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Universal Basic Income, Taxes, and the Poor

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Abstract

A Universal Basic Income (UBI) is often seen as an attractive policy option to replace existing targeted transfer and subsidy programs. However, in a budget-neutral switch to a UBI there is a trade-off between the generosity of the universal transfer, and hence its poverty impact, and the implied increase in tax burden. We summarize our results for fourteen low- and middle-income countries. We find that, with the exception of Russia, a poverty reducing, budget-neutral UBI would entail a significant increase in the net tax burden of top deciles. The efficiency cost and political resistance for such a policy would likely be too high.

Keywords: universal basic income, microsimulation, inequality, poverty, tax incidence
JEL codes: D31, D63, H22, I32, I38

Universal Basic Income, Taxes, and the Poor[1]

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Abstract

A Universal Basic Income (UBI) is often seen as an attractive policy option to replace existing targeted transfer and subsidy programs. However, in a budget-neutral switch to a UBI there is a trade-off between the generosity of the universal transfer, and hence its poverty impact, and the implied increase in tax burden. We summarize our results for fourteen low- and middle-income countries. We find that, with the exception of Russia, a poverty reducing, budget-neutral UBI would entail a significant increase in the net tax burden of top deciles. The efficiency cost and political resistance for such a policy would likely be too high.

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[1] This paper is based on Enami et al. [1] and Lustig, Jellema, and Martinez Pabon [2].

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Introduction

A Universal Basic Income (UBI) is often seen as an attractive policy option to replace existing targeted transfer and subsidy programs, whether in full or in part. The argument in favor of a UBI usually goes as follows: unlike targeted transfers, it provides an income floor; avoids the risk of exclusion errors; eliminates stigma; is administratively simple; and is politically appealing because potentially everyone could receive a net benefit [3]. A UBI can also avoid the potential efficiency costs (for example, on labor supply decisions) that means-based targeted programs may entail.

However, a budget-neutral transition from existing targeted programs to a UBI would result in reduced financial transfers to the poor. Even if spending on price subsidies was incorporated into the UBI budget, the universal nature of the transfers may still result in reduced transfers to the poor. The concept of tax justice is usually linked to the extent to which the tax (plus spending) system reduces postfiscal income inequality. From the fiscal incidence literature, however, we know the fiscal system may be progressive but increase poverty [4].[i] That is, although the distance between incomes may shrink, the absolute levels of postfiscal income for the bottom of the distribution may decline. In addition to reducing inequality, a fair tax system should avoid fiscal impoverishment—that is, situations in which the combination of taxes and transfers leave the poor with lower incomes. Therefore, when judging the impact of replacing existing transfers and subsidies with a UBI, one should assess whether this change generates or exacerbates fiscal impoverishment. Even if the latter does not occur, the poverty-reducing power of a UBI over other alternatives (including the existing system) should be a priority.[ii]

The potential negative effect on the poor from switching to a UBI could be tempered if the size of the UBI is allowed to increase beyond current spending on cash transfers and price subsidies. But if the goal for the policy change to be budget neutral was maintained, this increase in spending would need to be matched by increased taxes or reductions in spending on other categories. The increase in taxes, especially if the budget gap is financed with indirect taxes, could neutralize the benefit to the poor derived from a more generous UBI. Even when the budget-neutral switch to the UBI does not hurt the poor, the required increase in taxes may be too large to make the policy change feasible: the efficiency costs could make the policy self-defeating and/or political resistance could block it.

In sum, there is a trade-off between the generosity of a budget-neutral UBI (that is, its impact on poverty) and the necessary increase in tax burden. To illustrate this trade-off, here we summarize the results from previous research undertaken by the Commitment to Equity Institute (CEQI) by Enami et al. [1] and Lustig, Jellema, and Martinez Pabon [2]. These studies use microsimulations to estimate the impact on poverty and the effective tax rate in developing and upper-middle-income countries when existing transfers and price subsidies are replaced by a budget-neutral UBI with different levels of generosity. Specifically, the studies analyze ten low-

and lower-middle-income countries: Comoros, eSwatini, Ghana, India, Ivory Coast, Lesotho, Tanzania, Togo, Uganda, and Zambia; and four upper-middle- and high-income countries: Brazil, Chile, Russia, and South Africa.[iii]

Characteristics of Countries

Table 1 presents a description of the fourteen countries analyzed here. They feature a wide range of socioeconomic and fiscal characteristics. According to the World Bank classification system: Comoros, Tanzania, Togo, and Uganda are low-income countries; eSwatini, Ghana, India, Ivory Coast, Lesotho, and Zambia are lower-middle-income countries; Brazil and South Africa are upper-middle-income countries; and Chile and Russia are high-income countries. Countries are also diverse in terms of the size of transfers and taxes. Direct transfers in proportion to GDP range from zero percent in Ivory Coast and Uganda to 7.6 percent in eSwatini. Indirect subsidies range from 0.4 in Ivory Coast to 3.2 percent in Togo. Direct personal income taxes range from 0.8 in Ivory Coast to 9.1 percent in South Africa, and indirect taxes range from 5.4 in eSwatini to 17.1 percent in Togo.

Table 1: Country Characteristics

Country	Population (Millions)	GNI per capita ($PPP 2017)	Poverty headcount ratio (%), income class international poverty lines	Squared poverty gap (%), income class international poverty lines	Direct transfers (% of GDP)	Indirect subsidies (% of GDP)	Direct taxes (% of GDP)	Indirect taxes (% of GDP)
Low-Income Countries, $1.9 PPP Income Class International Poverty Line								
Comoros (2014)	0.8	2,999	13.6	1.6	2.1	na	2.3	6.0
Tanzania (2011)	45.7	2,061	49.8	6.7	0.1	1.2	2.7	9.8
Togo (2015)	7.3	1,982	36.7	6.2	0.1	3.2	1.1	17.1
Uganda (2016)	39.6	2,052	44.9	6.9	0.0	0.8	2.3	8.7
Lower-Middle-Income Countries, $3.2 PPP Income Class International Poverty Line								
eSwatini (2017)	1.1	7,845	49.5	10.5	7.6	na	4.6	5.4
Ghana (2013)	26.6	4,624	29.3	4.6	0.1	1.3	2.7	7.8
India (2012)	1109.0	4,529	61.4	9.0	0.5	2.9	1.9	11.1
Ivory Coast (2015)	23.2	4,322	52.4	10.0	0.0	0.4	0.8	11.2
Lesotho (2017)	2.1	3,031	51.6	17.1	5.0	0.9	5.7	8.1
Zambia (2015)	15.9	3,331	72.9	31.6	0.1	1.7	4.1	7.9
Upper-Middle-Income Countries, $5.5 PPP Income Class International Poverty Line								
Brazil (2015)	200.3	14,780	22.3	6.1	5.4	na	2.0	14.5
South Africa (2014)	54.8	13,701	57.4	27.1	3.0	na	9.1	8.8
High-Income Countries, $11.0 PPP Income Class International Poverty Line								
Chile (2015)	16.2	23,730	36.4	7.0	1.6	0.5	1.3	9.8
Russia (2016)	146.1	24,798	8.8	1.1	5.3	na	3.9	6.4

Notes: The poverty measures are for prefiscal income. Prefiscal income here is market income plus income from contributory pensions, see Figure 1 for details.

Source: Own elaboration based on Enami et al. [1] and Lustig, Jellema, and Martinez Pabon [2]. GNI per capita from the World Bank's World Development Indicators; accessed in February 2022. Direct transfers, indirect subsidies, direct taxes, and indirect taxes as a percentage of GDP from the CEQI Data Center on Fiscal Redistribution.

Baseline and UBI Scenarios: A Description

To show the potential trade-off between the generosity of a UBI—and, hence, its poverty impact—and the required increase in effective tax rates, the studies rely on microsimulation. They use it to construct prefiscal and postfiscal household income per person for each country and for the following three scenarios: (i) baseline, (ii) spending neutral, and (iii) poverty gap scenarios (Table 2).[iv]

Table 2: Scenarios

Scenario	Transfer per beneficiary
Baseline	The per capita value of direct cash transfers and subsidies received by each household in current fiscal system
UBI-Spending Neutral	Universal transfer equals current spending on cash transfers and consumption price subsidies divided by the total population
UBI-Poverty Gap	Universal transfer equals the average prefiscal poverty gap calculated with the World Bank Income Class International Poverty Lines; budget neutrality is achieved by increasing direct personal income taxes or indirect taxes

Source: Adapted from Enami et al. [1] and Lustig, Jellema, and Martinez Pabon [2].

The baseline scenario in Lustig, Jellema, and Martinez Pabon [2] uses harmonized microdata housed in the CEQI Data Center on Fiscal Redistribution that was generated from individual fiscal incidence studies based on household surveys conducted between 2010 and 2017.[v] These studies were produced using a common methodological framework described in Lustig [16]. Enami et al. [1] use household surveys and administrative information housed in the World Bank's Atlas of Social Protection Indicators of Resilience and Equity (ASPIRE) conducted between 2012 and 2016. Enami et al. [1] also use the fiscal incidence of taxes and consumption subsidies by decile available in the CEQI Data Center on Fiscal Redistribution.[vi]

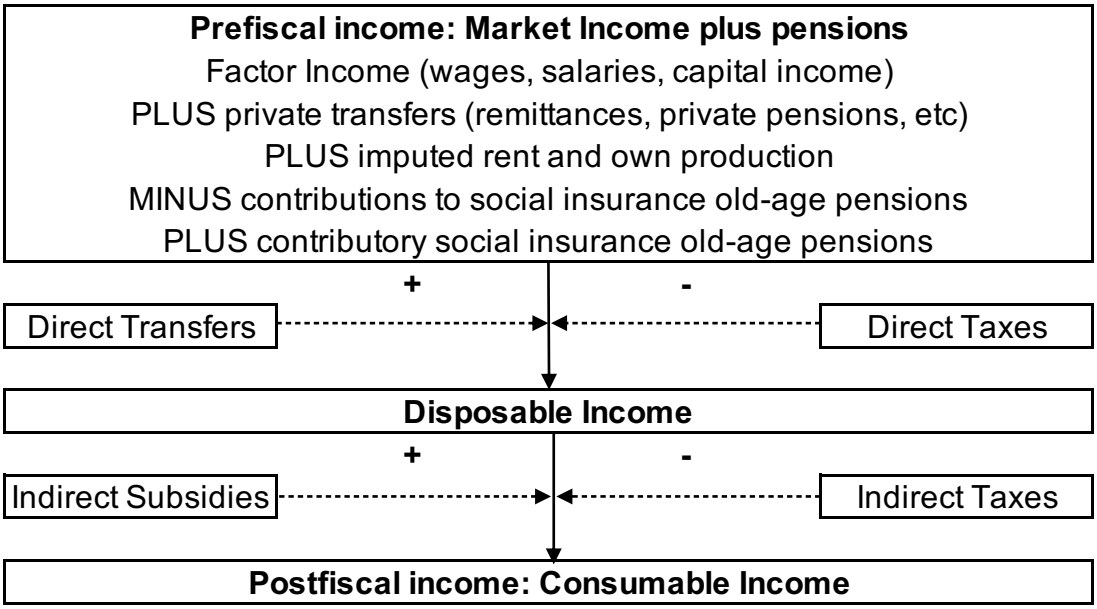
The budget-neutral UBI scenarios involve various combinations of cash transfers and taxes born by households. In both scenarios, consumption subsidies are eliminated. In the spending neutral scenario, current spending on transfers and subsidies is reallocated to the whole population as a uniform transfer. In the poverty gap scenario, the universal transfer is equivalent to the average poverty gap (measured by prefiscal income), and the funds saved from eliminating subsidies are added to the pool available to finance the universal transfer. Budget-neutrality is obtained by either increasing direct or indirect taxes. (Specifically, the baseline tax rates are multiplied by a constant factor calculated based on the financing gap (i.e., the needed additional budgetary resources)).[vii] This process implies that everybody's taxes are increased proportionally. These studies only

consider the intensive margin of tax changes. Rather than the taxpayer population increasing, those who already pay taxes are asked to foot the bill to ensure budget neutrality. Other options could have been to change the existing statutory progressivity of taxes (for example, by raising the tax rates on the rich proportionally more) and/or consider changing the extensive margin. The extensive margin could have been changed by lowering the threshold at which tax is paid or take greater steps to reduce tax avoidance and tax evasion. Such options were beyond the scope of the studies.

The two studies report poverty measures for the baseline and the budget-neutral scenarios. The poverty measures are the headcount ratio (incidence) and the squared poverty gap (severity), which is sensitive to the distribution of income within the poor. The poverty lines are the World Bank Income Class International Poverty Lines (in 2011 purchasing power parity dollars). There are three: US$1.9 a day for low-income countries, US$3.2 a day for lower-middle-income countries, and US$5.5 a day for upper-middle-income countries (see Jolliffe and Prydz [22]). Although there is not a World Bank poverty line for high-income countries, Enami et al. [1] compute a poverty line of US$11.0 a day for high-income countries (Chile and Russia in our sample) based on the methodology proposed by Ravallion and Chen [23].

In each scenario, poverty measures are estimated for prefiscal and postfiscal income. Prefiscal income is market income (labor income, income from capital, and private transfers) plus contributory pensions.[viii] Postfiscal income is consumable income, which equals prefiscal income minus both direct and indirect taxes, plus direct cash transfers and indirect subsidies (see Figure 1).

Figure 1: Income Concepts



Source: Adapted from Higgins and Lustig [25].

As already mentioned, the microsimulations consider two broad tax options to achieve budget neutrality: an increase in direct taxes on personal incomes (progressive throughout) and an increase in indirect taxes on consumption such as VAT, excise and sales taxes (more frequently neutral or regressive than progressive). The impact on net tax burdens (that is, the difference between the increase in transfers minus the increase in taxes) is assessed by the percent change in consumable income in the UBI scenario with respect to consumable income in the baseline.

The results summarized here used the so-called "accounting framework." They ignore behavioral and general equilibrium effects on labor supply, consumption patterns, and taxable income. In other words, they capture the first-round effects. While this is a limitation, first-round effects are considered a reasonable approximation for the short run. More importantly, if the simulated policies significantly increase the tax burden in the absence of labor supply and other behavioral responses, it functions as a cautionary tale. It suggests that behavioral responses would exacerbate the potential negative outcomes on the poor, net tax burdens, and the government's fiscal balance. Leaving out behavioral responses can be considered a lower bound of the negative effects that a UBI may entail.

UBI Scenarios: Impact on Poverty

Tables 3 and 4 present the poverty impact for the baseline and the UBI scenarios for the low- and lower-middle-income countries and the upper-middle- and high-income countries, respectively.[ix] In the poverty gap scenario, especially in low- and lower-middle income countries, there are cases in which the increase in taxes required to meet budget neutrality is such that postfiscal incomes become negative (for a subset of households) or there is extreme reranking (i.e., the prefiscal top incomes end in the lower end of the distribution in the postfiscal scenario). Since these are cases that would never be considered policy options, they are removed from the set to be analyzed and are left blank in the tables.

The first result to note in Tables 3 and 4 is that, in the baseline scenario, the postfiscal headcount ratio is higher than the prefiscal one in all fourteen countries (see numbers in red font). In all low- and lower-middle-income countries except from eSwatini and Lesotho, the postfiscal squared poverty gap is also higher than the prefiscal one. The fact that the fiscal system may increase poverty is an undesirable result that is usually "caused" by the fact that the poor and near-poor pay consumption taxes (even if the personal income is not taxed) and receive very little in cash transfers and only a small share of total subsidies.

Thus, as mentioned in the introduction, one first consideration while examining the UBI scenarios is whether postfiscal poverty is no longer higher than prefiscal. That is, whether fiscal impoverishment persists. The cells that are highlighted in grey in Tables 3 and 4 refer to the cases in which higher postfiscal (than prefiscal) poverty persists. Under the spending neutral scenario,

postfiscal poverty indicators are always higher. Therefore, if the main concern is to ensure that postfiscal poverty is no longer higher than prefiscal poverty, a spending neutral scenario will not meet this criterion.

What happens if one increases the generosity of the UBI transfer? We chose to define the more generous UBI as the average poverty gap because if it was perfectly targeted, it would eliminate poverty. The cases in which postfiscal poverty is higher than prefiscal poverty are highlighted in grey. Under the poverty gap scenario, among the low- and lower-middle-income countries, the postfiscal poverty indicators are lower than prefiscal poverty in Ghana, India, Togo, and Zambia (Table 3). In particular, postfiscal poverty is lower than prefiscal poverty for India and Zambia when the financing gap is funded with direct taxes. For Ghana, India, and Togo, the conditions are satisfied when the financing gap is funded with indirect taxes. For the four richer countries, the poverty condition is fulfilled in all four regardless of whether the gap is funded with direct or indirect taxes (Table 4).

In sum, in eight of the fourteen countries, the poverty gap scenario would yield postfiscal poverty lower than prefiscal poverty using both the headcount ratio and the squared poverty gap index. Furthermore, as shown in Tables 5 and 6, for all the countries that fulfill the last condition, postfiscal income for the poorest deciles is higher in the poverty gap scenario than in the baseline: that is, the prefiscal poor, on average, improve their income levels throughout.

Table 3: Poverty Impact for Baseline and UBI Simulated Scenarios in Low-Income and Lower-Middle Income Countries, Income Class International Poverty Lines

Country	Year of Survey	Income Class International Poverty Lines	Prefiscal income poverty headcount ratio (%)	Postfiscal income poverty headcount ratio (%)					Prefiscal income squared poverty gap (%)	Postfiscal income squared poverty gap (%)				
				Baseline	Spending Neutral Scenario		Poverty Gap Scenario			Baseline	Spending Neutral Scenario		Poverty Gap Scenario	
					DT	IT	DT	IT			DT	IT	DT	IT
Comoros	2014	1.9	13.6	14.1	14.1	14.1			1.6	1.7	1.7	1.7		
eSwatini	2017	3.2	49.5	50.1	50.2	50.2			10.5	9.4	9.9	9.9		
Ghana	2013	3.2	29.3	31.5	30.4	30.4		22.0	4.6	5.1	4.4	4.4		1.6
India	2012	3.2	61.4	65.8	63.7	63.6	47.6	60.2	9.0	10.6	9.1	9.0	3.1	4.1
Ivory Coast	2015	3.2	52.4	54.6	54.6	54.6			10.0	10.6	10.5	10.5		
Lesotho	2017	3.2	51.6	53.3	53.5	53.5			17.1	13.6	15.3	15.3		
Tanzania	2011	1.9	49.8	58.0	57.9	57.9		50.4	6.7	8.6	8.2	8.2		3.3
Togo	2015	1.9	36.7	42.7	42.7	42.7		34.4	6.2	7.7	7.7	7.7		2.6
Uganda	2016	1.9	44.9	47.2	46.7	46.7			6.9	7.4	7.1	7.1		
Zambia	2015	3.2	72.9	73.6	73.5	73.5	46.3		31.6	31.7	30.9	30.9	2.1	

Note: Numbers in red refer to the cases when postfiscal poverty is higher than the prefiscal one in the baseline scenario. The scenarios highlighted in grey fail to meet the condition that the postfiscal poverty measures are not higher than the prefiscal ones. Cells left blank are the scenarios which resulted in negative postfiscal incomes or extreme reranking.
Source: Own elaboration based on Enami et al. [1] and Lustig, Jellema and Martinez Pabon [2].

Table 4: Poverty Impact for Baseline and UBI Simulated Scenarios in Upper-Middle-Income and High-Income Countries, Income Class International Poverty Lines

Country	Year of Survey	Income Class International Poverty Lines	Prefiscal income poverty headcount ratio (%)	Postfiscal income poverty headcount ratio (%)					Prefiscal income squared poverty gap (%)	Postfiscal income squared poverty gap (%)				
				Baseline	Spending Neutral Scenario		Poverty Gap Scenario			Baseline	Spending Neutral Scenario		Poverty Gap Scenario	
					DT	IT	DT	IT			DT	IT	DT	IT
Brazil	2015	5.5	22.3	25.5	26.3	26.3	16.3	19.4	6.1	5.5	6.6	6.6	1.9	2.3
Chile	2015	11.0	36.4	41.1	41.7	41.7	30.4	34.4	7.0	6.8	7.3	7.3	2.2	3.2
Russia	2016	11.0	8.8	9.1	9.2	9.2	7.2	7.7	1.1	1.0	0.9	0.9	0.5	0.5
South Africa	2014	5.5	57.4	60.3	59.6	59.5	41.2	51.6	27.1	19.9	23.1	23.1	3.5	5.9

Note: Numbers in red refer to the cases when postfiscal poverty is higher than the prefiscal one in the baseline scenario. The scenarios highlighted in grey fail to meet the condition that the postfiscal poverty measures are not higher than the prefiscal ones. Cells left blank are the scenarios which resulted in negative postfiscal incomes or extreme reranking.
Source: Own elaboration based on Enami et al. [1].

UBI Scenarios: Impact on Net Tax Burdens

As shown in the previous section, a UBI equal to the average poverty gap represents a better option for the poor than the pre-existing distribution of transfers and price subsidies in eight of the fourteen countries. Thus, in principle, for these countries such a UBI might be an attractive option: it would provide a universal income floor while at the same time improve the income levels for the prefiscal poor over and above the baseline. Importantly, in none of these cases would postfiscal poverty be higher than prefiscal poverty under the UBI (as long as for the poorer set of countries the budget gap is financed with direct or indirect taxes depending on the outcome). We now turn to the impact on net tax burdens of those who will need to foot the bill to ensure budget neutrality.

The change in the net tax burden under the UBI scenarios is the difference between the change in direct transfers minus the change in direct and indirect taxes. Since prefiscal income in the baseline and UBI scenarios are the same by assumption, the net tax burden is mathematically equal to the change in postfiscal income of each considered UBI scenario minus postfiscal income in the baseline. Tables 5 and 6 present the percent change in postfiscal income under the poverty gap scenario compared with the baseline's postfiscal income by decile for the cases that met the poverty condition described in the previous section. Given the findings discussed in the above section, the spending neutral scenario has been eliminated because it does not fulfill the poverty criteria. Note that a positive (negative) value means that, on average, that decile received more (less) in transfers than it paid in taxes under the considered UBI scenario.

Under the poverty gap scenario, in all countries meeting the poverty criterion, the reform is progressive: that is, the incidence of net transfers decreases with income (Tables 5 and 6). Moreover, all deciles are net beneficiaries except for the top deciles. In all countries, the tenth decile is always a net payer of the UBI and in some countries the eighth and ninth deciles are net payers too.

Under the poverty gap scenario, however, the change in postfiscal income for the top decile is significant in all cases except for Russia. In the low- and lower-middle-income countries, when compared against the baseline postfiscal income, the decline ranges from 12 percent in Ghana to 41 percent in Zambia (Table 5). In the upper-middle- and high-income countries, it ranges from 1.7 percent in Russia to 27.3 percent in South Africa (Table 6). The change in the net tax burden shows that the potential efficiency costs could be significant. These costs could take the form of disincentives to work or strategies to affect taxable income (such as leaving earnings as part of undistributed profits because the latter usually face lower tax rates than personal income).

Moreover, if there is a "salience effect" (that is, people react to the increase in taxes without considering how much they receive in additional benefits under the UBI), the political resistance to such a reform could be significant too. In low- and lower-middle-income countries, the lowest

required increase in the average effective tax rate is in Ghana (for the case when the financing gap is funded with indirect taxes), where the average effective tax rate could rise 95 percent (from 10.6 percent to 20.7 percent). Likewise, the required increased in the average effective tax rate is also substantial for the upper-middle- and high-income countries. The lowest required increase is for indirect taxes in Russia, but even in this case, the increase is large: 37.7 percent (from 9.1 percent to 12.5 percent).

Table 5: Percent Change in Postfiscal Income between UBI Scenarios and the Baseline in Low-Income and Lower-Middle Income Countries

Decile	Ghana (2013) Poverty Gap Scenario IT	India (2012) Poverty Gap Scenario IT	Togo (2015) Poverty Gap Scenario IT	Zambia (2015) Poverty Gap Scenario DT
1	65.3	37.4	75.9	592.8
2	33.8	27.3	38.1	333.3
3	21.8	20.5	23.9	241.6
4	14.7	17.2	16.3	183.1
5	8.9	10.9	9.7	138.6
6	4.5	7.5	4.8	104.3
7	0.6	2.8	0.0	76.7
8	-3.0	-1.5	-4.1	48.9
9	-6.5	-8.1	-8.3	-3.5
10	-12.0	-18.9	-15.6	-41.0

Note: Deciles marked in red are under the income class international poverty line in the prefiscal income. The scenarios which fail to meet the condition that the postfiscal poverty measures are not higher than the prefiscal ones or which resulted in negative postfiscal incomes or extreme reranking are not shown.
Source: Own elaboration based on Enami et al. [1] and Lustig, Jellema and Martinez Pabon [2].

Table 6: Percent Change in Postfiscal Income between UBI Scenarios and the Baseline in Upper-Middle-Income and High-Income Countries

Decile	Brazil (2015)		Chile (2015)		Russia (2016)		South Africa (2014)	
	Poverty Gap Scenario		Poverty Gap Scenario		Poverty Gap Scenario		Poverty Gap Scenario	
	DT	IT	DT	IT	DT	IT	DT	IT
1	48.2	37.8	56.3	39.8	4.5	2.5	163.7	128.0
2	37.4	28.3	37.2	25.2	4.2	2.6	132.9	101.6
3	26.9	19.2	25.4	17.2	3.5	2.4	106.1	78.7
4	19.1	12.7	18.6	12.3	2.5	1.6	83.7	59.1
5	14.5	8.8	13.8	8.7	2.3	1.5	68.0	43.4
6	10.6	5.7	10.0	5.9	0.7	0.3	50.2	27.8
7	6.7	2.8	6.4	3.0	1.0	0.5	33.8	14.8
8	3.0	0.2	3.5	0.2	-0.7	-0.5	5.5	1.4
9	-2.2	-2.9	-0.2	-3.5	-1.2	-0.6	-13.8	-9.9
10	-13.9	-8.0	-17.8	-9.6	-2.6	-1.7	-27.3	-17.2

Note: Deciles marked in red are under the income class international poverty line in the prefiscal income. The scenarios which fail to meet the condition that the postfiscal poverty measures are not higher than the prefiscal ones or which resulted in negative postfiscal incomes or extreme reranking are not shown.
Source: Own elaboration based on Enami et al. [1].

Main Policy Conclusion

Implementing a budget-neutral UBI that does not hurt the poor could be quite challenging. With pre-UBI levels of spending on transfers and subsidies, when present, fiscal impoverishment is likely to persist. In the best of cases the poverty reducing effect will be smaller than under the current programs. The negative effects on poor people's postfiscal income from switching to a UBI could be tempered if the funds available for such a change go beyond current spending on cash transfers and price subsidies. If the goal for the policy change to be budget neutral was maintained, however, this increase in spending would need to be matched by increased taxes or reductions in spending on other categories. Our results suggest that if budget neutrality is to be achieved by raising direct or indirect taxes paid by households, the implied increase in tax burdens for top deciles would be significant, even if the progressivity of tax rates remains unchanged. Efficiency costs and political resistance could make such a policy change a nonstarter in most low- and middle-income countries. Of course, the pressure on tax burdens could be eased by lowering the generosity of the UBI transfer. However, this would hurt the poor. Such a trade-off needs to be carefully assessed before introducing a UBI reform.

In our exercise, we have considered achieving budget-neutrality by raising direct or indirect taxes on tax-paying households.[x] Nevertheless, other options and their implications should be explored as well. For example, budget-neutrality could be achieved by increasing the tax base

rather than just increasing the taxes on current taxpayers. One of the big challenges is to address informality and the fact that as more low-income individuals are turned into taxpayers, the chances that the fiscal system results in making the poor poorer increase [26].

Another option would be to resort to other sources of revenue, such as corporate taxes and to crack down on deliberate tax evasion schemes. Whether corporate taxes can be raised will depend on how much corporations are already being taxed. If taxes are "too high" compared with other countries, this may lead to corporations moving elsewhere [27]. Cracking down on evasion schemes is not impossible but it requires unwavering political will. Moreover, an important aspect often overlooked is that the burden of higher statutory corporate taxes or better enforcement schemes may fall on wage earners and/or consumers, including low-income ones. Who ultimately pays for the higher tax collection depends on the extent to which corporations are able to shift the higher taxes forward, which in turn depends on demand and supply characteristics in labor and product markets.

Lastly, governments could create more fiscal space by introducing changes on the spending side, such as cutting spending elsewhere or making government spending more efficient. Clearly, governments have a margin to improve the efficiency of their spending, cut wasteful spending, and crack down on corruption [28]. However, it is also the case that in low-income countries in particular, the needs are daunting. If to finance a UBI governments would need to reduce spending on education, health or infrastructure, for example, this may not only worsen living conditions for the poor in the short term but could exacerbate the intergenerational transmission of poverty.

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[i] This outcome does not contemplate imputing benefits from in-kind transfers such as the value of public spending on education and health (imputed at their government cost to families who report a child attending public school or using public health facilities).
[ii] These criteria are consistent with the distributive justice principles of Prioritarianism [5][6].
[iii] Results for Brazil, Chile, India, Russia, and South Africa are based on Enami et al. [1] and for Comoros, eSwatini, Ghana, Ivory Coast, Lesotho, Tanzania, Togo, Uganda, and Zambia come from Lustig, Jellema, and Martinez Pabon [2].
[iv] Both studies explore other scenarios as well but for the purpose of this note, the three covered here suffice to illustrate the main points.
[v] The description of the fiscal systems and specific assumptions for each country can be found in: Comoros [7]; eSwatini [8]; Ghana [9]; Ivory Coast [10]; Lesotho [11]; Tanzania [12]; Togo [13]; Uganda [14]; and Zambia [15].
[vi] The description of the welfare systems and specific assumptions for each country can be found in Table 3 and Appendix 1 in Enami et al. [1], and in Brazil [17], Chile [18], India [19], the Russian Federation [20], and South Africa [21].
[vii] The spending neutral scenario may require an adjustment in taxes to keep it budget-neutral after the transfers are redistributed among beneficiaries and taxes paid change "mechanically." In Enami et al. [1], the spending neutral scenario is allowed to adjust with direct or indirect taxes, while in Lustig, Jellema and Martinez Pabon [2] this adjustment is omitted. While this introduces a factor that makes the two studies not strictly comparable, the "mechanical" changes are sufficiently small so that ignoring them will not affect the conclusions.
[viii] This corresponds to the case in which contributory pensions are treated as pure deferred income rather than a government transfer. For details, see Lustig and Higgins [24].
[ix] In Lustig, Jellema and Martinez Pabon [2], the scenarios are presented for two alternative fiscal options. In the lower bound option, total subsidies and taxes are equal to what is obtained from the incomes captured in the survey. In the upper bound option, total subsidies and taxes are equal to the amounts reported in administrative accounts. Here, for the sake of comparability, we present the lower bound option.
[x] Additional results discussed in Lustig, Jellema, and Martinez Pabon [2] show that even when the simulation accounts for resources outside of the survey, the poverty gap UBI scenario is still inviable economically in low- and lower-middle-income countries.