

# Dvara Research | Research Brief | July 2020

# Picturising the Portfolios of Indian Households

Shailesh Kumar & Misha Sharma<sup>1</sup>, Household Finance Research Initiative, Dvara Research

#### Summary:

In this research brief, we picturise the portfolio of Indian households by reviewing the participation rates across various financial and non-financial instruments using data from 2019. We use the Consumer Pyramid Household Survey (CPHS) dataset collected and maintained by the Centre for Monitoring Indian Economy (CMIE) for our analysis . CPHS is a large-scale longitudinal survey of sample households surveyed repeatedly over time. The survey is conducted thrice every year in three waves. For the purpose of this analysis, we use the May to August 2019 wave of CPHS that consists of a total of 1,47,868 households in its sample. However, we apply household weights to make the sample representative at a population level, for this analysis. Specifically, we examine the data on whether households have current outstanding investments and borrowings across a variety of assets and liabilities, respectively. This helps us construct the portfolio of households by examining their participation rates across financial and non-financial instrument.

#### **About Household Finance Research Initiative:**

Dvara Research's Household Finance Research initiative aims to rigorously understand the financial choices and decisions of low-income or excluded individuals and households, and their relation to achieving households' objectives. It has been our consistent endeavour to study financial inclusion as a gateway to a suite of appropriate financial services eventually enabling well-rounded household balance sheets and consumer financial well-being.

We believe that careful research and a comprehensive body of evidence can powerfully inform market practices and the design of financial sector policy to deliver comprehensive financial services for all individuals, households, and enterprises, and eventually serve to create a safe environment in which formerly excluded populations may fully experience the benefits of financial inclusion. This research initiative seeks to significantly expand the scope of India-specific and policy-focused household finance research that is timely and relevant to current financial sector development.



#### 1. Introduction

Financial inclusion, broadly defined as universal access to a wide range of financial services at a reasonable cost, focuses on enhancing both the breadth and the depth of a range of financial services among the unbanked and underserved population (Rajan, 2009). These include access to and use of a variety of products and services such as savings and investment, credit, insurance, payment, retirement and pension accounts, that meet the various financial requirements and life-cycle goals of households. Therefore, reviewing the current levels of financial inclusion, requires us to probe deeper into not just the levels of access but also usage of a comprehensive suite of financial products and services, beyond ownership of bank accounts. Unfortunately, much of the narrative around financial inclusion has remained focused on access to financial services, especially in the form of ownership of bank accounts.

While policy work in financial inclusion has primarily focused on the extensive margin and geared towards understanding and tackling the challenges in 'access' to financial services, research in household finance focuses on understanding the intensive margin, that is whether households use these financial services and if so, to what extent. Understanding the intensive margin is important as it allows us to better understand the interactions that households have with financial institutions (C, Dasgupta, Sharma, 2020).

The Report of the Household Finance Committee (hereafter referred to as the HFC Report) released by the RBI in July 2017 integrates the tools of household finance research towards comprehensively understanding the levels of financial inclusion in India. Using the 2012 wave of All India Debt and Investment Survey (AIDIS), the HFC Report examines the participation and allocation in financial and non-financial markets both across assets and liabilities<sup>2</sup>. Overall, they find disproportionately high rates of participation and allocation in physical assets and unsecured liabilities as compared to formal financial instruments.

Similar to the analysis conducted in the HFC Report, this brief picturises the portfolio of Indian households by reviewing the participation rates<sup>3</sup> across various financial and non-financial instruments using data from 2019. We use the Consumer Pyramid Household Survey (CPHS) dataset collected and maintained by the Centre for Monitoring Indian Economy (CMIE) for our analysis<sup>4</sup>. CPHS is a large-scale longitudinal survey of sample households surveyed repeatedly over time. The survey is conducted thrice every year in three waves. For the purpose of this analysis, we use the May to August 2019 wave of CPHS that consists of a total of 1,47,868 households in its sample. However, we apply household weights to make the sample representative at a population level, for this analysis. Specifically, we examine the data on whether households have current outstanding investments and borrowings across a variety of assets and liabilities, respectively. This helps us construct the portfolio of households by examining their participation rates across financial and non-financial instrument.

<sup>&</sup>lt;sup>2</sup>Broadly, participation refers to the uptake of a product/service and allocation is the share of finances allocated towards the product/ service

<sup>&</sup>lt;sup>3</sup>CMIE dataset allows for analysis purely related to the participation trends across financial instruments. The data doesn't consist of information on the monetary value of these financial instruments; hence we are unable to comment on the allocation trends.

<sup>&</sup>lt;sup>4</sup>Further details about the CPHS dataset by CMIE can be found here- https://consumerpyramidsdx.cmie.com/



### 2. The Assets story

We open our analysis by looking at the participation rates in physical assets, divided into subcategories of durable goods, gold and real estate. We find very high rates of participation in real estate and gold, both at 99%, which is not surprising, as the data reflects adherence to the longstanding tradition and culture of possession of gold by Indian households as well as their proclivity to park their savings in building new homes or to extend existing ones. We also find 96.5% of households possessing at least one durable good.

After looking at the participation in physical assets, we examine participation across financial assets. If the possession of a bank account is considered as a first step along a household's path to financial inclusion, then we find from our data that the majority of households have begun the journey. Altogether, 78% of Indian households possess at least one bank account<sup>5</sup>. In terms of specific financial instruments, we start with taking a broader view first, and we discover that 29% of households don't own a single financial asset among the eight that we take into consideration, while 71% of households own at least one financial asset (Figure 1). Further, we delve into analysing participation in individual financial instruments, and see that life insurance, fixed deposits and post office scheme deposits emerge as the top three financial assets by far, and household participation in these instruments stand at 50%, 43% and 24.5% respectively. Participation rates for health insurance and provident fund are at 24% and 12%, respectively. On the other hand, participation for assets such as mutual funds and shares remain at less than 2%, reflecting the extremely limited popularity of risky instruments, compared to physical assets, where participation rates are almost universal (Figure 2).

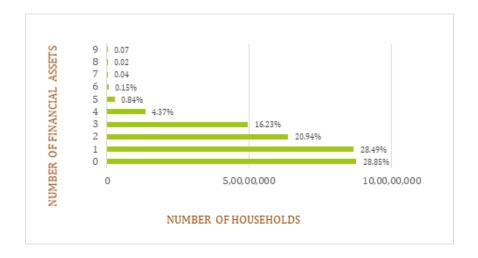


Figure 1: Number of Financial Assets Owned by Households

<sup>&</sup>lt;sup>5</sup>This figure is sourced from the People of India database maintained by the CMIE, that is a component of the CPHS. This database provides a moving kaleidoscope of the attributes and peculiarities of the Indian people. More information about this database can be found here- https://consumerpyramidsdx.cmie.com/kommon/bin/sr.php?kall=wshowadv&code=poiwv\_cpdx&sectid=21





Figure 2: Household Ownership of Financial Assets

Diving into the analysis of participation in financial assets across age groups, we discover that the ownership across all the financial assets peak for the middle-age range of 45-54 years and declines or flattens thereafter. However, for FDs we see a consistent increase in participation rates even beyond the middle-age range, potentially due to higher rates of interest on FDs for senior citizen group and their preference to invest in safer financial instruments (Figure 3).

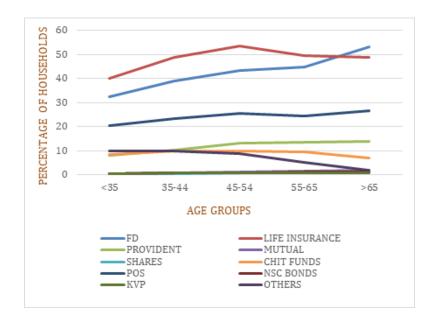


Figure 3: Participation in Financial Assets by Age



Households where the head of household is involved in blue collar employment, which includes wage laborers and industrial workers, have the lowest mean household income across all occupations. The pattern obtained, when we analyse participation in assets for blue collar employees, reveals that they have the lowest level of participation in almost all financial assets. This pattern appears again, when we analyse participation across income quintiles and find that households in the lowest income quintile exhibit very low levels of participation in nearly all financial assets. An exactly converse relation emerges when we consider white collar employees (which include managers, technical employees, and other white-collar employees directly mentioned in the data set) whose households have high mean income, exhibit a high level of participation across all assets (Figure 4).

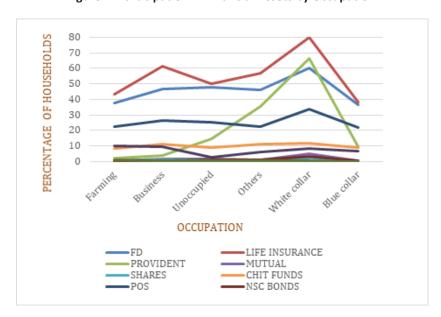


Figure 4: Participation in Financial Assets by Occupation

When households are analysed, based on classifying them into income quintiles<sup>6</sup> obtained from their monthly income, we observe higher participation in financial assets as we move towards higher income quintiles. This is truer for instruments such as fixed deposits, life insurance, post office savings and provident fund schemes. Tying back these results to the overall participation rates across all financial assets as presented in Figure 2, we observe that the high participation rates for these instruments are largely driven by high-income households, in the fourth- and fifth-income quintiles. For other assets such as chit funds, mutual funds and listed shares, the line is close to zero across quintiles, but slightly higher for the highest quintile (Figure 5).

<sup>&</sup>lt;sup>6</sup>We use the standard method to classify the monthly income data into income quintiles. We first arrange the households in ascending order of their monthly income and then divided the entire sample of households into five equal groups. The first or the bottom most group of the data is referred to as lowest quintile followed by the second, third and fourth quintiles and the final quintile is referred to as the highest quintile.



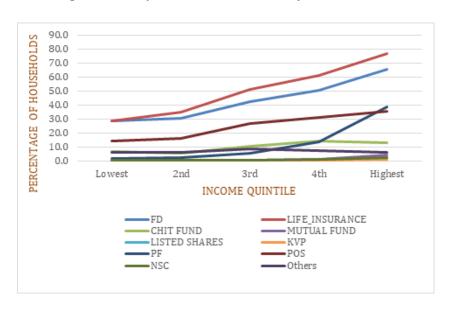


Figure 5: Participation in Financial Assets by Income Quintiles

Finally, we analyse household's participation in financial assets based on the education level of the highest educated member of the household. We find that higher education levels are associated with greater participation across all financial assets (Figure 6). This appears to substantiate the previous analysis of household participation in asset markets by occupation and income quintile, if we are prepared to assume that a higher level of education attainment is correlated with (and might even cause) better employment and higher incomes.

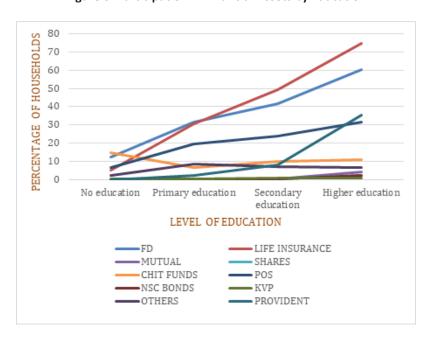


Figure 6: Participation in Financial Assets by Education



Comparing these results with the participation rates across physical assets based on the 2012 wave of AIDIS<sup>7</sup> data, we know that the participation rates for real estate and gold were at 89% and 83% respectively (C, Dasgupta, Sharma, 2020). The CMIE 2019 data therefore indicates a substantial upward trend in participation rates in physical assets, given the universal ownership, especially that of real estate and gold at 99%. It seems that over time, the preference to hold assets such as land and gold have become even stronger, potentially due to rising inflation and uncertainty in the financial markets. A comparison of financial assets across the two datasets is not possible due to the differences in the definition of these products across these two databases.

## 3. The Borrowings Story

Out of the total households, we find that 50.7% of households had an active loan at the time of the survey. The dominant source of borrowing, amounting to 26.6% of households using the source, is shops (Figure 7). Shopkeepers sometimes lend sums of money based on an informal contract for a certain time period. The shopkeeper may or may not charge a rate of interest on the borrowed sum. Such borrowings are usually utilised for consumption expenditure, medical emergency and other shortfalls in major household expenditures. It is a common practice to pay shopkeepers late due to lack of money. This late payment is not considered as borrowing. But payments to shops that are overdue by two months are considered a borrowing.

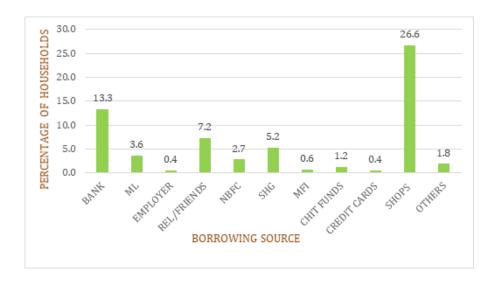


Figure 7: Household Ownership of Debt by Source

<sup>7</sup>Our purpose of mentioning the key results from AIDIS 2012 survey is to compare the participation rates from 2012 with those in 2019 using the CMIE dataset. AIDIS dataset consists of data on both participation and allocation, however, CMIE consists of only participation data, therefore, we compare only that piece across the two datasets. Moreover, a one to one comparison for all assets is difficult, as the definition of durable goods, financial assets, etc. differs across the two datasets. Therefore, we compare only real estate and gold, the definitions for which are simple and straight-forward. We do a similar comparison for participation across liabilities using AIDIS 2012 and CMIE 2019. The caveats however remain and a one to one comparison for all products is not possible.



Continuing to look at the source of borrowing, banks are a second source by some distance (relative to shops), with only 13.3% of the total population borrowing from them. This is followed by borrowing from other informal sources, such as relatives and friends and moneylenders comprising a total of roughly 11%. Finally, borrowing from SHGs, a platform largely devised for women from low-income households to save and borrow, stands at 5.2%

It is interesting to note the linkage between the dominant source of borrowing i.e., shops, and the predominant purpose for which most of the households borrow i.e., consumption expenditures (accounting for 61.9% of the borrowing households). Of the households that borrow to meet consumption expenditures, 81.3% borrow from shops. After consumption expenditure, borrowing for the purpose of spending in business stands at a distant second position with 11.2% of the borrowing households engaged in such borrowing. This is followed by 8.1% of households borrowing for purposes related to housing (Figure 8). For big-ticket purposes like housing, business and even investments, banks emerge as the major source of borrowing.

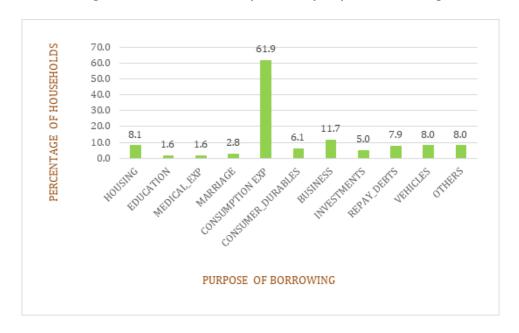


Figure 8: Household Ownership of Debt by Purpose of Borrowing

Borrowing for marriage and medical expenditure, although a very minuscule portion (2%), is largely sourced from friends and relatives. This is understandable, given the more personal nature of the expenditures involved. SHGs, which play an important role in rural households as a vital source of borrowing, especially for women, offer a major source of support for the repayment of loans, and also for education.

A high-level categorisation of borrowing sources into formal and informal<sup>8</sup> reveals that 36.2% of households borrow from informal sources, and over 21.5% of households borrow from formal sources.

<sup>&</sup>lt;sup>8</sup>Banks, NBFCs, MFIs, SHGs and Credit Cards are categorised as formal sources of finance, while Moneylender, Employer, Relatives/Friends, Chit Funds, Shops and Other Sources are categorised as informal sources of finance.



Parsing the data by age group, we observe that households' ownership of informal loans is even across all age groups, standing at around 36%. On the other hand, we see formal loans gradually increasing for higher age groups up until the middle age category of 45-54, after which it declines consistently for the older age groups. Overall, formal borrowing remains at around the 24% range with just a 4% maximum deviation across age groups (Figure 9). When categorised based on education, we see that participation in informal loans is highest for households with no formal education, while participation in formal loans is highest for households who have attained higher education (Figure 10). Surprisingly, households in both rural and urban regions prefer informal channels of borrowing (35% of households), over formal channels (21%) (Figure 11).

Figure 9: Participation in Financial Liabilities by Age

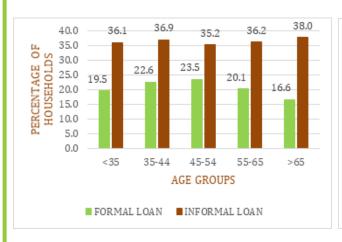


Figure 10: Participation in Financial Liabilities by Education

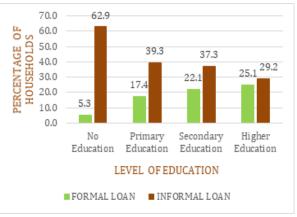
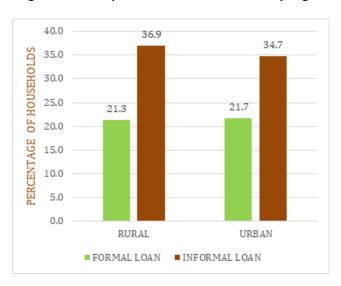


Figure 11: Participation in Financial Liabilities by Region





Finally, we find that for each of the first 4 income quintiles, there is a significant gap between borrowing from informal sources (38%) compared to formal sources (19.8%). By contrast, households in the highest quintile borrow almost equally from informal (28%) and formal (26%) sources (Figure 12).

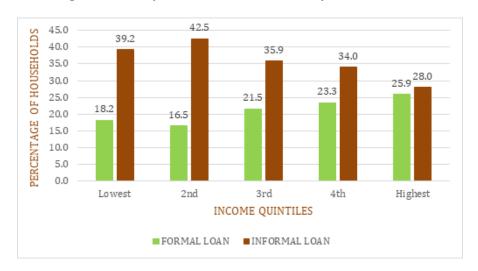


Figure 12: Participation in Financial Liabilities by Income Quintiles

Finally, we compare the participation rates of financial liabilities with the 2012 AIDIS data. The AIDIS data revealed that participation rates stood at 7% for mortgage loans, 3% for gold loans, 3% for other secured debt and 18% for unsecured debt<sup>9</sup> (C, Dasgupta, Sharma, 2020). While we are unable to present a one to one comparison, the CMIE data reveals a 100% increase in the participation rates for informal credit, i.e., from 18% in 2012 to 36% in 2019, in the last 7 years.

#### 4. Conclusion

We examine the household portfolio by analysing the participation rates across various financial instruments. Given the limitations of the CMIE dataset, we are unable to look at allocation in terms of the fraction of wealth allocated to various assets and borrowings. However, the dataset on participation is already rich, as it covers a range of instruments that fall under both formal and informal sources of finance. Additionally, since the question is framed as current outstanding investments and borrowings, we are able to draw inferences about the current usage of these products. This is important as it is not just enough to own or be able to access formal financial products and services, but also to use them for greater financial stability.

Overall, we find low rates of participation across formal financial assets. Barring life insurance and fixed deposits, rates of participation across all other assets are equal to or less than 25%, suggesting that broadly only a quarter of households (or less) from the entire population actively participate in formal financial markets and hold basic financial instruments such as health insurance and retirement accounts. Participation in physical assets such as

<sup>&</sup>lt;sup>9</sup>Unsecured debt is collateral free debt from informal sources.



real estate and gold are almost universal, with 99% of households possessing these assets. On the liabilities side, 50% of households have active borrowings, with 36% of households borrowing from informal sources. These results reveal that beyond access to bank account, access to and use of a suite of financial instruments required to meet the financial needs of households, are glaringly low. The consistent increase in participation rates across physical assets and informal sources of liabilities from 2012 to 2019 indicate that households do recognise the importance of investments and credit in meeting their life-cycle objectives but do not find using formal financial services as an attractive and efficient way to meet these goals. Very simply put, this suggests an obvious weakness in the current state of the financial system in fulfilling the financial requirements of households.

Broadly the themes that emerge from this analysis are the need for greater formalisation of financial services, a visibly large scope for diversification in households' financial portfolios, the urgent need for active use of risk mitigating products such as life and health insurance and long-term products required for financial stability such as retirement accounts. Appropriate use of each of these products based on the financial requirements, preferences, risk appetite and capacity of the household will help them get closer to achieving financial inclusion.

#### References

C, V., Dasgupta, M., & Sharma, M. (May 2020). Household Finance in India: Approaches and Challenges.

Rajan, R. G. (2009). A Hundred Small Steps. Report of the Committee on Financial Sector Reforms. Sage Publications India Pvt. Ltd.

Ramadorai, T. (July 2017). Report of the Household Finance Committee.