

Edward Andrew Miguel, Johannes Haushofer, Michael Walker,
and Dennis Egger

Economic activity and living standards during the COVID-19 pandemic

Evidence from rural Kenya



In brief

- Detailed quantitative evidence on the evolution of economic outcomes during the COVID-19 health crisis in low-income countries remains scarce.
- This study examines the impact of COVID-19 lockdowns using phone surveys from a representative sample of 11,000 households and 5,000 businesses in one of the poorest regions in Kenya.
- Surveys started early in the pandemic, and are designed to be representative over time, allowing us to trace out dynamics in core economic quantities such as expenditure, income, total sales, prices and local GDP.
- The findings suggest a precipitous drop in economic activity and analogous negative impacts on household living standards. While households have employed numerous coping strategies, government and NGO support is not sufficiently large to offset losses.

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Overview of the research

COVID-19 is causing negative health and economic effects around the globe, and data on its impact and the behavioural responses of households and firms in sub-Saharan Africa are currently limited. This creates a large demand for data that can help understand effects of the pandemic and associated policies.

As part of ongoing work on the long-term effects of an unconditional cash transfer program, this study has a highly relevant sample, recent contact information and field staff in place to conduct phone surveys to understand the scope of the pandemic. In particular, this study is also able to address whether a past cash transfer program administered in 2014-16 can improve outcomes and resilience during a shock, a finding that will be highly relevant to the many governments and NGOs that have implemented such programs. The NGO GiveDirectly made large, unconditional cash transfers to poor households in treatment villages meeting a basic means-test for eligibility. The transfers were large, at about 75% of annual household expenditure for recipient households, and generated sizable short-term gains 1.5 years later (Egger et al. 2019).

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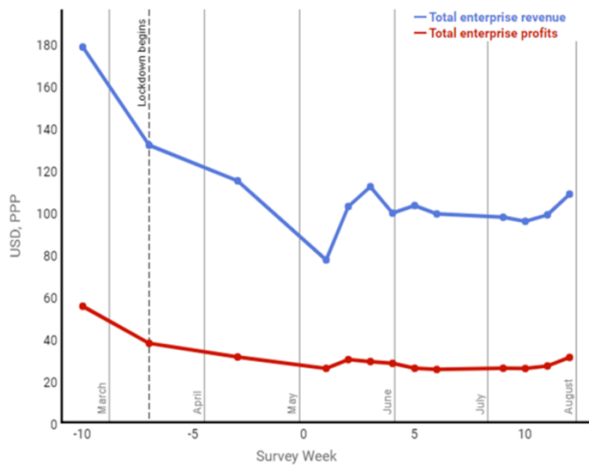
This study takes place in 653 villages in three subcounties of Siaya County, Kenya. Data was collected through repeated phone surveys, building on past survey work and a recent 2019 census of households and enterprises conducted by the research team. This allows us to construct representative estimates of the study area. In addition, our household surveys began early in the pandemic, allowing us to trace out effects from the initial weeks. We were able to obtain high tracking and survey rates for households and enterprises, with 89% tracking / 88% survey rate for enterprises and 79% tracking / 75% survey rate for households.

We have three main findings to date:

- 1. Enterprise activity drops precipitously from February to May.** Enterprise revenues fell by 44%, and both revenues and profits have remained roughly 40% below their February levels through July. These trends hold across agriculture, retail, manufacturing and service sectors, indicating a broad-based shock.
- 2. Household living standards have fallen by about 25% from late March to June.** This holds for both household earnings in the last 14 days (across agriculture, self-employment and wage work), and household consumption (food consumption and 8 non-food categories). Declines in non-food expenditure (40%) are noticeably larger than food consumption (12.5%), Food insecurity has increased: the number of days children miss meals increases by 55% on average, from 0.8 days to 1.2 days, while adults go from 1.4 to 1.7 days missing meals, though both of these have returned to late March levels by the end of June.

Figure 1: Enterprise revenues and profits in the past 14 days

(a) Across all sectors



(b) By sector

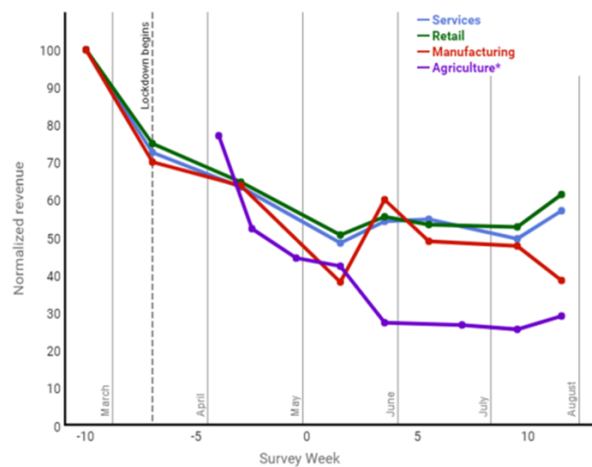


Figure 2: Household living standards relative to late March

Households:

Earnings: -25%*

Consumption: -23%*

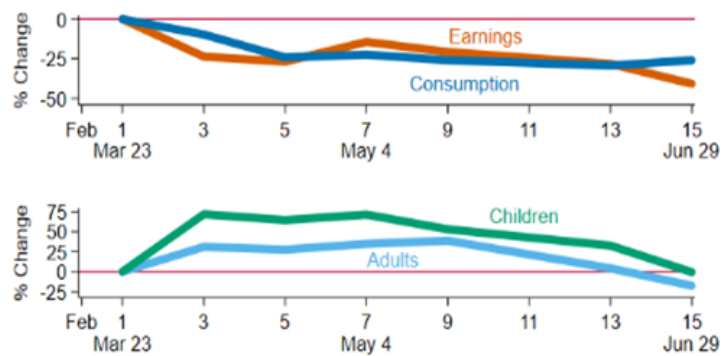
Days Missing Meals

Adults: 22%*

Children: 55%*

Mean change relative to reference date;

* = p-value < 0.05.



Note: The figure plots the declines in household earnings, consumption and days missing meals relative to a reference week of March 23. Earnings and consumption are measured in per-capita terms. Earnings includes wage, self-employment and agricultural earnings in the past 14 days. Household consumption expenditure is measured over the last 7 days across food consumption, which includes expenditure, own consumption and gifts, and 8 non-food categories.

3. We see increases in the share of households following prevention guidelines. As Kenya imposed strict mandatory face masks in April, self-reported face mask usage reaches 80% and stays consistent across the subsequent weeks.

Two caveats to these results are that these effects may be partially driven by flooding that affected the study area in March 2020, and may be partially driven by seasonal fluctuations. Ongoing work is further exploring these factors. In addition, surveys are ongoing, and thus we will be able to continue monitoring and tracking these effects.

In addition, in preliminary analyses, we find some evidence that past cash transfers partially offset the increases in food insecurity, particularly for adults. We find that cash-eligible households in treatment villages report about 10% fewer days adults missed meals compared to eligible households in control villages. Ongoing work is exploring how cash spillover effects may influence these estimates, and additional data may lead to further insights.

Policy motivation for research

Quantitative data on the pandemic experiences of enterprises and households in rural areas of sub-Saharan Africa remains relatively scarce, yet vital for developing appropriate policy responses. A large share of households and enterprises in our study area are in the informal sector, and are thus missed in aggregate macroeconomic statistics. Furthermore, the periodic household or labor force surveys conducted in many low- and middle-income countries (LMCIs) are too infrequent to serve as real-time tracking during a crisis. Repeated phone surveys allow for original, large-sample, representative data to document the losses from COVID-19.

Our study sample provides details on a relatively poor and potentially vulnerable population that may be especially at-risk from lost income. Our data allow us to understand how their livelihoods are affected and the coping strategies undertaken during the initial months of the pandemic. Ongoing phone surveys will also help us continue to trace out the persistence of any effects, and provide an indication if/when economic recovery begins. In addition, the details collected on social distancing behaviour provide insights into the degree to which households are following government recommendations.

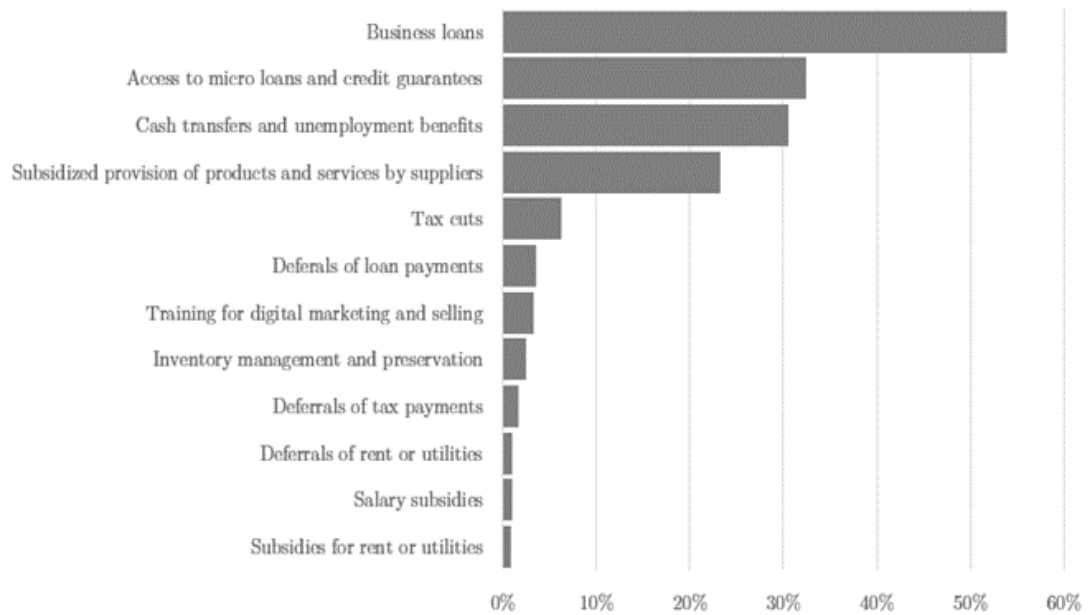
Our findings will also shed additional light on the extent to which one-time unconditional cash transfers and other development interventions may have lasting gains during times of crisis, contributing to fully quantifying their potential long-term benefits. These will be highly relevant to policymakers interested in social protection programs.

Policy recommendations

Given that we see increases in household food insecurity and domestic violence, this suggests that coping mechanisms that households are undertaking are not fully compensating for the lost income. This is a role that government and NGOs could help fulfil. This work also highlights the need for continued data collection to monitor the economic situation of low income households during the pandemic, in order to document the challenges they may be facing.

When asked what policies would help them most at this time, entrepreneurs in our study area most frequently mention business- and micro-loans, as well as cash transfers (see Figure 3). Moreover, our earlier research shows that cash transfers to households indirectly benefit enterprises as well by boosting revenues in the economy as a whole (Egger et al. 2019). Given limited budgets of local governments, some of these policies may need to be financed from international sources, despite the global economic slowdown.

Figure 3: Entrepreneurs' policy priorities



Note: This figure plots the frequency of responses among enterprises surveyed to the question 'In your view, what types of government or external assistance policies will benefit your business the most during the COVID-19 crisis?' Respondents were asked to choose up to 3 of the options.