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Estimating the Costs of a U.S. Paycheck Guarantee

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**SUBJECT TO REVISION/CORRECTION AS ADDITIONAL DATA AND ANALYSIS
BECOMES AVAILABLE**

Abstract

The public health crisis caused by corona virus disease (COVID-19) has required social distancing measures that have resulted in drops in economic activity and employment not seen since the Great Depression. In response, several countries have introduced government guarantees of worker paychecks. This paper provides a simple analysis of the potential fiscal costs of introducing such a guarantee in the U.S. The analysis finds that a program providing a 100% paycheck guarantee for all non-public sector workers, capped at an annual salary of \$100,000 and including healthcare benefits, would cost approximately \$115.7 billion per month, or \$347 billion for a 3-month program. The paper considers the sensitivity of this estimate to assumptions as well as alternative proposal scenarios. The paper concludes that the benefits of such a program in preserving employment are likely to far outweigh the fiscal costs.

JEL Codes: H81, H84, J65

Keywords: COVID-19, unemployment policy, paycheck guarantee, fiscal cost

1. Introduction

Public health actions to contain the spread of the SARS-CoV-2 virus, the cause of COVID-19 disease, have required “social distancing” measures which in turn have required the complete or partial shutdown of major sections of economies around the world [1]. Muellbauer (2020) estimates that the shutdowns will result in U.S. real consumer spending dropping by 20% in Q2 2020 and household labor income falling by 16%, declines not seen since the Great Depression [2]. Not surprisingly, the shutdowns have also resulted in a wave of unemployment. In the week ended April 4th, 6.6 million Americans filed for unemployment, bringing the total to nearly 17 million in just three weeks [3].

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Governments around the world have introduced a variety of fiscal and monetary responses to the crisis [4]. One response has been a “paycheck guarantee” providing direct fiscal support to employers who otherwise might not have sufficient funds to meet payrolls and be forced to lay-off employees [5]. Paycheck guarantees typically cover some percentage of payroll costs up to some maximum per employee. Paycheck guarantees differ from general business loans, grants, and other liquidity support in that they are explicitly targeted at covering payrolls and other employee related costs, and typically include mechanisms to prevent recipient businesses from diverting the funds to other purposes. Businesses would then rely on other programs (e.g. short-term loans or grants) for non-employee related liquidity needs (e.g. paying suppliers, debt service). Furthermore, given the speed of the collapse in employment, several countries are providing such payroll support directly from national treasuries into company accounts and payroll systems rather than via intermediaries such as banks.

Countries that have announced such schemes include France (70% gross wages up to €6,927 per mos., 100% for min. wage workers), Denmark (75-90% of wages), Netherlands (90% of wages for any company suffering a 20% revenue decline), Ireland (70% of wages up to €410 per week per worker tax-free), Australia (AUS\$ 130 billion in “job keeper” payments), and Germany’s “Kurzarbeit” program (guaranteed 60% of pay for reduced hours or temporary furlough). While it is too early to assess the impact of these programs on the COVID crisis, there is evidence that the “Kurzarbeit” program was highly effective during the Great Recession as German unemployment fell from 7.9 to 7% during mid-2009 to mid-2010, a period when OECD average unemployment rose by 3%.

In response to the crisis, the U.S. has engaged in a series of fiscal and monetary responses, notably the approximately \$2 trillion “Coronavirus Aid, Relief, and Economic Security Act” or “CARES Act” signed into law March 27, 2020, as well as a variety of measures taken by the U.S. Federal Reserve [6]. The CARES Act did not include an economy wide paycheck guarantee, however, Title I, Sec. 1102 of the Act includes “Paycheck Protection Loans” for small businesses with under 500 employees. Loans under this program will be forgiven if a recipient business can later show the loans were used for the purpose of meeting payroll and retaining workers.

However, soon after passage of the CARES Act, three problems were identified with the “Paycheck Protection Loans” program: 1) the limitation of the program to small businesses only provides coverage to the approximately 60 million workers employed by such businesses, leaving out approximately 81 million workers employed by mid-size and large private sector employers, 2) within a week of the program’s launch 70% of small businesses had applied for assistance, and more than 550,000 loans worth \$141 billion had been approved creating concerns that the \$349 billion allocated for the program would be insufficient, and 3) the program is administered by the Small Business Administration (SBA) via intermediary lending banks. Both the SBA and banks were unprepared for the overwhelming demand and reports say the process for approving and distributing loans has thus been slow, bureaucratic, and chaotic with many companies potentially unable to access funds for months and many unable to apply [7].

Lawmakers in the U.S. have thus been considering legislation to expand or replace the “Paycheck Protection Loans” program with an economy wide Federal paycheck guarantee that would address these three issues. Congresswoman Pramila Jayapal (WA 7th) and colleagues in the U.S. House of Representatives have proposed a “Paycheck Guarantee Act” that would guarantee 100% of the wages of employees of all business and non-profit employers up to a salary cap of \$100,000 plus costs for health insurance and other benefits, and a 20-30% uplift to cover other employee costs [8]. At the same time Senator Josh Hawley (MO) has called for a paycheck guarantee that would cover 80% of wages for the workers of any U.S. business, up to the national median wage, until the health emergency is over [9].

As details have been published for the Jayapal “Paycheck Guarantee Act” (which I’ll refer to as “Jayapal-PGA”) the remainder of this paper will provide a rough estimate of the potential fiscal costs of that specific proposal [10]. Section 2 will discuss the data sources and data adjustments, Section 3 the costing assumptions and calculation methods, Section 4 the key results, Section 5 will provide some basic sensitivity testing, and Section 6 will then discuss and compare alternative proposal designs, including a scenario approximating Sen. Hawley’s proposal. Section 7 will discuss the results and conclusions.

These “quick and dirty” estimates should be viewed as highly provisional, dependent on a number of key assumptions, and subject to updating and correction as new data and analyses become available. They are also not a substitute for the detailed policy costings that would be done for legislation by government agencies such as the Congressional Budget Office (CBO) and Office of Management and Budget (OMB). Such analyses might use different data, models, assumptions, and methods and thus might yield significantly different results.

2. Data Sources and Adjustments

The primary data source is the Social Security Administration’s (SSA) “Wage Statistics 2018” data on earnings by compensation interval [11]. This data provides annual compensation and numbers of employees for all U.S. employees by \$5,000 compensation intervals.

It is important to note that the definition of “net compensation” used in this data set may not align with the definition of salary in Jayapal-PGA which relies on IRS Form 941 quarterly payroll tax returns to determine payroll amounts.

The most recent SSA data are for 2018 and since 2019 data will not be available until October 2020, I have thus made a simple adjustment to update the data to approximate Q2 2020. The Federal Reserve Bank of Atlanta’s Wage Growth Tracker shows nominal wage growth from Q4 2018 to Q2 2020 of approximately 6% so all wage figures for all compensation bands were simply inflated by that amount [12]. It should be noted that as wage growth for upper income bands has typically been higher than for lower income bands over the past decades, this adjustment probably overstates the 2020 wage levels in lower bands and understates them in upper bands. This could cause a slight underestimation of the total cost of the program.

The Jayapal-PGA proposal covers “100% of base payroll and benefits”. The SSA data includes “wages, tips, and the like” but not benefits. The Bureau of Labor Statistics (BLS) reports that on average, wages and salaries account for 70.1% of employer compensation costs and healthcare and other benefits 29.9% [13]. But not all employees receive healthcare benefits, in particular many lower income workers are not covered. The data have thus been further adjusted using Peterson-KFF data on healthcare insurance coverage of workers by income band [14].

Furthermore, as the SSA data are for all employees, including public sector, I also made some adjustments to net out public sector employees (the PGA proposal says that “public and private employers of all sizes” are eligible, however, I interpret this to mean public companies, not Federal, state, or local governments). The Bureau of Labor Statistics reports for 2018 2,796,000 Federal government employees and 19,653,000 state and local government employees, so 22,449,000 employees are subtracted from the eligible workforce [15]. The Partnership for Public Service provides data on percentages of Federal employment by pay grade [16]. I then assume the same distribution for all public sector employees and remove them from the appropriate SSA pay bands.

3. Assumptions and Methods

The key features of the PGA proposal included in the model base case are:

- All non-public sector employees are eligible (large companies, small, non-profit, etc.)
- All employee wage and benefit costs are covered, up to an annual salary limit of \$100,000 per employee
- The proposal provides additional uplift of 20-30% of salary to cover other employer costs (e.g. rent, utilities, debt interest), I assume 25% in the base case
- The proposal is retroactive to March 1, 2020 and initially authorized for 3 months; however, if after three months public health measures that significantly restrict demand are still in place, then the program will automatically renew monthly until nominal personal consumption expenditures return to 95% of the three-month average December 2019-February 2020; for simplicity I assume 3 months in the base case and look at costs for longer durations.

A key driver of ultimate program costs will be the depth of the employment shock experienced by the economy. While there is much uncertainty about this, Del Rio-Chanona et. al. (2020) provide detailed bottom-up estimates of the potential U.S. employment shocks from the COVID-19 social distancing measures [17]. The analysis looks at individual occupations, whether workers in those occupations can work at home, and whether the industries those workers are in are “essential industries” and thus are able to continue operating or are forced to shut-down due to public health measures. The study combines this bottom-up “supply shock” analysis with a “demand shock” analysis of the impacts of a possible influenza pandemic conducted by the Congressional Budget Office in 2006 (while there are important differences between such an influenza scenario and the current COVID-19 pandemic, this is the best available study making such relevant estimates) [18]. These shocks are then estimated by income quartile and I used them to estimate the number of potential claimants under the Jayapal-PGA program.

It is important to note two caveats: First, these shocks only include “first-order” shocks from the direct effects of the lockdowns. They do not include “second-order” effects, e.g. if the initial wave of layoffs and drop in incomes decreases spending which causes further layoffs and income loss, etc. Or if problems in the financial sector and restrictions in the flow of credit lead to insolvencies, layoffs, etc. These second-order effects could be substantial, potentially larger than the first-order effects, and significantly increase the number of claimants and cost of the program. I conduct some sensitivity analyses on the size of the shock; however, it should be noted that one of the explicit purposes of the Jayapal-PGA proposal is to minimize such a cascade of first-order shocks into second-order shocks.

Second, the distribution of the shocks forecast by Del Rio-Chanona et. al. (2020) make a significant difference to the cost of the program as this study forecasts significantly larger employment shocks for lower income workers. I conduct some sensitivity analysis later on this estimate. The specific forecast shocks used in the base case estimate are:

<u>Income Quartile</u>	<u>Base Case Shock</u>
Lowest quartile	-0.42
2 nd quartile	-0.24
3 rd quartile	-0.21
Top quartile	-0.07

The significantly smaller shock for top-quartile workers is again due to the fact that these are largely knowledge and service industry workers many of whom are able to work from home and whose employers are thus less likely to lay them off due to the first-order impacts of the shutdowns. But again, as second-order effects take hold these workers could become vulnerable to layoffs as well.

The Jayapal-PGA proposal also has a provision for “Possible Discounting for Partial Revenue Loss” whereby companies that are only partially shutdown would only receive partial coverage, e.g. a company with 70% revenue loss would get 70% coverage of payroll expenses. As partial revenue loss is difficult to forecast, I did not include this provision explicitly. However, the Del Rio-Chanona et. al. (2020) model does implicitly take partial shutdowns into account and thus can be viewed as reflecting this factor in their estimation of employment shocks.

The final critical assumption is what proportion of employers affected by the employment shock request assistance under the Jayapal-PGA program. There are reasons why this might be less than 100%, notably because some firms will have resources to “ride out the shock” and not require assistance, and others may decide for various reasons not to request government assistance under this particular program, might utilize other forms of assistance, might not receive assistance in time to prevent lay-offs, or might simply prefer to lay-off employees. However, reports that 70% of small businesses applied for CARES Payroll Protection Loans within a few days of the program opening provides a benchmark for the level of demand for this support. While small businesses may require support in higher proportion than larger businesses, meaning the overall figure might be less than 70%, the fact that so many small businesses applied so quickly means the ultimate small business figure will likely grow higher than 70% over time. I have thus assumed that 80%

of employees potentially impacted by employment loss become claimants. I also provide sensitivities for this assumption.

To provide the costing estimate I apply the employment shock to workers in each \$5,000 income interval, estimate the number of claimants, then calculate the average salary coverage, healthcare benefits, and employer uplift associated with claimants in each income interval. The figures are then aggregated, and distributions calculated. I should note that the model does not include data or assumptions for the costs to manage or provide oversight for the program. The full model is available here (<https://www.inet.ox.ac.uk/publications/data-estimates-of-costs-for-a-u-s-paycheck-guarantee/>).

4. Results

The overall cost of the program in the base case is estimated at \$115.7 billion per month or \$347.2 billion for three months. The program is projected to protect the paychecks of 28.1 million workers or 17% of the total workforce (or 19% of the eligible workforce, i.e. not including public sector workers).

The estimated distribution of dollar benefits by income quartile is shown in Table 1. The distribution of workers protected is shown in Table 2.

Table 1. Distribution of dollar benefits

Income quartile	Total Payments	Percent
Bottom quartile	22,471,894,994	6%
2nd quartile	112,248,004,265	32%
3rd quartile	135,170,387,003	39%
Top quartile	77,258,247,109	22%
Total	347,148,533,372	100%

Table 2. Distribution of workers protected

Income quartile	Workers Claiming	Percent
Bottom quartile	11,392,570	41%
2nd quartile	9,937,037	35%
3rd quartile	5,195,798	19%
Top quartile	1,541,480	5%
Total	28,066,885	100%

Furthermore, the distribution of how the funds would be used for wages versus benefits versus employer uplift are shown in Table 3.

Table 3. Use of dollar benefits

Use of Funds	Amount Paid	Percent
Wages	225,446,107,442	65%
Benefits	65,340,899,070	19%
Employer Uplift	56,361,526,860	16%
Total	347,148,533,372	100%

5. Sensitivity Testing

As the cost of the program estimated in the base case is \$115.7 billion per month, clearly the most sensitive assumption is how long the program runs for. This is highly uncertain given that this timing depends on the course of the pandemic, the effectiveness of social distancing measures, the ability to exit those measures with widespread testing, containment, contact tracing, and treatment, the potential availability of a vaccine, and the actions of other countries.

Depending on when one views the U.S. economy likely to “re-open” the program costs would be as shown in Table 4.

Table 4. Total costs for varying lengths of program

Months	End Month	Total Cost
3	May	347,148,533,372
4	June	462,864,711,162
5	July	578,580,888,953
6	August	694,297,066,744
7	September	810,013,244,534
8	October	925,729,422,325
9	November	1,041,445,600,116

The next most sensitive assumption is the strength of the employment shock. As noted, the base case estimates are from the model by Del Rio-Chanona et. al. (2020), but such forecasts depend on many factors, are highly uncertain and again do not include the potential for second-order shocks. I thus tested a range of shocks as given in Table 5. In the high case the shocks are a third higher than in the base case, and in the low case they are a third lower.

Table 5. Sensitivity testing of employment shocks

Income Quartile	Base Case	High Case	Low Case
Bottom quartile	-0.42	-0.56	-0.28
2 nd quartile	-0.24	-0.32	-0.16
3 rd quartile	-0.21	-0.28	-0.14
Top quartile	-0.07	-0.09	-0.05

The high shock case raises the number of people claiming benefits under the program to 37.3 million and the cost to \$153.9 billion per month. Under the low shock scenario, the number of claimants drop to 18.5 million and the cost to \$76.3 billion per month.

The next most sensitive assumption is the percent of workers experiencing an employment shock that employers claim for. The base case again is 80%, but if that is raised to 90% the cost increases by 13% to \$130.2 billion per month, if 70% it reduces 13% to \$101.3 billion. Finally, the PGA proposal gives a range of employer uplift from 20-30%, in the base case 25% is assumed, but the high or low end of the range changes the cost by \$3.8 billion per month, or plus or minus 3%.

Finally, to bound the costs, if we combine scenarios for the two most sensitive variables to create a worst case (high shock, 90% claim) and best case (low shock, 70% claim), we get \$519.4 billion per month and 41.9 million claimants for the worst case, and \$66.8 billion per month and 16.2 million claimants for the best case.

A summary of the above sensitivity tests is given in Table 6.

Table 6. Sensitivity test of key assumptions

Assumption	Cost Per Month	Difference Per Mos.	Difference Percentage	Claimants	Difference Percentage
Base case	115,716,177,791			28,066,885	
High shock	153,902,516,462	38,186,338,671	33%	37,328,956	33%
Low shock	76,372,677,342	(39,343,500,449)	-34%	18,524,144	-34%
90% claim	130,180,700,014	14,464,522,224	13%	31,575,245	13%
70% claim	101,251,655,567	(14,464,522,224)	-13%	24,558,524	-13%
30% uplift	119,473,612,915	3,757,435,124	3%	28,066,885	0%
20% uplift	111,958,742,667	(3,757,435,124)	-3%	28,066,885	0%
High/90%	173,140,331,019	57,424,153,229	50%	41,995,076	50%
Low/70%	66,826,092,674	(48,890,085,117)	-42%	16,208,626	-42%

6. Alternative Program Designs

This section will briefly explore the costs of alternatives to the design given in the Jayapal-PGA proposal. As noted, Sen. Hawley has proposed a paycheck guarantee that would cover “80 percent of wages for workers at any U.S. business, up to the national median wage, until this emergency is over” [9]. While details on this proposal have not been published, it appears similar to the plan enacted by the UK government [19].

Using the SSA data (adjusted to Q2 2020), I estimate median individual wage at \$32,604 per year. With this as an upper threshold I then apply the 80% coverage formula and assume no employer uplift as it is not mentioned by Hawley. However, I do assume coverage of employee health benefits given that retention of employer health coverage is a key objective of the policy.

Using these assumptions my estimate of the cost of the Hawley proposal is \$58.6 billion per month or \$175.7 billion for 3 months, thus it is 49% less than the Jayapal-PGA proposal (see Table 7). While the total benefits under Hawley are significantly less, the distribution of benefits is not surprisingly more concentrated among lower income earners (see Table 8).

Although the Hawley proposal has the benefit of significantly lower fiscal costs, the potential drop in incomes for many workers would be consequential. For workers below the median, 80% paycheck coverage would be difficult to manage as most such workers have relatively low savings and a 20% income drop is significant. According to a 2018 U.S. Fed study 17% of adults are unable to meet current months bills, and a further 12% would not be able to meet them with an unexpected \$400 addition in expenses or drop in income—a 20% drop in income for the median earner is \$543 per month, so meeting this would be struggle for large numbers of Americans [20]. Many such workers would find they are better off taking the expanded unemployment insurance benefits offered under CARES. Many middle-class workers would also experience very sharp drops in incomes under this proposal—for example, an employee earning \$45,000 per year would experience a 42% income drop (see Table 9).

Another alternative would be a two-tier design. For example, one might provide 100% paycheck support up through the median individual income of \$32,604 and then 75% coverage of earnings above the median, capped at a salary of \$60,000 which is at the 75th percentile of earners (e.g. in individual with a \$45,000 annual salary would receive 100% of the median 32,604, plus 45,000 less 32,604 times 75% = 9,297, so a total of 32,604+9,297 = \$41,901 annualized or \$3,492 per month). The cost of such a program would be \$97.5 billion per month, 16% less than the Jayapal-PGA proposal but 66% more expensive than Hawley (see Table 7). The distribution of benefits is concentrated in the middle two income quartiles (see Table 8).

Table 7. Monthly costs of three proposal designs.

	Jayapal-PGA	Hawley	2-Tier
Cost per month	115,716,177,791	58,578,771,755	97,477,481,965
% difference		-49%	-16%

Table 8. Comparison of the distribution of dollar benefits by income quartile

Income quartile	Jayapal-PGA	Hawley	2-Tier
Bottom quartile	6%	9%	7%
2nd quartile	32%	44%	36%
3rd quartile	39%	36%	41%
Top quartile	22%	11%	15%
Total	100%	100%	100%

The three alternative proposal designs would also provide significantly different levels of wage replacement for different levels of income (Table 9).

Table 9. Comparison of levels of wage guarantee

Annual wages	Coverage			Percent of Wages Replaced		
	Jayapal-PGA	Hawley	2-Tier	Jayapal-PGA	Hawley	2-Tier
25,000	25,000	20,000	25,000	100%	80%	100%
35,000	35,000	26,083	34,401	100%	75%	98%
45,000	45,000	26,083	41,901	100%	58%	93%
55,000	55,000	26,083	49,401	100%	47%	90%
65,000	65,000	26,083	55,226	100%	40%	85%
75,000	75,000	26,083	55,226	100%	35%	74%
100,000	100,000	26,083	55,226	100%	26%	55%
150,000	100,000	26,083	55,226	67%	17%	37%

Thus, a middle-class earner making \$45,000 would see radically different levels of wage guarantee under the three proposals (100% under PGA, 58% under Hawley, and 93% under two-tier).

A final consideration is the aggregate level of wage coverage which is critical for the macroeconomic impacts of the fiscal stimulus provided by the measure. A key purpose of the program is not just to keep employees in their jobs but to preserve worker incomes and spending in the economy to enable a rapid recovery and prevent the downward spiral of second-order shocks. The aggregate estimated annual wage bill is \$8,887 billion, under the base case shocks the potential aggregate annual wage loss is \$771.8 billion, an approximately 9% drop (note that this is just wage income so does not include other sources of income included in Muellbauer, 2020 [2]). Over a three-month period, this potential wage loss is \$257.3 billion, so the Jayapal-PGA proposal would protect \$225.5 billion in wages or 88% of the potential loss, the Hawley proposal \$132.1 billion or 51%, and the two-tier proposal \$187.9 billion or 73%. Thus, without intervention the aggregate wage loss is 9%, with Jayapal-PGA the aggregate wage loss is reduced to 1%, with Hawley 4.3%, and two-tier 2.3%.

7. Discussion

The economic shocks of the COVID-19 health crisis are unprecedented in modern times and demand an unprecedented response from fiscal and monetary policymakers. The collapse in employment underway in the U.S. requires a particularly urgent response both because of the immediate human costs as well as the potential for the economy to enter a downward spiral of collapsing employment, incomes, demand, production, and investment.

While the CARES Act provides general liquidity support for businesses and expanded unemployment benefits for workers, it does not provide a program specifically targeted at preserving employment that is of sufficient scale and scope to mitigate the collapse in employment, and administratively designed to deliver the required funds quickly. The effectiveness of a paycheck guarantee scheme was demonstrated by Germany during the 2007-9 recession and has been adopted by a number of countries during the current crisis. Such a scheme, if adopted and implemented quickly, could be highly effective in the U.S. as well.

While the costs of any of the program designs discussed are considerable, so too is the scale of the crisis. The benefits of quickly mitigating the collapse in employment underway would be substantial and long-lasting, both in terms of preventing much stress and misery to working families, avoiding a major loss in human capital in the economy, minimizing the loss of otherwise viable businesses, enabling a rapid restart of the economy post-health crisis, and preventing second-order shocks from taking hold that could create a long-lasting depression in economic activity that would be very costly and difficult to recover from.

One can assess the policy and its variants along a number of objectives:

- **Fiscal stimulus** – Does the plan provide sufficient scale of income protection and fiscal stimulus to mitigate the loss of economic activity during the shutdowns? The Jayapal-PGA plan provides substantial income protection and stimulus, reducing aggregate wage loss to on the order of 1%. The 2-tier plan would also provide significant stimulus and income protection; however, the Hawley plan would still allow a significant drop in aggregate income, comparable to that experienced in a major recession.
- **Support for low wage workers** – Does the plan provide sufficient protection workers at lower income levels? The Jayapal-PGA and 2-tier plans would provide full-coverage for low income workers, while the Hawley plan would only cover 80% of income. As noted, a 20% income drop would be very challenging for many low-income families with limited savings. While the total resources available under the Hawley plan are less than the other two, the resources that are available are more concentrated on lower income workers.
- **Middle-class income security** – Does the plan adequately protect middle class families? Middle-class families provide the bulk of U.S. consumption and protecting their incomes will be critical for enabling a rapid restart of the economy after the health crisis passes. Per Table 5, the Jayapal-PGA plan provides complete coverage for middle class families, the 2-tier plan near-complete coverage, and the Hawley plan limited coverage that would see significant income drops for families above the median income. The 2-tier plan concentrates most of its resources on middle-income earners.
- **Support for business** – Will the proposal be sufficiently attractive to businesses such that those who need the support will apply rather than lay-off workers? The Jayapal-PGA plan, given its coverage to a high-income threshold, coverage of health benefits, and inclusion of support for other business costs provides near complete replacement of employee costs to businesses requiring support and thus would be highly attractive. It is an open question whether the more limited support under Hawley would be sufficient to prevent significant numbers of layoffs. Again, the 2-tier proposal strikes a middle ground.
- **Fiscal cost** – Does the policy provide an efficient and effective use of taxpayer funds? Overall the cost of all three plans is in line with the magnitude of programs in the CARES Act and other COVID-19 economic responses. The Hawley plan is significantly less costly than the other two. There is also a risk under the more generous Jayapal-PGA plan that if the unemployment shock and uptake are on the higher end of my scenarios, or the length of the program is extended, the costs could spiral substantially. But at the same time, if the shock and uptake were on the high end of my projections, then the added fiscal support of the Jayapal-PGA plan would help minimize the chances of the shocks triggering a long-lasting depression. Finally, it is also important to note that fiscal costs spent on a paycheck guarantee will be largely offset by less fiscal support required for unemployment benefits.

Thus, the net, medium term cost of the Jayapal-PGA plan may actually be less than the 2-tier or Hawley plans if it is more successful in reducing unemployment claims due to first-order shocks, and a cascade into second-order shocks.

While the trade-offs in plan design are complex, the critical point is that the U.S. should act quickly to adopt a paycheck guarantee. Overall, such a plan should guarantee all worker payrolls in large, small, for profit, and non-profit enterprises, and provide a sufficient level of coverage to maintain workers in employment through the shutdowns, maintain consumer spending in the economy, prevent business insolvencies, and prepare the economy to re-start when the virus is defeated.

References

- [1] See the Blavatnik School of Government, University of Oxford, COVID-19 Government Response Tracker, for details on social distancing and other measures adopted by countries around the world (<https://www.bsg.ox.ac.uk/research/research-projects/oxford-covid-19-government-response>).
- [2] Muellbauer, John (2020). The coronavirus pandemic and US consumption. *VOX CEPR Policy Portal*, April 11, 2020 (<https://voxeu.org/article/coronavirus-pandemic-and-us-consumption>).
- [3] U.S. Department of Labor, April 9, 2020 (<https://www.dol.gov/ui/data.pdf>).
- [4] Scarpetta, Stefano, Monika Queisser, Andrea Garnero, Sebastian Königs (2020). Supporting people and companies to deal with COVID-19: Options for an immediate employment and social policy response. *VOX CEPR Policy Portal*, April 12, 2020 (<https://voxeu.org/article/options-immediate-employment-and-social-policy-response-covid-19>).
- [5] Beinhocker, Eric (2020). Guarantee All U.S. Paychecks Now to Prevent a Depression. INET Oxford COVID-19 Research, April 6, 2020 (<https://www.inet.ox.ac.uk/publications/guarantee-all-u-s-paychecks-now-to-prevent-a-depression-updated-3rd-april/>).
- [6] H.R. 748/S.3548 116th Congress (2019-2020) CARES Act (<https://www.congress.gov/bill/116th-congress/house-bill/748/text>).
- [7] Hansen, Sarah (2020). Most Small Businesses Applied to the Paycheck Protection Program—and Most Are Still Waiting for the Money. *Forbes*, April 10, 2020 (<https://www.forbes.com/sites/sarahhansen/2020/04/10/most-small-businesses-applied-to-the-paycheck-protection-program-and-most-are-still-waiting-for-the-money/#701de56154fb>).
- [8] Jayapal Announces the Paycheck Guarantee Act, Press Release, April 10, 2020 (<https://jayapal.house.gov/2020/04/10/jayapal-announces-the-paycheck-guarantee-act/>).

- [9] Hawley, Josh (2020). Americans are ready for a comeback. Congress must help unleash it. *Washington Post*, April 9, 2020 (<https://www.hawley.senate.gov/op-ed-americans-are-ready-comeback-congress-must-help-unleash-it>).
- [10] Jayapal, Pramila (2020). Concept Paper for a Paycheck Guarantee Plan. April 10, 2020 (https://jayapal.house.gov/wp-content/uploads/2020/04/White_Paper_Jayapal_Paycheck_Guarantee_Program_04102020.pdf).
- [11] U.S. Social Security Administration “Wage Statistics 2018” (<https://www.ssa.gov/cgi-bin/netcomp.cgi?year=2018>).
- [12] Federal Reserve Bank of Atlanta Wage Growth Tracker (<https://www.frbatlanta.org/chcs/wage-growth-tracker>).
- [13] U.S. Bureau of Labor Statistics, Employer Costs for Employee Compensation – December 2019, news release March 19, 2020 (<https://www.bls.gov/news.release/pdf/ecec.pdf>).
- [14] Rae, Matthew, Daniel McDermott, Larry Levitt, and Gary Claxton (2020). Long-Term Trends in Employer-Based Coverage, Peterson-KFF Health System Tracker, April 3, 2020 (<https://www.healthsystemtracker.org/brief/long-term-trends-in-employer-based-coverage/>).
- [15] U.S. Bureau of Labor Statistics, Employment Projects, Employment by major industry sector, updated September 4, 2019 (<https://www.bls.gov/emp/tables/employment-by-major-industry-sector.htm>).
- [16] Distribution of public sector pay from Partnership for Public Service, Federal Workforce, Fed Figures 2019 (https://ourpublicservice.org/wp-content/uploads/2019/08/FedFigures_FY18-Workforce.pdf). Federal payscales from FederalPay.org (<https://www.federalpay.org/gs/2020>).
- [17] Del Rio-Chanona, R. Maria, Penny Mealy, Anton Pichler, François Lafond, and J. Doyne Farmer (2020). Supply and demand shocks in the COVID-19 pandemic: An industry and occupation perspective. *CEPR Covid Economics*, 17 April 2020, 6: 65-103 (<https://www.inet.ox.ac.uk/publications/supply-and-demand-shocks-in-the-covid-19-pandemic/>).
- [18] Congressional Budget Office (2006). Potential influenza pandemic: Possible macroeconomic effects and policy issues (<https://www.cbo.gov/sites/default/files/109th-congress-2005-2006/reports/12-08-birdflu.pdf>).
- [19] UK Treasury, HM Revenue and Customs, Coronavirus Job Retention Scheme, March 26, 2020 (<https://www.gov.uk/guidance/claim-for-wage-costs-through-the-coronavirus-job-retention-scheme>).
- [20] Board of Governors, U.S. Federal Reserve, Report on the Economic Well-Being of U.S. Households in 2018, May 2019 (<https://www.federalreserve.gov/publications/files/2018-report-economic-well-being-us-households-201905.pdf>).