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UNRAVELING THE DRIVERS OF HOUSEHOLD DEBT: AN IN-DEPTH STUDY OF FACTORS

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ABSTRACT

Over the past few decades, Household Debt (HHD) has expanded significantly in conjunction with credit to individuals. This study aims to synthesize information on household debt by identifying its main factors and laying the groundwork for future research. Through a brief study, an exhaustive analysis of 35 research articles based on household debt from 2007 to 2022 has been conducted to categorize the most influential factors affecting household debt. The majority of reviewed papers indicated that socio-demographic factors; income, age and gender, macroeconomic variables; unemployment, inflation, interest rate and behavioural aspects; risk attitude and religious beliefs were observed to be the most important dominating factors in deciding household debts across developed as well as developing nations. The study has also provided an approach for categorizing the key ideas, literature streams, and variables about household debt.

Keywords: Household Debt, Credit, Borrowing Behaviour, Socio-Demographic, Macroeconomic, Behavioural Aspects

JEL Classification: H31, H81, J11, E20

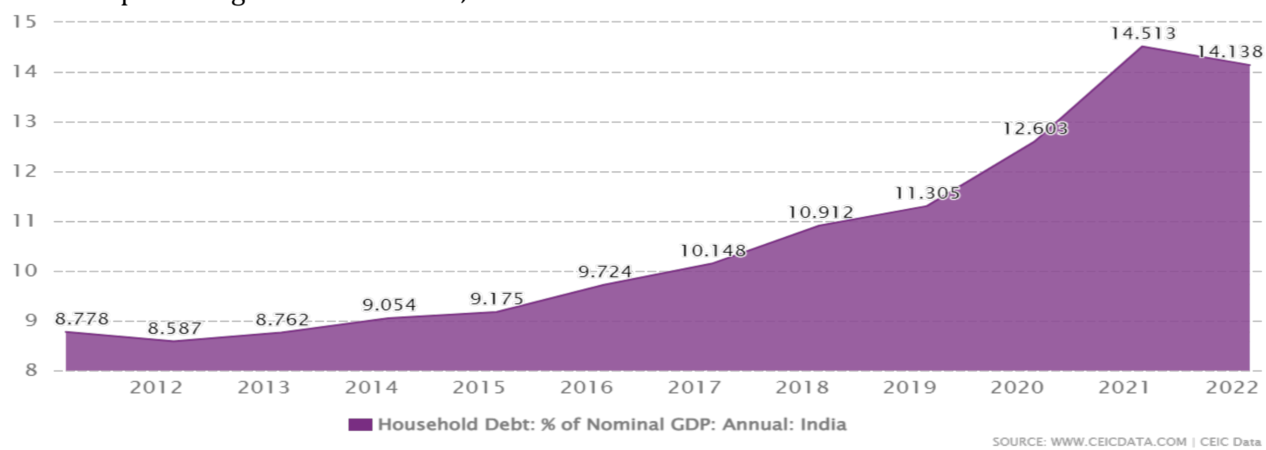
1. INTRODUCTION

"Demand is the product of willingness, desirability and capacity to purchase." But when the capacity to purchase does not happen, then the demand can't be produced. When this comes to a family, there is a positive relationship between the number of family members and the amount of demand. When the total income of a household will not be sufficient for their consumption, there arises a chance of household borrowing from the formal or informal sector. What are the factors or determinants the lenders take into consideration before sanctioning the borrowed amount, these scenarios play an important role in the borrowing process. Families benefit from Household debt (HHD) because it lets them purchase items and services, they otherwise wouldn't be able to afford all at once, enhancing their standard of living and easing their lifestyle for the future ability of the economy (Harari, 2022). Though the positive association between attitude toward borrowing and desire to borrow is evident, we show the correlation is negligible for those who score low on the demand for monetary resources and people who have low levels of arousal needs (Yazdanparas &

Yasser, 2017). HHD can be defined as 'all liabilities of households (including non-profit institutions serving households) that require payments of interest or principal by households to the creditors at a fixed rate in the future' and the later one 'Debt' is calculated as 'the sum of the following liability categories: loans (primarily mortgage loans and consumer credit) and other accounts payable' (OECD Database).

India's HHD reached 441.0 USD bn in Mar 2022, compared with the reported number of 392.9 USD bn in the previous year (CEIC database). In March 2022, HHD in India was 14.3% of the nation's nominal GDP, down from 14.5% the year before (CEIC database). Pressman (3rd November 2022) has mentioned that HHD has increased over the previous two years and will continue to increase as interest rates climb; this trend has become more concerning; further, the author mentioned that households that have too much debt may be forced to cut their spending, which will slow economic growth and cause a recession. According to Shetty (2022), a study on the home sector's financial obligations in India by RBI Bulletin, Overall household sector institutional borrowings rose from Rs 62 lakh crore in March 2019 to Rs 79 lakh crore in September 2021, a 28.3% increase; Household borrowings from institutions (commercial banks, NBFCs, home finance firms, and cooperative banks) increased from 32.9% in March 2019 to 35.4% in March 2020 as a percentage of GDP. Ponnathpur (2021) in his article concluded that the southern states of India have higher levels of debt whereas women-led families have lower levels of debt.

Figure 1 HHD: percentage of nominal GDP, India



Source: CEIC Database

Figure 1 shows India's HHD for consumer durables, housing and personal loans as a percentage of GDP from March 1, 2011 to march 1,2022. CEIC Database includes Annual HHD as% of Nominal GDP. According to SNA 2008 pricing, the Ministry of Statistics and Plan Implementation offers nominal GDP figures in local currency. In figure 1, upsurge from 2020 onwards exhibits the increased level of borrowings as compared to previous years. As per Figure 1, the pace of borrowing was steady and increased gradually till 2019. Covid-19 pandemic might be one of the major reasons behind the trend from 2020 onwards. The home balance sheet's credit/liability side became a research area long before liberalization in India, which is a case in point (Jacob, Sensarma, & Nair, 2022). Saving and borrowing habits of the underprivileged in developing nations is a significant but understudied topic that is rife with assumptions that have not been put to the test (Bostedt, Mukoya, Muricho, & Nyberg, 2021)

According to the OECD, HHD refers to the resident family's obligation to repay loan's principal and interest. To charge interest or a value on credit constitutes a debt or responsibility (OECD database). In recent times, the amount of HHD has raised concerns among low and middle-income households. In an economy, households play two roles: as consumers, they help to create demand, and as savers, they help to increase the amount of investment that can be financed domestically (Tejkiran, 2021). According to the National Accounts Statistics (NAS) 2022, households accounted for 78.5% of gross savings and 43.5% of gross value added at basic prices in the years 2020–21. The household sector makes a significant financial resource contribution to the Indian economy (Rawat, Kumar, & Saxsena, 2022). India's household's credit to GDP ratio is catching up to its counterparts among emerging economies, but the underlying forces driving its households' deposits, consumption/ spending patterns, disposable income, and demographic dividend—show considerable heterogeneities.

Studies in modern literature have investigated the potential reasons for rising debt. Small borrowers typically borrow money for spending and debt consolidation and in this regard, investigating the driving factors behind a household's decision to borrow money for a variety of needs will have a significant impact on the sustainability of rising (Molla & Alam, 2008). In the modern credit society, credit has become a readily available tool for financial consumers, excessive borrowing has grown to be a serious and pervasive issue that endangers their well-being (Sevim, Temizel, & Sayilir, 2012). In the previous literature stated by Lusardi & Tufano (2015) that the absence of financial literacy may encourage excessive borrowing.

Several studies carried out in developed nations like Australia, US, UK, Netherlands, Turkey, Greece, European Countries, OECD countries (Kolios, 2021; Lusardi & Scheresberg, 2013; Harari, 2022; Oosterbeek & Broek, 2009; Huston, 2012; Pastrapa & Apostolopoulos, 2015; Sevim, Temizel, & Sayilir, 2012; Samad, Daud, & Dali, 2020) and in developing countries like India, Malaysia, Jordan, China, Indonesia, Vietnam, Pakistan, Kenya (Jacob, Sensarma, & Nair, 2022; Chunping, li, & Lingwei, 2016; Nguyen, 2007; Wong, Kusairi, & Halim, 2022; Zhang & Wang, 2022; Kariuki, Muturi, & Mwangi, 2016; Akram, Munir, Hashmi, & Saleem, 2012). Most of the studies on this concern had been done by most of the developed countries and as for the developing countries not maximum studies were available including India.

In Indian context, a few of the papers used various reports (NSSO's conducted AIDIS- All India Debt and Investment Survey by NSSO, NAFIS-All India Financial Inclusion Survey by NABARD) for selecting their sample state. However, pan-India research is absent in the context of HHD. The unavailability of a secondary database might be one of the reasons for the insufficiency of Indian HHD data.

2. OBJECTIVES OF THE STUDY

- The study's objective is to scrutinize the factors primarily responsible for household borrowings.
- To identify and discuss the most deterministic demographic factors affecting household borrowings
- To deliberate upon the most influential socio-demographic factors affecting household debt.
- To discuss behavioural factors responsible for the borrowing behaviour of households.
- These objectives also point out the scope of the study.

3. DATA AND METHODOLOGY

The study considers the research based on both primary (demographic survey conducted by the authors) as well secondary data (based on macroeconomic variables) in the context of HHD. Publishing houses from where the articles were taken consist of various sources such as; Scopus-indexed journals, Springer, Wiley, Academia, Econ papers, Econ journals, NBER working papers, Archive, etc.

To search the concerned research papers, seven relevant author keywords - "Household Debt", "Household Indebtedness", "Household's Borrowing Behaviour", "Household Vulnerability", "Household Saving and Borrowing Behaviour" and "Consumer Over-indebtedness" were considered. Further, for the sake of better observations and interpretations, papers without full-text file (without tables and figures) have been excluded from the study. This stage led us to have 35 articles for the final review.

4. FACTORS AFFECTING HOUSEHOLD DEBT

Many factors affect the HHD decision. Household indebtedness is an interdisciplinary, complicated, and multidimensional phenomenon that cannot be explained by a single set of criteria/factors. There are Socio-demographic variables, Macroeconomic variables and behavioural factors which exhibit their influence on the borrowing practices of households. Discussions on the impact of these variables have been deliberated as under;

4.1. SOCIO-DEMOGRAPHIC FACTORS

4.1.1. AGE

Recent pieces of literature in the context of household borrowings give sufficient evidence of the influence of household economic and demographic factors on borrowings. According to life cycle theory (Modigliani, 1966), age (18-

60 years) affects the choice to take out a loan from the household (Takashino, Maharajan, & Fukui, 2014; Sevim, Temizel, & Sayilir, 2012; Huston, 2012). Across the studies, authors did not consider under 15 years considered them as children (Takashino, Maharajan, & Fukui, 2014). However, the impact of the age was mixed (Takashino, Maharajan, & Fukui, 2014). Sevim, Temizel, & Sayilir (2012), in their study about Turkish financial consumers stated that Young consumers (aged 18 to 25) were more prone than middle-aged consumers (aged 46 to 55) to engage in excessive consumption behaviour. Another author (Huston, 2012) who relates age with financial literacy for US consumers concluded that learning about money management when you're younger gives you a longer time to reap the rewards of your investment. (Nguyen, 2007) conducted his study on Vietnam Rural households with a comparative analysis between VLSS93 and VLSS98 stated that middle-aged household heads (33 to 41 age) were the main contributor to borrowing. Another study of 74 developed and developing countries, individuals in the labour market above the age of 15 in low-income nations were more likely to borrow than other cohorts (Naidu, zhao, Pandaram, Chand, & Patel, 2021). A study conducted in China, age of the household head had a negative influence across all household quantiles (Tseng & Hsiao, 2022) which contradicts (Pastrapa and Apostolopoulos, 2015) conducted in Greece. Another author (Kurowski, 2021) tested household's indebted response by mediating debt and financial literacy, found the lowest level of financial literacy in younger age groups (18 to 24 years old) and 55 to 65 years old were typically overindebted at their retirement age. The reason of retirement age's households was given by (Lusardi & Mitchell, 2013) as they were proficient at utilizing the goods and services provided by banks and the financial sector. Contrary to Lusardi and Kurowski, another study concluded that working age's household heads who had stagnant salaries or pensions (40-60 years) were more involved with the level of household indebtedness in a financially included region in India and it was irrespective of their agricultural background (Jacob, Sensarma, & Nair, 2022).

4.1.2. GENDER

The head of the household's gender also significantly influences the choice to borrow money

(Jacob, Sensarma, & Nair, 2022). Gender does not have any significant impact on borrowing (Takashino, Maharajan, & Fukui, 2014). Gender was statistically significant with respect to borrowing behaviour of turkish consumer, where the author found that women were the foremost one to take excessive behaviour of borrowing (Sevim, Temizel, & Sayilir, 2012). In a study of Chinese households' borrowing decisions by religious belief authors advocated its non-significant relationship while introducing gender as a control variable (Chunping, li, & Lingwei, 2016). In another study that examined gender using the Theory of Planned Behaviour, tried to focus on the difference in the patterns of borrowings, basically between developed and develping countries (47 and 27 countries respectively), found important gender difference in high-income countries. When comparing the borrowing patterns of men and women in Austria and Lithuania, it was found that, in Austria, men were more likely to borrow money for health or medical requirements, as observed in case of women in Lithuania. Similar gender differences were also observed in two low-income countries; Madagascar and Nepal (Naidu et al., 2021). Nunkoo & Ramkissoon (2010) also implemented the Theory of Planned Behavior to analyse impact of gender differences on borrowing behaviour. Li (2018) showed that due to fundamental gender inequalities in borrowing behaviour and debt management, single women have historically experienced greater difficulties paying off debt than single males. Waliszewski & Warchlewska (2021), while studying the credit usage, payment behaviour, saving patterns, and financial planning claimed that men typically had greater savings, and women typically had more debt.

4.1.3. INCOME

In context of Income as one of the variables for deciding the household borrowings, authors have different observations. Income also seemed to have diverse impact on household borrowings. In some studies, income observed to had a positive impact of household borrowings (Kolios, 2021;Kariuki, Muturi, & Mwangi, 2016; Pastrapa & Apostolopoulos, 2015; Wong, Kusairi, & Halim, 2022; Samad, Daud, & Dali, 2020). Nevertheless, some studies concluded that income exhibited negative association with borrowing behaviour (Oosterbeek & Broek, 2009; Akram, Munir, Hashmi, & Saleem, 2012; Chunping, li, & Lingwei, 2016).

While examining the impact of income as one of the factors affecting household borrowings, authors have considered different proxies of income like previous year's income (Akram et al., 2012), household income (Lusardi & Scheresberg, 2013; Noerhidajati et al., 2021), aggregate income (Wang, Zhang , & Wang , 2021) and total family income as a financial variable (Takashino, Maharajan, & Fukui, 2014). 'Wages' was used for the substitute of income of low-income and middle-income households. It was observed that households from low- and middle-income countries use consumer credit when a rise in wages is expected. This led to sudden shift in their consumption level. Thus, income observed to be positively affecting the borrowing decision (Kolios, 2021). Another author considered Gross Disposable income in connection with borrowing decision of households' of Kenya. Researchers found that borrowing practices had a significant influence on indebtedness and lower-income households convinced to take on debt to parallel up with higher incomes (Kariuki, Muturi, & Mwangi, 2016). In another study, in context of students in Netherlands, authors considered the parent's income (as a proxy for current income) of the students. They concluded that borrowing was negatively impacted by parents' income; children from wealthy households receive greater financial assistance from their parents and were more reluctant to take out a loan (Oosterbeek & Broek, 2009). A study in the United States claimed that household income had no bearing on the likelihood of receiving a loan (Hartarska & Gonzalez-Vega, 2006). Individuals in low-income countries could find difficult to fulfil the conditions and assume the risks associated with using a credit card and but in high-income nations, made use of credit cards for escalated health or medical expenses if their income was insufficient (Naidu et al., 2021). In comparison with low-income groups, high-income groups typically made better credit utilization (Sevim, Temizel, & Sayilir, 2012). A panel study of 19 countries highlighted that GDP per capita Income (as a proxy of income) showed positive coefficients and also had a statistically weighty effect (Samad, Daud, & Dali, 2020). Canakci (2021) examined the effects of monetary policy on household debts in China. For this purpose, the author considered bank records and the income of households to find out their borrowing decisions. As per the suggestions, households should always be prepared with a emergency budget in case of unforeseen loss like the coronavirus pandemic to avoid overindebtness and to smooth out their regular consumption (Kurowski, 2021). While investigating household indebtedness (Jacob, Sensarma, & Nair, 2022), authors emphasized income-based flow analysis (debt servicing ratio) and asset based stock analysis (leverage ratio) and concluded that indebtedness level was higher as compared to the national average. A study of 3 districts of Eastern India, considered Per Capita Annual household income (PCAHI) as a proxy of household income, found that access to credit helped in piling up of PCAHI and access to credit differentiated their economic well-being of the rural households (Kumar, Mishra, Sonkar, & Saroj, 2020).

4.1.4. OTHER SOCIO-DEMOGRAPHIC FACTORS

4.1.4.1. Education Level: In context level of education, contradicting results have been observed. Gandhimathi & Vanitha (2010) in their study in Coimbatore district in India, found that respondents of different education levels equally accessed credit from commercial banks and cooperative banks. On the contrary Akram et al. (2012) found statistically significant opposing relationship between HHD and the source of access in Faisalabad district in Pakistan. The authors observed that people with high education levels preferred cooperative banks for their low interest rates for household credit compared to commercial banks. (Sevim, Temizel, & Sayilir, 2012; Takashino, Maharajan, & Fukui, 2014; Chunping, li, & Lingwei, 2016; Tseng & Hsiao, 2022; Jacob, Sensarma, & Nair, 2022; Kumar, Mishra, Sonkar, & Saroj, 2020) found that people with high education level preferred financial institutions for credit access. Nevertheless, non-significant association was also observed between the level of education and household credit from financial institutions (Nguyen, 2007; Wang, Zhang , & Wang , 2021).

4.1.4.2. Family size: Family size was included as one of the variables while investigating the link with borrowing behaviour (Pastrapa & Apostolopoulos, 2015). Takashino, Maharajan, & Fukui (2014) analyzed the contribution of potential earning members in the family while deciding about household bahviour. Gandhimathi & Vanitha (2010) in their study of farmer's borrowing practices in Coimbatore district in Tamil Nadu found that family size did not have detrimental impact when deciding borrowing from either commercial or co-operative banks. While few authors concluded significant association between family size and borrowing behaviour (Wong, Kusairi, & Halim, 2022; Li, Song, Wu, & Huang, 2021). However, (Wang, Zhang , & Wang , 2021; Jacob, Sensarma, & Nair, 2022; Kumar, Mishra, Sonkar, & Saroj, 2020) did not observe any notable link between HHD and family size. (Noerhidajati, Purwoko, Werdaningtyas, Kamil, & Dartanto, 2021) examined the number of bank accounts in the context of family size, accordingly categorized income groups.

4.1.4.3. Marital Status: (Jacob, Sensarma, & Nair, Jun 2022) considered marital status in their study while studying the borrowing behavior of households. This was also stated as one of the influential socio-demographic factors. (Sevim, Temizel, & Sayilir, 2012; Chunping, li, & Lingwei, 2016; Pastrapa & Apostolopoulos, 2015) detected a significant relationship between marital status and HHD. In a few studies, the relationship was not noteworthy (Nguyen, 2007;

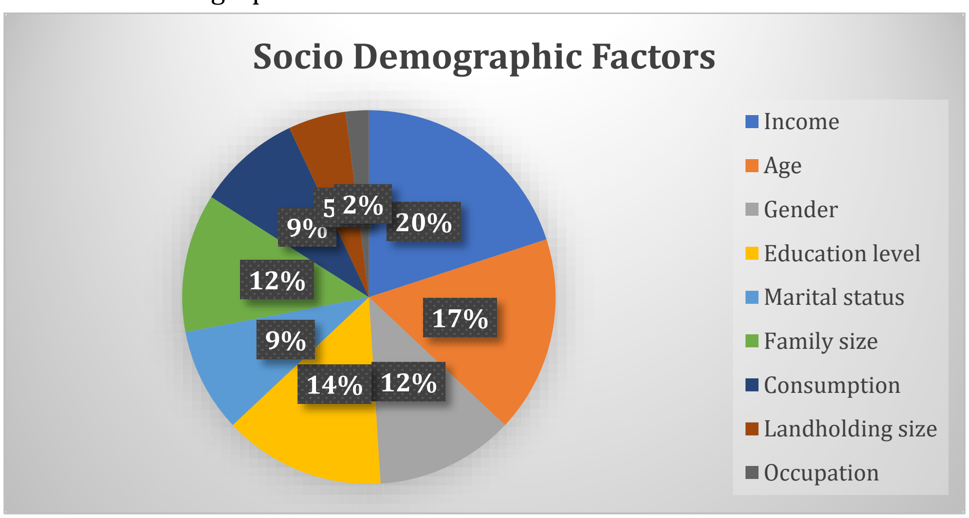
Wang, Zhang , & Wang , 2021; Li, Song, Wu, & Huang, 2021). (Lusardi & Scheresberg, 2013) considered single, separated and widow respondents in their study.

4.1.4.4. Consumption: (Kolios, 2021) in the Australian context observed a negative link between HHD and consumption level. (Mahdzan, Zainudin, & Shaari, 2022) in his study of public sector employees with higher income in Malaysia, examined excessive consumption levels with borrowing behaviour. The authors found a statistically significant association between borrowing behaviour and the exccessive consumption of employees. Contradictly, other authors reported a significant negative association with this conclusion while examining the link between household borrowings with household expenditure per annum (Gandhimathi & Vanitha, 2010), total consumption and consumption per capita (Nguyen, 2007) and household consumption (Samad, Daud, & Dali, 2020; Wong, Kusairi, & Halim, 2022; Li, Song, Wu, & Huang, 2021). However (Kereeditse & Mpundu, 2021) found an insignificant relationship. (Canakci, 2021) in his study of China while finding out the effect of monetary policy on HHD included household consumption as a control variable.

4.1.4.5. Landholding Size: Few authors included landholding size as one of the variables (Nguyen, 2007; Jacob, Sensarma, & Nair, 2022). Quantity of landholdings and the desire for credit to overcome financial limits by taking on HHD were inversely related and respondents with small landholdings made up the majority of the borrowers (Akram, Munir, Hashmi, & Saleem, 2012; Gandhimathi & Vanitha, 2010). Kumar, Mishra, Sonkar, & Saroj (2020) identified noteworthy relationship between operational land holding and HHD in eastern UP, Bihar and Jharkhand.

4.1.4.6. Occupation: The author (Takashino, Maharajan, & Fukui, 2014; Pastrapa & Apostolopoulos, 2015) observed that employed (other than unemployed and non agricultural household, pensioners or self-employed) people had more household borrowings. Further, agriculture household obseved to have more borrowings as compared to other occupation category (Takashino, Maharajan, & Fukui, 2014). Intrestingy both empolyed and unemployed had positive effect on household borrowing (Pastrapa & Apostolopoulos, 2015).

Figure 2: Proportion of Socio-Demographic Factors



Source: Author's compilation

From the above pie chart, we can observe that, among other socio-demographic parameters income, gender, and age are the most important ones. These 3 factors are the most influential determinants while making the borrowing decision for a household. This is because households typically desire to borrow money to smooth out their spending or when their disposable income is insufficient to cover necessary expenditures.

Table 1: Socio-Demographic Factors Affecting HHD

Table 1: Socio-Demographic Factors Affecting HHD			
Sl no	Determinant	Count of Factors	References
1	Income	20	(Kolios, 2020) (Irungu, est al.,2016) (Gandhimathi & Vanitha, 2010) (Oosterbeek & Broek, 2009) (Akram, et al.,2012) (Takashino, et al.,2014) (Sevim, et al.,2012) (Lusardi, 2013) (Chunping, et al.,2016) (Pastrapa &

			Apostolopoulos, 2014) (Naidu, et al.,2021) (Samad, et al.,2020) (Wong, et al.,2022) (Noerhidajati, et al.,2020) (Tseng & Hsiao,2022) (Wang, et al.,2021) (Li, et al.,2021) (Kurowski,2021) (Jacob, et al.,2022) (Kereeditse & Mpundu, 2021)
2	Age	17	(Oosterbeek & Broek, 2009) (Takashino, et al.,2014) (Sevim, et al.,2012) (Lusardi, 2013) (Chunping, et al.,2016) (Pastrapa & Apostolopoulos, 2014) (Nguyen, 2007) (Naidu, et al.,2021) (Tseng & Hsiao,2022) (Noerhidajati, et al.,2020) (Wang, et al.,2021) (Li, et al.,2021) (Kurowski,2021) (Waliszewski & Warchlewska, 2021) (Jacob, et al.,2022) (Kumar, et al.,2020) (Zhang & Wang,2022)
3	Education level	14	(Gandhimathi & Vanitha, 2010) (Akram, et al.,2012) (Takashino, et al.,2014) (Sevim, et al.,2012) (Lusardi, 2013) (Chunping, et al.,2016) (Nguyen, 2007) (Naidu, et al.,2021) (Tseng & Hsiao,2022) (Wang, et al.,2021) (Kurowski,2021) (Jacob, et al.,2022) (Kumar, et al.,2020) (Zhang & Wang,2022)
4	Gender	12	(Takashino, et al.,2014) (Sevim, et al.,2012) (Lusardi, 2013) (Chunping, et al.,2016) (Nguyen, 2007) (Naidu, et al.,2021) (Wang, et al.,2021) (Li, et al.,2021) (Kurowski,2021) (Waliszewski & Warchlewska, 2021) (Jacob, et al.,2022) (Zhang & Wang,2022)
5	Family size	12	(Gandhimathi & Vanitha, 2010) (Akram, et al.,2012) (Takashino, et al.,2014) (Pastrapa & Apostolopoulos, 2014) (Nguyen, 2007) (Naidu, et al.,2021) (Wong, et al.,2022) (Noerhidajati, et al.,2020) (Wang, et al.,2021) (Li, et al.,2021) (Jacob, et al.,2022) (Kumar, et al.,2020)
6	Marital status	9	(Takashino, et al.,2014) (Sevim, et al.,2012) (Lusardi, 2013) (Chunping, et al.,2016) (Pastrapa & Apostolopoulos, 2014) (Nguyen, 2007) (Wang, et al.,2021) (Li, et al.,2021) (Jacob, et al.,2022)
7	Consumption	9	(Kolios, 2020) (Shahnaz, et al., 2022) (Gandhimathi & Vanitha, 2010) (Nguyen, 2007) (Samad, et al.,2020) (Wong, et al.,2022) (Li, et al.,2021) (Canakci, 2021) (Kereeditse & Mpundu, 2021)
8	Landholding size	5	(Gandhimathi & Vanitha, 2010) (Akram, et al.,2012) (Nguyen, 2007) (Jacob, et al.,2022) (Kumar, et al.,2020)
9	Occupation	2	(Takashino, et al.,2014) (Pastrapa & Apostolopoulos, 2014)

Source: Author's compilation

4.2. MACRO-ECONOMIC FACTORS

Several studies have examined how variations in HHD are caused by macroeconomic factors as the unemployment rate, interest rates, housing prices, and inflation rates.

4.2.1. UNEMPLOYMENT RATE

Reduced HHD is correlated with increased unemployment, although the relationship weakens as debt levels rise. The sort of employment, fluctuations of income, consumption cost, etc. are some of the elements that will affect how much people will borrow in the years to come (Yang, Markoczy, & Qi, 2007). While investigating the Australian HHD, the authors discovered that the unemployment rate ultimately affected household income and confidence, resulting in principal loss as it was limited to the households (Meng, Hoang, & Siriwardana, 2013). (Dumitrescu, Enciu, Handoreanu, Obreja, & Blaga, 2022) in their study considered labourers who didn't have work at the time of the study but searching for a work was used as a proxy for unemployment rate and found a negative relationship between HHD and unemployment, which was also validated by previous literature (Philbrick, Gustafsson, & Fregert, 2010; Samad, Daud, & Dali, 2020). (Barrot, Erik , Plosser, & Sauvagnat, 2018) suggested utilizing the unemployment rate in their analysis to decrease the impact of the economic cycle on HHD. In contrast to the studies by (Dumitrescu et al.,2022) and (Samad et al.,2020), (Coletta, Bonis , & Piermattei Stefano, 2019) stated that unemployment rate's coefficient was positive and statistically significant in Baseline Econometric results, which suggests that during cyclical downturns, households accumulate more debt. Due to the continuous rise in unempolyment rate in South Africa, country's pre and post-low-quality asset financial crises became strong headache for household, which resulted in dilemmas later (Kereeditse & Mpundu, 2021) . During the proper exploration about the financial deregulation in Australian HHD, the authors found that they would still borrow as much as they could given their capacity to repay the loan and their willingness to accept the risk of losing their employment or running into some other difficulty (Green, Harper, & Smirl , 2009).

4.2.2. INTEREST RATES

Influnce and direction of impact of interset rate as one of the variables affceting HHD observed to be vary accroding to the national territory. Some authors showed its positive relevancy and some contracticted its association with the housaehold debt. Cheap and consistent interest rates as a result of effective monetary policy was one of the factors in the rise in HHD (Philbrick, Gustafsson, & Fregert, 2010). A study of 26 OECD countries covering a period of 20 years have revealed that higher levels of HHD are positively correlated with mortgage credit interest rates offered by commercial banks to the households (Dumitrescu, Enciu, Handoreanu, Obreja, & Blaga, 2022). On the other hand, in another study based upon 19 OECD members and non-members countries, there was a negative and statistically significant coefficient between unemployment and interest rate. Lending interest rate have negative relationship with changes in HHD (Samad, Daud, & Dali, 2020). A similar study (Estrada, Garrote, Valdeolivas, & Valles, 2014) based upon 21 OECD Countries, while controlling the effect of interest rates and income, found that household consumption increased due to household indebtedeness.

4.2.3. INFLATION RATES

In most of the reviewed studies, interest rate and inflation were going side by side in the same direction. However, reverse association was also observed in few studies subject to inflation control policies in the concerned area of the studies. People will be more likely to borrow money to pay for their indulgences when inflation is lower, which will raise HHD and vice-versa. HHD was negatively affected by low unemployment and inflation rate (Samad, Daud, & Dali, 2020; Canakci, 2021). In contrast a study of 33 OECD countries, the inflation rate showed a positive and significant relationship with HHD. However, because of the influx of financial money, inflation coefficients are no longer important (Coletta, Bonis , & Piermattei Stefano, 2019). Higher income earning household observed to struggle with the negative shocks of increased inflation (Noerhidajati, Purwoko, Werdaningtyas, Kamil, & Dartanto, 2021). A study conducted in western China for the rural households' financial knowledge, included the information on knowledge of inflation for the accomplishment of former variable (Zhang & Wang, 2022).

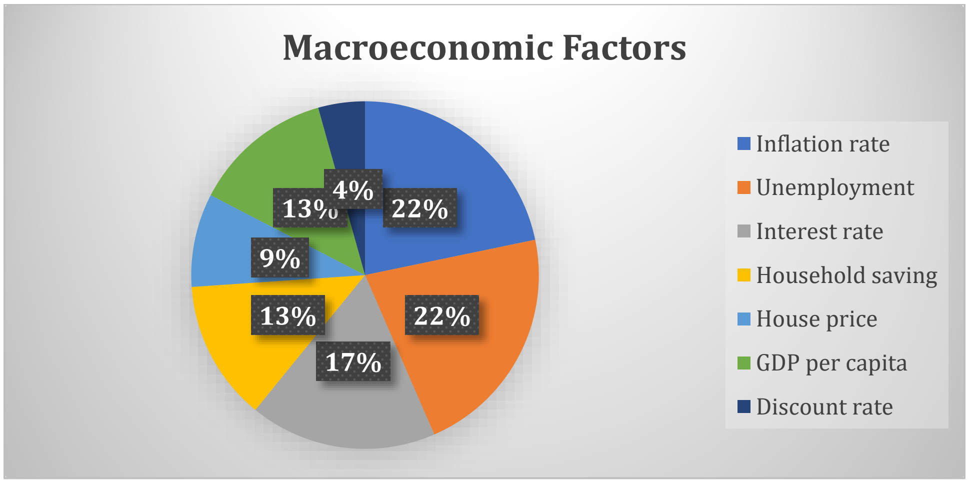
4.2.4. HOUSING PRICES

Deregulation of credit availability and constraints resulted in an overabundance of credit in China after the great recession resulted in interest rate reductions, which prompted an excessive increase in housing prices (Tseng & Hsiao, 2022). The increasing housing prices led to the increase in debt ratio of Chinese households as housing prices enhanced the housing demand, as well as household risk tolerance and borrowing capacity (Wang, Zhang , & Wang , 2021). A study based on 33 OECD countries checked the effect of the real house price index as an endogenous variable and found that there was a positive and significant effect on HHD (Coletta, Bonis , & Piermattei Stefano, 2019). Authors also observed that rising house prices might have an impact on HHD levels by enhancing the value of collateral and making debt more manageable.

4.2.5. OTHER MACRO ECONOMIC FACTORS

There are other which observed to have detrministics impact on debt decision for household irrespective of developing or developed status of an economy. some of the economic factors examined by the authors are; money supply (Kolios, 2021) ,utilisation of credit (Gandhimathi & Vanitha, 2010) ,dicount rate of future income (Oosterbeek & Broek, 2009) ,financial variable as asset holding and debt position (Takashino, Maharajan, & Fukui, 2014) ,Financial inclusion (Lusardi & Scheresberg, 2013) ,investment to GDP, GDP per capita (Canakci, 2021; Wang, Zhang , & Wang , 2021) , Government expenditure (Dumitrescu, Enciu, Handoreanu, Obreja, & Blaga, 2022; Tseng & Hsiao, 2022) , real exchange rate and uncertainity index to show the impact of economic growth on debt decision after pandemic crisis (Li, Zhang, Xue , & Wang, 2022).

Figure 3: Proportion of Macro-Economic Factors



Source: Author's compilation

In Figure 3, represents the majority of macroeconomic variables that are typically included in regression models to assess changes in the dependent variable. The studies that took into account macroeconomic aspects for their research revealed that the most frequently used variables were the unemployment rate and the inflation rate, as these two factors played significant role in the HHD decision.

Table 2: Macroeconomic Factors Affecting HHD

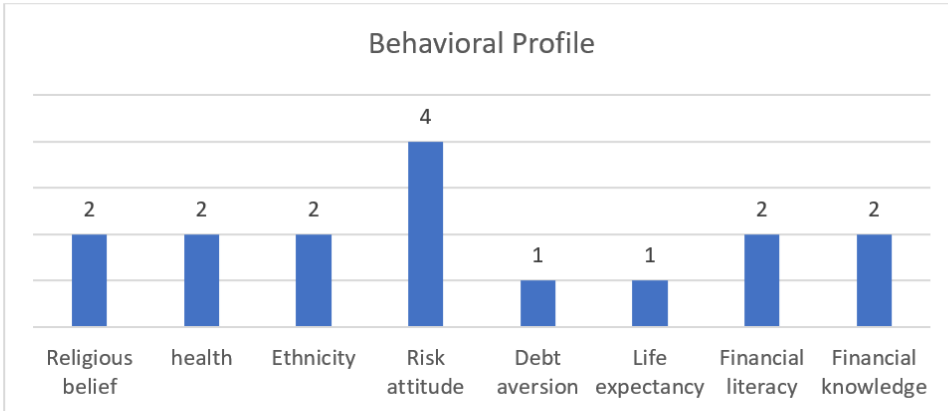
Table 2: Macroeconomic Factors Affecting HHD			
Sl no	Determinant	Count of factors	References
1	Inflation rate	5	(Dumitrescu, et al.,2022) (Samad, et al.,2020) (Coletta, et al.,2018) (Canakci, 2021) (Kereeditse & Mpundu, 2021)
2	Unemployment	5	(Kolios, 2020) (Naidu, et al.,2021) (Dumitrescu, et al.,2022) (Samad, et al.,2020) (Coletta, et al.,2018)
3	Interest rate	4	(Akram, et al.,2012) (Dumitrescu, et al.,2022) (Samad, et al.,2020) (Canakci, 2021)
4	Household saving	3	(Pastrapa & Apostolopoulos, 2014) (Wong, et al.,2022) (Noerhidajati, et al.,2020)
5	GDP per capita	3	(Li, et al.,2021) (Canakci, 2021) (Wang, et al.,2021)
6	House price	2	(Dumitrescu, et al.,2022) (Samad, et al.,2020)
7	Discount rate	1	(Oosterbeek & Broek, 2009)

Source: Author's compilation

4.3. OTHER BEHAVIORAL FACTORS

There are so many other factors which also affecting the borrowing behaviour of household such as psychological factors, cultural factors and social factors, behavioral factors, demographic factors etc. All these factors are affecting the household borrowing decision in distinct manner. It may be some direct relationship or indirect relationship with the HHD to some extent. Demographic factors like educational level, landholding size, family size (Gandhimathi & Vanitha, 2010; Wong, Kusairi, & Halim, 2022), marital status (Sevim, Temizel, & Sayilir, 2012), children's dependecy ratio (Wang, Zhang , & Wang , 2021), occupation, number of dependents in a household (Takashino, Maharajan, & Fukui, 2014), household savings (Pastrapa & Apostolopoulos, 2015) etc. were also influencing and participating in the regression equation of HHD. Cultural factors and Social factors like religious belief put limitations in specific religion having a debt for household (Chunping, li, & Lingwei, 2016), materialism like how much luxurious things they want to demonstrate the living of standard (Mahdzan, Zainudin, & Shaari, 2022), ethnicity/Racism (Lusardi & Scheresberg, 2013) and physical condition (Tseng & Hsiao, 2022) were also affecting borrowing decision of household in an extant. Psycholgical factors like sense of happiness, sense of security, experience in taking debt and expectation (Wu, Fasianos, & Kinsella, 2015) also plays an important role (Tseng & Hsiao, 2022). Behavioral factors such as Risk attitude towards taking the debt or not, as it include some subjective judgement, have the positive signifiacance with borrowing decision , Financial knowledge with attitude (Tseng & Hsiao, 2022) and Debt aversion as a non-standard determinant of borrowing decision (Oosterbeek & Broek, 2009) had also been considered in studies.

Figure 4: Uses of Behavioural Factors



Source: Author's compilation

Table 3: Behavioural Factors Affecting HHD

Table 3: Behavioural Factors Affecting HHD			
Sl no	Determinant	Count of factors	References
1	Risk attitude	4	(Oosterbeek & Broek, 2009) (Wu, et al.,2015) (Tseng & Hsiao,2022) (Li, et al.,2021)
2	Religious belief	2	(Shahnaz, et al., 2022) (Chunping, et al.,2016)
3	health	2	(Chunping, et al.,2016) (Zhang & Wang,2022)
4	Ethnicity	2	(Lusardi, 2013) (Chunping, et al.,2016)
5	Financial knowledge	2	(Tseng & Hsiao,2022) (Noerhidajati, et al.,2020)
6	Financial literacy	2	(Kurowski,2021) (Zhang & Wang,2022)
7	Debt aversion	1	(Oosterbeek & Broek, 2009)
8	Life expectancy	1	(Coletta, et al.,2018)

Source: Author's compilation

Table 4: Various Proxies in Measuring Factors as Determinants Influencing Household Debt

Table 4: Various Proxies in Measuring Factors as Determinants Influencing Household Debt		
Factors	**Measurements**	**Articles**
Income	Previous year's Income	(Akram et al., 2012)
	Household income	(Lusardi & Scheresberg, 2013; Noerhidajati et al., 2021;Hartarska & Gonzalez-Vega, 2006)
	Aggregate income	(Wang, Zhang , & Wang , 2021)
	Total family income	(Takashino, Maharajan, & Fukui, 2014)
	Gross disposable income	(Kariuki, Muturi, & Mwangi, 2016)
	Parent's income	(Oosterbeek & Broek, 2009)
	GDP per capita income	(Samad, Daud, & Dali, 2020)
	Per capita annual household income	(Kumar, Mishra, Sonkar, & Saroj, 2020)

Consumption	Excessive consumption level	(Mahdzan, Zainudin, & Shaari, 2022)
	Household expenditure per annum	(Gandhimathi & Vanitha, 2010)
	Consumption per capita	(Nguyen, 2007)
	Household Consumption	(Samad, Daud, & Dali, 2020; Wong, Kusairi, & Halim, 2022; Li, Song, Wu, & Huang, 2021)
Unemployment	Labour force	(Dumitrescu, Enciu, Handoreanu, Obreja, & Blaga, 2022)
Interest Rate	Mortgage credit interest rate	(Dumitrescu, Enciu, Handoreanu, Obreja, & Blaga, 2022)
	Lending interest rate	(Samad, Daud, & Dali, 2020)
House Price	House price index	(Coletta, Bonis , & Piermattei Stefano, 2019)
Demographic	Age	(Takashino, et al.,2014) (Sevim, et al.,2012) (Lusardi, 2013) (Chunping, et al.,2016) (Pastrapa & Apostolopoulos, 2014)
	Education Level	(Gandhimathi & Vanitha, 2010) (Akram, et al.,2012) (Takashino, et al.,2014) (Sevim, et al.,2012) (Lusardi, 2013) (Chunping, et al.,2016)
	Gender	(Naidu, et al.,2021) (Wang, et al.,2021) (Li, et al.,2021) (Kurowski,2021) (Waliszewski & Warchlewska, 2021) (Jacob, et al.,2022) (Zhang & Wang,2022)
	Family size	(Wang, et al.,2021) (Li, et al.,2021) (Jacob, et al.,2022) (Kumar, et al.,2020)
	Marital status	(Takashino, et al.,2014) (Sevim, et al.,2012) (Lusardi, 2013) (Chunping, et al.,2016)
	Landholding size	Gandhimathi & Vanitha, 2010) (Akram, et al.,2012) (Nguyen, 2007) (Jacob, et al.,2022)
	Caste system	(Kumar, Mishra, Sonkar, & Saroj, 2020)
Behavioural	Risk attitude	(Oosterbeek & Broek, 2009) (Wu, et al.,2015) (Tseng & Hsiao,2022) (Li, et al.,2021)
	Religious belief	(Shahnaz, et al., 2022) (Chunping, et al.,2016)
	health	(Chunping, et al.,2016) (Zhang & Wang,2022)
	Financial knowledge	(Tseng & Hsiao,2022) (Noerhidajati, et al.,2020)

Source: Author's compilation

Table 5: Inclusion/Exclusion of Factors in Different Studies

Table 5: Inclusion/Exclusion of Factors in Different Studies				
Sl.No.	**Author**	Socio-Demographic	Macro-Economic	Behavioural
1	Kolios ,2020	+	+	-
2	Kariuki et al., 2016	+	-	-
3	Mahdzan & Zainudin, 2022	-	-	+
4	Gandhimathi & Vanitha, 2010	+	-	-
5	Oosterbeek & Broek, 2009	+	-	+
6	Akram et al., 2012	+	-	+
7	Meng et al., 2013	-	+	-
8	Dutta & Magableh, 2010	+	-	+
9	Takashino et al., 2014	+	-	-
10	Wu et al., 2015	-	-	+
11	Sevim et al., 2012	+	-	-
12	Huston, 2012	-	-	+
13	Lusardi & Scheresberg, 2013	+	-	+
14	Chunping et al., 2016	+	-	+
15	Pastrapa & Apostolopoulos, 2014	+	+	-
16	Nguyen, 2007	+	-	-
17	Devine, 2022	-	+	-
18	Naidu et al., 2021	+	+	-
19	Dumitrescu et al., 2022	-	+	-
20	Samad et al., 2020	+	+	-
21	wong et al., 2022	+	+	-

22	Tseng & Hsiao, 2022	+	-	+
23	Noerhidajati et al., 2020	+	+	-
24	Wang et al., 2021	+	+	-
25	Coletta et al., 2018	-	+	+
26	Li et al., 2022	-	+	-
27	Li et al., 2021	+	+	-
28	CANAKCI, 2021	-	+	-
29.	Kurowski, 2021	+	-	+
30.	Waliszewski & Warchlewska, 2021	+	-	-
31.	Jacob et al., 2022	+	-	-
32.	Kereeditse & Mpundu, 2021	+	+	-
33.	Kumar et al., 2020	+	-	-
34.	Zhang & Wang, 2022	+	-	+
35.	Green et al., 2009	-	+	-
	Total studies in which factors were considered	35		

Source: Author's compilation

5. CONCLUSION

Household debt being a burning topic in today's modern world, have been reviewed for this study, covering a span of 15 years between 2007 to 2022. Households were contributing to the GDP of countries, directly affecting the inflation rate and as a result its impact can also be noticed on the country's growth of economy. Most economies had seen a considerable pile up in HHD over the last few decades, which had facilitated smooth spending with reducing household savings rates as a result of rising inflation rates (Ismail, et al., 2020). By going through the studies in developed and developing countries, it is perceived that "HHD" have much weight in economy. As the economy of developing countries were not wealthy and its per capita income is insufficient, those deficiencies were satisfied through HHD and these incidents were observed mostly after Covid-19 Pandemic crisis (Kurowski, 2021). Considerable growth in HHD had been observed in post financial crisis (Li, Zhang, Xue , & Wang, 2022; Waliszewski & Warchlewska, 2021). Authors of various papers modelled their study based quantitative methods viz. various estimation methods like Logit, Probit and Tobit econometric approach, descriptive statistics, association techniques to find out the determinants impacting the borrowing choice of households in both the advanced and emerging economies. But still there is a scarcity of qualitative methods and theoretical understanding of the household borrowing behaviour about the modelling of determinants. HHD had a significant influence on the whole economy of a country including the monetary policy and fiscal policy, resulting in the nourishment of the economy.

We can conclude the decision of HHD should be taken by the households very carefully and more attention to be emphasized in this context. It is intended that the study would not only improve knowledge of HHD but also serve as a solid foundation for further study in this area.

6. CONCLUDING REMARKS AND FUTURE RESEARCH AGENDA

This study has considered freely available open- access articles only. More intensive studies can be conducted by further researchers by considering more articles of the selected keywords. From the exhaustive study, we can conclude that most of the studies had considered rural households for empirical analysis in emerging economies. Comparison between rural and urban household is also observed to be less explored area. As far as Future research can be extended by introducing socio-demographic factors as interaction terms/mediating variable in the HHD model or by controlling demographic factors for the betterment of econometric modelling. Suitable estimation method can be used as per the need of primary data of HHD.

CONFLICT OF INTERESTS

None.

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