The Job Guarantee: A Primer

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Abstract

This paper will consider various aspects of the job guarantee proposal including its potential social benefits, impact on the labor market and inflation, costs and finance, and important lessons from the New Deal and recent empirical research on public-service employment programs in the OECD. Many argue the success or failure of such an ambitious program depends the details of how it is administered and designed. New Deal era programs were considered a failure due to various issues of design. More contemporary attempts by European countries have been plagued by similar issues which fail to transition the long-term unemployed into the private sector due mostly to a lack of training and education opportunities. There are also many ways to structure the program in terms of how participants receive jobs. We will explore these issues in some depth. To the extent that this paper offers any meaningful contribution to the literature, it will be emphasize the lessons learned from past U.S. experience and more recent experiments in the OECD.

1 Introduction

The problem of mass unemployment is a fundamental characteristic of capitalist economies. In a wage-labor system driven by profit, there will always be a pool of people willing to work but firms unwilling to hire them regardless of the state of the economy. This problem is made worse by the complex dynamics of our economy, where the structural composition of skills needed is always changing rendering certain skills obsolete and creating demand for new skills. This results in a constant mismatch pool of skilled workers (Wray, 2007). Labor-saving technology and automation of production results in higher productivity, but it also means fewer workers are needed to produce at the same quantities as before, pushing workers into the surplus labor pool (Marx, 1990). Globalization further exacerbates the problem as firms are able to operate beyond borders to access cheap labor, further expelling workers into the ranks of the unemployed. Not only is mass unemployment an inherent feature of capitalism, but it is also used as discipline mechanism against wage increases and inflation by capitalist and policy makers, respectively.

However, unemployment has broader social consequences. At an individual level, not only does it result in a loss of income and living standards, temporary unemployment can become permanent if workers are unable to find new employment in a relatively short amount of time as skills atrophy and employers move on without them. Ortego-Marti (2017), consistent with Pissarides (1992), present "evidence that the rate of skill loss varies across occupations and industries. Occupations and industries that require more

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skills experience higher rates of human capital decay." Peck (2011) argues that companies tend to ignore workers altogether who have been unemployed for a year or more. Furthermore, long periods of idleness result in skill erosion or atrophy and behavioral changes that may make them unqualified for work they have done before. As unemployment persists, social networks begin to shrink, and so do word-of-mouth recommendations and prospects for employment. Evidence from Eriksson and Rooth (2014) indicate that employers equate nine months of unemployment to four years of lost work experience. These phenomena induce surplus labor populations which suffer long-term bouts of unemployment and discouragement resulting in a falling labor force participation rate. Thus, "unemployment breeds unemployability, feeding the decades-long uptrend in long-term unemployment, while the economic, political, and social costs are mounting" (Tcherneva, 2014). The mounting costs of unemployment include increased crime rates (Raphael and Winter-Ebmer, 2001), poverty, and inequality (Sheng, 2011). The confluence of long-term trends of falling labor force participation, declining labor union participation, wage stagnation, and declining share of labor income (Gordon, 1997; Pollin, 1998) are making mass unemployment an acute problem.

Many progressive economists advocate for Keynesian expansionary fiscal policy to combat economic downturns and reestablish full employment. This generalized approach relies on government spending and or tax cuts and subsidies to push up aggregate demand to a sufficient level to achieve full employment. However, fiscal policy suffers from multiple problems particularly in downturns. First, fiscal policy tends to be slow to get underway due to inherent time lags: recognition lag, legislative and implementation lag, and effectiveness lag. Due to the legislative process, fiscal policy tends to be inefficiently distributed to regions which may not need it as much as others as law makers in particular vie for a piece of the stimulus, and so, in a downturn, the hardest hit communities may not get the resources they need. In addition, fiscal policy has no explicit counter inflationary mechanism to offset bottlenecks which could occur from indiscriminate spending. Similarly, tax cuts to households can be beneficial especially in balance sheet recessions where households are debt constrained, but their marginal propensity to save will increase in a downturn, what Keynes called the "paradox of thrift," resulting in a decrease in aggregate demand. These issues make for a lot of economic obstacles in fighting downturns.

Policy makers also rely on tax incentives to induce investment. The effectiveness of tax subsidies depend on businesses' participation in taking advantage of them. In a downturn, future expectations of profit tend to go down. You can lead a horse to water, but it will not necessarily drink unless it is thirsty. Therefore, investment incentives in a downturn is likely to be less effective than direct public spending. But assuming the horse is thirsty, investment-led growth, generally, has four major problems: First, investment typically requires a combination of internal and external funds, which increases private debt and leverage leading to financial instability. Second, investment tends to increase the profit share of income as profits return to capitalists which rewards the rich and lowers marginal propensity to consume. Third, it worsens wage inequality as the distribution of higher wages go to unionized workers and tighter labor market sectors. And fourth, it is inflationary as tight labor sectors demand higher wages and increase the average aggregate inflation (Minsky, 1964, 1973; Wray, 2007). Furthermore, growth is unsustainable (politically) as policy makers fear inflation and slow the economy by raising interest rates creating unemployment again. Even in an environment where monetary policy is complementary to continued growth, increasing financial instability could result in a subsequent downturn increasing inequality and unemployment. (Wray, 2007).

Hyman Minsky argued that growth only, generally, is an inappropriate policy, the government needs to also consider the impact of growth on allocation, distribution, employment and prices (Wray, 2007). Such an analysis requires an understanding sectoral dynamics as in a complex economy where some sectors grow faster than others. Therefore, policy makers should consider how policy can be used to improve the distribution of employment by sector.

The solution to mass unemployment requires a bolder, more sophisticated policy solutions which address joblessness in both recessions and expansions. The job guarantee (JG) proposal maybe the bold alternative we are looking for.

What is the job guarantee? A job guarantee program is a proposal to end involuntary unemployment through implementation of a federally-funded program in which the government employs all qualifying persons in the labor force ready, willing, and able to work for the public sector at a socially determined base wage. Participation would be voluntary, but constricted to persons of working age who are unemployed. The program would work based on the buffer stock principle: expanding during contractions as unemployment rises, and contracting during expansions as the economy improves. The program would take on those willing to participate as they are and find them jobs which best fit their existing skills. However, training and education would be a necessary and crucial part of the program to develop participants' human capital and smooth out transition into the private sector work.

This paper will consider various aspects of the job guarantee proposal including its potential social benefits, impact on the labor market and inflation, costs and finance, and important lessons from the New Deal and recent empirical research on public-service employment programs in the OECD. Many argue the success or failure of such an ambitious program depends the details of how it is administered and designed. New Deal era programs were considered a failure due to various issues of design. More contemporary attempts by European countries have been plagued by similar issues which fail to transition the long-term unemployed into the private sector due mostly to a lack of training and education opportunities. There are also many ways to structure the program in terms of how participants receive jobs. We will explore these issues in some depth. To the extent that this paper offers any meaningful contribution to the literature, it will be emphasize the lessons learned from past U.S. experience and more recent experiments in the OECD.

The remainder of the paper will be structured in the following way: Section 2 will provide a brief history of public-service programs and job guarantee proposals in the U.S. and touch on the institutions and proponents who have written on the subject. Section 3 will provide a little more detail the job guarantee as presented in the literature. Section 4 will look to the various social and economic problems in the U.S. that could be addressed by a JG program. Section 5 will look at cost estimates in the literature as well as my own estimate based on more recent unemployment statistics. My estimate considers a $10 and $15 minimum wage plus benefits. Section 4 examines the financing aspects. The most prominent of JG proponents fall into the Modern Monetary Theory camp which argues a sovereign currency issuer does not face any revenue constraints. Section 7 examines the potential impact on exchange rates and inflation. Section 8 will emphasize the lessons from the New Deal era programs and the experience of OECD countries which have experimented with public-service employment programs since the 1970s. This section stresses the importance of incorporating training and education services into any job guarantee program to ensure success. Finally, section 9 will conclude.

2 A Brief History

After the Industrial Revolution, countries with relatively well-developed markets experienced periodic production and financial crises. Despite vast colonial territories which provided access to cheap raw materials, new labor and consumer markets, crises and recessions kept occurring resulting in unemployment fluctuations. Working against the prevailing wisdom of his day, John Maynard Keynes understood that the underemployment of labor resources in a market based economy were not the exception as believed by the classical economist, but the rule (Antonopoulos, 2007). Keynes "held that unemployment was irrational since it meant wasting available resources. Keynes was convinced that the wise application of well-designed policies could create and sustain full employment capitalism" (Pollin, 1998). Keynes also understood that the conventional instruments of economic management, which we use today, particularly Keynesian "pump-priming" fiscal policy and manipulations of the interest rate would not be adequate to manage or prevent crises. Keynes advocated for a more comprehensive intervention of the state on investment. "I conceive," he said, "a somewhat comprehensive socialisation of investment will prove the only means of securing an approximation to full employment; though this need not exclude all manner of compromises and of devices by which public authority will cooperate with private initiative" (Keynes, 1936). Keynes held these views for many years prior to the publication of *The General Theory*. Keynes was active politically with the Liberal Party in Britain, and, according to Crotty (2017), was "probably the - major force" in producing *Britain's Industrial Future* (1928), a collective work of progressive proposals to improve Britain's economy. Keynes proposed a new politically autonomous institution, like the Fed, called Board of National Investment. Under the coordination of this "new and powerful" institution,

> the state will be able to regulate the aggregate rate of growth of the economy by controlling the pace of public capital accumulation and directing investment toward the industries and areas hardest hit by structural unemployment. The Board was to control all the financial capital made available to public and semi-public concerns. It could borrow on its own account and was even authorized to lend to private companies. Keynes estimates that it would control 4 percent of GDP a year to start, and up to 8 percent of GDP in the foreseeable future" (Crotty, 2017).

While most governments did not take up all aspects of Keynes' proposals, governments took bold actions to combat the high unemployment of the 1930s' Great Depression. President Roosevelt's' legislative efforts from the Emergency Relief Appropriation (ERA) Act of 1935 created a jobs program through the Works Progress or Projects Administration (WPA). This administration was charged with

> coordinating the activities of the works program—which was to provide temporary jobs through existing (the CCC and Public Works Administration) and new emergency public employment agencies established under the authority of the ERA Act (the Resettlement Administration and National Youth Administration) and numerous other federal agencies (the Bureau of Public Roads and Corps of Engineers)—and administering small-scale "useful projects" utilizing unemployed workers receiving or eligible for public assistance (Levine, 2010).

However, there were three main reasons which prevented the program from being a true JG program. First, jobs were limited to one individual per eligible household, typically the designated head or primary breadwinner. To qualify, no one else in household could be working. Second, Congress, as a result of being lobbied by businesses, ensured the jobs created by the program could not compete with private sector jobs including federally funded construction projects which were bid to private contractors. This resulted in jobs which "many participants [who] were employed in [these] jobs derisively called *make work, leaf raking*, or *shovel leaning*" (Levine, 2010). Additionally, many of the jobs created typically paid

low wages inadequate to support worker's families leaving them dependent on other public welfare programs. Third, funding for the programs were often limited by Congress citing Federal budget constraints and attempts by Roosevelt to maintain a balanced budget (Levine, 2010; Kaboub, 2007).

> Even in the case of the comparatively well-funded WPA, appropriations typically were made annually in emergency acts and not adjusted upward to reflect later increases in unemployment. As a result, the largest of the job creation programs was unable to keep pace with increasing demand for public employment. For example, after the WPA's annual appropriation had been set, unemployment again began to rise in late 1937, and the percentage of unemployed persons in WPA jobs fell from about 30% to less than 20% (Levin, 2010).

A positive take away, however, is that " it did empirically show that the government can act as employer of last resort and provide decent jobs that do not compete with the private sector and that are socially, economically, and environmentally useful." (Kaboub, 2007).

Later in the 1940s post-war era, the job guarantee would continue to be part of the American conversation. For example, John Philip Wernette was a business professor and president of the University of New Mexico, who recognized the inherent instability of capitalism. Fearful of another great depression in the post-war era, and the repercussions of mass unemployment, he proposed in his book, *Financing Full Employment* (1945), a "new fiscal-monetary system" with what he called the "Full Employment Standard" (FES). His proposal would establish a Federal Stabilization Board in replacement of the Reserve Board of Governors to control the money supply and creation of new money by the treasury through the federal government to finance budget deficits and/or pay off the Federal Debt" (Kaboub, 2007). The FES would have been financed by printing new money which Wernette believed could be absorbed with little risk of inflation if managed appropriately through taxes which destroy money. "The function of Federal taxes," he said "is preventing inflation. The federal government literally does not have to collect taxes in order to get the money for its expenditures. Like any other sovereign government, our Federal government has the power of creating money" (Wernette 1945). This approach is consistent with Abba Lerner's functional finance theory; which we will discuss in more detail in section 6. The experience of U.S. nationwide mobilization of resources during World War II, and the ability to finance that mobilization demonstrated that the government revenue from taxes was not a constraint on federal spending. This revelation was shared even among central bankers. Beardsley Ruml (yes that was his real first name) was the director of the New York Federal Reserve Bank from 1937 -1947. In a speech he gave to the Bar Association in 1946, Ruml declared "The necessity for a government to tax in order to maintain both independence and its solvency is true for state and local governments, but it is not true for a national government."[1] In applying functional finance principles, Ruml argued:

> the government may find itself collecting more in taxes than it is spending, or spending more than it collects in taxes In the former case it can keep the difference in its coffers or use it to repay some of the national debt, and in the latter case it would have to provide the difference by borrowing or printing money. In neither case should the government feel that there is a anything especially good or bad about this result it should merely concentrate on keeping the total rate of spending neither too small nor too great, in this way preventing both unemployment and inflation (Ruml, 1946).

These views were forgotten and fell out of favor as the new generation came of age and into power decades later.

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[1] Interesting, you can hear the full speech on YouTube at https://www.youtube.com/watch?v=XfZCdISWgx0

The year after Wernette's publication, John Pierson, a Yale-educated economist who worked in the U.S. Department of Labor and helped draft the Employment Act of 1946, which proposed an Economic Performance Insurance (EPI) guaranteeing full employment by the government. This would include "a nationwide reserve shelf of additional public services and public works" (Kaboub, 2007). Pierson emphasized the importance of maintaining consumer demand through a government guarantee of consumer spending and fiscal adjustments on consumer taxes, subsidies, and transfer payment schemes. Guaranteed employment and consumer spending would establish a floor, but to temper inflation expectations, Pierson also proposed a ceiling over both. If warranted, government could simply scale back spending subsidies or increase taxes and postpone anticipated public projects. (Kaboub, 2007).

In response to the high unemployment levels in the early 1970s, Congress enacted the Comprehensive Employment and Training Act (CETA) of 1973. The legislation was signed by Richard Nixon. According to Ammarell (2015), the act consolidated a variety of federal job programs from the 1960s, but decentralized control to the states and local communities which were given block grants for classroom and on-the-job training, as well as education to provide workers with additional skills to make them marketable in the labor market. The program also funded public service employment to provide useful work and build skills. The CETA lasted just over nine years, but went through various alterations and amendments which created additional programs for youth and disadvantaged groups such as veterans and the handicapped. Initially, most funding went into training programs, but training allocation would be dwarfed by public service employment (PSE) programs. By the late 1970s, growth in PSE expenditure garnered criticism as national employment levels improved, but the PSE continued to grow. At its peak in 1979, PSE expenditure was approximately 0.23 percent of GDP and accounted for over half the entire CETA budget (Brodsky, 2000). When it came time for reauthorization of the legislation in 1978, Congress imposed stricter eligibility standards to specifically target the unemployed, underemployed and economically disadvantaged. To qualify, recipients had to be at least fifteen weeks unemployed and be of low income or qualify for family income support. By 1981, CETA funding was severely cut and President Reagan made clear he would not support reauthorization (Ammarell, 2015).

The idea of a job guarantee would continue to be thought about by economists such as Hyman Minsky (1965, 1986) and others who would cut against the grain of the neoclassical school which had gained ascendancy. Multiple institutions have also taken up the proposal including the Levy Economics Institute of Bard College in New York (Kaboub, 2007; Antonopoulos, 2007; Tcherneva, 2012, 2014), of which Minsky was a distinguished scholar from 1990 until his death in 1996, the Center for Full Employment and Price Stability (CFEPS) in Kansas City, Missouri, and Center for Full Employment and Equity (CofFEE) in Newcastle, Australia (Mitchell and Watts, 2013). And more recently, the Center for American Progress (Tanden et al. 2017).

3 The specifics of a Job Guarantee

The job guarantee goes by many names throughout the literature including Employer of Last Resort, Public Service Employment, Government Employment Guarantee, Buffer Stock Employment, Job Guarantee or Federal Job Guarantee. For the purposes of our discussion, I will stick with Job Guarantee or JG.

What are the specific features of the job guarantee program? As stated above, the JG proposes an end to involuntary unemployment through the implementation of a federally-funded program in which the government employs all unemployed persons in the labor force ready, willing, and able to work for the

public sector at a socially-determined base wage. Workers who choose to participate would come as they are and the program would find jobs that fit their skills in the public sector. Since the government would take anyone willing to work, the program would create an infinitely elastic demand for labor and operate as an effective price floor in the labor market, and could be adjusted overtime to help reduce the wage gap between skilled and unskilled sectors. (Minsky 1986; Wray 2007; Kaboub, 2007). Some proponents also propose tht compensation include a minimum package of benefits related to health care, retirement plans, and vacation which would act as a standard or minimum floor of benefit that the private sector would need to compete with. JG would operate as a price anchor and establish greater price stability through consistent consumer and labor demand. The JG would operate as a buffer stock during economic recessions and expansions, fluctuating as needed. During a recession, the size of the JG pool would absorb workers displaced from the private sector, and when the economy expands it automatically shrinks when workers find employment. The private sector employers will be able to access labor above the fixed wage set by the government. Since surplus labor will be absorbed, JG will create a consistently tighter labor market putting minor upward pressure on wages which can be ratcheted up as need be by policy makers.

4 What would participants do?

Currently, there is no shortage of social and economic needs a program like the job guarantee could address. Immediately, a JG program opens up a wide range of possibilities to advance sorely needed public services and infrastructure improvements, as well as compensate traditionally unpaid labor crucial to society. The government can use these workers to address infrastructure maintenance via repair, retrofitting, upgrading including power grids, roads, bridges, parks, waterways, and sewer drainage systems. According to the 2017 Infrastructure Report Card by the American Society of Civil Engineers, the estimated cost of infrastructure repair is $3.6 trillion.[2] This does not include the additional expenditure for continued maintenance which is cheaper than waiting for the roads and bridges to collapse. These workers can also be used to transition existing infrastructure to renewable energy sources and retrofit to energy efficiency. Pollin et al. (2014) with the Center for American Progress find the transition to a green economy would require an estimated $200 billion total investment annually, about $55 billion or 0.3% of GDP would need to be public investment per year. It is projected 4.2 million overall jobs would be created from both expanded operations of renewable energy sources and maintenance jobs which could be filled by JG workers with existing skills and acquired skills from on-the-job training. These are urgent expenditures the government needs to undertake regardless of whether a JG program is in place, but JG could facilitate some of these important projects putting people back to work while providing the training they need for the structural transformation towards a renewal energy economy.

Through the JG program, the government can provide public goods and services where most needed. This would produce visible benefits from taxes perceived to fund government programs including parks, safety, clean streets, education, child and elder care, etc. Some services would need to be permanent as the public becomes accustomed to receiving certain public services which provide a lot of social good, e.g. child and elder care.

[2] The report was retrieved from https://www.infrastructurereportcard.org/wp-content/uploads/2017/04/2017-IRC-Executive-Summary-FINAL-FINAL.pdf

JG can also be used to combat the prevalence of racial inequality in labor markets. According to the Bureau of Labor Statistics, the unemployment rate for black Americans and even with some college education is higher relative to whites controlling for age (Darity Jr., 2013). Black men with criminal records also face lower odds of a callbacks for interviews relative to whites with criminal records (Darity Jr., 2013). At-risk Racial groups subjected to discrimination in the labor market would have recourse through the JG program. The program could help stigmatized classes such as former convicted felons which would have the effect of reducing recidivism rates if jobs are also paired with skill training and job-placement assistance when ready to move into the private sector (Visher et al. 2005).

JG could be used to redress gender inequality as well. A major barrier to working women is access to child care. Malik et al. (2016), in a report for the Center for American Progress, find that 42 percent of children under 5 years old live in ”child care deserts,” defined as a zip code with too few or no child care centers, creating a serious national problem of under access to child care especially for rural areas. Clearly the market has been unable to deliver to meet the demand. This crisis could be alleviated through JG personnel being trained to provide high quality child care which would facilitate parent’s capacity, particularly mothers, to take up work full- or part-time. To the extent that gender segregation occurs in the labor market, a well-designed JG program would be an important tool to eliminate barriers to entry for women, and men, in certain occupation due to child care constraints.

Another crisis on the horizon is elder care. According to a study from MetLife and the National Alliance for Caregiving, 79 percent of family caregivers are providing care to someone over the age of 50, 60 percent of whom are working women, providing unpaid care to a parent or grandparent.[3] The study calculated that women alone lose an average $324,044 in compensation due to caregiving responsibilities. In addition to “child care deserts,” there are also “elder care deserts” where it's difficult to access resources such as transportation or medical care by seniors. Meg Brown at the University of Iowa reported on a study led by Jennifer Margrett, director of the Iowa State’s interdepartmental gerontology program and associate professor in human development and family studies, which “found that 14 of the 20 oldest states are also in rural” which lack resources such as public transit, assisted living communities, or *home-based care providers*” (emphasis added).[4] JG can provide elder care programs which would prevent older adults from entering expensive assisted living facilities prematurely.

Lastly, one of the most important problems JG would address is skill deterioration due to long-term unemployment. As mentioned above, a long-term bout of unemployment can result in significant sill deterioration, social network shrinkage, and behavior changes which may reduce hiring and income potential (Peck, 2011; Ortego-Marti, 2017). Firms also discount skill and experience the longer candidates have been out of a job (Eriksson and Rooth, 2014). JG can alleviate this problem in two ways. First, as with infrastructure, prevention is better than a cure. Workers unable to find employment in the private sector can work in the JG to avoid skill erosion and gain access to public sector resources to find jobs in the private sector as opportunities become available. Second, already discouraged workers marginally attached to the workforce would have access to a job through the public sector that will fit their existing skills, and, most importantly, provide training, retraining, and education programs to develop skills further and transition the

[3] Study retrieved from https://www.metlife.com/assets/cao/mmi/publications/studies/mmi-caregiver-cost-study-productivity.pdf
[4] Brown, Meg. (2015, February 11). “Iowa State researchers urge rural states to prepare for aging.” Iowa State University, College of Human Sciences, Archive. Retrieved from http://archive.hs.iastate.edu/news/2015/02/11/aging

long-term unemployed into the private sector. As it turns out, prior studies and analysis of public sector employment programs confirm access to training and education is a crucial component to effectively transition from long-term unemployment to the private sector; we will explore this issue further in section 8.

5 Estimating the cost

So far, the literature has managed only halfhearted attempts to estimate the cost. Part of the problem is that the costs will vary depending on how the program is administered, and the base wages and benefits set by policy makers. For example, Darity Jr. (2012) estimates if the mean cost per worker including salary, benefits, and materials is $50,000, it would cost $750 billion per 15 million people employed by JG. In the U.S., the national unemployment rate in October of 2017 was 4.1% at a level of approximately 6,520,000 unemployed persons according to the Bureau of Labor Statistics. Discouraged workers marginally attached to the labor force were approximately 524,000. Financing jobs for both groups would be approximately $350 billion. However, this would be just to employ the workers. This estimate at best assures about $20,000 in annual income per worker with approximately $30,000 accounting for benefits and materials according to Darity. This amounts to only $384.61 per week, which assumes a wage of $10 an hour at about 38 working hours per week. Tanden et al. (2017) at the Center for American Progress have proposed workers be paid a $15 per hour wage, which would be approximately $30,000 per job with about 38 workings hours costing about $158 billion, not including benefits.

My own calculation based on a $10 base wage at 38 hours per week plus health insurance benefits, which are estimated to be $15,000 by 2023 by the Center or Medicaid and Medicare Services, puts the combined estimate of employing the above BLS estimate of 7,044,000 unemployed and discouraged workers at $282 billion, or 6.8 percent of the 2017 federal budget and 1.5 percent of GDP. If the wage was increased to $15 per hour, the cost would increase to $314 billion, approximately 7.6 percent of the federal budget or 1.7 percent of GDP.

Wray (2015) estimates unemployment swings between 8 million in an expansion and 12 million in a contraction. At $15 an hour plus health benefits, that would be a swing in budget costs between $357 billion and $535 billion.

The estimates above, however, do not include administration costs and other complementary policies needed to ensure the program successfully transitions particularly long-term unemployed persons into unsupported positions in the private sector. The good news is that the U.S. already has an unemployment office infrastructure which could be converted to administer the job guarantee program. The U.S. Department of Labor administers benefits through unemployment offices which are run by the states. That could continue as states will typically know better the economic needs at the local level. Job-search assistance and some training programs are also run through these offices by the Department of Labor Employment and Training Administration.

In 2012, the U.S. spent just over $2.3 billion on unemployment insurance alone, or about 0.01 percent of GDP.[5] According to the U.S. Department of Labor Employment and Training Administration

[5] According to U.S. Dept. of Labor Employment and Training Administration state allocations report retrieved from https://workforcesecurity.doleta.gov/unemploy/content/futa/fy2012suia.asp

Fiscal Year 2012 budget allocation was $3.6 billion in employment and training services which is about 0.02 percent of GDP.[6] Combined that is only 0.03 percent of GDP in spending on unemployment. The estimates above would push up total spending to about 2 percent of GDP. For perspective, in 2012, European countries spent between 1-2 percent of GDP on unemployment expenditure programs including unemployment benefits, job-search assistance, training and education, and direct public employment programs.[7]

Based on current unemployment statistics and estimated cost of providing a $15 minimum wage plus health benefits and some additional administration and education and training services, the cost of a job guarantee program is certainly affordable for a country like the U.S. if it decided to prioritize full employment. There is also the consideration that not all those unemployed will be willing to work, so these estimates likely overestimate the cost. In addition, such a program would reduce expenditure on other welfare programs. However, as the program expands, the cost would increase. But this is really not a problem for a country that issues its own currency.

6 Financing

The organization which has made to most contribution to the job guarantee literature in the U.S. has been the Levy Institute at Bard College. Most Levy scholars espouse the Modern Monetary Theory, or neo-chartalism, which incorporates the insights of Abba Lerner's functional finance approach. The thrust of the theory goes like this: Money is a creature of the state. Money is created when the government spends and destroyed when it taxes. The federal government does not need to "borrow" its own money from the private sector. To the extent that the government does monetize its deficit spending by issuing bonds, it is only to remove excess reserves from the banking system. Through an elaborate dance, the central bank and treasury coordinate new bond sales with open market operations to adjust the overnight interest rate to their policy target. Though the Federal Reserve cannot buy treasuries on the primary market, it does buy them on the secondary market. The Fed can simply purchase bonds as needed in exchange for reserves to banks, and sell them back as needed. Otherwise, the bonds can remain on the Fed's balance sheet until it expires if it wishes. The end result is the same as if the federal government printed the money and spent it directly into the economy: "the government deficit spending leads to a direct deposit credit to someone's bank account and a credit of reserves to a bank which are then exchanged for a treasury to extinguish the excess reserves" (Wray, 2015). This is a self-imposed constraint however. As long as we are dreaming of a job guarantee, we can also dream of doing away with this scheme and the federal government could simply spend directly into the economy. Government bonds are not a necessary component of the spending itself, but it is highly useful for central bank operations and "control" of the overnight interest rate. Therefore, in theory anyway, there is no finance or revenue constraint on the state as the sole issuer of the currency. Therefore, financing full employment in perpetuity is entirely feasible from this perspective regardless of the cost (Kaboub, 2007; Tcherneva, 2012; Wray, 2015).

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[6] "The Training and Employment Services (TES) appropriation funds a system of education, skills training and employment services directed toward increasing the post-program employment and earnings of current and future workers, particularly low-income persons, dislocated workers, at-risk and out-of-school youth, and other unemployed and underemployed individuals." From the U.S. DOL FY 2012 budget brief, retrieved from https://www.dol.gov/dol/budget/2012/bib.htm#eta

[7] Denmark 1.8%, Finland 2.1%, France 2%, Germany 1.2%, Netherlands 1.8%, Sweden 1.2%, United Kingdom 0.7%.

Nonetheless, a program like the JG is entirely affordable even with a federal government which operates with its hands tied behind its back and legs tied together, but it will require accommodative monetary policy. As long as the Fed keeps interest rates low as it has been able to through quantitative easing and other operations, debt servicing will not be a problem. The other consideration for monetary policy is to realize that with the implementation of a JG program, the central bank can no longer fight inflation by raising interest rates to create unemployment. Instead, it will need to continue open market operations to maintain its overnight target rate along with longer-term asset purchases to keep long-term interest rates low. Given the issues around investment, Keynes' preferred monetary policy was to keep short- and long-term interest rates low in both contraction and expansion of the economy even when the economy appeared to be "overheating" with wasteful investment:

> even if over-investment in this sense [of being wasteful] was a normal characteristic of the boom, the remedy would not lie in clapping on a high rate of interest which would probably deter some useful investments and might further diminish the propensity to consume, but in taking drastic steps, by redistributing incomes or otherwise, to stimulate the propensity to consume… Thus the remedy for the boom is not a higher rate of interest but a lower rate of interest. For that may enable the so-called boom to last. The right remedy for the trade cycle [business cycle] is not to be found in abolishing booms and thus keeping us permanently in a semi-slump; but in abolishing slumps and thus keeping us permanently in a quasi-boom (Keynes, 1936).

For Keynes, the state of quasi-boom would keep the economy humming so that private sector employment would remain at full employment, and would euthanize the rentier in an environment where capital is abundant, but it would also have the effect of keeping debt servicing "affordable." Even in an environment where debt servicing is high, it is illogical for a country like the U.S. to ever default on its debt as even Paul Krugman noted in a 2012 *New York Times* post. The government can always pay its debt plus interest as it comes due. The government only needs to "ensure that debt grows more slowly than their tax base." Even at its height after World War II, the national debt has never been an obstacle. By the end of World War II, the government's debt-to-GDP ratio reached 113 percent. But as Krugman notes, "The debt from World War II was never repaid; it just became increasingly irrelevant as the U.S. economy grew, and with it the income subject to taxation." If a job guarantee is a policy that can facilitate growth and stability, than any addition to the debt from the program would also become irrelevant as the economy grows.

7 Exchange rates and inflation

What about exchange rates? A JG program would increase incomes to the poor and would increase consumption, and, therefore, imports. If demand for imports increases greater than exports, the value of the dollar would decline making import purchases more expensive or inflationary. While there certainly would be some exchange rate "pass through" effect, there is a reason to believe it would be minor as JG would serve as a price anchor for domestic and foreign value. So beyond an initial effect with implementation, an inflationary spiral via a "pass through" effect is unlikely. However, even in such circumstances, there are plenty of other tools aside from using unemployment as a discipline mechanism. The federal government also has "trade policy, import substitution, luxury taxes, capital controls, interest rate policy, turnover taxes, and so on, if desired to minimize pressures on exchange rates should they rise" (Wray, 2015).

What about inflation and resource constraints? As noted above, the JG program can act as a price anchor for both domestic and foreign value. By acting as a wage floor, we ensure that demand will not fall below a certain level. If we keep the wage uniform, then demand pull inflation is unlikely. The uniform

wage would also have the advantage of limiting competition with private sector employers who would need to pay a wage slightly above the program's wage to attract workers out of the program. Keeping the wage uniform would also be an incentive for the work to leave the program when a better employer's offer comes along. If the wage is permitted to go up or be differential within the program, then it may create more competition and higher wage increases with the private sector than desired. While the program would act as a minimum wage floor, it would provide some economic security that if you lose your job in the private sector, a public sector job is waiting for you. This may make some workers feel comfortable about changing jobs or making higher wage demands, but you will not be in a better bargaining position to demand wages much higher than the minimum wage offered by the program. And for jobs at wages much higher than the minimum, JG would offer no greater bargaining position for those employees. So beyond the initial increase in income to the poor and unemployed, inflation from higher wage increases would not be any greater pressure than they are today. In addition, when it comes to many of the social issues and services that the market is failing to adequately provide, such as child and elder care, the program would compete with the private sector to bring prices down.

When it comes to resource constraints, the government spending on a JG program means using some resources also needed by the private sector. Depending on the abundance of those resources, this could cause some inflation and even crowding out of private sector firms priced out for those resources by a government which can afford anything for sale in its own currency. This is an issue the government should be mindful of, but even with a federal government as large as it has become today, this has not been an issue. The other consideration is that given that our economy has transitioned to a predominately service economy, human bodies are mostly what is needed to facilitate the services needed to address many of the social issues mentioned in section 4.

Using data between 1983 and 2010, Fullwiler (2013) simulates the effect of a JG program on inflation using a multi-country econometric Fair model. To simulate the JG program, Fullwiller uses the unemployment level as the level of JG participation; in essence, assuming there is no unemployment.[8] Consistent with the prediction of literature, the simulation shows a onetime increase in inflation of about 0.6 percent from the base level. From then on, the program does not itself cause inflation, but instead contributes modestly to price stability through modest increases of inflation during recessions and modest decreases in expansions. Fullwiler also simulates the impact on the value of the US dollar. During the startup phase, the value falls approximately 2.5 percent against other currencies, and then stabilizes. This is due to the fact that the JG has its strongest impact on inflation in the beginning, but also stabilizes.

8 The importance of education and training

With a policy like a job guarantee will come numerous social and economic benefits if administered appropriately. But the main purpose of the job guarantee program is to end involuntary unemployment; particularly long-term unemployment which generates many of these social issues. The goal should not only be to employ these individuals in the unfortunate circumstance of being unable to find employment in the private sector, but to develop their human capital and make them attractive again to the private sector.

[8] The model also makes a number of other assumption consistent with post-Keynesian approach to macroeconomics. The paper is well worth a review to appreciate the contribution such simulations can offer in predicting the effects of- -various macro policies. A free 2012 version of his paper can be retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2194960

Table 1. Nie & Struby Analysis of Active and Passive Labor Market Policy

Active	Unemployment rate
Job-search assistance	-0.31*
Training programs	-0.2**
Employer subsidies	-0.15
Supported employment	-0.05
Direct job creation	0.27
Passive	
Unemployment insurance	7.59**

Standard errors are excluded. * and ** indicate significance at the 90 and 95 percent confidence level,

However, it should be acknowledged that for some individuals this is not feasible or desirable, who are content with a public sector job that provides benefits; this should not be a negative mark against the policy. But for those willing to participate and enhance their human capital, such services should be facilitated to help the transition to private sector. The problem highlighted by current research available is that private sector employers may discount public sector experience as direct job creation does not have the effect we would expect on employment outcomes and the unemployment rate.

There are two categories of labor market policies, active and passive. Typical passive policies include unemployment insurance benefits and early retirement programs. Active policies include job-search assistance, training programs, employer subsidies, employment support, and direct job creation (also referred to as public-service employment). Job-search assistance connect employers to the unemployed than would be the case if the employer were to search on their own. Such programs have become increasingly important to the businesses as well as workers as there is a growing reliance on such services online, e.g. Monster, Glassdoor, Indeed, ZipRecruiter, etc. Training programs focus on vocational training which provide unemployed workers with specific skills that are in demand in the private sector. Employment subsidies are temporary payments to employers to hire and employee bonuses for taking the job (Nie and Struby, 2011). Employment support provides temporary payments while the unemployed complete vocational or other training to prepare them for private sector employment. Direct job creation typically creates "temporary, nonmarket jobs that would not have existed without the policy. These jobs often are in the public or nonprofit sector and are targeted at long-term unemployed or groups that are difficult to place in other types of jobs" (Nie and Struby, 2011).

Table 2. Card et al. Meta-Analysis of Active and Passive Labor Market Policies

	Mean Effect on Employment Outcomes		
Active	**Short-term**	**Med-term**	**Long-term**
Job-search assistance	4.1	4.4	2.3
Training programs	3.9	14	13.6
Employer subsidies	3.2	11.7	45.9
Direct job creation	-4.2	-2.2	2.5
Passive			
Unemployment benefits	-0.6	8.7	17.3

During the 1970s, high unemployment was not only a problem for the U.S., but in Europe as well. Many OECD countries enacted similar legislation to the CETA mentioned in section 2. While the CETA fell out of favor in U.S. by the 1980s, European countries have consistently devoted funding to public service employment (PSE) programs as part of an overall active labor market strategy. However, according to Brodsky (2000), these "early efforts to address the problem of long-term unemployment through public-service employment programs have proved unsuccessful. Participants seldom learned marketable skills and rarely moved on to jobs in the private sector." Studies from these early programs concluded the ineffectiveness of these programs was attributed to many factors including the fact that "job creation programs with no supportive labor market measures, such as job search assistance or training, often did not improve the employment prospects of the target population" (Brodsky, 2000). These programs have since been improved in various ways, but mainly by incorporating the necessary training programs and human capital enhancing projects and activities which help facilitate transition to the private sector. But more recent studies have shown little improvement in effectiveness of PSE programs generally.

In their study of active labor market policies in OECD countries, Nie and Struby (2011) find that spending on unemployment benefits increased the unemployment rate by 7.59 percent. This was not a surprise as unemployment benefits reduce incentives to work, but provide more time workers to find the right work that fits their skills. But troublingly, Nie and Struby find that spending on direct job creation by the public sector was correlated with a 0.27 percent increase in the unemployment rate while all the other active policies above had positive correlations (see Table 1 for the effect on of each policy); however, only job-search assistance and training programs had any significance with positive correlations of 0.31 and 0.2 percent, respectively.

However, Card et al. (2015) conducted a meta-analysis of studies on active and passive labor market policies in OECD countries plus some countries in the Caribbean. Figures from the study can be found in Table 2. The meta-analysis included 207 studies. Their findings were similar to Nie and Struby for all labor market policies, but they break down the result into short-term, medium-term, and long term.

Job-search assistance, training programs, and employer subsidies had the greatest positive effects on employment outcomes. The mean effect on employment outcomes of direct job creation by the government was negative 4.2 percent in the short-term, negative 2.2 percent in the medium-term, but was positive 2.5 in the long-term. Given the issues surrounding skill deterioration and negative network impacts of long-term unemployment, this finding is more consistent with the expectation of any type of employment. However, training programs had a larger mean effect of 13.6 percent and employer subsidies an astonishingly 45.9 percent. Since this is a meta-study, there are no levels of significance to draw from.

These studies bring up legitimate concerns about the effectiveness of a public sector program relative to education or training. Card et al. surmises "This pattern suggest that private employers place little value on the experiences gained in a public sector program -- perhaps because *many of these programs have little or no skill-building component*, and only serve to slow down the transition of participants to unsubsidized jobs" (Card et al. 2015; emphasis added). The implication is that the jobs performed should include real skill building. A weakness of direct job creation is that often the goal is make it so that these jobs do not directly compete with the private sector. This is a lesson which we also learned from the failure of New Deal programs. As mentioned in section 2, the WPA was not allowed to create jobs for workers that directly competed with the private sector. This lead to ditch digging projects that were derided by both the general public and participants. This is clearly an issue that should be reconsidered in light of past experience and empirical evidence. For JG workers to be attractive to the private sector, JG participants need to be building skills that the private sector wants. Therefore, it is important that projects put forward for participants include such skill building activities. More importantly, it stresses the need for a robust education and training system to build up participants' human capital. While the literature does pay some lip service to incorporating training and education, it does not receive the attention it deserves. For a JG program to be successful in moving workers from the JG program into the private sector, education and training needs to be an essential component.

9 Conclusion

In this paper I have examined various aspects of the job guarantee proposal from the literature. This review was by no means exhaustive, but provided the basics contours and concerns that arise from consideration of such an ambitious policy. The justification for such a program comes from the urgent need to address mass unemployment, particular long-term unemployment, which carries with it many deleterious social and economic impacts. There are also is no shortage of social and economic services that a program like JG could address. Rough cost estimates of the program indicate that a $10 or $15 minimum wage plus benefits are well with in affordability for a country like the U.S. if it were willing to prioritize full employment. But even if the program were considerably more, the U.S. being its own currency issuer means it can afford anything for sale in its own currency, and cannot default on its debt. There are exchange rate and inflation constraints, but neither is likely to fluctuate significantly after the implementation. Indeed, the JG will act as a price anchor and automatic stabilizer which econometric simulations concur with the consensus of the literature. There are, however, important lessons to be learned from past experience in the U.S. and from OECD countries that have continued to experiment with public-service employment programs since the 1970s. To the extent this paper makes any contribution to the literature, it is to emphasize the necessity of a robust training and education program to ensure participants, particularly long-term unemployed individuals, develop and maintain skills desirable to the private sector.

A program like a job guarantee is sorely needed in a time when the labor force participation rate is still historically low, when wages are stagnant, and growth anemic. Such a program will face intense opposition from businesses and politicians who cling to antiquated ideas in macroeconomic theory. As discussed above, by the 1970s, economists and policymakers abandoned any commitment to full employment and accepted the Phillips curve paradigm of a trade-off between low unemployment and inflation; believing mass unemployment is necessary as a check on wage demands. However, Keynes resoundingly rejected this view which was held by classical economists in his day:

> The Conservative belief that there is some law of nature which prevents men from being employed, that it is "rash" to employ men, and that it is financially 'sound' to maintain a tenth of the population in idleness for an indefinite period, is *crazily improbable* – the sort of thing which no man could believe who had not had his head fuddled with nonsense for years and years.
>
> Our main task, therefore, will be to confirm the reader's instinct that what seems sensible is sensible, and what seems nonsense is nonsense. We shall try to show him that the conclusion, that if new forms of employment are offered more men will be employed, is as obvious as it sounds and contains no hidden snags; that to set unemployed men to work on useful tasks does what it appears to do, namely, increases the national wealth; and that the notion, that we shall, for intricate reasons, ruin ourselves financially if we use this means to increase our well-being, is what it looks like – a bogy (Keynes, 1929/1971-1989).

We are still fighting these conservative beliefs today. So remember that on the day that a job guarantee proposal is taken seriously in Congress, is the day that you will hear outcries from capitalists and Republican politicians objecting to giving poor people and the long-term unemployed jobs and causing hyperinflation. But this will be exactly what it looks like, a bogy.

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