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## Getting Back to Full Employment

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Note: This brief is based on the book *Getting Back to Full Employment: A Better Bargain for Working People*.

## Introduction

Based on conventional estimates of the lowest unemployment rate consistent with stable inflation, the job market has been slack for much of the past three decades. This persistent excess supply of labor has created myriad problems, all of which remain with us to this day. High unemployment, particularly for the long-term unemployed, remains a central problem. But one of the most important, if often underappreciated, aspects of slack labor markets is the extent to which they also hurt job holders through the reduced rate of real wage growth, especially for minorities, low-, and middle-wage workers. In this regard, persistently high un- and underemployment are also implicated in the long-term problem of growing inequality.

When the job market is operating below full employment, fiscal outcomes also take a hit as fewer people are working, either at all or for their desired number of hours. The result is less tax revenue, more spending on safety net programs, and all else equal, higher budget deficits. The last time the budget hit surplus, in the latter 1990s, full employment was the main factor behind the swing from deficit to surplus.

Another serious problem associated with persistent periods of slack labor markets is "hysteresis": when large shares of the workforce are un- or underemployed for a long time, their skills can deteriorate and they can lose their connection to the labor market. At the same time, economic slack typically leads to diminished capital investment. Together, these dynamics can lower the long-term growth rates of the labor force and the broader economy, i.e., they can lower the economy's potential growth rate.

Finally, those unfortunate enough to begin their careers in slack labor markets have often been found to have permanent lower career trajectories, in terms of occupational and compensation advancement.

Conversely, we argue that every one of these problems can be ameliorated by tight labor markets. By facilitating a dynamic wherein employers need to bid up compensation to get and keep the workers they need, full employment raises both the pay and hours worked of low- and middle-wage workers relative to those at the top of the pay scale. In other words, it pushes back against the long-term trend of wage and income inequality.

Moving towards full employment is clearly associated with higher tax revenues, due to more people working and thus paying taxes, and at the same time putting less pressure on safety net programs. Our analysis of the last time the federal budget was in surplus (1998-2001) shows these employment dynamics clearly dominated the more commonly told tale of those years: the fiscal rectitude of the Clinton budgets (which did play a role, but a quantitatively minor one relative to growth).

A very important benefit of full employment is its capacity to reverse some of the damage of hysteresis, as defined above. When people are unemployed for too long—and long-term unemployment has been a particularly pernicious problem of late in the U.S. labor market—their skills and general employability can atrophy in ways that make them less attractive to employers. Recent research has revealed, for example, that simply being unemployed for many months is (not unexpectedly) perceived by employers as a negative attribute. This dynamic has played a potentially damaging role in lowering the share of the working-age population participating in the labor force, which in turn slows the rate of potential G.D.P. growth. We argue that full employment, by fully utilizing available labor resources, including some of those currently sitting out of the labor market, can reverse some of the damage and raise the economy's "speed limit." Note also that if we are correct, then tolerating slack labor markets, say, through wrongly timed austere fiscal policies, is a very expensive mistake indeed.

In other words, if policymakers have the tools to move the economy to full employment, as we believe they do, then not taking action against slack job markets does permanent damage to the rate of economic growth, the rate of job growth, federal and state budgets, career trajectories, and living standards, particularly of the least advantaged.

## What is Full Employment?

For economists, the definition of full employment invokes the tradeoff between unemployment and inflation. More precisely, economists frame the question this way: what is the lowest unemployment rate consistent with stable inflation, otherwise known as the “nonaccelerating inflation rate of unemployment,” or NAIRU?

The Congressional Budget Office (CBO), along with most economists, place the NAIRU at 5.5 percent, though some economists’ estimates go as high as 6 percent. However, our economic history is replete with upwardly biased estimates of the full-employment unemployment rate. Given recent changes in the relationship between unemployment and inflation, the costs of overestimating the NAIRU—costs that fall hardest on the working households that have already faced wage and income stagnation for decades—may now be higher than those of underestimating it.

Theory predicts and evidence finds a correlation between unemployment and inflation. Yet knowing that this correlation exists does not provide policymakers with enough information to accurately or precisely determine the actual level of unemployment consistent with stable prices. In fact, past estimates of the NAIRU have proved to be highly unreliable, implying outbreaks of spiraling prices that never occurred (most recently, this occurred in the latter 1990s). When a group of economists measured the extent of this imprecision, they found a 95 percent confidence interval around NAIRU estimates that included values of less than 4 percent and more than 8 percent.

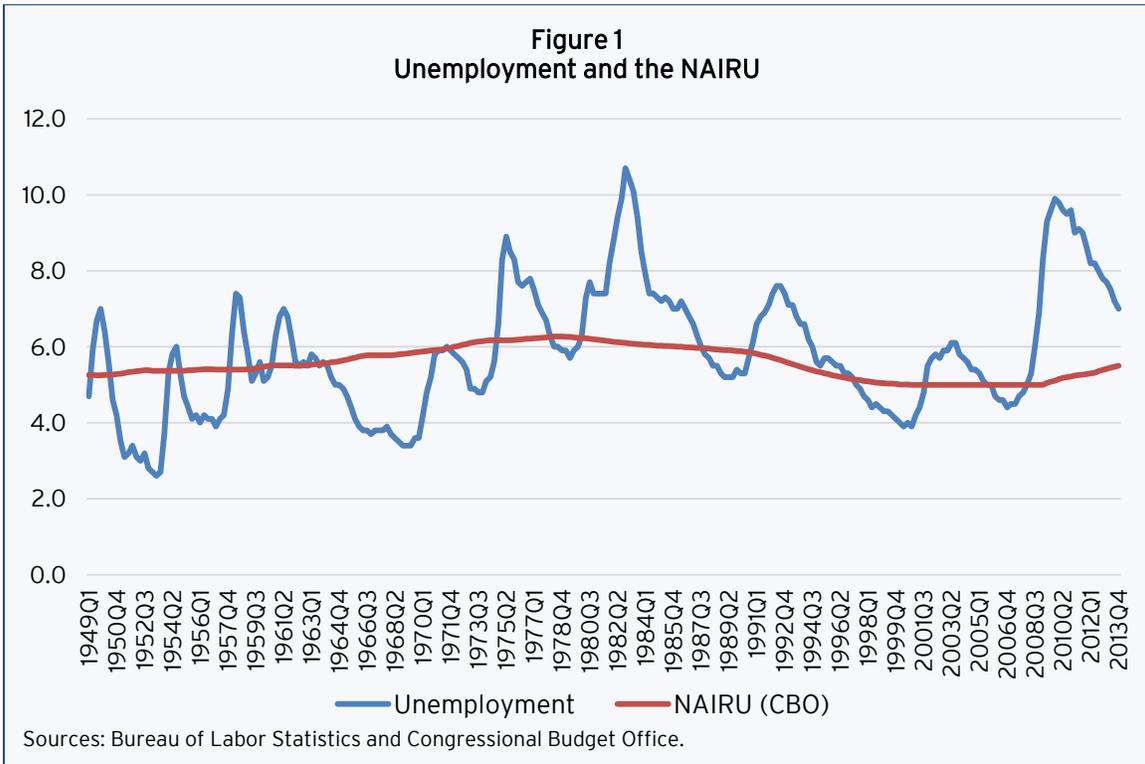
In addition, the correlation between inflation and unemployment has diminished over time, meaning that we would pay a lower price in terms of higher inflation from below-NAIRU unemployment than would have been the case in the 1970s or 1980s. On the other hand, this also implies that lowering inflation through higher unemployment would be harder to achieve now than in the past.

We conclude that it is a mistake to put too much faith in any particular estimate of the NAIRU. While there are risks of higher inflation at low rates of unemployment (though those risks have diminished), we simply cannot accurately pin down the level of unemployment that will lead to rising inflation. For example, in the latter 1990s, unemployment started dropping to levels that economists widely believe would lead to accelerating inflation (Figure 1 below shows how the actual unemployment rate fell below the NAIRU in these years). Yet there is little evidence of accelerating inflation over this period.

This result could reasonably be taken to imply that the 2000 jobless rate of 4 percent remains a reasonable target, but who knows? An honest definition of full employment right now is probably this: it is the rate of unemployment such that if policymakers tried to implement policies that would push that rate down even further, they wouldn’t substantially increase employment. They’d just boost inflationary pressures.

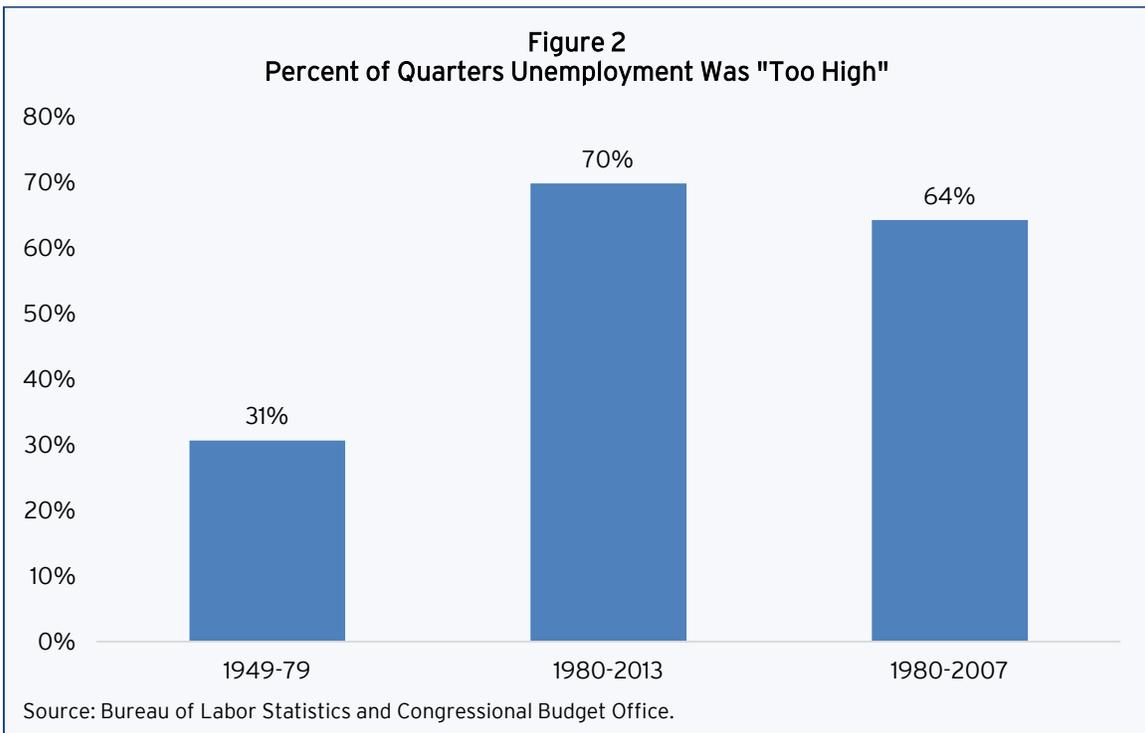
## U.S. History of Full Employment Over Last 60 Years

Though the NAIRU is only roughly estimated, with a wide confidence interval around the “true” rate, it is the industry standard for evaluating the extent to which the job market is slack or tight. In this regard, we can gain useful insights about the history of the U.S. job market from the perspective of the continuum—slack/tight—from comparing actual unemployment to the CBO’s historical NAIRU series.



The first figure plots the actual unemployment rate against the NAIRU. Just eyeballing Figure 1 suggests that in recent decades, the actual jobless rate has spent more time above full-employment line than in earlier times, an impression confirmed by a closer look in Figure 2.

In Figure 2, we simply calculate the share of quarters that the actual unemployment rate was "too high," i.e., above the NAIRU. In the 1950s-70s, the job market was slack one-third of the time by this metric. Since then, slack conditions have prevailed more than twice that amount of time, a result that holds even if we leave out the recent downturn.



Why has the job market been so slack post- vs. pre-1980? There is no widely agreed-upon explanation, though certainly the fact that two particularly deep and protracted downturns fell in the latter period are part of the answer (the recent “great recession” and the early 1980s downturn). The economy has been a lot more open in terms of global trade in the latter period, though this by itself would not necessarily lead to more slack. The problem, as discussed below, is imbalanced trade: we not only traded more in the latter period, we maintained large trade deficits, essentially exporting labor demand to countries with whom we ran those deficits.

Fiscal and monetary policy have also played important roles. As the Federal Reserve (Fed) manages the tradeoff between the unemployment and inflation rates, its actions are implicated in the latter period, although the story here is complicated by different Fed regimes. For example, most recently, former Fed chair Ben Bernanke worked aggressively to lower the unemployment rate, but Congress pushed fiscal policy in the other direction, cutting spending and raising taxes in ways that have counteracted the Fed’s efforts. Also, in the latter 1990s, to his credit, Fed chair Alan Greenspan ignored conventional NAIRU estimates and, as can be seen in Figure 1, allowed the unemployment rate to fall below the NAIRU without raising interest rates.

Other candidates for contributing to the high levels of slack in recent years include “secular stagnation” and economic inequality.

Historically, causes of secular stagnation (meaning a period wherein the economy grows at rates below its potential) relate to the misallocation of considerable economic resources to sectors that are less associated with job growth and more associated with macroeconomic instability. An obvious candidate here is the financial sector, which in recent business cycles has been associated with large bubbles and damaging recessions. While no clear causal chain exists between the growth in the relative size of the finance sector and stagnant growth periods, past instances of secular stagnation, such as the Great Depression and several prolonged downturns in the 19<sup>th</sup>-century, have followed the collapse of asset bubbles. Arguably, the growth of such dangerous bubbles stems from a bloated financial sector.

Increased inequality is a natural candidate for contributing to the pattern in Figure 2 because income, wealth, and wage disparities grew quickly in the latter relative to the former period. But as Bernstein discusses in depth in a recent paper, causality is hard to determine in this case. While there are interesting ways in which inequality may slow growth—e.g., through reduced consumer spending among the “have-nots” and the formation of credit bubbles—it’s also the case, as we stress below, that slack job markets themselves boost unequal outcomes.

Global trade was much increased over the latter slack period shown in Figure 2, but that in itself does not imply higher unemployment. The key issue is whether, on net, trade boosts or reduces domestic demand. For example, persistent trade deficits (meaning we’re consistently buying more from abroad than we’re selling) have the effect of exporting labor demand to other countries. In this regard, the two periods are very different, with significant deficits reducing domestic labor demand in the latter relative to the former period. From 1949-79, the period covered by the first bar in Figure 2, trade was essentially balanced: the average trade balance amounted to 0.3% of GDP. Since then, we have run trade deficits every single year, averaging 2.6 percent of GDP.

These diagnoses give rise to prescriptions in a later section emphasizing a number of policies designed to boost job creation and lower unemployment.

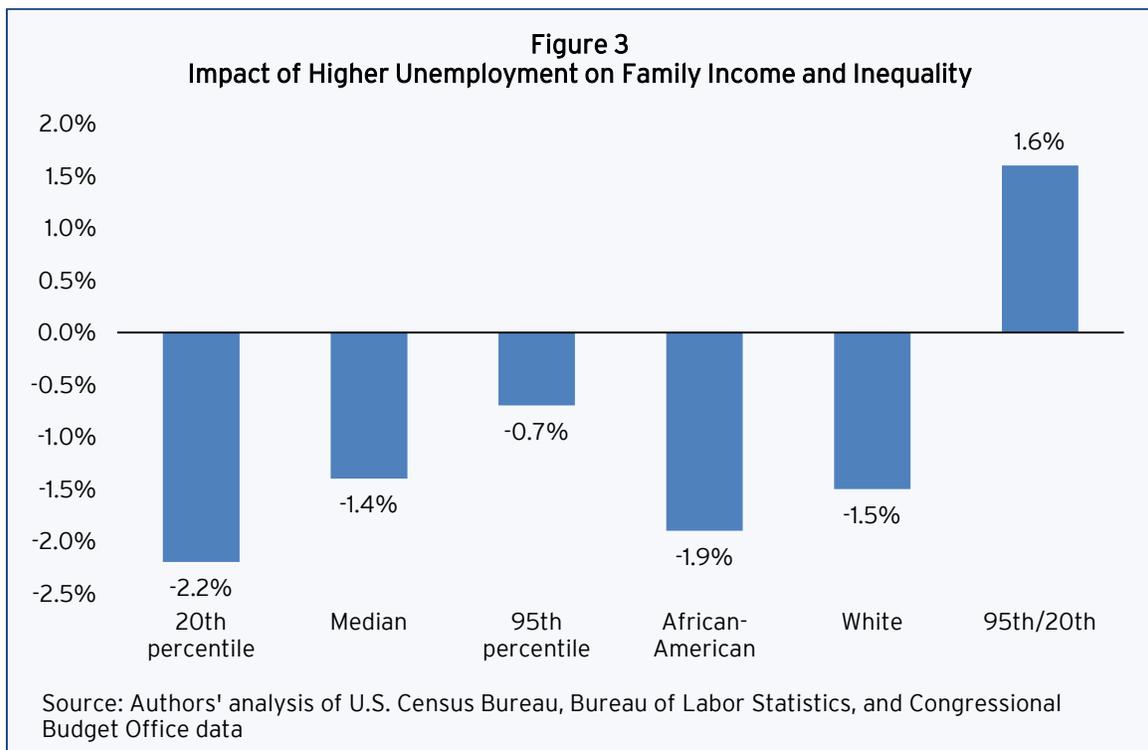
## What’s So Important About Full Employment?

The introduction notes that the absence of full employment is associated with both low and unequal income and wage growth. The next few figures provide empirical analysis of that assertion. Figure 3 shows the outcomes of a simple statistical exercise that correlates the unemployment gap as shown in Figure 1 (actual unemployment minus the NAIRU) with real income trends for various groups and income classes.

The first three bars show that the lower your family income, the more you lose in slack labor markets. For families in the 20th percentile, for each percentage point that the unemployment rate was further from full employment, real incomes fell 2.2 percent; for median families, the

correlation was about two-thirds that of the low-income families, and for high-income families (the 95th percentile) the growth effect loses another third of its impact. For African American families, the impact of a smaller unemployment gap was similar to that of low-income families, and white families saw losses equivalent to those at the median. Though these are simple correlations summarizing complex, dynamic relationships, they imply that a sustained period of slack will have a sustained, negative impact on the real income growth of low- and middle-income families.

Consider these patterns in light of the income inequality debate that has become increasingly prominent in recent years. The forces that are driving inequality—and they are many, including globalization, technology, de-unionization, declining minimum wages, regressive tax policy, and more—push exactly the other way, leading to more income growth the higher you go up the income scale. The last bar in Figure 3 explicitly measures this correlation between slack labor markets and the growth of income inequality, measured here as the ratio of high to low incomes. One extra point of labor market slack is associated with a 1.6 percentage point increase in the ratio of high to low incomes. In this sense, by providing those with the least bargaining power more clout in tight versus slack job markets, full employment is a potent antidote to inequality, and vice-versa.



The process through which full employment drives the correlations just shown relates to hourly wages and hours of work. That is, tighter labor markets pressure employers to raise their compensation offers to get and keep the workers they need, leading to higher hourly wages, again, especially for lower-paid workers, as shown in Figure 5. But equally important, especially given the growth of involuntary part-time work, full employment increases the hours of work for those who want more work but can never seem to find it in slack labor markets.

Figure 4 shows a real-world example of this hours phenomenon. As has been noted, the latter 1990s was the last time the U.S. was clearly at full employment. Over these years, the increase in hours worked was markedly highest for those in the bottom fifth of the income scale. Wealthier households showed smaller gains, in part because from the middle on up, they were already working mostly full-time, full-year. Welfare reform also played a role in increasing labor supply of low-income working parents in these years, but it was strong macroeconomic demand that provided them with the job slots required to meet the expanding supply.

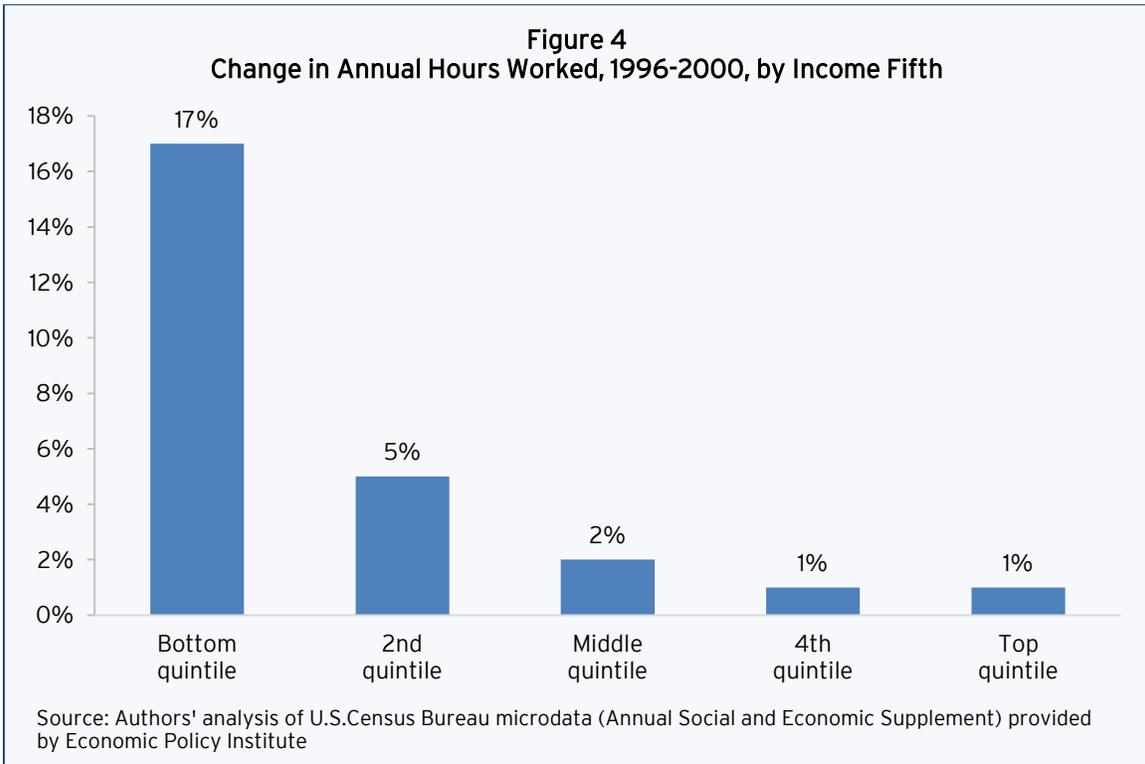
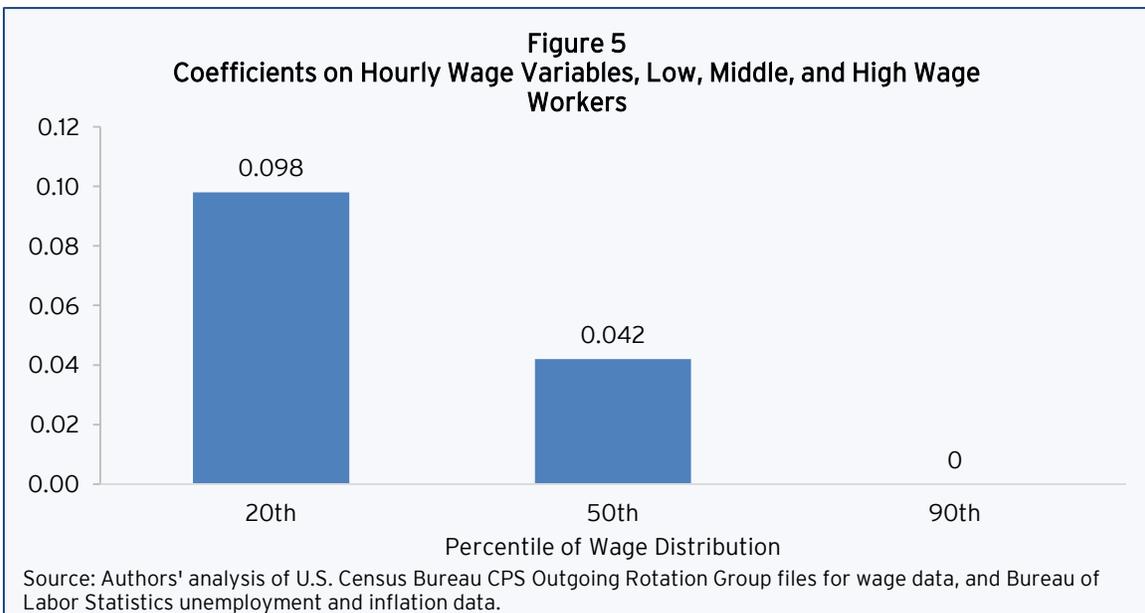


Figure 5, drawn from panel regressions of all states over 32 years (1979-2011), shows the impact of lower unemployment on hourly wages, demonstrating the now-familiar equality-inducing pattern of larger gains at the low end, moderate gains in the middle, and in this case, no gains from lower unemployment at the top of the wage scale.



Full employment also provides an important lift to fiscal accounts. Clearly, if more people are working for higher wages and for more hours, income and payroll tax revenues will increase and many safety net expenditures will decline. It was thus not a coincidence that the last time the budget was in surplus (1998-2001) was during a full-employment economy. President Clinton's progressive early budget/deficit reduction package certainly helped improve the fiscal accounts, but even accounting for those policy changes, the CBO in 1996 projected significant

deficits in 2000 (2.7 percent of GDP). What the budget agency did not account for was the sharp acceleration in growth and jobs, which in turn led to higher tax revenues and lower spending on means-tested programs, which were largely responsible for the swing from deficit to surplus.

Another potentially big downside to persistent slack in the job market is something economists have labeled “hysteresis.” Technically, this means that something happens that induces a downshift in the trend growth rate of key economic variables, like real GDP, labor supply, or investment. But how could slack in the job market lead to such a negative outcome?

Imagine, as has been the case in recent years, that the unemployed experience particularly long spells of unemployment. Many might leave the job market, such that the available supply of labor falls not just in the recession but in the recovery as well. Others may find that their skills depreciate, such that they’re less attractive to employers (research has shown that all else equal, employers consider long-term unemployment a negative signal about the job applicant). Since the supply of labor is a key growth input, these phenomena can, and probably have, led to lower overall growth rates.

Similarly, in periods of weak consumer demand, investors are less likely to find projects with decent returns on their investment, leading to diminished investment in plants and equipment, which has obvious implications for employment, growth, and productivity.

A group of Federal Reserve economists recently produced a detailed statistical analysis of these types of developments. In their estimates, the economy’s potential growth rate fell sharply in the Great Recession and the weak recovery, from about 2.5 percent to around 1 percent, due to declines in labor supply and productivity growth, both of which are functions, at least in part, of hysteresis (some of the recent labor force decline—though less than half—is due to retiring baby boomers, not weak demand).

Finally, it can do lasting damage to the career of a young person if they begin their career in a period of significant labor market slack. Common sense would suggest that it is tougher to get a job and a desired wage in a labor market situation in which supply outpaces demand. But research has found that while this is the case, the damage goes beyond the near-term impact of the down economy. For example, one study by Lisa Kahn found that those who graduate and enter the job market during a recession can suffer an earnings loss of about 7% in their first year compared to those who entered the market in an expansion. Moreover, these effects persist “over many years, with recession-era grads earning 4 percent to 5 percent less by their 12th year out of college, and 2 percent less by their 18th year out.”

Put it all together, and the evidence of the costs of excessive, persistent labor market slack is extremely high. Notably, the costs fall most heavily on those lacking the economic resources to offset them. Any rational policymaker should want to work very hard to avoid the macroeconomic costs of future growth suggested by newer research. The good news is that at least since Keynes, the problem of underperforming economies has been viewed as a “policy problem”—one that did not have to be accepted as the natural workings of some immutable economic laws.

## The Policy Path Back to Full Employment

Thus far we’ve argued that the absence of full employment is deeply damaging in lasting ways. In this section, we summarize policy measures that we believe would help move the job market back towards full employment.

***More Stimulative Fiscal Policy:*** Though austerity measures—reducing government deficits in response to output gaps—have dominated fiscal policy in most advanced economies in recent years, from our perspective austerity is to full employment as leeching is to healing. It is often thought that U.S. policymakers practiced less austerity than some of our European counterparts, but the fact is that the United States’ budget deficit fell to 4 percent of gross domestic product in 2013 from 10 percent of G.D.P. in 2009, the largest four-year decline since 1950. Such deep and precipitous deficit contraction before the private sector was ready to take up the mantle of labor demand is one reason why our output gaps have persisted so long.

What about monetary policy? Taper talk seems precipitous to us given both job-market conditions (still weak) and inflation (not a threat). In our view, the Fed has been the only game in town trying to bring down unemployment for a good while now. The problem is Fed policymakers can't do it by themselves. They need much better fiscal policy to complement their monetary efforts.

**Lowering the Trade Deficit:** As we stress in a recent op-ed, reducing the budget deficit right now hurts growth and jobs, but taking aim at the persistent trade deficit, through which the United States exports labor demand, would help a great deal, particularly regarding manufacturers. Moreover, we contend that trade is a "policy variable," amenable to interventions that push back against competitors who place a fat thumb on the exchange-rate scale to keep their imports cheap and our exports expensive.

We note three ideas that could counter currency management. First, we could pass legislation that gives the government the right to treat currency management as a violation of international trading rules, leading to offsetting tariffs. Second, we could tax foreign holdings of United States Treasuries, making the usual tactic of currency managers more expensive. Third, we could institute reciprocity into the process of currency management: if a country wants to buy our Treasuries, we must be able to buy theirs (which is not always the case now).

The Obama administration, however, has not taken such measures, preferring instead to try to meet its goal of doubling exports by 2015. We of course support higher export targets, which are clearly consistent with more job creation. But there's a key word missing from the administration's formulation. It is not just exports that matter, it's *net* exports.

**Direct Job Creation:** Even with better fiscal and trade policy, the quantity of jobs available to lower-skilled workers is likely to be inadequate for years to come. In our model, that is particularly worrisome because it implies not just high unemployment but also persistent real-wage losses. For that reason, we believe a subsidized jobs program that scales down in good times and up in bad times is needed.

The model we recommend is a successful, big-bang-for-the-buck subsidized jobs program that was in place during the Recovery Act. LaDonna Pavetti, from the Center on Budget and Policy Priorities, recently summarized the results:

Thirty-nine states and the District of Columbia used \$1.3 billion from the TANF (Temporary Assistance for Needy Families) Emergency Fund to place more than 260,000 low-income adults and youth in temporary jobs in the private and public sectors during the Great Recession. Now...there's new evidence that these subsidized jobs programs did what they were supposed to do: help disadvantaged individuals during hard economic times to boost their incomes and improve their chances of finding unsubsidized jobs when the subsidized jobs ended.

**Work-Sharing:** Instead of laying people off in downturns and then paying them unemployment insurance benefits, why not cut the hours of the broader workforce and use the benefits to partially compensate for those lost hours? In other words, instead of concentrating the impact of weak demand on a relatively smaller number of workers, spread around the pain in the interest of keeping people on the job, but for fewer hours.

Let's say you run a company with 100 employees and your demand falls by 20 percent. Your usual approach is to lay off 20 workers, but under work-sharing, you'd cut everyone's hours by one-fifth, and make up at least some of the difference with UI benefits that would otherwise have gone to laid off workers.

Germany used this approach to great effect during the recent deep recession, when its G.D.P. fell just as much as that in the United States (if not more so), but Germany's unemployment rate rose far less. German unemployment is now more than two percentage points below its pre-recession level. True, this idea distributes labor-market slack more than it reduces it, but by keeping more workers on the job, even with reduced pay, it probably helps stabilize aggregate demand better than the current American approach, especially in the long term, by avoiding long spells of unemployment that can do lasting damage at both the micro and macro levels.

Though it is not nearly widely enough known, the U.S. actually has a federal work-sharing policy that was passed by Congress in early 2012, and numerous states use it. But participation rates are too low.

**Infrastructure Investment:** This proposal relates closely to the fiscal recommendation above, of course, and the need to upgrade public goods is widely recognized. But it is important to link this idea to the full employment discussion through points made by Lawrence Summers and J. Bradford DeLong in a recent paper. They argue that under certain conditions, fiscal policy will come very close to “paying for itself,” and those conditions are likely to be met in periods with large output gaps, like the present.

What are these conditions? First, borrowing rates are low, so the incurred interest burden is, too. Second, the fiscal stimulus can prevent long-lasting damage to the economy’s growth rate, so its benefits must be weighed against that very steep potential cost. And third, when we’re talking about infrastructure, gains made on the productivity margin will be lost if the nation’s roads, bridges, waterways, airports, communication systems, and so on just keep deteriorating.

One wants to be careful not to assert a Laffer curve for public investment, but recent work showing the extent of long-term damage that the Great Recession has meted out on potential growth, productivity, and labor force participation strengthens Summers and DeLong’s findings.

## Conclusion

We support the proposals reviewed above, but we’re sure we’ve not “run the table” on good ideas and are wide open to other suggestions. Our main points are that: a) full employment is very much more the exception than the rule in recent decades, and b) unemployment during recessions is amenable to policy initiatives like the ones we review. Better fiscal policy, trade policy, and so on can help close the gap between whatever the NAIRU may be and the current jobless rate.

Not only will implementing these policies help working people, it will help the least well-off the most. In that regard, full employment strikes us as a critical antidote to the increased inequality problem that has in recent months been elevated in the economics debate in the nation’s capital. We also stress the importance of full employment in improving our fiscal outlook and pushing back on hysteresis effects that threaten to lower the economy’s potential growth rate.

Finally, a pessimist (who’s also a sadist) could raise the gridlocked political environment right now as a serious constraint on any of these sorts of ideas. That’s certainly true, but only up to a point. If “constrained politics” is a reason not to think and write about policy solutions, those of us in that business might as well close up shop. In fact, such ideas and debates have long runways, and the more we debate the path back to full employment, the more likely we’ll be to have a viable agenda when cramped politics in the nation’s capital loosen up.

There is much that can be done in this regard without Congress, including trade diplomacy that focuses on reducing currency manipulation and promotion of the existing work-sharing program. In addition, there is considerable action at the state and sub-state level, including subsidized jobs programs in numerous states, infrastructure investment, and more. These efforts should be watched and evaluated.

Whatever the politics, getting back to full employment seems to us a truly non-partisan goal. We can and should have good arguments about how to get there. But there should be no question regarding that destination and the urgency of getting there.

## Authors

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