



# The Federal Job Guarantee: Prevention, Not Just a Cure

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*This paper, argues the author, examines how the Job Guarantee proposal uniquely meets two major social requirements. It is a policy response whose merits include much more than its macroeconomic stabilization features, as discussed in the literature. It is also, in a sense, a method of inoculation against the vile effects of unemployment. The paper discusses several preventive features of the program.*

## INTRODUCTION

In conventional economic analysis, unemployment is regarded as either a market failure or a market feature. The former stems from market imperfections such as wage rigidities, search frictions, and matching problems. The latter is a benchmark macroeconomic condition, such as a natural rate of unemployment, that is thought to be a result of market forces. Globalization, automation, and the loss of manufacturing jobs are often added as reasons for the inevitability of the problem. The general consensus is that some—possibly increasing—levels of joblessness will always be with us.

This paper considers unemployment as an artifact of modern market processes and policy design, but one that is by no means unavoidable. Because conventional theory treats it as such, policy responses do not aim to eradicate it. As a consequence, unemployment has become persistent, pervasive, and pernicious and has inflicted large direct and indirect costs on the economy, society, and individuals. Analyzing these latter problems is the task of this paper. The case made herein is that unemployment behaves like a disease and should be treated as one.

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The theoretical perspective that underpins the foregoing analysis is based on an understanding of unemployment as a “monetary phenomenon” (as in the work of Keynes)<sup>1</sup> and as a “creature of the state” (an in the modern money and chartalist traditions).<sup>2</sup> These two features of unemployment pertain to its origins and nature and have been discussed in detail elsewhere and thus are beyond the scope of this paper.

Instead, here we will look at a particular aspect of the behavior of unemployment that best describes it as an infectious disease, virus, or even an epidemic. We focus on the transmission mechanism of unemployment, its macroeconomic behavior, and socioeconomic impact. The following analysis suggests a fundamental shift in the policy response to tackling joblessness toward an approach that is based on preparedness and prevention. The final section illustrates why the Job Guarantee proposal (Tcherneva 2018) has key preventive features and is therefore uniquely suited to tackling the social and economic costs of unemployment.

## THE BEHAVIOR OF UNEMPLOYMENT

To examine the behavior of unemployment, it is useful to look at county-level data over time, as reported by the Bureau of Labor Statistics (BLS). Animating the data offers insights not available when one considers a simple time series or a snapshot of local-level statistics. Such an animated map from 1990 to 2016 can be found at [https://www.youtube.com/watch?v=shqJR\\_0Wdrl](https://www.youtube.com/watch?v=shqJR_0Wdrl).

The following maps (Figure 1) can be used as a reference for the purpose of the discussion, though they do not adequately capture the evolution in unemployment month-to-month, area-to-area as in the animated presentation.

### A Viral Transmission

Figure 1 shows the unemployment rate in the United States from 1990 to 2016 and includes three recessions and subsequent expansions (early 1990s, early 2000s, and the Great Recession). Examining the data as it changes over time reveals several striking patterns.

First, even at the peak of a business cycle, countless communities across the United States experience elevated unemployment levels. When the United States experiences peak economic activity, these communities continue to be mired in recession.



**FIGURE 1** U.S. Unemployment 1990–2016

Second, as the economy enters a recession, many communities experience much more severe joblessness than indicated by the national unemployment numbers. From 1990 to 2016, national unemployment reached 10 percent only once—in November 2009. And yet, local-level

data during this period shows that 10 percent and above was the norm for many communities in the United States throughout the entire period, i.e., in good times and bad. Note that the BLS unemployment maps report ranges, where the top cohort includes areas with 10 percent to 60 percent unemployment, meaning that even mapping the county data masks the depths of the unemployment problem in these communities.

Third, considering that the official numbers vastly underrepresent the actual unemployment rate, there are many communities across the United States that experience depression-level unemployment rates on an ongoing basis.

Fourth, and perhaps most striking, is the discernable geographic pattern of the evolution in unemployment over time. A region affected by mass layoffs quickly sees its unemployment problem spread to an ever-increasing area. The radius of the affected area grows in recessions. Like the ripple effect of a pebble tossed in a lake, mass layoffs in a distressed community produce higher unemployment rates in the surrounding areas. Once the economy recovers, unemployment slowly shrinks and is reduced first in the periphery, but the recovery never fully reaches the core of the affected geographical area, leaving it in distress even at the peak of an expansion. (The animated map most clearly demonstrates this contagion effect.)

In other words, the data show that unemployment is not only persistent but, when mass layoffs take place, the effect transmits quite rapidly. Put simply, one unemployed person throws another one out of work. When Lowe's or Home Depot lays off thousands of workers across the country, the resulting decline in aggregate demand disperses in a very specific geographic pattern, amplifying the unemployment problem in the community and neighboring areas.

This pattern suggests that unemployment behaves much more like a virus or an infectious disease than a random shock event. Not only does it propagate in a specific geographic pattern, but it also inflicts severe consequences on individuals and communities. Indeed, much of the literature on the costs of unemployment indicates that this is precisely how unemployment should be studied. The relevant literature comes from health economics, the cognitive sciences, and public health. A large and growing body of research on the social determinants of health outcomes/inequities and social wellbeing, for example, shows where unemployment and underemployment emerge as key determinants among a set of multiple deprivations. And while there is abundant research at the micro level on the impact of unemployment on labor markets, individuals, families, and communities, economic theory is impoverished for not theorizing these findings at the macroeconomic level.



**FIGURE 2** Jobs Needed Versus Jobs Available

Apart from its transmission mechanism, unemployment resembles a disease in several other ways.

### Chronic and Vicious

At the macroeconomic level, it is well recognized that unemployment is a chronic problem. There is an ongoing shortage of jobs in recessions or expansions. There are always more job seekers than available job offers (Figure 2).

Even at the peak of a business cycle, there are more people in need of work than there are jobs available. Currently 1.5 people are vying for every job opening (in April 2019, there were 7.5 million vacancies for the 11 million people who wanted full-time work). Note that the job openings data include positions that are full-time, part-time, permanent, short-term, or seasonal. If we were able to separate and compare the availability of permanent, full-time jobs to people who wanted one, the jobs shortage would be bigger.

While the national unemployment rate today is below its pre-crisis level (3.6 percent in May 2019), this “success” is largely due to a mass exodus of people from the labor market after the Great Recession. After correcting for labor force participation shifts before and after the crisis, Dantas and Wray (2017) estimate that the number of missing jobs is, on average, about double the official unemployment levels.

Conventional analysis not only treats the chronic job shortage as a “natural” condition, but also largely ignores its volatile nature. With every recession, joblessness accelerates rapidly, whereas the recovery is much lengthier and more gradual. Private firms expediently slash payrolls and discard hundreds of thousands of workers every month in a downturn, but take much longer to reemploy them in recoveries. This asymmetry has produced jobless recoveries.

Policy is designed to tolerate chronic unemployment. Indeed, the Fed explicitly bases its interest-rate policy on estimates of the “desirable” level of joblessness. And thus unemployment is not eradicated, while its chronic nature is reinforced by policy design. And just like an untreated chronic disease, joblessness creates other serious complications.

### The Mark of Unemployment

Like a disease, joblessness is a pernicious problem. It creates a series of vicious labor market outcomes that are difficult to break. One of these is that unemployment breeds unemployability (so to speak), as evidenced by the secular rise in the share of long-term unemployment in total unemployment (Tcherneva 2012).

When employers review job applicants, those who already have gainful employment are generally more appealing than equally qualified candidates who have gaps in their work experience. And the bigger the gaps, the lower the likelihood of reemployment. In other words, private employers prefer to hire last precisely those workers who need to be employed the most (those with the longest spells of unemployment).

In the years following the Great Recession, firms regularly refused to hire the unemployed. Job openings inserted clauses such as “the unemployed need not apply” or “must be currently employed” (Goodwin 2011; Rampell 2011). The legality of this practice was challenged by the Equal Employment Opportunity Commission (EEOC) (2011) and several U.S. states (Rampell 2011; Hananel 2011).

This anecdotal evidence is corroborated by research, which finds that nine months of unemployment is perceived by employers as equivalent to four years of lost work experience (Eriksson and Rooth 2014). Like a scarlet letter, the “mark” of unemployment is a considerable obstacle to reemployment for the unemployed. Additionally, Abraham et al. (2016) find that after correcting for individual heterogeneity and work history, unemployment duration has a strongly negative effect on the likelihood of subsequent employment.

Apart from the “last hired/first fired” phenomenon experienced by those in long-term unemployment, the impact on well-being is largely ignored by macroeconomists, despite abundant research that speaks to the problem.

## UNBEARABLE COSTS

Unemployment is chronic, volatile, and pernicious. It also inflicts unbearable costs on individuals, their families, communities, and the economy that are largely ignored by macroeconomic analysis and policy design.

## A Deadly Impact

Without slipping into hyperbole, joblessness is found to be literally deadly. In a widely cited research paper, Case and Deaton (2015, 2017) find that increased mortality among working-class white men has been driven by “deaths of despair”—that is the pain, distress, and social dysfunction that emerged from the loss of stable blue-collar work that started in the 1970s and continued well after the Great Recession. Overall economic distress, and joblessness in particular, has produced complex socioeconomic and health problems that have contributed to the rise in mortality (Case and Deaton 2015, 2017). But the link between unemployment and dying is even more direct. A metadata analysis of sixty-three countries reveals that the impact of unemployment on suicides is nine times higher than previously believed (Nordt et al. 2015). One in five suicides is due to unemployment (Nordt et al. 2015, but the impact of unemployment on psychological distress is underestimated by the suicide data, considering that the number of attempts far exceed that of successful suicides (Drapeau and McIntosh 2014). The Nordt et al. study is corroborated by a panel study of twenty-five OECD countries, which explicitly examines the impact of unemployment and labor market institutions on suicides (Breuer and Rottmann 2014). Additionally, Stuckler and Basu (2013) estimate the number of suicides in the United States that are specifically linked to Great Recession joblessness and find that states with higher unemployment rates have higher suicide rates. Couch et al. (2013) examine the impact of long-term unemployment on health and economic outcomes by studying the double-dip U.S. recession during 1980–82. They find that twenty years later, long-term unemployment continues to be associated with higher mortality.

One study, using a large longitudinal dataset for Denmark, examines the impact of unemployment on mortality by correcting for the impact of long-term unemployment on health and still finds that unemployment causes a 32–37 percent excess mortality for men in their twenties, thirties, and forties (for older men in their fifties, the impact is smaller, and the impact on women is less clear except for those in their twenties). The case is interesting because Denmark has active labor market policies and institutions, which have been found to alleviate the effect on suicides (Nordt et al. 2015).

Not only does unemployment kill, it also imposes high costs on individuals, their families, communities, and the economy.

## Costs on Individuals

A spell of unemployment causes a *permanent* loss in earnings over a lifetime (Couch et al. 2013; Abraham et al. 2016). The unemployed are sicker

and spend more on healthcare costs. They suffer from increasing rates of alcoholism, physical illness, depression, and anxiety, make more trips to the doctor, and take more medication (Linn, Sandifer, and Stein 1985; Case and Deaton 2015). This is not just the case in the United States but also around the world, according to a metadata study that examines several variables of mental health, including mixed symptoms of distress, depression, anxiety, psychosomatic symptoms, subjective well-being, and self-esteem (Paul and Moser 2009). These multifaceted health effects create a vicious cycle that prevents the unemployed from reentering the labor market (Krueger 2016). Since there are chronic job shortages, medical interventions alone (even if they are prioritized) would not be adequate. Even if one manages to escape the “unemployment–ill health” trap, s/he will likely slip back into it if the job opportunities are not there.

Furthermore, unemployment has significant, robust, and lasting negative effects on individuals’ social participation, which depresses their long-run social capital (Kunze and Suppa 2014). The isolation that unemployment causes erodes the social network that a person often needs for reemployment (Darity 1999). The scarring effects from joblessness—i.e., the permanent decline in well-being, even after one has been reemployed—are well documented (for a survey of some of the literature, see Clark, D’Ambrosi, and Ghislandi [2015]). Many of the costs of unemployment are nonpecuniary—one study puts that number at 85–93 percent (Winkelmann and Winkelmann 1995)—which suggests that interventions that mainly focus on providing income to the unemployed will also be inadequate.

### Impact on Children, Families, and Communities

Unemployment does not just affect the unemployed; it also harms their children and families. It is a causal factor in malnutrition and growth stunting and negatively impacts the mental health of spouses and children (Lindo 2010; Bubonya, Cobb-Clark, and Wooden 2014). Children’s educational attainment, labor market outcomes, and social mobility are also negatively affected (Venator and Reeves 2013; Reeves and Howard 2013).

Unemployment causes entrenched urban blight and economic crimes. There is a cyclical component to criminal activity linking it to changes in unemployment.

Raphael and Winter-Ebmer (2001) examine the period from 1970 to 1997 and find that there are sizable effects of unemployment on the seven felony offenses recorded by the Department of Justice. Additionally, they find significant and sizable positive effects of unemployment on the rates of specific violent, as well as property, crimes. In a subsequent study, the authors find that nearly 40 percent (their most conservative estimate) of



the decline in property crime rates during the 1990s is attributable to the concurrent decline in the unemployment rate (Raphael and Winter-Ebmer 2001).

There is also a strong correlation between youth unemployment and crime (Fougère, Kramarz, and Pouget 2009). Youth unemployment is linked to violent and nonviolent right-wing extremist crime (Falk and Zweimuller 2005). In the United States, one study finds that crime has become an underlying result of youth unemployment and poverty, rather than an exogenous “deviant behavior” factor (Freeman 1992). Globally, youth unemployment has been on the rise. The International Labor Organization (ILO) puts that number at 71 million youth and highlights the linkages between crime and social unrest (International Labor Organization 2016). After accelerating rapidly during the Great Recession and declining for two years, youth unemployment is on the rise again (International Labor Organization 2016).<sup>3</sup>

Additionally, regional studies from around the world attribute human trafficking and forced and child labor to high rates of poverty and unemployment.

### Impact on the Economy

Unemployment is a direct and indirect contributor to inequality. It increases the general level of income inequality in most countries (Galbraith 1998; Sen 1997a) and leads to greater inequality within labor and between labor and capital (Tcherneva 2014). The social exclusion produced by unemployment exacerbates interracial and interethnic tensions and antisocial and criminal behavior (Burgess and Mitchell 1998; Darity 1999; Sen 1997b). Sen (1997a) additionally finds a negative impact on technological change, innovation, and output.

Mitchell (2012) estimates that in the middle of the Great Recession, the United States lost \$10 billion of output *each day* as a result of high levels of unemployment<sup>4</sup> (for comparison purposes, that is equivalent to the *annual* 2016 budget of the Environmental Protection Agency). Even at the peak of the expansion in 2007, when unemployment was relatively low, the daily GDP loss from unemployment in the United States was \$500 million.

Unemployment is a contributing factor in financial crises and economic instability (Galbraith 2009, 2012), as well as insocial and political instability, human trafficking, exploitation, and slavery.

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The discussion so far has only scratched the surface of the large human, social, and economic costs of unemployment—a global problem with global implications. It nevertheless points to a very specific research

direction regarding the problems of unemployment. The way unemployment propagates, the vicious cycles it creates, and the large costs and scarring effects it inflicts more closely resemble the behavior of an infectious disease, a virus, and even an epidemic. Yet the vast literature on the social and economic consequences of unemployment has not informed macroeconomic research or policy design.

## FEATURES OF AN EPIDEMIC

The discernable pattern in the propagation of unemployment and the literature on its social and economic costs suggest a new macroeconomic approach to joblessness. Unemployment seems to behave like a virus, or an epidemic, and it is incumbent on economists and policymakers to examine and treat it as one. What would such an approach mean for macroeconomic analysis and policy design?

There are three key characteristics of an epidemic: (1) pattern and reoccurrence, subject to “favorable” conditions; (2) virulence; and (3) impact on the host (in our case, the unemployed) and the community. These features mirror the findings on the behavior and costs of unemployment above.

First, an epidemic develops a pattern flow that repeats periodically in areas with suitable conditions. Since policy is not designed to eradicate unemployment and tolerates an ongoing high level of joblessness in distressed areas, the conditions that ensure its recurrence are ever present (think of vulnerable areas and distressed communities that experience mass unemployment on an ongoing basis, e.g., the Rust Belt).

Second, an epidemic has a distinct geographic manifestation and increased virulence. The animated county-level unemployment data discussed above illustrates the contagion effect across communities from an initial spike in unemployment. One of the objectives of policy would be to prevent the transmission of unemployment from the core to the periphery.

Finally, epidemics cause changes in host susceptibility to the infectious agent. With respect to unemployment, this means that those who experience spells of unemployment bear its negative consequences for years to come. These include (but are not limited to) scarring effects, worsening of health outcomes, and permanent loss in income and in social and human capital. And just like an epidemic, the infectious agent (unemployment) affects not only the host (the unemployed individual), but also the people around that person, who may not have experienced unemployment themselves (e.g., children and other family members).

How might policy be designed to address these three features of an epidemic—its pattern, contagion, and impact on the unemployed and the economy?

## INTERVENTIONS

Epidemiologists speak of a three-pronged approach to tackling epidemics: (1) identification; (2) containment; and (3) inoculation.

The first is identifying the origins of the infectious agent. In the case of unemployment, the BLS collects data on mass layoffs and reports the hot-spots that tend to experience ongoing high levels of joblessness at the state, county, metropolitan, and city level.

The second is examining the transmission and propagation mechanism, and devising methods for containment. Local area BLS data paint a clear picture of the regional dissemination of joblessness. A spatial study of unemployment may be particularly useful if it is mapped against other forms of social and economic deprivation (such as limited access to decent food, housing, education, health services, and transportation) and can suggest ways to address these multiple problems in concert.

The final strategy involves designing interventions that rest on two key features—*preparedness* and *prevention*. These will be discussed below.

### The Job Guarantee: Preparedness and Prevention

Epidemic treatments are often based on proactive solutions, early interventions, and direct approaches wherever possible.

What the literature on the costs of unemployment and the social determinants of health suggests is that directly creating employment opportunities for the unemployed is *in and of itself* an important policy objective. One such direct approach to joblessness is the Job Guarantee, aka, employer of last resort, buffer stock employment, or public service employment (Wray 1998; Mitchell 1998; Harvey 1989; Tcherneva 2018). The advantage of this type of program is that it not only stresses job creation as an end in itself, but also explicitly aims to address other forms of social deprivation. This makes the Job Guarantee a unique multi-prong intervention tool that can tackle unemployment by addressing the material, psychosocial, and behavioral factors that produce the vicious dynamic that make joblessness such a challenging problem to solve.

Existing work has emphasized the macroeconomic benefits of this proposal, including but not limited to its superior countercyclical stabilization mechanism, ability to formalize labor markets and establish an effective minimum wage, produce socially useful output, enhance human capital, and alleviate income and gender disparities (e.g., Tcherneva 2012).

The aspect of the Job Guarantee that this paper stresses is that it is also a *preventive* program. It inoculates against the vile effects of unemployment by preventing the contagion effect from mass layoffs and the worsening of individual scarring effects, as well as by alleviating the outstanding community problems that are linked to unemployment, such as urban blight, crime, poverty, homelessness, and others.

### Preparedness

When it comes to epidemics, preparedness and prevention are essential. The Centers for Disease Control and Prevention, for example, have a detailed readiness-response protocol in case of an outbreak. Government warehouses around the country contain stockpiles of vaccines (against N1H1, Ebola, etc.) that are shelved and can be disbursed in case of need.

In a similar fashion, the Job Guarantee is a type of preparedness response. It is proposed as a permanent program that provides job opportunities for those who wish to work on an as-needed basis. By design, the Job Guarantee will maintain a reserve of types of jobs and places of work that can accommodate new entrants into the program and let them go without disruption should they find alternative employment. The ability to absorb or shed employees is not a unique challenge for the Job Guarantee. Indeed every labor market—in the private, nonprofit, or public sectors—deals with entrants and leavers on an ongoing basis. Furthermore the creation of jobs relatively quickly need not be a tall task. Experience has shown that large-scale employment programs can be up and running in a matter of months. Once such programs are in place, finding work for any additional entrants is a much easier task by comparison.

### Prevention

The second, and perhaps more important, aspect of the intervention for the purposes of our discussion is prevention. Because the Job Guarantee complements private-sector employment by fluctuating countercyclically (expanding when private employment shrinks and shrinking when private employment expands), it ensures, by design, that mass unemployment does not develop and thereby restrains the contagion effect from an initial onset of private-sector layoffs.

The first preventive feature of the Job Guarantee is that it does not allow unemployment to accelerate rapidly, as it does under the status quo.

Typically, conventional policies turn their attention to unemployment with considerable delay. The existing automatic stabilizers—such as unemployment insurance (UI) or Temporary Assistance to Needy Families (TANF)—put a floor on collapsing aggregate demand but are not pro-

employment growth policies by definition or design. Additional stimulus in the form of indirect measures (tax and interest rate cuts, subsidies, incentives) usually arrives too little and too late. And just as it is very difficult to contain an epidemic once it has spread, it is very difficult to reverse unemployment once we allow mass layoffs to persist and propagate.

The Job Guarantee, by contrast, does not allow the contagion effect from mass layoffs to spread widely. First, it fundamentally changes aggregate spending patterns, as compared to those under existing welfare policies. Programs such as UI and TANF are small and temporary. Once they expire, the unemployed face greater economic insecurity. The instability in consumption that arises as a result is exacerbated by increasingly protracted jobless recoveries. When unemployment is a permanent feature of the economy, the uncertain prospects of reemployment fundamentally depress the spending patterns of households that include the unemployed and those with precarious work.

By contrast the Job Guarantee is an employment safety net. As a “guarantee,” it promises that a job opportunity at an above-poverty wage will always be available should one need it, rain or shine, in good times or bad. The Job Guarantee also ensures that people never involuntarily slip into long-term unemployment. The existence of the Job Guarantee itself, and the ability to enroll in it without delay, makes spending patterns more stable than in its absence.

A permanent Job Guarantee program brings additional benefits to individuals and households. One of the most often cited reasons for job dissatisfaction is job insecurity; individuals in temporary work report overwhelmingly greater anxiety and unhappiness with their jobs relative to workers with stable full-time employment (Green, Kler, and Leeves 2010; Booth, Francesconi, and Frank 2002). The fear of unemployment has been found to substantially decrease the mental health of employees (Reichert and Tauchmann 2011).

There is evidence that subsidized employment via public works has a much higher happiness return than unemployment or idleness (Crost 2011). Furthermore, active labor market programs, such as direct job creation, are more effective than income support programs (such as UI) in helping individuals transition to paid employment (Graversen and Ours 2006).

The second preventive feature of the Job Guarantee is that it not only stops the contagion effect from unemployment in its tracks, but it also thwarts the social and economic costs of unemployment. It is, in a sense, a method of inoculation.

As discussed above, providing jobs to the jobless is a worthy policy goal as an end in itself, as it prevents the scarring effects from unemployment. However, interventions focusing on providing jobs and income alone, with little regard for the multiplicity of problems that the unemployed experience, will not be entirely successful. Here the Job

Guarantee offers another important preventive feature. Because the program can help alleviate other social problems, it can be a useful labor market intervention and institutional tool for addressing several deprivations in concert. Various programs in the United States have found that giving the homeless a job has been extremely effective in tackling homelessness (e.g., Cox 2015).

### Paying for Goods, Not Bads

In a sense, the Job Guarantee prevents the exacerbation of the social costs of unemployment and other social deprivations by attempting to match the unemployed to jobs that meet basic unsatisfied needs, for example, healthy food, afterschool care, clean public spaces. The Job Guarantee aims to create socially useful output, that is, it produces “goods” and is therefore superior to the status quo, which produces “bads.”

It is useful to remember that unemployment is already “paid for” in terms of the lost output and increased resources dedicated to tackling poverty, declining health, crime, and other associated problems. The public sector and society in general are already bearing these costs. The Job Guarantee redistributes the expenditures and real resources toward more productive uses, such as human capital and community investment, rehabilitation, and renewal.

Furthermore, the Job Guarantee can have a positive effect on state budgets. As discussed in the modern money theory literature, unlike the federal government, individual states are constrained by tax revenue for funding programs (which is why the Job Guarantee is pitched as a federally funded but locally administered program). Since Reagan’s “Devolution Revolution,” states have increasingly been responsible for funding and administering programs that were previously under the charge of the federal government. Additionally, state spending is constrained by their balanced budget amendments, which prevent states from deficit spending and supporting antipoverty programs precisely at a time when they are most needed—in downturns (Medicaid and State Children’s Health Insurance programs are just two examples of countercyclical policies that often experience funding shortfalls in recessions). In other words, the costs that arise from the problem of unemployment are increasingly borne by the states.

Consider one example of the potentially large positive effect of the Job Guarantee on state budgets—state spending on incarceration. Nationally, the annual cost per inmate is \$31,000 (compare that to a Job Guarantee job that pays \$15 per hour, or \$31,200 annually for full-time work). In some states these costs are much higher; New York State, for example, spent \$60,000 per inmate in 2012, and the city of New York spent \$168,000 (Henrichson and Delaney 2012).

Falling employment and wages have been found to increase incarceration and recidivism (Western, Kleykamp, and Rosenfeld 2006) and community-based employment programs, specifically, have been found to prevent it (Gillis and Nafekh 2005). In the United States, programs that place ex-convicts into jobs, such as the Jacksonville-based “Ready4Work,” have shown striking results—a reduction in recidivism from 70 percent to 15 percent.

Since the Job Guarantee offers jobs for the at-risk and hard-to-employ populations, the cost savings to states could be significant. The program can reduce state spending on inmates drastically, but it can also shrink other costs as it reduces the rate of reoffending and certain types of economic crimes. Furthermore, former inmates who enter the Job Guarantee program will make a net positive contribution to the local economy with their production, consumption, and ability to pay rent and taxes. Incarceration is but one example of the savings in terms of financial and real resources that states could enjoy if the Job Guarantee were in place.

## CONCLUSION

This paper focused exclusively on the costs and propagation mechanism of unemployment to identify one key aspect of this macroeconomic phenomenon—it behaves like a disease. We developed a key rationale for implementing a Job Guarantee by illustrating how it meets the two requirements for disease intervention: preparedness and prevention. In a sense, the Job Guarantee is a targeted preparedness response that thwarts many of the large costs of unemployment.

A Job Guarantee is by no means a panacea to all the complex socioeconomic problems that have been brewing for decades. Instead it is an expedient and direct method for dealing with the vile effects of chronic unemployment. Its preventive features include, but are not limited to, curtailing the contagion effect of mass layoffs, stabilizing spending patterns at the bottom of the income distribution, and reducing the existing outsized real and financial costs of unemployment on individuals, their families, and the economy.

The above findings strongly suggest that providing jobs to the unemployed for their own sake is a worthy policy objective. The Job Guarantee is uniquely suited to not only prevent the costs of unemployment, but also to bring positive multiplier effects that emerge from the socially useful output, enhanced human capital, and increased public goods provided by the program. The Job Guarantee could prevent many of the scarring effects on individuals and their families, as well as the

social squalor that comes with joblessness. Furthermore, the program can potentially offer considerable state relief in terms of real and financial resources by reducing homelessness, poverty, and recidivism.

The direct employment method improves the life chances for the hard-to-employ and the ability of Job Guarantee participants to transition to other forms of employment (private, nonprofit, or public) as compared to those of the unemployed. It also offers a road to participation. One existing Job Guarantee proposal (Tcherneva 2006) essentially marries the employer of last resort (Minsky 1986) and basic participation income (Atkinson 1996) proposals. While participation is often considered necessary because of the reciprocity principle that usually informs some versions of the basic income proposal, participation is also important because it has been found to be a key social determinant of social and health equity (Whitehead et al. 2016).

In sum, the Job Guarantee is a policy response whose merits include much more than its macroeconomic stabilization features. It is, in a sense, a method of inoculation against the vile effects of unemployment.

## NOTES

1. See Keynes (1936).
2. See, for example, Mosler (1997–98), Mitchell (1998), Wray (1998), and Tcherneva (2003).
3. According to the International Youth Foundation, youth unemployment may be six to seven -times higher than the ILO estimates, after accounting for measurement limitations.
4. For methodology, see Mitchell and Watts (2000).

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