

Poverty and Distributional Impacts of COVID-19: Potential Channels of Impact and Mitigating Policies

April 16, 2020

In addition to its immediate impact on health outcomes and, tragically, on lives, it is now clear that the coronavirus (COVID-19) outbreak is likely to have long-lasting economic and social impacts of global proportions stemming from the direct and indirect effects of illness, the preventive behaviors of people and the transmission control policies of governments. Specifically, GDP projections have already been revised downward for most regions and countries, driven by shocks to both domestic demand and supply and sharp declines in the circulation of goods and services, as well as people and lately capital. Revisions are likely to continue as the ultimate size and persistence of the economic impact remains unknown.

During the first few months of the outbreak, governments around the world have been correctly focused on managing the spread of the disease, relying in many cases on stringent transmission control measures without placing a high weight on the current and future economic costs of these measures. As it becomes clear that the economic and social costs of the outbreak will be significant, governments are increasingly turning their attention to a broader set of policy interventions that can help mitigate such costs.

This note explores the extent to which economic and social impacts may vary across income groups and, possibly, across space, and discusses policy measures that governments may consider for mitigating negative impacts on the poor and most vulnerable in the short and medium-terms. For this purpose, the note proposes a simple framework describing the main ways that aggregate shocks affect household and individual incomes, explores what channels may be most important for the poor and vulnerable, and identifies priority areas of policy focus. The note also incorporates examples from countries – of both impacts and policy options – based on responses received from a quick stocktaking exercise with staff from the World Bank’s Poverty & Equity Global Practice working in regional units.

WELFARE IMPACTS OF COVID-19 ON INDIVIDUALS AND HOUSEHOLDS

Aggregate shocks to economic activity can affect welfare (and well-being) at the household and individual level through the following channels:

1. **Impact on labor income** due to
 - The direct effect of lost earnings because of illness or the need to take care of sick household members
 - The indirect effect of shocks to earnings and employment, caused by decline in aggregate demand and supply disruptions. The impacts can take one or more of the following forms: (a) decline in quantity of work, either hours (intensive margin) or employment (extensive margin); (b) decline in wages, which is unlikely for salaried

workers in the short-run but may occur over time due to furloughs or wage-cuts by some employers to avoid layoffs; (c) decline in income of self-employed, due to reduction of economic activity (sales, production) in micro and small enterprises due to fall in demand and disruptions in supply of inputs, or due to mobility restrictions, particularly for migrants engaged in seasonal agriculture.

2. **Impact on non-labor income** due to:

- Decline in international (and domestic) remittances resulting from the economic impacts of the crisis in places where the migrants are employed, and potentially in private transfers as economic stress can reduce transfers between households or charitable support
- Potential change in public transfers – e.g. increase as governments respond to mitigate the impacts of the shock or decrease as fiscal constraints force countries to choose between existing social protection and health care.

3. **Direct impact on consumption** through:

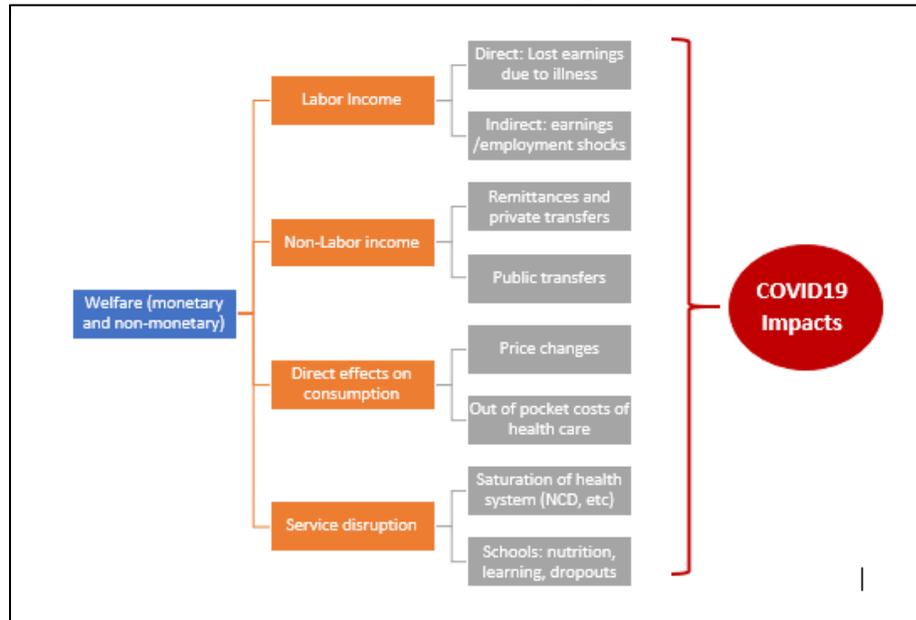
- Changes in prices and shortages of basic consumption goods and essentials (such as food and medicines), due to disruptions in the functioning of markets because of decline in trade (including import or export restrictions) or a fall in domestic production. This effect is in addition to the indirect welfare impact of any increase in the prices of production inputs, which would affect cost of production and labor income
- Rise in out-of-pocket cost of health care for those directly affected by the pandemic, which may reduce consumption of other necessities among credit-constrained households
- On the other hand, in some countries (e.g. in Latin America), inflation pressures are expected to subside on account of lower prices of oil and other commodities, which could mitigate some of the effects of a and b.

4. **Service disruptions** with adverse impact on non-monetary dimensions of welfare:

- Suspension of classes and feeding programs in schools, leading to impacts on student retention, learning, and nutrition
- Potential saturation of health system in countries with high incidence of COVID-19, leading to inadequate care for non-communicable diseases
- Disruptions in mobility, due to quarantines and other containment measures which may drastically reduce public and private transportation services

The above channels of impact are reflected in Figure 1. In addition to the impacts outlined above, there are longer-run dynamic effects that can have extremely damaging impacts on economic mobility of individuals and with that on movements of households into and out of poverty. For example, a loss of income for a period of time can severely restrict the ability of poor households to invest in education of children, and/or in the nutrition and health of children and mothers, with potential negative impacts on long-term outcomes of children, including lifetime earnings.

Figure 1. The main channels for short-term impacts of COVID19 on welfare



VARIATION IN WELFARE IMPACTS ACROSS GROUPS

Impacts through the above channels are likely to vary across groups due to differences in their demographic and socioeconomic characteristics, and their ability to cope with shocks through private means. These characteristics *interact with the channel(s) of impact* that are most salient for a specific economy to produce the eventual impacts. While every country is likely to show its own pattern of variation of impacts across groups, impacts are likely to vary systematically by characteristics such as:

1. **Age.** Children and youth suffer schooling interruption, adults are most likely to suffer employment loss, and the elderly face higher risk of severe health outcomes from COVID-19.
2. **Gender.** Women have specific vulnerabilities, since (a) school closures and elderly care tend to burden time use of women; (b) women are more exposed to infection due to larger share of women in health and service sectors; (c) women face a higher likelihood of domestic violence during home confinement; and (d) some of the service sectors most affected by the economic shock have higher concentrations of female employment. On the other hand, men appear to be more vulnerable than women to suffer serious effects of the coronavirus infection, including hospitalization and death.
3. **Socioeconomic status.** Vulnerable groups such as migrants, refugees, and ethnic minorities like the Roma, and more generally, households with lower levels of income and education face greater challenges in accessing services such as health, education, and infrastructure. The disparities in access will be exacerbated by the pandemic.
4. **Household composition.** Certain types of households are more vulnerable, such as those with children, elderly, or sick members.

5. **Type of economic activity.** The vulnerable, at least in the short-run, are more likely to be engaged in: (a) self-employment rather than salaried employment; and (b) the informal rather than the formal sector, as both these groups are less likely to be affiliated to social security systems than the salaried in the formal sector, and may not be covered by the emergency response measures being deployed by policymakers.
6. **Sector of economic activity.** The earliest and largest impacts are more likely to occur in the service sector, in industries such as transport, retail sales, entertainment, tourism, and personal services, including those engaged in the gig economy, rather than in agriculture, large manufacturing, and public, professional, ICT, and financial services. This is because the first group of activities is more instantly affected by quarantine-type measures, whereas agriculture and some manufacturing are exempted so that basic products continue to be produced, and workers in other services can often telework. Export-oriented manufacturing and services in developing economies will also be affected rapidly due to plunging demand in advanced economies. Over time, however, secondary impacts (due to forward and backward linkages across firms and falling demand) are likely to spread to other parts of the economy in both formal and informal sectors.
7. **Location.** The immediate impacts will be higher in urban areas than rural areas, because high-density areas are more likely to have rapid spread of the virus and to have high concentrations of services that are severely affected by closures. Over time, rural areas will be increasingly affected as the broader economic consequences of falling demand and mobility disruptions spread to other parts of the economy.

How are the poor and the vulnerable likely to be affected?

Based on the generalized patterns of impact described above, the main sources of impact for the poor and the vulnerable (those who are not poor, but insecure) would likely be related to:

1. **Where they live.** The poor live primarily (although not exclusively) in rural areas. While this might minimize their exposure to the disease, it also means they have limited access to health services. Moreover, since rural households tend to depend more on domestic remittances from urban migrants, economic shutdowns in urban areas will hurt the poor in rural areas. The poor in urban areas, on the other hand, live in congested settlements with low-quality services, which significantly increase their risk of being infected by the contagion.
2. **Where they work.** The poor work largely in the agriculture and service sectors and are usually self-employed or informally employed, mainly in micro and family enterprises. Those employed in the informal service sector in urban areas are likely to bear the most severe initial impacts. Many of the vulnerable non-poor are increasingly employed in the gig economy, particularly in middle-income countries, and they will also be at risk of slipping into poverty. Those engaged in agriculture may be able to cope, at least initially, with potential disruptions to food supplies or price spikes, but are likely to be affected by a decline in demand in urban areas over time.
3. **High dependence on public services, particularly health and education.** In the immediate term, limited access to (quality and) affordable health services can have devastating impacts in the event of an illness in the family, while school closures can lead to

a decline in food intake among children of poor families who frequently rely on school feeding programs.

4. **Limited savings and lack of access to insurance.** This, in the absence of adequate safety nets, can force the poor to rely on coping strategies with potential long-lasting negative effects, such as the sale of productive assets or diminished investments in human capital.

While the impacts shown in Figure 1 will be felt by most households almost immediately, the long-term welfare impacts of the crisis through monetary and non-monetary channels are likely to be particularly damaging for the poor and vulnerable. Income losses can quickly translate into the loss of productive assets, which will be hard to rebuild even in the medium term. The effect of long school closures, disruptions to ECD services, school nutrition programs, and overstretched health facilities are much higher on poor families and their children; and when they occur at critical ages, may not be recoverable for the cohort that suffers the temporary shock.

VARIATION IN NATURE OF WELFARE IMPACTS ACROSS COUNTRIES

Given the varied channels of impact described above and the characteristics that matter for impacts, one would expect certain patterns of impacts to emerge for groups of economies that share some common features. Below are a few examples of how such patterns might emerge, based on a quick review of country-specific information provided by Poverty and Equity GP staff working in regional teams.

Impact on labor income. The shocks on labor income will be particularly hard on those working in the informal sector, usually self-employed or working for small informal firms, who account for a majority of those employed in low- and middle-income countries. For example, 45 percent of all workers in Bolivia are informally employed, as are 90 percent in Mozambique and 80 percent in Afghanistan. In terms of how the impacts on labor incomes will play out, countries can be classified into three broad categories based on the structure of the economy. The impacts expected for each group are summarized as below.

- The first group of countries are mostly low-income countries in Sub-Saharan Africa, where a large share of the vulnerable population depends on *small-scale low-productivity farming*. For example, three-quarters of the poor rely on agriculture in Tanzania. This type of farming requires migrant workers during the harvest and access to local markets to sell produce and buy supplies; any interruption may endanger the next harvest.
- The second group, comprising many middle-income countries, are those with large *informal service sectors in urban areas*, especially in hospitality, tourism, and retail. This group includes Kenya, India, Indonesia, Thailand, and many (small) island nations that will suffer from quarantine restrictions and the collapse of international travel.
- The third group are economies that are exposed to *international commodity price movements or rely on exports*, either of natural resources such as oil (Nigeria, Democratic Republic of Congo), cash crops such as coffee, soybeans, or cotton, (Brazil, Guatemala, Burkina Faso) or commodities (Indonesia, Vietnam, Mexico). For example, 55 percent of Niger's exports are radioactive chemicals, followed by petroleum (16 percent) and oil seeds (15 percent). Falling export prices in

addition to the consequences of domestic policies to deal with COVID-19 will exacerbate the economic crisis for these countries.

Impact on non-labor income

- International remittances, mainly originating from the European Union and the United States, account for a significant share of GDP not only in many low-income countries like Nepal (25.4%) and Ethiopia (7%), but also in lower-middle- and upper-middle-income countries such as Guatemala (12%), Moldova (10%), Sri Lanka (8%), and Tunisia (5%). While a large share of international remittances tends to go to the non-poor, a sharp fall in remittances can increase the likelihood of families falling into poverty, and in some cases, reduce investments in human capital development that is often financed by remittances.
- Domestic remittances are an important income source for rural households as well, particularly in low- and lower-middle-income countries. For example, nearly 40% of poor households in Nigeria receive either domestic or international remittances. Since domestic remittances are often sent by urban informal sector workers, including seasonal migrants in countries like Bangladesh and India, to their families in rural areas, a substantial shock to the urban informal sector is likely to directly reduce income from remittances in rural areas.
- Governments that are highly resource-constrained may have to limit social support payments to respond to the health crisis. For example, in Jordan, where the government is under significant fiscal pressure, public transfers and remittances make up around a third of total income for the poorest 40 percent. Moreover, while governments may increase public transfers as a response to the crisis, coverage of refugee and migrant populations (for example from Venezuela or Syria to neighboring countries) is severely limited.

Direct impact on consumption

- Increases in food prices (or shortages) are likely to have a disproportionate impact on low-income households in many developing economies. Food consumption accounts for the largest share of household spending for low-income households in many developing countries — for example, over 60 percent in rural areas in Mozambique, and between 66 percent and 75 percent of the poor and vulnerable in Indonesia.
- Countries that rely heavily on food imports could experience supply disruptions. For example, currently the Kyrgyz-Kazakh border is closed and food exports from the Russian Federation are limited due to COVID-19. The Kyrgyz Republic is highly dependent on imports of food, particularly wheat and wheat flour. Kyrgyz households, who spend on average 60 percent of their consumption expenditures on food, have had to increasingly resort to coping strategies that are harmful for their nutrition and livelihoods.
- Rising out-of-pocket health expenditures can have a direct impact on the ability of households to afford other necessities. In Sudan, for example, out-of-pocket expenditures cover as much as 80 percent of the cost of treatment, with more than 40 percent of the population not covered by health insurance.

Service disruptions

- Health services are strongly correlated with economic growth and population density, and insurance coverage is usually limited to the formal sector in low- and lower-middle income countries. For example, as of 2014, Burundi had 0.8 hospital beds per 1,000 inhabitants,

compared to 1.6 per 1,000 in Rwanda and, 5.6 per 1,000 in European Union. In Bosnia and Herzegovina, there is substantial unmet need among the Roma population for medical care due to low access to health insurance.

- Disruption of schooling is a major concern for the poor and vulnerable populations in most countries. While urban private schools may be able to continue teaching online, this option will not be available in most public and rural schools. In some countries, such as Rwanda, Mozambique, and Honduras, school closures not only stop educational services but also other programs for children typically delivered through the school system, such as deworming and school meals. Disruption in schooling can also lead to increased dropouts. Evidence from the Ebola crisis has shown that girls have a higher likelihood to leave the schooling system than boys.
- Fiscal as well as mobility constraints can interrupt the provision of important services such as public transport that are critical for the marginalized. Different types of service interruptions often affect the same segment of the population. In Pakistan, current limitations to public transport and inter-provincial/long-distance commuting might affect the capacity of poor people to access health services, particularly in remote areas.

POLICY OPTIONS TO MITIGATE THE IMPACTS OF THE SHOCK AND PLANT THE SEEDS OF RECOVERY

Given the above, aggregate macro-fiscal, monetary, and financial policy responses (not discussed here), need to be complemented with interventions that consider the specific circumstances and needs of the poor and vulnerable. Policy interventions must act to minimize the potentially devastating effects of the outbreak on welfare of the vulnerable groups, and to limit long-term consequences that would lead to deeper poverty and inequality traps. In the short- and medium-term, policy responses could include targeted interventions in *three policy areas* as follows:

Compensating for the loss of labor and non-labor income, which will also contribute toward the following objectives for the poor and the vulnerable: (i) improve food security, nutrition, and ability to procure other necessities; (ii) prevent over-indebtedness and protect productive assets; and (iii) support employability and the relocation of workers across sectors.

In the immediate to short term:

- *Expansion in shock-responsive safety net programs* to provide more or larger fast-disbursing cash transfers to existing beneficiaries, who are usually the poorest in society.
- *Increase in coverage of existing safety net programs to new beneficiaries* based on geography (e.g. the areas with the highest levels of community transmission and/or economic disruptions), or sector of employment, or focusing on at-risk categories (e.g. families with young children, pre-existing health conditions, and elderly family members). May also include non-poor, low-income households with international migrant workers who are likely to suffer a negative income shock as a result of the decline in international remittances.
- *Portability of safety net program benefits*, to ensure predictability of coverage as urban migrants will be likely to return to rural areas.

- *Suspension of group activities and conditionalities* to reduce the risk of contagion for all safety net programs.
- *Targeted one-off payments* to specific vulnerable groups of workers (e.g. those in the tourism sector).

In the short to medium term:

- *Temporary bans on eviction and/or temporary moratoria in the payment of (public) utility bills* could provide some relief for the households.
- *Waivers for financial fees* for domestic and international remittances.
- *Public work programs* could be effective in providing employment opportunities for the poor and the vulnerable in both rural and urban areas. But activities must be such that they can be performed with social distancing or adopted only in the post-pandemic economic recovery phase in a country. Alternatively, public work programs can be temporarily transformed into cash transfer programs to avoid social gathering.
- *Potential fiscal policy tools: (i) delay or cancellation of specific taxes or contributions* (e.g., VAT, sales taxes, fuel-taxes, payroll taxes) for a given time period; *(ii) tax cuts and subsidies* for basic commodities affected by price increases (e.g., food, fuel), the effectiveness of which is likely to be lower in countries with high levels of informal employment and illegal electricity connections; *(iii) universal (or quasi-universal) transfers*, which are simpler to administer but may be unaffordable for many LICs and MICs that are already in fiscal stress.

The ability of countries to mitigate immediate income losses by expanding or introducing new benefits will be limited by fiscal constraints, as well as the capacity to identify and target the right households. For example, in Bangladesh, many of the social protection programs suffer from weak targeting, and less than 1 percent of the urban population currently benefit from such programs. The government of Bolivia has announced Bono Familia, a one-time lump-sum cash transfer that will be given to households with children in primary and pre-school public institutions. Although it will reach 46 percent of the population, 37 percent of the poor are non-eligible.

Fiscal constraints may also require the shift of resources from one program to another. For example, in Jordan, the poverty-targeted unconditional cash transfer could be expanded to mitigate the impact of the pandemic on the poor and vulnerable. Potential short-term funding for this and for the expansion of health insurance for the poor could come from reallocation from the bread subsidy. The government of Guatemala, instead of expanding income-support schemes, has announced policies that are less costly in the short-run such as the deferral of utility payments to safeguard the uninterrupted provision of basic services, along with loans with soft conditions to SMEs.

Mitigating the direct effects on consumption of higher food prices, potential food shortages, and unexpected medical costs

- *Continuing provision of targeted meal programs* even if food distribution mechanisms (e.g. use of packaged/dried food) need to be modified to account for the risk of contagion
- *Mitigating the impact of unexpected medical costs* through, for instance, waivers
- *Public procurement and distribution of basic food items*. This could be done in combination with private sector/CSO actors

The closure of schools will affect an important point of contact with poor and vulnerable households who benefit from school feeding and health programs precisely when food and health expenditures are expected to increase. Several countries have already announced policies to address this disruption. The government of Colombia has guaranteed the provision of its flagship school feeding program, PAE, to each child benefitting from it prior to the closing of schools. They have also planned for food packages to benefit 250,000 elderly who are not receiving the cash transfer Adulto Mayor. Where such programs are not in place, as in Afghanistan, the government and development partners could utilize community development programs and funnel assistance to grain banks, supporting the distribution of food and other necessities at the community level.

To mitigate the cost of medical expenses, governments can both directly support the production of medical supplies as well as support the cost of treatment. The government of Chad has created a fund called “FS Covid19”, which is intended to reinforce medical infrastructure and functionalities to enable rapid response to the needs of health facilities in an emergency. Brazil has temporarily removed import tariffs and industrialized products taxes for relevant medical supplies.

Mitigating the effects of widespread disruptions to public service delivery

- *Scaling up public health diagnostic and care capabilities* in underserved areas
- *Measures to compensate for the loss of months of learning at school:* e.g. expansion of distance education; training for teachers in distance education; equipment and connections for children without access to ICT; providing additional schooling during summer of 2020

The immediate source of concern in many countries is the capacity of the health care sector to deal with the crisis. For example, in Bangladesh, authorizing COVID-19 tests through reputable private sector care providers would expand capacity. The only testing permitted in Bangladesh is currently through the Institute of Epidemiology, Disease Control and Research which has limited number of test kits and only operates in Dhaka and Cox’s Bazaar.

Once the health care needs have been addressed and schools reopen, governments need to implement policies that will mitigate the effects of suspension of educational services, especially for the poor and vulnerable. For example, 99 percent of students will not have any home-based learning during the school closures in Mozambique. Policies that can be considered to encourage students to go back to school after schools reopen include increasing the coverage of school lunch programs, suspending school fees, making bonus payments to teachers, as well as revising the 2020 academic calendar to make up for the lost days of instruction.

Supporting firms and workers to protect jobs and facilitate recovery. To complement the measures under the three policy areas discussed above, a range of policy interventions would be needed to support firms and workers in the short to medium term. Although many of the poor are unlikely to benefit directly from these measures, many urban workers who risk falling into poverty as a result of lost livelihood would benefit. Increasing the survival rate of formal sector firms can have important and positive spillover effects for the informal sector via both supply and demand channels. These measures are also needed to ensure that a minimum level of economic activity is maintained and/or can resume relatively quickly after mobility restrictions are lifted.

- *Policies to support firms*: includes providing grants and wage subsidies to firms to minimize layoffs and supporting micro and small enterprises through measures such as tax exemptions, delays, or waivers targeted to small firms, soft loans, and grants.
- *Active labor market programs* to facilitate the transition of workers who have lost jobs that are not coming back into training or new jobs.
- *Facilitate entry in “contactless” service economy* among the self-employed and those displaced from micro, small, and medium enterprises – through measures like temporary subsidies for internet services through mobile phones, increased access to (subsidized) credit with asset collateralization, and/or subsidized leasing arrangements to facilitate purchase of small productive assets.

Governments have a variety of policies at their disposal to support firms and protect jobs. Already, the government of Albania has deferred the tax return submission deadline from late March to June 1, rescheduled the payment of corporate income taxes, and proposed a credit guarantee scheme for SMEs to pay wages. Furthermore, the central bank has allowed banks to defer repayment of loans for those affected by COVID-19 without regulatory penalties. In the Dominican Republic, among other measures, firms affected by the suspension of economic activity will receive a subsidy of up to RD\$8,500 per formal worker. Policies already announced in Brazil include tax and FGTS contribution deferment of three months for small firms, cutting payroll taxes for training in half, additional credit lines to SMEs, as well as measures to facilitate credit operations for companies and families with good credit scores.

Policies that support firms directly can be costly. If fiscal resources are limited, countries can also implement policies that will cushion the impact of job losses. For example, in Bangladesh lessons can be drawn from the 2002 closure of the Adamjee Jute Mills, when 25,000 workers lost jobs. In that case, separation payments and retraining programs were used. To support these types of emergency payments to workers, resources budgeted for export subsidies can be reprioritized.

Ultimately, welfare impacts are likely to vary across countries and within countries over time. As a consequence, policy response packages will need to be both tailored to country circumstances and designed in ways that makes them flexible and adaptable. In addition, effective policymaking and monitoring in a situation that is so rapidly evolving requires that decision makers have access to timely and policy relevant information on both impacts and the effectiveness of policy responses. Similarly, given the unprecedented nature of the COVID-19 crisis and the speed at which governments are launching policies and programs to address its impacts, it is important that systems be put in place to allow for real-time monitoring of policy and program implementation and learning.