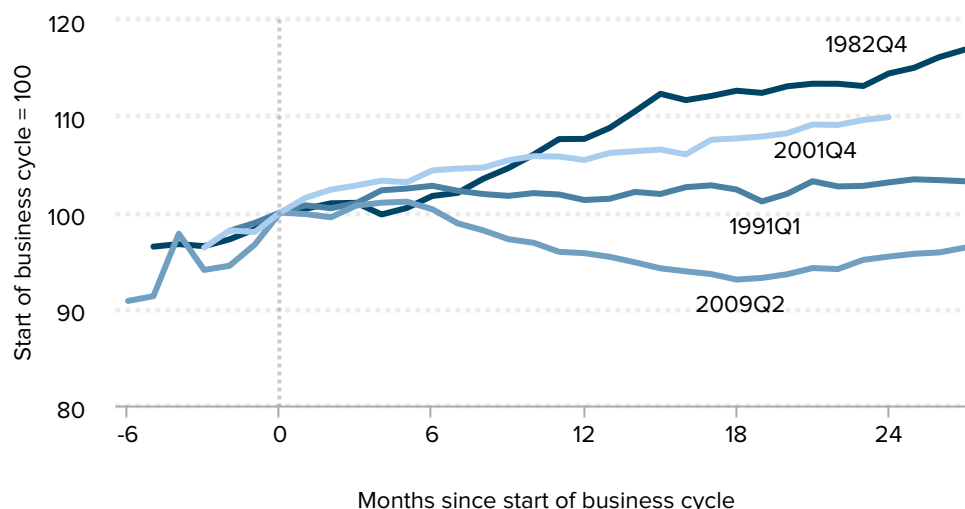
These data on fiscal contraction should make something very clear: the Federal Reserve has been far more active in trying to engineer a complete recovery from the Great Recession than its fiscal policymaking counterparts. These fiscal policymakers have actually put roadblock after roadblock in the way of recovery with this spending austerity and with other actions that we note below.

Because the federal government can run deficits for sustained periods with little economic harm, it is more able to sustain or increase spending during periods of economic weakness (including spending on grants to state and local governments) than are state and local counterparts. This means that federal policymakers bear more of the blame for the decision to embrace austerity than their peers in states. And at the federal level, it clearly was not the Obama administration that championed austerity. We may wish that

Figure A

Fiscal austerity explains why recovery has been so long in coming

Change in per capita government spending over last four business cycles



Notes: For total government spending, government consumption and investment expenditures are deflated with the NIPA price deflator. Government transfer payments are deflated with the price deflator for personal consumption expenditures. This figure includes state and local government spending.

Source: Reprinted from Josh Bivens, *Why is Recovery Taking So Long—and Who's to Blame?*, Economic Policy Institute report, August 11, 2016. EPI analysis of data from Tables 1.1.4, 3.1, and 3.9.4 from the National Income and Product Accounts (NIPA) of the Bureau of Economic Analysis (BEA)

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administration officials had been better anti-austerity champions, but it was clearly Republicans in Congress who drove the sharp spending austerity highlighted in Figure A.

However, putting the proper blame on congressional Republicans does not let state and local governments entirely off the hook. While state governments are generally bound by law to balance annual budgets, they can choose whether to balance budgets with tax increases or spending cuts. By and large over the past nine years they have chosen to rely far too heavily on spending cuts, despite the clear economic evidence that spending cuts do far more damage to growth in the short run than do tax increases.¹⁰

As an aside, the fact that some of the same federal lawmakers who have enthusiastically backed this damaging fiscal austerity also routinely criticize the Fed for failing to generate a more robust recovery is striking.

Finally, we should also note that some of the potential effectiveness of the Fed's actions was blunted by executive branch failures as well. As noted earlier, one of the ways interest rate reductions can spur household spending is by enabling homeowners to refinance their mortgages. However, if a homeowner's outstanding mortgage is larger than the current value of the home (i.e., if the homeowner is "underwater"), then refinancing is generally not possible. The federal housing agencies could have relaxed this policy during

the crisis: in 2008, newly nationalized Fannie Mae and Freddie Mac held \$5 trillion in mortgages that they could have allowed refinancing on. Yet the head of the Federal Housing Finance Agency, Ed DeMarco, refused to move on this front.¹¹

If Congress and key actors in the executive branch had been as consistently determined as the Federal Reserve was to engineer a rapid recovery from the Great Recession, tens of millions of American families would have had a much easier decade.

By resisting calls to remove support, the Fed helped sustain recovery

By the time Janet Yellen became Fed chair, the Fed was no longer buying new long-term assets under the LSAP program. The Fed was, however, continuing to reinvest the proceeds from earlier investments to keep the natural “rolloff” of maturing assets from running down the Fed’s stock. If they had not made these reinvestments, the stock of assets held by the Fed would have dwindled quickly, and the Fed’s support for economic recovery would have rapidly been undone. The Fed also held its target short-term interest rate (the federal funds rate) at essentially zero.

Some have argued that while extraordinary support provided in the immediate aftermath of the Great Recession was appropriate, the Fed should have begun withdrawing this support at a more rapid rate by 2014. We think this view is wrong. A more rapid drawdown of Fed support for recovery would have sacrificed the substantial and *noninflationary* improvements in the labor market since the beginning of 2014 without buying anything in terms of inflation control.

Importantly, the rapid decline in the headline (or official) unemployment rate from 2010 to 2014 was driven by a decline in labor force participation as well as by rising employment. **Figure B** shows two lines: one is the official unemployment rate while the other is a measure of unemployment that takes into account “missing workers”—i.e., potential workers who likely would be actively searching for work in a healthier economy but who stopped searching for scarce work in the aftermath of the Great Recession.¹² From 2010 to 2014, the official unemployment rate dropped 3.1 percentage points, while the rate augmented by missing workers dropped only 2.0 percentage points. This implies that fully a third of the decline in unemployment after 2010 can be attributed to falling labor force participation rather than increased employment.

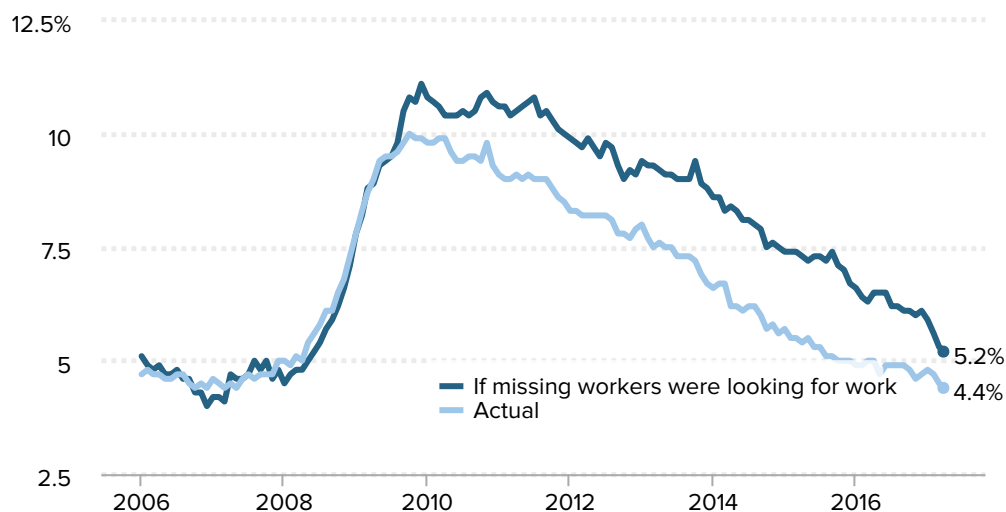
But after 2014, the official unemployment rate actually started dropping more slowly than the one augmented by missing workers. Between the beginning of 2014 and the end of 2016, the official rate dropped 1.9 percentage points while the rate augmented by missing workers dropped 2.6 percentage points. This means that observers who focused only on improvements in the official unemployment rate missed crucial improvements in drawing workers back into active labor market participation in 2014 and beyond.

This post-2014 improvement is mirrored in another indicator, the share of prime-age adults (adults age 25–54) with a job. As shown in **Figure C**, this measure rose only 1.3

Figure B

The unemployment rate is vastly understating weakness in today's labor market

Unemployment rate, actual and if missing workers* were looking for work, January 2006–April 2017



* Potential workers who, due to weak job opportunities, are neither employed nor actively seeking work

Source: EPI analysis of Current Population Survey public data series

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percentage points in the four years from the beginning of 2010 to the beginning of 2014, clawing back only a portion of the 5.5 percentage point decline it suffered during the downturn (from a high point in January 2007 to a low in December 2009). But in the three years from the beginning of 2014 to the end of 2016, this measure rose by 1.8 percentage points. It still has not reached its peak pre–Great Recession levels, let alone the much higher peaks it attained in 1999 and 2000, but the pace of improvement has been much greater since 2014.

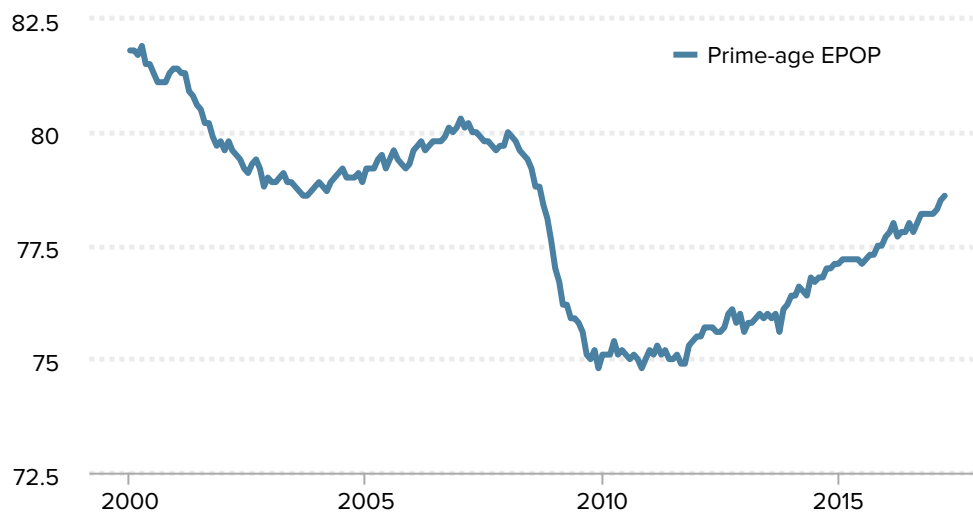
It should be noted that this more rapid improvement in key labor market indicators in the post-2013 period was not associated with the Fed “overshooting” and unleashing too much inflationary pressure into the economy. The average year-over-year increase in the Fed’s preferred inflation measure has not changed appreciably in the post-2013 period. Nominal wages have started rising a bit faster in the post-2013 period, but their growth remains far below the pace that would threaten to push the Fed’s overall price inflation target above its (likely too conservative) 2 percent. **Figure D** shows price and wage growth over the course of the recovery.

The rapid improvement in labor market indicators besides the unemployment rate, and the fact that this improvement did not lead to economic overheating, should be considered vindication for the view that the U.S. economy at the beginning of 2014 still had substantial “room to run.” Chair Yellen coined this phrase (albeit only recently) and seems to clearly have held this judgment for much of the post-2013 period. She was right. Evidence-based

Figure C

Prime-age employment to population ratio (EPOP)

Share of adults age 25–54 with a job, 2000–2017

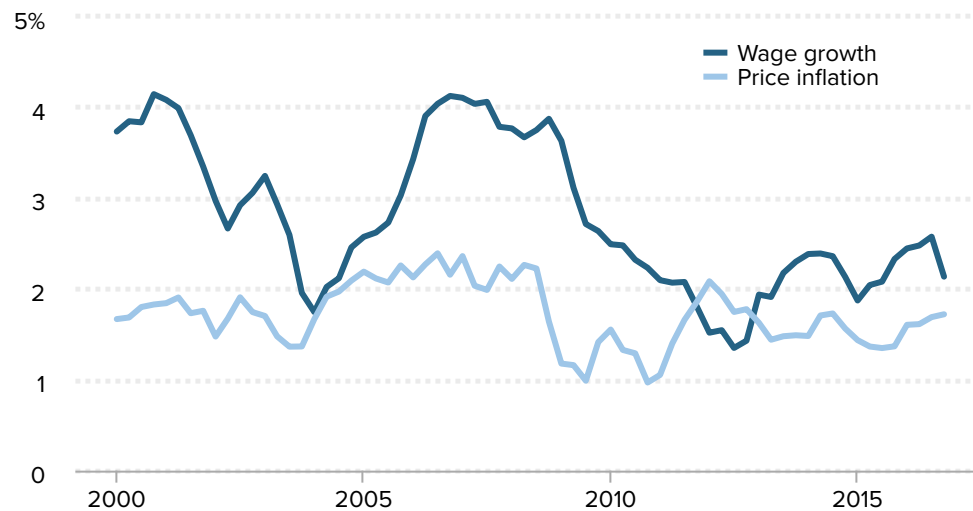


Source: Data from the Bureau of Labor Statistics (BLS) Current Population Survey (CPS) program

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Figure D

Inflation and wage growth



Source: Author's analysis of data from the Bureau of Labor Statistics (BLS) and the Bureau of Economic Analysis (BEA). Inflation is the four-quarter change in the price index for core personal consumption expenditures from the BEA. Wage growth is the four-quarter change in average hourly earnings of production and nonsupervisory workers from the Current Employment Statistics program of the BLS.

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judgments that give serious weight, and not just lip service, to the Fed's mandate to pursue maximum employment are exactly what we need from a Federal Reserve chair.

Yellen's Federal Reserve System legacy: Modest progress toward more diverse and publicly representative governance

While the seven members of the Board of Governors in Washington, D.C., are appointed by the U.S. president and confirmed by the Senate, the board of directors of each of the 12 regional Federal Reserve Banks are chosen by each regional bank's board of directors. Each bank board appoints its bank president but the Board of Governors in Washington must approve the regional bank presidents.

Throughout her tenure at the Fed, Janet Yellen has called attention to the lack of sufficient diversity and public representation among the presidents and boards of directors of the 12 regional Federal Reserve Banks. While vice chair, she sent an annual letter to the Federal Reserve Banks emphasizing the need to prioritize diversifying the institution's leadership. The letters included examples of nonprofits, community groups, and labor organizations that could provide candidates that reserve banks could recruit to act as directors. As the Fed's first female chair, Yellen has repeatedly told Congress that enhancing diversity at the Fed is an important objective.

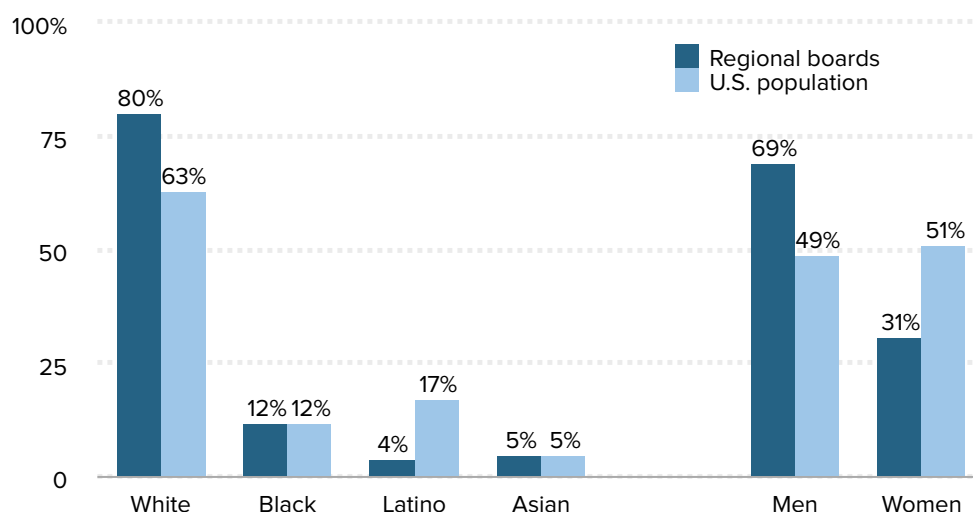
During Yellen's four years as chair, the Federal Reserve Banks have made modest progress toward more diversity and less representation by corporate and financial interests on their boards of directors. The percentage of women directors on the Reserve Banks' boards has grown by 5 percent; the percentage of white directors, while still disproportionately high at 80 percent, has dropped 3 percent; and the number of Black, Latino, and Asian directors has grown. The number of directors representing nonprofits and labor organizations has increased very slightly.¹³ These are small steps in the right direction.

Perhaps most noteworthy, Yellen presided over the selection of the first African American Federal Reserve Bank president in the Fed's history, when the Board of Governors approved the appointment of Raphael Bostic as president of the Atlanta Fed earlier this year.

This progress is far from sufficient, though—leadership at the Fed remains disproportionately white, male, and corporate (**Figure E** shows the current race and gender representation on the Federal Reserve Bank boards compared with the U.S. population). However, Yellen has demonstrated that she cares about this issue, and she seems to understand that there is more work to do. Trump's prospective nominees to the Board of Governors are almost entirely white men from corporate and financial backgrounds. Their confirmation will make the Fed less diverse, while leaving fewer Fed leaders who have demonstrated a commitment to racial and gender equity or to the importance of diverse leadership.

Figure E

Current race and gender representation on regional Federal Reserve Banks' boards of directors (2017) and in the U.S. population (2010)



Sources: Regional Federal Reserve Banks (2016); American Community Survey (2014)

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Threats to Yellen's legacy from Fed tightening

The Federal Reserve under the leadership of Janet Yellen has been a clear outlier among American policymaking institutions in working hard to return the economy to full health. If other policymaking institutions had taken this job as seriously as the Fed, the U.S. economy would have reached full employment a long time ago. But, crucially, the job is not yet done. Despite enormous improvements, the economy has failed to reach full employment and thus is not positioned to ensure sustained wage growth for low- and moderate-wage workers. A key threat to Chair Yellen's legacy is that the American economy will fail to reach the crucial full-employment benchmark.

This threat has grown because of interest rate increases in December 2016 and March 2017. These increases are particularly worrisome because they signal that the Fed may lack determination to pursue a complete recovery to full employment. Strikingly, there is little to nothing in the economic data to argue that wage or price inflation is anywhere near levels that would normally require an interest rate increase. Price inflation has run below the Fed's 2 percent target for years, and it remains below 2 percent even in the most recent data. Given that an extended period of above-2-percent inflation should be tolerated (or even encouraged) to make up lost ground on wages, the fact that the Fed has raised rates before we have reached this target strongly indicates that Fed officials view their 2 percent target as a hard ceiling, not as a long-run average. Similarly, wage

inflation has not touched the 3.5 percent minimum that would signify a healthy economy, and again, an extended period of above-target wage growth would do the economy good. Enforcing wage and price targets as hard ceilings is an unforced policy mistake that hurts millions of American families.

The low wage growth and low price inflation of recent years has already done real damage. Slowing inflation has made it harder to erode the overhang of household debt. For example, take a couple that took out a mortgage in 2006 when inflation was over 2 percent. Looking ahead, they would have forecast that their monthly mortgage payment in 2017, adjusting for inflation, would be considerably smaller than the burden they actually face in 2017; slower-than-expected inflation means that the onerousness of mortgage debt has eroded much more slowly in recent years than previously. Wage growth running well below target has exacerbated economic inequality and poverty, as demonstrated by the share of corporate sector income going to workers' pay rather than to capital owners. This share reached a historic low earlier in the recovery.¹⁴ Recent economic improvements have clawed back a decent portion of this falloff in labor's share of corporate-sector income, but the labor share is still not at normal levels.

Further, the prime reason why labor's share of income has recently increased is not that nominal wage growth has accelerated, but that productivity growth has almost collapsed. Productivity is the amount of total income (in the form of both wages and profits) generated in an average hour of work in the economy. Any time nominal wages grow more rapidly than the sum of productivity growth and inflation, there will be an increase in the share of income claimed by workers. In recent years, even as price inflation and nominal wage growth have been sluggish, productivity growth has nearly collapsed—its growth rate has dropped to well under 1 percent per year. A good portion of this productivity slowdown is likely itself a symptom of continued weakness in aggregate demand.¹⁵

By enforcing wage and price inflation targets as hard ceilings, the Fed would create an economy in which an excess burden of debt, abnormally low labor shares of income, and sluggish productivity growth become the “new normal.” There's no need for that. The Fed can instead aim for wage and price targets as averages rather than as ceilings. Although the Fed has undershot wage and price inflation in recent years, it can and should overshoot to an equivalent degree in the future to keep this damage from becoming a permanent state of affairs.

Besides the obvious benefits of eroding nominal household debt and returning to labor some of the share of income it lost early in the recovery, reinforcing wage and price targets as averages rather than ceilings would enhance the central bank's credibility. And credibility is key in dealing with the zero lower bound (ZLB) problem. A recurring theme in the theoretical literature is that monetary policy is much more effective at pulling an economy at the ZLB out of recession if the central bank can credibly commit to allowing inflation to exceed the long-run target for a spell during the recovery. Since this is the first time the United States has been in a recession when the federal funds rate was at zero, this credibility is subject to some question. But if the Fed does not follow years of undershooting on inflation with a period of overshooting, it will destroy its credibility for

the next recessionary episode at zero interest rates.

Finally, it is worth noting that even small rate increases might be substantially more contractionary now than in the past. Because key American trading partners are mired in demand shortfalls of their own, even small interest rate hikes could put much greater upward pressure on the U.S. dollar than in the past. This appreciating dollar would widen trade deficits and redistribute aggregate demand from the United States to these trading partners. If the United States were genuinely and securely at full employment, this redistribution would be useful to the global economy, by taking aggregate demand from an economy that didn't need it and giving it to economies that did. But the United States is not at full employment, so this redistribution of demand from a rising dollar would just drag the economy back down into stagnation.¹⁶

Threats to the Federal Reserve and to Janet Yellen's legacy from Congress and the administration

The financial crisis transformed the political landscape of the United States, eroding public trust in a range of important institutions, including the Federal Reserve. Many scholars, economists, and policymakers have been guided by evidence and reason in their analysis of the crash, enumerating important mistakes the Fed made in the run-up to the crisis but noting that the central bank's post-crisis interventions aided economic recovery. Far from calling for curtailing the Fed's power, most economists argue that the crisis dramatically highlighted the need for a lender of last resort that can conduct expansionary monetary policy during times of economic strife. Drawing from this evidence-based perspective, policymakers should seek to provide the Fed with more tools to undertake effective expansionary policy. Examples include broadening the Fed's power to buy state and local government bonds or transferring purchasing power directly to households during times of economic crisis.¹⁷

Nonetheless, many politicians have succumbed to the temptation to channel voters' frustrations into animosity toward the Federal Reserve. Members of Congress have repeatedly considered legislation to restrain the Fed's ability to conduct expansive policy and expressed alarm about quantitative easing, though these legislators' concerns have never panned out. During the 2012 presidential election, Republican candidate (and future Trump administration official) Rick Perry called Federal Reserve Chair Ben Bernanke's conduct "treasonous" and threatened him with violence. In 2016, Republican candidates again inveighed against the Fed, with eventual winner Donald Trump saying Chair Yellen should be "ashamed" of her policies. "The Fed is not doing their job. The Fed is being more political than Secretary Clinton," Trump said during the first presidential debate, adding that stocks were in a "big, fat bubble" as a result of Federal Reserve policies. Trump's closing ad of the campaign featured an image of Yellen, while the narrator condemned "global special interests."¹⁸

Now, Trump is president, and many of the Fed's fiercest critics hold positions of power in Congress and the administration. This is a grave threat not only to the Federal Reserve and Janet Yellen's legacy, but also to the economy. Members of Congress who seek a more constrained Federal Reserve have been emboldened to enact laws toward that end. And the president will be appointing, and Congress confirming, the chair of the Federal Reserve and three of the seven members of the Board of Governors whose staggered 14-year terms are set to expire this year.

The 115th Congress and the Trump administration could restrain the Fed's ability to conduct expansive policy

The Republican majority in Congress has been sharply critical of the Federal Reserve's policy decisions in recent years, first condemning Chair Yellen and the Board of Governors for keeping rates low, then reversing course by criticizing the December 2016 rate hike, and even lashing out against a speech Yellen gave about income inequality. In June 2017, the U.S. House of Representatives approved the Financial CHOICE Act (H.R. 10), a bill that would impose sweeping new limitations on the Fed's ability to conduct monetary and regulatory policy. In particular, the Financial CHOICE Act would reduce Fed policymakers' discretion by forcing them to strictly follow a formula for interest rates and to submit to audits by the Government Accountability Office whenever they stray from the prescribed dictates of that formula. The bill would also repeal the Volcker Rule, a centerpiece of recent Federal Reserve regulations meant to reduce the likelihood of another financial crisis by prohibiting banks from making certain kinds of speculative investments.

In March, the House approved a bill that would allow the executive branch to review and block all regulations made by independent agencies, including the Federal Reserve and its monetary policymaking body, the Federal Open Market Committee (FOMC).¹⁹ Unlike similar previous bills, no exemption was made for monetary policy decisions, meaning that FOMC decisions about reserve requirements, interest on excess reserves, and more, would be subject to review by the White House.²⁰

The effect of imposing these constraints on the Fed all trend in the same direction: making it more difficult for the Fed to achieve its full employment mandate. Indeed, economists at the Minneapolis Federal Reserve have estimated that had the Fed followed the rule-based monetary policy prescribed by the Financial CHOICE Act over the past five years, 2.5 million fewer jobs would have been created. Eliminating the Fed's full employment mandate is the explicit goal of numerous members of the Republican majority. While serving in the House of Representatives, Vice President Mike Pence authored legislation to focus the Fed exclusively on price stability. House Speaker Paul Ryan is also on the record in support of eliminating the full employment mandate. During the markup of the Financial CHOICE Act, Financial Services Committee members Andy Barr (R-Ky.) and Tom Emmer (R-Minn.) reiterated their support for narrowing the Fed's full employment mandate.

Important financial protection measures are also at risk

The upcoming Board of Governors nominations also have significant implications for regulatory policy. Through the Dodd-Frank Wall Street Reform and Consumer Protection Act, Congress delegated a wide range of financial stability protections to the Federal Reserve to implement. Yellen and the Board of Governors have worked to put many of these measures in place, including capital requirements; liquidity requirements; stress tests to ensure that banks can withstand sudden changes in economic conditions; and the Volcker Rule, which limits the extent to which banks can make speculative investments with depositors' money. President Trump's Treasury Department recently released a report targeting many of these protections for weakening or repeal. Assessing the Treasury report, Americans for Financial Reform pointed out that agencies and regulators such as the Federal Reserve will determine whether critical Dodd-Frank provisions remain in place: "Of the 31 Treasury recommendations listed in the Appendix to this report, 29 could be accomplished through purely regulatory action."²¹

One of the Board of Governor vacancies that Trump will soon attempt to fill is a position created by Dodd-Frank called the Federal Reserve vice chair for supervision. The vice chair for supervision is tasked with primary oversight over regulatory matters at the Fed, but it is not an executive position. Therefore, targeting financial stability protections such as the Volcker rule, relaxing capital and liquidity requirements, altering stress test procedures, or any other move to undermine basic financial safety measures put in place by Chair Yellen and her fellow governors since the crisis will require approval by the Board of Governors as a whole. This is another reason why Yellen and the other governors who know these new regulatory policies best must remain in their positions—to protect the rules and ensure that any that are revised are changed responsibly in a way that does not threaten financial stability.

Trump could appoint, and Congress confirm, Fed governors who could halt, and even reverse, the recovery

Even if Congress never enacts its vision for a more constrained Federal Reserve, however, the Trump administration has the power to transform policy at the Fed by appointing key Fed officials. It is therefore important to look at Trump's track record on appointments to date.

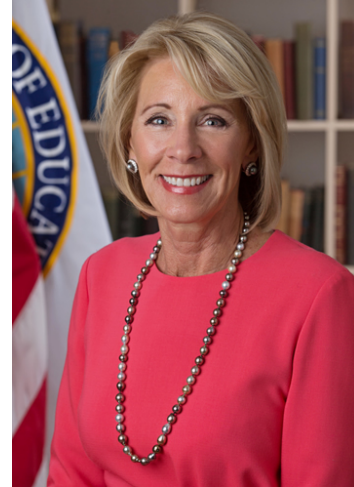
Donald Trump's personnel selections show a disdain for the work of the federal government

Donald Trump has filled his administration with individuals who have demonstrated a lack of understanding of—even disdain for—the work of the federal government and the executive branch. In some cases, these longtime anti-government activists have a history

of undermining the very institutions they are now tasked with overseeing. In other cases, Trump administration personnel have troubling conflicts of interest and close ties to the industries regulated by their agencies.

Here are some examples:

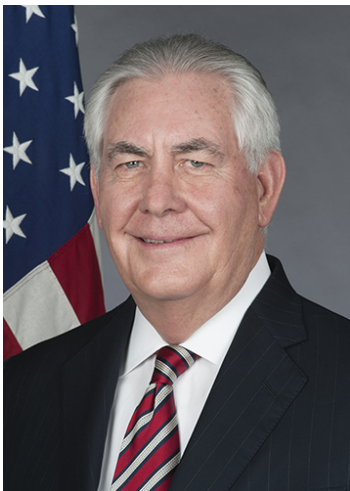
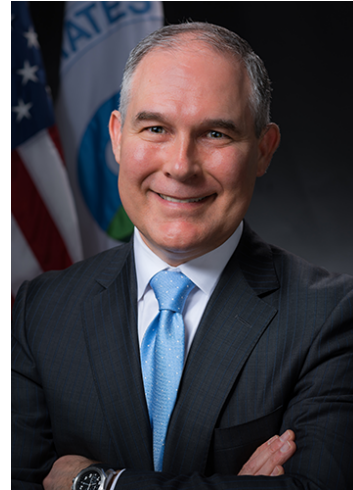
Education Secretary Betsy DeVos is an outspoken advocate of school privatization and charter school expansion. Although the Department of Education deals primarily with the implementation of federal education standards and funding, strong standards and generous education funding are the antithesis of DeVos' espoused goals. She has spent tens of millions of dollars lobbying and advocating for charter school expansion, private school vouchers, and weaker accountability standards for charters. Since her narrow confirmation, DeVos has assented to a rollback of Obama administration protections for transgender students, halted a federal effort to simplify student loan processing, and expressed support for reducing the budget of, and eventually eliminating, the Education Department. "It would be fine for me to have myself worked out of a job," DeVos said in a February interview.²²



Energy Secretary Rick Perry campaigned for president in 2012 on a promise to eliminate the Department of Energy. After forgetting the Energy Department was one of three agencies he had said he wanted to get rid of, Perry said, "From time to time, you may forget about an agency that you are gonna zero out. Everybody tomorrow will understand the Energy Department is one of those that needs to be done away with." Twenty percent of the Energy Department's budget is dedicated to energy research. Perry is unlikely to steer research toward clean sources, given that he denies climate science and believes Earth is in a cooling trend, he censored scientific research as governor of Texas, and he supports a massive expansion of offshore drilling and fossil fuel extraction.

Perry reportedly believed promoting fossil fuel expansion to be the main responsibility of the energy secretary and was surprised to learn that two-thirds of the department's budget is actually devoted to maintaining the nation's nuclear arsenal and handling nuclear waste. Since Perry has taken office, Energy Department personnel have been discouraged from using the term "climate change" in department memos because the term causes Perry to have a "visceral reaction."²³

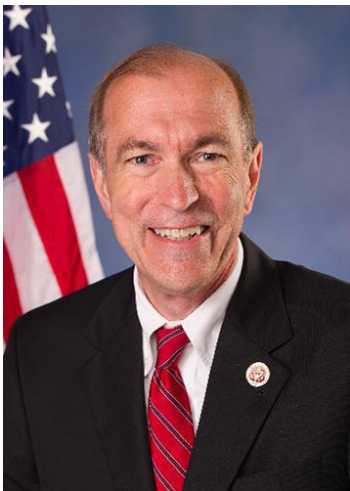
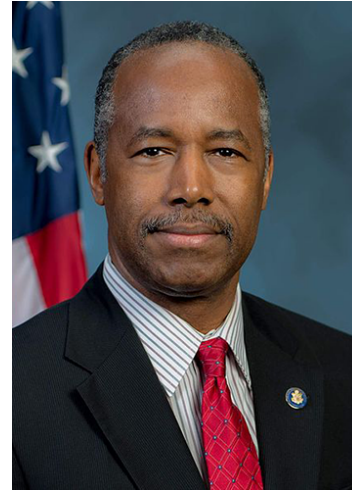
EPA Administrator Scott Pruitt sued the Environmental Protection Agency (EPA) a total of 13 times during his tenure as Oklahoma Attorney General. Insisting that the EPA was “never intended to be the nation’s foremost environmental regulator,” Pruitt targeted a large swath of EPA rules and standards, including limits on sulfur dioxide and nitrogen oxide emissions from power plants, air pollution from mercury and arsenic, health and safety standards for smog pollution, and protections for wetlands. During his confirmation hearing, Pruitt was unable to answer a basic question about lead in drinking water—whether lead is safe at any level—and would not clarify his understanding of the extent to which human activity contributes to climate change. Since becoming EPA Administrator, Pruitt has falsely claimed that carbon dioxide is not a major contributor to global warming; he has frozen the development of a rule aimed at preventing refinery explosions; he has dismissed members of an EPA scientific review board, signaling his intention to replace them with oil and gas industry leaders; and he has downplayed the impact of Trump’s budget for the EPA, which would slash the agency’s funding by \$2.5 billion, or one-third.²⁴



Secretary of State Rex Tillerson serves at the helm of the U.S. diplomatic apparatus. The secretary of state is responsible for articulating a vision for how foreign governments should conduct themselves on the global stage and for taking appropriate diplomatic action to promulgate that vision. When Tillerson was an executive at Exxon, the company faced criticism for its human rights record, including allegations that Exxon employees had tortured local residents in Indonesia in order to protect Exxon’s assets there. During his confirmation hearing, Tillerson refused to comment on or even express concern about mass killings, suppression of political dissidents, and other incidents of oppression in Syria, Russia, Saudi Arabia, and the Philippines. Since taking office, Tillerson has lifted human rights conditions that had previously restricted arms sales to Bahrain and declined to attend the State Department’s release of its annual human rights report. Tillerson has also informed State Department employees that he believes the Trump administration’s \$10 billion (or 28 percent) proposed cut to department funding is necessary. Career diplomats have been instructed not to speak to Tillerson, and he has eschewed customary meetings with State Department officials during all of his foreign trips to date.²⁵

Housing and Urban Development (HUD) Secretary Ben Carson

had no prior experience with affordable housing before taking his current position. One of HUD's major priorities is to ensure enforcement of the Fair Housing Act, which aims to prevent housing discrimination. Yet in 2015, Carson suggested that he did not believe in that goal, writing that a HUD rule requiring analysis of racial bias in zoning laws was a "social engineering scheme" and objecting to a Supreme Court ruling that found that housing policy that has a discriminatory impact, even if unintentional, can be labeled discriminatory. Carson has expressed the belief that comfortable accommodations in low-income housing breed dependency, and he recently joked that affordable housing dwellers lacked only "pool tables" after touring a facility. During an early trip as HUD Secretary, Carson visited Detroit to tout the success of a \$3 billion community development program administered by HUD. Carson failed to note that Trump's proposed budget would eliminate that program altogether. The \$6.2 billion total cut that HUD faces threatens to severely restrict access to public housing for low-income households, but Carson has not yet publicly commented on the cut.²⁶



Export-Import Bank president nominee Scott Garrett

was until this year a member of the House of Representatives. While serving in the House, Garrett called the Export-Import Bank "a bank that embodies the corruption of the free enterprise system." When Congress forced a temporary shutdown of the Export-Import Bank in 2015, Garrett proudly supported the shutdown, voting against the Bank's reauthorization. Of Garrett's nomination, the *New York Times* wrote: "As a critic of the organization that he has been asked to lead, Mr. Garrett fits the mold of the deconstructionists who Mr. Trump found appealing in forming his cabinet, like Rick Perry at the Department of Energy and Scott Pruitt at the Environmental Protection Agency." "You have to make sure you are not putting someone there who is a saboteur," Sen. Heidi Heitkamp (D-N.D.) said of Garrett in the same article.²⁷

Prospective nominees to the Board of Governors oppose measures the Fed has taken to aid economic recovery

Table 2 shows the current makeup of the Federal Reserve Board of Governors.

Table 2

Members of the Federal Reserve Board of Governors as of July 2017

Governor	Entered office	Term expires
Janet Yellen <i>(chair)</i>	February 3, 2014 (as chair)	February 3, 2018 (as chair)
	October 4, 2010 (as vice chair)	January 31, 2024 (as governor)
Stanley Fischer <i>(vice chair)</i>	June 16, 2014 (as vice chair)	June 12, 2018 (as vice chair)
	May 28, 2014 (as governor)	January 31, 2020 (as governor)
Jerome H. Powell	May 25, 2012	January 31, 2028
Lael Brainard	June 16, 2014	January 31, 2026
Vacant		
Vacant		
Vacant		

Economic Policy Institute

Because all of the governors have several years remaining in their terms, they all have a role to play in protecting the Fed's recent accomplishments. The Board of Governors is traditionally a consensus-driven body, and even if the membership of the Board looks very different one year from now, the experienced voices of the current governors can have tremendous impact on future deliberations. The four sitting members of the Board of Governors will constitute a majority of the Board as long as they choose to remain, and Trump appointees will therefore need to solicit their input and agree together with them on the appropriate course of monetary and regulatory policy.

Still, there is no question that significant changes are in store for the Board of Governors. President Trump has three vacancies to fill, and various names have been floated as likely nominees to these vacancies. Like so many Trump nominees and appointees, some of the prospective nominees have troubling conflicts of interests, extreme views, or other aspects of their backgrounds that suggest they will not support the efficacy of the institution they're appointed to serve. Trump has already filled an array of administration positions with financial sector insiders who cannot be expected to properly monitor financial safety, and he has met with economic advisers who have dangerous ideas, including the outright abolition of the Fed.²⁸

If appointed and confirmed, the leading contenders for Board of Governors positions would all represent a significant departure from Yellen's regulatory policies and full employment objective. Almost without exception, top contenders have made dire and unfounded pronouncements about recent measures the Fed has taken to aid economic recovery. The fragile progress toward a full employment economy protected from Wall Street excess would be threatened were Trump to succeed in reshaping the Board of Governors with these nominees.

Here is a list of prospective nominees for the Board of Governors and some of their economic positions:

Randal Quarles is the Trump administration's first nominee for the Board of Governors, and has been nominated for the top regulatory position at the Fed. Despite being Trump's pick for vice chair for supervision, Quarles has spent most of his career pushing for looser regulations and greater market concentration in the financial sector. A self-described "Wall Street lawyer" and private equity insider, Quarles advised JPMorganChase & Co., Deutsche Bank, and others on major mergers. At The Carlyle Group, Quarles advocated for relaxing a Federal Reserve regulation on private equity's ownership of banks, then profited from that change when the Carlyle Group invested in BankUnited. Quarles opposes the Volcker Rule, a part of the Dodd-Frank Wall Street Reform and Consumer Protection Act that seeks to make the financial system safer by prohibiting banks from betting their own money on speculative investments. And his general attitude toward regulations can best be summed up with a line he delivered during a speech as a Bush Treasury Department official: "Markets are always ahead of regulators, and frankly that's how it should be."

On monetary policy, Quarles is an enthusiastic supporter of reducing the Fed's discretion by imposing a Taylor Rule (a formula that prescribes a value for the federal funds rate). He believes that low interest rates—not the bank deregulation he has championed for years—are a "source of systemic risk."²⁹

Marvin Goodfriend has been reported as another Trump nominee to the Board of Governors. On monetary policy, Goodfriend is an outspoken hawk, and has called explicitly for the elimination of the full employment mandate. In March 2017 testimony, Goodfriend called the full employment mandate "incoherent," and in 2012, he agreed with the suggestion that the American economy would be better if the Fed focused only on price stability, calling the Fed's efforts even to get to 7 percent unemployment a "Herculean" task. Goodfriend believes the current Fed leadership has been a "disaster" and has no credibility to tackle inflation. He is skeptic of any attempt to monitor the safety of the financial system, and is a staunch advocate of the Financial CHOICE Act and all of its provisions targeting the Volcker Rule and other regulations.³⁰

Gary Cohn is Trump's National Economic Council director and one of the lead contenders to be the next Fed chair. From 1990 until 2017, Cohn worked at Goldman Sachs, where he rose to the number two position, serving as president and chief operating officer. Cohn is one of five former Goldman Sachs executives who have been picked for senior roles in the Trump administration. If confirmed to the Fed, Cohn would join an FOMC that is already stacked with Goldman Sachs veterans; in fact, one-third of the Fed's 12 regional Reserve Bank presidents have strong ties to Goldman Sachs. Cohn was once described as a "driving force" behind Goldman Sachs's mortgage trading department, which notoriously encouraged clients to invest in subprime mortgages, then bet against those same investments. According to reporting by McClatchy, Goldman Sachs "marketed \$57 billion in risky mortgage securities, including \$39 billion backed by risky home loans in 2006 and 2007 without telling investors it was secretly shorting the housing market." A subsequent Senate investigation of these practices revealed that Goldman executives, including Cohn,

had engaged in e-mail exchanges speculating about the “serious money” they might make betting against the housing markets. Ultimately, Goldman Sachs decided to make larger investments in bets against the housing market than bets in favor.

When Goldman Sachs’ actions during the financial crisis were later scrutinized by the Financial Crisis Inquiry Commission, Cohn misled the Commission during testimony under oath. Cohn testified that “Goldman had tapped the Fed’s discount window—the mechanism that allows banks to get emergency funding—only once for a ‘de minimis’ amount of money,” when Goldman had actually utilized the discount window five times between 2008 and 2010.³¹

Kevin Warsh was a Federal Reserve governor from 2006–2011 and has been cited as a possible nominee for Federal Reserve chair. Warsh was a Fed official and an unofficial emissary to Wall Street during the run-up to and onset of the Great Recession, yet missed key signals that a financial crash was imminent. In a March 2007 speech, Warsh described the financial system as healthy and innovative, hailing, in particular, derivatives and credit default swaps—two key contributors to the coming financial crisis. During the summer of 2008, as the crisis began to unfold and unemployment began to rise, Warsh was continuing to warn about “inflation risks.” Warsh’s analysis remained obtuse after the crash. For instance, he has claimed that subprime mortgages “were not at the core of the global crisis.” Throughout the post-crash period, Warsh expressed reservations about the measures the Fed was taking to assist the reeling economy, and as early as 2009, with unemployment still at crisis levels, he suggested it may soon be prudent to return interest rates to more “normal” levels. Warsh also made incorrect claims that the Fed’s efforts to shorten the recession and spur a faster recovery were responsible for a rise in inequality.³²

Glenn Hubbard was the chair of the White House Council of Economic Advisers during the early part of George W. Bush’s administration. Though he’s mostly known for pushing the Bush tax cuts during this period, he was also an advocate of the laissez-faire regulatory approach that helped bring on the financial crisis. Hubbard once argued that derivatives—a leading cause of the financial crisis—improved the “allocation of risk” and “enhanced stability.” After the crisis, Hubbard pointed to the Fed’s accommodative policy in the early 2000s, rather than to the risky Wall Street behavior he had promoted, as a major cause. His Wall Street–friendly approach is perhaps unsurprising given the hundreds of thousands of dollars in consulting and speaking fees he has accepted from large financial firms, including Goldman Sachs, JPMorganChase, Bank of America, and Citigroup. In a December 2016 op-ed, Hubbard labeled the Fed’s low-interest-rate policy “hyper-accommodative” and warned that low interest rates harm savers, without considering the potential benefits stemming from lower rates.³³

John Taylor is a Stanford economist rumored to be in the running for Federal Reserve chair. He is the namesake of the “Taylor Rule,” a prescriptive monetary policy tool that would have significantly constrained job growth had it been in use over the past five years. His ardently hawkish views led him to be critical of the expansionary policies that the Fed pursued during the Great Recession. In a 2010 letter, he called for the discontinuation of large-scale asset purchases, incorrectly warning that they would lead to inflation.³⁴

Conclusion: Yellen should remain at the Board of Governors to continue her legacy and protect against threats to full employment

Over the past 10 years, the Federal Reserve has helped bring our economy back from the brink. For the work she has done navigating this contentious period at the Fed, stabilizing the economy through sound financial protections, and resisting pressure to change course before full employment was within reach, Janet Yellen deserves to be commended. Though the topline unemployment figure recently reached its lowest point in 10 years, prime-age employment still is not where it was before the recession and wage growth remains below target. With economic conditions especially sensitive to rapid interest rate hikes at the moment, Yellen and the Fed should continue to weigh remaining signs of weakness in the recovery, and proceed with caution over the year ahead. Persistent signs of labor market slack and slow wage growth are not the only factors that should give Yellen pause. Also concerning are the threats to the Fed in the form of an erratic president, hawkish deregulating nominees to the Board of Governors, and a hostile Congress. Yellen should remain at the Board of Governors to protect against these threats, and continue to advocate for an inclusive, full-employment economy where all communities have the opportunity to benefit from economic prosperity and security.

The structure of the Federal Reserve allows for continuity not only by making the chair a renewable position, but also by allowing all governors, including the chair, to serve 14-year terms. In his book *The Power and Independence of the Federal Reserve*, Peter Conti-Brown explains how this structure has often resulted in the reappointment of sitting chairs, writing, “Because of the structure of the governor and chair appointments—the fact that the chair can serve almost indefinitely, and everyone knows this—the sitting chair is nearly always a candidate for reappointment, whether the president likes it or not.”³⁵

Though the president is powerful, even sharp political and ideological differences have not historically precluded Federal Reserve chairs from being reappointed. Federal Reserve chairs exert their own influence and power and can build the case for their reappointment through sound policy and effective management. As Conti-Brown notes:

The four-year, renewable term for the Fed chair provides an opportunity for the president and public to reassess the accomplishments of the Fed chair. But no sitting chair with time left to serve as governor, who is interested in reappointment, can be dismissed as a candidate. The effective Fed chair builds a financial and political constituency for reappointment. The president must keep that constituency in mind when making the reappointment decision, whatever the statute says. Indeed, it is telling that of the eight chairs of the Board of Governors since the

position was created in 1935, five were reappointed by a successive administration. And four of the five were reappointed by a successor president of a different party.³⁶

The case for reappointing Janet Yellen as Fed chair is strong. She consistently supported the Fed's efforts to proactively and forcefully confront the Great Recession and ameliorate the damage it inflicted on American families. During the worst economic and financial crisis since the Great Depression, some missteps were likely inevitable, but at a time when other macroeconomic policymakers were completely derelict in their duties (or actively making recovery harder), the Fed consistently pushed the economy in the direction of full employment. Yellen and the Fed deserve much praise for pursuing full employment, particularly because it required them to develop and deploy unconventional tools. Throughout the recovery, critics have warned that unconventional monetary policy would invite disaster by undermining central banking's reputation for a conservative and cautious approach weighted toward achieving price stability. These critics have been proven wrong, as Yellen has led the Fed closer to achieving both sides of its dual mandate than it has been in years.

Yellen was also the right person to assume the Fed chair in early 2014. Intense pressure began in that year to rapidly "normalize" monetary policy even before the economy itself had normalized. The Fed under Yellen recognized instead that many broad indicators of economic health needed to improve and so largely kept the Fed's support for full employment in place. This paid off, with much progress on these indicators and no hint of excess inflation or overheating.

Based on our assessment of Yellen's accomplishments as Fed chair, we believe she not only deserves reappointment but will have the needed financial and political constituency to secure reappointment. As Conti-Brown notes, the fact that her term as governor does not expire until 2024 gives her additional leverage in seeking reappointment. Moreover, it is not unprecedented for a Fed chair to remain on the Board of Governors even after a president has refused to reappoint him or her as chair. In fact, this very course of action was pursued by one of the most influential and respected figures in Federal Reserve history. Marriner Eccles made his initial appointment to the Board of Governors by President Franklin Roosevelt contingent upon sweeping structural changes that would make the Fed more publicly accountable and less beholden to the financial sector. Because he envisioned and helped create the Federal Open Market Committee (FOMC), the Federal Reserve Building in Washington, D.C., is named for Eccles, who served as Fed chair from 1934–1948.

As chair, Eccles pursued expansionary policy to fight the Great Depression. Once World War II broke out, he led the Fed's move to "peg" government debt to low interest rates to fund the war. When World War II ended, President Truman declined to reappoint Eccles, instead replacing him with an industrialist who would support the continuation of Treasury-Fed "pegging." As Conti-Brown notes, Truman assumed Eccles would be insulted by the demotion and would step down from the Board of Governors. But Eccles saw a pressing need to continue influencing policy and he remained on the Board.

With the Great Depression and World War II over, and the Truman administration turning its eye to Cold War spending, Eccles was concerned that the Federal Reserve needed its independence restored to fight inflationary pressures. He advocated publicly for Federal Reserve independence, and he stood his ground even when Truman took the unprecedented step of summoning the FOMC to the Oval Office. When the Federal Reserve finally regained its independence through the Fed-Treasury Accord of 1951, Eccles resigned.

In general, there was more continuity on fiscal policy and economic conditions between Roosevelt's administration and Truman's than could be expected between the administrations of Barack Obama and Donald Trump. But Yellen faces a similar choice as Eccles. Eccles acted not out of political animus toward Truman, but out of a belief in protecting the Federal Reserve's institutional ability to guard against economic threats.³⁷

Yellen's legacy, control of the Federal Reserve, and the future of the American economy hinge in part on Trump's decision to reappoint Yellen. Even if Trump's nominees to the Board of Governors turn out to be experienced and knowledgeable actors, there is ample reason to believe they will be committed to a deregulatory and monetary agenda that has dangerous ramifications for the country. Trump's three appointees to the Board of Governors, if confirmed, would not constitute a majority on the Board unless Yellen agrees to step down and is replaced by a new chair.

Yellen and the other members of the Board of Governors, as well as members of the United States Senate, must take these factors into account in weighing the dynamics of Board of Governor nominations and at the FOMC. The Fed has historically been a consensus-driven body, and it is rare for the FOMC to make decisions with more than one or two dissents. The deference that is normally shown to the regulatory and monetary policy preferences of the chair means that the Trump administration's decision about whether to reappoint or replace Yellen has outsized implications for the rest of the Board of Governor nominations. Even if Trump's Fed nominees seem to respect the institution of the Fed and have more relevant experience than personnel selections in other areas of his administration, all Board of Governor nominees' views should be carefully scrutinized, especially because of the pressure they'll face to defer to the chair. For example, while Marvin Goodfriend may hold an impressive set of academic and economic credentials, his extreme views on both monetary and regulatory policy should be concerning to anybody who cares about a stable financial system and a full employment economy. If Trump replaces Yellen with a strict monetary hawk or someone who favors deregulation, Goodfriend will likely enthusiastically go along with those policies, and therefore should be opposed.

Should President Trump install governors who want to undermine the full employment mandate or impose constraining rules-based monetary policy, it is worth questioning whether the "consensus-driven" norm at the Fed should hold. If the current governors continue to serve their terms and the newly constituted FOMC sees that it cannot forge a majority consensus for tighter, job-killing monetary policy, it would be forced to moderate the pathway by which the Fed pursues policy. This matters not only because the economic recovery is very fragile, but also because the Fed has recently announced plans to unwind

its historically high \$4.5 trillion balance sheet. It is important for veteran leadership at the Fed to ensure that its balance sheet unwinding transpires in a thoughtful way that does not destabilize financial markets or muddy the federal budget picture. And the ability of Trump nominees to unwind the regulatory framework created by the Fed since Dodd-Frank hinges largely on the question of whether the governors who put that framework in place continue to serve. In a precarious moment for our economy, the need for steady hands at independent agencies is immense. Yellen and her fellow governors should remain at their positions until they are satisfied that their legacy is secure and dire economic threats have passed.

About the authors

Josh Bivens joined the Economic Policy Institute in 2002 and is currently the director of research. His primary areas of research include macroeconomics, social insurance, and globalization. He has authored or co-authored three books (including *The State of Working America, 12th Edition*) while working at EPI, edited another, and has written numerous research papers, including for academic journals. He often appears in media outlets to offer economic commentary and has testified several times before the U.S. Congress. He earned his Ph.D. from The New School for Social Research.

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Endnotes

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