

Research Notes

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Temporary Basic Income in Times of Pandemic: Rationale, Costs and Poverty- Mitigation Potential

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Abstract: The pandemic has exposed the costs of job and income losses. Emergency cash transfers can mitigate the worst immediate effects on people who lack access to safety nets. This research note provides estimates for a potential Temporary Basic Income (TBI) for poor and near-poor people across 132 developing countries, as well as the minimum cost of income support sufficient to mitigate the pandemic-induced poverty increase. The total monthly cost of the TBI ranges 0.27–0.63% of developing countries' combined GDP, depending on the choice: (i) top-ups on each country's average incomes up to a vulnerability threshold; (ii) transfers based on each country's median standard of living; or (iii) uniform transfers. This note argues that some form of TBI is within reach and can inform a larger conversation about how to build comprehensive social protection systems that make the poor and near-poor more resilient to economic downturns in the future.

Keywords: temporary basic income, unconditional cash transfers, vulnerability, poverty, COVID-19

1 Introduction

The surge of COVID-19 cases across developing countries and the health and socio-economic crisis that has followed has sparked a global conversation on how to

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better protect people's lives and livelihoods while keeping the pandemic's pressures on health systems at manageable levels. Although the magnitude of the shock has been distributed unequally both across countries and across different groups and sectors within a country (depending on the capacity of governments to implement mitigating policies, the nature of labour markets, or the country's exposure to global economic downturn through trade, tourism, or remittances), in most developing contexts an important number of people has been prevented from earning an income as a result of the interaction between social distancing measures, a large share of workers in at-risk service sectors and in non-agricultural informal activities, and absent employment-based insurance for the latter.

While the world has witnessed a response of historic proportions in terms of compensating measures, the lion's share of this effort has been accounted for by high-income economies. Specifically, between the start of the pandemic and May 2021, about US\$79.6 billion were invested by low- and middle-income countries in social assistance, both cash-based and in-kind, representing less than a fifth of the world's total of US\$1.7 trillion (Gentilini et al., 2021). In per capita terms, these countries have spent an average of US\$26 in social assistance (among low-income countries only, the amount per capita is as low as US\$4), which is in stark contrast with the corresponding average of US\$545 recorded by high-income economies.

This research note estimates the total cost and per beneficiary amounts of Temporary Basic Income (TBI) schemes to almost 2.8 billion poor and vulnerable people in 132 developing countries, which are home to about 97% of the developing world's population and 83% of the world's population.¹ Three schemes of TBI are proposed, with per beneficiary amounts that are homogeneous across individuals within a country, but they vary across countries in the first two schemes: (1) a top-up to existing average per capita incomes that are below a minimum defined by a vulnerability threshold that changes in value (in PPP 2011) depending on a country's average standard of living;² (2) a transfer equivalent to half each country's median per capita income, being also sensitive to varying standard of living across countries; and, (3) a transfer of \$5.50 a day that is uniform across countries. The rationale behind the estimates is to offer a benchmark in terms of size and cost for providing unconditional cash assistance during a specific period across the developing world. To illustrate their benefits, the proposed

¹ An additional subset of 33 high-income, advanced economies, which together are home to 14% of the global population, were excluded from the computations. The remaining 3% of the world's population is concentrated in 30 countries for which there is no available data.

² From here onwards and unless otherwise stated, all monetary amounts are expressed in international dollars at 2011 PPP exchange rates.

schemes are also compared against the minimum cost of mitigating the short-term increase in poverty induced by the pandemic and related containment measures.

The rest of this note is organized as follows. Section 2 presents a brief description of the pre-existing conditions that have magnified the adverse effects of the pandemic-induced crisis on less advantaged populations. Section 3 presents the proposed schemes of temporary cash assistance, including costs and per capita benefits, as well as its comparison with the minimum cost of mitigating the increase in pandemic-induced poverty. Section 4 discusses some critical administrative, fiscal, and political implementation challenges. Finally, Section 5 concludes.

2 Pre-Existing Conditions Make People in Developing Countries Less Resilient to the Realisation of Shocks

At the onset of the pandemic, most developing countries were riven by pre-existing inequalities that would eventually threaten the lives and livelihoods of its most vulnerable citizens. For starters, 60% of total workers in developing countries make a living in non-agricultural informal markets (70% when including agriculture); at the regional level, such a proportion reaches 72% in Africa, 63–64% in Asia and the Pacific and the Arab States, and 50% in Latin America and the Caribbean (ILO, 2018; p. 14). Arguably, most of the non-agricultural informal workers are engaged in activities and tasks that are less likely to be performed from home, especially in urban areas where the effect of stringent containment measures may be particularly stronger. For instance, Dingel and Neiman (2020) estimate that the share of jobs that could be performed at home is less than 25% in most of the developing countries they analyse, and as low as 5% in some sub-Saharan countries, whereas Garrote Sanchez et al. (2021) find that only one of every 26 jobs in low-income countries can be done from home.

Secondly, a sizable share of the population in developing countries cannot be regarded as economically secure in the face of shocks. Figure 1 plots the pre-crisis cumulative income distribution at the global level, which reveals that only three out of 10 individuals in the world had incomes above a threshold of \$13 a day—identified as the dividing line between vulnerability-to-poverty and economic security in the context of upper-middle-income countries (see, e.g. Bussolo, Dávalos, Peragine, & Sundaram, 2018; Lopez-Calva & Ortiz-Juarez, 2014). Even based on vulnerability thresholds adjusted to the average income of each region, before the

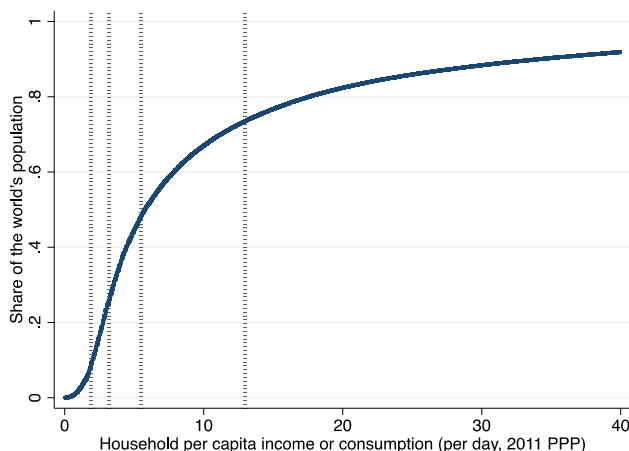


Figure 1: Global cumulative distribution of income or consumption, 2019.

Source: Authors' elaboration based on World Bank, PovcalNet's harmonized household surveys.

Notes: The global distribution of household per capita income or consumption is based on household survey data from 161 countries. In those countries where the latest available household survey is prior to 2019, household's income or consumption was extrapolated to 2019 assuming no changes in the distribution. The distribution is capped at \$40 a day for visual purposes. Vertical lines represent, starting from the left, the per person daily values of the \$1.90, \$3.20, and \$5.50 a day poverty lines, and the \$13 a day vulnerability threshold.

crisis, a fourth of the total population in East Asia and Pacific, and between half and two-thirds of the total population in the rest of the regions, were either poor or at high risk of poverty (see Table 1 and Subsection 3.1 for details on the estimation).

These pre-existing conditions of informality and vulnerability coexist with a social insurance system that tends to benefit mostly formal workers. Of the above statistic of six in 10 workers in non-agricultural informality, only one of them can rely on employment-based protection benefits (ILO, 2018). Under such circumstances, any COVID-19 containment measures would prevent a large majority of people from earning an income. Indeed, following the implementation of the first lockdowns, some estimates suggest that the earnings of informal workers contracted by 60% globally in the first month of the crisis (ILO, 2020a), whereas during the whole 2020, relative to 2019, global labour incomes had declined by 8.3%, or US\$ 3.7 trillion, as a result of working-hour losses—the latter being equivalent to more than 220 million full-time jobs³ (Figure 2). Additional evidence from household surveys across nine developing countries shows, first, that the median

³ Labour incomes include wages for employees and labour incomes of self-employed. The loss of working hours reached almost 9% in 2020 relative to the fourth quarter of 2019 (ILO, 2020b).

Table 1: Regional coverage of potential TBI schemes on poor and vulnerable (million people).

Regions	Coverage			Total population	Share of covered
	Poor	Vulnerable	Total		
Developing countries (132)	1072.7	1706.9	2779.6	6300.4	44.1%
East Asia and Pacific	155.5	365.8	521.3	2039.7	25.6%
Europe and Central Asia	59.4	158.6	217.9	469.6	46.4%
Latin America and the Caribbean	150.5	227.2	377.7	621.5	60.8%
Middle East and North Africa	74.5	93.9	168.4	376.2	44.8%
South Asia	192.7	594.0	786.7	1734.8	45.4%
Sub-Saharan Africa	440.2	267.4	707.6	1058.5	66.8%

Source: Own estimates based on World Bank, PovcalNet.

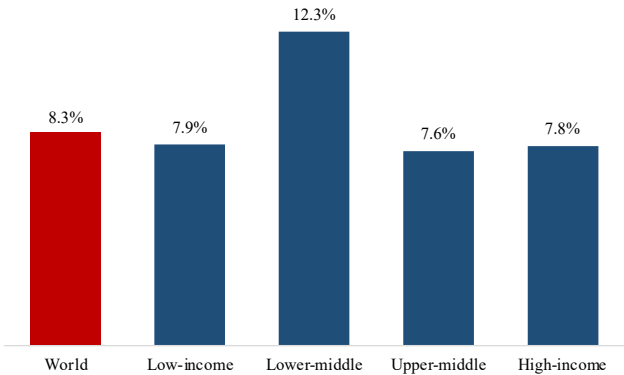


Figure 2: Percentage declines in labor income due to working-hour losses, by income groups. Source: Based on ILO (2020b).

Notes: Changes are before support measures and compare the first three quarters of 2020 with the same period in 2019.

share of households that experienced income losses since the start of the crisis reached 68%, and, secondly, that such losses persisted after three months (Egger et al., 2021). The latter is consistent with evidence from previous crisis, which suggests that the loss of incomes hits particularly hard during the shock and often persists with a low recovery well beyond the end of the crisis (e.g. Davis & von Wachter, 2017).

Looking at the pre-crisis distribution of income in Figure 1 above suggests that poverty rates would be highly responsive to even small income contractions. Indeed, it is easy to picture what some early estimates have already revealed: even

under the strong assumption of a generalised, yet moderate contraction of 5% in per capita incomes globally, extreme poverty at \$1.90 a day could increase by about 1% point, equivalent to close to 80 million people falling into poverty (Sumner, Ortiz-Juarez, & Hoy, 2021). Other estimates based on country-specific growth forecasts suggest an increase in extreme poverty in 2020 of at least 115 million (Fajardo-Gonzalez, Gray Molina, Montoya-Aguirre, & Ortiz-Juarez, 2021; Lakner, Yonzan, Mahler, Castañeda, & Wu, 2021)—and up to 168 million in the latter study when considering a regressive contraction where the bottom 60% of the population is hit harder.

Beyond the immediate monetary impacts, the progression of the pandemic has worsened other indicators of social progress such as food insecurity (see, e.g. Amare, Abay, Tiberti, & Chamberlin, 2021 in Nigeria; Arndt et al., 2020 in South Africa; Ceballos, Hernandez, & Paz, 2021 in Guatemala; Hirvonen, de Brauw, & Abate, 2021 in Ethiopia; and Wang et al., 2021 for evidence in China), and has exerted adverse effects on gender equality as women have experienced a disproportionate decline in incomes and jobs (see, e.g. Adams-Prassl, Boneva, Golin, & Rauh, 2020; Dang and Viet Nguyen 2021; Foucault & Galasso, 2020; Montoya-Aguirre, Ortiz-Juarez, & Santiago, 2021). The reason for the latter being that the health emergency has increased the demand for childcare, which has been filled by working mothers thus reducing their working hours or shifting into inactivity, while at the same time the crisis has hit harder those sectors with relatively more female employment (see, e.g. Alon, Doepke, Olmstead-Rumsey, & Tertilt, 2020; Blundell, Costa Dias, Joyce, & Xu, 2020; Reichelt, Makovi, & Sargsyan, 2021). In terms of health, some risk factors such as comorbidities, often more prevalent among people at the bottom of the income distribution, as well as persistent conditions of indoor and outdoor pollution, malnutrition, and lack of basic infrastructure could make some people in developing countries particularly vulnerable to COVID-19 (see, e.g. Alkire, Dirksen, Nogales, & Oldiges, 2020; Brown, Ravallion, & van de Walle, 2020). In addition, the disruption in education has put the accumulation of human capital at risk, pushing some school-age groups further down the learning ladder as a result of lacking computer equipment and internet connection, of receiving deficient coaching at home, or of living in inadequate conditions, viz. overcrowded, stressful or violent homes (see, e.g. Di Pietro, Biagi, Costa, Karpiński, & Mazza, 2020; Neidhöfer, Lustig, & Tommasi, 2021; UNDP, 2020).

It is thus likely that the non-pharmaceutical efforts to contain the disease, magnified by pre-existing structures of inequalities and exclusion, carry devastating costs for the livelihoods of less advantaged people. The severity and accelerated progression of the pandemic across developing countries makes clear that unprecedented mitigating actions are urgent.

3 A Temporary Basic Income for Poor and Vulnerable People

It is urgent and only fair to provide shock-resistant transfers in the form of what is termed in this research note a Temporary Basic Income (TBI). The term *basic income* has been commonly used to refer to universal basic income (UBI) schemes in a simpler way by longstanding proponents (e.g. Haagh, 2011, 2019; Standing, 2017, 2020; Van Parijs & Vanderborght, 2017), without implying that the *universal* component does not still apply to it. Such a term is employed here to denote schemes of emergency cash assistance that are explicitly temporary, while retaining some of the features that characterize UBI.

In general, UBI schemes carry the notion of a *right* to income with an undetermined duration; its coverage is universal or quasi-universal; and its delivery is unconditional, not subject to means or job-seeking testing or spending conditions (see also Gentilini, Grosh, Rigolini, & Yemtsov, 2020b). TBI as proposed here, on the other hand, are not universal but targeted to people with livelihoods below a vulnerability-to-poverty threshold, which is at least 70% above the value of the poverty line (see next subsection). While this targeting involves, by definition, a mechanism to exclude non-eligible people, TBI remains unconditional in terms of not imposing behavioural conditions such as job-search or use of the cash benefits. Finally, the delivery of TBI, as with that of UBI, is assumed to be made on an individual basis, regardless of household composition, thus avoiding any assumption of economies of scale and unintended within-household discrimination that could be particularly harmful for women's empowerment and control of economic resources.⁴

The coverage, size, and duration of the TBI schemes shown below assume that the costs of the crisis are widespread, profound and potentially lasting. As such, the amounts per beneficiary might help people to cover some expenses to support education and work from home or assist households to prevent the depletion of productive assets—in addition to enabling people to cover essential spending and, crucially, reaching those who have not been able to make any progress in average consumption through business-as-usual policies (e.g. Ravallion, 2020). There is strong evidence for developing countries that, in the presence of unconditional

⁴ In the context of conditional cash transfer (CCT) schemes targeted to poor people, some recent evidence suggests that delivering cash assistance to women could exert a positive effect on several dimensions: more balanced economic power within the household, better spending in comparison to men in terms of more nutritious diet for children, and the possibility of women avoiding taking low-pay jobs and instead staying at home with their children (Armand, Attanasio, Carneiro, & Lechene, 2020; Garganta, Gasparini, & Marchionni, 2017).

cash transfers, human capital accumulation can be protected and boosted through expenditure on more and better diets, as well as on health and education services (see, e.g. Handa et al., 2018a; Haushofer & Shapiro, 2016). Moreover, by allowing people to meet their essential consumption needs, cash assistance could also lead to the protection and accumulation of productive assets and the diversification of livelihoods (Handa, Natali, Seidenfeld, Tembo, & Davis, 2018b).

A few available studies have already reported some positive results regarding the adequacy of emergency cash transfers to mitigate some of the effects of the crisis on peoples' livelihoods. For instance, experimental evidence from Colombia has shown that the roll-out of the value-added tax compensation—a form of unconditional cash assistance delivered to one million households a week after the national lockdown—exerted moderate, but positive effects in improving households' financial health, food access, children's education, and psychological well-being (Londoño-Vélez & Querubin, 2021). Results from simulations on household surveys suggest that emergency cash assistance could have a sizeable and significant offsetting effect of the short-term impacts on food insecurity (Abay, Berhane, Hoddinott, & Tafere, 2020) and poverty (Fajardo-Gonzalez et al., 2021; Lustig, Martinez Pabon, Neidhöfer, & Tommasi, 2021). Finally, although from a high-income context, an unintended consequence of the delivery of a universal one-off grant is worth mentioning. While most people allocated it to debt relief, a sizeable share (up to 18%), composed mostly of relatively richer citizens, transferred their grant to supplement the incomes of poorer relatives and friends (Feldman & Heffetz, 2020).

The idea of a TBI arises from the urgency to deliver shock-resistant transfers to an unprecedented crisis. Several countries have taken a step forward in this direction by rolling out similar schemes under different names and with diverse targeting thresholds. Tuvalu, for instance, implemented a fully-fledged scheme that does fulfill the UBI criteria, although articulated as having a limited lifespan (Gentilini, Almenfi, & Dale, 2020a). Spain approved a long-term commitment to provide a minimum income guarantee for vulnerable families up to a minimum threshold.⁵ In Colombia, the government introduced the *Solidarity Income* scheme to deliver resources to an additional three million vulnerable households—and increase the cash transfers for 12 million people through existing assistance schemes (Alvarez, León, Medellín, Zambrano, & Zuleta, 2020). Additional examples include Serbia's universal one-off payments, or the schemes launched by the Dominican Republic, Pakistan, or Philippines with coverages ranging from half to three fourths of the total population (Gentilini, Almenfi, & Dale, 2020a).

⁵ See the Royal Decree-Law 20, May 29, 2020 that establishes the minimum vital income.

Two significant caveats are worth noting here. First, the fact that poor and vulnerable people in developing countries may benefit from a TBI does not necessarily mean that, in all settings, markets exist for the goods and services that people value and require, and, even if markets exist, it is unclear whether they can be distorted by the predefined duration of the TBI. That is, while some available evidence from local UBI pilots is not supportive of inflationary pressures (e.g. Davala, Jhabvala, Mehta, & Standing, 2015), there is the risk that knowing in advance the duration of the TBI could lead to a spike in local food prices. This may be problematic among the poorest, given that they spend a larger share of their income on food, and also because in poorer countries people tend to face differentials in prices for healthy versus non-healthy foods that are much higher than in richer countries (e.g. Headey & Alderman, 2019). Second, even the successful implementation of a TBI does not resolve the key systemic challenge faced by most developing countries today: how to build a robust social protection and insurance system that is equitable, comprehensive, enjoys broad-based political buy-in, and is financially sustainable over the long run (e.g. Ortiz, Behrendt, Acuña-Ulate, & Nguyen, 2018).

3.1 Vulnerability Thresholds and TBI Scenarios

The economic costs imposed by the pandemic have been hard not only for the existing poor, but also to those who were at high risk of falling into poverty before the pandemic and who are likely experiencing a limited income-generating capacity. Both the existing poor and those in vulnerability to poverty constitute the potential group of beneficiaries of the TBI schemes.

This group is comprised, first, by 1.07 billion people living under the typical international poverty lines of \$1.90, \$3.20, and \$5.50 a day, applied depending on countries' living standard. Specifically, using the sample of national poverty lines (in 2011 PPP) of Jolliffe and Prydz (2016), the median value of these lines among countries in both South Asia and sub-Saharan Africa (SSA) is roughly \$2 a day; thus, by proximity, poverty in these regions is assessed in this note under the well-established threshold of \$1.90 a day. As for the rest of regions, the median value of the national poverty lines in the sample is \$3.4–3.9 a day among countries in both East Asia and the Pacific (EAP) and the Middle East and North Africa (MENA), and \$5.2–6.3 among countries in both Europe and Central Asia (ECA) and Latin America and the Caribbean (LAC). Based on the proximity of such median values to the typical international lines, it is thus assumed in this paper that \$3.20 a day is a reasonable standard for poverty measurement across EAP and MENA, and that \$5.50 a day is so across ECA and LAC.

A second subgroup of beneficiaries comprises 1.71 billion people who are non-poor according to the previous standards, but presumably face a sizeable risk of falling into poverty. The identification is based on the following criteria. For countries in both ECA and LAC, it is considered that vulnerable-to-poverty people comprises those with incomes above the \$5.50-a-day poverty line, but below a vulnerability threshold of \$13 a day. The latter is the updated value (in 2011 PPP) of the cut-off of \$10 a day (in 2005 PPP) identified by Lopez-Calva and Ortiz-Juarez (2014) as the dividing line between vulnerability and economic security in the context of LAC countries, and is consistent with the value of the vulnerability line estimated for ECA countries by Bussolo et al. (2018).

Following a similar approach, in countries in EAP and MENA, where poverty is assessed by the \$3.20-a-day threshold, people regarded as vulnerable would be those with incomes above such value but below \$5.50 a day, the latter corresponding to the vulnerability threshold identified among EAP countries by the World Bank (2018a). Finally, and with no known evidence suggesting the value of a corresponding vulnerability threshold for countries where poverty is assessed at \$1.90 a day, it is simply assumed that vulnerable people would be those with incomes above \$1.90 a day but below the next typical international poverty line, that is, \$3.20 a day.

Table 1 shows the total number of potential beneficiaries, disaggregated by regions, after applying the previous standards. The total of 2.78 billion beneficiaries identified is equivalent to a coverage of 44% of the developing world's total population, reaching up to 61–67% in Latin America and the Caribbean and sub-Saharan Africa.

This relatively high coverage of the TBI schemes carries the advantages of potentially minimising stigma and exclusion errors at lower rungs of the income ladder, both of which are common in traditional social assistance programmes targeted exclusively to poor households. For instance, in a sample of 27 programmes whose selection of beneficiaries is based on means or proxy means tests the exclusion error averages 57%—ranging from about 10% in South Africa, to 30–40% in some South American countries, and to 90% or more in countries like Ghana or Guatemala—whereas such errors average, as expected, less than 5% in universal or quasi-universal selection programmes (Kidd & Athias, 2019).

For the 2.78 billion beneficiaries, three scenarios of a TBI with homogeneous amounts across beneficiaries within a country are considered: top-ups on existing average incomes in each country; lump-sum transfers that are sensitive to cross-country differences in median standard of living; and lump-sum transfers that are uniform regardless of the country where the beneficiary population lives. Specifically, the costs of the following transfer equivalences are compared:

- (1) **A cash transfer equivalent to each country's average shortfall in income in relation to the corresponding vulnerability threshold, viz. \$3.20 a day for countries in South Asia and SSA, \$5.50 a day for countries in EAP and MENA, and \$13 a day for countries in ECA and LAC.** Under this approach, average incomes among poor and vulnerable people before the crisis are supplemented up to the point of reaching the vulnerability threshold. The estimation of the total cost and per beneficiary amounts is based on the well-known per capita deficit measure, defined as⁶

$$P_j = \frac{1}{n_j} \sum_{i=1}^{q_j} \left(1 - \frac{y_{ij}}{z} \right) \quad (1)$$

where z is the vulnerability threshold; y_{ij} represents the income of individual i living below z in country j ; q_j is the total number of people whose incomes y_{ij} are below z ; and n_j is the total population in each country. This measure takes its values in the range $[0,1]$ and reflects the average per capita shortfall, as a percentage of z , between the incomes of those living below z and the value of z . Suppose that the vulnerability threshold is \$13 a day in a given country, and that the per capita deficit equals 0.20, i.e. the average shortfall in per capita incomes of those people living with less than the vulnerability threshold is 20%. The monetised amount of this shortfall is, therefore, \$2.60 a day (13×0.20), or \$79.1 in monthly terms ($2.60 \times \frac{365}{12}$). Adding up this monthly monetised per capita shortfall across the country's total population yields the total monthly amount that this society requires to lift (top-up) the incomes of those living below the vulnerability threshold up to \$13 a day, or \$395.4 in monthly terms. That total monthly amount is taken in this note as the country's total cost of the TBI under this scheme. Finally, to get the per beneficiary amount, such country's total cost is shared evenly among the beneficiary population, i.e. those living below the vulnerability threshold. Notice that these top-ups vary across countries as the average shortfall in income changes from place to place.

- (2) **A cash transfer equivalent to half the median per capita income in each country.** This option follows some well-established approaches⁷ and, by definition, changes in value across countries as the countries' per capita median income also varies. A feature of this approach is that if the value of the

⁶ Also commonly known as a poverty gap; see Foster, Greer, and Thorbecke (1984) for further details.

⁷ See, for instance, a detailed conceptual and technical discussion of the *societal* minimum standard, on which this proposal is built, in Jolliffe and Prydz (2017) and World Bank (2018b). Half the median income is also the approach followed by the OECD for the measurement of relative poverty among its member countries.

half median measure in a given country is lower than the typical international poverty line of \$1.90 a day, then such value is raised up to the latter amount. Therefore, the minimum amount of a TBI per beneficiary under this option cannot be lower than \$1.90 a day. Formally, the cash transfer per beneficiary in each country j can be expressed as

$$\max(\$1.90, 0.5 \cdot \tilde{y}_j) \quad (2)$$

where $\tilde{y}_j$ is the median per capita income (or consumption) in country j . Suppose that the median per capita income in a given country is \$300 a month, then half this amount (\$150 a month) will represent the per beneficiary amount. Adding these per beneficiary amounts across the total beneficiary population, i.e. those living below the vulnerability threshold, yields the country's total cost of the TBI under this scheme.

- (3) **A uniform cash transfer of \$5.50 a day.** These uniform transfers build on the design of an earlier proposal of a uniform relief scheme delivering \$1.90 a day for around 3.4 billion people living on less than \$5.50 a day (Lakner, Özler, & Van Der Weide, 2020) but expand the latter's scope by increasing the size of the transfers from \$1.90 to \$5.50 a day and adjust the coverage to include vulnerable individuals by taking into account the different standard of living across countries. This per capita transfer of \$5.50 a day, or \$167.3 a month, represents the per beneficiary amount regardless of the country where they live; if such amount is added across the beneficiary population of each country, it therefore yields the country's total cost for this TBI.

Notice that for each TBI scheme, the total cost computed for each country is added up across the 132 developing countries under analysis to yield a developing world's total cost of TBI. The latter are the ones discussed in the next subsection.

3.2 Total Cost and Per Beneficiary Amounts

The estimation of the total and per beneficiary costs of these TBI schemes exploits the latest (by the time of writing this note) publicly available data, from around 2018–2019, for each of the 132 developing countries listed in Table A1 in the Supplementary Material, covering approximately 83% of the world's population. This data corresponds to the World Bank's PovcalNet dataset on harmonised household surveys, which provide information on per capita income or expenditure at 2011 PPP exchange rates, as well as an array of poverty measures.

As a result of the pandemic’s progression and its economic effects, it is likely that, relative to both the figures recorded before the pandemic or to what could have been expected in 2020 in the absence of crisis, the incidence of poverty has already increased and those who were already poor before the pandemic became poorer. While there are some estimates suggesting these outcomes (e.g. Lakner et al., 2021; Sumner et al., 2021), there is also uncertainty in terms of the true magnitude of the increase in poverty and the income losses among the existing poor, all of which is dependent on the duration of the crisis and the policy responses already in place. For instance, Fajardo-Gonzalez et al. (2021) project an increase in poverty of 117 million people under a distributive-neutral projection and 168 million people under a distributive-regressive projection. Given this, this note takes a conservative stance and assumes that pre-crisis income levels are a relatively objective starting point to provide a benchmark of the potential costs of temporary cash transfers.

Figure 3 summarises the developing world’s total cost of each of the above TBI options on a monthly basis (also shown at the bottom of Table 2), i.e. each country’s total cost estimated for each TBI scheme is aggregated across the 132 developing countries under analysis (country-level estimates are shown in Table A1 in

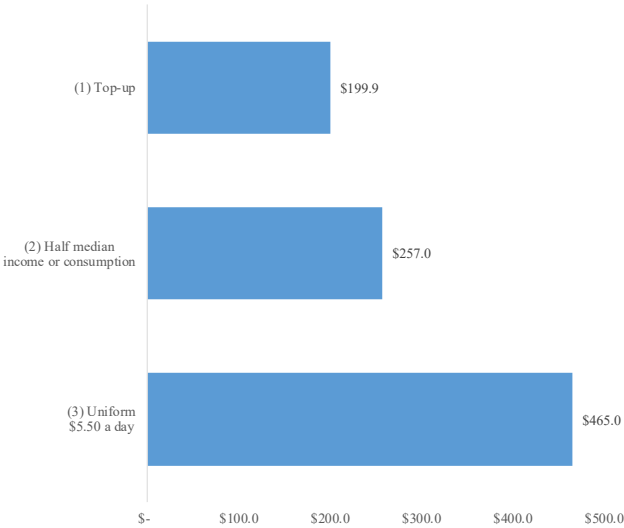


Figure 3: Monthly cost of a potential TBI to poor and vulnerable people under different scenarios (\$ billion).

Source: Own estimates based on World Bank, PovcalNet.

Notes: Monthly amounts are expressed in international dollars at 2011 PPP exchange rates.

Table 2: Monthly cost of a potential TBI under different scenarios, by regions and income groups (\$ billion and % of regions' and income groups' GDP).

	Monthly cost (billion)			Monthly cost (% GDP)		
	Top-up	Half median	Uniform	Top-up	Half median	Uniform
East Asia and Pacific	27.0	59.3	87.2	0.08%	0.18%	0.26%
Europe and Central Asia	34.7	39.1	36.5	0.32%	0.36%	0.33%
Latin America and the Caribbean	72.8	57.7	63.2	0.720%	0.57%	0.62%
Middle East and North Africa	11.0	13.5	28.2	0.22%	0.27%	0.57%
South Asia	21.2	46.1	131.6	0.21%	0.45%	1.27%
Sub-Saharan Africa	33.1	41.3	118.4	0.76%	0.95%	2.71%
Low-income	29.2	28.3	81.0	2.18%	2.11%	6.05%
Lower-middle income	74.9	99.9	251.8	0.35%	0.47%	1.19%
Upper-middle income	95.8	128.8	132.2	0.19%	0.25%	0.26%
Developing world (132)	199.9	257.0	465.0	0.27%	0.35%	0.63%

Source: Own estimates based on PovcalNet and IMF's World Economic Outlook Database (April 2020 update) for GDP.

Notes: Monthly amounts are expressed at 2011 PPP exchange rates.

the Supplementary Material). For the total coverage of 2.78 billion poor and vulnerable people, the developing world's total cost of top-up transfers reaches \$199.9 billion per month, whereas that of transfers based on half the median income reaches \$257 billion. These figures are roughly half the monthly cost of a uniform transfer of \$5.50 a day: \$465 billion.

The cost of the first two schemes compare closely to the monthly cost (\$195.7 billion) of an earlier proposal for an emergency relief transfer of \$1.90 a day to around 3.4 billion poor people living under the \$5.50 a day poverty line globally (Lakner et al., 2020). Such schemes, however, differ in their design. The latter is a uniform transfer delivered to the global poor according to the same standard, regardless of the country where they live and including high-income countries, whereas the first two schemes proposed in this note are, by design, sensitive to each country's standard of living.

The magnitude of the developing world's total cost for each TBI scheme is better understood when compared relative to the size of the economy of the 132 developing countries combined. This size is computed by adding up each country's annual GDP. The comparison, presented at the bottom of Table 2, shows that the (monthly) developing world's total cost of the scheme based on top-ups is equivalent to 0.27% of the (annual) developing world's total GDP; it reaches 0.35% of the GDP for the scheme based on half the median income; and 0.63% of the GDP for the more expensive uniform transfer scheme.

How these monthly relative costs of TBI compare with previous proposals of expanded social protection? Although not strictly comparable in terms of design, coverage, generosity, and duration, some estimates by Ortiz, Durán-Valverde, Pal, Behrendt, and Acuña-Ulate (2017) show that the cost of providing universal cash transfers to support maternity leave and allowances for all children aged 5 years or less, orphans, people with severe disabilities, and older persons, could amount to a monthly average of 0.13% of 101 developing countries' GDP used in their sample (or 1.6% of GDP on an annual basis). A similar figure (1.5% of countries GDP, on average) has been also estimated by the World Bank (2012) as the annual cost of expanding social protection for all poor and vulnerable populations. Note that latter figures are approximately half the monthly cost of a TBI under the top-up scheme (0.27%).

In Table 2, each country's total cost for each TBI scheme is aggregated both at the level of regions and income groups in the first panel of columns (note that the sum of costs within each classification equals the developing world's total cost show at the bottom). Each country's GDP is also aggregated at the level of regions and income groups to facilitate the comparison in relative terms, which is presented in the second panel of columns. In some regions and income groups, the cost of a monthly cash transfer under any one of the three TBI schemes, relative to the annual size of the economy, is well below 1%. For instance, the costs could amount to 0.08–0.26% of the GDP in EAP; 0.60–0.70% of the GDP in LAC, or 0.19–0.26% of the upper-middle-income countries' GDP.

Expectedly, the costs of some of the TBI schemes in relation to the economy tend to be particularly large for populous low-income countries. In SSA, for instance, the monthly costs range from 0.76% of the GDP for a top-up transfer up to 2.71% for a uniform transfer, whereas in South Asia such a uniform transfer could cost the equivalent of 1.27% of its GDP. Looking at low-income countries combined, the monthly cost under any one of the three TBI schemes could amount to 2.18–6.05% of the GDP.

Considering the size of the developing world's economy, the above comparisons suggest that, in general, there is only a moderate cost to carry out a comprehensive assistance transfer over a period of, say, 3–9 months assuming a profound shock with a slow recovery. For instance, providing 3–9 months of a TBI either under the top-up scheme or the half median income scheme, could cost between 0.8 and 3.1% of the 132 developing countries' annual GDP (Table 3, panel b), whereas the cost of a uniform transfer could amount up to 5.6% of the developing countries' annual GDP if such a transfer is delivered over a nine-month period (Table 3, panel b).

Moving to the size of TBI per beneficiary, the monthly amount per person equals \$167.3 under the uniform transfer of \$5.50 a day, and that monthly amount

Table 3: Cost of a potential TBI to poor and vulnerable people under different scenarios for a duration of 3–9 months (\$ trillion and % of GDP).

Scenario	Three-month		Six-month		Nine-month	
	Panel a: \$ trillion					
(1) Top-up	\$	0.60	\$	1.20	\$	1.80
(2) Halfmedian	\$	0.77	\$	1.54	\$	2.31
(3) Uniform \$5.50 a day	\$	1.39	\$	2.79	\$	4.18
Panel b: % of developing world's GDP						
(1) Top-up	0.8%		1.6%		2.4%	
(2) Half median	1.0%		2.1%		3.1%	
(3) Uniform \$5.50 a day	1.9%		3.8%		5.6%	

Source: Own estimates based on PovcalNet and IMF's World Economic Outlook Database (April 2020 update) for 132 developing countries' GDP.

Notes: Monetary amounts are expressed in international dollars at 2011 PPP exchange rates.

remains unchanged regardless of the size of the targeted population and the country where they live. The per beneficiary amounts under the top-up and half median schemes, on the other hand, will vary across countries as they are sensitive, respectively, to the prevailing difference between the incomes of the potential beneficiaries and the vulnerability threshold and to the standard of living in each country. This is shown in Table 4, which present the population-weighted average transfers per beneficiary aggregated at the regional level and by income groups.

Among the 132 developing countries considered, the transfer equivalent to the top-up of existing average incomes up to the vulnerability threshold is \$61.7 a

Table 4: Potential TBI per beneficiary (monthly averages).

	Per capita amounts		
	Top-up	Half median	Uniform
East Asia and Pacific	45.6	138.8	167.3
Europe and Central Asia	138.5	219.4	167.3
Latin America and the Caribbean	187.7	164.5	167.3
Middle East and North Africa	54.4	111.0	167.3
South Asia	26.3	59.5	167.3
Sub-Saharan Africa	45.0	59.2	167.3
Low-income	55.6	58.4	167.3
Lower-middle income	43.6	67.9	167.3
Upper-middle income	83.1	170.2	167.3
Developing world (132)	61.7	110.5	167.3

Source: Own estimates based on PovcalNet.

Notes: Monthly amounts are population-weighted averages of country-level figures and are expressed in international dollars at 2011 PPP exchange rates.

month per beneficiary, and \$110.5 a month if such transfer equals half the median per capita income. Because these options are responsive to prevailing standard of living in each country, monthly basic incomes computed for the poorest countries, mainly in SSA and South Asia, are well below the global figures. This is in contrast to regions with higher living standards, where the size of TBI per beneficiary increase significantly in comparison with the former regions and in relation to the developing world's average. For instance, the size of the per beneficiary transfer under the top-up scheme in ECA and LAC is 2–3 times larger than the global average.

Finally, Figure 4 plots the amounts of TBI per beneficiary in each country. Starting with those derived from the top-up option, the data reveals that the largest monthly transfers, above \$100 per beneficiary, are observed mostly in ECA and LAC, as these regions have a relatively high vulnerability threshold of \$13 a day, given their median standard of living and with a tendency to increase, as expected, the poorer a country is. A similar tendency is observed at the bottom of the plot, where the size of transfers ranges \$15–\$100 per beneficiary in the remaining four regions, with the largest amounts being observed among the poorest countries.

The opposite pattern is observed for the half median income scheme, with the largest amounts per beneficiary, above \$250 per month, being observed in 19 richer

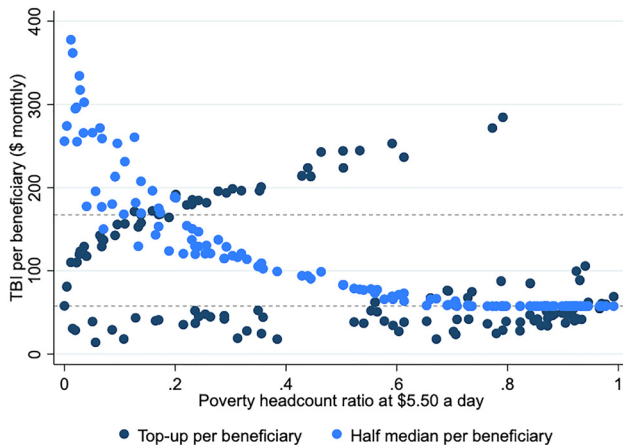


Figure 4: Potential TBI per beneficiary under different schemes (\$ monthly).

Source: Own estimates based on World Bank, PovcalNet.

Notes: Monthly amounts are expressed in international dollars at 2011 PPP exchange rates. The dashed horizontal lines represent the monthly amount per beneficiary of the following uniform transfers: \$5.50 a day (upper line) and \$1.90 a day (lower line). The total costs and amounts per beneficiary in each country are shown in Table A1 in the Supplementary Material.

countries (16 of which in ECA and LAC), whereas the lowest, between \$58 and \$70 per month, is observed in 56 low-income and lower-middle-income countries, of which 38 are in SSA and seven in EAP. The plot also illustrates that the option of a TBI of \$1.90 a day (\$57.8 per month) proposed in an earlier analysis as an emergency relief (Lakner et al., 2020) might delimit the lower bound of a temporary transfer (lowest dashed line).

3.3 Capacity of TBI Schemes to Mitigate the Increase in Pandemic-Induced Poverty

Would these potential TBI schemes have been sufficient to mitigate the short-term increases in poverty induced by the pandemic? To address this question, this subsection presents estimates of the cost of the *minimum* TBI that would have mitigated the countries' short-term poverty increases in 2020 across the developing world, and compares it to the cost of the *original* TBI schemes proposed above.

The first step is to estimate the pandemic-induced increase in poverty. For this, the analysis exploits the dataset and counterfactual approach in Fajardo-Gonzalez et al. (2021). That is, countries' distributions of per capita income in 2019 are projected to 2020 using country-specific forecasts of GDP per capita growth to produce two scenarios of per capita income: that after considering the economic contraction, and that which would have prevailed in the absence of the pandemic.⁸ The increase in poverty that could be attributable to the pandemic is then derived by the difference in the poverty headcount ratios between the two scenarios. In Fajardo-Gonzalez et al. (2021), two different projections of per capita income between 2019 and 2020 for the scenario that accounts for the effects of the pandemic are computed (and included in the analysis of this subsection): a distribution-neutral projection where all the population in each country faces the same income change, proportional to the change in GDP per capita, and a regressive projection, where the contraction hits harder the incomes of the bottom 60% of the population—with a proportional adjustment among the top 40%, thus holding the economy-wide contraction unchanged, while allowing for inequality to increase slightly.

⁸ The first scenario used the country-specific forecasts, as of October 2019, of GDP per capita growth that would have prevailed in 2020 had the pandemic not occurred. The second uses the forecasts, as of April 2021, after considering the pandemic-induced economic contraction. This approach is the same as that used in Lakner et al. (2020, 2021) and, as in the latter, it assumes that only 85% of the growth in national accounts is passed through to household's income or consumption.

Table 5: Minimum monthly cost of a TBI to mitigate the pandemic-induced increase in poverty under different economic contractions, by regions and income groups (\$ billion and % of regions' and income groups' GDP).

	Monthly cost (billion)		Monthly cost (% GDP)	
	Neutral	Regressive	Neutral	Regressive
East Asia and Pacific	26.25	35.87	0.09%	0.12%
Europe and Central Asia	20.25	26.05	0.19%	0.24%
Latin America and the Caribbean	48.68	75.76	0.51%	0.80%
Middle East and North Africa	10.51	14.84	0.27%	0.39%
South Asia	65.49	94.13	0.58%	0.83%
Sub-Saharan Africa	12.33	17.49	0.30%	0.42%
Low-income	6.46	4.91	0.59%	0.45%
Lower-middle income	94.15	136.89	0.50%	0.72%
Upper-middle income	75.68	110.31	0.16%	0.24%
Developing world	183.51	264.14	0.26%	0.38%

Source: Own estimates based on World Bank, PovcalNet.

Notes: Monthly amounts are expressed in international dollars at 2011 PPP exchange rates. The values of the poverty lines to compute the increases in poverty vary across regions (see Subsection 3.1).

Based on these inputs, a minimum TBI *mitigates* all the short-term pandemic-induced increase in poverty if the incidence of poverty after accounting for both the economic contraction and the TBI transfer is less or equal than the incidence of poverty had the pandemic not occurred. The poverty lines used to compute the poverty headcounts, and derive the pandemic-induced increase, are the same than those described in Subsection 3.1 above, i.e. \$1.90 a day for countries in SSA and SAS, \$3.20 a day for countries in EAP and MENA, and \$5.50 a day for countries in ECA and LAC.

Table 5 summarises the cost of such a minimum TBI—total and by region and income group—under the distribution-neutral and regressive contractions. The developing world's monthly cost of a TBI delivered to all poor and vulnerable people and enough to mitigate poverty increases under a distribution-neutral contraction reaches \$183.5 billion, or 0.26% of the developing world's GDP (i.e. slightly less than the monthly cost of \$199.9 billion under the top-up scheme in subsection 3.2), and it raises up to \$264.1 billion, or 0.38% of the developing world's GDP, under the regressive contraction (i.e. close to the monthly cost of \$257 billion for the half median scheme).⁹

⁹ A scenario where only the increases in extreme poverty across all countries are mitigated—as measured with the \$1.90 a day poverty line—is also computed and presented in Table A2 in the Supplementary Material. The results suggest that, under a distribution-neutral contraction, the monthly total cost of such a TBI reaches \$142.5 billion, or 0.20% of the developing world's GDP,

Focusing on regions, under the distribution-neutral contraction, the monthly cost of the minimum TBI is below 0.60% of the annual GDP for all regions, ranging from 0.09% in EAP and 0.19% in ECA to 0.51 and 0.58% in LAC and SAS, respectively. Under the regressive contraction, as expected, the monthly cost of this minimum TBI raises relative to the distribution-neutral contraction in all regions (reaching in LAC and SAS up to 0.80–0.83% of their GDP), although such a cost is still below 1% and in line with the costs of the top-up and half median income schemes estimated in Subsection 3.2 above.

Seen by income groups, the monthly cost of the minimum TBI to mitigate poverty increases, relative to each group's annual GDP, are substantially higher in both LIC and LMIC than in UMIC. For instance, under the distribution-neutral contraction, the cost reaches 0.50–0.59% of GDP in the first two groups, but only about 0.16% in UMIC. Comparing the costs under this contraction and the regressive one, the monthly costs increase in the latter in both LMIC and UMIC, but decrease in LIC (from 0.59 to 0.45% of LIC's GDP). The latter is a feasible result when the income distribution is such that the regressive contraction yields less people pushed back into poverty, compared to the distribution-neutral contraction. This happens because a larger shock at the bottom hits people who were already poor before the pandemic, while those non-poor people at the top, who are hit by a relatively more moderate shock, were those who fell into poverty under the distribution-neutral contraction.

Figure 5 compares the monthly cost of this minimum TBI to mitigate poverty increases with the cost of the three TBI schemes proposed in the previous subsections (i.e. top-up, half median, and uniform transfers). The results suggest that any of the latter three schemes would be enough to mitigate all the pandemic-induced increase in poverty (i.e. 'pay' for the mitigation costs) under a distribution-neutral shock in all regions, with the only exception of SAS where only the uniform transfers scheme would cover the costs. The cost of mitigating the poverty increase under a regressive shock, on the other hand, would not be covered by any of the three proposed TBI schemes in LAC, and only the costliest TBI scheme (i.e. uniform transfers) would suffice in both MNA and SAS. By contrast, the increase in poverty under such a regressive contraction could be mitigated even with the cheapest TBI scheme (i.e. top-ups) in both ECA and SSA.

while in the case of a regressive contraction it would have reached \$198.2 billion, or 0.28% of the developing world's GDP.

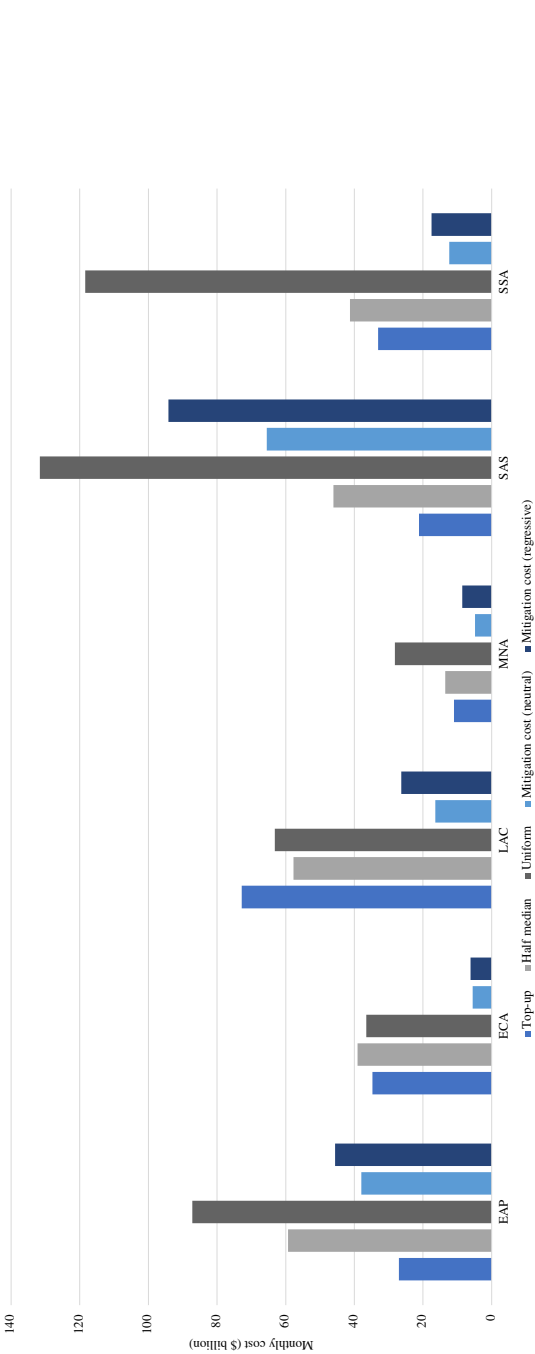


Figure 5: Monthly cost of potential TBI schemes and minimum TBI to mitigate the increase in poverty under different scenarios, by region (\$ billion and % of regions' GDP).

Source: Own estimates based on World Bank, PovcalNet.

Notes: Monthly amounts are expressed in international dollars at 2011 PPP exchange rates.

4 Implementation Challenges

In most developing countries, the counter-factual to a TBI is not *nothing* but expanding existing social assistance or social insurance programmes to reach diverse populations with various eligibility and targeting criteria and payment schemes. There are at least three hard implementation challenges involved in a TBI rollout: administrative targeting and payments, fiscal space and funding, and political economy issues. Unlike many of the systemic challenges implied by a UBI, the TBI poses, mostly, an emergency implementation challenge: it is about reaching as many excluded people as possible within a short period of time.

The first obstacle is administrative and digital. How to reach those eligible individuals—citizens and resident non-citizens living with less than the value of the vulnerability threshold—who are currently invisible to existing administrative registry and payment systems? There is an extensive literature on the costs of targeting that analyses errors of inclusion, both external and internal, eligibility criteria, either universal or categorical, and targeting means, that is, means and proxy-means testing, geographic and self-selection mechanisms, among others (see Gentilini, Grosh, Rigolini, & Yemtsov, 2020b; Hanna & Olken, 2018; Lowe, Grosh, George, & Gentilini, 2020). The literature suggests a pecking order of feasibility by administrative cost: a *low-cost* ideal type involves universal eligibility or self-selection criteria that reduces exclusion errors and targeting costs to a minimum, serviced by digital payment and mobile money mechanisms in contexts of high financial inclusion and high digital inclusion; a *high-cost* ideal type involves in-kind transfers, with proxy-means testing with multiple eligibility criteria, associated with high exclusion errors and high marginal targeting costs, serviced by cash payment systems in the absence of digital payments and inclusion (see Devereux et al., 2017). The administrative challenges for a TBI rollout stand somewhere in between.

Most developing countries combine features of *both* ideal types. Most countries have unified registry systems that cover a portion of those under a poverty or vulnerability threshold (see Kidd & Athias, 2019); they also have vast sectors of the population uncovered by registries, who do not have access to a bank account or mobile money accounts. For most countries, a TBI will involve both topping-up existing unified social registry systems and directing lump-sum payments to excluded individuals through digital registration campaigns. This is precisely what a number of countries have started doing since the COVID-19 crisis hit. Some uncovered or unregistered people are beyond the traditional reach of the state because they lack formal documentation or live in remote areas or informal settlements. In some cases, alternative solutions such as partnering with local social

networks that have greater proximity to poor and vulnerable people may be necessary to fill in for an absent state (Lustig & Tommasi, 2020). The cost of *adding* each new household is not insignificant, but pales in comparison to the direct and indirect benefits of reaching those with a TBI in comparison.

The second challenge concerns fiscal space and funding. Given the temporary nature of the challenge, we exclude additional taxation, natural resource royalties or pension earmarks, and focus on three pockets of existing resources: repurposing fiscal resources directed to external debt repayment (through temporary debt standstills); repurposing energy subsidies, no-harm and wasteful expenditures during the crisis; and self-funding through potential multiplier effects of temporary cash transfers that will partially be recouped through direct and indirect taxation. Each of these has its own set of challenges, but together might provide enough funding for a TBI across the developing world under some of the options reviewed in the previous section.

The largest pocket of resources comes from repurposing external debt service repayments through a comprehensive debt standstill. While a TBI for developing countries could cost less than 1% of their combined GDP per month (see Table 2 above), the distribution is unequal: for the vast majority of the 56 upper-middle-income countries considered, any of the three TBI options will amount to less than 1% of their GDP, whereas for some of the 30 poorest, low-income countries in the world it could reach well beyond 5% and in some cases up to 15–20% of their own GDP (see Table A1 in the Supplementary Material). At the global level, developing countries were expected to pay \$3.1 trillion in debt service in 2020, \$1 trillion of which is long term debt and \$2.1 trillion of which is short term debt (World Bank, 2020). A comprehensive debt service standstill alone will fund the equivalent of a 16-month TBI under the top-up option, a 12-month cash transfer under the hal median scheme, and up to 6–7 months of a uniform transfer of \$5.50 a day.

A second pocket of resources that can be repurposed for the COVID-19 response by many countries are energy subsidies, both to consumers and to producers. Sixteen countries currently spend over 2% of their GDP on energy subsidies (Coady, Parry, Le, & Shang, 2019). Besides fossil fuel subsidies, countries can also repurpose wasteful fiscal earmarks, benchmarked as inefficiency expenditures, and all non-essential expenditures. While inefficiency benchmarks have often been associated with graft, inefficient procurement systems, or inefficient allocation of investment or recurrent expenditures, they provide a proxy for emergency fiscal space: some benchmarking exercises put this figure at anywhere between 3 and 10% of GDP in developing countries (see, for instance, Tiffin, 2006).

Finally, emergency cash transfers have some of the highest fiscal multiplier effects among poor and vulnerable populations as they are often steered towards

immediate food and essentials consumption (Bastagli et al., 2016). Part of this effect will be captured by direct and indirect taxation over the following months, thus providing a degree of self-funding. Recent studies suggest that cash transfers are partially self-funding (see Hendren & Sprung-Keyser, 2020; Standing, 2017). Ultimately the yardstick for judging the fiscal impact of an unconditional cash transfer is context-specific and revolves around the alternative uses of such fiscal resources. The literature is still open on this question (Banerjee & Duflo, 2019; Banerjee, Niehaus, & Suri, 2019).

Nonetheless, certain countries may still be unable to fund some of the proposed TBI schemes for several months using only local revenues. A 6-month scheme in SSA, for instance, would be extremely difficult to fund as the top-up scheme would reach 4.5% of the region's GDP, whereas a half median income scheme would cost 5.7% of the GDP—nearly the region's annual health expenditure. A more modest scheme may be enough to mitigate the pandemic-induced increase in poverty with 1.8–2.5% of this region's GDP depending on the characteristics of the crisis—in regions such as LAC and SAS, however, a minimum six-month TBI scheme to mitigate the poverty increases would cost slightly more than 3% of each region's GDP under a distribution-neutral shock, and up to 5% under a regressive shock.

The third implementation challenge is political and can be unpacked in two steps. First, who benefits from a TBI, and how will that shape a political coalition for and against? Second, how will a TBI be unwound after the emergency? Similar challenges are faced by advanced economies implementing emergency furlough programmes, tax holidays, and social assistance top-ups—with the difference that developing country political coalitions are likely to face more political pressure and experience more volatility during implementation and graduation windows (De Wispelaere & Yemtsov, 2020).

A TBI signals a society's political resolve to provide a TBI *floor* to thrive or to survive during an acute crisis. It is not unlike topping-up the existing social assistance system but involves adding more beneficiaries or stakeholders during the emergency period. This expands the political coalition of beneficiaries, without necessarily expanding sources of funding. The literature has documented cases of *excluded* middle classes that feel threatened if either the sources of funding, or the target of expenditures, are not credible (see, for instance, Lee, 2020). How to ensure fiscal resources from a debt standstill, for example, are not repurposed for graft or directed to alternative purposes? One answer is using explicit third-party oversight: requiring a debt standstill to open a *country account* that is transparent to creditors, debtors, and citizens on both servicing and expenditures (see, for instance, Bolton et al., 2020). A second answer is requiring single lump-sum transfers that do not involve the expectation of recurrent expenditures, and do not

yield the threat of future taxation. This is, in fact, how most countries have been implementing their COVID-19 topping-up strategies.

How to ensure a temporary scheme does not perpetuate itself beyond the emergency period? While in theory a one-shot lump-sum requires no pre-commitment rule, in practice the feasibility of such an action is often tied to the degree of trust in government and expectations concerning future policy action. Not every government is able to repurpose fossil fuel subsidies or apply a *temporary tax* for this reason. Some governments may signal an explicit bridge to a future minimum income guarantee policy (as signalled by the Spanish government), but other governments will signal an emergency policy with no expectation of continued support. Furlough schemes and tax holidays in more formal settings often provide pre-set timelines and stick to a calendar. In informal settings, these pre-commitment schemes need to be supplemented by broad-based support, cross-party agreements, or third-party accountability. These are all political challenges that need to be addressed on a country-by-country basis.

5 Conclusion: Mitigating the Crisis

This paper focuses on estimating potential costs of unconditional income transfers to 1.07 billion poor and 1.71 billion vulnerable populations in developing countries, either top-ups on existing average incomes in each country up to a vulnerability threshold; lump-sum transfers that are sensitive to cross-country differences in median standard of living; or lump-sum transfers that are uniform regardless of the country where the population lives. This group of potential beneficiaries is defined by considering vulnerability thresholds that change in value depending on a region's living standard criteria.

The paper reviews some implementation challenges, including how to expand coverage and combine digital and cash payments systems to reach excluded populations; how to fund a TBI without raising new taxes, and how to begin to address the complex political economy challenges posed by implementing a temporary basic income floor. The idea of a TBI arises from an unprecedented set of responses to an unprecedented crisis. It is being rolled out under different names and with diverse targeting thresholds in countries around the world. It intersects with existing social assistance and insurance systems, but also with the idea of an entitlement-based Universal (or Unconditional) Basic Income (UBI) that secures a basic income floor for all people, regardless of means and behavioural testing or work considerations.

For now, the focus of policymakers is on mitigating the effects of a devastating crisis. The figures in this paper suggest that some forms of a TBI strategy is largely

within reach and can inform a larger conversation about how to address vulnerabilities worldwide through policy action.

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