

## Labor Market Considerations for a National Job Guarantee

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## MISSION STATEMENT

The Hamilton Project seeks to advance America's promise of opportunity, prosperity, and growth. The Project's economic strategy reflects a judgment that long-term prosperity is best achieved by fostering economic growth and broad participation in that growth, by enhancing individual economic security, and by embracing a role for effective government in making needed public investments. We believe that today's increasingly competitive global economy requires public policy ideas commensurate with the challenges of the 21st century. Our strategy calls for combining increased public investments in key growth-enhancing areas, a secure social safety net, and fiscal discipline. In that framework, the Project puts forward innovative proposals from leading economic thinkers — based on credible evidence and experience, not ideology or doctrine — to introduce new and effective policy options into the national debate.

The Project is named after Alexander Hamilton, the nation's first treasury secretary, who laid the foundation for the modern American economy. Consistent with the guiding principles of the Project, Hamilton stood for sound fiscal policy, believed that broad-based opportunity for advancement would drive American economic growth, and recognized that "prudent aids and encouragements on the part of government" are necessary to enhance and guide market forces.





# Labor Market Considerations for a National Job Guarantee

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## Abstract

Despite a relatively strong U.S. economy in late 2018, many workers continue to experience stagnant wages and underemployment. In response, policy interventions like subsidized wages, training and search assistance, expanded public employment, and federal guarantees of employment have all been proposed, but relatively little is known about how a federal job guarantee would function. We therefore discuss a number of relevant labor market considerations: How many people are likely to participate in a job guarantee? What types of work and nonwork activities are the eligible population currently engaged in? What types of work would program participants do? Can we expect workers to be well matched with their employers? Are there unintended consequences of the program for participants or nonparticipants? We conclude that, while a job guarantee could lift employment rates and incomes for many participants, there is considerable uncertainty associated with its impacts. In particular, a potentially very large but unknown fraction of workers currently earning low wages—as well as those outside the labor force—would take up a job guarantee, meaning that it could affect far more workers than are currently unemployed or underemployed.

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## Introduction

By many broad measures, the U.S. labor market has been thriving in late 2018. The unemployment rate has fallen to levels not seen in nearly 50 years, and has been below the Congressional Budget Office's estimate of the long-run unemployment rate for six consecutive quarters (Congressional Budget Office 2018; Bureau of Labor Statistics [BLS] 2018a; authors' calculations). Still, even the current unemployment rate of 3.7 percent leaves 6.1 million job searchers without employment, including 1.4 million who have been unemployed for more than 26 weeks (BLS 2018a; authors' calculations). Furthermore, the unemployment rate focuses only on those actively searching for a job, omitting underemployment and labor force nonparticipation. Patterns in employment rates (i.e., the share of a particular population that is working) raise additional questions as to whether the economy has reached a maximum employment level.

These concerns have led to a number of proposed employment support programs ranging from subsidized wages, to training and search assistance, to expanded public employment, to outright guarantees of employment provided by the federal government. In the case of a guarantee, workers would not be required to find a willing private employer in order to participate in the program; any individuals who met very minimal eligibility requirements (e.g., being 18 or older) would be extended a federally funded job. Given that there are long-standing proposals and evidence on subsidies—especially for Earned Income Tax Credit (EITC) expansions—and job training, we focus our attention on the newer proposals that would guarantee employment: the job guarantee proposal of Paul, Darity, and Hamilton (hereafter PDH; 2018), and additional job guarantee proposals from the Center for American Progress (hereafter CAP; 2018), Senator Cory Booker (Booker 2018), and the Levy Economics Institute

of Bard College (hereafter Levy Institute; Wray et al. 2018). As a counterpoint, we then use a Hamilton Project proposal by David Neumark (2018) for targeted job provision in high poverty areas that transitions to a wage subsidy.

To provide context, we first explain how gaps in the labor market may necessitate policy interventions like hiring subsidies, other active labor market policies, or job guarantees. We then consider the different ways in which job guarantees could function: How many people are likely to participate? How might the proposals reshape the labor market more broadly? A number of other economic considerations are also important to explore: What types of work and nonwork activities are the eligible population currently engaged in? What types of work would program participants do? Can we expect workers to be well matched with their employers? Are there unintended consequences of the program for participants, nonparticipants, or the economy?

This policy discussion is an urgent one for millions of Americans. The employment rate of prime-age individuals is currently below its pre-recession peaks in 2007 and 2000, indicating that the economy was once able to provide work to a larger share of the country. It is debatable whether this decline is due to cyclical slack in the economy or structural shifts that change the propensity to work, but today's labor market does not seem to be characterized by maximum employment. At the same time, participation rates and employment rates have been rising for three years after the unemployment rate fell below 5 percent, suggesting that more people have been able to work and enter the labor market than was once supposed.

Even with unemployment as low as the October 2018 rate of 3.7 percent, labor outcomes for many groups still show room for growth. For example, as of October 2018 the unemployment rate for workers 25 and older with less than a high school education was 6.0 percent (BLS 2018a). Over

the long run, as Bernstein (2018) highlights, the U.S. job market has experienced some degree of slack for almost three quarters of the time since 1980. Persistently weak labor markets put downward pressure on wages, incomes, and other important economic outcomes, with effects particularly large for low-skilled workers.

In addition to these concerning national patterns, there are also regional differences in outcomes that demand policy attention. Austin, Summers, and Glaeser (2018) show that even when the nation appears to be doing well, there are still regions and places where economic prospects and outcomes are much bleaker.<sup>1</sup> Worse yet, it seems these regional differences are persistent over time, and are amplified during economic downturns.

In recent work, The Hamilton Project has addressed these core labor market problems, conducting analysis and highlighting policy proposals that support broadly shared economic growth. This framing paper is a continuation of that effort. It aims to illuminate some of the potential labor market impacts of employment support programs, allowing for a more informed policy discussion.

We now turn to a more detailed discussion of the goals that employment support programs—and job guarantees specifically—seek to accomplish. We then discuss relevant labor market considerations for the design of a job guarantee and provide numerical context rooted in current labor market data. Finally, we conclude by discussing and then summarizing prominent contemporary employment support policy proposals.

## The Goals That Employment Support Programs Seek to Accomplish

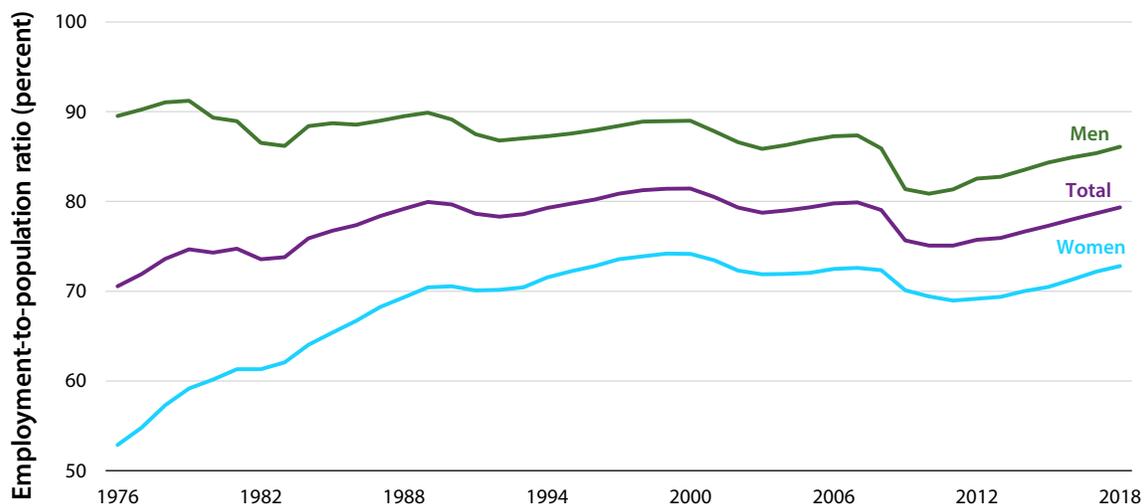
Employment support programs have a variety of goals, and it is important to be attentive to the specific problems they are designed to address. Some programs aim to provide fiscal stimulus during recessions, functioning as automatic stabilizers by supporting household purchases when private-sector job losses are occurring (Wray et al. 2018). Other programs are motivated by concerns like low employment rates and slow wage growth (PDH 2018). Still others focus on addressing racial disparities, regional inequality, and concentrated poverty (CAP 2018; Neumark 2018).

### BOOSTING EMPLOYMENT AND WAGES

The share of the population that is working is affected by a wide variety of factors, but one of the most important is the demographic mix of the population. Because we do not expect children or the elderly to work, we focus on those in their prime working years, defined as those between the ages of 25 and 54. This focus avoids complications associated with both changing education rates of those under 25 and early retirement of those 55 and older. (Later we will consider the labor market impacts on the working-age population, 18–64.)

Prime-age employment rates rose consistently in the United States from the 1960s to the end of the 20<sup>th</sup> century as more and more women entered the labor force. Employment dipped during recessions, but then resumed its upward climb. From 1999–2011, though, women’s employment rate began to fall, joining the long downward trend in the male prime-age

FIGURE 1.  
Prime-Age Employment-to-Population Ratio, 1976–2018



Source: BLS 2018a (Current Population Survey [CPS]); authors' calculations.

Note: Data are for all persons between the ages of 25 and 54. The 2018 values are derived using available data from the first nine months of the year.

employment rate.<sup>2</sup> Figure 1 shows that since 2011, both men's and women's employment rates have risen as the labor market has recovered, with women's employment rate recovering to its pre-recession high in 2007 (though still below its peak in 1999).

Though they have recovered in the years following the last two recessions, employment rates have remained below previous peaks; an active literature has explored potential explanations (see Abraham and Kearney 2018 for a recent overview). Some factors may have reduced labor supply, such as the increased number of people with criminal records who struggle to find employment, increased use of opioids and other painkillers, increased disability payments, improved leisure options, and additional support from working spouses, among others. As noted in Abraham and Kearney, though, these factors appear to explain only a small share of the decline in participation.<sup>3</sup> The bulk of the decline in participation and employment has taken place among less-educated workers. At the same time, the real hourly wage of these individuals has declined. This suggests that a lack of labor demand rather than a lack of labor supply is a crucial part of the explanation for the lower employment levels (Council of Economic Advisers [CEA] 2016a). Weak labor demand for certain groups of workers is one clear motivation for policies that would encourage hiring either by subsidizing employment or by directly hiring workers.

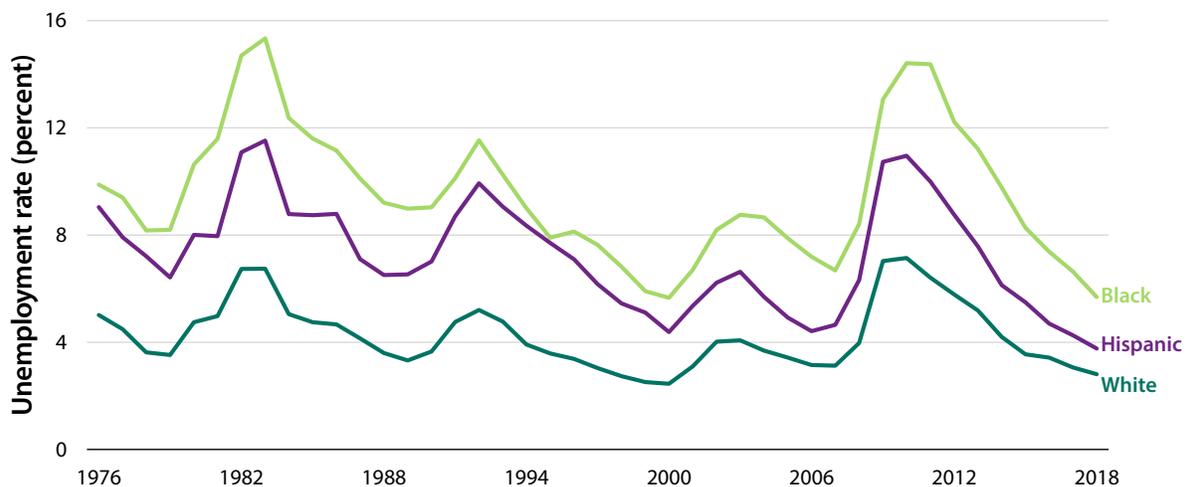
In addition to boosting employment directly, some programs may counteract declining worker bargaining power and thereby improve labor market outcomes. Deterioration in the real value of the federal minimum wage, the decline of

private-sector unions, and increasing returns to skill have contributed to stagnant wages (Shambaugh et al. 2017). A job guarantee, for example, would provide low-skilled workers with an additional outside option, potentially improving their bargaining position when negotiating wages with private employers (PDH 2018).

If public jobs are provided at higher wages or under superior conditions to some jobs in the private sector, such a program could either absorb workers with poor outcomes in the labor market or put pressure on the private sector to improve wages and conditions. Alternatively, wage subsidies provided to workers (e.g., the EITC) can also lift the labor market outcomes of those in low-wage jobs. Policies that lift the minimum wage could also improve outcomes for low-wage workers, though unlike a job guarantee, a minimum wage could reduce employment if firms are unwilling to pay the higher wage. Finally, training or education policies could be used to lift workers' skills and increase their wages as their productivity rises.

The labor market as currently structured does not lift all workers out of poverty. Currently, about 40 percent of working-age individuals living in poverty are in fact working or actively seeking work. Roughly one tenth have full-time full-year employment, but it does not pay enough to keep them out of poverty (Shambaugh, Bauer, and Breitwieser 2017). The poverty line for a single adult was \$12,752 in 2017—the equivalent of a full-time hourly wage of \$6.38. A single earner with three dependents would have to earn \$24,944 (a full-time hourly wage of \$12.47) to avoid poverty (U.S. Census

FIGURE 2.  
Prime-Age Unemployment Rate for Selected Races and Ethnicities, 1976–2018



Source: BLS 2018a (CPS); authors' calculations.

Note: Data are for all persons between the ages of 25 and 54. "White" refers to all non-Hispanic whites. The 2018 values are derived using available data from the first nine months of the year.

Bureau [Census] 2018b).<sup>4</sup> In total, 8.1 million workers have jobs but are classified as being in poverty by standard poverty measures (Census 2018a). (These estimates may be lower when using other measures of poverty that include transfers or measure consumption, not income.)

The fact that the majority of working-age individuals in poverty are not working suggests a large potential scope of benefits that could be generated by a job guarantee. On the other hand, the fact that the majority of those not working who are in poverty either have health and disability barriers to working, or are caregivers, highlights the fact that making jobs available may not be sufficient to help people work their way out of poverty (Shambaugh, Bauer, and Breitwieser 2017).

### MITIGATING BUSINESS CYCLES

Support for employment is most helpful during economic downturns. When a recession begins, private labor demand typically falls precipitously, leading to layoffs and reduced hiring (Farber 2011; Lazear and Spletzer 2012). In turn, falling employment leads to falling consumption, magnifying the drop in economic activity (Jappelli and Pistaferri 2010). By raising the benefits of private employment to both workers and firms, a targeted subsidy can serve as an automatic stabilizer if it becomes more widely used during economic downturns. Neumark and Grijalva (2017) present evidence that some subsidies targeted at the unemployed during the Great Recession may have been an effective way to lift employment. A job guarantee would also serve as an automatic stabilizer, with participation in the program expanding during downturns. By automatically increasing government spending when private demand falls, the job guarantee could in theory prevent active downturns from deepening and could cushion the blow of temporary job loss. See Tcherneva (2018) for detailed description of a job guarantee as a macroeconomic stabilizer. However, because some unemployed workers might prefer to search for a better job match, a job guarantee is unlikely to completely offset unemployment shocks.

### RAISING EMPLOYMENT OF DISADVANTAGED GROUPS

In addition to insufficient employment at the national level, there are wide gaps across certain groups. For decades the unemployment rate for black Americans has been nearly double that of white Americans, and the Hispanic unemployment rate has fluctuated in between. Figure 2 shows that the unemployment rates for all three groups have risen in recessions and dipped in recoveries, but at almost any moment in time, twice as many black Americans who wanted to work have been unable to find a job compared to whites.<sup>5</sup> Policies that encourage hiring might most benefit those groups that have been locked out of the labor market, and this is likely even more true of government hiring or guarantees. If government

is less likely than private employers to discriminate against black Americans, government expanding its role in the labor market could reduce discrimination.<sup>6</sup>

Another group that often faces discrimination and hiring barriers in the labor market is the formerly incarcerated. Private employers value criminal background checks, which appear to play a strong role in many hirers' decisions (Finlay 2009; Holzer, Raphael, and Stoll 2006). Call-back rates for job interviews are far lower both for black applicants and for applicants with criminal records (Pager 2003). In addition to private-sector barriers, public policies also present impediments: many states make it difficult or impossible for people with criminal records to obtain occupational licenses that are legally required to work in a particular field (Rodriguez and Avery 2016). In conjunction with reforming licensing and other institutions that impose collateral consequences of conviction, employment support programs could help the formerly incarcerated to establish a work history and improve their labor market outcomes (Doleac 2016).

### RAISING EMPLOYMENT IN STRUGGLING PLACES

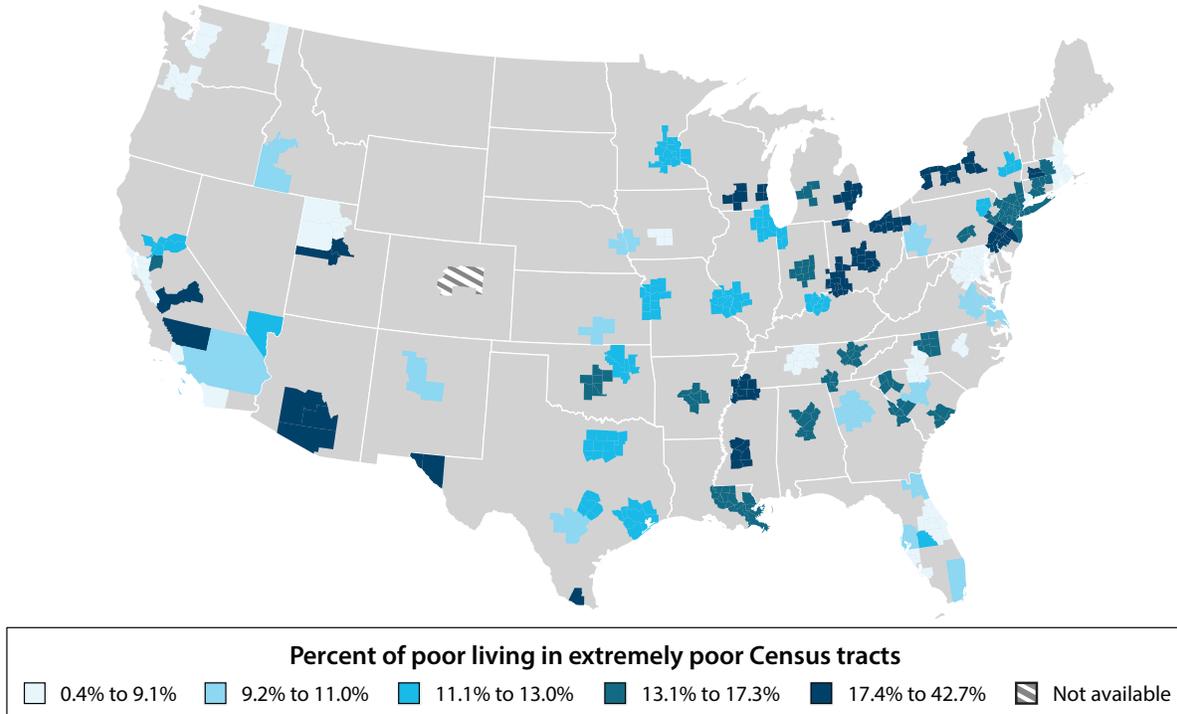
Gaps in employment exist not only across demographic characteristics, but also across place. Figure 3 shows the extent of concentrated poverty in large U.S. metro areas. As Austin, Glaeser, and Summers (2018) point out, many parts of the country—even in times of overall prosperity—face significant economic struggles; moreover, labor market outcomes do not appear to converge over time in the same way that they did in the past.

In a 2018 framing paper, The Hamilton Project explored these geographic gaps, noted the lack of convergence across economic outcomes of counties from 1980 to 2016, and explored the challenge for public policy presented by these regional disparities (Nunn, Parsons, and Shambaugh 2018). Figure 4 shows that several counties in Appalachia, the Southeast, and the Southwest have prime-age employment-to-population ratios below 60 percent, while a number of counties in the upper Midwest and Northeast feature rates above 80 percent. These gaps dwarf employment rate gaps across groups or over time and help motivate geographically targeted employment support programs.

These patterns provide a motivation for job guarantee proposals, but problems could also be addressed by subsidizing the wages of workers to increase the benefits that employers and workers derive from the employment relationship. Alternatively, one could take steps to increase educational attainment and skills of those falling out of the labor market, thereby increasing their productivity and improving their labor market outcomes. While none of these policies are necessarily substitutes, they are distinct options with different advantages and disadvantages.

FIGURE 3.

### Concentrated Poverty Rates, Top 100 Metro Areas



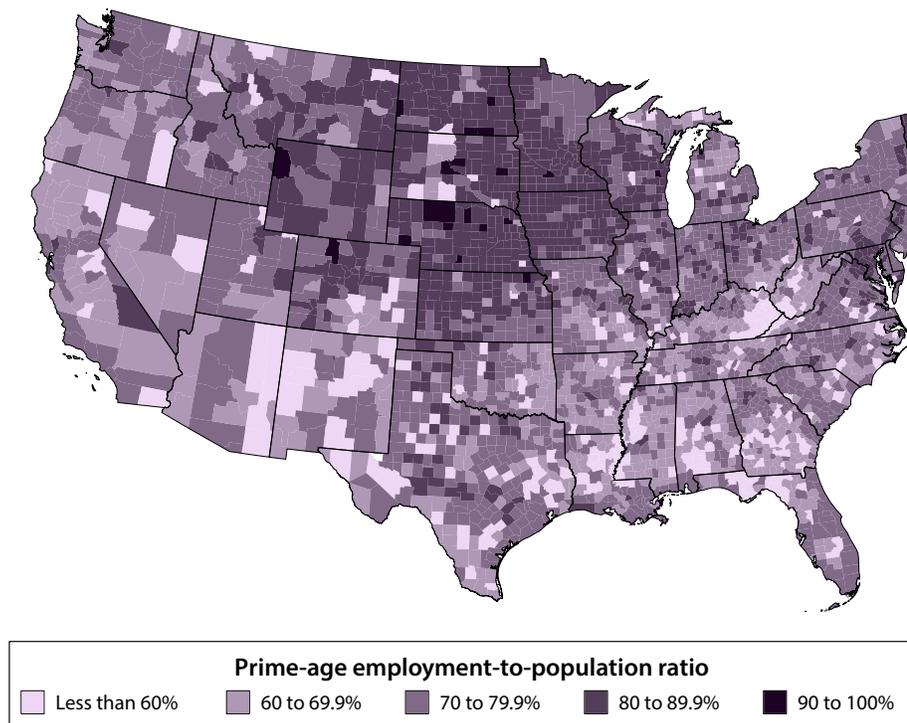
Source: Neumark 2018.

Note: The numerator of the concentrated poverty rate is the number of metro area residents in poverty living in extremely poor census tracts, defined as those with at least a 40 percent poverty rate. The denominator is the number of people in poverty in a given metro area. Metro area rankings are based on the 2012 population. Light gray areas are not in the top 100 metro areas.



FIGURE 4.

### Prime-Age Employment-to-Population Rates by County



Source: Census 2012–16 (American Community Survey); authors' calculations.

Note: Data are for persons between the ages of 25 and 54. Lighter counties have relatively lower employment-to-population ratios, while darker counties have relatively higher ratios.



## What We Know about Private-Sector Wage Subsidies

In addition to employing workers directly, or paying the entire costs of employment for a third party, government can also provide partial subsidies for hiring or employment, either to a targeted group or to workers more generally. Broadly speaking, this approach encompasses a variety of programs including the EITC (focused on low-income households with children), the Work Opportunity Tax Credit (WOTC; focused on a variety of groups including people with criminal records and the disabled), employment subsidies provided through enterprise zones (focused on disadvantaged areas), and even the payroll tax holiday of 2011–12. In each case, the subsidy or tax reduction raises the return to work in the private sector and is broadly available regardless of the type of work conducted.

Private-sector wage subsidies may help to mitigate unemployment and underemployment by increasing the return to work. In the simplest model of the labor market, all nonemployment is chosen freely; however, in a more realistic model it is costly for workers and firms to find each other and form mutually beneficial agreements, which results in some degree of involuntary unemployment.<sup>7</sup> Moreover, employer concentration may induce firms to employ fewer workers than is optimal for society (Benmelech, Bergman, and Kim 2018; Manning 2003).

Evidence from the United States regarding the impacts of non-categorical subsidies (i.e., those made broadly available rather than those restricted to a narrowly defined group) is relatively limited.<sup>8</sup> Evidence regarding categorical subsidies is more plentiful. In particular, expansions of the EITC have led to increased employment (Eissa and Liebman 1996; Hoynes, Rothstein, and Ruffini 2017). Subsidies like the WOTC that are targeted to more-disadvantaged groups have met with more-limited success, in part due to worker stigmatization (Burtless 1985; Hamersma 2014; Neumark 2013).

Private-sector subsidies have both advantages and disadvantages relative to direct government hiring. On the one hand, some of the benefits of subsidies can accrue to employers rather than workers, especially in the short run before employers have fully responded to the policy. This is especially true if the wage subsidy is provided to an employer to encourage hiring, but can be the case even if the subsidy is provided to the worker directly. If a person was previously willing to work for \$10 an hour and the government provides a \$2 an hour subsidy to the worker, that worker might accept an offer of \$8.50, with the firm capturing most of the subsidy. (This is particularly likely when firms have extensive market power.) Even setting aside who gets the benefits of a subsidy, much of the spending may accrue to jobs that would have existed even without the subsidy.

On the other hand, private-sector subsidies allow markets to allocate labor across industries and occupations without any necessity for policymakers to determine the best uses of labor. To the extent that the goal for public policy is simply to raise the return to work and increase employment, subsidies are a less-intrusive and easier-to-implement alternative to direct public hiring. An important concern is that if there is discrimination in the private sector, the subsidy might not help marginalized groups as much as would alternative policy options. In addition, the employment response to a subsidy may be inadequate in some locations, depending on market conditions.

## Design Considerations for Employment Support Policies

Any proposal to encourage employment faces a series of questions that help to inform aspects of its design.

- Who is in the eligible population and how many of these individuals are likely to take up the program? Is there regional variation in likely program take-up? Does this number change over the course of the business cycle?
- What types of work or nonwork activities (e.g., caregiving or school enrollment) are individuals in the eligible population currently engaged in?

- What types of work would program participants do? Will participants work within the private, public, or nonprofit sectors?
- Are there unintended consequences of the program for participants, nonparticipants, and the broader economy? For example, would the program reduce school enrollment, divert workers into career trajectories with slower human capital formation and wage growth, create stigma for participants, affect nonparticipant employment, or affect productivity?

On the one hand, a modest wage subsidy would not require policymakers to choose what participants would do, because it would rely entirely on the market to allocate labor. On the other hand, depending on the reaction of private firms and

the competitiveness of the labor market, much of the benefits could accrue to the firms that pay less to employ workers, even though they would have hired many or all of the workers in the absence of the subsidy. The more expansive the program, the more imperative it is to answer questions regarding what participants would do and what types of unintended consequences or spillovers exist.

There have been more experiments and analysis of programs that feature wage subsidies. The EITC is well studied, and proposals like that of Hoynes, Rothstein, and Ruffini (2017) for the Hamilton Project detail the effects of expansion. A proposal by Senator Sherrod Brown and Representative Ro Khanna is an example of a much larger expansion in the EITC (Khanna 2017). A survey by Indivar Dutta-Gupta, Kali Grant, Matthew Eckel, and Peter Edelman provides a detailed analysis of various wage subsidy programs, in particular those programs using Temporary Assistance for Needy Families (TANF) funds (Dutta-Gupta et al. 2016). Box 1 contains a brief summary of what is known about the effects of private sector wage subsidies.

In addition, other active labor market policies—specifically, job search and training programs—could achieve some of the goals that motivate job guarantee proposals. Box 2 provides a short description of evidence about the effects of these policies.

Until recently, job guarantee programs have received less research and policy attention. (The final section of the paper describes the major contemporary proposals.) We now turn to the practical issues facing a job guarantee proposal, with a particular emphasis on labor market considerations.

### WHO IS LIKELY TO USE THE PROGRAM?

The scope of an employment support program can vary from a targeted private-sector wage subsidy that is restricted to workers in particular locations and income groups, to a universal job guarantee with essentially unrestricted eligibility. David Neumark's (2018) proposal for The Hamilton Project is an example of the former, since it targets low-income households in communities with concentrated poverty, and it would be funded with a fixed appropriation. On the other end of the spectrum, the proposed programs of the Levy Institute (Wray et al. 2018) and PDH (2018) are available to any adult workers who would like to participate. These distinctions lead to stark differences in program take-up: the baseline version of the Neumark proposal would employ several thousand individuals, whereas a job guarantee like that of the Levy Institute or PDH would employ 10 million or more workers. Of course, in both cases it is possible to scale the proposal to affect fewer or more workers.

In the case of proposals that aim to reach millions of Americans, it is helpful to examine how many individuals fall into labor force categories that may dispose them to consider

#### BOX 2.

### What We Know about Active Labor Market Policies

Active labor market policies—job training, search assistance, and employment subsidies—have long been used in the United States to improve labor market outcomes for workers who are struggling. For some of the same reasons described in box 1, job training and job search assistance could reduce involuntary unemployment, while also boosting wages through human capital acquisition and better job matching. But U.S. spending on these policies has fallen as a fraction of GDP by about half from 1985 to 2014, leaving it well below nearly all other OECD countries (CEA 2016b).

As reorganized by the Workforce Innovation and Opportunity Act of 2014, many U.S. job search and training programs (including some TANF services) are provided through American Job Centers to a variety of targeted groups. Youth, dislocated workers, veterans, the previously incarcerated, and others are all eligible for different services.

The empirical evidence on the efficacy of these job search and training programs is generally positive. On average, the short-run effects of active labor market programs are relatively small, but long-run effects are substantial: participant employment is 5–12 percentage points higher after more than two years (Card, Kluve, and Weber 2017). This difference is driven by job training programs. Effects are especially positive for women and the long-term unemployed, and especially positive during periods of labor market slack.

However, it is important to note that active labor market policies vary considerably and often have quite different effects. Moreover, they can have negative impacts on program nonparticipants, who may find themselves displaced by participants (Crépon et al. 2013; Gautier et al. 2018).

the employment support program. The unemployed—those actively but unsuccessfully seeking work—are the most likely participants, but it is likely that not all unemployed workers would enter the program. Many of the unemployed might prefer to search for work with higher compensation than that provided through the job guarantee. Many of those out of the labor force might choose to take up the job guarantee, but if they are not working due either to child- or elder-care responsibilities or if they suffer from health and disability constraints, their participation may depend on the extent of wraparound services. Finally, many employed workers might choose to take up the job guarantee if the job guarantee wage is set higher than their current wage rate. Figure 5 shows the number of civilian working-age (18–64 year old) adults who are unemployed, working at a wage below \$15 per hour (either full or part time), or out of the labor force.<sup>9</sup> To provide additional relevant information, figure 5 also shows the number of civilian working-age adults who report particular reasons for being outside the labor force. Those who are either disabled or caregivers might be especially unlikely to participate in any employment program, while those who are enrolled in school or who have entered early retirement might be more likely to participate.

While figure 5 shows that close to 100 million individuals aged 18–64 could in theory be attracted to a guaranteed job, no serious projection assumes this many would be directly employed. The unemployed are actually a small portion

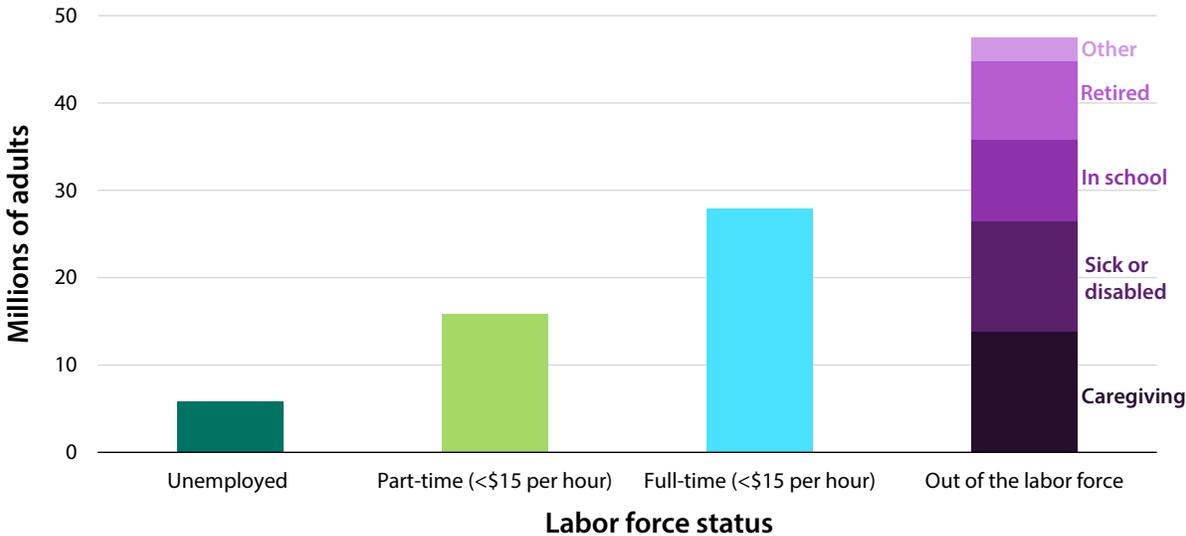
(5.9 million) of those who might take up the guarantee jobs. The take-up of a job guarantee depends critically on the extent to which those out of the labor force would enter as well as how many of those employed at low wages would prefer a guaranteed job.

In what follows, we separately focus on groups that warrant particular attention in understanding the potential participant population: the unemployed, people outside the labor force, full-time workers earning less than \$15 per hour, and part-time workers earning less than \$15 per hour. We analyze and discuss these groups, explaining some of the issues that relate to their labor force participation and potential participation in a job guarantee program.

*The Unemployed*

While the unemployed seem to be the most likely to take up a job guarantee, many of them might not choose a guaranteed job. Many individuals who have temporarily lost a job have job options, but are searching for an appropriate fit in terms of wage, location, and career. There are currently about 5.9 million working-age unemployed workers in the United States, but roughly a third of them have been unemployed for less than five weeks (BLS 2018a). It is not clear that these job searchers would be interested in a guaranteed job. Conversely, nearly 1.4 million workers have been unemployed for more than 26 weeks (BLS 2018a). These people are having considerable difficulty finding a job, and many would likely choose a job guarantee.

FIGURE 5. Working-Age Population, by Labor Force Status



Source: BLS 2018a (CPS); authors' calculations.  
 Note: Estimates are for October 2017 through September 2018. Data are for all persons between the ages of 18 and 64.

### Labor Force Nonparticipants

As is shown in figure 5, the largest group of people aged 18–64 that is not currently engaged in work for more than \$15 per hour are those outside the labor force. This group represents nearly half of all people who are not earning at least \$15 per hour. Accordingly, it is especially important to take them into account when assessing any employment support program.

Of the more than 47 million people who are currently out of the labor force, many would not be available for federally subsidized employment. More than 26.5 million (55.8 percent) of all persons not in the labor force cite caregiving, a disability, or an illness as their reason for not participating in the labor market.

However, some members of those groups may be induced to join the labor force for a guaranteed job; for example, some of those who had enrolled in school (9.3 million) or some of those who have taken early retirement (9.0 million) would participate. Diminished school enrollment could be an undesirable effect of subsidized employment, given that education has long-run benefits for workers' career growth (Shambaugh, Bauer, and Breitwieser 2018). Caregiving presents different challenges, and PDH (2018) allocates resources directly for a child-care benefit as part of the job guarantee, which would allow some caregivers to take up market employment. Still, many caregivers have dependents such as sick spouses or ailing parents, and these responsibilities would continue to make labor force participation difficult.

An alternative way to consider potential participation of those currently out of the labor force is to examine the fraction of working-age people who state that they would like a job but who are not currently searching for employment. While the size of this group rose sharply in the last recession, it is currently about 4 million (BLS 2018b; authors' calculations).<sup>10</sup>

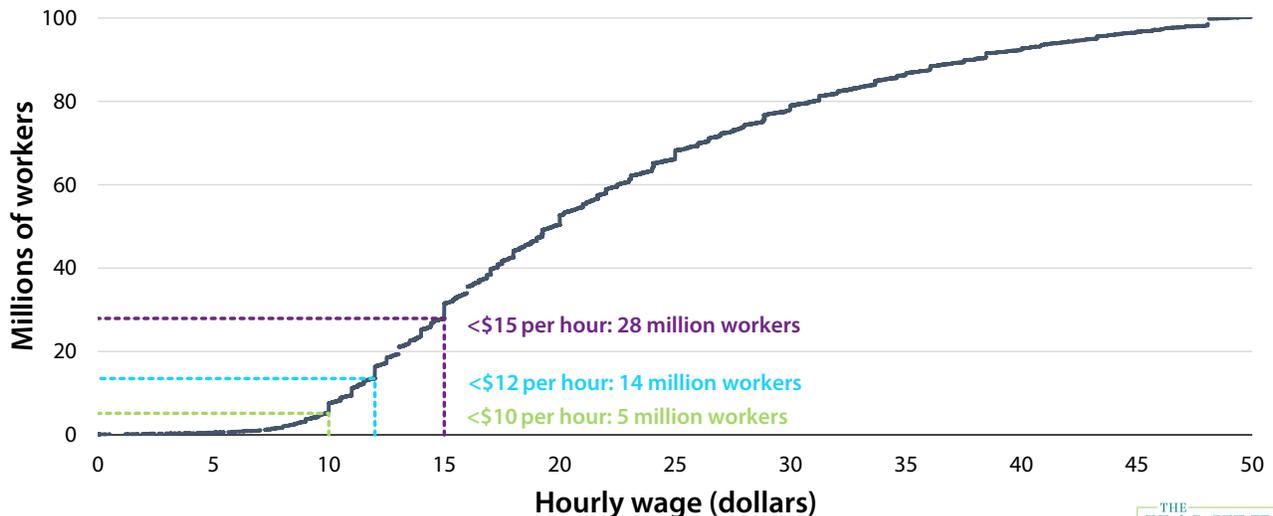
### Full-Time Workers Earning Less Than \$15 per Hour

In some job guarantee proposals, a federal job guarantee would be available to all persons—regardless of their current employment status—who are willing to work for \$15 per hour. Other proposals have called for somewhat lower wages. It is therefore useful to examine just how many currently employed workers might be tempted by a guaranteed federal job at various wages. Figure 6 shows the number of full-time workers who are currently paid less than \$10, \$12, and \$15 per hour, respectively.

One striking implication of figure 6 is the economically significant difference between a program that offers a \$10 hourly wage (which would pay more than is currently earned by 5.2 million full-time workers) and a program that offers a \$15 hourly wage (which would pay more than is currently earned by 27.9 million full-time workers). Many workers would find a \$15 per hour guaranteed job appealing but would not participate for a \$10 per hour job.

However, it is important to recognize that the wages paid by employers are not fixed: many employers will respond to a federal job guarantee by raising their own wages, thereby retaining their employees. For workers who currently receive a wage just below the proposed guarantee rate (e.g., \$14.50 per

FIGURE 6.  
Hourly Wage Distribution of Full-Time Workers



Source: BLS 2018a (CPS); authors' calculations.

Note: Estimates are for October 2017 through September 2018. Data are for all persons between the ages of 18 and 64 who are currently employed full time. Workers earning more than \$50 per hour are not shown.

hour), this response is especially likely to occur. Moreover, workers might prefer their existing jobs, even those that pay less than the job guarantee, if their existing jobs offer superior nonwage benefits and amenities (Hall and Mueller 2018), or if their current jobs offer a higher likelihood of training and career development.

It is also possible that by employing more people and boosting incomes, a job guarantee may stimulate economic activity in areas that previously had low employment levels. This increased economic activity might in fact spur private-sector demand for workers and put downward pressure on the number of people taking the job guarantee.

### Part-Time Workers Earning Less than \$15 per Hour

Some part-time workers may also be available to participate in a job guarantee or other employment support program. While 15.9 million part-time workers earn less than \$15 per hour (and 4.9 million part-time workers earn less than \$10 per hour), some of these individuals may prefer their current employment for the same reasons as their full-time counterparts discussed previously. On the other hand, there might also be part-time workers earning somewhat more than the offered job guarantee wage who would prefer a full-time job even at the cost of a lower wage.

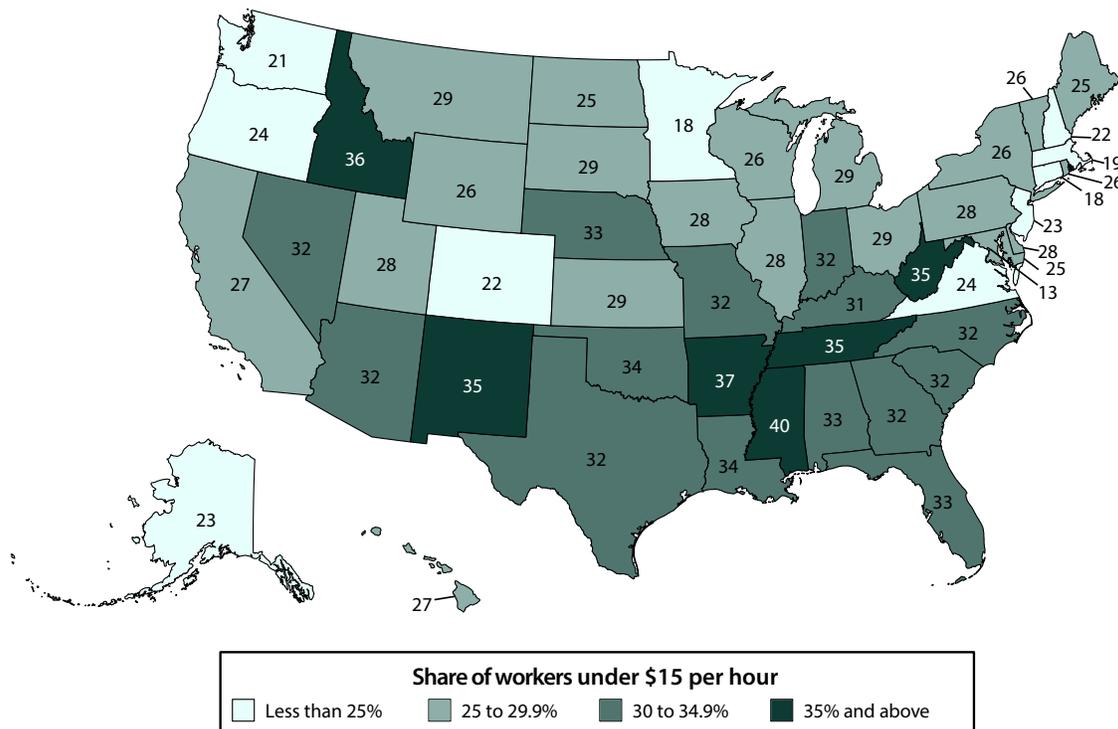
Part-time workers earning less than \$15 per hour provide diverse reasons for not working full time (see appendix figure 1). The low-wage, part-time population has varying impediments to full-time work: 4.5 million are enrolled in school or other training, 3.4 million would like to work full time but cannot find such employment, and 2.7 million are engaged in caregiving that limits the time available for market employment. This second group—often referred to as people working part time for economic reasons—would seem most likely to take up a guaranteed job if it were available.

### Regional Variation in Program Take-up

Any national employment support program that does adjust for regional variation in labor market outcomes should expect uneven participation across the country. Seen from one perspective, this is a feature of employment support programs: places with weak labor demand could expect higher participation, and presumably higher benefits. However, it is also important to acknowledge that places differ widely in the typical wages that workers receive, and some states have many more low-wage workers than do other states. To the extent that one’s expectations about a job guarantee program are based on assumptions about the wage distribution in medium- or high-wage places, one would understate the

FIGURE 7.

## Share of Full-Time Workers Earning Less than \$15 per Hour



Source: BLS 2018a (CPS); authors' calculations.

Note: Estimates are for October 2017 through September 2018. Data are for all persons between the ages of 18 and 64 who are currently employed full time.

likely impacts in lower-wage regions like the lower Midwest, Southeast, and Southwest.

Figure 7 demonstrates this by showing each state’s share of full-time working-age workers who are paid less than \$15 per hour (see appendix figure 2 for the equivalent state map based on a \$10 per hour wage). While only 19.3 percent of Massachusetts workers are paid less than this threshold, 39.8 percent of workers in Mississippi fall below \$15 per hour. In states such as Mississippi a job guarantee is likely to attract many more participants, with a larger corresponding impact on the private sector. Whether the private sector would substantially increase wages or whether there would be a large shift from private- to public-sector work is unclear, but transitions from private employment are especially important to consider in low-wage places.

**Business Cycle Variation in Program Take-up**

In addition to varying across the country, the number of program participants should also be expected to vary with the stage of the business cycle. In a relatively tight labor market like the one characterizing 2018, the number of participants will be relatively low: many workers have employment options they prefer in the private sector. But during recessions and their aftermath, when labor markets are slack and many people have limited options, we expect participation to be higher. Figure 8 shows the number of working-age adults—adjusted for the growing U.S. population and expressed in 2018 levels—who fell into various labor force status categories in 2002, 2010, and 2018 (2002 and 2010 were chosen because

they approximated the labor market troughs associated with the previous two recessions).

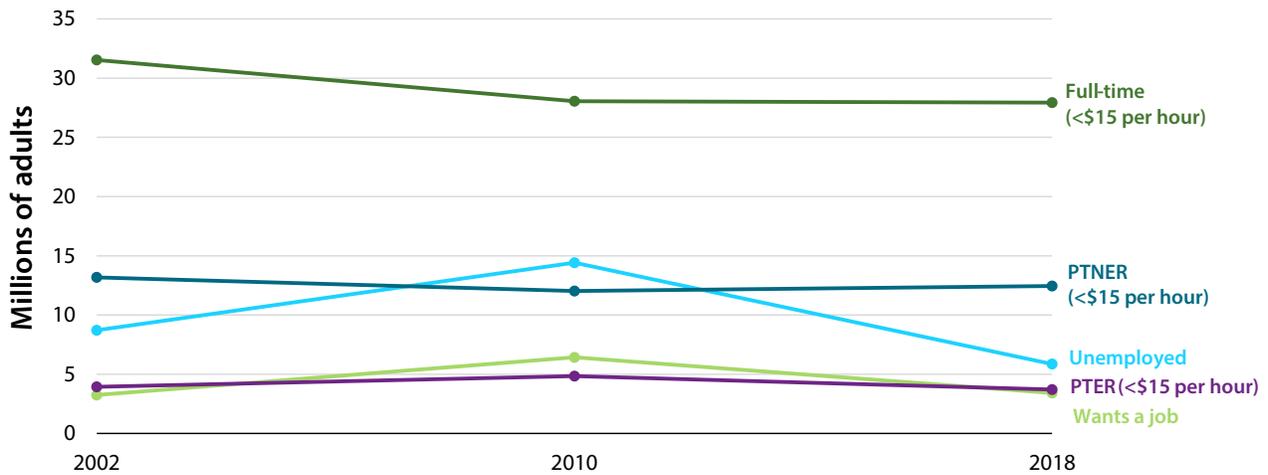
Adjusted for population growth, the number of full-time workers earning less than (an inflation-adjusted) \$15 per hour has fallen since 2002; by contrast, the number of unemployed (and the number of those outside the labor force who wanted a job) was sharply higher in 2010 than in either 2002 or 2018.

This countercyclical feature may be a desirable part of a job guarantee: when a recession begins, many workers will be protected from employment and income losses. However, it is important to be aware of the extent of this fluctuation in program participation, which would need to be accommodated by program administrators through an expansion of available work projects.

**Summary of Potential Participants**

Participants in a job guarantee would come from all segments of the labor market. While there are nearly 6 million unemployed workers, some would continue searching for a better-matched job rather than take a job guarantee. PDH (2018) assume that the broader measure of unemployment (U-6)—which includes unemployed persons, marginally attached workers, and those working part time for economic reasons—would fall to 1.5 percent of the labor force. The rate is currently 7.4 percent, implying roughly 9.7 million participants in a job guarantee (BLS 2018a; PDH 2018). Notably, this calculation does not include any workers who are in full-time employment at salaries below the job guarantee wage, and includes only a portion of those out

**FIGURE 8.** Working-Age Population by Labor Force Status across the Business Cycle, Selected Years



Source: BLS 2018a (CPS); BLS 2018b (Annual Social and Economic Supplement); authors’ calculations.  
 Note: “PTER” refers to part-time for economic reasons, and “PTNER” refers to part-time for noneconomic reasons. Data are for all persons between the ages of 18 and 64 and for the years 2002, 2010, and 2018. Estimates for 2018 are for October 2017 through September 2018; however, information about workers who report wanting a job is obtained from the 2018 Annual Social and Economic Supplement to the CPS. Wage thresholds for 2002 and 2010 are inflation-adjusted to \$15 in 2018 dollars using the CPI-U-RS. To adjust for demographic and population shifts over time, we apply the 2002 and 2010 subpopulation shares to the 2018 working-age (18–64) population.



of the labor force who say they want a job (i.e., marginally attached workers). But it could also overestimate the interest in a guaranteed job of those currently unemployed or working part time for economic reasons.

Wray et al. (2018) produce detailed projections by labor force status group and estimate that 12.7–17.4 million individuals would take up a job guarantee option. They assume a high take-up rate by the unemployed and by those out of the labor force who want a job, but assume nearly no take-up of those who already have a full-time job. In most cases, they assume that the private-sector firms would raise wages to \$15 per hour or more.

Based on the discussion above, the most likely participants in a job guarantee include some portion of the unemployed (5.9 million), some portion of those out of the labor force who want a job (4.2 million), and some portion of those who work part time for economic reasons (3.4 million earning less than \$15 per hour). Among these roughly 13 million people in total, some would not participate in the job guarantee program, either because they are looking for a higher-wage job, or because they are not able to enter the labor force. But participation could also be much larger than one would expect if only these groups are considered. Some portion of those out of the labor force who do *not* currently state that they want a job would nonetheless join the labor force if the right opportunity presented itself. This is especially true of those who are caregivers if child care is provided, or those in school if the job guarantee diverts them away from enrollment. Importantly, some portion of the 27.9 million full-time workers earning less than \$15 an hour would switch to a job guarantee. Finally, some portion of the 15.9 million workers who earn less than \$15 per hour in part-time employment would switch to a guaranteed job.

In addition, the composition of these labor force groups is not constant over time. As shown in Coglianesse (2018), there is considerable churn of individuals from employment to being out of the labor force and vice versa. Similarly, Bauer, Schanzenbach, and Shambaugh (2018) demonstrate widespread movement across full-time employment, part-time employment, unemployment, and being out of the labor force among low-income populations. Given the large flows in and out of these labor force categories, it may be that many individuals take up the job guarantee at some point in time. For projections of long-run program participation, the important question is whether those individuals tend to remain in a guaranteed job or not.

These data suggest that it is possible the job guarantee could have take-up in the tens of millions, with the clearest determinants of size being the relative attractiveness of the guaranteed jobs and the reaction of the private sector to this new competition for workers. Some proposals (e.g., Wray et

al. 2018) suggest a phasing in of the job guarantee program to minimize disruption, while others call for extensive evaluation and experimentation (Booker 2018).

## WHAT ARE THE CURRENT ACTIVITIES OF LIKELY PARTICIPANTS?

Participants would be drawn to a large-scale employment support program from a variety of activities, both within and outside the labor force. But to understand how the labor market would accommodate any program, it is particularly important to examine the industries in which low-wage employees currently work.

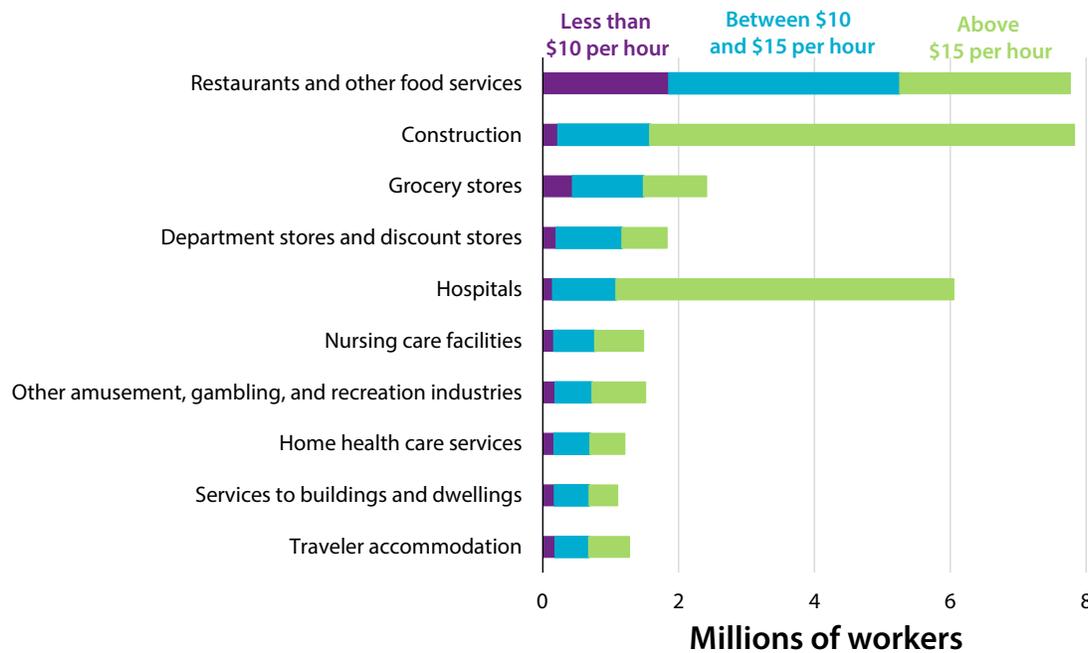
A \$15-per-hour federal job guarantee could attract some of the 27.9 million full-time workers (25.3 percent of all full-time employment) and 15.9 million part-time workers (54.6 percent of all part-time employment) away from their current jobs and into the program (BLS 2018a; authors' calculations). As noted, employers would likely respond by raising wages to retain some workers; in addition, increased demand arising from increased employment may raise labor demand, which is not reflected in this analysis. However, figure 9 gives us a guide as to which industries would be particularly affected by a job guarantee. A \$10-per-hour federal job guarantee would likely be attractive to far fewer workers than a \$12 or \$15 guarantee—of all workers, 10.1 million earn less than \$10 per hour.<sup>11</sup>

Figure 9 displays the top 10 detailed industries by total private-sector employment of workers earning less than \$15 per hour, with employment broken out by wage level. The second-largest industry—food service—contains the most workers earning less than \$15 per hour. In many states, food service workers are subject to a lower minimum wage than other sectors under the assumption that the income deficit will be made up by tips; we use earnings variables that include tips. There are also a large number of grocery store, department store, and construction workers who earn less than \$15 per hour, though only 20.1 percent of the workers in the construction industry earn less than \$15. By contrast, well over half of those employed in many of the other industries shown are earning less than \$15. A job guarantee could therefore necessitate a dramatic shift in how these industries employ workers. They would either have to shift pricing, margins, or productivity to pay current workers \$15 an hour, or they would need to change their employment patterns substantially.

The \$10-per-hour wage threshold implies a different picture. Only the food service industry employs more than 500,000 workers earning less than \$10 per hour (including tips). Fully 24 percent of the food service industry workers earn less than \$10, suggesting that a job guarantee would imply substantial changes in employment patterns. The average across the other

FIGURE 9.

## Top 10 Private-Sector Industries by Number of Workers Earning Less than \$15 per Hour



Source: BLS 2018a (CPS); authors' calculations.

Note: Estimates are for October 2017 through September 2018. Data are for all persons between the ages of 18 and 64 who are currently employed in the private sector. The selected industries are defined at the 4-digit NAICS code level. They are the top 10 industries, as measured by the number of workers earning less than \$15 per hour.



nine industries shown is just 11.4 percent, suggesting a much smaller potential impact.

Depending on what projects are undertaken through a federal job guarantee, the uneven distribution of low-wage workers across industries could lead to a substantial reallocation of workers into different types of economic activity. For example, while reductions in private-sector construction employment could be offset by federal infrastructure activities, it is more difficult to see how restaurant employment would be offset. More directly, the job guarantee would disrupt a given private industry to the extent that it currently depends on low-wage employment.

Understanding the reallocation of workers across tasks and industries is important to understanding how efficient a job guarantee would be. The labor market performs an allocative function, matching workers and firms according to their preferences and productivity (Barnichon and Figura 2015; Abowd, Kramarz, and Margolis 1999). While there is certainly a role for public investments in public goods that cannot be supplied through private activity alone, the public sector cannot fully benefit from the price signals that guide the private labor market, which increases the likelihood that job guarantee workers will be misallocated to activities that do not constitute the best use of their time and effort.

### WHAT WOULD PARTICIPANTS DO IN AN EMPLOYMENT SUPPORT PROGRAM?

Employment support programs may seek to place workers in the private, public, or nonprofit sectors. The programs may also be administered by any of a variety of different authorities at the local, state, or federal levels acting singly or in combination. In the Neumark (2018), CAP (2018), and Booker (2018) proposals, local communities would submit applications to a specified federal agency with detailed plans outlining the specific jobs that will be created. The Levy Institute's plan (Wray et al. 2018) would have oversight at the federal level by the U.S. Department of Labor, but actual program administration would occur at the local level. The PDH proposal (2018) suggests federal government involvement at all stages, from creation to implementation to evaluation.

These proposals also vary in terms of who would be the employer. Some provide tax credits or wage subsidies to private employers, allowing the labor market to decide what job tasks will be conducted (Bartik and Bishop 2009). Neumark's plan relies on both the for-profit and the nonprofit sectors, subsidizing nonprofit jobs that graduate workers into partially subsidized private-sector jobs. On the other end of the spectrum, proposals like PDH's (2018) and the

Levy Institute’s (Wray et al. 2018) call for the public sector to employ program participants, generally through federal grants provided to state and local governments.

Regardless of whether work occurs in the private, public, or nonprofit sectors, it is necessary to assess the likely industries and occupations in which participants will work. Infrastructure and public work projects are obvious possibilities, to the extent that they contribute to valuable public goods and can be staffed in part by workers with relatively low skill levels.<sup>12</sup> However, the modern labor market might not be able to accommodate all of the workers who would participate in a job guarantee if, for instance, public works projects were the exclusive output.

It is therefore useful to examine the distribution of occupations worked by current public-sector employees earning relatively low wages. Figure 10 shows public-sector (local, state, and federal) employment by major occupation categories, restricted to those earning less than \$15 per hour. To the right of each bar is the percent of the occupation

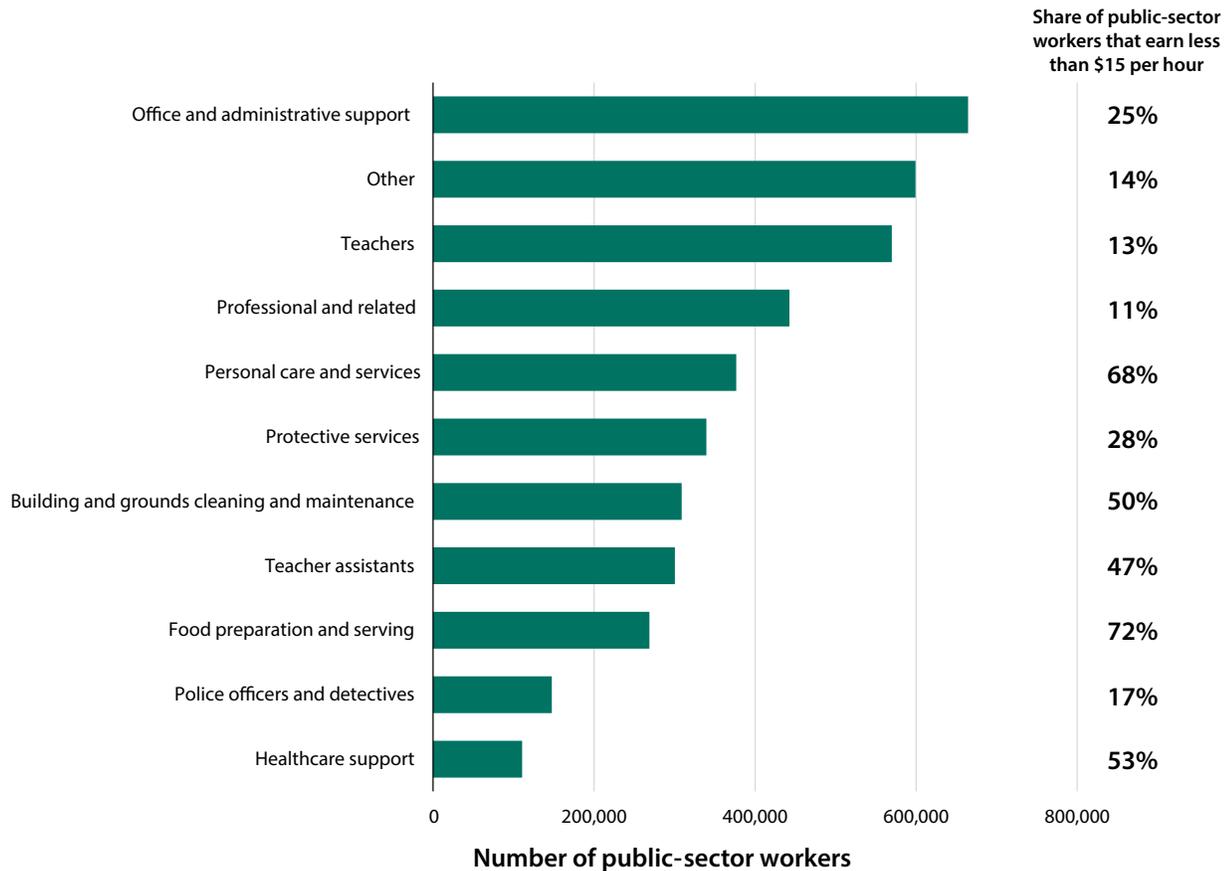
(restricted to public-sector workers) that falls below the \$15 per hour threshold.

Low-wage public-sector workers are spread across a broad range of occupations, with particularly high numbers working as teachers and teacher assistants (the public sector employs over 560,000 teachers and another 300,000 teacher assistants at wages below \$15 per hour) as well as providers of office and administrative support (about 665,000). The occupations that currently dominate public-sector employment may be particularly suited to a job guarantee, given that the administrative infrastructure already exists to employ many workers. In some cases (e.g., teacher assistants), the public sector may be able to accommodate a large number of additional workers, but in other cases the need for additional labor may be limited, or substantial training may be required to make use of additional labor (e.g., jobs in law enforcement).

Personal care workers (often providing either child care or elder care) are relatively numerous in the public sector, and a sizable majority (68 percent) make less than \$15 an hour.

FIGURE 10.

### Public-Sector Workers Earning Less than \$15 per Hour, by Selected Occupation Categories



Source: BLS 2018a (CPS); authors’ calculations.

Note: Estimates are for October 2017 through September 2018. The bars represent the number of public-sector employees in each occupation group currently earning less than \$15 per hour. These bars sum to the total public-sector workforce between the ages of 18 and 64 earning less than \$15 per hour. The percentages next to the bars are the number of public-sector workers earning less than \$15 per hour in an occupation divided by the number of all public-sector workers in the same occupation.

The proposal from Wray et al. (2018) suggests workers would perform care for the environment, the community, and other public goods. This envisions a large role for personal care workers as part of the job guarantee.

It is worth noting that construction-related occupations do not appear in figure 10. Much of public-sector construction is contracted out to private-sector firms, and what public-sector work is done generally has a wage well above \$15. To employ large numbers of workers on a project basis could require a substantial increase in administrative capacity.

Except for infrastructure—which by its nature is project-based—one concern in some occupations is the potential job churn that a job guarantee program would entail. Some proposals anticipate that workers would be encouraged to find private-sector, better-paying employment (e.g., PDH 2018 suggest one day per month off to look for alternative work). Encouragement to seek other employment could present difficulties in occupations (e.g., teaching) for which worker turnover at inopportune times (e.g., in the middle of the school year) can be quite disruptive. There would also be a business cycle aspect to this concern: when the private labor market strengthens, the number of job guarantee participants would decline, reducing labor available in occupations like child- or elder-care services that were previously well supplied. Relatedly, it is unclear to what extent job guarantee participants would face the risk of firing, and whether fired participants would eventually be permitted to rejoin the program.

These and other administrative issues would generate extensive management demands both on the federal government agency running the program and on the state and local governments that would be administering the program. As Josh Bivens (2018) points out, a job guarantee work force of 10 million would be more than three times larger than the public K–12 teacher workforce. That group is both highly trained and has a clear goal (educating youth), and still requires a large administrative system. Far more people doing a wide variety of tasks would present large-scale administrative challenges.

### **ARE THERE UNINTENDED CONSEQUENCES FOR PARTICIPANTS, NONPARTICIPANTS, AND THE ECONOMY?**

As previously discussed, a job guarantee proposal must include a realistic assessment of who would likely participate, and when and where they would participate. Given that a job guarantee would in part draw from the existing low-wage labor market, any proposal must take into account disruption to the industries that currently rely on those workers. And a job guarantee proposal—unlike a private-sector wage subsidy—must plan for how labor would be used, and which tasks workers would perform.

In addition, any assessment of a job guarantee program should consider the full range of potential economic consequences for program participants, nonparticipants, and the economy. Next, we highlight a few particular issues that may be relevant to participants' outcomes. In some instances, careful piloting and evaluation of a job guarantee would shed light on the empirical significance of these concerns.

#### ***Effect on Human Capital Investments***

In choosing between school enrollment and employment, and in choosing among different employment options, individuals must take into account the different career paths that would result from the various options. Choosing to enroll in school reflects a judgment that the future wage gains generated by increased human capital (and any nonwage benefits of schooling) exceed the opportunity cost of tuition and forgone earnings. Similarly, some jobs confer experience and training (or prospects for internal advancement) that is especially valuable, and that may compensate for lower wages (Postel-Vinay and Robin 2002).

A job guarantee could have different types of effects on workers' long-term career outcomes. On the one hand, a guaranteed job might attract individuals who would otherwise have obtained more schooling: by making it easier to immediately obtain employment, a job guarantee lowers the appeal of school enrollment. An empirical literature has examined this effect in the context of minimum wage laws, which may reduce school enrollment to an extent (Neumark and Wascher 2007). In a very different context, the recent surge in oil and gas extraction and associated increase in labor demand for low-skilled workers raised the male high school dropout rate by 0.3 percentage points in the average labor market with shale reserves (Cascio and Narayan 2015).

The extent to which a job guarantee would reduce the incentives for human capital accumulation depends on the attractiveness of the program and whether there are any advantages (e.g., pay, working conditions, etc.) in the program for those with more skills.

#### ***Stigma of Program Participation***

Another potential impact of a job guarantee—and indeed of targeted employment subsidies more generally—is to stigmatize the targeted population, possibly creating a negative labor market signal that could both discourage participation and possibly impair subsequent career progress (Burtless 1985; Hamersma 2014; Neumark 2013). If a job guarantee is primarily taken up by people who have struggled in the labor market for reasons that are (from the perspective of employers) outside their own control and unrelated to their personal characteristics, participation in the program should not produce stigma. However, if a job guarantee is taken up by people with persistent labor market deficits, some of

which are not readily observable by private employers, then participation in a job guarantee could serve as a negative signal of job readiness and productivity.

Stigmatization could manifest as unexpected difficulty in transitioning from the job guarantee program to private-sector employment. Depending on the structure and goals of the program, which may seek to provide temporary assistance during times of distress, this could be undesirable in and of itself. Moreover, some participants could miss out on wage growth that they would otherwise have experienced had they not entered the program if job guarantee wages do not rise with experience as fast as wages in the private sector.

### **Spillover Effects on Nonparticipants**

A common issue in evaluating active labor market policies is the potential for spillover impacts on those who do not participate in the program. For example, job search assistance might improve the employment prospects of a participant only at the expense of a nonparticipant who becomes less competitive for a given job (Crépon et al. 2013; Gautier et al. 2018). This can be a particular concern during weak labor markets, when the amount of employment may be less responsive to labor supply.

Similarly, a job guarantee may have effects on employment outside the program. Figure 9 explored the direct impact of a job guarantee on nonparticipant employment, examining the industries where a relatively large number of workers could be attracted to the program. In addition, private employers may respond to a job guarantee by creating fewer job openings, given that they would be less likely to fill those openings at the original wages.<sup>13</sup> On the other hand, a job guarantee program could generate more economic activity, thereby improving outcomes for nonparticipants.

### **Implications for Productivity**

A job guarantee would change the labor market in a number of ways that alter labor productivity, defined as output per hour worked. First, by bringing in many less-skilled and less-experienced workers who had been non-employed, the average measured labor productivity of all workers would be reduced. This is not a bad thing for the economy, given that the new employees would be generating more output than when they were not working. This is analogous to the experience during economic recoveries, when unemployed workers obtaining new jobs often drags down productivity growth.

Second, and more importantly, a job guarantee might lower the productivity of a given worker. Because the administrative allocation of workers would likely not match peoples' talents with occupations as well as a market allocation would, individuals would quite likely find themselves creating

less output per hour than if they had found employment outside of the job guarantee program. The size of this productivity reduction would depend on the ability of the job guarantee program administrators to match participants with productive employment. During downturns in private labor demand, when the program would likely be flooded with applicants, it seems unlikely that workers would be well-matched in all cases. However, if the alternative for many workers is not private employment, but rather non-employment, then output per capita could still be higher with a job guarantee.

A related concern is that a large number of people might stay in relatively unproductive guaranteed jobs for long periods of time. In these cases, they will almost certainly be less productive than if they were allocated by a labor market to their best-matched employment option. Thus, a significant concern for job guarantee programs that are large enough and well-paying enough to draw people from the private sector is the negative effect they would have on productivity, which has clear negative implications for living standards. Conversely, the more targeted a program is—i.e., the more limited a program is to individuals who are unemployed or not well-utilized in the private labor market—and the more emphasis that is placed on training and eventually transitioning people to the private labor market, the less one would be concerned about deleterious productivity implications.

## **Contemporary Employment Support Policy Proposals**

In recent years several proposals for employment support have received considerable attention. Mark Paul, William “Sandy” Darity Jr., and Darrick Hamilton’s Federal Job Guarantee proposal (2018), the Levy Institute’s Public Service Employment proposal (Wray et al. 2018), and CAP’s Blueprint for the 21<sup>st</sup> Century proposal (2018) are all large-scale commitments to federally funded employment. Senator Booker’s recent Federal Jobs Guarantee Development Act of 2018 and David Neumark’s call for a Rebuilding Communities Job Subsidies program (2018) reflect a more targeted approach that includes experimentation. These five policy proposals give a sense of the range of current discussion about employment support policies.

### **SUMMARIZING PROPOSAL COSTS AND BENEFITS**

Relying entirely on estimates provided by the authors of the respective proposals, table 1 shows a side-by-side comparison of four of the key programs’ costs and other details. As noted previously, there is a sizable population that could in principle be attracted to a job guarantee program, leaving considerable uncertainty regarding program participation.

TABLE 1.

## Summary Table of Proposals' Costs

	Neumark (Phase 1)	Center for American Progress	Paul, Darity, and Hamilton	Levy Institute
Hourly wage	\$10	\$12	\$11.83 (minimum)	\$15
Annual labor costs (per worker)	\$30,000	\$24,960	\$24,600 (minimum) \$32,500 (mean)	\$31,200
Annual nonlabor costs (per worker)	\$10,000	\$6,240	\$23,500	\$12,480
Annual average total cost (per worker)	\$40,000	\$31,200	\$56,000	\$43,680
Take-up	5,000 people	900,000 people	Full-time: 9,700,000 people Total: 10,700,000 people	Lower bound: 12,708,000 people Upper bound: 17,463,000 people
Total annual program cost	\$200 million	\$32 billion	\$543 billion	Lower bound: \$409 billion Upper bound: \$543 billion

Source: Center for American Progress 2018; Paul, Darity, and Hamilton 2018; Neumark 2018; Wray et al. 2018.

Note: Only phase 1 of Rebuilding Communities Job Subsidies is considered in this table. All estimations are taken from the relevant proposals.



The differing scale of the proposals leads to very different headline costs. David Neumark's proposal is highly targeted and would cost just \$200 million a year. In contrast, the job guarantees of PDH or the Levy Institute would cost roughly \$500 billion a year, and possibly more if the take-up in the programs is larger than projected. Across the proposals, costs per worker are projected to be roughly similar.<sup>14</sup> This leaves total estimates ranging between \$30,000–\$55,000 per participant in the different plans. There are some offsets that one would need to consider, though, that would make the costs per participant lower. PDH, for example, would provide health coverage, leading to a relatively high non-labor cost per worker. To the extent that many participants were already on Medicaid, these costs would not be new for the government. Other government programs would also see a reduction in costs. For every previously non-working SNAP (Supplemental Nutrition Assistance Program, sometimes referred to as “food stamps”) recipient who gains a job, SNAP costs would fall as well.<sup>15</sup> Unemployment insurance (UI) payments would clearly dip as well, but it is important to remember that only about one-quarter of unemployed workers are currently receiving UI benefits, and no individuals out of the labor force or currently in full-time low-wage jobs are receiving them (Kimball and McHugh 2015). Consequently, for the fraction of those taking up the job guarantee who currently receive UI benefits, the cost savings of eliminating UI payments (roughly \$300 a week) would offset roughly half the job guarantee wage, but this would be for a very limited share of the job guarantee workers.<sup>16</sup> Also, given that the job guarantee would

not be time-limited but unemployment insurance is, the cost saving would accrue only so long as a worker would have still been receiving unemployment insurance payments (in the absence of the proposal). One exception is during economic downturns when a much larger share of job guarantee participants would come from the ranks of the unemployed. In this sense, the increase in cost of a job guarantee during a recession would be offsetting the typical rise in costs from existing automatic stabilizers.

In addition, job guarantee participants would now be earning money, leading to an increase in tax revenue. However, this tax revenue would be relatively limited. A single individual earning \$30,000 would face a combined payroll and federal income tax liability of roughly \$6,000, offsetting a significant portion of their wage cost; however, if that person was the head of a four-person household, the combination of exemptions, deductions, EITC, and child credits would generate no total federal tax liability. Some individuals would then earn enough to become ineligible for EITC, but many who were previously not working would become eligible.<sup>17</sup>

In total, a small average increase in tax revenue per capita combined with a small reduction in SNAP costs, as well as a much larger reduction in unemployment insurance costs for those in the program, would all reduce per-participant job guarantee costs relative to the projections in table 1. Also, as noted, the nonlabor costs that include health care are overestimates of the marginal cost to the government in most

cases, given that the government is already paying for some of participants' current health care costs. But it is important to emphasize that this is only true of costs per participant: if job guarantee take-up is higher than projected, total costs will be larger than anticipated. In addition, take-up from the currently employed will entail costs for the government with little reduction in government spending or increases in tax revenue.

The benefits of employment support policies would clearly scale to their costs. By employing 5,000 people, the Neumark (2018) proposal could improve labor market outcomes and public goods within the narrowly prescribed high-poverty areas it targets, but would not meaningfully change nationwide employment or wage statistics. At the other extreme, the PDH job guarantee that reduces the broadest measure of underemployment (U-6, which includes the

unemployed, those marginally attached to the labor force, and those employed part time for economic reasons) to 1.5 percent would move millions into employment. If the prime-age U-6 rate fell to 1.5 percent, this would raise the prime-age employment rate by 3.2 percentage points up to 82.5 percent.<sup>18</sup> This contrasts with its previous high of 81.4 percent in 2000. The larger program envisioned by the Levy Institute would—based on their calculations—increase the prime-age employment-to-population ratio nearly four percentage points in their high-take-up scenario.<sup>19</sup> This would push the ratio well above its previous peak, but still within the range of other G7 economies. A more cautious set of estimates of these types of guarantees—assuming lower take-up by both the unemployed and those out of the labor force—would cut the prime-age unemployment rate in half and reduce those marginally attached to the labor force by a quarter.

### BOX 3.

## History of Federal Public Hiring Programs

Policies to support employment have a long history in the United States. Responding to an unemployment rate that peaked at one quarter of the labor force in 1933 (National Bureau of Economic Research 2018), President Roosevelt's New Deal included large-scale employment support programs like the Civilian Conservation Corps (CCC) and the Works Progress Administration (WPA; renamed in 1939 as the Work Projects Administration). Running from 1933 to 1942, the CCC targeted young men with dependents. In its inaugural year it enrolled 250,000 people, growing to 500,000 people per year at its peak and employing more than 3 million people throughout its existence (Bass 2013, 74–75). These laborers were primarily enlisted in public works efforts surrounding environmental conservation. The much larger federal employment effort of the New Deal was the WPA, which began in 1935 and ended in 1943. During that eight-year period the WPA employed more than 8.5 million people; in its peak year it employed more than 3 million individuals out of a labor force of roughly 55 million. Much like the CCC, WPA workers focused on public works, with a strong emphasis on traditional infrastructure projects. The WPA built more than 5,900 new schools, 220 new hospitals, 77,000 new bridges and viaducts, and 24,000 miles of storm drains and sewerage lines; in addition, it repaired or paved more than 650,000 miles of roads (U.S. Federal Works Agency 1946, 131).

The CCC and WPA both ended in the early 1940s after the United States entered World War II. During the postwar boom the need for federal employment support diminished. However, the experience of the Great Depression and perceived success of New Deal programs prompted the passage of the Employment Act of 1946. This Act aimed to build upon the New Deal programs by placing the responsibility for promoting maximum employment—and stabilizing inflation—on the federal government (Steelman 2011).

Frustrated by high inflation and unemployment during the 1970s, the Full Employment and Balanced Growth Act of 1978 (also known as the Humphrey-Hawkins Act) tasked the federal government with reducing the national unemployment rate to 4 percent by 1983 and working toward full employment (DeLong 1996). The Humphrey-Hawkins Act established the Federal Reserve's dual mandate of promoting price stability and maximum employment. More-ambitious commitments—such as an explicit legal right to a job—were dropped due to concerns about potential inflationary effects (Cowie 2010, 281–83).

In contrast to direct employment, the federal government has also implemented a variety of wage subsidies that aim to boost employment. The largest of these is the EITC, which raises the return to work for many low-income families. This program and other wage subsidies were discussed in box 1.

Doing so would increase the prime-age employment rate by 1.8 percentage points, or not quite back to its previous peak. Broader program participation by those out of the labor force for school, health and disability, or caregiving would lift the rate higher in all cases. The biggest source of uncertainty—the take-up of the currently employed at low wages—would not affect prime-age employment rates, given that those individuals already have jobs.

The impact on wages would depend on the extent to which private employers shift the entire wage distribution in response to a \$15 job guarantee. Moving the 25.5 million prime-age workers currently employed at wages below \$15 per hour up from their current wages to \$15 would not increase the median wage, which is above \$15 per hour. One could instead look at the average wage earned by the bottom 80 percent of the wage distribution (roughly equivalent to production and nonsupervisory workers, a frequently used measure of the wages of a typical worker) to see the impact of a job guarantee. Raising the wages of currently employed workers up to \$15 per hour would increase the average wage by 6 percent. On the other hand, pulling the 2.3 million prime-age workers into the labor force at \$15 per hour (the relatively cautious scenario described previously) would offset some of the increase in the average wage, given that the current average is above \$15 per hour. On net, the impact of both raising wages and adding new workers would be to raise the average wage for production and nonsupervisory workers by roughly 5 percent.<sup>20</sup>

### **NEUMARK: “REBUILDING COMMUNITIES JOB SUBSIDIES”**

Neumark’s (2018) proposal incorporates lessons learned from state and federal experience with enterprise zones and other targeted economic growth policies. Neumark’s Rebuilding Communities Job Subsidies would target joblessness in areas of concentrated poverty, providing fully subsidized nonprofit jobs (followed by partially subsidized private-sector jobs) that would supply public goods in those areas. Neumark proposes a two-phase plan: in Phase 1 nonprofit jobs are fully subsidized by the federal government for 18 months at a proposed wage of \$10 per hour; in Phase 2 workers transition to private-sector positions for a subsequent 18 months in which the jobs are subsidized 50 percent for the first \$30,000 of annual earnings.

The geographically targeted program, with an annual Phase 1 cost of \$200 million and an annual Phase 2 cost of \$75 million, would initially include a strong experimental evaluation component that includes 5,000 test jobs and 5,000 control jobs in 200 total test sites. These sites comprise four to six Census tracts in which 40 percent or more of the population is below the poverty line, on average. Within the sites, Rebuilding Communities Job Subsidies are limited to workers in families

whose income lies below 100 percent of the poverty line if they are not employed and 150 percent if they are employed. Neumark plans for the U.S. Department of Housing and Urban Development (HUD) to oversee administration of the program. HUD will establish a competitive application process for nonprofits and potential treatment areas. Applicants must demonstrate a comprehensive plan of action that will be implemented if funding is granted, and local nonprofits will have identified a lack of skills in the area that the proposed jobs will seek to remedy.

After the initial three years of experimentation, HUD will compare economic conditions, including employment rates, job skill levels, and opportunity access between the test and control sites to evaluate the job subsidy plan’s success in improving job opportunity access in communities in need.

### **CENTER FOR AMERICAN PROGRESS: “BLUEPRINT FOR THE 21<sup>ST</sup> CENTURY”**

In 2018 the Center for American Progress called for a variety of policy initiatives aimed at expanding growth and employment across the country. The initiatives included a proposed federal job guarantee for selected distressed communities. The job guarantee would be administered in counties that fall in the bottom 10 percent according to an employment, earnings, and poverty index that CAP created. Counties would submit a plan outlining specific projects that recipients will perform, how these projects will help the greater community, and whether a public or private entity will be the employer.

Workers would be paid \$12 per hour, increasing to \$15 per hour by 2024. CAP estimates an annual cost of \$32 billion for creating 1.2 million jobs. The U.S. Department of Labor would create a new agency—the Office of Community Employment (OCE)—that would establish guidelines and oversee the equitable distribution of jobs by local governments.

While county governments would be the administrators of the jobs program, CAP provides for sanctions if the counties are unable to run the program to standards set by the OCE. In this instance, the federal government would shift authority to another unit such as a local community college, or would administer the program itself. The Department of Labor would also create a new enforcement office to ensure compliance by the local unit.

### **PAUL, DARITY, AND HAMILTON: “THE FEDERAL JOB GUARANTEE: A POLICY TO ACHIEVE PERMANENT FULL EMPLOYMENT”**

Economists Mark Paul, William “Sandy” Darity Jr., and Darrick Hamilton (2018) propose the creation of what they call a National Investment Employment Corps (NIEC): a large-scale direct hiring program run by the federal

government that would serve anyone over the age of 18 who wants a job.

The authors propose that the Secretary of Labor work with other federal agencies to identify areas of needed investment, working with local and state governments that would submit employment proposals to the NIEC. Employment within the job guarantee program could be either part time or full time, and individuals would be allowed up to eight hours per employed month to seek alternative employment or job training.

NIEC jobs have a minimum hourly wage of \$11.83, but the authors note that wages would fluctuate with experience, and they estimate a mean annual salary of \$32,500. Of these jobs, they project that 9.7 million would be full time, and 10.7 million people would participate in total.

The proposed NIEC would include a Division of Progress Investigation (DPI) tasked with monitoring shirking or corruption, and that would be empowered to take disciplinary actions against participants engaged in such behavior.

### **SENATOR BOOKER: “FEDERAL JOBS GUARANTEE DEVELOPMENT ACT OF 2018”**

Senator Cory Booker’s Federal Jobs Guarantee Development Act of 2018 would establish a pilot program to learn more about how a job guarantee would work in practice. Local governments and nonprofits would provide jobs under plans approved by the Secretary of Labor, with the federal government providing reimbursement for the costs of these jobs.

The bill calls for three-year grants that would be provided to local governments that partner with philanthropic organizations to provide jobs. The pilot would be conducted with 15 local governments, of which at least four would be rural, six would be urban, and one would be tribal. Eligible government participants would have an unemployment rate that is at least 150 percent of the national unemployment rate. Priorities for the job plans would include child care, elder care, disabled care, and infrastructure activities.

Senator Booker’s proposed jobs would pay a wage of \$15 per hour and would provide health insurance and paid family and sick leave. The proposal also provides for up to eight weeks of paid job training, with enhanced training available to the long-term unemployed and formerly incarcerated.

The chief evaluation officer at the U.S. Department of Labor would evaluate the pilot program and assess the impacts on outcomes including total and private-sector employment, wages and benefits, the poverty rate, effects on safety-net and federal spending, child health and educational outcomes, mental health, incarceration rates, and other indicators.

### **THE LEVY INSTITUTE: “PUBLIC SERVICE EMPLOYMENT PROGRAM”**

Economists L. Randall Wray, Flavia Dantas, Scott Fullwiler, Pavlina R. Tcherneva, and Stephanie A. Kelton at the Levy Institute have proposed a federally funded and locally administered program that supplies employment opportunities, which they call the Public Service Employment program. The program would be administered by the Department of Labor, which would work with local governments to establish community jobs banks—warehouses for on-the-shelf jobs that can be supplied to workers on short notice.

The Levy Institute’s proposal works exclusively through public-sector and nonprofit employment. In choosing program activities, the U.S. Department of Labor would consider (1) the usefulness of activities, (2) the creation of employment opportunities, and (3) the degree to which existing employment opportunities would be affected by the program. Additionally, Public Service Employment would provide training, education, and apprenticeships.

Eligibility for the job guarantee—at an hourly wage of \$15—would be unrestricted. The authors project that the total annual cost would be \$544 billion, with an estimated 12.7–17.4 million participants.

## **Conclusion**

More than 10 years after the beginning of the Great Recession, the economic recovery has not reached all workers, and it has not addressed structural problems of weak worker bargaining power. The extent of employment losses during the recession, the unexpectedly prolonged period of labor market weakness that ensued, and lackluster wage growth have all led policymakers to consider new programs that would support employment.

These ideas harken back to the federal response to the Great Depression, which similarly included large-scale federal hiring. Since that time, the U.S. labor market has evolved considerably, and success for any new federal employment support policy requires that it address a range of questions about its design, intended impacts, and implementation challenges.

Employment support programs of all types aim to generate better labor market outcomes for Americans, many of whom have either found themselves out of the labor force or in a low-wage job. No plan is a panacea. Large-scale job guarantee programs would involve substantial costs (particularly at higher wages); potentially cause wide-ranging, poorly understood changes in the private labor market; and risk

using labor in unproductive ways. On the other end of the spectrum, wage subsidies rely heavily on the current market structure, allowing current discrimination to persist; are vulnerable to capture of benefits by firms in regions or industries where firms have extensive labor market power; and may subsidize workers and firms that would have formed matches in the absence of the subsidy. Training and search aid have also had varying effects across different groups. These considerations suggest experimentation and analysis as policymakers look for ways to improve living standards across the country.

One simple conclusion from this paper is that the effects of any job guarantee program are likely to be quite sensitive to the wage offered. If a federally supported job offers a minimum hourly wage of between \$7.25 and \$10, a relatively modest fraction of currently employed U.S. workers would likely be affected. However, at higher hourly wages like \$15, a federal program would have more-sweeping implications for the U.S. labor market, affecting an unknown fraction of 27.9 million full-time workers, 15.9 million part-time workers, 5.9 million unemployed workers, and tens of millions of people who are outside the labor force (within the 18-64 year old population; see appendix table 1).

Of course, there is considerable uncertainty about which people and how many people would be affected. In each group—the unemployed, those outside the labor force, and

those working part- or full-time at a relatively low wage—only a fraction would likely choose to participate. Among the unemployed, some job searchers would prefer to continue searching for a high-wage job; among those outside the labor force, many might prefer not to work or could face impediments to work that are not solved by a job guarantee; and among the employed, many would prefer their existing jobs even if their wages could be raised by participation in a job guarantee program. But because all these groups are quite large, the number of potential participants is also very large, and careful evaluation is required to make any confident projections about expected participation in a national job guarantee program. The larger programs would likely cost hundreds of billions of dollars a year and could lift employment rates by 2 to 4 percentage points depending on take-up. Higher-wage job guarantees would also lift more out of poverty and raise wages of the bottom 80 percent of workers by roughly 5 percent.

The choice of whether to implement a job guarantee proposal should not be made in isolation. That is, policymakers should consider whether a job guarantee would be more appropriate than alternatives like wage subsidies, targeted public sector hiring, and other active labor market policies. This document has pointed to important labor market considerations that merit further study as policymakers contemplate job guarantee proposals.

# Endnotes

1. See also Weingarden (2017) and Hendrickson, Muro, and Galston (2018) for analysis of differences between metro and non-metro areas.
2. A 2017 Hamilton Project volume addressed this trend, containing analysis and policy proposals aimed at supporting women's labor market outcomes (Schanzenbach and Nunn 2017).
3. Notably, the employment rate decline in the United States stands in contrast to stability or increases in many other advanced economies. Currently, the employment rate for 25–54 year olds is lower in the United States than in all other G7 (major advanced economies) countries except Italy. Part of this difference may be due to relatively ungenerous work-family policies in the United States that discourage women's labor force participation (Blau and Kahn 2013).
4. However, the Earned Income and Child Tax Credits would boost after-tax income for a family in this situation; after accounting for the EITC, a wage of only \$8.21 per hour would be required to avoid poverty. Calculations are made using the National Bureau of Economic Research's TAXSIM program.
5. See Cajner et al. (2018) for a detailed exploration of racial disparities in labor market outcomes. They find that elevated unemployment rates for black workers are predominantly driven by higher job separation rates, rather than lower hiring rates. This suggests that an employment support policy should address effects on firing as well as hiring.
6. For example, the U.S. Postal Service has been an important source of labor demand for black workers (Rubio 2010). See also a 2018 Hamilton Project framing paper that explores how structural racism has affected the spatial distribution of economic activity (Hardy, Logan, and Parman 2018).
7. See, for example, Diamond (1982) and Mortensen and Pissarides (1994).
8. See Perloff and Wachter (1979) for an analysis of the short-lived New Jobs Tax Credit, which paid a subsidy to employers for increases in their wage bill beyond wages paid during a baseline period.
9. While a job guarantee might apply to teenage workers or those over 64, we restrict ourselves to the typically defined working-age population, as this allows us to focus on those most likely to be affected by a job guarantee while avoiding issues related to retirement.
10. This is a separate categorization from the one used in figure 5, i.e., some of those outside the labor force who would like to work are in school, some are retired, and so forth. It is important to note, however, that a substantial amount of employment results from the hiring of those outside the labor force who originally stated that they did not want a job.
11. However, many workers may be on career paths that lead them to higher wages. Workers tend to earn more with every additional year of labor market experience and tenure with a specific employer, although this annual percent increase is smaller for low-skilled workers (Bagger et al. 2014). By one estimate, 10 years of tenure are associated with about a 10 percent increase in wages for the average worker (Altonji and Williams 2005).
12. There are regulatory obstacles that would have to be overcome. For example, the Davis-Bacon Act of 1931 mandates that laborers and mechanics on public works projects be paid the local prevailing wage, which, as Wray et al. (2018) note, is often much higher than even \$15 per hour (Wray et al. 2018).
13. But it is important to note that spillover effects on nonparticipants are also a concern for private-sector wage subsidies, if those subsidies are only available to a portion of the labor force. Employers will have an incentive to shift their hiring toward subsidized employment and away from unsubsidized employment.
14. Neumark's proposal envisions a lower wage, but allows for the fact that some areas have minimum wages above \$10 per hour and envisions some other associated labor costs, making the annual labor cost per worker much closer to programs with a \$15 minimum wage.
15. Proposals with lower wages would likely lead to smaller reductions in SNAP program costs as more workers would remain under the income threshold for eligibility.
16. If roughly one third of the workers in a job guarantee were previously unemployed, and fewer than one third of those workers were receiving unemployment insurance, roughly one in ten workers in a job guarantee would have been receiving UI benefits. This may be an overestimate to the extent that low-wage workers are less likely than others to be eligible for UI.
17. It is likely better to think of EITC costs as part of the tax offset. Thus, whether one should offset the costs by expected revenues would depend on the types of participants. Also, to the extent that a job guarantee is employing people who were previously employed in the private sector but at a lower wage, there is a much smaller increase in tax revenue for a given job guarantee outlay. Calculations are made using the National Bureau of Economic Research's TAXSIM program.
18. We use a 2017–18 employment rate baseline of 79.3 percent for prime-age workers.
19. If one assumes that those working part time for economic reasons who are paid \$15 or more would stay in their current positions—and all of that group earning less would take the guarantee jobs—then nearly all the unemployed and marginally attached would need to take guarantee jobs to achieve the 1.5 percent target in the PDH projection. If one assumed the ratios of unemployed, marginally attached, and part time for economic reasons within U-6 remained the same, the PDH projections would involve slightly higher unemployment rates and as such the prime-age employment rate would increase by slightly less. The main difference in the employment rate projections for the PDH and Levy Institute proposals is that the latter projects a higher level of participation by those currently out of the labor force.
20. It is worth noting that a job guarantee is likely to raise wages of those earning somewhat more than the guarantee wage, which would enhance the projected wage boost. But at the same time, a guarantee will not raise every worker's wage to the guarantee wage. Some workers will prefer to retain private-sector jobs paying below that level, and this will tend to lower the projected wage increase.

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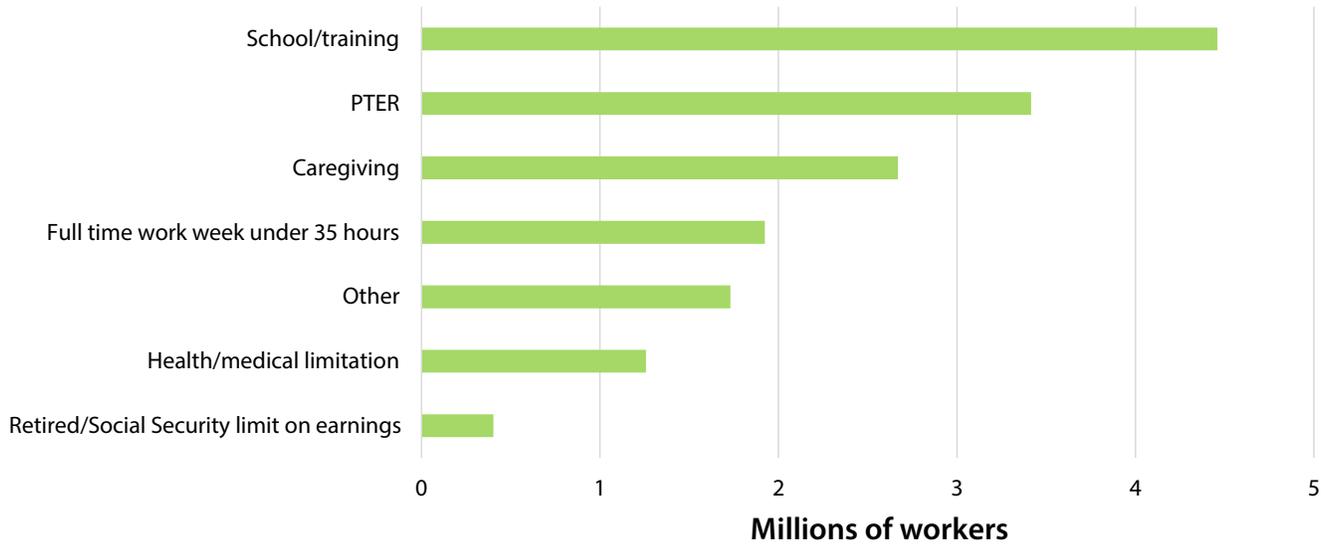
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# Appendix

APPENDIX FIGURE 1.

## Part-Time Workers Earnings Less than \$15 per Hour, by Reason for Part-Time Status



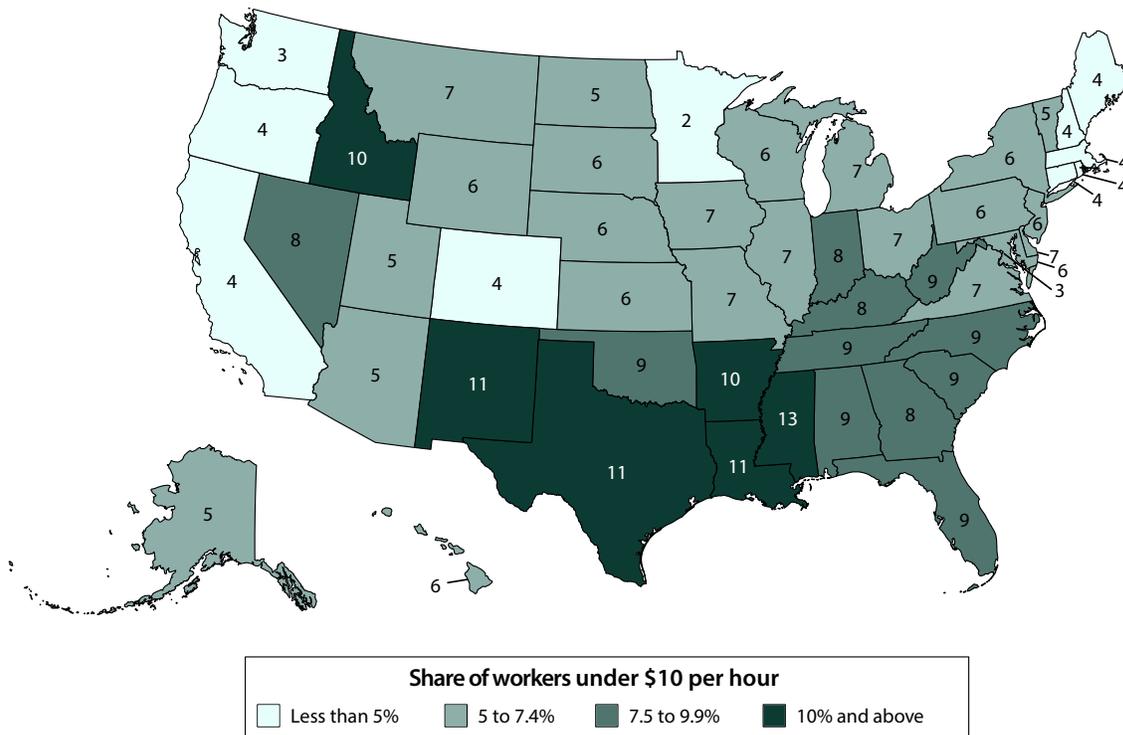
Source: BLS 2018a (CPS); authors' calculations.

Note: Estimates are for October 2017 through September 2018. Data are for all persons between the ages of 18 and 64 who worked part-time for less than \$15 per hour. "PTER" refers to part-time workers who give an economic reason (e.g., inability to find full-time work) for their status.



APPENDIX FIGURE 2.

## Share of Full-Time Workers Earning Less than \$10 per Hour



Source: BLS 2018a (CPS); authors' calculations.

Note: Estimates are for October 2017 through September 2018. Data are for all persons between the ages of 18 and 64 who are currently employed full-time.



APPENDIX TABLE 1.

## Potential Job Guarantee Take-Up Population for Selected Hourly Wages

Employment Status	Hourly Wage <\$10 per hour	Hourly Wage <\$15 per hour
Unemployed	5,860,000	5,860,000
Full-time Workers	5,160,000	27,930,000
Part-time Workers	4,920,000	15,860,000
Part-time for economic reasons	1,010,000	3,420,000
Part-time for noneconomic reasons	3,910,000	12,440,000
Not in Labor Force (by Major Activity)	47,470,000	47,470,000
Caregiving	13,840,000	13,840,000
Sick or Disabled	12,650,000	12,650,000
In school	9,320,000	9,320,000
Retired	8,970,000	8,970,000
Other	2,690,000	2,690,000
Not in Labor Force (by Wants a Job)	47,470,000	47,470,000
Wants a job	4,180,000	4,180,000
Marginally attached	1,310,000	1,310,000
Discouraged worker	396,000	396,000

Source: BLS 2018a (CPS); BLS 2018c; authors' calculations.

Note: Estimates are for October 2017 through September 2018. Values are rounded to the nearest 10,000. Data are for all persons between the ages of 18 and 64. "Part time for economic reasons" refers to all part-time workers who give an economic reason (e.g., inability to find full-time work) for their status. "Part time for noneconomic reasons" refers to all part-time workers who give a noneconomic reason for their part-time status. The full-time and part-time estimates both reflect all workers earning less than \$10 or \$15 per hour.



# Technical Appendix

## Figure 5. Working-Age Population, by Labor Force Status

Wages were calculated using two methods: (1) using the reported hourly wage if available and (2) dividing the weekly earnings by the number of hours usually worked. In cases where the hourly wage was missing, the second method was used. If both values were available, we used the higher of the two wages so that our measure includes tips, commissions, and other income not captured in the hourly wage. We do not adjust for CPS top codes in either hourly wages or weekly earnings. Self-employed persons are excluded from this analysis. Full- and part-time values represent an estimate of full- and part-time workers, respectively, earning strictly less than \$15 per hour. These estimates are calculated by taking the share of workers earning less than \$15 per hour from the Outgoing Rotation Group (ORG) subsample of the Current Population Survey (CPS), excluding observations in the ORG that have missing wage values. Because there are observations with missing values for wages, the estimates in the ORG of the number of full- or part-time workers earning less than \$15 per hour do not reflect the entire population. We therefore take the population shares calculated in the ORG using only observations with wage data and apply them to the working population estimates calculated using the entire CPS Basic monthly sample.

Full- and part-time workers are defined based on their work status during the CPS survey reference week, regardless of their usual status. As such, those who were not at work during the survey reference week were left out of our sample. Unemployed and labor force nonparticipant values are calculated directly from the CPS Basic monthly sample. For those not in the labor force, one of three classifications is assigned: (1) retired, (2) unable to work, and (3) other. Individuals assigned the “other” classification were then asked their major activity while not in the labor force. Responses included disabled, ill, in school, taking care of house or family, and other. We recoded all respondents as “sick or disabled” if they were either “unable to work” or if they were “other” and cited “disabled” or “ill” as their main activity.

## Figure 6. Hourly Wage Distribution of Full-Time Workers

Wages were calculated using two methods: (1) using the reported hourly wage if available and (2) dividing the weekly earnings by the number of hours usually worked. In cases where the hourly wage was missing, the second method was used. If both values were available, we used the higher of the two wages so that our measure includes tips, commissions, and other income not captured in the hourly wage. We do not adjust for CPS top codes in either hourly wages or weekly earnings. Self-employed persons are excluded from this analysis. Full- and part-time values represent an estimate of full- and part-time workers, respectively, earning strictly less than \$15 per hour. These estimates are calculated by taking the share of workers earning less than \$15 per hour from the Outgoing Rotation Group (ORG) subsample of the Current Population Survey (CPS), excluding observations in the ORG that have missing wage values. Because there are observations with missing values for wages, the estimates in the ORG of the number of full- or part-time workers earning less than \$15 per hour do not reflect the entire population. We therefore take the population shares calculated in the ORG using only observations with wage data and apply them to the working population estimates calculated using the entire CPS Basic monthly sample. Full-time workers are defined based on their work status during the survey reference week, regardless of their usual status. As such, those who were not at work during the survey reference week were left out of our sample.

## Figure 7. Share of Full-Time Workers Earning Less than \$15 per Hour

Wages were calculated using two methods: (1) using the reported hourly wage if available and (2) dividing the weekly earnings by the number of hours usually worked. In cases where the hourly wage was missing, the second method was used. If both values were available, we used the higher of the two wages so that our measure includes tips, commissions, and other income not captured in the hourly wage. We do not adjust for CPS top codes in either hourly wages or weekly earnings. Self-employed persons are excluded from this analysis.

### Figure 8. Working-Age Population by Labor Force Status across the Business Cycle, Selected Years

Wages were calculated using two methods: (1) using the reported hourly wage if available and (2) dividing the weekly earnings by the number of hours usually worked. In cases where the hourly wage was missing, the second method was used. If both values were available, we used the higher of the two wages so that our measure includes tips, commissions, and other income not captured in the hourly wage. We do not adjust for CPS top codes in either hourly wages or weekly earnings. Self-employed persons are excluded from this analysis.

Full- and part-time values represent an estimate of full- and part-time workers, respectively, earning strictly less than \$15 per hour. Wage thresholds in 2002 and 2010 are set to \$15 in 2018 CPI-U-RS adjusted dollars; this yields a 2002 threshold of \$10.74 and a 2010 threshold of \$13.02 in current dollars. These estimates are calculated by taking the share of workers earning less than \$15 per hour from the Outgoing Rotation Group (ORG) subsample of the Current Population Survey (CPS), excluding observations in the ORG that have missing wage values. Because there are observations with missing values for wages, the estimates in the ORG of the number of full- or part-time workers earning less than \$15 per hour do not reflect the entire population. We therefore take the population shares calculated in the ORG using only observations with wage data and apply them to the working population estimates calculated using the entire CPS Basic monthly sample. To adjust for demographic and population shifts over time, we apply the subpopulation shares to the 2018 working-age (18–64) population.

Full- and part-time workers are defined based on their work status during the survey reference week, regardless of their usual status. As such, those who were not at work during the survey reference week were left out of our sample. “PTER” refers to persons working part-time who cite an economic reason (such as seasonal work, labor dispute, could only find part-time, slack work, etc.) as their main reason for having part-time status. “PTNER” refers to persons working part-time who cite a noneconomic reason (such as school/training, child care problems, other family/personal obligations, health/medical limitation, etc.) as their main reason for having part-time status. The estimate of unemployed persons is calculated directly from the CPS Basic monthly sample. “Want a job” values were calculated using the March Annual Social and Economic Supplement to the CPS for the years 2002, 2010, and 2018. These values refer to those persons not in the labor force who reported that they want a job, full- or part-time job.

### Figure 9. Top 10 Private-Sector Industries by Number of Workers Earning Less than \$15 per Hour

Wages were calculated using two methods: (1) using the reported hourly wage if available and (2) dividing the weekly earnings by the number of hours usually worked. In cases where the hourly wage was missing, the second method was used. If both values were available, we used the higher of the two wages so that our measure includes tips, commissions, and other income not captured in the hourly wage. We do not adjust for CPS top codes in either hourly wages or weekly earnings. Self-employed persons are excluded from this analysis. Full- and part-time values represent an estimate of full- and part-time workers, respectively, earning strictly less than \$15 per hour. These estimates are calculated by taking the share of workers earning less than \$15 per hour from the Outgoing Rotation Group (ORG) subsample of the Current Population Survey (CPS), excluding observations in the ORG that have missing wage values. Because there are observations with missing values for wages, the estimates in the ORG of the number of full- or part-time workers earning less than \$15 per hour do not reflect the entire population. We therefore take the population shares calculated in the ORG using only observations with wage data and apply them to the working population estimates calculated using the entire CPS Basic monthly sample.

### Figure 10. Number of Public-Sector Workers Earning Less than \$15 per Hour, by Selected Occupation Categories

Wages were calculated using two methods: (1) using the reported hourly wage if available and (2) dividing the weekly earnings by the number of hours usually worked. In cases where the hourly wage was missing, the second method was used. If both values were available, we used the higher of the two wages so that our measure includes tips, commissions, and other income not captured in the hourly wage. We do not adjust for CPS top codes in either hourly wages or weekly earnings. Self-employed persons are excluded from this analysis. Full- and part-time values represent an estimate of full- and part-time workers, respectively, earning strictly less than \$15 per hour. These estimates are calculated by taking the share of workers earning less than \$15 per hour from the Outgoing Rotation Group (ORG) subsample of the Current Population Survey (CPS), excluding observations in the ORG that have missing wage values. Because there are observations with missing values for wages, the estimates in the ORG of the number of full- or part-time workers earning less than \$15 per hour do not reflect the entire population. We therefore take the population shares calculated in the ORG using only observations with wage data and apply them to the working population estimates calculated using the entire CPS Basic monthly sample.

The selected occupation categories are at different levels of aggregation in order to highlight specific occupations. “Other” includes occupations under the umbrella of sales, management, and financial, among others. “Professional and related” includes occupations such as engineers, lawyers, and social workers, and excludes teachers and teacher’s assistants, which are both highlighted in their own categories. Protective Services includes occupations such as fire fighters, security guards, and correctional officers, and excludes police officers and detectives, which is highlighted in its own category.

### **Appendix Figure 1. Part-Time Workers Earnings Less than \$15 per Hour, by Reason for Part-Time Status**

Wages were calculated using two methods: (1) using the reported hourly wage if available and (2) dividing the weekly earnings by the number of hours usually worked. In cases where the hourly wage was missing, the second method was used. If both values were available, we used the higher of the two wages so that our measure includes tips, commissions, and other income not captured in the hourly wage. We do not adjust for CPS top codes in either hourly wages or weekly earnings. Self-employed persons are excluded from this analysis. Full- and part-time values represent an estimate of full- and part-time workers, respectively, earning strictly less than \$15 per hour. These estimates are calculated by taking the share of workers earning less than \$15 per hour from the Outgoing Rotation Group (ORG) subsample of the Current Population Survey (CPS), excluding observations in the ORG that have missing wage values. Because there are observations with missing values for wages, the estimates in the ORG of the number of full- or part-time workers earning less than \$15 per hour do not reflect the entire population. We therefore take the population shares calculated in the ORG using only observations with wage data and apply them to the working population estimates calculated using the entire CPS Basic monthly sample.

### **Appendix Figure 2. Share of Full-Time Workers Earning Less than \$10 per Hour**

Wages were calculated using two methods: (1) using the reported hourly wage if available and (2) dividing the weekly earnings by the number of hours usually worked. In cases where the hourly wage was missing, the second method was used. If both values were available, we used the higher of the two wages so that our measure includes tips, commissions, and other income not captured in the hourly wage. We do not adjust for CPS top codes in either hourly wages or weekly earnings. Self-employed persons are excluded from this analysis.

### **Appendix Table 1. Potential Job Guarantee Take-Up Population for Selected Hourly Wages**

Wages were calculated using two methods: (1) using the reported hourly wage if available and (2) dividing the weekly earnings by the number of hours usually worked. In cases where the hourly wage was missing, the second method was used. If both values were available, we used the higher of the two wages so that our measure includes tips, commissions, and other income not captured in the hourly wage. We do not adjust for CPS top codes in either hourly wages or weekly earnings. Self-employed persons are excluded from this analysis. “Want a job”, “marginally attached”, and “discouraged worker” values were calculated using an unpublished Bureau of Labor Statistics table for 2017 annual averages in the Current Population Survey basic sample.

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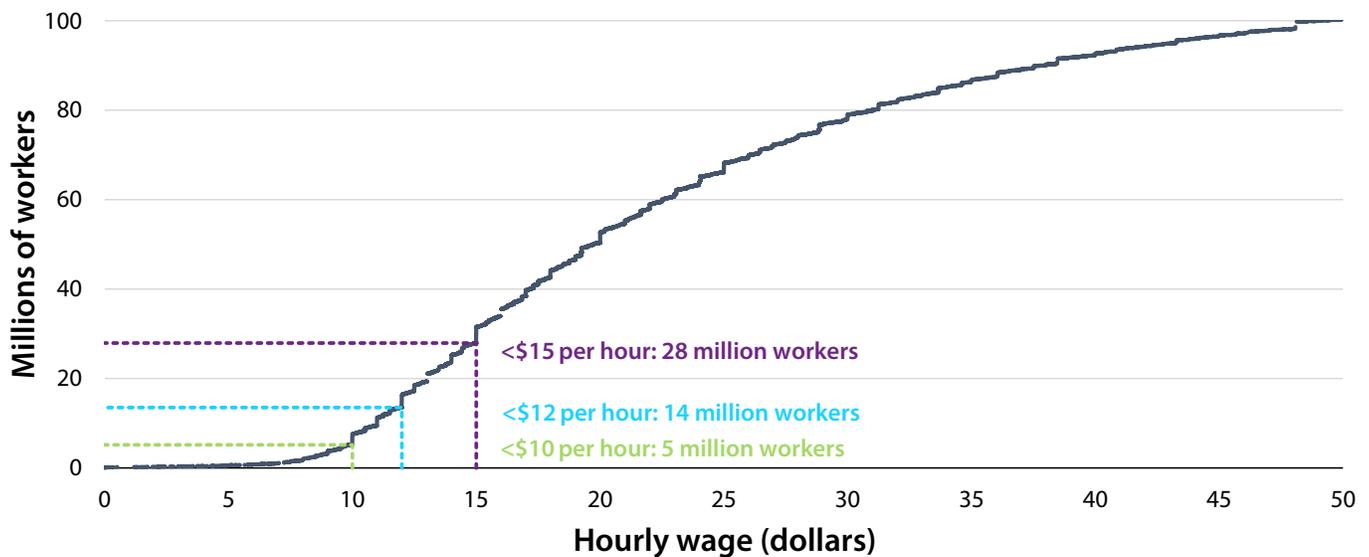
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JAY SHAMBAUGH  
Director

# Abstract

Despite a relatively strong U.S. economy in late 2018, many workers continue to experience stagnant wages and underemployment. In response, policy interventions like subsidized wages, training and search assistance, expanded public employment, and federal guarantees of employment have all been proposed, but relatively little is known about how a federal job guarantee would function. We therefore discuss a number of relevant labor market considerations: How many people are likely to participate in a job guarantee? What types of work and nonwork activities are the eligible population currently engaged in? What types of work would program participants do? Can we expect workers to be well matched with their employers? Are there unintended consequences of the program for participants or nonparticipants? We conclude that, while a job guarantee could lift employment rates and incomes for many participants, there is considerable uncertainty associated with its impacts. In particular, a potentially very large but unknown fraction of workers currently earning low wages—as well as those outside the labor force—would take up a job guarantee, meaning that it could affect far more workers than are currently unemployed or underemployed.

FIGURE 6.  
Hourly Wage Distribution of Full-Time U.S. Workers



Source: Bureau of Labor Statistics 2018a (Current Population Survey); authors' calculations.  
Note: Estimates are for October 2017 through September 2018. Data are for all persons between the age of 18 and 64 who are currently employed full time. Workers earning more than \$50 per hour are not shown.



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