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# Why and how to measure household debt in informal economies?

Isabelle Guérin, Arnaud Natal, and G. Venkatasubramanian



The surge in global household debt, particularly in developing countries, is underestimated due to widespread informal debt. Economists and statisticians must urgently address this issue. The *Observatory of Rural Dynamics and Inequality in South India* offers innovative methods for accurate household debt measurement.

## Introduction

Although levels of household debt vary across different contexts, they constantly exhibit an upward trend. In OECD countries, the average level of household debt nearly doubled from 1995 to 2021, rising from 68% to 127% of disposable income.<sup>1</sup> This upward trend is even more pronounced in the Global South. According to data from the Bank for International Settlements, household debt in emerging countries has increased from 28% to 50% of GDP between 2010 and 2022.<sup>2</sup> While

real estate debt is a major contributor to household debt in the North, in the South, consumer debt plays a more significant role. Additionally, the true extent of indebtedness is often underestimated due to informal, unregulated, and unrecorded debt, which can be substantial. Therefore, it is crucial to develop specific methods for measuring indebtedness. This note elaborates on the methodological innovations implemented by the *Observatory of Rural Dynamics and Inequalities in South India* over the past two decades.

## How to measure debt?

The omission of small informal loans partly explains the underestimation of family indebtedness [1]. Any attempt to measure debt is confronted with various biases. Certain debts are socially stigmatized, and individuals are reluctant to openly discuss them (social desirability bias). Research conducted in diverse settings such as the United States and South Africa has revealed that individuals tend to underesti-

<sup>1</sup><https://doi.org/10.1787/de435f6e-en> (accessed on 2 January 2024).

<sup>2</sup>[https://data.bis.org/topics/CREDIT\\_GAPS/data/BIS,PDQ\\_J3,1.0](https://data.bis.org/topics/CREDIT_GAPS/data/BIS,PDQ_J3,1.0) (accessed on 2 January 2024).

mate their debt by approximately fifty percent [2]. Individuals may also forget certain debts, especially when they have multiple debts (memory bias). Moreover, what may be classified as a debt by statisticians or field economists, a sum that is to be repaid, might be perceived differently by villagers, for instance, as “financial aid” or “money borrowed from elsewhere”, even if it still involves an obligation to repay (categorization bias). Furthermore, both consciously or unconsciously, both men and women may tend to undervalue the debts of women, restricting them to minimal amounts that are solely allocated for day-to-day expenses (gender bias). Additionally, conventional counting practices present a challenge for statisticians. Tamil villagers commonly reason in terms of approximate, contextual, qualitative, and comparative values rather than continuous variables [3]. For instance, in response to the question “how much money did you borrow from this lender?”, some participants may respond with phrases like “Much too much” or conversely “he gave me very little”.

Ethnography played a crucial role in identifying these biases and developing questionnaires that aimed to mitigate them (complete elimination of biases is unattainable). This involved using vernacular terminology and avoiding derogatory language, providing a comprehensive list of expenses and inquiring about their sources of funding instead of directly asking respondents about their debt levels. Furthermore, interviews were conducted separately with men and women, adopting a conversational approach to establish

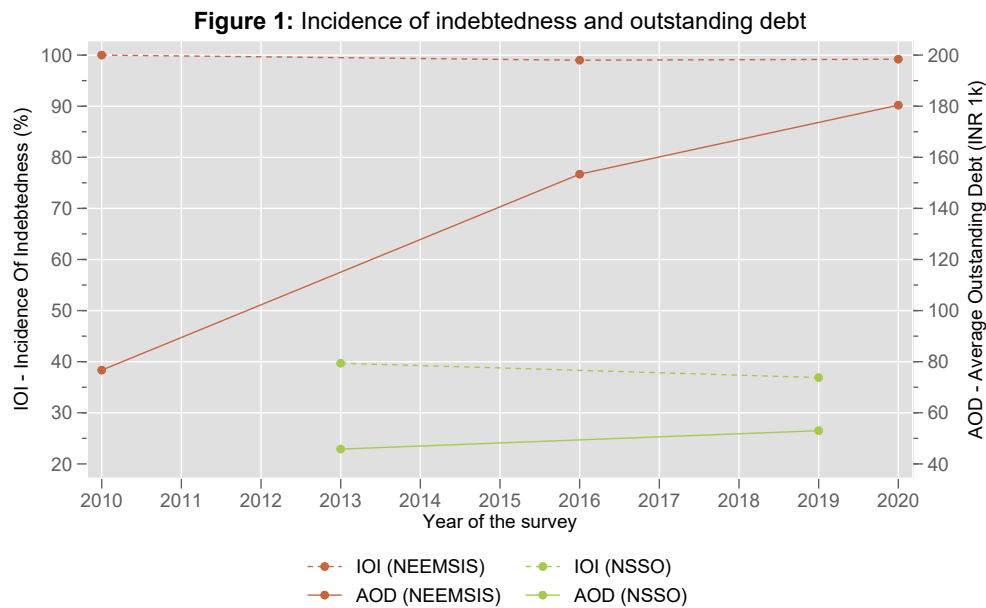
rapport and instill confidence. To accomplish this, researchers immersed themselves in participants’ social environments and utilized shared cultural references pertaining to local social, political, and religious aspects. Notably, careful attention was paid to individuals’ qualitative evaluations of debt prior to soliciting quantitative data (as individuals often possess knowledge of their debt amounts; however, the subjective quality of the debt may outweigh its actual quantity) [4].

To collect data, the *Observatory* conducted a baseline survey of over 400 households in 2010 (known as the RUME survey), and two follow-up household surveys in 2016-17 and 2020-21 of the same population (known as the NEEMIS waves).<sup>3</sup> These surveys were conducted in 10 villages in Tamil Nadu, in the districts of Kallakurichi and Cuddalore. This unique longitudinal database provides valuable insights into the changing dynamics of the region over a span of three points in time. It is worth noting, however, that our sample is not intended to be representative of the entire population, but rather serves to illustrate the diverse economic and rural dynamics within the region.

## Why worry about measuring debt?

The objective of RUME (2010) and subsequent NEEMIS (2016-17, 2020-21) data is not to supplant national statistical surveys, but rather to uncover the aspects that are overlooked by delving into and putting into context socio-economic processes at the local and regional levels [5].

<sup>3</sup><https://neemis.hypotheses.org/> (accessed on 2 January 2024).



Consequently, these data expose a distinct void in official statistical surveys.

This is particularly evident when examining household debt. When examining the prevalence of indebtedness (i.e., the percentage of households with at least one active loan), RUME and NEEMSIS data indicate that approximately 99% of households have debts, while national data such as the All India Debt and Investment Survey (AIDIS) from the NSSO (2013, 2019) reveal that only 40% of households were indebted in 2013 and 37% in 2019 (see Figure 1). Additionally, the average outstanding debt (the amount yet to be repaid) estimated using NEEMSIS data in 2020-21 surpasses that estimated using AIDIS data in 2019 by more than three-fold (in current rupees, INR 180,400 and INR 53,000 respectively).

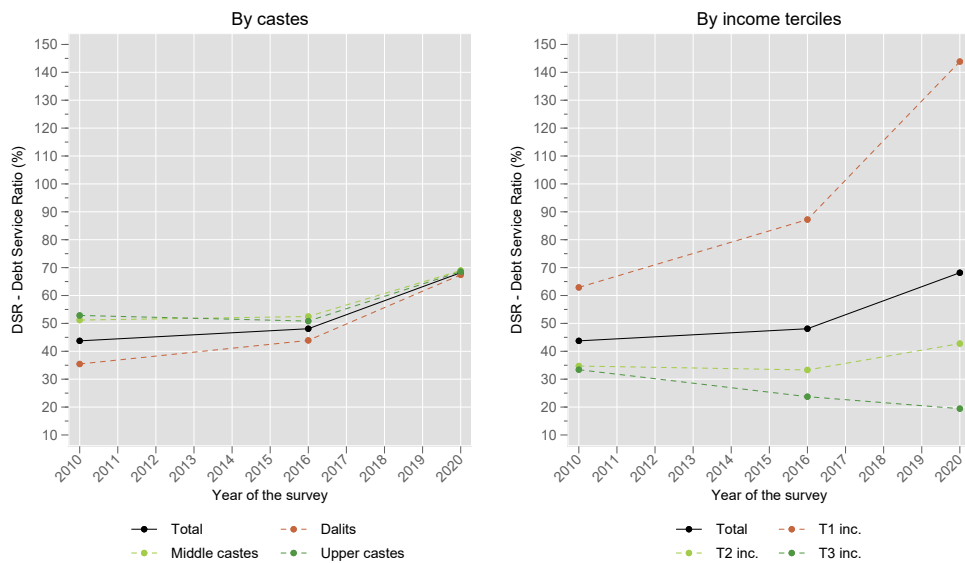
AIDIS data continue to be valuable for capturing temporal trends, such as the gradual decline and subsequent resurgence of informal household debt over

the past half-century. Nonetheless, these data alone fail to provide a comprehensive understanding of the magnitude of household debt. In the past, underestimating household debt has already led to serious crises. In contemporary India, it is clear that policymakers focus excessively on so-called “financial exclusion” (i.e., households lacking access to formal financial services) and underestimate the scale of rural household debt.

### Household financial vulnerability: an escalating concern

Specific indicators are needed to capture the consequences of debt in terms of financial vulnerability. Debt ratios are the most widely used indicators, and the most telling is probably the debt service ratio (DSR). It represents the proportion of gross annual income devoted to repaying the annual debt (capital and interest). From Figure 2, it is evident that the fi-

**Figure 2: Debt service ratio**



Source: RUME (2010), NEEMSI (2016-17, 2020-21); authors' calculations.

financial condition of households is deteriorating. In 2010, approximately 44% of their annual income was allocated towards debt repayment, whereas this proportion has escalated to 68% in 2020-21. This is of particular concern for Dalits (formerly known as untouchables) who belong to the so-called lowest castes. Unlike the “middle” and “upper” castes, Dalits have witnessed a consistent increase in their average debt servicing. The gravity of the situation is magnified for households falling under the lowest tercile of income earners, that is, the poorest 33% of households. In 2010, these households apportioned approximately 60% of their annual income for debt repayment, whereas this proportion has surged to over 140% in 2020-21. In simpler terms, for every 100 rupees earned, a staggering 140 rupees is dedicated solely to debt repayment.

## Conclusion

While many efforts have been made to better measure income, consumption and wealth in the economies of the Global South, very little attention has been paid to the reliable measurement of indebtedness. The scale of household indebtedness and its constant rise do, however, raise real public policy questions, since debt and over-indebtedness have significant consequences in terms of impoverishment, mental health, forced migration, and similar concerns. It is imperative for economists and statisticians to promptly address this matter, and the endeavors of the *Observatory* represent an initial stride in this direction.

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### Observatory of Rural Dynamics and Inequalities in South India (ODRIIS)

The *Observatory* analyzes over the past 15 years how structural changes in India are reshaping the organization of work, migration, social hierarchies, and household livelihoods. The *Observatory* also observes, measures, and understands inequalities to contribute to the theoretical renewal of the concepts of agriculture and ecology; labour and knowledge; money, debt, and finance. To achieve these objectives, the *Observatory* collects longitudinal data in rural and peri-urban areas of South India using a multidisciplinary approach; shares quantitative data and survey tools; contributes to academic debates and policymaking through publications; and trains social sciences students in research.

The aim of this Policy Brief series is to disseminate the *Observatory's* empirical, methodological and theoretical work to provide the general public and decision-makers with relevant information based on original, evidence-based data.