# SPECIAL ISSUE ARTICLE

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# Poverty, vulnerability and Covid-19: Introduction and overview

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**Funding information** UK Foreign, Commonwealth and Development Office (FCDO)

# Abstract

This symposium issue speaks to the topic of poverty dynamics and vulnerability during an unusual, unexpected and damaging global pandemic. We provide here an introduction and overview to the symposium.

The collection of articles in this symposium issue speaks to the issue of poverty dynamics and vulnerability during an unusual, unexpected and damaging global pandemic. One way to think of the present Covid-19 crisis is that it turns the immediate policy challenge regarding poverty reduction on its head. In the decades prior to the Covid-19 pandemic, attention had tended to focus on the challenge of sustaining, and possibly accelerating, poverty reduction against a background of economic growth and broadly rising living standards. In contrast, the current crisis and the likely post-crisis economic trajectory of most countries present policy-makers with the imperative of formulating and implementing measures to reverse, or at least attenuate, massive increases in the numbers of poor people living below the poverty line.

When the UN set the Sustainable Development Goals (SDGs) in 2015, it was widely appreciated by the global development community that ending poverty by 2030 was a highly aspirational objective. Of the approximately 700 million people who at the time were living below the international extreme poverty line, most lived in fragile and conflict-affected states. Thus, it was clear that achieving the SDGs would require different approaches and strategies.

The onset of the Covid-19 pandemic added a great deal of further complexity. Historically, the orientation of, for example, the World Bank's Poverty Assessments had typically been on the evolution of poverty in a context of economic growth and general economic development.

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Key concerns were to identify means to enhance the growth elasticity of poverty reduction, or to strengthen the poverty impact of policy interventions. Following the spread of Covid-19 and its dire socioeconomic consequences, this focus falls short. It is reasonable to anticipate that, over the medium term at least, both developed and developing countries will be grappling with severe economic crises alongside public health challenges. Moreover, the numbers of people living below the poverty line are likely to swell dramatically.

Unexpected crises demand concerted policy responses, and Covid-19 certainly does. Beyond the immediate human toll wrought by illness and death, a great deal of suffering is likely to result from the falling back into poverty of large numbers of people who had previously managed to escape poverty, but who have lost their means of livelihood and face market responses (for example, affecting availability of and access to food) that make their very survival precarious. Their limited assets and limited capacity to cope during major shocks reinforce these challenges. In addition, it is important to acknowledge that the Covid-19 pandemic will almost certainly frame and influence future crises in ways we are yet to understand.

The current poverty challenge has thus become less one of enhancing the poverty impact of economic growth, and more one of charting strategies to prevent poverty from rising precipitously in the face of public health crises and severe economic downturns. Poverty studies need to reflect this new reality and should be reoriented accordingly. Arguably, an important dimension of such a reorientation is that poverty studies should place additional emphasis on questions relating to vulnerability and poverty dynamics in the face of heightened exposure to health risks and economic disruption.

The papers in this symposium issue offer an initial and partial attempt to illustrate what such a reorientation might include. We undertake a set of country-specific poverty studies as part of the Data and Evidence to End Extreme Poverty (DEEP) program of research and policy analysis led by Oxford Policy Management (OPM) on behalf of the UK Foreign, Commonwealth and Development Office (FCDO).<sup>1</sup> While the country studies, mostly focused on relatively populous nations, draw to some extent from existing data and standard methods and tools of poverty analysis, it has also been necessary to employ new methods and empirical approaches. Notably, in placing considerable emphasis on poverty dynamics and vulnerability, modified country assessments would ideally draw heavily on panel data that permit the tracking of welfare trajectories at the household level. However, panel data are scarce—particularly large, nationally representative panels in the developing country context. In an effort to overcome this constraint we have made the pragmatic decision to construct synthetic panels from existing cross-sectional data sets in the five countries that comprise this symposium, namely, India, Ethiopia, Tanzania, Mozambique and Myanmar.

There is growing experience with the construction of synthetic panels, and they have indeed been shown to provide evidence on poverty transitions that resonates with findings derived from genuine panels. Of course, synthetic panels are predicated on assumptions, and there is thus an associated requirement to explore opportunities for validation and to undertake robustness analysis. In our country studies, we have attempted to probe assumptions to validate findings where possible.

Beyond offering insights into the occurrence and scale of transitions into and out of poverty, synthetic panels can also shed light on aspects of economic vulnerability. Given the nature of the challenges faced by countries following the Covid-19 crisis and its attendant economic consequences, there is a need not only to identify the poor, but also to delineate and characterize those who might currently be above the poverty line but who could easily become poor. The literature has not converged on a single definition of vulnerability, but one way of thinking about it is in

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terms of those who are not currently poor but who face a heightened risk of falling into poverty. This perspective underpins the analysis of vulnerability in the present set of country studies.

One of the difficulties in assessing the impact of the Covid-19 crisis on poverty and vulnerability concerns the lack of household survey data that reflect household circumstances following the onset of the crisis. Survey data generally become available only with a lag, making it difficult to track impacts in real time. We have tried to confront the challenge of lack of data by carefully integrating our synthetic panel method with historical data that pertain to the pre-Covid era. Our intention is to document poverty dynamics during the pre-Covid pandemic with a view to gaining insights into the possible consequences and implications of the Covid-19 pandemic. For example, it seems reasonable to suppose that those who were chronically poor in the pre-Covid period—a period when overall living standards were typically rising—would be among those facing pronounced hardship after Covid-19 hit. Similarly, those of the non-poor in the pre-Covid period who faced a high risk of falling back into poverty would presumably also be particularly vulnerable following the public health and economic shocks wrought by the pandemic. Nevertheless, our analysis cannot be regarded as complete: historical data cannot help with the identification and analysis of new groups of poor people and new drivers of poverty. We will need to carefully scrutinize new data as these become available, taking due account of the impact of the policy responses which governments did or did not take in response to the crisis, and which differed across the countries considered in this symposium.

We are also fully aware that scrutinizing historical data is not the only means through which to assess the consequences of the current crisis. Other approaches, such as the implementation of rapid telephone surveys, or application of simulation models, are also available and have helped to provide insights into the challenges at hand. The various entry points all have their strengths and weaknesses. The hope is that together they can combine to usefully inform policy reflection and design.

Following this introduction, Garcés-Urzainqui, Lanjouw, and Rongen provide an overview of the methodology underpinning the construction of synthetic panels from cross-sectional data for the purpose of studying poverty dynamics. This primer serves as a common methodological reference point for the five country cases in this symposium. The authors describe the assumptions that underpin the basic approach and its extensions, and discuss their plausibility. While proper panel-based analysis is clearly preferred for the study of poverty dynamics, the synthetic panel methods are argued to be useful in the all too common situation where panel data are unavailable or suffer from particularly pressing quality concerns. Put differently, the synthetic panel methods offer a palliative to the acute scarcity of panel data. Notably, the authors argue that the synthetic panel approach has generally been found to produce bounds that reliably encompass actual poverty transitions. However, in the absence of fortuitously available, relevant, ancillary data, the strong assumptions required to produce point estimates cannot be readily checked, and results must thus be correspondingly treated with circumspection. As a general proposition, the authors argue that, unless point estimates can be empirically validated, the emphasis, when drawing conclusions, should be on findings that are consistent with patterns also captured by the bounds estimates.

India, the world's second most populous country, has been hit hard by the Covid-19 pandemic. The virus has exacted a heavy toll in terms of lives lost and deteriorating health outcomes, and the economic consequences of the pandemic have been similarly grim. Dang, Lanjouw and Vrijburg review the emerging and rapidly growing literature, but note that there remain significant knowledge gaps as to the distributional consequences of the crisis. In particular, comprehensive data on welfare outcomes at the household level are highly outdated in

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India—the most recent household survey data from the National Sample Survey Organisation refer to the year 2011/12. The authors analyze the available pre-Covid survey data to document the incidence of chronic poverty and downward mobility between 2004/5 and 2011/2. They show that this was a period of strong economic growth and rapidly declining poverty, and argue that a profile of poverty dynamics during such a period offers a plausible, albeit partial, window on population groups that are particularly at risk as a result of the Covid-19 crisis. They suggest, further, that there are grounds for expecting severe distributional consequences of the pandemic going forward. As the virus spreads out of the relatively affluent cities, and as economic stagnation persists, rural areas, with historically higher rates of chronic poverty and vulnerability, may expect to see particularly sharp increases in poverty. Dang et al. highlight that while recent vaccination developments offer some grounds for optimism, there remains an urgent need to identify, implement and amplify effective policy alleviation measures.

Understanding poverty dynamics in Ethiopia, the second largest country on the African continent in terms of population after Nigeria, is the focus of the contribution by Mekasha and Tarp. Their detailed analysis of poverty transitions and vulnerability based on pre-Covid survey data identifies population groups that face a high risk of falling back into poverty during a period of broadly rising prosperity. A profiling of the socioeconomic characteristics of these different population segments points to sections of society that are likely to be highly affected by the pandemic. Mekasha and Tarp show that the adverse impact of the pandemic is likely to be higher in urban areas. Specifically, they indicate that female-headed households in urban areas, as well as households where the head is less educated, engaged in the service sector, in self-employment, or in domestic work, were highly represented among the downwardly mobile in the pre-Covid period, and are likely to be particularly at risk during the pandemic. Accordingly, they argue that poverty reduction policies should target both the existing poor, located mainly in rural areas, and the vulnerable non-poor in urban areas, who face a high risk of poverty because of the pandemic.

Moving attention further south in Africa, Aikaeli, Garcés-Urzainqui and Mdadila examine the dynamics of poverty and vulnerability in Tanzania. They stress that despite apparent stability in aggregate poverty rates, and despite robust economic growth, households experienced strong fluctuations in consumption levels during the pre-Covid period: one out of five Tanzanians above the poverty line in 2012 were found to be poor six years later. Aikaeli et al. find that education and employment in the non-farm sector are particularly effective in shielding households from poverty in Tanzania, while rural households and those with many children are most likely to slip into poverty. Implications of the authors' findings are twofold. First, new policies specifically targeted at those most directly affected by the pandemic should be put in place, as existing policies do not seem to be particularly well targeted at the newly vulnerable, such as people dependent on agricultural exports. Moreover, among those less directly hit by the first-order economic impacts of the Covid-19 shock, the authors find a large number of rural households that endure a situation of either persistent poverty or great vulnerability. Their situation appears to have become even more critical, calling for concerted efforts to improve their situation.

Turning yet further south in Africa, the paper by Salvucci and Tarp provides an analysis of the dynamics of poverty and vulnerability and their correlates in Mozambique before and during Covid-19. Their results suggest there is a high degree of chronic poverty in the country, and even many of the non-poor face a high risk of falling back into poverty. The authors point to seasonal patterns in the dynamics of poverty. Although a large percentage of the population is either poor or non-poor over the entire year, a high percentage of individuals were observed to fall into poverty between the dry and the rainy season, and a non-negligible proportion of these were

1800

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then unable to lift themselves back over the poverty line in the subsequent dry season. The authors stress that findings such as these could not be obtained from standard cross-sectional data analysis. They note further that while the structural correlates of poverty and vulnerability, and of the transition between different poverty states, do not appear to have evolved markedly over time, new sources of vulnerability have emerged due to Covid-19. Salvucci and Tarp recommend complementing standard anti-poverty measures with the formulation of a universal social protection policy that is able to protect the very large group of vulnerable individuals living above the poverty line but facing a high risk of falling back into poverty.

The last article by Ferreira, Salvucci, and Tarp in this symposium addresses poverty and vulnerability transitions in Myanmar. This troubled country in South East Asia experienced a violent military coup on 1 February 2021, rendering particularly complex the task of disentangling the impact of the pandemic from the political upheaval. However, it is clear that Myanmar achieved marked progress in economic growth and poverty reduction in the pre-Covid period. At the same time, the analysis reveals—as is the case in the other case-study countries—important differences in the probability of transitioning between different states depending on household and location characteristics. The Covid-19 lockdown measures clearly increased the likelihood of falling into poverty among those hit hardest by the shock. These include "newly" vulnerable groups such as urban households, individuals working in the informal sector, in the tourism sector, in retail, transportation, services in general, and manufacturing. At the same time, rural households have historically been particularly vulnerable; they seem to have fallen deeper into poverty and become less able to recover. High levels of chronic poverty and limited upward mobility in some parts of the country, and for some household categories, combine to make the consequences of a Covid-19 shock most worrying.

A common theme running through our five case studies is that consequences of the new economic environment posed by the Covid-19 crisis are not spatially uniform. Mobility is one of the first casualties from the policy measures that have comprised the typical policy response to the Covid-19 pandemic. Restrictions on the movement of people have also interrupted the normal flow of goods and services. As a result, the health and economic consequences of the crisis have been spatially concentrated. The synthetic panels underpinning our examination of poverty dynamics in the case studies have been built up from nationally representative cross-sectional surveys. These surveys generally permit only a modest level of spatial disaggregation. We have considered spatial dimensions of the dynamics of poverty at the level that our data permit, and have derived some preliminary insights. Poverty maps could potentially reveal the presence of more disaggregated pockets of poverty. However, such maps rely on historical data—usually household survey and population census data—that become available only infrequently. As new poverty map data become available, including maps on the spatial distribution of Covid-19, an important priority for future research into the impacts of the Covid-19 crisis will be to dig deeper into spatial patterns of poverty dynamics.

The objective of this symposium issue is to draw attention to the importance of considering poverty dynamics and vulnerability in the context of the Covid-19 pandemic and the attendant, drastically altered, global development landscape. We argue that country poverty assessments should incorporate analysis of such dynamics and we have aimed to fill an immediate knowledge gap based on available data in five countries (India, Ethiopia, Tanzania, Mozambique and Myanmar). These countries represent an illustrative mix of both large and small developing countries. They may well point to similar outcomes in a broader set of countries, especially in Africa. Given the lack of panel data, we have employed a synthetic panel approach, as outlined in the contribution by Garcés-Urzainqui, Lanjouw, and Rongen. This approach is no substitute

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for proper analysis based on panel data, but can offer useful insights in the absence of such data. The country studies presented here highlight the importance of identifying the characteristics associated with movements of people into and out of poverty. They highlight that the pandemic has swept across countries in which not only was chronic poverty previously widespread but also there were significant numbers of non-poor people facing a high risk of falling back into poverty. It is important to consider these population groups alongside the "new poor," who have specific characteristics or attributes that are likely to have been particularly adversely affected by the pandemic and associated economic consequences. Many of these "new poor" are in urban areas, and would seem to require specific, tailored, social protection. At the same time, the health and economic impacts of the pandemic have been spreading to rural areas. As the impact of the pandemic spreads out from the relatively better-off urban areas, and as economic stagnation persists, rural areas may see particularly sharp increases in poverty. This brings into focus the need for a redoubling of efforts to promote policy packages that address also the needs of the rural poor and vulnerable.

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### ENDNOTE

<sup>1</sup> The authors are grateful for the funding support from the FCDO and the DEEP program coordination by OPM.

**How to cite this article:** Lanjouw, P. F., & Tarp, F. (2021). Poverty, vulnerability and Covid-19: Introduction and overview. *Review of Development Economics*, 25, 1797–1802. https://doi.org/10.1111/rode.12844

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