

## Reporting Summary

Nature Research wishes to improve the reproducibility of the work that we publish. This form provides structure for consistency and transparency in reporting. For further information on Nature Research policies, see our [Editorial Policies](#) and the [Editorial Policy Checklist](#).

### Statistics

For all statistical analyses, confirm that the following items are present in the figure legend, table legend, main text, or Methods section.

n/a Confirmed

- The exact sample size ( $n$ ) for each experimental group/condition, given as a discrete number and unit of measurement
- A statement on whether measurements were taken from distinct samples or whether the same sample was measured repeatedly
- The statistical test(s) used AND whether they are one- or two-sided  
*Only common tests should be described solely by name; describe more complex techniques in the Methods section.*
- A description of all covariates tested
- A description of any assumptions or corrections, such as tests of normality and adjustment for multiple comparisons
- A full description of the statistical parameters including central tendency (e.g. means) or other basic estimates (e.g. regression coefficient) AND variation (e.g. standard deviation) or associated estimates of uncertainty (e.g. confidence intervals)
- For null hypothesis testing, the test statistic (e.g.  $F$ ,  $t$ ,  $r$ ) with confidence intervals, effect sizes, degrees of freedom and  $P$  value noted  
*Give  $P$  values as exact values whenever suitable.*
- For Bayesian analysis, information on the choice of priors and Markov chain Monte Carlo settings
- For hierarchical and complex designs, identification of the appropriate level for tests and full reporting of outcomes
- Estimates of effect sizes (e.g. Cohen's  $d$ , Pearson's  $r$ ), indicating how they were calculated

*Our web collection on [statistics for biologists](#) contains articles on many of the points above.*

### Software and code

Policy information about [availability of computer code](#)

Data collection

Data analysis

For manuscripts utilizing custom algorithms or software that are central to the research but not yet described in published literature, software must be made available to editors and reviewers. We strongly encourage code deposition in a community repository (e.g. GitHub). See the Nature Research [guidelines for submitting code & software](#) for further information.

### Data

Policy information about [availability of data](#)

All manuscripts must include a [data availability statement](#). This statement should provide the following information, where applicable:

- Accession codes, unique identifiers, or web links for publicly available datasets
- A list of figures that have associated raw data
- A description of any restrictions on data availability

## Field-specific reporting

Please select the one below that is the best fit for your research. If you are not sure, read the appropriate sections before making your selection.

Life sciences  Behavioural & social sciences  Ecological, evolutionary & environmental sciences

For a reference copy of the document with all sections, see [nature.com/documents/nr-reporting-summary-flat.pdf](https://www.nature.com/documents/nr-reporting-summary-flat.pdf)

## Behavioural & social sciences study design

All studies must disclose on these points even when the disclosure is negative.

Study description	The study analyzes longitudinal survey data from four African countries with varying policy implementations to estimate the impact of the impact of COVID-19 on socioeconomic indicators for households, individuals, and children. The data sources include pre-COVID-19 national face-to-face surveys and monthly phone surveys that were implemented following the onset of the pandemic.
Research sample	The longitudinal survey data informing our analysis stem from (i) the pre-COVID-19 national face-to-face household surveys that were designed to be representative in each country at the national, urban/rural and regional-levels, and (ii) the monthly phone surveys that aimed to re-interview all households that had previously been interviewed by the aforementioned pre-COVID-19 face-to-face household surveys and that had provided at least one mobile phone number for a household member or a reference individual outside the household. Please see the appendix for more information on how the phone survey samples were drawn.
Sampling strategy	Please see the appendix that details the sampling strategy for the monthly phone surveys as well as the approach to calculation of the phone survey sampling weights that help provide general household population-representative insights.
Data collection	Data collection is detailed in the appendix and the anonymized unit-record survey data are publicly available on the World Bank Microdata Library.
Timing	Data collection began in May 2021 and completed in July 2021.
Data exclusions	Data was excluded only if the record was incomplete or missing information on the relevant variables.
Non-participation	Participants either declined to be interviewed as part of the informed consent request or they were not reachable by phone. Details of unreached participants and correction for potential attrition and selection bias are discussed in the appendix.
Randomization	Randomization was not possible since the study examines the impact of COVID-19 and related national policies.

## Reporting for specific materials, systems and methods

We require information from authors about some types of materials, experimental systems and methods used in many studies. Here, indicate whether each material, system or method listed is relevant to your study. If you are not sure if a list item applies to your research, read the appropriate section before selecting a response.

### Materials & experimental systems

n/a	Involved in the study
<input checked="" type="checkbox"/>	<input type="checkbox"/> Antibodies
<input checked="" type="checkbox"/>	<input type="checkbox"/> Eukaryotic cell lines
<input checked="" type="checkbox"/>	<input type="checkbox"/> Palaeontology and archaeology
<input checked="" type="checkbox"/>	<input type="checkbox"/> Animals and other organisms
<input type="checkbox"/>	<input checked="" type="checkbox"/> Human research participants
<input checked="" type="checkbox"/>	<input type="checkbox"/> Clinical data
<input checked="" type="checkbox"/>	<input type="checkbox"/> Dual use research of concern

### Methods

n/a	Involved in the study
<input checked="" type="checkbox"/>	<input type="checkbox"/> ChIP-seq
<input checked="" type="checkbox"/>	<input type="checkbox"/> Flow cytometry
<input checked="" type="checkbox"/>	<input type="checkbox"/> MRI-based neuroimaging

## Human research participants

Policy information about [studies involving human research participants](#)

Population characteristics	Please see the above response on the research sample. For more details, please consult the appendix.
Recruitment	In each country, the monthly phone survey aimed to re-interview all households that had previously been interviewed by a pre-COVID-19 national face-to-face household survey and that had provided at least one mobile phone number for a household member or a reference individual outside the household. The face-to-face and phone surveys are conducted by the respective national statistical office (NSO) in each country, in accordance with the Statistical Act. The only exception is in the case of the phone survey in Ethiopia, which is conducted by a private firm contracted by the World Bank (namely Laterite Ethiopia) but upon clearance from the Central Statistical Agency (CSA) of Ethiopia, as the survey implementing agency for the

## Ethics oversight

face-to-face survey that served as the sampling frame for the phone survey. The face-to-face and phone survey data collection is conducted in each country with the informed consent of each survey respondent.

In each country, the NSO provides and implements the guidelines for the face-to-face and phone survey procedures, in collaboration with the World Bank Living Standards Measurement Study (LSMS) Program and the Poverty and Equity Global Practice. The only exception is again in the case of Ethiopia, where the private firm implements the phone survey guidelines that are provided by the World Bank and are approved by the CSA of Ethiopia. The survey data are anonymized prior to public dissemination on the World Bank Microdata Library and our analysis relies on these anonymized public use datasets.

Note that full information on the approval of the study protocol must also be provided in the manuscript.