Stringency of Movement Restrictions Linked With Higher Retail Food Prices but Not Overall Prices for All Consumer Goods During COVID-19 Pandemic

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Objectives: The COVID-19 crisis has disrupted economies and health systems across the globe and has brought substantial challenges for food systems. Government responses key to minimizing disease spread have included a number of movement restriction policies (e.g., school closures, stay at home measures, etc.). Such policies have impacted food consumption and purchasing behaviours and have harmed much of the face-to-face type of labour required for food retailing, which in turn may have impacted the affordability of diets. We use evidence from 133 countries to investigate the association between stringency in movement restriction policies and retail price levels for food and other consumer goods.

Methods: We use the International Monetary Fund's monthly national consumer price index (CPI), and food and non-alcoholic beverage index (FCPI), as well as a ratio of FCPI to CPI—the food price index (FPI)—for 133 countries from January 2017 to November

2020. Data on stringency in movement restriction policies and COVID-19 cases and mortality per million were obtained from the Oxford COVID-19 Government Response Tracker and the European Centre for Disease Prevention and Control, respectively. Fixed effects regression models were used to estimate the association between stringency of COVID-19 movement restrictions and monthly differences in 2020 retail price levels (from average 2017–2019 levels) of foods and other consumer goods, while controlling for pandemic severity in each country and month.

Results: Regression models yielded a positive and significant relationship between stringency level and FCPI level (coeff. = 1.24-1.91; 95% CIs: 0.25-2.79) or FPI level (coeff. = 1.24-2.14; 95% CIs: 0.60-2.53). Alternatively, stringency level was either negatively associated with CPI level (coeff. = -0.57; 95% CI: -1.06 - -0.07) or not significantly associated with CPI level.

Conclusions: Government response stringency in COVID-19 movement restriction policies is linked with higher retail food price levels. Governments could consider implementing these policies alongside other measures (e.g., food assistance) to mitigate negative spillovers into the domain of food security and nutrition.

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