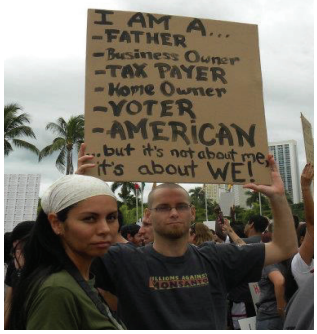
Federal Job Guarantee as a Proposition for Enhancing Economic Efficiencies and Business Competitiveness



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Executive Summary

It took a significant departure from conventional practices, economic understandings, and policy implementations to get us out of the Great Recession of 2008. It was a gradually socially painful jobless recovery. The Emergency Economic Stabilization Act of 2008 authorized the investment of more than $700 billion to buy risky and nonperforming debt from various lending institutions (Lewis et al, 2008). Many credible sources reported that the US Federal Reserve pumped over $8 trillion into the financial industry and investment banking community. This amount was calculated taking into account other financial support and services provided to soften the blow of the finance industry. Eight trillion dollars is a much larger sum than was given without blinking. The same philosophical postulation of "too big to fail" utilized to justify the bailout of the financial sector in 2008 should be extended to assist in the development of employment opportunities for any American who wants to take the public sector job. It is not exclusively for the unemployed, out of the labor force or discouraged worker should include the working poor to eliminate poverty.

The Federal Job Guarantee is a program that supplies a tangible and sustainable solution to break the cycle of long-term poverty in America by providing quality employment options for all, especially for the most financially vulnerable members of our society. The program has three additional other benefits. First, it creates a counter-cyclical stabilizer that could smooth severe economic downturns, Second, it generates a skillful and competitive labor force due to active investment in skills development with the prospect of impacting businesses bottom line, and third, it serves as a price floor for wages in the labor market. An efficient labor market creates a more efficient and productive business environment.

In short, the Federal Job Guarantee, if implemented conscientiously, efficiently, and strategically, has the potential of serving as a mechanism for moderating economic downswings and as a catalyst for igniting socio-economic development and equity, thereby contributing to a more productive and competitive labor force in support of business growth. Additionally, the COVID-19 Global Pandemic and economic crisis are offering an opportunity to rethink our tools to soften the business cycle swings. The Federal Job Guarantee can provide the safety net for the millions of people that have been left without employment during this crisis. The Federal Job Guarantee offers a tangible and sensitive solution for many Americans.

Introduction

Before COVID-19, economic indicators were depicting a "strong" economy, there was yet, a challenging reality that needed to be addressed, a reality that was corrosive to any democracy. A reality where millions of Americans struggle economically to create a sustainable and prosperous life for them and their families. In many instances, the affected Americans hold multiple jobs with no sustainable wages to provide for their families, and still cannot break away from the poverty trap[1]. For many Americans, the lack of access to quality employment remains a prevalent barrier to achieving social and economic self-sufficiency, even during times where our economy is expanding at a healthy rate. Established economic discourse generates a general sense of complacency since statistics either are shown at the aggregate level, as averages or, for policy convenience, with little focus on the areas of trouble. For example, The Financial Times stated that "The US economy is enjoying its longest uninterrupted stretch of expansion since at least 1854 to surpass the 1990s economic boom — at least in duration[2]. Or the Economist magazine presented an article titled "America's expansion is now the longest on record." The analysis and articles are correct, but they do not present the full picture due to evaluating the economy by using GDP growth, total non-farm employment, and national unemployment rates, but portrays a reality that is not experienced by all members of our society. One of the limitations of these statistics is that do not completely encompass the disengaged minorities, marginalized, and underrepresented populations. So, for many Americans, the reality of participating in the latest economic boom, before COVID-19, was a deceiving mirage with daring consequences.

This last statement leads us to the incomprehensible understanding of an economy that provides pathways to unbalanced opportunities for participation; and metrics systems that do not fully capture the reality of the several socio-economic dynamics experienced by all Americans, giving us a false reading of the reality. Not acknowledging these market imperfections, econometric limitations, policy inadequacies, and business inefficiencies would only contribute to the worsening of the precarious situation that many American lives, and would perpetuate the denial of these challenging situations and the continuation and expansion of poverty experienced by many Americans.

Before COVID-19, the US Census Bureau estimates that the number of Americans living in poverty is 13.5% or about 43.1 million (obviously, this reality has worsened over the last three months).

Before COVID-19, the US Census Bureau estimates that the number of Americans living in poverty is 13.5% or about 43.1 million (obviously, this reality has worsened over the last three months). Some other scholars use a more wholistic methodology and estimate this number to be much larger. They estimate that the number of people living in "near-poverty" in the United States is around 100 million, a number that is close to one-third of our total population. This last number encompasses Americans who are still struggling financially to provide for their families despite having multiple jobs and putting more than 40 hours a week into work. These are the very same Americans that are one to two paychecks away from encountering a financial breakdown which will be disruptive not only to themselves, their family but to the local community as a whole.

[1] Poverty trap is defined as the system of conditions that makes it very challenging for members of a society to break away from poverty. Poverty trap conditions are created when local economy requires extensive quantity of capital in order to earn adequate and sustainable living. When this capital is not available for investment and therefore not available as a salary and wages, creates a self-reinforcing cycle of poverty.

[2] https://www.ft.com/tour.https://www.ft.com/conent/5c443804-9c41-11e9-b8ce-8b459ed04726

The International Monetary Fund (IMF) and the United Nations (UN) have produced two publications that bring these issues of pervasive poverty in America to light. In June 2016, the IMF cautioned Americans about the high poverty rate and urgent need to raise the minimum wage, and the need for improving labor market conditions by promoting jobs with fringe (health and vacation) benefits. In December 2017, the UN reported on extreme poverty in the United States, and strongly condemned the unprecedented growth of private wealth and the propagation of homelessness and pervasive poverty. The report when as far as declaring the state of Alabama to have the "worst poverty in the developed world" and depict similar characteristics to poverty experience in developing nations. The UN report highlights that over 40 million people in the US live in poverty and over five million live "in 'Third World' conditions." All these poverty indicators are growing while the growing income disparity and technology gaps keep widening (Chuang,1998) and adding to wage gaps by gender and race.

Given this assortment of additional information, policymakers should not rush to claim victory and assume that the economy has already reached full employment and a well-balanced growth pathway. It is not until all Americans enjoy a prosperous future and poverty is eradicated that we can be satisfied. Rather, policymakers should pursue policies that attempt to push for tighter labor markets until wage growth picks up, the working poor disappears, poverty and income inequality are eradicated. In the past, poverty reduction strategies rely heavily on policies that pivot around progressive tax rates, workforce development programs, and welfare programs, but have been mildly successful

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in terms of assisting the population that needs the most and breaking away from the poverty cycles. All these policies in conjunction had not significantly increased the labor force participation rate which has remained at a historical two-decade low of about 63 percent.

Our proposal demonstrates that when a conducted a well-orchestrated FJG, the cost of implementation could be as low as 27-28 percent depending on the scenario. More importantly, the gains in terms of tangible and intangible benefits to the most vulnerable members of our communities are significantly higher in the long run. The FJG has the potential of breaking the poverty cycle definitively.

Background

A good measure to pay attention to is the labor force participation rate which is derived from the Current Population Survey (CPS). CPS is a household survey and serves as the base for many other key statistics like the unemployment level, unemployment rates, etc. The labor force participation rate quantifies what percentage of the civilian noninstitutional population actively participates in the labor market. Labor force participation rose from 58.1 percent in 1954 to a high of 67.3 percent in 2000 and then started a downward trend (Figure 1).

FIGURE 1. Civilian Labor Force Participation Rate

Source: U.S. Bureau of Labor Statistics.

It is important to understand who is counted and who is left out of the calculation in order to draft policies that mitigate the social afflictions that are intended to solve; otherwise, instead of assisting to solve poverty, for example, the policy may contribute to ineffectively address the real issues and challenges. In the particular case of estimating the member of our labor force, participation rate, and unemployed, there is one very important limitation to understand clearly. The limitation emanates from the definition of who is actively looking for employment and attachment to the labor market.

In the first instance, anybody who is actively looking for employment gets drop out of the calculation if the person remains unemployed after 6 months. They are known as discouraged dislocated workers. The general understanding is that if they have not opted for achieving employment; then, they may not have the urgency for earning a living due to the perception that they are plenty of job opportunities. These job opportunities, most likely are in other occupational areas where the job seeker lacks experience or at different occupational groups putting the person at risk

of becoming under-employed. In the second instance, many members of our community hold multiple part-time jobs with a small number of hours; despite that, they would like to work many more hours or even become fulltime employees. The aggregated statistics need to be analyzed very carefully to negating the opportunity of growth to vulnerable populations. As we can see, there is still much to do to reenergized Americans that is not ripping the benefits from today's economic expansion.

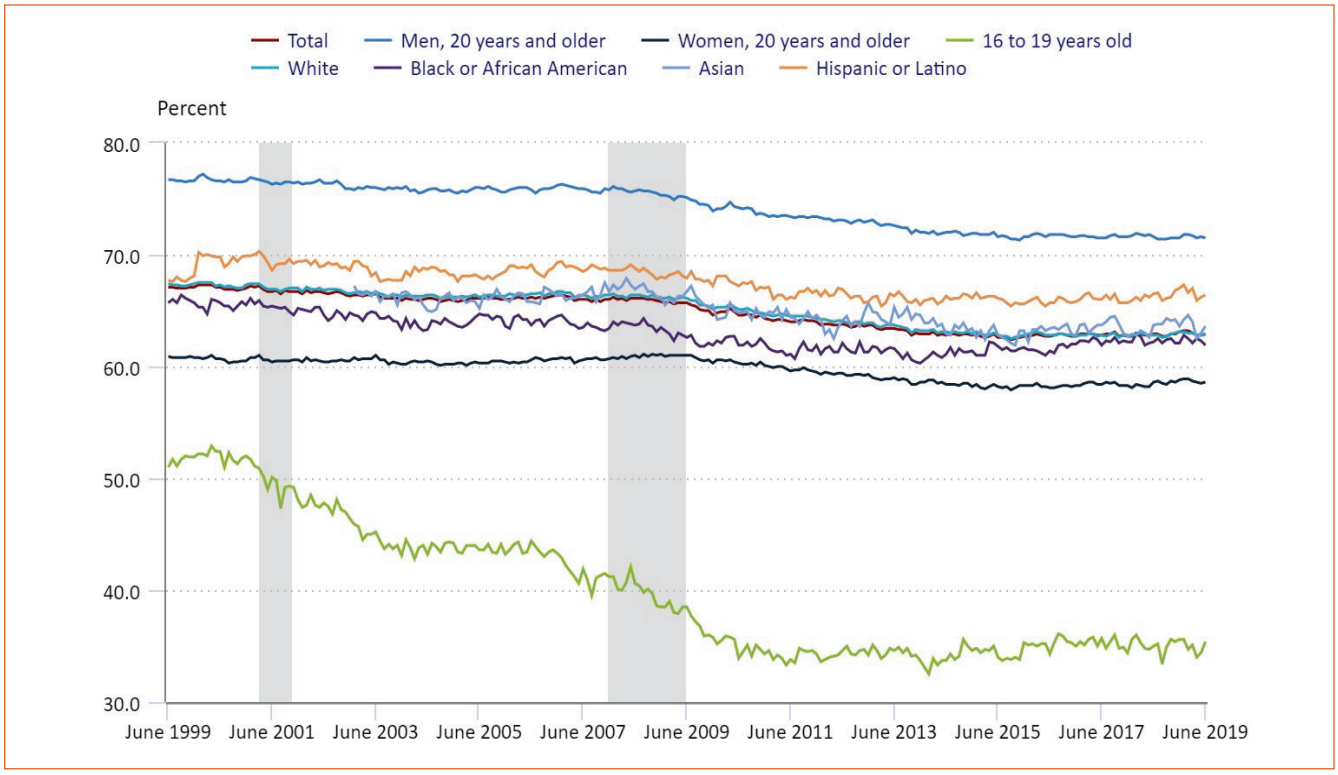
Figure 2 depicts the labor force participation rate by persons' characteristics like ages gender and ethnicity. It shows that people between the ages of 16 to 24 participation rate was 55.0 percent in September 2018. Their rate has remained fairly steady since late 2009. Before that, the labor force participation rate for people ages 16 to 24 had trended downward for several decades. Among people ages, 25 to 54, the labor force participation rate was 81.8 percent in September 2018.

The rate has edged up in recent years for women and men. Among people age 55 and older, the labor force participation rate was 40.1 percent in September 2018. The rates for women and men in this age group had trended upward through the end of the 2007–09 recession and have been fairly steady since then.

A simple visual analysis of figure 2 illustrates the declining trend in participation rates for all ethnic groups over the last two decades. African Americans and Hispanics are the two groups particularly affected by not reaching a higher percentage of the participation rate in order to benefit from the latest economic expansion. It is troubling to notice the rapid decline in the number of employment opportunities for younger adults age 16-19.

The following chart clearly indicates areas for improvement in terms of engaging different segments of our population. Particularly during times when our economy is experiencing tight labor markets, figure 2 depicts the opportunities reaching ours to the underserved and underrepresented members of our community.

FIGURE 2. Civilian Labor Force Participation Rate by Age, Gender, and Ethnicity



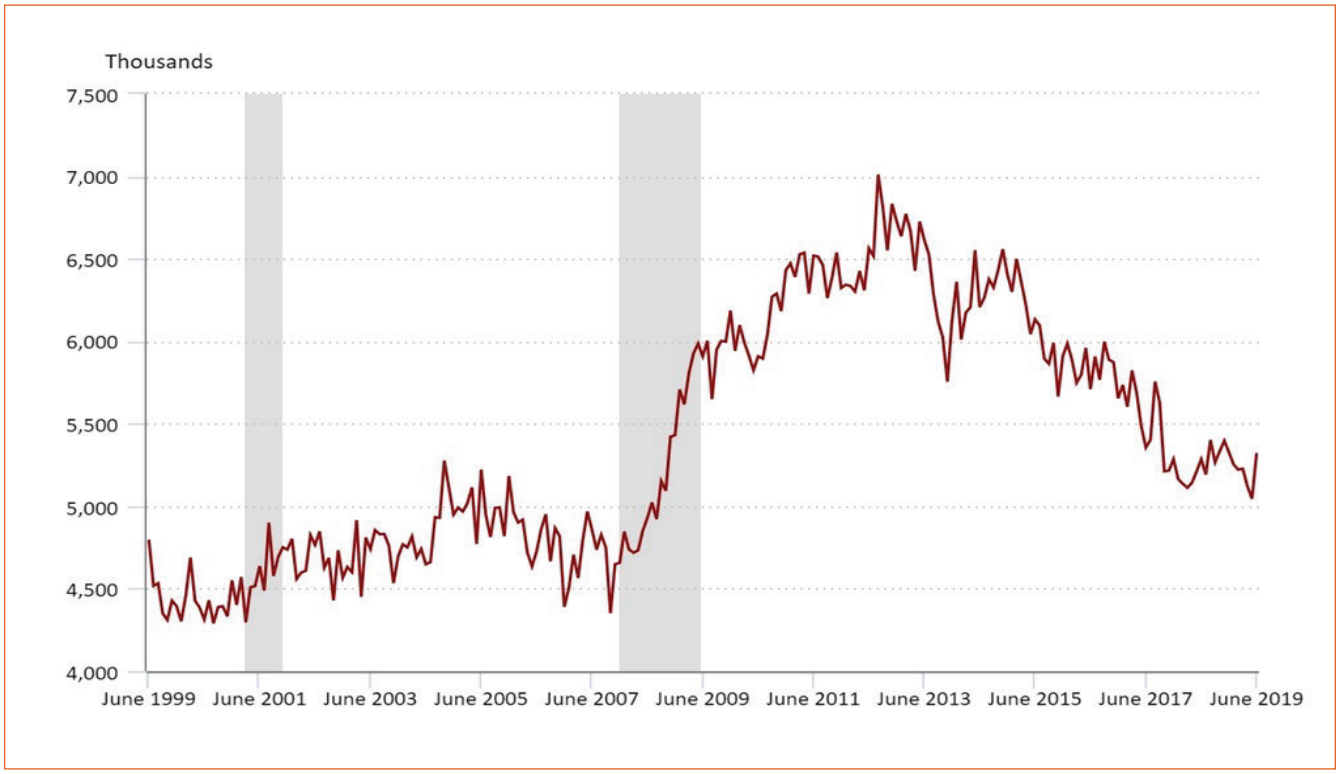
Source: U.S. Bureau of Labor Statistics.

The US Bureau of Labor Statistics' survey called Current Population Survey (CPS) collects a sample of 60,000 eligible households for this survey. From this survey, the BLS concludes that there is a significant number of persons between the ages of 16 and 65 that would like to have a job but have become discouraged to keep looking. This is a confirmation that our labor force is not being utilized to its full potential; hence, creating inefficiencies and poverty. Notice in Figure 3 the lag in the pick for Persons not in the Labor Force Who Want a Job after our last recession, and between 2012 and 2013. This indicates that many of these persons tried to seek employment even during the recession but became discouraged did not actively engage in employment activities.

Despite all the positive economic news that partially covers a portion of the economy, there are about 5.3 million people that are not actively looking for employment; therefore, not counted as part of the labor force, but would like to have a job.

According to the last June 2019 report from the BLS, there were around 5,300,000 people not counted as part of the labor force but would like to have a job. These people are part of the persons who most likely are considered discouraged workers and whose unemployment insurance benefits ran out due to not finding quality employment for 6 months. These statistics peaked in May 2013 at 7,000,000 people. These statistics do not take into account the marginal attached/employed and the working poor. This statistic has not reached pre-recession levels as of June 2019.

FIGURE 3. Persons not in the Labor Force Who Want a Job



Source: U.S. Bureau of Labor Statistics.

We need to be fully aware of the limitations of our data and analysis before proposing any policy to alleviate any social afflictions and poverty.

There are currently employers looking for qualified labor to maintain, to expand, and grow their businesses. It works against our society having untapped talent not maximizing their potential, not paying taxes, but on the contrary, collecting social benefits.

The BLS reported that the Nation's current economic expansion entered its ninth year in 2018. By the end of the year, the economy had grown for 114 months since the end of the Great Recession in June 2009—the second-longest economic expansion on record. Reflecting this sustained period of economic growth, the U.S. labor market showed continued strength during the year. Steady job growth continued, and the unemployment rate (the number of unemployed people as a percentage of the labor force) fell to a 49-year low. Then, general media outlets were reporting that A tight labor market is holding small businesses back from expanding in this hot economy. CNBC and SurveyMonkey's latest small business optimism index echo that sentiment, finding 52% of small businesses say it's harder to find workers today than it was a year ago.

Many economists and policymakers embrace the notion that much of the decline in labor force participation could be attributed to business cycle factors and it could be considered an indicator of future economic activity. These economists and policymakers believe that the low labor force participation rate indicates that the economy is weaker than the (U-3) unemployment rate actually indicates. This implies that a large number of discouraged workers (who are not counted as part of the labor force) would cause the labor force participation rate to fall and keep the unemployment rate lower than it would otherwise be. So, it is important to note the limitations of the calculations of the unemployment rate (U-3).

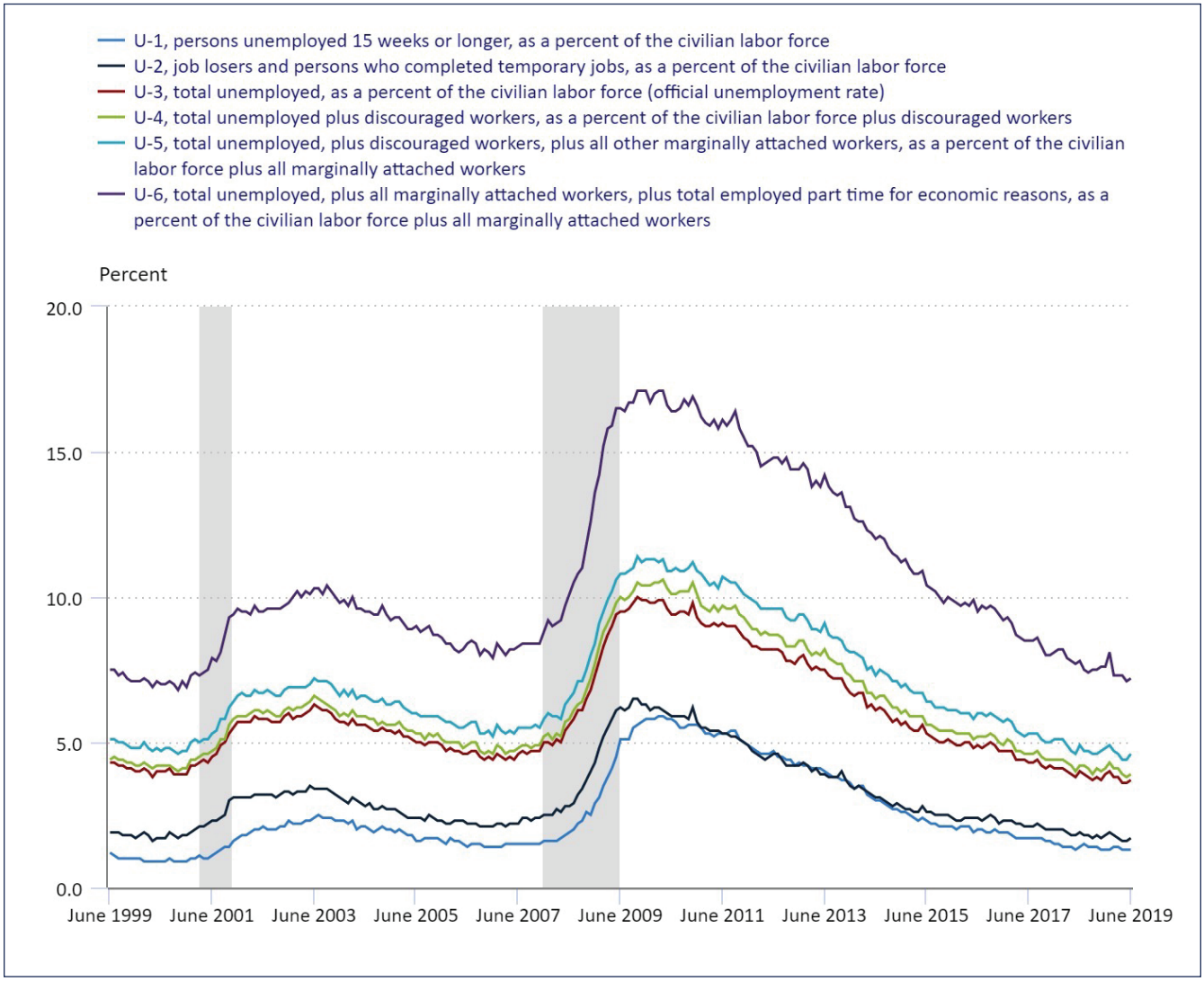
The U.S. Bureau of Labor Statistics produces several labor market indicators like employment levels and unemployment rates, including six "alternative measures of labor underutilization." These six additional measures (U-1 to U-6) provide a more extensive perspective and understanding of the challenges workers experience in today's economy. Even though these measures differ in scope, they commonly depict trends comparable to that of the unemployment rate (U-3). For example, each of the six indicators increased at the beginning of the 2001 recession and declined around mid-year in 2003. The six alternative measures started growing once more during the financial crisis of 2007- 2009. The upward trend persevered throughout the recession and progressively started declining in 2010. None of the indicators has gone back to its prerecession level, and as expected, they have been exacerbated with COVID-19.

From 2013 until today, the most comprehensive measure of labor underutilization, U-6 has risen to an unprecedented level in the history of these measures. The U-6 includes the total unemployed plus people who are marginally connected to the labor force and employed people who are working part-time for monetary reasons. During the last financial crisis, the unemployed and individuals working part-time for financial motives constituted the largest portion of U-6. Prior to COVID-19, the unemployment rate was gradually declining since 2010, unfortunately, the marginally attached and part-time workers categories have seen relatively minimum improvement. Nevertheless, the U-6 was behaving similarly with the motion of U-3. Above all, U6 provides a more realistic measure to evaluate the health of the labor market.

It is crucial to understand that the U-6 can give us a better reading of the problem our workers face in the labor market. This is very important to crafts appropriate measure and policies.

According to the Current Population Survey (CPS), the official definition of a dislocated worker or unemployed is a person who is 16 years and older and is actively looking for work and is available to work. The unemployed are the largest component of the U-6, at about 50 percent. At the beginning of the last economic downturn, 7.6 million workers were displaced from their jobs. These numbers almost had almost doubled to 14.7 million when the recession officially ended in June 2009. This upward trend persisted until the end of 2010. By September 2014, the unemployment rate had decreased to 9.3 million, and it continued to a very slow recovery, a jobless, recovery for the most until hitting prerecession levels.

FIGURE 4. Alternative Measures of Labor Utilization



Source: U.S. Bureau of Labor Statistics.

Workers who are marginally attached to the labor market are the ones that would like to have a job and are available to work but are not currently seeking employment. The marginally attached represents the smallest share of the three components that constitute the U-6 (around 12 percent in September 2014). There were 1.3 million marginally attached workers in December 2007 and by June 2009, that statistic has grown substantially, to 2.2 million. This upward trend continued until early in 2011 when it began to improve. Nevertheless, the statistics show that there were 2.2 million marginally attached workers in September 2014.

Studies show that to a great extend most marginally attached workers remain remarkably higher during the recovery. Despite this negative trend, the marginally attached worker as a factor has a relatively minimal impact on the U-6 due to its small size.

Part-time workers for economic motives are defined as involuntary part-time workers, working between 1 to 34 hours per week. Let's remember that these workers are available and actively seeking fulltime employment. This happens mainly when the local economy does not have enough employment opportunities or when the worker does not have the ability to find and secure fulltime

employment. Let's also remember that these workers are involuntarily working part-time. The involuntary part-time workers constitute with about 38 percent of the U-6. The number of involuntary part-time workers during the recession of 2007-2009 was 4.6 million. This number increased to 9.2 million by March 2010. The workers working part-time for monetary motives has trended down a bit, nevertheless, it was still significant, it was 7.1 million in September 2014. The most important factor contributing to the increase of the U-6 has been the involuntary part-time workers during the 2007–2009 recession. While unemployment figures depict a much rosier picture, experiencing a gradual decline over the years, the U-6 indicator has shown less of a comparable improvement, particularly when compared to the U-3 as a measure of labor underutilization.

A worthwhile rate noting is the rate between U-3 and U-6, which shows the gap between these two indicators and we can see that is has been expanding over the last few years. For example, from December 2012 to September 2014, the U-3 declined from 12.3 million to 9.3 million, a decline of 24 percent, whereas the involuntary part-time workers fell from about 7.9 million to 7.1 million (only 10 percent). Figure 5 illustrates the dynamic relationship and dependency between U-3 and U-6; nevertheless, the visual analysis indicates a correlation in terms of expansion and contractions of the two variables, but not in terms of the proportions of their components.

Table 1 shares the different levels for the Alternative Measures of Labor Underutilization and assist us to visually analyze and understand how comprehensive these measures are. For example, 7.2 percent of unemployment in June 2019 translates into 11.3 million persons needing employment with sustainable wages. The 11.3 million people needed employment is a figure that has been calculated during a time of positive economic indicators at the peak of the economic cycle. This number, for sure, will be much greater during times when the economy experiences a contraction.

TABLE 1. Unemployment Rates as per the Alternative Measures of Labor Underutilization

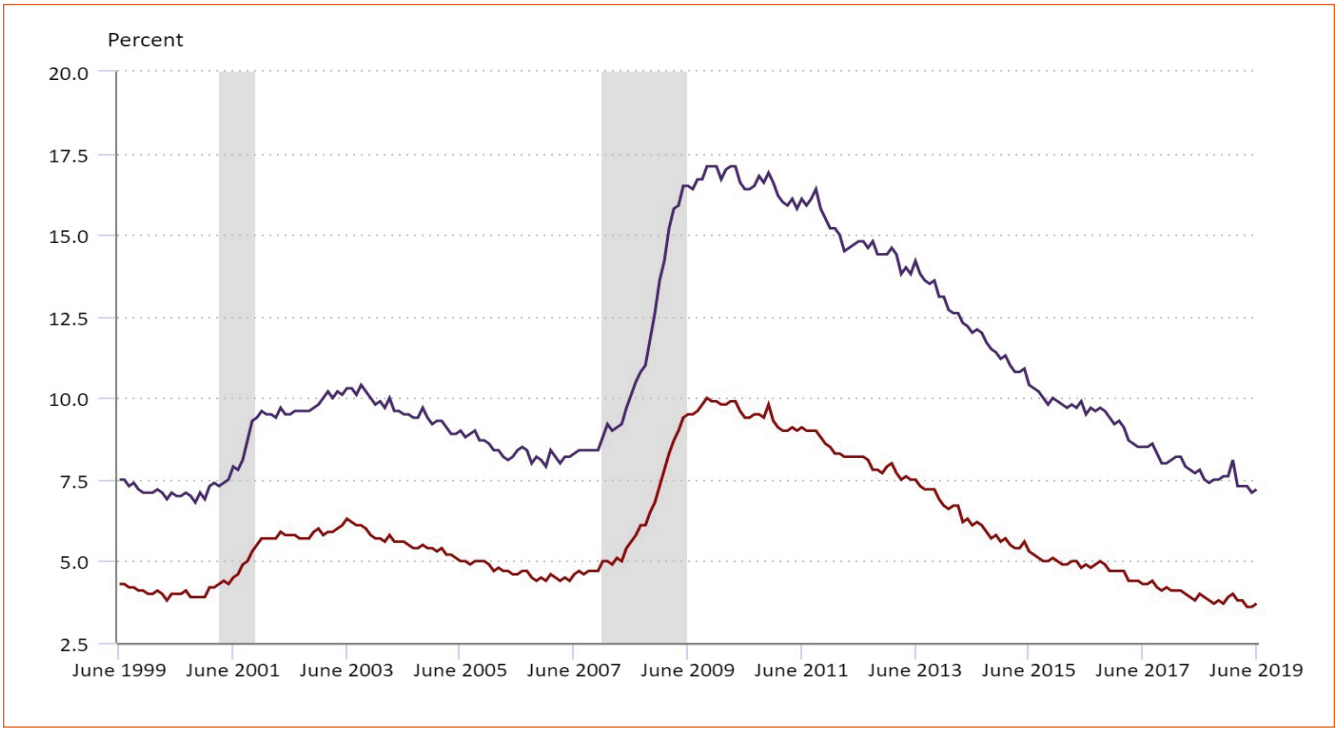
Measure	Seasonally adjusted					
	June 2018	Feb. 2019	March 2019	April 2019	May 2019	June 2019
U-1	1.4	1.4	1.4	1.3	1.3	1.3
U-2	1.9	1.8	1.7	1.6	1.6	1.7
U-3	4.0	3.8	3.8	3.6	3.6	3.7
U-4	4.2	4.1	4.1	3.9	3.8	3.9
U-5	4.9	4.7	4.6	4.4	4.4	4.6
U-6	7.8	7.3	7.3	7.3	7.1	7.2

Source: US Department of Labor. Bureau of Labor Statistics.

Figure 5 illustrates the fluctuation overtime of the U-3 and U-6. Also, the figure depicts the relationship between these two variables. Notice that U-6 shows a much more pronounce spike during the last recession which indicates that the number of discouraging workers, marginally attached workers, and involuntary part-time workers increased during this period of time.

A good program that can infuse enough momentum into increasing the labor force participation rate is the Federal Job Guarantee since the marginally attached, involuntary part-time and discouraged workers may get motivated to return to seek employment with benefits. The Federal Job Guarantee programs will be able to engage these three groups in a meaningful career pathway, with sustainable wages providing the platform to break away from the poverty cycle for himself and the next generations. The Federal Job Guarantee program could be implemented with a focus on strategic industries with greater multiplier effects and therefore, with a greater social return on investment and greater transformational power.

FIGURE 5: U3 versus U6 – what is measures versus the real needs are



Source: U.S. Bureau of Labor Statistics.

The Proposal

There has not been a shortage of the rhetoric used by politicians and elected officials in addressing poverty in America. The policies and programs developed to solve poverty have been mere palliatives with no long-lasting impact. Additionally, no serious consideration has been placed on tangible solutions like the Federal Job Guarantee. Nonetheless, over the last 15 years, there has been an increase in the discussions of the federal government to provide or guarantee jobs to Americans struggling to find employment in the private sector. The questions of how many Americans would participate and how much would it cost? are the questions we are answering in this paper.

The benefits are many and include poverty reductions, put pressure on the private sector to increase wages, strategically support living wages in economically distressed areas, contribute to reducing racial inequality that still holds minorities back, and serve as an effective mechanism in response to economic downturns. On the other hand, the primary criticism the Federal Job Guarantee faces is the very hefty monetary investment on this program and the obvious expansion of fiscal expenditures. The FJG opponents also argue that the program will generate adverse market conditions for small business, alleygating that small businesses will not be able to compete with the wages and benefits offered by the federal government and threatening the financial sustainability, therefore the existence of the small business.

The scale of the initial monetary investment will depend on the size of the population to be assisted by the program, and the potential industries and specific business impacted. Our paper offers a new perspective where the FJG will strategically focus on the populations facing long-term unemployment U-6 while assisting small businesses remaining stable during economic downturns. Our paper takes into account the multiplying effect in terms of direct and indirect job creation following an investment in the FJG employment in industries and businesses that are more vulnerable during economic slowdowns.

We envision a FJG that activates automatically and is fully flowing in accordance with market fluctuations. There will have to be a close collaboration between the local workforce development agencies and the economic and business development departments at the local level. The employment will be federal employment with a federal employment wage rate and benefits. FJG participants will be federal employees and will follow federal employment guidelines in terms of training, safety, and federal guidelines. The intention is that at one point in time during the recovery, the small business/industry will reimburse the federal government for the cost of the employee. The employee will be exposed to all the training and benefits available to create opportunities for professional growth, while the business will have available a highly qualified worker.

Following Dr. William Darity's paper titled "A Path to Ending Poverty by Way of Ending Unemployment: A Federal Job Guarantee," and the discussion of the three scenarios provided in the publication, and focusing on the total number of unemployed over the age of 18 (U-6) and the number of full-time equivalents (FTE) – jobs demanded.

The paper shows that during the Peak of the Great Recession the total number of FTE jobs demanded was 21,803,217. Please see table 2. Subsequently, for the modest uptake of July 2016, the estimated uptake would have been 11,952,708 jobs, demanding $1.2 trillion per year, and for the high uptake of July 2016, the estimated number of FTE jobs demanded would have been 38,252,798 requiring $2.1 trillion per year as an initial investment. Please refer to Table 2.

Our paper not only explores the initial investment in federal employment but expands this analysis to include the multiplying effect in terms of creating additional jobs. Following the same rationale as calculations as per Darity et All in their paper but updated for June 2019's number. The creation of 11.3 million jobs would have a cost, but more importantly, will have a tremendous positive impact on the life of many Americans and will finally give us a real opportunity to break the long-term poverty cycle.

TABLE 2. Federal Job Guarantee Expenditure and Uptake Estimates

	Peak Great Recession Case Scenario	July 2016 Modest Uptake	July 2016 High Uptake
Uptake			
Unemployment (U3)	10.1%	4.9%	4.9%
Unemployment (U6)	17.0%	9.7%	9.7%
Total number of unemployed over the age of 18 (U6)	26,423,432	15,623,402	15,623,402
Number of unemployed if U6 were at a full employment rate of 1.5%	24,091,953	13,207,412	13,207,412
Number of full-time equivalent (FTE) jobs demanded	21,803,217	11,952,708	38,252,798
Expenditures			
Average annual wage	$32,500	$32,500	$32,500
Average spending on supplies and capital goods per FTE	$10,833	$10,833	$10,833
Employer's share of FICA taxes	$2,486	$2,486	$2,486
Average spending on benefits	$10,000	$10,000	$10,000
Average cost per job	$55,820	$55,820	$55,820
Total cost	**$1,194,159,144,294**	**$654,648,131,050**	**$2,135,255,241,508**

Source: Author's calculations using the Labor Force Statistics from the Current Population Survey and BLS May 2016 National Occupational Employment and Wage Estimates.

Extending on Dr. Darity's analysis[3] to include a multiplier effect in terms of the jobs created by the expansion of, not only, the government employment through the FJG, but taking into account the indirect job creation in all industries. We refer to the FJG jobs as the Direct Public Sector Job Creation and the jobs created indirectly in other industries as the Indirect Private Sector Job Creation. So, carrying forward from Dr. Darity's analysis, the number of jobs needed to impact the total U.S. Market Economy in the three scenarios presented in their report is 21,803,217 during Peak 2008 Great Recession, followed by the 2nd scenario of 11,952,708 (modest uptake) and 38,252,798 for the 3rd scenario (high uptake). Please refer to table 3.

The Industry by Industry Multipliers from the Total Requirements produced by the U.S Department of Commerce, Bureau of Economic Analysis were used to estimate the indirect employment created by the FJG. Following the same rationale, 8,344,441 needed for the Peak 2008 Great Recession, followed by the 2nd scenario with 4,574,493 jobs (modest uptake) and 14,639,960 for the 3rd scenario (high uptake). Please refer to Appendix IV.

Our proposal and approach take away some of the pressure in terms of the amount of effort and massive funding levels needed to launch a full FJG program; nevertheless, it capitalizes on the indirect employment creation. This indirect employment creation does

[3] Darity, William Jr. "Who loses from Unemployment." Journal of Economic Issues, 33, no. 2 (June 1999): 491.

not have to be low quality work propositions, on the contrary, it will have to follow FJG guidelines in terms of opportunities and benefits. Therefore, the level of Direct Public Sector employment, under the three scenarios, needed would be 13,458,776 needed for the Peak 2008 Great Recession, followed by the 2nd scenario with 7,378,215 jobs (modest uptake) and 23,612,838 for the 3rd scenario (high uptake).

It is important to bring to our attention that the focus of the job creation for "Indirect Private Sector Job Creation" pivots on the industries with the higher multipliers which will render greater levels of employment. (Please refer to Appendix IV). Our estimation reveals that Manufacturing, Finance, Insurance, Real Estate, Rental and Leasing, and Professional and Business Services industries will generate most of the employment due to a direct investment in government jobs due to the FJG. These three major industry sectors encompass 66 percent of the total job growth.

TABLE 3. Private/Public Sector Jobs Created Under 3 Scenarios of an FJGP

	Peak Great Recession Case Scenario	July 2016 Modest Uptake	July 2016 High Uptake
Direct Public Sector Job Creation:			
Number of full-time equivalent (FTE) jobs demanded* Darity et All[4]	**21,803,217**	**11,952,708**	**38,252,798**
Direct – jobs demanded	13,458,776	7,378,215	23,612,838
Indirect Private Sector Job Creation:			
Agriculture, Forestry, Fishing and Hunting	134,588	73,782	236,128
Mining	269,176	147,564	472,257
Utilities	134,588	73,782	236,128
Construction	403,763	221,346	708,385
Manufacturing	2,826,343	1,549,425	4,958,696
Wholesale Trade	538,351	295,129	944,514
Retail Trade	0	0	0
Transportation and Warehousing	403,763	221,346	708,385
Information	538,351	295,129	944,514
Finance, Insurance, Real Estate, Rental and Leasing	1,076,702	590,257	1,889,027
Professional and Business Services	1,615,053	885,386	2,833,541
Educational Services, Healthcare, and Social Assistance	134,588	73,782	236,128
Arts, Entertainment, Recreation, Accommodation, and Food Services	134,588	73,782	236,128
Other Services, Except Government	134,588	73,782	236,128
Total Indirect Jobs Demanded	**8,344,441**	**4,574,493**	**14,639,960**

[4] Darity, William Jr. "Who loses from Unemployment." Journal of Economic Issues, 33, no. 2 (June 1999): 491.

Government revenues are estimated by calculating taxes generated from income taxes (direct) and sales taxes (indirect) that apply to the average annual wage salaries for the government jobs of $32,500 as postulated in Dr. Darity's paper. We understand that income taxes vary depending on the Internal Revenue Service (IRS)'S tax brackets. For the sake of this study, we utilized an average of 12 percent income tax across the nations. Please refer to Appendix I and II for the 2018-19 tax brackets. Similarly, sales taxes varied greatly around the nation, therefore, we use an average based on the information presented in Appendix III and IV. We estimate an average of 8.7 percent sales tax. In our calculation, we applied the taxes from the average annual wages. Table 4 illustrates the calculations direct (avg 12%) and indirect (avg 8.7%) government revenues for the public sector jobs created by the FJG under the three scenarios.

TABLE 4. Revenues from Creating FJG Direct Public Sector Jobs under the Three Scenarios

	Peak Great Recession Case Scenario	July 2016 Modest Uptake	July 2016 High Uptake
Average annual wage (Gov Jobs)	$32,500	$32,500	$32,500
Direct Taxes (*) 12% - Income Tax	$3,900	$3,900	$3,900
Indirect Tax (AVG 8.7%) – Sales Tax	$2,488	$2,488	$2,488
Total in Taxes	$6,388	$6,388	$6,388
Direct # of Jobs (**)	13,458,776	7,378,215	23,612,838
Total Revenues Back to Government	**$85,977,352,843**	**$47,133,513,319**	**$150,843,533,245**

*Federal tax brackets: 2019 tax brackets (for taxes due April 15, 2020)

**Number of full-time equivalent (FTE) jobs demanded

Please notice that the level of employment is about 62 percent of the level of employment proposed in Dr. Darity's paper. This is because our paper is taking into account the level of employment created by the private sector. We estimate the private sector employment creation by incorporating the multiplier effect generated from the FJG. As shared earlier in this paper, these private-sector jobs must follow FJG standards in terms of quality of work and benefits. Facilitating and regulating the quality of work may prove to be challenging; nevertheless, the aspirational goal could be delineated in the job description and enforce through a qualifying process for local, state, and federal government contracting.

Table 5 presents the same calculations as the prior table, but this time, the calculations focus on the jobs created indirectly by the implementation of the FJG. One of the most important highlights of this process depicted in this table is that the indirect jobs created do not generate any expenses for the FJG. On the contrary, it would generate revenues through direct and indirect taxes and will generate saving savings in government expenditures due to not needing unemployment benefits. On the non-tangible assets, having a large segment of the population fully engages in the labor market, learning, working, and contributing to society makes a big difference when referring to a higher standard of living and higher quality of life.

TABLE 5. Revenues from Creating FJG Indirect Private Sector Jobs under the Three Scenarios

	Peak Great Recession Case Scenario	July 2016 Modest Uptake	July 2016 High Uptake
Average annual wage (Gov Jobs)	$32,500	$32,500	$32,500
Direct Taxes (*) 12% – Income Tax	$3,900	$3,900	$3,900
Indirect Tax (AVG 8.7%) – Sales Tax	$2,488	$2,488	$2,488
Total in Taxes	$6,388	$6,388	$6,388
Indirect # of Jobs (**)	8,344,441	4,574,493	14,639,960
Total Revenues Back to Government	**$53,305,958,763**	**$29,222,778,257**	**$93,522,990,612**

More specifically, Table 4 depicts the revenues generated from the indirect private-sector jobs created from the implementation of the FJG under the three scenarios. Our analysis reveal that government revenues reach $53,305,958,763 at the Peak 2008 Great Recession, followed by the 2nd scenario with $29,222,778,257 jobs (modest uptake) and $93,522,990,612 for the 3rd scenario (high uptake). Please refer to Appendix I and II for the 2018-19 tax brackets and to Appendix III and IV for sales tax information.

Darity's analysis requires the full FJG payroll under the federal government while this paper's approach asks for only 62 percent of employment to be under the federal government and the remaining 38 percent under the private sector. This last approach facilitates the promotion and increases the chances for acceptance and approval by elected officials since the required investment is lower and promotes new hires by businesses in the private sector.

In this analysis, we utilize the maximum authorized unemployment benefits to reflect the savings in social benefits expenditures if the FJG employs the millions of dislocated workers needing meaningful and quality work. Appendix VI shows the table with all the states in the Nation's maximum allowable unemployment benefits. We averaged these weekly benefits and multiplied the maximum number of weeks permissible by law. This maximum authorized unemployment benefits are multiplied time the number of the total number of full-time equivalent (FTE) jobs demanded. Following the same analysis for the three scenarios, we obtain the figures illustrated in table 6. In other words, the total savings in government expenditures due to not needing to unemployment benefits because the persons are employed are $ 269,882,030,674 at the Peak 2008 Great Recession, followed by the 2nd scenario with $ 147,951,612,236 and $ 473,496,310,347 for the 3rd scenario (high uptake).

TABLE 6. Total Savings in Government Expenditures due to Not Needing Unemployment Benefits

	Peak Great Recession Case Scenario	July 2016 Modest Uptake	July 2016 High Uptake
Number of full-time equivalent (FTE) jobs demanded	$21,803,217	$11,952,708	$38,252,798
Total Savings in Gov Expenditures due to Unemployment Benefits	$ 269,882,030,674	$ 147,951,612,236	$ 473,496,310,347

Our analysis has expanded on the "A Path to Ending Poverty by Way of Ending Unemployment: A Federal Job Guarantee" paper by including, first, the calculation of the multiplier effect of the FJG program, and determining that a 62 percent investment could lead to 100 percent employment due to the creation of jobs created in the private sector. Second, our analysis includes the revenues generated in terms of direct and indirect taxes generated from the implementation of the FJG, and lastly, our analysis includes the saving in government expenditures due to not needing unemployment benefits.

Table 7 illustrates the simple mathematics behind the calculations which render the true cost of the Federal Job Guarantee program taking into account the multiplier effect, the revenues derived from the creation of jobs, and the social benefit savings. So, the true cost of the FJG is $327,969,936,033 at the Peak 2008 Great Recession, followed by the 2nd scenario with $179,795,893,120 and $600,195,955,087 for the 3rd scenario (high uptake).

TABLE 7. True Cost FJG with Multiplier Effect and Savings in Unemployment Benefits

	Peak Great Recession Case Scenario	July 2016 Modest Uptake	July 2016 High Uptake
Total Government Revenues	($139,283,311,606)	($76,356,291,576)	($244,366,523,857)
Savings in Gov Expenditures due to Unemployment Benefits	($269,882,030,674)	($147,951,612,236)	($473,496,310,347)
Total cost According to Paper 1	$1,194,159,144,294	$654,648,131,050	$2,135,255,241,508
Total Cost According to Paper 2 w/Multiplier	$737,135,278,313	$404,103,796,932	$1,318,058,789,290
True Cost of FJG – Taking into Account Multiplier Effect +Savings	$327,969,936,033	$179,795,893,120	$600,195,955,087
Ratio of Paper 1 Estimate/True Cost	27%	27%	28%

The approach presented in this paper presents a more palatable proposition since it requires less than one-third of the initial investment presented in Dr. Darity's paper. Our approach presents an opportunity for considering the FJG in support of the small business.

Other Important Factors to Consider

Nontangible Benefits of the Federal Job Guarantee

For as long as humans have been around, the action of working has served as an integral part of our essential nature. Our ancestors experienced the advantages of working as the urgency of survival was obtainable through means of labor. Their endeavors to locate and collect vital material commodities such as food, water, and shelter transcend into contemporary society in which we also engage in similar ventures to realize the same objective: to survive. The successful ability to secure such substantial necessities cultivates additional obscured compensation, resulting in the undertaking of labor to be both more rewarding and meaningful. The intangible benefits earned through the act of working can be assorted to both psychological and sociological advantages. Working strengthens the well-being of people all while developing and stimulating the linkage between them and the social and economic forces that impacts them daily. Working, specifically attaining employment, is both the necessity and the norm of present-day society. Adverse ramifications arise as people are deprived of procuring employment such as both physical and mental health challenges and learning barriers that prevent the individual from developing the necessary skills to advance within society. Such shortcomings disrupt the social ecology of society as high rates of unemployment can lessen the quality of life of a community, likely resulting in detrimental side effects such as higher rates of criminal activity, drug usage, and overall poverty.1 Creating and allowing access to employment to the people and in most general, the communities, who experience high numbers of unemployment will promote both the financial and intangible benefits that will allow them to prosper and survive.

One of the intangible benefits of working is better physical health. The United Kingdom's Department of Work and Pensions found that those who face unemployment often experience higher mortality rates, poorer general physical health, and higher frequency of medical intervention, medication consumption, and hospital admissions within their report Is Work Good For Your Health and Well-Being?2 In The Impact of Employment on the Health Status and Health Care Costs of Working-age People with Disabilities, the Lead Center shares common results from many large-scale literature reviews and analyses affirming the physical health benefits of employment. 54percent of individuals with disabilities who disclosed their health as "excellent, very good, or good" were employed in contrast to 26percent of individuals with disabilities who stated they were in "fair or poor" health. 3 Additionally, recipients from North Carolina with disabilities who were enrolled within the Medicaid program and utilized a high level of health care services were found to be less likely to be employed in comparison to recipients who utilized a lesser number of health care services. Analyses such as the previously mentioned reaffirm both positive and imperative advantage of procuring employment as it actively affects our physical well-being.

Just as employment can contribute positively to the physical well-being of an individual it can additionally be as beneficial for the mental health of a person. Those who live in poverty often feel powerless as they experience an inability to meet basic needs such as food, clean water, and shelter. Within the literature reviews conducted in The Psychiatrization of Poverty: Rethinking the Mental Health-Poverty Nexus, research has shown that a variety of mental disorders are linked to poverty. Mental disorders such as depression affect low-income groups 1.5-2 times more, and schizophrenia at 8 times the rate. 4 According to the Lead Center, the Behavior Risk Factor Surveillance System Survey showed that employed individuals with a disability experienced mental distress less frequently in comparison to individuals with a disability who are not employed. 5 In the same matter that the attainment of employment positively benefits physical health, it also contributes to the intangible well-being of mental health. The intangible benefits of employment are evident as research and literature reviews report the effects of working on physical health and mental, which are critical for human development and survival. The hardships and impairment that severe unemployment inflicts upon individuals can spread into their communities if

unresolved. These individuals often feel as though they have lost social capital and are socially excluded from others due to their inability to access employment. According to The Social Consequences of Poverty: An Empirical Test on Longitudinal Data, such effects and feelings may discourage them from participating in civic and political affairs.6 High rates of unemployment may also increase additional negative behaviors

The Impact of Employment on the Health Status and Health Care Costs of Working-age People with Disabilities, (Lead Center), 3 6 Carina Mood, The Social Consequences of Poverty: An Empirical Test on Longitudinal Data, (Social Indicators Research) that can agitate communities, such as higher usage of drugs and crime.7 There are often negative outlooks when examining the correlation between the act of working and its effects on people. However, one must consider the security and dependability of such work for the individual. When discussing the policies to reduce unemployment, especially among areas that experience high rates of it, plans must be implemented to ensure that the development of employment must include factors such as job security and sufficient living wages to ensure that the employed individual experiences the positive intangible benefits discussed.

Improving Business and Economic Efficiencies

The FJG has tremendous potential for influencing positively business and economic efficiencies by creating productive working environments that align with innovation, higher federal labor standards, and training opportunities. We start from the premise that an efficient labor market will transfer efficiencies and competitiveness to the firms and businesses. For example, it is said that economic efficiency takes place when all goods and factors of production in an economy are distributed or allocated to maximize value and minimized waste and negative externalities. This could be accomplished only with a well-prepared labor force that has the hard and soft skills needed to determine better resource allocations all through the production process and delivery of services.

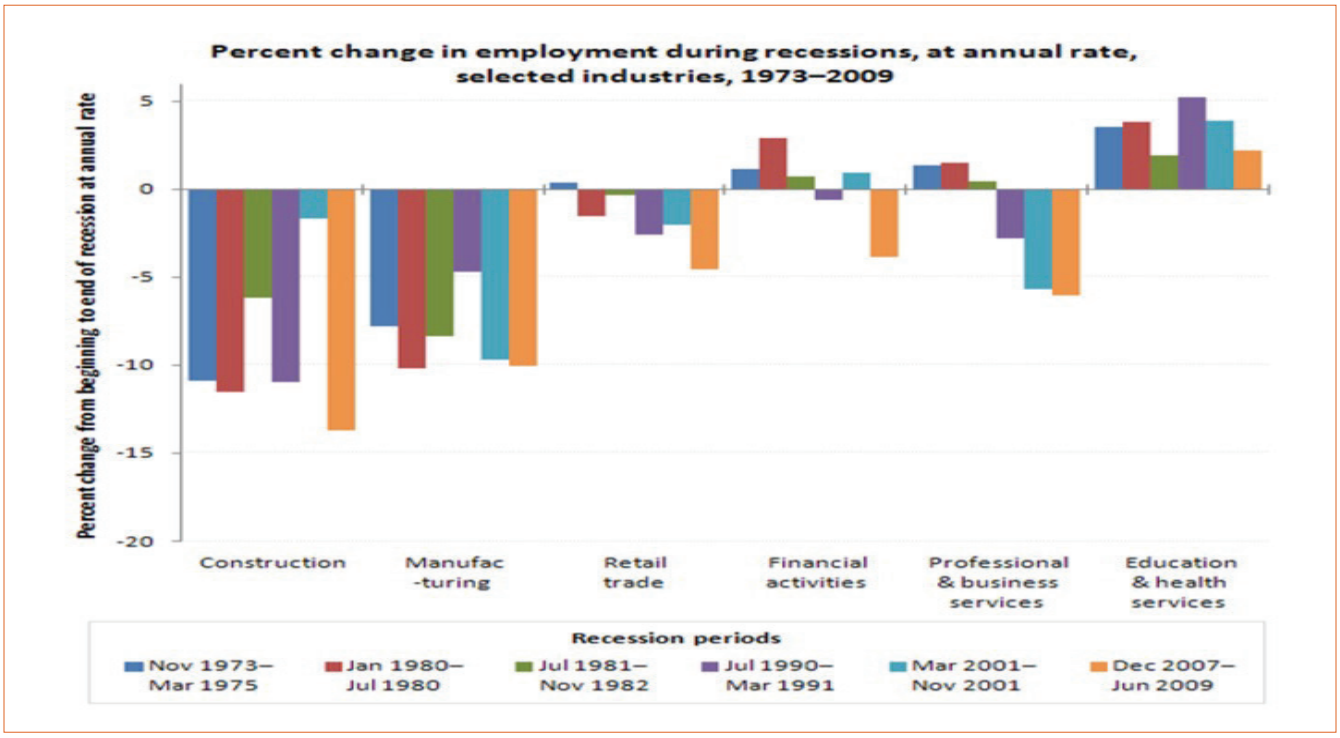
Business and economic efficiency pivots on making cost-effective production decisions within company and industry sectors, making sensitive decisions to capture segments of the market, and efficient distribution of goods and services. According to the World Economic Forum, efficient workers with the most suitable job skills will be the ones delivering a higher level of efficiencies and productivity in the firms. The FJG will offer labor market stability which will provide the base for efficient labor markets that will incentivize employees and employers to promote productivity.

Our FJG proposal recommends balancing the creation of direct government jobs and indirect private sector jobs which would vary depending on the phase of the business cycle of the economy. A well-trained workforce will add flexibility to labor markets allow workers to shift from declining firms and enable companies and the economy as a whole to respond to external shocks. Unfortunately, the dynamic upswings and downswings of the economy do not provide enough market stability for businesses to invest in their long-term educational development of their workers. On the contrary, most businesses, particularly small businesses, have the tendencies to focus on the short-term benefits and financial bottom line. Indirect private-sector employees could be FJG employees leased to private sector companies, similarly as the State University System of Florida are Florida State employees but are leased to the university system. There are a few examples at the county level as well.

Industries' Recession Resistant

Over the last six recessions, some industries are more prone to stronger declines in employment levels than others. This depends on several factors and the nature of the decline of economic activity. Figure 6 shows that Education and Health Services major industries division have experienced a positive percent change in employment. It is imperative to pay attention that these very same industries experiencing qualified labor shortages. The Federal Job Guarantee program should invest in services that align with these industries as key industries to smooth out the business cycles.

FIGURE 6. Percent Change in Employment During Recessions



Source: U.S. Department of Labor. Bureau of Labor Statistics.

Multiplier Effect On Strategic Industries

Visual analysis of the Industry by industry multipliers[5] from the Total Requirement (Appendix VI) rapidly reveals strong effects from the Manufacturing; Finance, Insurance, Real Estate, Rental and Leasing; and the Professional and Business Services industries. All these industries amount to 66 percent of the total employment effect in the entire economy. Just manufacturing alone contributes to 34 percent of the entire effect. If there is a need to making the FJG more impactful, in terms of the return on investment, then these three industries are the ones we should be aiming at investing.

TABLE 8. Major Industry Contribution due to the Multiplier Effect – Private/Public Sector Jobs Created Under 3 Scenarios

	Peak Great Recession Case Scenario	July 2016 Modest Uptake	July 2016 High Uptake	July 2016 High Uptake
Direct Public Sector Job Creation:				
Number of full-time equivalent (FTE) jobs demanded* Darity et All	21,803,217	11,952,708	38,252,798	
Direct – jobs demanded	13,458,776	7,378,215	23,612,838	
Indirect Private Sector Job Creation:				
Manufacturing	2,826,343	2,826,343	4,958,696	34%
Finance, Insurance, Real Estate, Rental and Leasing	1,076,702	590,257	1,889,027	34%
Professional and Business Services	1,615,053	885,386	2,833,541	19%
Other Industries	2,826,343	1,549,425	4,958,696	34%
Total Indirect Jobs Demanded	**8,344,441**	**4,574,493**	**14,639,960**	**100%**

All other industries amount to the remaining 34 percent.

[5] In economics, a multiplier broadly refers to an economic factor that, when increased or changed, causes increases or changes in many other related economic variables. In terms of gross domestic product, the multiplier effect causes gains in total output to be greater than the change in spending that caused it. The term multiplier is usually used in reference to the relationship between government spending and total national income. Multipliers are also used in explaining fractional reserve banking, known as the deposit multiplier. An investment multiplier similarly refers to the concept that any increase in public or private investment has a more than proportionate positive impact on aggregate income and the general economy. The multiplier attempts to quantify the additional effects of a policy beyond those immediately measurable. The larger an investment's multiplier, the more efficient it is at creating and distributing wealth throughout an economy.

Alternatives To The Federal Job Guarantee

Many believe that the Universal Basic Income is an alternative to the Federal Job Guarantee (FJG). Nothing could be further from the truth. Both programs, the FJG and the UBI provide either salary/wages or cash payment by the government to all residents. The FJG provides a better platform since it engages the person in a working activity as an employee rather than just a cash recipient, from this perspective, exposing persons to a culture of work and training opportunities. Our research shows that Pilot UBI programs have taken place or are ongoing in the United States, Brazil, Canada, Finland, and other parts of the world. We have not seen a pilot of the FJG anywhere in the globe.

Advocates of UBI affirm that it helps with fighting poverty, reducing income inequality, improving the health of recipients, and empowering women by recognizing the value of unpaid homemakers and caregivers. UBI proponents believe that it encourages employment and skills training. Opponents of UBI say that it provides a disincentive to work and weakens the economy. They also say it is unaffordable and less effective than targeted aid and welfare. Additionally, Robert Greenstein, President of the Center on Budget and Policy Priorities, states that "if you take the dollars targeted on people in the bottom fifth or two-fifths of the population and convert them to universal payments to people all the way up the income scale, you're redistributing income upward. That would increase poverty and inequality rather than reduce them." Furthermore, UBI does not cure addiction, poor health, lack of skills, or other factors that contribute to poverty.

The FJG is not just a better proposition than UBI. FJG adds money to the economy by increasing productivity and output. This is how you avoid or greatly reduce the severity of, inflation. It forces private industry and the military to up their game, to be competitive with the FJG: better than a bare-minimum living wage, benefits, and working conditions. During times like the current crises, the FJG would expand to accommodate the dislocated workers providing not only a safety net but a motivation to keep active in the labor force despite all challenges. This context provides a more productive, engaging, and mentally healthy environment.

This study presented on page 24 a section that introduces the nontangible benefits of the Federal Job Guarantee, primarily listing all the benefits derived from engaging in work activities. Since the beginning of humanity, man has developed skills that develop satisfaction and independence by generating his or her own means of survival, in this case, earning a wage for work.

The FJG As An Economic Safety Net During the COVID 19 Global Pandemic

The Federal Job Guarantee (FJG) and the Universal Basic Income (UBI) have been getting a lot of attention from policymakers during the COVID 19 Global Pandemic. If we would have had one of these programs, the blow to economic activity would have been minimized by having persons receiving some kind of cash assistance, wages, or salaries to assist them during these difficult times. Nevertheless, it is important to highlight that most government employees have kept working during the COVID-19 crisis, acting as an economic stabilizer. In other words, most government employees have been equipped to exercise a greater level of flexibility and adaptability to the huge challenges created by COVID 19 Global Pandemic.

In many regards, these flexibility and adaptability come from continued training opportunities, including upskilling and re-skilling of soft-skills and hard skills. With the continuation of employment and training opportunities come the health benefits that are crucially important during a pandemic. Unfortunately, Americans that become dislocated workers or unemployed during this global health crisis, have lost their health insurance adding to the stress and uncertainty.

As many as 44 million Americans lost their jobs during the peak of COVID-19. The FJG offers a tangible, sensitive, and sustainable proposition to dramatically tackling poverty reduction and smoothing out open market economic swings. The ability to employ all not only benefit the individual and their respective families, but the business in general since the demand for goods and services would not decline as in a crisis without a safety net. The FJG program should be designed to absorb all employees negatively affected and keeping working and earning wages during difficult times. Once the economy bounces back, then the private section could rehire these employees. Dr. Daniel P. Carpenter from Harvard University and Dr. Darrick Hamilton from Ohio State University published a paper calls for the federal government to provide a federal job guarantee for everyone that have become unemployed due to COVID-19 by directly hiring millions of workers in the coming two years. They argued such a measure would rejuvenate the workforce and "inject diversity and youth into a system that sorely needs it."

Conclusion and Recommendations

Many are the long-lasting benefits that the FJG could provide to all Americans at the macro and microeconomics levels. The FJG offers a real, sensitive, and sustainable proposition to dramatically tackling income inequality, reducing poverty, energizing labor markets, creating healthier work environments, and smoothing out market swings. It is time to give the opportunity for this innovative proposition to create a better capitalism model. There is a consensus among several economists and some policymakers that the recovery from the COVID-19 crisis should lead us to a new economy, a new economy that is more humane, more inclusive, and more stable. If implemented consciously and comprehensively, the FJG program promises to deliver all these benefits that would make us a better society.

The cost of implementing the FJG, although significant, will not compare to the immense long-lasting social cost of not do it. Nevertheless, this paper offers an approach that perhaps is more suitable to the FJG critics. Our proposal demonstrates that when conducting a well-orchestrated FJG, the cost of implementation could be as low as 27-28 percent. More importantly, the gains in terms of tangible and intangible benefits to the most vulnerable members of our communities are significantly higher in the long run. The FJG has the potential of breaking the poverty cycle definitively.

In short, the Federal Job Guarantee program has the potential for lifting millions of Americans out of poverty by providing meaningful job opportunities with sustainable wages, fringe benefits, and health insurance. The multiplier effect of such massive, but necessary investment translates into an increase in purchasing power and disposable income of the targeted population; generate increases in Government tax revenues which are very important for the state and local economies, spawn increases in savings in social benefits, and for sure a much happier, healthier and more productive labor force which paves the road for a more efficient and resilient business base.

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APPENDIX I. 2018-2019 Tax Brackets

2018-2019 tax brackets

BANKRATE.COM MARCH 7, 2019 in TAXES Advertiser Disclosure

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Federal tax brackets: 2019 tax brackets (for taxes due April 15, 2020)

Tax rate	Single	Head of household
10%	Up to $9,700	Up to $13,850
12%	$9,701 to $39,475	$13,851 to $52,850
22%	$39,476 to $84,200	$52,851 to $84,200
24%	$84,201 to $160,725	$84,201 to $160,700
32%	$160,726 to $204,100	$160,701 to $204,100
35%	$204,101 to $510,300	$204,101 to $510,300
37%	$510,301 or more	$510,301 or more
Tax rate	**Married filing jointly or qualifying widow**	**Married filing separately**
10%	Up to $19,400	Up to $9,700
12%	$19,401 to $78,950	$9,701 to $39,475
22%	$78,951 to $168,400	$39,476 to $84,200
24%	$168,401 to $321,450	$84,201 to $160,725
32%	$321,451 to $408,200	$160,726 to $204,100
35%	$408,201 to $612,350	$204,101 to $306,175
37%	$612,351 or more	$306,176 or more

APPENDIX II. 2018 Federal Tax Brackets for 2019

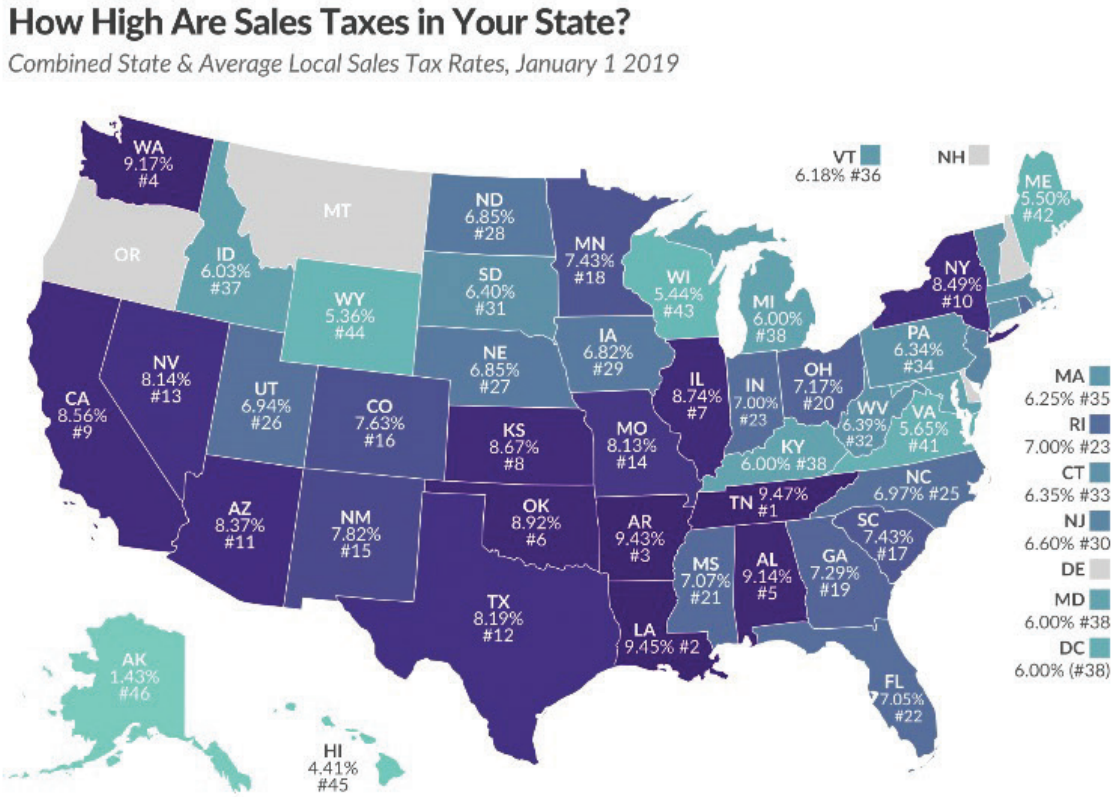
Taxpayers fall into one of seven brackets, depending on their taxable income: 10%, 12%, 22%, 24%, 32%, 35% or 37%. Because the U.S. tax system is a progressive one, as income rises, increasingly higher taxes are imposed. But those in the highest bracket don't pay the highest rate on all their income. For example, for 2019 taxes, single individuals pay 37% only on income above $510,301 (above $612,350 for married filing jointly); the lower tax rates are levied at the income brackets below that amount, as shown in the table below.

The table displays tax brackets according to filing status: single, married filing jointly or qualifying widower, head of household and married filing separately. The IRS makes inflation adjustments each year.

Federal tax brackets: 2018 tax brackets (for taxes due April 15, 2019)

Tax rate	Single	Head of household
10%	Up to $9,525	Up to $13,600
12%	$9,526 to $38,700	$13,601 to $51,800
22%	$38,701 to $82,500	$51,801 to $82,500
24%	$82,501 to $157,500	$82,501 to $157,500
32%	$157,501 to $200,000	$157,501 to $200,000
35%	$200,001 to $500,000	$200,001 to $500,000
37%	$500,001 or more	$500,001 or more
Tax rate	**Married filing jointly or qualifying widow**	**Married filing separately**
10%	Up to $19,050	Up to $9,525
12%	$19,051 to $77,400	$9,525 to $38,700
22%	$77,401 to $165,000	$38,701 to $82,500
24%	$165,001 to $315,000	$82,501 to $157,000
32%	$315,001 to $400,000	$157,001 to $200,000
35%	$400,001 to $600,000	$200,001 to $300,000
37%	$600,001 or more	$300,001 or more

APPENDIX III. State Taxes Accross The USA



APPENDIX IV. State and Local Sales Tax Rates as of January1, 2019

State and Local Sales Tax Rates as of January 1, 2019

State	State Tax Rate	Rank	Avg. Local Tax Rate (a)	Combined Rate	Combined Rank	Max Local Tax Rate
Alabama	4.00%	40	5.14%	9.14%	5	7.00%
Alaska	0.00%	46	1.43%	1.43%	46	7.50%
Arizona	5.60%	28	2.77%	8.37%	11	5.60%
Arkansas	6.50%	9	2.93%	9.43%	3	5.125%
California (b)	7.25%	1	1.31%	8.56%	9	2.50%
Colorado	2.90%	45	4.73%	7.63%	16	8.30%
Connecticut	6.35%	12	0.00%	6.35%	33	0.00%
Delaware	--	46	0.00%	0.00%	47	0.00%
Florida	6.00%	16	1.05%	7.05%	22	2.50%
Georgia	4.00%	40	3.29%	7.29%	19	5.00%
Hawaii (c)	4.00%	40	0.41%	4.41%	45	0.50%
Idaho	6.00%	16	0.03%	6.03%	37	3.00%
Illinois	6.25%	13	2.49%	8.74%	7	4.750%
Indiana	7.00%	2	0.00%	7.00%	23	0.00%
Iowa	6.00%	16	0.82%	6.82%	29	1.00%
Kansas	6.50%	9	2.17%	8.67%	8	4.00%
Kentucky	6.00%	16	0.00%	6.00%	38	0.00%
Louisiana	4.45%	38	5.00%	9.45%	2	7.00%
Maine	5.50%	29	0.00%	5.50%	42	0.00%
Maryland	6.00%	16	0.00%	6.00%	38	0.00%
Massachusetts	6.25%	13	0.00%	6.25%	35	0.00%
Michigan	6.00%	16	0.00%	6.00%	38	0.00%
Minnesota	6.88%	6	0.55%	7.43%	18	2.00%
Mississippi	7.00%	2	0.07%	7.07%	21	1.00%
Missouri	4.23%	39	3.90%	8.13%	14	5.454%
Montana (d)	--	46	0.00%	0.00%	47	0.00%
Nebraska	5.50%	29	1.35%	6.85%	27	2.00%
Nevada	6.85%	7	1.29%	8.14%	13	1.415%
New Hampshire	--	46	0.00%	0.00%	47	0.00%
New Jersey (e)	6.63%	8	-0.03%	6.60%	30	3.313%
New Mexico (c)	5.13%	32	2.69%	7.82%	15	4.125%
New York	4.00%	40	4.49%	8.49%	10	4.875%
North Carolina	4.75%	35	2.22%	6.97%	25	2.75%
North Dakota	5.00%	33	1.85%	6.85%	28	3.50%
Ohio	5.75%	27	1.42%	7.17%	20	2.25%
Oklahoma	4.50%	36	4.42%	8.92%	6	6.50%
Oregon	--	46	0.00%	0.00%	47	0.00%
Pennsylvania	6.00%	16	0.34%	6.34%	34	2.00%
Rhode Island	7.00%	2	0.00%	7.00%	23	0.00%
South Carolina	6.00%	16	1.43%	7.43%	17	3.00%
South Dakota (c)	4.50%	36	1.90%	6.40%	31	4.50%
Tennessee	7.00%	2	2.47%	9.47%	1	2.750%
Texas	6.25%	13	1.94%	8.19%	12	2.00%
Utah (b)	5.95%	26	0.99%	6.94%	26	2.750%
Vermont	6.00%	16	0.18%	6.18%	36	1.00%
Virginia (b)	5.30%	31	0.35%	5.65%	41	0.70%
Washington	6.50%	9	2.67%	9.17%	4	3.90%
West Virginia	6.00%	16	0.39%	6.39%	32	1.00%
Wisconsin	5.00%	33	0.44%	5.44%	43	1.75%
Wyoming	4.00%	40	1.36%	5.36%	44	2.00%
District of Columbia	6.00%	(16)	0.00%	6.00%	(41)	0.00%

(a) City, county, and municipal rates vary. These rates are weighted by population to compute an average local tax rate.

(b) Three states levy mandatory, statewide, local add-on sales taxes at the state level: California (1%), Utah (1.25%), and Virginia (1%). We include these in their state sales tax.

(c) The sales taxes in Hawaii, New Mexico, and South Dakota have broad bases that include many business-to-business services.

(d) Special taxes in local resort areas are not counted here.

(e) Salem County, N.J. is not subject to statewide sales tax rates and collects a local rate of 3.3125%. New Jersey's local score is represented as a negative.

Note: D.C.'s ranks do not affect states' ranks, but the figures in parentheses indicate where it would rank if included.
Sources: Sales Tax Clearinghouse, Tax Foundation calculations, State Revenue Department websites.

APPENDIX V. Industry By Industry Multipliers – Total Requirement Table

2017 - Industry-by-Industry Multiplier

Industries/Industries															
Name	Agriculture, forestry, fishing, and hunting	Mining	Utilities	Construction	Manufacturing	Wholesale trade	Retail trade	Transportation and warehousing	Information	Finance, insurance, real estate, rental, and leasing	Professional and business services	Educational services, health care, and social assistance	Arts, entertainment, recreation, accommodation, and food services	Other services, except government	Government
Agriculture, forestry, fishing, and hunting	126%	1%	1%	2%	9%	1%	1%	1%	1%	0%	1%	1%	2%	1%	1%
Mining	3%	111%	8%	4%	10%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%
Utilities	2%	2%	105%	1%	2%	1%	2%	2%	1%	2%	1%	1%	2%	1%	1%
Construction	1%	2%	2%	101%	1%	1%	1%	1%	1%	3%	0%	1%	1%	1%	3%
Manufacturing	37%	24%	13%	40%	162%	9%	9%	18%	12%	6%	9%	16%	16%	16%	21%
Wholesale trade	15%	5%	3%	9%	13%	104%	3%	4%	3%	2%	2%	4%	4%	3%	4%
Retail trade	1%	0%	1%	6%	1%	0%	101%	1%	0%	0%	0%	0%	1%	1%	0%
Transportation and warehousing	6%	5%	8%	5%	8%	5%	5%	114%	2%	2%	2%	2%	3%	2%	3%
Information	2%	3%	2%	2%	3%	4%	4%	3%	117%	3%	5%	4%	4%	4%	4%
Finance, insurance, real estate, rental, and leasing	19%	14%	8%	9%	9%	15%	20%	17%	10%	127%	12%	17%	16%	16%	8%
Professional and business services	9%	17%	12%	13%	15%	21%	19%	14%	18%	14%	122%	17%	19%	12%	12%
Educational services, health care, and social assistance	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	101%	0%	0%	1%
Arts, entertainment, recreation, accommodation, and food services	1%	1%	1%	1%	1%	1%	1%	2%	3%	2%	3%	3%	104%	2%	1%
Other services, except government	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%	1%	2%	102%	1%
Government	2%	2%	4%	1%	2%	2%	2%	5%	2%	2%	1%	2%	2%	2%	102%
	2.3	1.9	1.7	1.9	2.4	1.7	1.7	1.9	1.7	1.6	1.6	1.7	1.8	1.6	1.7

Source: US Department of Commerce, Bureau of Economic Analysis.

APPENDIX VI. Comparison of State Unemployment Benefits

State	Unemployment Rate	Max. Weeks of Benefits	Max. Weekly Benefits	Max. Dearness Allowance	Total Weekly Benefits
Alabama	7.5	26	$275		$275
Alaska	12.4	26	$370	$72	$442
Arizona	10	20	$240		$240
Arkansas	8	26	$451		$451
California	14.9	26	$450		$450
Colorado	10.5	26	$597		$597
Connecticut	9.8	26	$649	$75	$724
Delaware	12.5	26	$400		$400
Florida	10.4	26	$275		$275
Georgia	7.6	12	$365		$365
Hawaii	13.9	14	$648		$648
Idaho	5.6	26	$414		$414
Ilinois	14.6	26	$471	$178	$649
Indiana	11.2	21	$390.00		$390
Iowa	8	26	$591	$106	$697
Kansas	7.5	26	$488.00		$488
Kentucky	4.3	16	$552		$552
Louisiana	9.7	26	$247		$247
Maine	6.6	26	$414.00	$215	$629
Maryland	8	30	$430		$430

State	Unemployment Rate	Max. Weeks of Benefits	Max. Weekly Benefits	Max. Dearness Allowance	Total Weekly Benefits
Massachusetts	17.4	26	$823	$397	$1,220
Michigan	14.8	26	$362	$209	$571
Minnesota	5.6	20	$717		$717
Mississippi	8.7	26	$235		$235
Missouri	7.9	13	$320		$320
Montana	7.1	26	$552		$552
Nebraska	6.7	28	$440		$440
Nevada	15	12	$450		$450
New Hampshire	11.8	26	$427		$427
New Jersey	16.6	26	$696.00		$696
New Mexico	8.3	26	$492	$50	$542
New York	15.7	26	$504		$504
North Carolina	7.6	26	$350.00	$50	$400
North Dakota	6.1	26	$618		$618
Ohio	10.9	26	$647	$155	$802
Oklahoma	6.6	26	$520		$520
Oregon	11.2	26	$648		$648
Pennsylvania	13	26	$572	$8	$580
Rhode Island	12.4	26	$586.00	$144	$730
South Carolina	8.7	26	$326		$326
South Dakota	7.2	20	$414		$414
Tennessee	9.7	26	$275		$275
Texas	8.6	26	$521		$521
Utah	5.1	26	$560		$560
Vermont	9.4	26	$513		$513
Virginia	8.4	26	$378		$378
Washington DC	8.6	26	$425		$425
Washington	9.8	26	$790		$790
West Virginia	10.4	26	$424		$424
Wisconsin	8.5	26	$370		$370
Wyoming	7.6	26	$508		$508
US Average/Participant		24	474		507
Maximum Allowable per Participant					**$12,378**

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