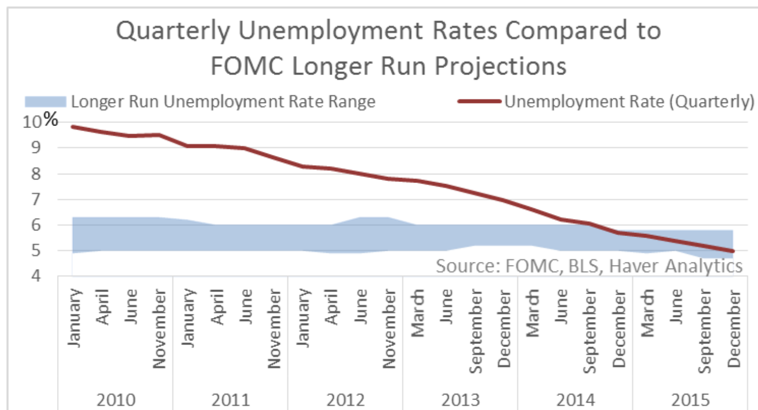
JOINT ECONOMIC COMMITTEE
SENATOR DAN COATS, CHAIRMAN

Is the "Full Employment" Glass Half Full?

February 10, 2016

The term "full employment" has been used for decades by economists and policymakers to signify a strong and healthy labor market, in which all workers who want a job have one except for those who lack skill or ability (structural unemployment) or are simply in a period of transition between one job to another (frictional unemployment). Therefore, full employment is not analogous to zero percent unemployment. Though it bears no precise definition, full employment most commonly means the level of employment achieved by an unemployment rate above zero percent that is consistent with stable inflation (also known as NAIRU—the non-accelerating inflation rate of unemployment—or the "long-run Phillips curve").[1] Full employment is often seen as a moving target—most empirical studies claim it falls within a range of possible values. In fact, members of the FOMC have lowered their projection of the longer-run unemployment rate to a range of 4.7-5.8 percent unemployment (effectively what the Fed estimates NAIRU to be).[2] This range is viewed as approaching full employment.[3]



Note: Unemployment rate range by FOMC announcement date, which shifted in 2013 forward. Actual quarterly unemployment data by calendar quarter.

However, this measure has become increasingly problematic as a proxy of labor market health. For instance, while today's U-3 "official" unemployment rate of 4.9 percent falls within the traditional concept of full employment, it would be imprudent to assume a healthy labor market given that other labor market indicators continue to show significant slack. The current elevated level of the long-term unemployed as a share of the jobless and the declining labor force participation rate are troubling signals of the relative health of the labor market. As a result, traditional estimations of full employment appear less useful in determining the broader health of the labor market than in the past.

Furthermore, while federal law establishes full employment as an official policy goal,[4] blind commitment to full employment at all costs can actually be counterproductive to its achievement. Federal policymakers have an important role in fostering a free-market economy in which Americans enjoy ample opportunities for employment, but some policymakers have viewed the federal government as the paramount facilitator of the labor market. Today, most economists and many policymakers now recognize that government cannot know in a timely manner the level of full employment to fine-tune policy effectively. Given the difficulty of properly understanding the underlying reasons for labor market movements, policymakers' ability to directly influence labor market outcomes through fiscal and monetary policies is limited and at times errant despite best intentions. Absent policy distortions, the private sector is the true driver of labor market dynamism and strength.

Generally Defined but No Consensus on Exact Value

Colloquially, full employment is generally taken to mean the level of employment at which additional demand in the economy will not create more jobs. The Congressional Research Service (CRS) defines full employment as "the

Measures of Unemployment in the Context of Full Employment

Conceptually, the Bureau of Labor Statistics (BLS) defines the labor force as consisting of employed and unemployed workers. The unemployment rate is the share of the labor force who are without a job, currently available to work, and who actively sought work in the past 4 weeks. The BLS publishes several specific measurements of unemployment to give a better picture of the utilization of the labor market, as a percent of the civilian labor force:

- U-1: Persons unemployed 15 weeks or longer
- U-2: Job losers (whose employment ended involuntarily) and persons who completed temporary jobs
- U-3 (official unemployment rate): Total unemployed
- U-4: U-3 plus discouraged workers (a subset of the marginally attached who want a job, are available to work, and looked for work in the past 12 months, but not in the past 4 weeks specifically because they believed that no jobs were available to them), as a percent of the civilian labor force plus discouraged workers
- U-5: U-4 plus all other persons marginally attached (who want a job, are available to work, and looked for work in the past 12 months, but not in the past 4 weeks) to the labor force, as a percent of the civilian labor force plus all persons marginally attached to the labor force
- U-6: U-5 plus total employed part time for economic reasons, as a percent of the civilian labor force plus all persons marginally attached to the labor force

The U-3 rate is considered the official rate and is the rate used in projections by the Congressional Budget Office, the Office of Management and Budget, and the Federal Open Market Committee. In the current labor market environment, however, many analysts are referring to the U-6 measure as the "real" unemployment rate given its broader scope of labor utilization.

Declining labor force participation, particularly among prime-age workers, suggests that there is considerable slack, or underutilization, left in the labor market. Federal Reserve Chair Janet Yellen noted this in recent testimony before the Joint Economic Committee: "...while we are close to full employment or maximum employment, at least to my mind there remains some margins of slack in the labor market. Part-time, involuntary unemployment remains too high. Labor force participation is a declining trend. But nevertheless, I think it is to some extent depressed by the fact that the job market hasn't been stronger."

There are also several general terms associated with different types of unemployment, which in theory inform the appropriate policy response, but in reality are difficult to determine:

- Frictional: unemployment due to persons moving between jobs
- Structural: unemployment arising from technical changes in the products and services demanded, leaving a mismatch between skills and needs
- Cyclical: unemployment due to business cycle flows through recessionary periods, resulting from inadequate economic activity (aggregate demand)

concept that all of the economy's labor and capital resources are in use—there is little idle capacity and unemployment is at its natural rate."[5] The natural rate of unemployment is the sum of structural and frictional unemployment. Despite lacking specific measure, it is widely acknowledged that the recession caused the economy to fall far below full employment.[6] Given the Federal Reserve's current projected short- and longer-run ranges for the normal unemployment rate, many economists and analysts would consider the economy currently at or near "full employment."[7] Thus, according to some, the economy has achieved a balance in which there is no remaining cyclical unemployment (which is said to occur when there is not enough aggregate demand) nor pressures pushing inflation higher.

Full Employment in Name Only?

Reaching the definitional threshold of full employment, if it is even possible to pinpoint in a timely manner, does not necessarily translate into a healthy and thriving labor market, and that is particularly true of the current labor environment. Other labor indicators clearly demonstrate that some slack still remains in the labor market,[8] suggesting that the general definition of full employment requires further scrutiny.

Labor force participation, discouraged workers, and long-term unemployed have yet to fully recover from the recent recession, even when adjusting for demographic changes. As a percent of the jobless, the share of long-term unemployed (27 weeks or more) remains elevated at 26.9 percent in January, and nearly double its 40-year pre-recession average.[9] The number of discouraged workers remains significantly above its pre-recession average at 623,000 (not seasonally adjusted). In addition, the employment-to-population ratio, which is the ratio of employed to the population age 16 and older, remains well below pre-recession levels at 59.6 percent.[10]

Furthermore, the overall labor force participation rate remains near a recovery low of 62.7 percent in January, 3.0 percentage points below the recovery start, even as the national unemployment rate ticked down to 4.9 percent. The labor force participation rate for prime working-age Americans (age 25-54) is down 1.8 percentage points since the start of the recovery to 81.1 percent. Even adjusting for population changes for this age group, roughly 3.2 million prime working-age Americans are out of a job and nearly 2.3 million are out of the labor force compared to before the recession.[11]

What Full Employment Meant Then and Means Now for Policymakers

The unemployment rate, and subsequently its implications for full employment, may have been a useful rule of thumb in the past for labor market strength. However, this is only true as long as other labor market indicators follow in tandem. Broader labor market indicators bear greater examination for labor market health. The reasons for workers to find themselves jobless or leave the labor force may suggest a different remedy today than the stimulative measures initially pursued through fiscal and monetary policies during and in the immediate aftermath of the recent recession. Many economists and policymakers believe that, at least in theory, using these macroeconomic stabilization tools as "counter-cyclical" policy stimulus can boost economic growth in times of distress and rein in growth when the economy is perceived to be overheating (i.e., when growth is occurring at an unsustainable rate and demand outpaces production, leading to higher prices). However, the reality is that the appropriate policies may not be chosen at all or in a timely manner, and the wrong move may prove to yield a worse outcome for the economy than would have occurred had no action been taken at all.

When President Obama appealed to Congress to pass the 2009 American Recovery and Reinvestment Act (ARRA), the Council of Economic Advisers (CEA) released an analysis claiming that ARRA would keep unemployment below 8 percent. Instead, in the months after ARRA was enacted, the unemployment rate shot up to 10 percent. Throughout the subsequent years, the unemployment rate remained above the Administration's promise. In fact, it remained above the level the CEA projected if Congress had passed no stimulus at all. The CEA expected that the unemployment rate would return to 5 percent by 2013, a benchmark only recently achieved in late 2015.[12]

In addition, the $830 billion added to the deficit due to ARRA came at both a fiscal and economic cost. The deficit hit a record $1.4 trillion in 2009, and trillion-dollar deficits continued through 2012. In addition, the nonpartisan Congressional Budget Office (CBO) projected that the long-term costs of ARRA will reduce GDP by up to 0.2 percent after 2016. CBO explained that ARRA's long-run effect will result from the increase in government debt, as each dollar of additional debt crowds out about one-third of a dollar of private domestic capital.[13]

A Close Encounter with Full Employment at Any Cost

With the passage of the *Employment Act of 1946*, which also established the Council of Economic Advisers and the Joint Economic Committee, U.S. federal government policy expanded to include pursuit of full employment. However, what constitutes full employment was not explicitly defined in the Act, given its imprecise definition.[14] This was, in part, application of economist John Maynard Keynes' theory that government spending is necessary to boost aggregate demand. Its inclusion in many advanced countries' policies after 1945 is what Austrian economist Friedrich A. Hayek termed as "perhaps the most dangerous legacy which we owe to the great influence of the late Lord Keynes."[15]

Hayek argued that not all unemployment above the natural rate is indicative of insufficient aggregate demand, and pursuit of full employment through spending to increase aggregate demand risks not only chronic inflation, but imposes a pervasive mismatch between the type of labor supplied and the type of labor demanded by employers. Hayek goes on to note the true problem is to achieve a distribution of labor with a sustainable level of high employment without artificial stimulus. However, Hayek cautions that we are incapable of knowing what that distribution of labor is beforehand.[16]

If one believed that the right to employment and use of the government as employer of last resort is the stuff of Hollywood and *House of Cards*, it may surprise that these were once considerations in Congress as means to achieving full employment. As noted by the St. Louis Fed, the original sponsors of the Employment Act of 1946 believed that massive global unemployment contributed to the rise of National Socialism in Germany, setting the stage for World War II.[17]

In the United States, the unemployment rate rose from an average of roughly 4.5 percent between 1900 and 1930 to 25 percent by 1933, before falling to an elevated level of 15 percent by 1940.[18] The initial draft of the proposed legislation, titled the *Full Employment Bill of 1945*, stated that "all Americans able to work are entitled to an opportunity for useful, remunerative, regular, and full-time employment,"[19] suggesting that America's private enterprise could not generate the conditions necessary for full employment. Economists James M. Buchanan and Richard E. Wagner contend that the legislation implied the free enterprise economy was "officially conceived to be unstable."[20]

The bill was subject to lengthy debate, including arguments highlighting the inability to accurately forecast full employment, the risk of higher inflation from efforts to reduce unemployment, and particularly about whether the right to employment was socialistic and "alien to the basic principles of the United States."[21] The right to employment language, as well as the word "Full" in the bill title, was ultimately removed from the final version, the *Employment Act of 1946*, and full employment as a policy goal became a statement of intention rather than a requirement. Furthermore, the law also recognized maximum employment, production, and purchasing power as important economic goals.[22]

Full Employment at Any Cost: A Near-Redux

The unemployment rate averaged 4.6 percent from 1950 to 1970, but the rate began to rise once again, reaching above 8 percent by 1975. To the surprise of many, inflation was also high, rising above 8 percent, running counter to the understanding that there was an inverse relationship between inflation and unemployment (originally known as the Phillips curve). It was becoming clear that government policy could not permanently trade higher inflation for lower unemployment.[23] Following the stagflation of the 1970s, occurring when both the unemployment rate and the inflation rate were significantly elevated and economic growth slowed, the specter of the right to employment appeared again in the *Full Employment and Balanced Growth Bill of 1976* (informally known as the Humphrey-Hawkins Act). After more than two years of intense debate, the right to employment language was stricken once more, leaving full employment as one of the intended economic goals, along with increased real income, growth in productivity, price stability, and balance of trade and budget, that the federal government is expected to attain.[24]

The final version, entitled the *Full Employment and Balanced Growth Act of 1978*, also set explicit targets for unemployment and inflation, which could be amended by Congress.[25] The debate amongst policymakers as to whether citizens have "the right to a useful and remunerative job,"[26] and implicitly, that the government should be an "employer of last resort"[27] has continued in iterations over the past several decades. Buchanan and Wagner note in the context of a free society, though labor market readjustments can be postponed by policymakers in pursuit of full employment, they cannot be prevented.[28]

Recognition of the significant limits to direct fiscal management of the economy ultimately prevailed. Nonetheless, the language suggests that the federal government pursue maximum employment as one of its objectives through fiscal policy measures, as well as coordination of fiscal and monetary policies, given the Federal Reserve's mandate to pursue price stability and maximum employment through monetary policy measures.[29]

Considerations Going Forward

There are significant tradeoffs associated with using fiscal and monetary policies to bring the economy back to full employment. Federal borrowing to meet that goal comes with long-term economic costs and exacerbates intergenerational inequities.[30] Indeed, CBO stated as much in its aforementioned evaluation of the long-term effects of ARRA. Similarly, using expansionary monetary policy to artificially lower the cost of credit and thereby boost employment comes with the risk of distorting prices and inflating market bubbles and malinvestments in the economy. This inevitably leads to the unintended, economically deleterious consequences of misused resources and subsequent economic losses.

Furthermore, the underlying reasons for changes in economic or labor market trends may not necessarily be well understood in order to determine the appropriate policy. For example, structural changes underlying the economy can be confused with cyclical changes. As noted in the aforementioned CRS report, if a worker leaves the labor force to attend school in order to switch careers, such a move would be considered structural, while leaving the labor force for school because there is currently no work available would be considered cyclical.[31] Buchanan and Wagner emphasize that "we must try to understand the institutional processes that may have produced an observed result before we act on the end result itself."[32]

Today, it is widely understood that monetary policy can only affect unemployment in the short term. The FOMC has stated that it does not have a specified fixed goal for full or "maximum" employment, but rather, "policy decisions must be informed by its members' assessments of the maximum level of employment, though such assessments are necessarily uncertain and subject to revision."[33] Furthermore, the San Francisco Fed notes that relying on a single labor market indicator "has become more difficult since the Great Recession, which is why policymakers have made it clear that they will rely on a broad range of indicators when gauging labor market conditions."[34] As such, in anticipation of the labor market and inflation continuing to progress towards their longer-run trends, it is expected that following the initial target federal funds rate hike of 25 basis points announced in December 2015, the Fed will continue to cautiously wind down accommodative policies as it continues to monitor those indicators in pursuit of its mandates.

Perhaps more concerning is that, once slack in the labor market dissipates, the economy may look markedly different from previous realizations of "full employment." Many analysts and experts are starting to suggest that the U.S. economy is on pace for a slowdown given that productivity, population, and labor force growth, and subsequently hours worked, are slowing. It is quite possible that the recession, paired with longer-term structural trends in technology and demographics, as well as policy changes that affect the reward of work, have altered incentives to participate in the workforce, in hours worked, and in starting and growing businesses. Many policies that the Administration pursued and offered in the aftermath of the recession are estimated to negatively affect the labor market. For example, CBO projected that a proposed federal minimum wage to $10.10 per hour could amount to an employment reduction of as much at 1 million workers.[35] In addition, CBO also estimates the implementation of the Affordable Care Act will cause a labor force reduction of roughly 2 million full-time equivalent workers by 2025.[36] Further, the Administration issued a record number of 82,036 pages of regulation to the Federal Register in 2015, amounting to more than 3,378 final rules and regulations and adding to the near-$2 trillion in lost economic productivity and higher prices due to cumulative regulatory burdens.[37]

Rather than the Administration's policies, Congress should look to pro-growth, structural policy measures and reforms, including changes in spending and tax provisions, and deregulatory measures that aim to increase the incentives for potential workers to find jobs, and for businesses and entrepreneurs to hire and train workers.[38] Above all, in this uncharacteristically slow-growth environment, it remains more important than ever that Congress and the Federal Reserve avoid taking hasty action that risks destabilizing an already fickle economy.

---

[1] Economists Milton Friedman and Edmund Phelps argue that there is a distinction to be made between the short-run and long-run timeframe for the Phillips curve. Meaning, once workers' expectations of price inflation are fully incorporated (meaning workers expect their wages to increase at the same rate as their eroding purchasing power, implying a constant real wage rate), the natural unemployment rate is compatible with any level of inflation. For more information, see: Kevin D. Hoover, "Phillips Curve," The Concise Encyclopedia of Economics, Library of Economics and Liberty, http://www.econlib.org/library/Enc/PhillipsCurve.html

[2] FOMC, December 2015; see also: Jon Hilsenrath, "Nobody Knows Nairu, and That's a Problem for the Fed," *The Wall Street Journal*, February 13, 2015, http://blogs.wsj.com/economics/2015/02/13/nobody-knows-nairu-and-thats-a-problem-for-the-fed/

[3] "Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents under their individual assessments of projected appropriate monetary policy, December 2015," FOMC, December 16, 2015, http://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20151216.pdf

[4] G. J. Santoni, "The Employment Act of 1946: Some History Notes," Federal Reserve Bank of St. Louis, November 1986, https://research.stlouisfed.org/publications/review/86/11/Employment_Nov1986.pdf

[5] Marc Labonte, "Returning to Full Employment: What Do the Indicators Tell Us?" CRS, June 2014, R43476, https://www.fas.org/sgp/crs/misc/R43476.pdf

[6] For box: "Table A-15. Alternative measures for labor underutilization," http://www.bls.gov/news.release/empsit.t15.htm; "The Economic Outlook," Hearing before the Joint Economic Committee, December 3, 2015, http://www.jec.senate.gov/public/index.cfm/hearings-calendar?ID=BE436A26-83D2-42FB-8281-074A0D2F9AF1; Arnold Kling, "Rethinking Macroeconomics, Continued," Econ Log, August 20, 2009, http://econlog.econlib.org/archives/2009/08/rethinking_macr.html

[7] Josh Zumbrun, "Economists See U.S. on Cusp of 'Full' Employment, WSJ Survey Says," *The Wall Street Journal*, October 8, 2015, http://www.wsj.com/articles/economists-see-u-s-on-cusp-of-full-employment-wsj-survey-says-1444313041

[8] Tim Worstall, "This Is As Good As It Gets Folks: The US Is About at Full Employment," Forbes, October 9, 2015, http://www.forbes.com/sites/timworstall/2015/10/09/this-is-as-good-as-it-gets-folks-the-us-is-about-at-full-employment/

[9] JEC author's calculations of the 40-year pre-recession average of long-term unemployed as a share of the jobless; data from BLS.

[10] "The Employment Situation – January 2016," Employment Situation News Release, Bureau of Labor Statistics, February 5, 2016, http://www.bls.gov/news.release/empsit.htm

[11] JEC author's calculations, taking pre-recession prime working-age labor force participation and employment-to-population ratio rates and applying those rates to current population for that age cohort (seasonally adjusted by Haver Analytics), finding the difference between the pre-recession rate-adjusted levels and current reported levels for the prime working-age labor force and employment; data from BLS.

[12] Christina Romer and Jared Bernstein, "The Job Impact of the American Recovery and Reinvestment Act," January 9, 2009, http://otrans.3cdn.net/45593e8ecbd339d074_l3m6bt1te.pdf
[13] "Estimated Impact of the American Recovery and Reinvestment Act on Employment and Economic Output in December 2013," Congressional Budget Office, February 2014, Page 8, http://www.cbo.gov/sites/default/files/cbofiles/attachments/45122-ARRA.pdf
[14] James M. Buchanan and Richard E. Wagner, *Democracy in Deficit: The Political Legacy of Lord Keynes*, 1977, via the Library of Economics and Liberty, http://www.econlib.org/library/Buchanan/buchCv8c11.html
[15] F.A. Hayek, "Full Employment, Planning and Inflation," Institute of Public Affairs Review, 1950, https://www.ipa.org.au/library/publication/1213679484_document_review4-6_hayek-fullemployment.pdf
[16] Hayek, 1950. An important clarification Hayek makes with regard to use of monetary policy, "That so long as a state of general unemployment prevails, in the sense that unused resources of all kinds exist, monetary expansion can only be beneficial, few people will deny. But such a state of general unemployment is something rather exceptional, and it is by no means evident that a policy which will be beneficial in such a state will also always and necessarily be so in the kind of intermediate position in which an economic system finds itself most of the time, when significant unemployment is confined to certain industries, occupations or localities."
[17] Federal Reserve Bank of St. Louis, November 1986.
[18] Federal Reserve Bank of St. Louis, November 1986.
[19] As quoted by Aaron Steelman, "Employment Act of 1946," Federal Reserve Bank of Richmond, via Federal Reserve History, February 20, 1946, http://www.federalreservehistory.org/Events/DetailView/15
[20] Buchanan and Wagner, 1977
[21] Federal Reserve Bank of St. Louis, November 1986.
[22] Federal Reserve Bank of St. Louis, November 1986.
[23] Hoover.
[24] Federal Reserve Bank of St. Louis, November 1986.
[25] Federal Reserve Bank of St. Louis, November 1986.
[26] "First Principles Series: FDR's Second Bill of Rights," Heritage Foundation, http://www.federalreserve.gov/faqs/money_12848.htm
[27] Farrell E. Block, "Unemployment: Causes and Cures," Cato Policy Analysis No. 4, Cato Institute, October 10, 1981, http://www.cato.org/pubs/pas/pa004.html
[28] Buchanan and Wagner, 1977.
[29] In addition, the Federal Reserve Reform Act of 1977 made explicit the Federal Reserve's objectives, directing the Federal Reserve to "maintain long run growth of the monetary and credit aggregates commensurate with the economy's long run potential to increase production, so as to promote the goals of maximum employment, stable prices, and moderate long-term interest rates." The third goal is not explicitly discussed, and it is common to refer to the Fed's policy goals as a "dual mandate." See more: Joy Zhu, "Federal Reserve Reform Act of 1977," Federal Reserve History, November 16, 1977, http://www.federalreservehistory.org/Events/DetailView/38
[30] Labonte, June 2014.
[31] Labonte, June 2014.
[32] Buchanan and Wagner, 1977.
[33] "What are the Federal Reserve's objectives in conducting monetary policy?" Federal Reserve Board, http://www.federalreserve.gov/faqs/money_12848.htm
[34] Canyon Bosler, Mary C. Daly, and Fernanda Nechio, "Mixed Signals: Labor Markets and Monetary Policy," *FRBSF Economic Letter*, Federal Reserve Bank of San Francisco, December 1, 2014, http://www.frbsf.org/economic-research/publications/economic-letter/2014/december/unemployment-labor-monetary-policy-taylor-rule-job-market/
[35] "The Effects of a Minimum-Wage Increase on Employment and Family Income," Congressional Budget Office, February 18, 2014, https://www.cbo.gov/publication/44995
[36] Edward Harris and Shannon Mok, "How CBO Estimates the Effects of the Affordable Care Act on the Labor Market: Working Paper 2015-09," Congressional Budget Office, December 7, 2015, https://www.cbo.gov/publication/51065
[37] Clyde Wayne Crews, "Bureaucracy Unbound: 2015 Is Another Record Year for the Federal Register," Competitive Enterprise Institute, December 30, 2015, https://cei.org/blog/bureaucracy-unbound-2015-another-record-year-federal-register
[38] Labonte, June 2014.