

The pandemic poverty penalty: how COVID-19 complicates our measure of household well-being

*Some countries measure well-being, including inequalities in well-being, by consumption. But when people no longer travel to work or eat in restaurants because of COVID, the assumed relationship between spending and well-being – already loose, because of the poverty penalty – breaks down. **Laura Caron (Columbia)** and **Erwin R Tiongson (Georgetown)** say economists need to become better attuned to new sources of inequality.*

Poor households often pay more for goods and services than rich ones do. This concept is known as the “[poverty penalty](#)”. First documented by the sociologist [David Caplovitz](#) and more recently by economist [Ronald Mendoza](#), poor households often pay higher prices at local convenience stores when they do not have transport or access to cheaper stores, or because they do not receive bulk discounts. “Market failures” mean that some products (such as health insurance) may not be available to poorer households, who then pay for more expensive substitutes.

The pandemic has created new forms of the poverty penalty. Like other crises, it has substantially reduced income and employment. In addition, unlike other crises, the lockdowns during the pandemic have restricted consumption choices and lowered costs for those who transitioned to remote work – including reductions in commuting expenses, restaurant meals, and even clothing – while costing some households more. These, in turn, have been unequally distributed, resulting in inequalities in both the quantities and prices of goods consumed by rich and poor households.

First, remote work and commuting cost-saving have been unequally distributed, and are generally less accessible to lower-income households. In the [US](#), for example, Blacks and Hispanics – as well as low-wage workers – are less likely to work remotely. In [South Africa](#), according to Imraan Valodia and David Francis, the rich are “able to continue to earn an income by working from home, and many will actually save money due to reduced expenditure on things like eating out, holidays and entertaining.” The inequality [stretches](#) across countries too: while remote work was possible worldwide, nearly 25% of workers in high-income countries were estimated to have worked from home in 2020. In low-income countries, only 13% did.

Second, poor households have also had to pay more to obtain basic necessities. “I’m having to shop locally because of lockdown, where the prices are slightly higher,” a [worker in the UK](#) said recently. More generally, a [study](#) comparing poor and rich UK households found that “families on a low income are having to buy food at a higher effective price.” Similarly in the US, those who rely on [public transport](#) to travel to [groceries](#) – often those with low incomes – have a limited set of options, at a time when public transport is not available or presents health risks. Even for people who were able to work remotely, lockdowns and stay-at-home orders meant that many who were already struggling [saw](#) rising energy bills from being at home, taking up a larger portion of the income of poorer households.

Together, these imply larger reductions in expenditure and higher savings for rich households. In fact, the patterns in higher-income countries are striking. In Australia, [Canada](#), [France](#), [Germany](#), [the UK](#), and the [US](#), higher income households have seen more reductions in household consumption. For example, in the [UK](#), 23% of households in the lowest quintile reduced spending, compared with more than 49% in the top quintile. As a result, household saving rates have been exceptionally high across high-income countries and savings have been concentrated in higher-income households, though part of the savings likely come from precautionary savings rather than just the new constraints on consumption. In the [UK](#), savings in the top quintile increased (more than in previous years), while *declining* in the lowest quintile. In [Canada](#), the richest quintile accounts for nearly 40 percent of all new savings while the lowest quintile accounts for less than 10 percent. There are similar patterns in [Australia](#). There may even be further domino effects that we cannot measure yet – reduced spending by the high-income on transportation or retail may, in turn, drive job losses and reduced incomes for low-income workers employed in these industries.



A near-empty commuting train in Chicago in October 2020. Photo: [Raed Mansour](#) via a [CC BY 2.0 licence](#)

In lower-income or middle-income countries, the patterns have been less clear. This might be partly due to the measurement of household consumption and how the data are collected, including partial information on prices and quantities. However, the pandemic poverty penalty may have important consequences for the measurement of welfare in these countries.

Before COVID-19 and in the absence of reliable income data, these countries often used data on consumption or expenditures to [measure household well-being](#). In brief, and at the risk of over-simplification, all household expenditure items were added up—food and non-food expenditures alike—and divided by household size. Higher (per capita) consumption or expenditure was interpreted in the same way as income would be, with higher consumption taken to mean higher levels of well-being. Households whose consumption per day fell below a certain [threshold](#) were thought to be poor.

Rapid assessments of household consumption during the pandemic arguably follow the logic above—with reductions in consumption expected to follow from income losses, as people cope with a shock. However, these assessments face a particular challenge during the current pandemic, when lockdowns and remote work have forced changes in consumer behaviour separate from the usual household decision-making process. For example, absent more precise information, a fall in food consumption, including the consumption of restaurant meals reported by a household, can have ambiguous implications for well-being: we cannot tell whether that was due to no longer eating out at work because of remote work, restaurants being closed or unsafe, or the household no longer being able to afford to eat out. By how much well-being falls depends on the household's preferences and could be determined theoretically from a household utility function.

What do rapid assessments in lower-income or middle-income countries find? In several countries, urban households and richer households have been more likely to reduce consumption during the pandemic. In [Papua New Guinea](#), for example, nearly 40 percent of richer households reduced both food and non-food consumption, while only 24 percent of poorer households did so. In [Moldova](#), richer households faced smaller income losses while reducing expenditures more sharply than poorer households. In [Mongolia](#), urban households were more likely to reduce both food and non-food expenditures. There are similar patterns in [Ethiopia](#), [Malawi](#), and [Nigeria](#) although the differences are smaller. There are also similar patterns among refugees in [Uganda](#) (although not necessarily in the general population [there](#)).

It is not clear from published summary data *by how much* expenditures were reduced, only that urban and richer households were more likely to reduce them. In [China](#), however, we have more information: Both rural and urban households reduced spending on transport, education and entertainment, and clothing, but reductions were even larger for urban households. Rural households increased spending on food while urban households decreased it.

There are two sets of competing explanations for these patterns, both plausible. First, reductions in consumption may truly reflect reduced quantity or quality of consumption, and, in turn, may reflect a fall in well-being. Reduced consumption in urban areas is consistent with greater job and income losses in urban areas. However, as in the case of Uganda's refugees, it is possible poor and rural households did not reduce their consumption as much, not because they were much better off, but "because their levels of food and non-food consumption were already very low."

Nonetheless, we see falls in consumption even among those who have *not* experienced business or income losses. For example, in six countries in East Asia and the Pacific, many households that did not suffer any wage or business loss also [lowered](#) their food expenditures, including more than half of those in Indonesia. This suggests there may be an alternative explanation for lowered spending during the pandemic. In particular, where transport expenditure can be as much as [a third of daily income](#), the savings can be large for those in low-income countries able to work from home, who are likely to be richer, wage-employed workers or workers in urban areas. Similarly, the larger reduction in food consumption among richer households might reflect reduced restaurant meals and more home cooked meals, and thus a reduction in prices (and perhaps quality) but not quantities. And just like their counterparts in high-income countries, these households might have substantially reduced both their food and non-food consumption, not out of need (from reduced incomes) but because the lockdowns compelled or allowed them to do so.

This new pandemic poverty penalty may turn out to be permanent, if wealthier households commute to work less and save money on transport, though they might spend more at restaurants and other forms of entertainment as places reopen and as households reallocate expenditures. Although we do not know that these "forced savings" represent an increase in household well-being, they may at least give people the buffer they need to face future crises or job losses and increase wealth. In places where consumption will remain the primary measure of household well-being, this might require that we measure consumption a little differently. For specialists in this field, something analogous to estimates of the rental equivalent of owner-occupied housing units might be necessary – for example, a commuting expense equivalent, comparing remote and in-person workers. Or, we might use measures of [income or wealth](#) in place of consumption, or some [combination of income and consumption](#). More importantly, it means we must become ever more attuned to new sources of inequality in the way we live and the way we work.

This post represents the views of the authors and not those of the COVID-19 blog, nor LSE. The authors thank Lidia Ceriani, Andrew Dabalen, Shantayanan Devarajan, Maria Ana Lugo, Steve Radelet, Martin Ravallion, and Giovanni Vecchi for their helpful comments and insights.