



DATA FOR DEVELOPMENT

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Borrowing-induced Impoverishment Associated with Non-communicable Diseases among Indian States using Human Development Survey Data

Mukul Das & Manish Kumar



In the absence of Universal Health Coverage (UHC) in India, non-communicable disease (NCD) related health expenditure is strongly associated with household borrowing. Such borrowing can deepen impoverishment in ways conventional measures fail to capture. Using data from the two waves of the India Human Development Survey, Round I (2004-05) and Round II (2011-12), the study introduces a repayment-adjusted consumption measure that subtracts loan repayments from household consumption to estimate the extent of impoverishment. The study uses logistic regression to identify the determinants of borrowing. The findings show that impoverishment was highest in Bihar, Madhya Pradesh, and Uttar Pradesh in both rounds. Households with lower education, those without government insurance, and middle-income households were more likely to borrow. The study highlights the limitations of conventional measures in capturing the full financial burden of NCDs. It recommends incorporating a borrowing module into future surveys to identify hidden impoverishment and adopting state-specific financial protection measures, including greater awareness of insurance schemes, expanded NCD insurance coverage, outpatient care coverage, and regulation of private healthcare pricing.

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Mukal Das is a PhD scholar in the Department of Economics at SRM University-AP, Amaravati. His research in health economics examines the economic burden of non-communicable diseases in India, focusing on borrowing-induced impoverishment and household financial vulnerability using IHDS and NSS data. He holds an M.A. in Economics from Guwahati University.



Manish Kumar is an Assistant Professor in the Department of Economics at SRM University-AP, Amaravati. His research interests include the economics of innovation, firm-level productivity, and health economics. His work examines the economic drivers of innovation, productivity and healthcare outcomes, thereby contributing to a broader understanding of economic development and policy challenges.

India's Occupational Transformation: A Tale of Two Escalators

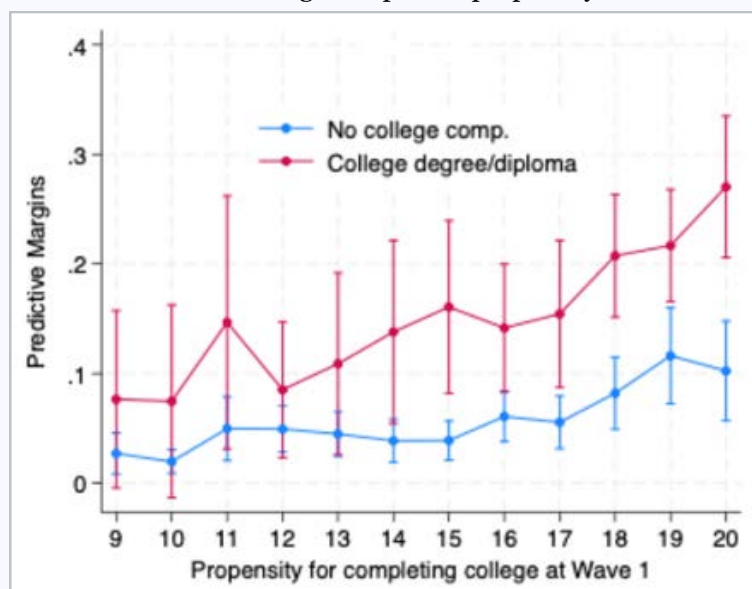
Sonalde Desai & Pallavi Choudhuri

India's rapid expansion in higher education has coincided with stagnant growth in skilled, white-collar jobs, leading to hyper-competition and underemployment among graduates. Using panel data from the India Human Development Survey (IHDS), the paper tracks 12,084 young men between 2004–05 and 2011–12 to assess whether college degrees facilitate access to white-collar employment beyond background advantages. Applying a propensity-score stratification framework, the study examines heterogeneous returns to higher education across social origins. In contrast to United States patterns

where marginalised individuals gain the most from higher education, the occupational benefits of a college degree in India are heavily concentrated among the already privileged. Interestingly, non-graduates from the highest-propensity backgrounds secure white-collar jobs at higher rates than college-educated men from disadvantaged backgrounds. Thus, while education offers an occupational escalator out of casual work, it moves faster for the privileged, reinforcing existing socioeconomic inequalities.



Figure 1: Predicted probability of attaining white collar job at wave 2 for different college completion propensity Strata



Source: Authors' computation based on two waves of the IHDS, conducted in 2004-05 and 2011-12.



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About the Authors



Sonalde Desai is a Distinguished University Professor Emerita in the Department of Sociology at the University of Maryland and Professor and Centre Director at the NCAER-National Data Innovation Centre. She leads the India Human Development Survey (IHDS), which covers over 40,000 households. She holds a PhD from Stanford University and completed postdoctoral training at the University of Chicago and RAND Corporation. She served as President of the Population Association of America in 2022 and is a Fellow of the American Association for the Advancement of Science (AAAS).



Pallavi Choudhuri is a Professor and Deputy Director at the NCAER-National Data Innovation Centre. Her research focuses on social protection, poverty, employment, and gender. She is a member of the Technical Advisory Group for Household Surveys of the National Sample Survey. Her papers have been published in international journals such as World Development and the Journal of Survey Statistics and Methodology. Previously, she was a Visiting Assistant Professor of Economics at Grand Valley State University, Michigan. She holds a PhD in Economics from the University of Wyoming.

Recent Publications Using IHDS Data

Ganguly, D., & Agarwal, G. (2026, September 26). Create the Right Digital Ecosystem for Children. The Hindu Business Line.

Gupta, N., & Sedai, A. K. (2026). Does Financial Inclusion Increase Household Resilience to Natural Disasters? WIDER Working Paper 2026/111. Helsinki: UNU-WIDER.

Panda, S. (2026). Collectivism–Individualism Cultural Cleavage, Local Institutions and Prosocial Behaviour: Evidence from Household Electricity Theft in India. Journal of International Development.

Sun, K. (2026). Feature Selection for Multidimensional Poverty Measurement: Taming Indicator Dimensionality. Research Square (Preprint).

About IHDS

The India Human Development Survey (IHDS) began as a nationally representative, multi-topic survey of 41,554 households in 1,503 villages and 971 urban neighbourhoods across India. The first round of interviews were completed in 2004-05; the Data is publicly available via ICPSR. The second round re-interviewed most of these households in 2011-12 (N = 42,152), and data for the same are available via ICPSR. Fieldwork for IHDS-III was undertaken in 2022-24, and data is currently being cleaned and processed.

The IHDS-III has been jointly conducted by researchers from the University of Maryland, the National Council of Applied Economic Research, Indiana University and the University of Michigan.

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