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Understanding the Challenges of Structural Unemployment

This is a final draft with citations of a presentation made by Jessica Einhorn, resident Senior Adviser at Rock Creek, on November 24, 2014.

The issues of structural unemployment are intertwined and often lead to a focus on income inequality. But, stepping back, we need to first understand structural unemployment in the US—what is it, does it exist, and what are the remedies?

Whenever unemployment reaches elevated levels, a debate is likely to ensue over the degree to which cyclical versus structural factors are to blame. Cyclical unemployment implies that the economy is suffering from too little demand; when demand and growth increase the workers will find jobs.

But structural unemployment is more frightening and more challenging. It implies that some of the unemployed simply lack the skills to participate as labor in the economy. They become long term unemployed – after sufficient discouragement and their insurance is exhausted, they simply drop out of the labor force.

When the percentage of eligible labor in the overall labor force drops, we say that the *participation rate* has declined. That is a key variable in the hunt for the structural element. In the US, long-term unemployment is marked after 26 weeks, which means that those who have given up looking for work after 6.5 months are not part of the unemployment numbers as reported by the Bureau of Labor Statistics. This statistical distinction is a convenient, albeit arbitrary, way of distinguishing amongst the workers whom we treat as cyclically out of work, pending more demand in the economy, versus structurally excluded from work. Structural unemployment reflects a mismatch between the skills of workers seeking jobs and the skills that are needed in the economy regardless of economic growth.

In February 2012, the Congressional Budget Office (CBO) published a study called "Understanding and Responding to Persistently High Unemployment." At that point, the rate of unemployment in the US had exceeded eight percent since February 2009. Three years was the longest stretch of high unemployment since the Great Depression, and the CBO was projecting unemployment of more than eight percent until 2014. In fact, unemployment was on a slow but steady decline, crossing the eight percent inflection point a few months after the study was published. And by September 2014, unemployment had declined below six percent for the first time in six years.

So here we are: the envy of the developed world in job creation. But our so-called great middle

class is not thriving and the political mood, as reflected in the mid-term elections, is downcast.

Technically, the recession that began in December 2007 ended in June 2009, but as the unemployment percentage declined in the years following 2009, commentary focused on the decline in labor force participation, an unhappy explanation for improvement in the top line number.

As recently as this summer, Janet Yellen made clear that during her tenure as Federal Reserve Board Chairman, the Fed would not abandon the third of America's unemployed, 3.2 million people at that time, who have been out of work for more than six months and, therefore, fall out of the unemployment data. Add to this an additional 7.5 million people who were working part-time jobs because they could not find full-time employment, and the broader number of under-employed and unemployed was 12.2 percent as of July 2014.

Of course, employment data comes in monthly and is always subject to further revision. But even with impressive numbers, it is a slow slog with structural dimensions. On the participation rate, Americans who have a job or are looking for one declined in September to a three decade low of 62.7 percent. Before the recession, it stood at 66 percent. Only part of the decline is due to aging baby boomers. Participation of Americans in the prime working age of 25-54 is historically low, according to *The Wall Street Journal*.

But the good news is that the number of job openings across the US reached a 13-year high this summer; employers posted 4.84 million open positions in August, the highest level since 2001, according to a November article by Eric Morath of *The Wall Street Journal*. As Morath said, the U.S. labor market "reached its longest stretch of job creation since at least World War II."

The devil is in the details. In particular, workers coming back since the Great Recession are trading down into lower paying or part-time work, and some employers are finding it challenging to find workers with the skills they need. We always hear that employment gains have not resulted in a general sentiment of optimism. The data shows us why: wages are not rising enough—only two percent in the private sector in the past year, hardly beating the already low inflation.

Indeed, the Great Recession has brought to the fore a concept in economics called "hysteresis." Hysteresis refers to long-term effects that come from severe recessions. A recession reduces capital accumulation, scars workers who lose their jobs, and reduces activities that lead to technological progress. And the effects linger.

Labor Force Participation: Understanding the Numbers

In July 2014, the Executive Office of the President put out a paper called, "The Labor Force Participation Rate since 2007: Causes and Policy Implementations." While the summary reads something like a *preparing for the campaign* document, it is still a neatly compiled treasure trove of data.

The report explains that 2008 was both the year of the Great Recession and a big inflection point when the first cohort of baby boomers became eligible for social security under the option of retiring at 62.

Three factors – the effects of the Recession, the retirement boom, and longer-term trends – together explain the drop in participation rate from 65.9 percent at the end of 2007 to 62.8 percent in the second quarter of this year. The report estimates that approximately half of the decline is due to aging. Approximately 0.5 percent (a sixth of the decline) is cyclical to the Recession. And the remaining one percent is attributable to declining trends in prime age men and women. The increasing impact from aging is expected to offset improvements in other trends going forward as the demographic bulge of the baby boomers works its way through the labor market, even with increasing participation by the elderly from historic trends.

The subtle but very important shift at the Fed to keep the long-term unemployed on their active screen was to move from a focus on reported unemployment to a concern with overall labor force participation. Under Chair Yellen, the Fed was saying that the drop in participation in labor markets was a symptom of an incomplete cyclical recovery in the United States.

It may seem almost trivial but much of the debate actually centers on the definitions that prevail. A syllogism:

- The Fed can only affect cyclical factors, not structural…
  And
- Twenty six weeks out of work is defined as structural unemployment
  Therefore
- The Fed should be taking its foot off the pedal as unemployment numbers reach levels that are conventionally considered at full employment for the part of the population that has been out of work for less than 26 weeks.

By switching to the "participation rate" as an explanatory variable that masks the true unemployment in America, the Fed potentially gets a new lease on stimulus. Until the summer of 2014, the emphasis at the Yellen-led Fed was on the shortfall of jobs, with a decided tilt in favor of considering cyclical factors as the dominant cause. But in August 2014, Chair Yellen made headlines by shifting her stance toward structural issues in a careful and finely balanced speech.

Public Voices

Structural unemployment entered the limelight with a speech by Janet Yellen in March 2014[1] to community organizations in Chicago. She addressed the subject again at the annual meeting of central bankers, finance ministers and academics in Jackson Hole in August[2], after the White House report was published. These have been characterized as "bookends" in Yellen's thinking on the subject and, because of her role as Chair, in the Fed's thinking. Examining those speeches is illuminating, even as she continues to add chapters to the book.

The other two public voices that I have found particularly instructive on unemployment are Larry Summers and Adam Posen. Summers has also stimulated interest by raising the issue of secular stagnation in in a speech at the IMF Economic Forum in November 2013. He also reconsidered the topic in an op-ed for the Washington Post on September 8, 2014. Adam Posen, who heads the Peterson Institute for International Economics and also has a regular column in the *Financial Times*, described an enigma that Yellen and Summers wrestle with and put it in a historical context.[3]

So what is their, and my, fascination? First and foremost, the workings of labor markets are not traditionally the domain of macroeconomists and they certainly have not been in the purview of central bankers during the modern era. Secondly, modern economics is empirically based and it is hard to tease out the data needed to make a judgment about whether there are structural problems in labor markets which are impacting growth or financial stability. For those who have spent their professional lives looking at the level of demand in the economy to see if stimulus is required without risking inflation, there is now a much wider lens. Economists and policy makers

[1] Yellen, Janet. "What the Federal Reserve is Doing to Promote a Stronger Job Market." The Federal Reserve Bank, March 31, 2014, http://www.federalreserve.gov/newsevents/speech/yellen20140331a.htm

[2] Yellen, Janet. "Labor Market Dynamics and Monetary Policy." The Federal Reserve Bank, August 22, 2014, http://www.federalreserve.gov/newsevents/speech/yellen20140822a.htm

[3] Posen, Adam. "Keep rates low until the hidden jobless return to work." *The Financial Times*, August 19, 2014, http://www.ft.com/intl/cms/s/0/12ae0580-26d0-11e4-bc19-00144feabdc0.html#axzz3O9iBYdId

now need to assess whether structural aspects on the supply side are leading to distortions that should affect their management of non-inflationary demand.

Is There Structural Unemployment in the US Economy? Scholarly Research

In February 2012, Atif Mian and Amir Sufi published a working paper for the National Bureau of Economic Research (NBER)[4] that sifted data on employment losses in the non-tradable sector and tradable sector of the economy to see what they would find in terms of the effects of the huge balance sheet losses from the recession on employment through its impact on demand. Mian and Sufi did this by US counties and found that counties that had high leverage going into the financial crisis experienced higher unemployment than neighboring counties with less leverage. They used data to show that it was not structural factors—like declines in construction—that explained the differences between counties. They concluded that “the decline in aggregate demand driven by household balance sheet shocks accounts for almost 4 million of the lost jobs from 2007-2009, or 65 percent of the lost jobs in our data”

Edward Lazear, another prominent economist, published his opinion piece in the Wall Street Journal on September 3, 2012, arguing emphatically that unemployment had exceeded eight percent for three years because of low growth, not because of structural issues. His target was policy. He said neither government officials nor central bankers should find comfort in rationalizations about changes in the labor market. The country needs policies that support recovery.

Another NBER paper, published by Peter Diamond in February 2013[5], took on the puzzle itself. He noted that whenever unemployment stays high for an extended period, it is common for people to conclude that the problem is structural not cyclical, and that unemployment is going to be permanently higher in the future. The focus of his essay is methodological and the bottom line is that “measuring structural change is not simple or easy.”

In another working paper published in July 2014 by the NBER, authored by Kroft, Lange, Notowidigdo and Katz[6], the authors again work through data to show that structural factors like demographics, occupation, and regional location, account for very little of the observed increase

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[4] Mian, Atif and Sufi,Amir. “What explains high unemployment? The aggregatedemand channel.” The National Bureau of Economic Research, February 2012, http://www.nber.org/papers/w17830

[5] Diamond, Peter A. “Cyclical Unemployment, Structural Unemployment.” The National Bureau of Economic Research, February 2013, http://www.nber.org/papers/w18761

[6] Kroft, Kory, Lange, Fabian, Notowidigdo, Matthew J., and Katz, Lawrence F. “Long-Term Unemployment and the Great Recession: The Role of Composition, Duration Dependence, and Non-Participation.” The National Bureau of Economic Research, July 2014, http://www.nber.org/papers/w20273

in long-term unemployment. Instead, their model shows those who are out of work for longer terms stay out of work more permanently, or even drop out of participation by not looking for work. While long-term unemployment had historically been around one percent, it shot up with the great recession and remained at 3.5 percent in 2013, while short and medium-term unemployment returned to normal levels. They suggest that, perhaps, employers discriminate against those who have been out of work for longer periods, or that discouraged workers look less hard.

Workers may drop out of the labor force altogether, although extended unemployment insurance reduces that exit rate. This is a good example of how one must to look carefully at what the data is measuring before reaching conclusions on structural change. We should not be surprised if a termination of benefits leads a long-term unemployed worker to move out of the labor market altogether. Those boundaries are fluid. Bob Funk, former chairman of the Federal Reserve Bank of Kansas City, made this point in an article in *The Wall Street Journal* published November 9, 2014[7]. Now in the private sector, Funk's company commissioned surveys in May 2014 and the results backed up the intuition. Eighty-two percent of America's unemployed said they would "search harder and wider" if their unemployment insurance ran out. He concludes, with no aspersions on the common sense of workers, that extended insurance raises unemployment rates. The elusive trick is to find the right period to offer needed assistance without tipping the balance toward disincentives to work.

Policy Agenda

In Yellen's March 2014 speech in Chicago, entitled "What the Federal Reserve is Doing to Promote a Stronger Job Market"[8], she explained that she and her colleagues found it appropriate to continue to focus on helping the labor market without adding to inflation risks due to something she called *slack*. The heart of her speech explained the word slack, and why it is so important. Basically, it means that "there are significantly more people willing and capable of filling a job than there are jobs for them to fill." As she explains, slack is cyclical unemployment and the government has the tools to address it.

Yellen enumerated the evidence for the conviction. Seven million people are part-time workers but want full-time positions. Job turnover shows firms reluctant to hire and workers reluctant to quit. More evidence was found in wages, which did not rise as in past recoveries. The numbers

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[7] Funk, Bob. "Clear Evidence on Disincentives to Work." *The Wall Street Journal,* November 9, 2014, http://www.wsj.com/articles/bob-funk-clear-evidence-on-disincentives-to-work-1415573805

[8] Yellen, Janet. "What the Federal Reserve is Doing to Promote a Stronger Job Market." The Federal Reserve Bank, March 31, 2014, http://www.federalreserve.gov/newsevents/speech/yellen20140331a.htm

of long-term unemployed are elevated and they seem to be sidelined with risks that they will drop out of the labor force altogether. Finally, the participation rate has declined; astonishingly, participation rates were the same as 1978, when a much smaller share of women worked. She drove home the point by noting that the 6.7 percent unemployment figure of that time might be overstating progress.

Yellen reassured her listeners that the Fed's reduction in the purchase of securities should not be seen as any diminution in the commitment to maintain "extraordinary support for the recovery for some time to come." In short, the Fed was on the case.

Yellen came back to these issues just a month later at a speech on Monetary Policy and the Economic Recovery at the Economic Club of New York[9]. She was talking to fellow forecasters and the thrust of her speech was that reductions in unemployment through 2011 were roughly in accord with forecasts but it only came about with the extraordinary measures of accommodation adopted by the FOMC in the face of near zero interest rates.

Something had broken in the old models and unemployment was not simply declining with a pickup in growth. She renewed her pledge to "systematically respond to unforeseen economic developments in order to promote a return to maximum employment in a context of price stability." Since the risks of inflation overshooting 2 percent were judged to be lower than undershooting, the Fed had taken on employment as its priority challenge.

In the months following Yellen's speeches, the US economy seemed to be picking up steam, while Europe tried to recover from another bump in the road. The debate in Europe centered on the degree to which the ECB could ease without lessening pressure on European governments for structural change and put them back on a competitive footing with the US and Germany. The central dilemma for EU countries was meeting deficit targets without undue fiscal restraint. The way to square that circle was to point to structural change in labor markets, for example, to allow growth without reversing fiscal consolidation. In other words, Europe could not count on a cyclical upswing to cure their labor problems. Its labor markets are recognized to be less flexible than in the US and it was, therefore, more natural to shift the viewpoint when recovery slowed down against the background of the sovereign debt crisis in Greece.

The surprise was that the US was starting to see its own structural problem. As our economy recovered, short-term unemployment was returning to normal levels, while long-term unemployment remained stubbornly high. In a Brookings paper by Alan Krueger, Judd Cramer and David Cho entitled "Are the long-term unemployed on the margins of the labor market?"

[9] Yellen, Janet. "Monetary Policy and the Economic Recovery." The Federal Reserve Bank, April 16, 2014, http://www.federalreserve.gov/newsevents/speech/yellen20140416a.htm

from Spring 2014, Alan Krueger and his colleagues considered the notion that the long-term unemployed might require special efforts to bring them back into the workforce—arguing on behalf of structural unemployment. For some observers, this led to questions as to whether the Fed was taking risks with inflation by counting long-term unemployment as part of the slack. This issue of *bifurcation* would loom larger as the economy moved out of its weak first quarter and was steadily adding jobs. Indeed, both Governors Carney in the UK and Yellen at the Fed seemed to weight the problems in the employment sector more heavily, as they passed their own initial guideposts for monetary easing but saw resistance in the response to demand in the labor market.

By the time summer came, the data and anecdotes on income inequality further muddled the context in favor of easing. The *Financial Times's* Edward Luce, from an article on June 1, 2014 entitled "Tepid US Recovery – It's the Middle-Class, Stupid" noted that at $53,000, the median US household is more than $4,000 (7.6 percent) poorer in real terms than it was at the start of the recession. And Andrew Puzder, CEO of a restaurant chain, wrote an op-ed in *The Wall Street Journal* on June 10th of last year entitled "Why Young People Can't Find Work" arguing it's because the costs of employment had gone up. Leaving aside his agenda, the data was grim for the young. The percentage of 16-19 year olds working or actively looking for work were at some of the lowest monthly rates since the data started being collected in 1948. For 25-29 years olds, the picture was similarly forbidding. Puzder also notes that "Between May 2008 and May 2014, BLS data show that the employable population increased by 14,217,000 while the number of people employed actually decreased by 94,000 and the number of people unemployed increased by 1,404,000." Something structural was occurring.

In June, Martin Feldstein who had already expressed his doubts about quantitative easing, returned to *The Wall Street Journal* to argue that inflation is rising and prices are already rising faster than 2 percent. Feldstein returned to Alan Krueger's paper to question whether we should depend on unemployment to limit wage inflation. He pointed out that one-third of the 6.3 percent of those counted as unemployed had been out of work for more than six months, and that there was no established consensus amongst economists on this issue. As the former president of the National Bureau of Economic Research and Professor of Economics at Harvard noted, more research is needed but we will not know who is right before it is too late. He concludes in an opinion piece published in *The Wall Street Journal* on June 10, 2014, "A misinterpretation of labor-market slack, and a failure to create a positive real federal-funds rate, could put the economy on a path of rapidly rising inflation."

By August 2014, the issue of "labor market dynamics and monetary policy" had become so important that it was the topic for discussion at the annual meeting of central bankers, finance ministers and academics in Jackson Hole, Wyoming.

As already mentioned, Yellen delivered a speech that explained in detail how developments in the functioning of labor markets were making it more difficult for the Fed to make judgments about the degree of slack that monetary policy could remediate. The context was her earlier important statements about how monetary policy would not be tightened as long as unemployment remained above 6.5 percent and inflation within bounds around the two percent target; and the later pronouncement that determining the level of maximum employment within inflation targets "may change over time and may not be directly measureable."

It is interesting to contrast the Yellen speech with that of Mario Draghi at Jackson Hole. Draghi's speech from August 22, 2014 entitled "Unemployment in the Euro Area" deserves to be read in full, as he explains the sorry state of employment in the EU due to the double recessions first in 2008 and then with the sovereign debt crisis again in 2011. Draghi goes on to vigorously argue that in some of the EU countries there is significant structural unemployment. Specifically, he says that "no amount of fiscal or monetary accommodation…can compensate for the necessary structural reforms in the Euro area." The reform agenda in labor markets requires policies that shorten the duration of unemployment by allowing workers to move quickly to new job opportunities and raising the "skill intensity" of the workforce. Draghi's message was that monetary policy could not be relied on to cure labor market ills. Fiscal and structural policy must do their parts.

Yellen's message is different. Unable to designate the structural changes that would bring back labor participation, she is torn about abandoning monetary easing when inflation and, in her view, financial stability are well in hand but unemployment continues to create such real life pain.

Adam Posen and Larry Summers Add Perspective

Writing in the *Financial Times* last summer[10], Adam Posen looks at the debates about the specific numbers and their direction and concludes that there are arguments for both sides when it comes to Fed easing or tightening. But he adds an interesting perspective. He draws a contrast with the past three decades, when central bankers saw inflation breakout as the major risk and worried less about overshooting unemployment. He argues that those assumptions now have to be reversed, especially with the growing understanding that unemployment and underemployment does lasting damage to prospects for employment, which is especially dire for the young; a structural phenomenon.

[10] Please see footnote three on page four

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Posen goes on to question whether keeping interest rates low can cause other harm, especially with heightened concerns for financial stability. He argues that these problems can be directly addressed through macro-prudential instruments that restrict the amount of credit extended by banks. Opinions will differ but it is a powerful statement of the case for those who want government action to combat long-term unemployment.

Over the past year, Larry Summers has been thinking through and educating the rest of us on what it might mean if we are in a secular decline. On November 8, 2013, at the IMF Jacques Polak Annual Research Conference, he took that decline as posing a challenge as to "how we manage an economy in which the zero nominal interest rate is a chronic and systemic inhibitor of economic activity, holding our economies back below their potential". Given high savings rates, low propensity to invest, and real interest rates bound by a zero rate, Summers lamented the long slog ahead. This was a demand side explanation.

About a year later, Summers embraced the argument of National Bureau of Economic Research economist Robert Gordon, noting that it might be that supply side barriers are the real constraint, hitting the economy before that demand constraint can even pinch. Looking back on the year since he wrote about secular decline, he noted the substantial drop in unemployment for the year in the face of low growth, which implies a major slowing of growth potential. He goes on to speculate that the continued declines in unemployment rates will be cut off by employers not finding the workers they need, rising wages hitting employment, or government policy. And the complex circle comes fully around.

As Summers said in the Washington Post on September 8, 2014, "to achieve growth of even 2 percent over the next decade, active support for demand will be necessary but not sufficient. Structural reform is essential to increase the productivity of both workers and capital, and to increase growth in the number of people able and willing to work productively." Summers' thought process brings him to a call for the *new economic agenda*—infrastructure investment, immigration reform, a pro family workplace, energy development and tax reform.

Remedies

When I began reading into the issues surrounding unemployment, especially for monetary policy, I thought I would end up with remedies. It is worth repeating Summers' list of proposed remedies: infrastructure investment, immigration reform, a pro family workplace, energy development, and tax reform. This is the new economic agenda—the agenda of the future. Each of these topics is worth its own seminar, for both political and economic analysis.

But for now I want to end with the central question of how do we puzzle out structural unemployment and determine whether a structural agenda is essential to future economic growth.

At the meetings in Jackson Hole in August, Mario Draghi sat next to Janet Yellen at lunch and, when he rose to speak, he said his own speech was similar to hers.

He said the short story is that Europe has structural problems and the US is cyclical so US labor markets would recover with growth but Europe would need more deep-seated reform.

But Draghi went on to say that reality was more complex. On August 24, 2014 the *Financial Times* article entitled "Jackson Hold Left Stymied by Rogue Jobs Data" noted, "*It's complicated* was pretty much the message from Jackson Hole this year." And, indeed it is. The structure of our labor markets now reflects full-time jobs morphing into full-time workers who turn up as part-time (with several jobs); technology challenging middle-skill occupations; early retirement bringing down participation rates; low turnover and reduced mobility; a lack of data about employment related to digital entrepreneurs, called micro-entrepreneurs; a data collection system that harkens back to a country of laborers in manufacturing and does a poor job of measuring spending, productivity and other aspects of the services sector which accounts for more than three-quarters of our economy.

We don't have the answers but we now have a new set of questions and challenges. Identifying these challenges is the first step toward a solution, and I'm confident we'll get there. We just cannot lose sight that our labor force is facing obstacles unseen since the end of the second Word War. For macroeconomists, labor is the variable that cannot be overlooked.

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