# INCOME GUARANTEE BENEFITS and FINANCING:

## Poverty and Distributional Impacts

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The concept of a guaranteed income has resurged in public discourse in the United States as a potential anti-poverty policy. It has been about 50 years since the negative income tax (NIT) experiments tested the idea of an income floor to support vulnerable families, and in just the last few years there have been Congressional proposals for a universal child credit, an NIT-type tax credit, as well as a presidential candidate running on a universal basic income (UBI). The common characteristic of these proposals is to guarantee a given level of income for eligible individuals or families. While income guarantee programs are sometimes represented as necessarily "universal" (eligible to everyone) and "basic" (a livable income), versions of

### Key Findings

- Income guarantee plans can substantially reduce poverty at reasonable costs.
- How much poverty is reduced depends upon who is eligible and how the benefit is financed.
- A modest income guarantee of \$250 per month for adults and children can be financed principally by eliminating redundant deductions in the federal income tax and secondarily by a \$42-per-metric-ton carbon tax.
- This \$250 per month benefit for adults and children with hybrid financing reduces child poverty from 12.6 to 4.8%. A \$500 per month benefit limited to adults financed solely by a carbon/consumption tax would reduce child poverty only to 10.3%.

guarantees can be more or less targeted, and critically, the way a program might be financed is an important aspect of its potential impact. For example, a fundamental tax reform that democratizes the current system of personal deductions and credits into a universal and refundable credit would be a progressive innovation that could fund a modest-sized income guarantee before considering other financing mechanisms.

In this brief, we explore three alternative income guarantee designs as well as three different primary methods of financing the program benefits. A common argument against a UBI is that the cost is too large and the benefits are not targeted. Using more general models of an income guarantee, we explore the feasibility of applying a fundamental baseline tax reform, eliminating potentially redundant tax code provisions (personal deductions and child/dependent tax credits) while financing the remainder of program costs by either a proportional increase in federal income taxes, a consumption tax via a value-added tax (VAT), or a carbon tax. One major finding is that income guarantee policies could significantly decrease poverty. Additionally, the program design and financing mechanisms matter for both feasibility and impacts.





#### **Policy Designs**

In all analyses, we compare three income guarantee benefit designs that are smaller in scale than the income necessary to meet a family's basic needs, yet substantial enough for alleviating poverty. Each of the designs includes categorical eligibility by age or work status, and each is also less than fully universal in that the benefit amount for each begins to phase out at \$150,000 in household income at a rate of 2% for each additional \$1,000 (that is, from \$150,000 to \$200,000). Plan A targets all individuals under age 65 (including children), plan B is targeted only to adults aged 19 to 64, and plan C is targeted to adults over age 18 who are working in the labor market, caring for the young, disabled, or elderly, or enrolled in full-time postsecondary education. Table 1 indicates the benefit amount per individual (\$250 monthly for plan A and \$500 for plans B and C), as well as the total yearly gross cost and net cost after the fundamental baseline tax reform of eliminating personal deductions and child/dependent tax credits. The plans range in gross cost from \$720 billion to \$1 trillion, yet the baseline tax reform would offset these costs by eliminating about \$600 billion in redundant tax code that serves a similar purpose as an income guarantee. That is, personal deductions exist primarily to protect a certain portion of income from tax liability to ensure families have a foundation of livable income that is safe from taxation. The income guarantee programs would essentially democratize these personal deductions or credits into the form of a cash transfer, while all other earnings and income is immediately subject to federal income tax.

The fundamental tax reform of eliminating deductions simplifies the federal income tax code. It also makes it more progressive, not by raising rates, but by replacing tax deductions with fully refundable adult and child tax credits which are economically equivalent to an income guarantee for adults and children.

Table 1. Gross and Net Costs of Three Income Guarantee Benefit Plans

|                                       | A.<br>Individuals<br>under age 65 | B.<br>Individuals<br>aged 19 to 64 | C.<br>Working individuals<br>over age 18 |
|---------------------------------------|-----------------------------------|------------------------------------|--|
| Monthly benefit amount per individual | \$250                             | \$500                              | \$500                                    |
| Total yearly gross cost               | \$720 billion                     | \$1 trillion                       | \$940 billion                            |
| Fundamental baseline tax reform       | -\$600 billion                    | -\$600 billion                     | -\$600 billion                           |
| Net costs remaining                   | \$120 billion                     | \$400 billion                      | \$340 billion                            |

Notes: Yearly totals are rounded. The fundamental baseline tax reform represents the tax revenue generated by eliminating personal deductions and child/dependent tax credits, which offsets the gross costs before financing by other mechanisms.

The magnitude of the baseline tax reform shown in Table 1 suggests that the majority of a modestly-sized income guarantee could be financed by restructuring personal deductions and credits to be flat and fully refundable. While there are many financing options for the net costs, we focus on a relatively progressive federal income tax and compare that to consumption taxes via a value-added tax, or VAT, or a carbon tax. Of the three options, the carbon pricing model has received bipartisan support from prominent economists and think tanks as a means of generating revenue while reducing greenhouse emissions that are harmful to the environment. The 2018 Nobel laureate economist William Nordhaus and others have contributed research toward an intergovernmental task force consensus suggesting that carbon pricing should be approximately \$42 per metric ton of greenhouse emissions (and increase over time). Meanwhile, the Climate Leadership Council,

1 Note that Plan C may include adults aged 65 and over if they are working according to the criteria listed.

led in part by conservative economists and former Republican Secretaries of State, proposed a carbon dividend plan with carbon pricing similar to the task force recommendation and distributing the revenue back to the population. We consider both income tax and carbon tax financing as well as hybrid models. The exact mix of financing is of course at the discretion of policymakers, but our simulations below highlight the tradeoffs and virtues of different approaches.

#### Results

Because the fundamental baseline tax reform is potentially such an important component of financing an income guarantee policy, we begin with comparisons of poverty impacts with and without the initial baseline reform. Figure 1.1 shows the results without fundamental tax reform. It contrasts financing by higher income taxes relative to a carbon tax. Income tax financing in this case, in contrast to the fundamental income tax reform, only involves proportional increases across all tax rates. The carbon tax financing necessary for the selected income guarantee designs exceeds the \$42-per-metric-ton level discussed above but corresponds to some upper-range estimates and could also be thought of as a hybrid of a carbon tax and a VAT.<sup>2</sup> The poverty reduction effects of all three programs when financed by the federal income tax are quite large—reducing poverty from 13.2% to between 6.5% and 8%. Depending on who is eligible for benefits, the carbon tax reduces poverty by about three percentage points less than income tax financing. As eligibility for the benefits narrows from all those below age 65 to only adults, and then to only working adults, poverty rates increase. What may be surprising is that limiting eligibility has a bigger effect on poverty rates than doubling the benefit from \$250 to \$500 per month.

Figure 1.2 displays results that incorporate the fundamental baseline tax reform. It depicts the effects on poverty of financing the remaining net costs via either proportional increases in income tax rates or a carbon tax. Instead of a pure carbon/consumption tax as shown in Figure 1.1, the carbon tax results in Figure 1.2 combine a mixture of the fundamental reform on income taxes and financing the remaining costs via carbon taxes. The income tax results in Figures 1.1 and 1.2 are similar. For all programs, however, poverty rates are slightly higher with fundamental tax reform (by about half of a percentage point). Some low income families would pay more in taxes when redundant deductions and credits are eliminated as compared to proportional increases in tax rates. When beginning with a baseline reform on income taxes, financing the remainder by income tax or carbon tax would make little difference when the benefit size is relatively small, as in Plan A (the poverty rates would fall to 7.8 or 8.7, respectively). This is because the bulk of the costs are paid for via the fundamental tax reform. The differences are more substantial for the two plans that are higher-benefit, more costly, and more restrictive.

<sup>2</sup> When financing by carbon tax, some income guarantee plans may cost more than some of the central estimates of socially-efficient carbon pricing suggested by climate science and economic models. In those cases, one could imagine a carbon tax that is supplemented by a general value-added tax on consumption, which would yield similar qualitative results.

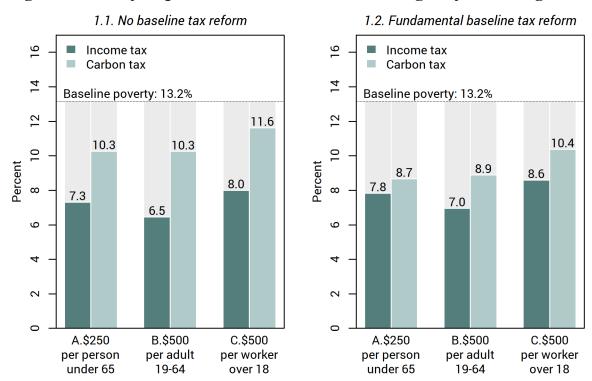


Figure 1. Poverty Impacts of Income Guarantee Designs by Financing Plan

Figure 2 report results for the population of children under the age of 18 years old. The relative comparisons of guarantee and financing plans generally follows the same pattern for children as in the total population, but the interaction between financing mechanisms and eligibility of children for benefits is starker. With pure carbon/consumption tax financing (panel 2.1), child poverty rates are reduced only to 9.7% and 10.4% with \$500 per month plans limited to adults or adult workers. Plan A—which includes children as well as adults—would reduce the poverty rate to 4.4% with a lower benefit of \$250 per month financed by a pure increase in income tax rates. One difference in the patterns seen in child poverty relative to national poverty is that doubling the benefits and restricting eligibility to adults (moving from design A to B) leads to relatively higher child poverty. This difference in child poverty outcomes is exacerbated by financing via carbon tax where children contribute to the family's carbon consumption and tax burden yet are excluded from benefit eligibility.<sup>3</sup>

<sup>3</sup> In another brief, we show that a carbon tax and dividend can actually increase child poverty if benefits are restricted to adults only. Targeting adults only aged 19 to 64 as we do in this brief, increases the likelihood of children benefiting more from an adult only program because those 19-64 are more likely than aged adults to have children. Also, our carbon tax estimates here assume a mixture of carbon pricing and general consumption taxation to finance more generous program designs. A strictly pure carbon tax and dividend would be subject to lower benefit values than the total costs passed through according to Congressional Budget Office accounting rules that adjust for tax revenue losses associated with carbon pricing effects on reduced production among affected firms.

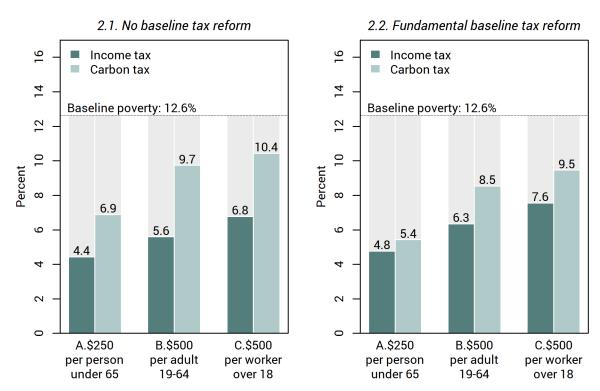


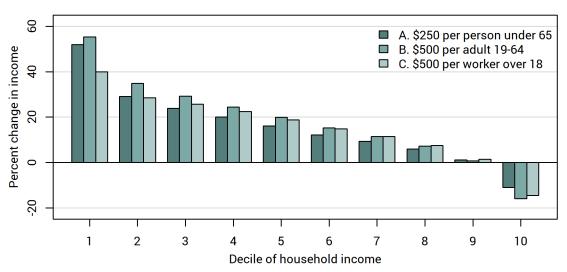
Figure 2. Under-18 Poverty Impacts of Income Guarantee Designs by Financing Plan

The income guarantee designs that begin with a fundamental tax reform offer a way to reduce tax code redundancy and diversify the tax instruments for financing the gross costs of an income guarantee program. There is no reason that the tax revenue to cover the net costs could not be diversified further with some combination of financing strategies, such as a hybrid plan with a carbon tax in addition to proportional increases in federal income tax rates. Other tax strategies could be introduced to either complement a progressive redistribution (some form of a wealth tax, for example), or again, the carbon tax could be supplemented with a VAT that increases in size as the carbon tax revenues decrease with lower greenhouse emissions.

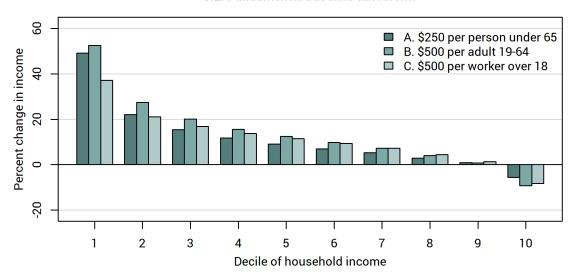
While the results so far have focused on poverty reduction, Figure 3 shows the distributional impact of the net transfer after financing the income guarantee benefit designs both without and with the fundamental tax reform (panels 3.1 and 3.2, respectively). With a phase-out threshold of \$200,000, the lower 90% of the population by household income would receive a net benefit, on average, regardless of the financing plan chosen. Without the fundamental tax reform, the lowest decile of households would have about a 40 to 55% increase in income. Across the middle of the income distribution, net benefits are somewhat smaller when the fundamental tax reform offsets the guarantee by eliminating personal deductions and credits. Households in the 9th decile of income would have benefits close to zero on average, and the top 10% of households would see a net tax that decreased their incomes by at most 16% without the fundamental tax reform, or no greater than 10% after the fundamental reform.

Figure 3. Distributional Impacts of an Income Guarantee Financed by Proportional Increases in Income Taxes without and with Fundamental Tax Reform





#### 3.2. Fundamental baseline tax reform



#### Conclusion

Income guarantee plans can reduce poverty substantially at a reasonable cost. A modest income guarantee of \$250 per month for adults and children can reduce poverty by 40%, and over 80% of the costs can be financed by eliminating redundant and less progressive deductions and non-refundable credits in the federal income tax. The remainder could be financed by a carbon tax. How much poverty is reduced depends upon who is eligible and how the benefit is financed. If the benefits were limited to adults and were financed entirely by a carbon tax or a value-added tax that was nearly as regressive as the carbon tax, the program would only modestly reduce poverty.

## Appendix

In order to estimate how an income guarantee policy would affect poverty, we simulate benefit amounts for individuals based on data from the Current Population Survey's Annual Social and Economic Supplement (CPS-ASEC). We supplement this main data source with adjusted estimates from Urban Institute's Transfer Income Model version 3 (TRIM) to account for underreported social welfare income, imputed household spending estimates from the Consumer Expenditure Survey (CE), and simulated tax credits and liabilities using Tax-Calculator release 2.5.0. We construct a 3-year file with data corresponding to 2013 to 2015, and we adjust dollar values for inflation to simulate outcomes based on tax law in the year 2020. For each family, we estimate their net income after taxes, transfers, and certain expenses based on the Supplemental Poverty Measure (SPM) framework, and then we calculate what the poverty rate would be based on SPM poverty thresholds relative to net income before and after simulating the net changes from each income guarantee and financing plan. Our estimates incorporate potential behavioral effects such as individual labor supply responses to the net policy reform, or the decrease in greenhouse emissions from a carbon tax.

## Acknowledgements

This brief is made possible with the support of The Economic Security Project. This work also benefited from comments and assistance from Alexander Barron, Noah Kaufman, Peter Marsters, Sonia Huq and Christopher Wimer. All errors and assertions in this brief, however, are our own.

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