



ADDRESSING THE COST-OF-LIVING CRISIS IN DEVELOPING COUNTRIES:

Poverty and vulnerability projections
and policy responses

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Addressing the cost-of-living crisis in developing countries: Poverty and vulnerability projections and policy responses

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The ripple effects of the war in Ukraine have disrupted energy and food markets. Among many other factors, supply chain disruptions and price spikes in key commodities have been pushing the world towards a precarious inflationary surge. This will have immediate and devastating effects on household welfare—with those in poverty and near-poverty typically hit hardest due to their higher energy and food budget share—posing significant policy challenges to governments during the response. This paper estimates the potential effects of food and energy inflation on global poverty and vulnerability and simulates the welfare loss mitigation potential of two policy options: blanket energy subsidies and targeted cash transfers. The results suggest that soaring food and energy prices could push up to 71 million people into poverty, with clear hotspots in the Caspian Basin, the Balkans, and Sub-Saharan Africa (particularly in the Sahel). We find that targeted and time-bound cash transfers are the most effective policy tool to address the impacts.

Soaring food and energy prices

The war in Ukraine has severely disrupted global markets for food and energy due to both countries' large global market shares. Before the war, Russia was the world's largest and second biggest exporter of natural gas and crude oil, respectively, while Russia and Ukraine together accounted for almost a quarter of global wheat exports, 14 percent of corn exports, and more than half of sunflower oil exports (United Nations [Comtrade Database](#)).

A consequence of global market disruptions has been a further increase in energy and food prices—already on an upward trend after the first year of the pandemic and mainly driven by a recovering global demand with supply restrictions. More than two thirds of the 166.8 percent increase in natural gas over the twelve-month period ending on 31 May 2022 has been recorded since the start of the war on 24 February 2022. In the case of crude oil and its two main refined products, i.e., gasoline and heating oil, the post-invasion subperiod accounts for between half and 60 percent of the annual price increases and is also responsible for almost 40 percent of the annual price increase of wheat and for 60 to 75 percent of the annual price increases of corn and sunflower seed oil (Figure 1).²

Between half and two thirds of the 12-month international price increase in energy, sunflower seed oil and corn has occurred since Russia’s invasion of Ukraine, whereas for wheat and some of the main fertilizers, the contribution of the post-invasion subperiod ranges from 30 to 40 percent.

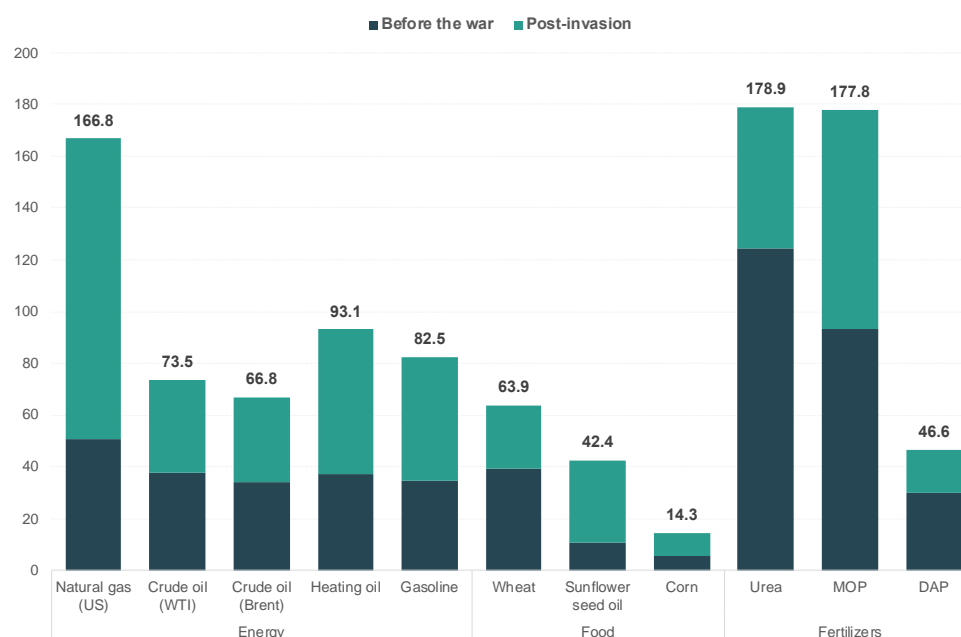


Figure 1: The chart plots the total percentage price increase of selected commodities over the 12-month period ending on 31 May 2022 (figures at the top of each bar) and its breakdown by subperiods before and after Russia’s invasion of Ukraine on 24 February 2022.

Source: Authors’ own elaboration based on daily energy and food prices from [Trading Economics](#) and on monthly prices for fertilizer from the World Bank Commodity Price Data ([The Pink Sheet](#)). *Notes:* MOP refers to muriate of potash (potassium chloride), and DAP refers to diammonium phosphate.

These price spikes have been sounding the alarm of a global inflationary surge not seen in years—partially because of feedback loop pressures (e.g., food production is highly energy-intensive) and soaring prices in other key commodities such as fertilizer (Figure 1), for which Russia is the world’s biggest player, accounting for more than 15 percent of global exports (United Nations [Comtrade Database](#)). The International Monetary Fund (IMF 2022) has projected an inflation rate in 2022 of almost 6 percent in advanced economies, the highest in four decades, and close to 9 percent in developing countries and emerging economies, the highest since the Great Recession. For the 103 countries for which information is available up to February 2022 in the latest version of the Global Database of Inflation (Ha, Kose and Ohnsorge 2021), the median annual inflation rate had reached 7 percent.

This global context exerts negative direct and indirect effects on developing countries’ economies and peoples. The global economy is expected to expand at a lower rate than previously forecast in the absence of the war—in 2022, 3.6 percent instead of 4.4 percent according to IMF (2022), or 2.9 percent instead of 4.1 percent according to World Bank (2022). In terms of people, the adverse effects tend to hit individuals’ livelihoods in the short- and medium-term. Recent estimates suggest that the current context has contributed to the world still having at least 75 million more people in poverty than what was expected had the pandemic, war, and food inflation not occurred (Mahler et al. 2022). Finally, such

effects seriously threaten people's lives. The intersection of pre-existing inflationary pressures and war-induced disruption of production and distribution of food can exacerbate food insecurity and the risk of famines (UN 2022)—mostly driven by drought, an estimated 49 million people in 46 countries currently live in near-famine-like conditions, with 750,000 people at immediate risk of starvation, of whom about 75 percent are concentrated in Ethiopia and Yemen (FAO and WFP 2022).

The magnitude of these adverse effects, however, is not homogeneous and greatly depends on countries' exposure to shocks and coping capacity. Based on several indicators of direct and indirect economic exposure (e.g., trade, migration and financial and investment flows) and resilience (e.g., fiscal space, foreign reserves or debt), Raga and Pettinotti (2022) constructed an index of vulnerability to the economic effects of the war for 118 low- and middle-income countries that are home to about 80 percent of the world's population. As expected, the index reveals that some of the most vulnerable countries are located in Europe and Central Asia due to their bilateral exposure to both Russia and Ukraine, though a large number of countries with medium-to-high vulnerability are found in the Middle East and North Africa and in Sub-Saharan Africa—especially those that are commodity importers and those with a high dependency on tourism and remittance flows.

What were poor and vulnerable households' expected trajectories for 2022, had the war not occurred, and how has the war changed that counterfactual picture? The analysis below quantifies the potential short-term impacts that soaring food and energy prices recorded up to April 2022 could have had on poverty and vulnerability to poverty.

Poverty and vulnerability impacts of food and energy price spikes

Scenarios and assumptions

The analysis exploits binned distributions of per capita household income in 2019. These distributions are derived from the World Bank and cover about 95 percent of the world's population across 159 advanced and developing countries.³ Changes in poverty and vulnerability-to-poverty headcount rates are computed from these distributions, projected forward to 2022, by following a counterfactual approach in the fashion of Mahler et al. (2020, 2022)—that is, by comparing the headcount rates resulting from household income had the war and its inflationary blow not occurred (benchmark scenario) with those calculated after accounting for the immediate income shock brought by the recent surge in food and energy prices (cost-of-living scenario).

Specifically, the *benchmark scenario* results from projecting the distributions from 2019 to 2022 using the growth rates between the observed value of countries' GDP per capita in 2019 and the corresponding value expected in 2022 in the absence of the war—as forecast in the IMF's World Economic Outlook Database (WEO) of October 2021.⁴ These projections consider countries' demographic changes and follow the standard practice that only 85 percent of the growth rate in GDP per capita is passed through to households (Lakner et al. 2022). An important caveat is that, given the lack of more detailed information, the projected changes in per capita household income are distribution-neutral.⁵

The *cost-of-living scenario*, on the other hand, takes the previous projected distribution and translates the recent food and energy price spikes into direct reductions in household income, which occur in a proportional magnitude determined by household budget shares for food by quintile and budget shares for energy by percentile. The data on the former come from Mahler et al. (2022), whereas those

on energy shares by percentile are derived from the Household Impacts of Tariffs database (Artuc, Porto and Rijkers 2019) (see Appendix A). The food and energy inflation rates are derived from the inflation database of Ha, Kose and Ohnsorge (2021) and countries' official statistics for the period October 2021 (presumably the month from which actual inflation was not factored in the 2022 forecasts in the WEO October 2021) and April 2022 (the latest available) (see Appendix A). Over this six-month period, the food and energy inflation rates reached an average of 9.5 and 8.7 percent, respectively.

This cost-of-living scenario is likely an upper bound, indicative only of the potential *immediate* shock on household income from soaring prices. At least two caveats are worth mentioning. First, this scenario assumes full pass-through of prices to households and that all households are net buyers of food and energy. Yet, a noticeable share of households, at least in the case of food items, are net sellers and would benefit from higher prices (see, e.g., Artuc et al. 2022). Second, the scenario omits changes in household behaviour and substitution effects as a response to price spikes, as well as new policy responses in the form of increased blanket subsidies, tax cuts or cash and in-kind transfers.⁶ In sum, whether the short-term poverty increases documented below persist over time will depend on how protracted the food and energy inflationary pressures are, on households' coping and adaptation strategies and on the capacity of governments to implement and sustain mitigation policies.

Changes in poverty and vulnerability-to-poverty

Using the distributions of per capita household income for both benchmark and cost-of-living scenarios, poverty headcount rates are quantified through typical international standards (per person, 2011 PPP): \$1.90 a day, the World Bank's standard of absolute poverty, and \$3.20 and \$5.50 a day, equivalent to the median values of the poverty lines among, respectively, lower-middle- and upper-middle-income countries (Jolliffe and Prydz 2016). For the measurement of vulnerability to poverty, the analysis uses a threshold of \$13 a day, which is associated with a low probability of falling into poverty at \$5.50 a day (see, e.g., Bussolo et al. 2018; Lopez-Calva and Ortiz-Juarez 2014).

Figures 2 and 3 (panel a) summarize our results. Compared to the benchmark, the poverty headcount based on the \$1.90-a-day poverty line increases by 51.6 million people after accounting for the food and energy inflationary pressures—from almost 624 million people to 675.5 million people, or from 8.3 percent to 9 percent of the world's population. The additional number of people falling into poverty at \$3.20 a day reaches up to 20 million, leaving the net cumulative figure at 71.5 million people and the headcount rate at 22.7 percent—almost one percentage point higher than in the benchmark. Notice that, globally, the number of those living on either \$3.20 to \$5.50 or \$5.50 to \$13 a day (i.e., those who are non-poor but vulnerable to falling into poverty) decreases slightly as more individuals are pushed below \$3.20 or \$1.90 a day. The total population in poverty or vulnerability to poverty adds up to a global figure of 5,164.1 million people (68.6 percent) under the cost-of-living scenario, i.e., 67 million people more than in the benchmark. Finally, the cost-of-living crisis could exacerbate the intensity of poverty—defined as the per capita shortfall in income as a percentage of the corresponding monetary threshold. Panel b of Figure 3 shows that, compared to the benchmark, the poverty gap could increase by 11.2 percent for the \$1.90-a-day poverty line (from 0.028 to 0.031) and by 7 percent for the \$3.20-a-day poverty line (from 0.077 to 0.082). This indicates that soaring food and energy prices has worsened the conditions of the existing poor population.

The increase in poverty at \$1.90 a day could push the global headcount rate upwards from 8.3 percent to 9 percent after the impact of soaring food and energy prices—at higher poverty lines, the global headcount could increase by about one percentage point.

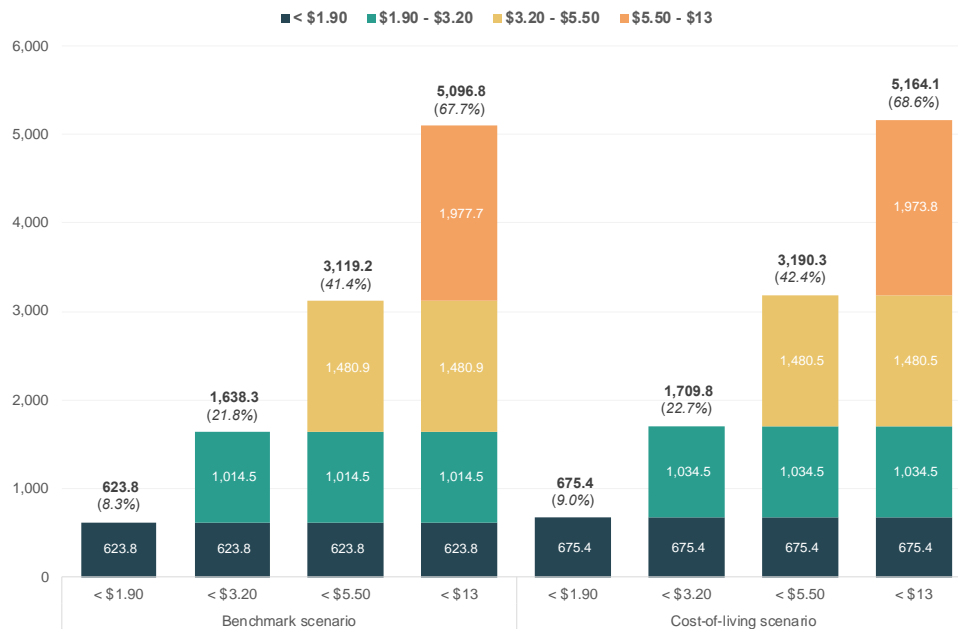


Figure 2: The chart plots projections of the number of people living in poverty and vulnerability to poverty under different monetary thresholds for both benchmark and cost-of-living scenarios (million people and percentages of the global population atop each bar). The figures within each bar's portions correspond to the population living either under \$1.90 a day or within the indicated intervals above \$1.90.

Source: Authors' own elaboration based on the sources described in the text.

The projected number of people falling into poverty at \$1.90 a day reaches 51.6 million after the short-term impact of soaring food and energy prices, and up to 71 million people if poverty is measured with higher poverty lines. The cost-of-living crisis could also worsen the conditions of the existing poor population.

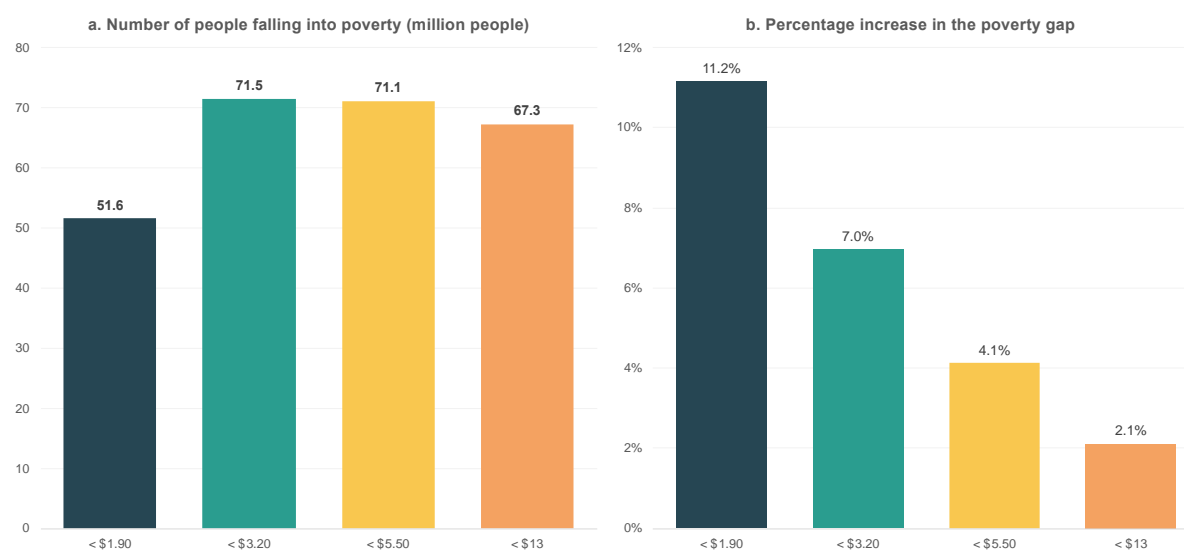


Figure 3: Panel a plots the number of people who could fall below different monetary thresholds as a result of soaring food and energy prices vis-à-vis the benchmark scenario (million people). Panel b plots the percentage increase in the poverty gaps estimated in the cost-of-living scenario vis-à-vis those estimated in the benchmark scenario.

Source: Authors' own elaboration based on the sources described in the text. *Notes:* The poverty gap is defined as the average shortfall in per capita income as a proportion of the corresponding monetary threshold. The gaps estimated for the \$1.90, \$3.20, \$5.50, and \$13-a-day thresholds are, respectively: 0.028, 0.077, 0.181, and 0.405 in the benchmark scenario, and 0.031, 0.082, 0.188, and 0.414 in the cost-of-living scenario.

Which countries are exposed to the largest global poverty impact? For each poverty line, the distribution of the proportional increases in poverty across countries, vis-à-vis the benchmark scenario, is broken down into categories of low, medium, and high poverty impact and plotted as a heatmap in Figure 6. Among those countries likely facing high poverty impacts across *all* poverty lines are Armenia and Uzbekistan in the Caspian Basin; Burkina Faso, Ghana, Kenya, Rwanda and Sudan in Sub-Saharan Africa; Haiti in Latin America; and Pakistan and Sri Lanka in South Asia. In these countries, around 3 percent of the population, on average, could fall into poverty. In Ethiopia, Mali, Nigeria, Sierra Leone, Tanzania and Yemen, the impacts could be particularly hard at the lowest poverty lines, whereas in Albania, Kyrgyz Republic, Moldova, Mongolia, Tajikistan and Ukraine, the hits could be hardest at \$5.50 a day.⁷ Clear geographical hotspots, depending on the poverty line, emerge in Sub-Saharan Africa, mainly in the Sahel region, the Balkans and the Caspian Basin (see Appendix B).

The group of countries facing the largest poverty impacts at \$1.90 or \$3.20 a day tends to be concentrated in Sub-Saharan Africa, particularly in the Sahel, whereas at \$5.50 a day the concentration occurs in the Caspian Basin and the Balkans.



Figure 4: The figure plots countries' poverty impacts under different monetary thresholds. The poverty impact is measured as the proportion of each country's population falling into poverty as a result of soaring food and energy prices vis-à-vis the benchmark scenario. The table at the bottom shows the average poverty impact for each poverty line and impact magnitude.

Source: Authors' own elaboration based on the sources described in the text.

The policy response trajectory

What works best at mitigating poverty impacts? Soaring food and energy prices impose tough challenges, especially for developing countries. There are normative and instrumental reasons to shield poor and vulnerable-to-poverty populations from risks of impoverishment and to prevent short-term shocks from translating into persistent economic deprivation. But in most countries, this needs to be done while not losing sight of other pressing development issues (e.g., the recovery of the pandemic-

induced learning losses and widening inequalities or the urgent reduction of carbon emissions) and in a context of limited fiscal space with increased risks of debt crisis—e.g., the pandemic might have pushed debt in developing countries to a 50-year high, equivalent to more than 250 percent of government revenues (Estevao 2022).

The governmental policy toolkit for protecting people's livelihoods has several options: one-off or time-bound income support; in-kind and quasi-cash transfers (e.g., school-feeding and vouchers); "blanket" subsidies (e.g., price caps or freezes); unemployment insurance; and tax cuts (e.g., VAT or fuel tax). Each of these options brings its own set of challenges—including delivery capacities and fiscal sustainability. Some options can move in the wrong direction on other key dimensions—e.g., blanket energy subsidies can protect low-income households while encouraging more energy consumption and carbon emissions while exacerbating income inequality, given their pro-rich bias (e.g., Coady, Flamini and Sears 2015). The implementation of any shock-resistant policy, therefore, needs to be understood in context.

How has the world responded to the current food and energy price spikes? Recent surveys and policy trackers show that blanket subsidies and tax cuts that forego revenue are the tools most governments in developing countries have resorted to for protecting consumers.⁸ The IMF has identified around 70 countries implementing at least one of the above policy options: cash transfers, vouchers or reduced utility bills are common practice in advanced economies, while in developing countries the most-used tools are tax cuts and reliance on existing subsidies (Amaglobeli et al. 2022). Similarly, around 60 countries identified by the World Bank have introduced energy price-related measures, whereas an additional 40 countries are maintaining existing fuel subsidies—with the bulk accounted for by developing countries (Gencer and Akcura 2022). Finally, out of the 142 policy responses identified by Gentilini et al. (2022) across 77 countries, more than 100 are tax cuts and subsidies for fuel, food and fertilizer, with the lion's share of these (65 percent) concentrated in developing countries.

That most developing countries move in the direction of price-related policies might not be surprising, though. One potential reason is the urgency to respond to price spikes. Introducing new price controls and tax cuts or increasing existing blanket subsidies might avoid the hurdles of well-crafted targeting—which may require strong social registries and payment systems already in place. However, as food and energy prices soar, the excessive additional fiscal burden of such policies may become unsustainable and harmful. They may divert resources away from key sectors (e.g., social protection, health and education), potentially hitting poorer groups harder; they may hurt the environment and delay energy transitions; and they may be difficult to reverse without fuelling social and political tensions.

The cost-of-living crisis meets the climate emergency

The process just described is the policy pathway expected to play out during the current cost-of-living crisis (phases i and ii in Figure 5). During this process, our conservative estimates based on country-level data from the IMF's Energy Subsidy Template (Parry, Black and Vernon 2021) suggest that the value of fossil-fuel energy subsidies could reach much higher levels in 2022 than previously forecasted: at least US\$605 billion (2021 prices)—or \$40 billion more than the latest projection (Gray Molina, Montoya-Aguirre and Ortiz-Juarez 2022). Clearly, this estimate is a lower bound as it considers that the only transmission channels are increases in oil, natural gas and coal supply costs but allows for no changes in electricity subsidies—for which no readily available information at this point can accurately inform the impacts of energy prices on countries' electricity supply costs to estimate the behaviour of electricity subsidies.⁹

Thus, in general and from the perspective of fossil-fuel energy, the fiscal burden of addressing the cost-of-living crisis may be exacerbating the climate emergency through at least two channels: diverted resources and foregone revenue that could otherwise be allocated to climate change mitigation and adaptation policies, and higher carbon emissions from induced consumption via artificially low domestic energy prices. The way forward depends on whether governments adopt a business-as-usual approach under which existing subsidies return to their pre-crisis levels, simply because international prices decline, or see the crisis as an opportunity for a renewed reset (phase iii in Figure 5)—an opportunity in which subsidies are progressively lifted, freed resources are used to strengthen targeting registries and cash delivery systems, investments are made in clean energy and energy efficiency and household demand for fossil-fuel energy declines.

The cost-of-living crisis opens the opportunity for a renewed reset in the expected policy response trajectory.

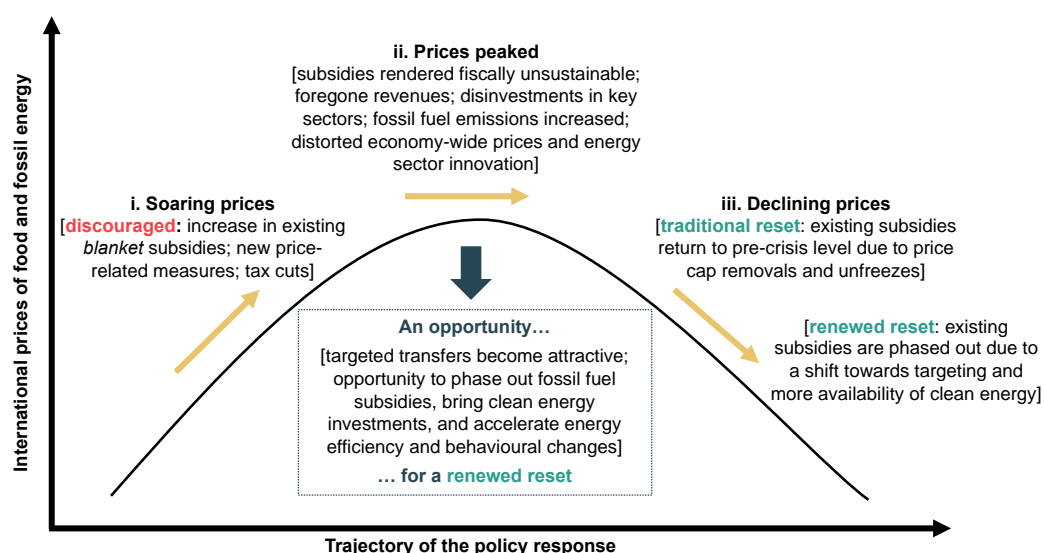


Figure 5: An inverted-U policy response pathway for the cost-of-living crisis

Source: Authors’ own elaboration.

Blanket subsidies or targeted cash transfers?

Another potential reason for the reliance on existing subsidies to address the cost-of-living crisis is that countries’ fiscal capacity to roll out targeted income policies is exhausted—understandably, given the massive social protection spending and fiscal stimulus in response to the pandemic (see, e.g., IMF 2021; Gentilini et al. 2021). But a relevant question emerges: Should the policy response be determined by *either* a “more of the existing price measures” *or* a “new income measures” approach?

This section concludes with an indicative analysis of the cost-effectiveness of two policies with similar costs implemented across all 127 developing countries in our sample to mitigate the documented poverty impacts. The first policy is a universal subsidy on energy products that covers 20 percent of their price—close to the magnitude of existing electricity, gasoline and natural gas subsidies in the inventory of Parry, Black and Vernon (2021). The amount of the subsidy varies across the population, depending on household income and consumption share on energy, as well as across countries,

depending on countries' energy inflation (see Appendix A). The second policy is a targeted cash transfer of \$0.14 (2011 PPP) a day delivered to each individual, equivalent to the average additional per capita expenditure on energy across developing countries induced by the energy inflation considered in the *cost-of-living* scenario above.

The target population for the cash transfer comprises those living in poverty and vulnerability to poverty based on thresholds adjusted according to countries' income levels. For starters, the \$13-a-day threshold was originally computed in upper-middle-income contexts where poverty is measured at \$5.50 a day. Though \$13 a day may be informative for global comparisons of vulnerability (similarly to poverty comparisons at \$1.90 a day), it may be very demanding for targeting purposes in poorer countries. In lower-middle-income countries, where poverty is measured at \$3.20 a day, a recent estimate suggests that \$5.50 a day is associated with a low risk of poverty (World Bank 2018), and it is thus adopted in this analysis as the vulnerability threshold. As for low-income countries, where poverty is measured at \$1.90 a day, it is simply assumed that people in vulnerability to poverty at this level are those living below \$3.20 a day. Using these thresholds, the total coverage of the targeted transfer reaches 4.12 billion people, more than half of the world's population.

The monthly cost of each policy amounts to \$19.8 billion (2011 PPP). For the targeted transfer, the cost of benefits adds up to \$17.5 billion, excluding administrative costs that represent 13 percent of this amount (Figure 6, panel a).¹⁰ The incidence of benefits by quintiles of per capita income differs greatly between the policies (panel b), with the blanket energy subsidy being clearly unequalizing. Specifically, more than 60 percent of the benefits of the targeted transfer are concentrated among the poorest 40 percent of the population, while they accrue only 12 percent of the benefits of the blanket energy subsidy. By contrast, the richest 20 percent receive more than half of the blanket subsidy.

The results in terms of the effectiveness of both policies at mitigating the potential poverty impacts caused by soaring food and energy prices are summarized in Table 1. The targeted cash transfer more than mitigates all of the global poverty increase at \$1.90 and \$3.20 a day that results in the *cost-of-living* scenario (at least in the short-term). This policy also prevents 52.6 million people from falling into poverty at \$5.50 a day—i.e., almost 75 percent of the total 71.1 million “new” poor. The potential of the universal energy subsidy to mitigate the poverty impacts, on the other hand, is comparatively modest: it could prevent only 11.4 to 19.1 million people from falling into poverty, depending on the poverty line. This is less than 15 percent of the mitigation achieved by the targeted transfer at \$1.90 and \$3.20 a day and about 36 percent at \$5.50 a day.

More than half of the benefits of a universal energy subsidy are concentrated at the top 20 percent of the income distribution. By contrast, more than 60 percent of the benefits of a cash transfer policy of the same budget size, targeted to poor and vulnerable-to-poverty populations, are accrued by the bottom 40 percent.

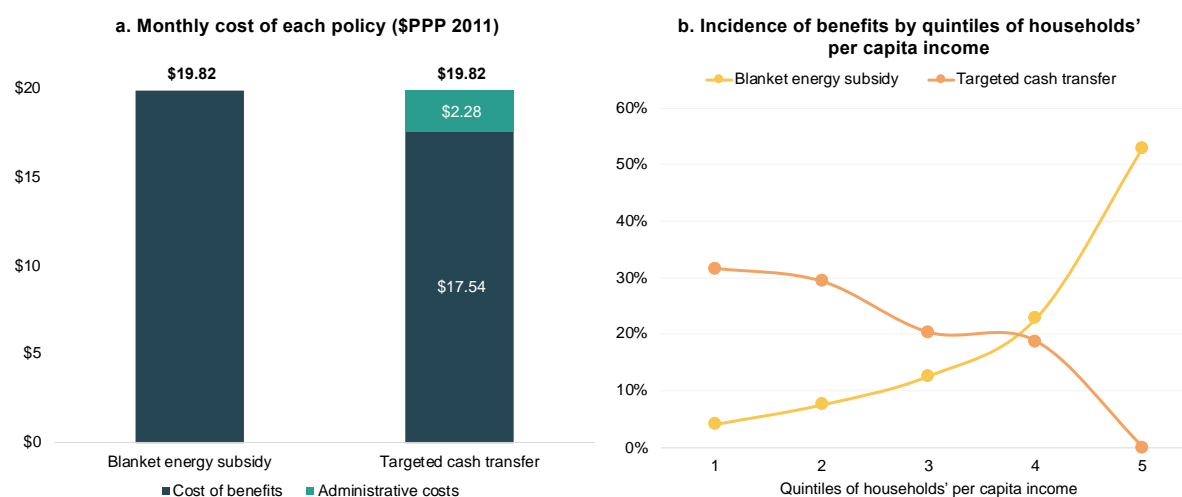


Figure 6: Panel a plots the monthly cost of a universal energy subsidy and an individual cash transfer for poor and vulnerable people across 127 developing countries (\$ billion, PPP 2011); panel b plots each policy's incidence of benefits by quintiles of household per capita income.

Source: Authors' own elaboration based on the sources described in the text.

A modest per capita amount of a targeted transfer more than mitigates all of the global poverty increases at \$1.90 and \$3.20 a day and almost three quarters at \$5.50 a day. In comparison, a blanket subsidy mitigates only, at most, a fifth of the poverty increase.

Poverty line	Poverty impact (million people)	Poverty mitigation (million people)	
	Cost-of-living scenario	Cost-of-living scenario with...	
		Targeted transfer	Blanket energy subsidy
\$1.90	51.6	-96.1	-11.4
\$3.20	71.5	-113.5	-15.8
\$5.50	71.1	-52.6	-19.1

Table 1: The table shows the number of people who could fall into poverty at different monetary thresholds as a result of soaring food and energy prices vis-à-vis the benchmark scenario (million people) and the magnitude of poverty mitigation (million people) that results from comparing the poverty headcount in the cost-of-living scenario after and before the influence of the targeted cash transfer or blanket energy subsidy.

Source: Authors' own elaboration based on the sources described in the text.

Even if modest and after accounting for administrative costs, the targeted cash transfer outperforms the blanket energy subsidy in terms of mitigation of short-term poverty impacts. The latter policy can be effective in protecting some poorer households but not all. Moreover, it may carry damaging effects on public finances at times of high energy prices, on income inequality, and on the environment at a time when the world is racing against the climate emergency. A recent comparative assessment of price and income support measures shows that targeted transfers not only help poorer households cope with price spikes but also have a significantly lower impact on carbon emissions (Bethuynne et al. 2022).

Hence, the implementation of the appropriate policy response for shielding households against food and energy price spikes should be driven by the magnitude of the positive outcomes it is intended to yield at the lowest fiscal, social and environmental costs. Of course, whether targeted shock-resistant transfers are feasible to implement is conditional on existing fiscal and administrative capacities. But again, the ongoing cost-of-living crisis can be seen as an opportunity to undertake the regulatory steps and necessary investments while gradually phasing out harmful subsidies. We can't forget the recent pandemic experience: in a matter of weeks, fiscal and administrative challenges were eclipsed by the impressive political will to mobilize the necessary resources to address the emergency. How the world will face the next crisis will depend on what can be done today.

Conclusions

In the first part of this paper, we project that the current cost-of-living crisis may have pushed over 51 million people into extreme poverty at \$1.90 a day, and an additional 20 million at \$3.20 a day, with hotspots in Sub-Saharan Africa, particularly in the Sahel, the Balkans and the Caspian Basin. In the second part of the paper, we contrast the welfare effects of using blanket energy subsidies versus using time-bound targeted cash transfers to protect poor and vulnerable households. We find that a modest targeted cash transfer more than mitigates poverty increases at every poverty line, is more equitable than using blanket subsidies and is fiscally more effective. The binding constraints faced by developing countries at this moment are both administrative and fiscal.

The administrative challenge is targeting poor and vulnerable households—affected by food and energy price surges—that may not be currently included in existing administrative registries. In this respect, there are important lessons learned from the COVID-19 response. Biometric screening, digital enrolment and digital payment systems have greatly increased developing countries' capability to roll out cash transfers. In places where digital reach is limited, policymakers have also successfully tapped grassroots local and community organizations to identify and register potential beneficiaries. Despite the positive track record, the challenge of targeting a new subset of the population remains significant.

The fiscal challenge is even greater: to provide sizeable, short-term relief to poor and vulnerable households at a moment when most developing countries are struggling with shrinking fiscal space and ballooning debt service payments. The lessons from the COVID-19 response are, again, appropriate. In the short run, developing countries can tap existing fiscal resources if they can find breathing space from debt servicing to official creditors—as implemented between March 2020 and December 2021 through the Debt Service Suspension Initiative (DSSI). We believe a DSSI+ should call for a moratorium on official debt for two years to assist all developing countries, regardless of GDP per capita, to bounce back from a string of economic and fiscal shocks.

Multilateral and bilateral actors face an additional challenge, which is to refrain from repurposing fiscal resources from one set of development challenges to another set of challenges. Resources for *both humanitarian and development assistance* are needed. The bridge that links cash transfers to compensate for food and energy price spikes in the short run to the labour markets, social protection systems and small and medium businesses needed to reactivate supply chains and catalyse inclusive growth in the medium run is a quintessential development challenge.

Finally, the current crisis exposes a number of important and underlying policy debates: from assessing the limits and scope of using interest rate hikes to address supply chain issues (very limited) to anticipating the equity and fairness effects of suppressing wages, for fears of a wage-price spiral (very regressive), to addressing the long-run effects of extending fossil fuel subsidies that make the ambitious decarbonization targets charted by the Intergovernmental Panel on Climate Change (IPCC) reports potentially unsurmountable (very unsustainable). These debates will play out differently in different country contexts. UNDP will continue to tailor policy solutions to conditions most appropriate on the ground.

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Appendix

A. Notes on missing data on budget shares and inflation and energy subsidies

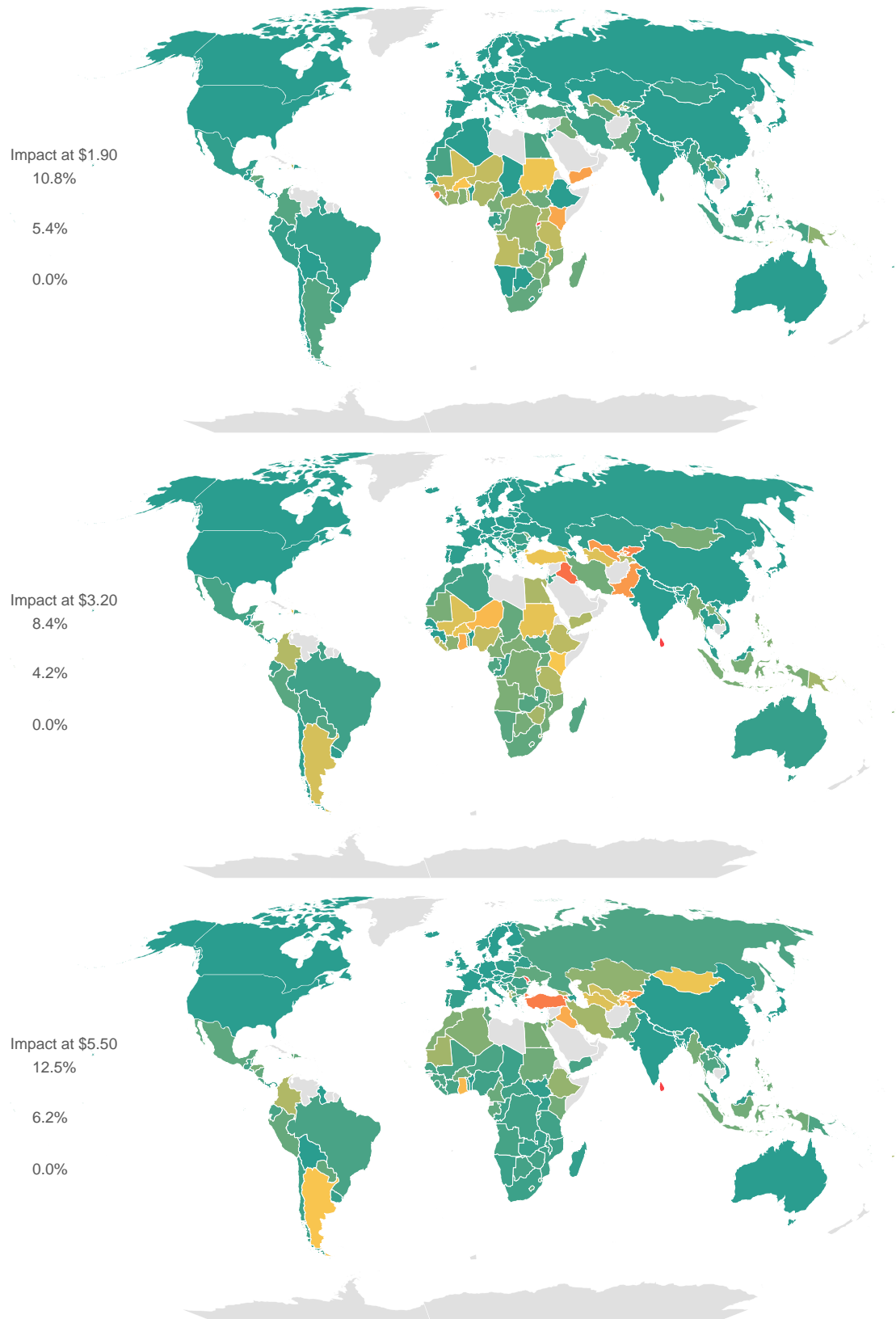
Household budget shares. The information on household budget shares for food by quintiles was taken from this [chart](#) published in Mahler et al. (2022) and is available for only 59 countries. The data on budget shares for energy by percentiles come from the Household Impacts of Tariffs database (Artuc, Porto and Rijkers 2019) and is available for only 52 countries. In those countries with missing data, the approach followed was to predict the missing shares by level of household income through a regression of the corresponding budget shares on log-transformed per capita income.

Food and energy inflation. Inflation data for food and energy were derived from the inflation database of Ha, Kose and Ohnsorge (2021), February 2022 update, and extended up to April 2022 with information from countries' official statistics. The data for food and energy are not available for 48 and 45 countries, respectively. For these countries with missing data, the average inflation of countries within their region-income cell was assigned instead, with the exception of Iran and Iraq, which were assigned their region average since the only other country in their region-income cell was Lebanon, a significant outlier in terms of inflation.

Simulation of energy subsidies. The indicative assumption of a universal subsidy on energy products that covers 20 percent of their price follows the energy subsidies inventory of Parry, Black and Vernon (2021), which shows that, in 2020, explicit subsidies covered, on average, 26, 33, and 26 percent of supply costs of electricity, natural gas and gasoline, respectively. In the simulation exercise shown in the text, the analysis assumes that the level of energy consumption does not change in the short term. Then, the per capita subsidy amount is equal to 20 percent of the per capita expenditures in energy. The latter is equal to the share of consumption spent on energy times consumption per capita plus the additional per capita expenditure in energy caused by the change in prices.

B. Poverty impact hotspots

(Percentages of countries' population that could fall into poverty as a result of soaring food and energy prices)



Source: Authors' own elaboration based on the sources described in the text.

Endnotes

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² The Food and Agriculture Organization's (FAO) [Food Price Index](#), which consists of the average of the price indices of meat, dairy, cereals, vegetable oils and sugar, reached its highest point in at least two decades between March and May 2022.

³ The distributions of per capita household income are derived from the March 2021 update of the World Bank PovcalNet database (Arayavechkit et al. 2021) and computed using the *povcalnet* Stata command (Castañeda Aguilar et al. 2019) under Creative Commons licence CC BY 3.0 IGO. The distributions correspond to per capita consumption in about 60 percent of countries in the sample. For simplicity in the exposition, this brief uses per capita income interchangeably with per capita consumption.

⁴ In the case of Ethiopia, the analysis uses the forecast in the [WEO April 2021](#), as that in the [WEO October 2021](#) is not available for this country.

⁵ This is non-trivial. While countries' GDP per capita growth rates between 2019 and 2022 implicitly consider the pandemic-induced economic contraction and recovery, the distribution-neutrality assumption omits, for instance, that poorer households were likely hit proportionally harder during the pandemic or that their potential recovery has been slower.

⁶ Our estimates partially account for the structure of existing price subsidies when these are considered in the estimation of Consumer Price Indices, as well as for existing in-kind transfers and auto consumption patterns as captured in household budget shares.

⁷ Notice that for Ukraine, the poverty impact considered in this analysis comes only from food and energy inflation. Applying the GDP per capita contraction of 32.5 percent forecast by the IMF ([WEO April 2022](#)) to households in the Living Conditions Survey 2020 (at an 85 percent pass-through), our estimates suggest that the poverty headcount at \$5.50 a day could increase by nine percentage points, equivalent to around 3.3 million people falling into poverty (*vis-à-vis* a counterfactual scenario had the invasion not occurred).

⁸ Similar approaches have been followed in previous crises. During the food price spike in 2007–2008, 75 percent of developing countries undertook some sort of policy response to cushion the impact. Above half of the responses included tax cuts and 44 percent price controls and subsidies to consumers (Baffes and Nagle 2022).

⁹ The latter is a non-trivial omission since electricity subsidies could account for up to 40 percent of global fossil-fuel energy subsidies, suggesting that our estimate can be significantly above \$605 billion.

¹⁰ Some figures from the [World Bank](#) suggest that the administrative cost for large-scale *conditional* cash transfer programs reaches 10 to 13 percent.

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