A Review of Consumers' Over-Indebtedness: Definitions, Determinants, and Measurement Approaches

*Nur Hafidzah Idris, Roszi Naszariah Nasni Naseri

Faculty of Business Management University Technology MARA, Cawangan Melaka, MALAYSIA

*Corresponding Author

DOI: https://dx.doi.org/10.47772/IJRISS.2025.910000212

Received: 30 September 2025; Accepted: 14 October 2025; Published: 01 November 2025

ABSTRACT

Over-indebtedness is one of the biggest challenges in the modern world. While there is a growing global concern about consumer over-indebtedness, research remains limited and inconsistent in defining and measuring this condition. This review critically analyzes the various definitions and measurement approaches of over-indebtedness, identifying conceptual gaps and methodological limitations in objective, subjective, and administrative models. The paper concludes by advocating for a borrower-centric measurement framework, particularly the 'sacrifice-based' approach proposed by Schicks (2014), which offers a more holistic and accurate understanding of the over-indebtedness condition. The review highlights that adopting such frameworks will enable future researchers and policymakers to design more effective interventions and solutions to mitigate over-indebtedness challenges.

Keywords-Over-indebtedness; consumer debt; household indebtedness; financial behavior

INTRODUCTION

Debt plays an essential role in people's everyday life. Household consumption theoretically stimulates the economic growth of a nation by generating revenue for the financial industry, employment and business outcomes. However, having much debt will lead to some adverse effects, which include slow GDP, the impact on financial institutions, and individuals' difficulties. A study conducted by Idris (2019) claimed that Malaysians currently are facing with an over-indebtedness problem, and the highest number of an over-indebted borrower comes from Malay Muslims.

Being indebtedness was not necessarily a problem if it is manageable. Debt is perceived as necessary, but in most cases, considered as detrimental and dangerous. Most of the religious considering debt as unhealthy an avoidance activity for their followers. Islam, which means peace and freedom is not encouraged its follower (Muslim) to participate in involving in debt and urges the Muslim to avoid it as much as possible. Few hadiths and stories by Prophet Muhammad (PBUH), had enlightened on the avoidance of the debt. One of it, as narrated from Aisha (PBUH) that the Prophet (PBUH) used to say in his prayer: "O Allah, I seek refuge with You from sin and heavy debt". Someone said to him: "How often you seek refuge from heavy debt" He said: "When a man gets into debt, he speaks and tells lies, and he makes a promise and breaks it", narrated by al Bukhari and Musli

Meanwhile, Christian religion viewed money lending at interest as a sin and those who defaulted on debts were viewed as dishonest and evil and treated as criminals (Braucher, 2006; Braun Santos et al., 2016). Besides, in Southern India, it was said that people consider debt as bad and try hard to avoid it (Afonso et al., 2016; Guérin et al., 2011). Even though most of the religions take seriously on debt matters, however, the number of over-indebted borrowers shows an increasing trend from year to year.

In order to propose a solution and developing measures to avoid over-indebtedness requires a comprehensive understanding of "what it is over-indebtedness" and the situations where over-indebtedness is most likely to exist among the borrowers. Concerning this, therefore we come out with a review of over-indebtedness, specifically on its definitions and measurements that had been used in the literature. We hope that this review paper would help researchers in household debt area to propose a solution and "remedies" to overcome over-indebtedness problem.

DETERMINANTS OF OVER-INDEBTEDNESS

The development of consumption theories relating to consumer's debt was dated back to over 50 years ago in the literature. The Keynesian Consumption Function, which was pioneered by John Maynard Keynes in 1936, is an economic formula, which represents the functional link between gross national income and total consumption. Keynes posits that lower-income results in a lower marginal propensity to consume (MPC) and lower average propensity to consume (APC). The Permanent Income Hypothesis of Milton Friedman (1957) posits that consumers will expend money at a rate that accords with their predicted income over the long term. Based on both of these economic theories, we can postulate that an individual with a high income tends to become an over-indebtedness.

Katona (1975) in Flores and Vieira (2014) posits three reasons why individuals may spend more money than they make: (i) a low income, which makes them incapable of sustaining basic expenses, (ii) a high income coupled with a high compulsion to spend, and (iii) an absence of motivation to save money, irrespective of their income level. This is consistent with the concept of consumption function within the life cycle theory established by Modigliani, Ando and Brumberg (1963), which states that the household’s saving and consumption choices at any stage shows an active effort to reach the ideal allocation of consumption across the life cycle. Of course, this consumption is also restricted by resource availability over the household’s lifespan. The Katona study is vital in terms of its exploration of the factors which give rise to credit problems, such as psychological, behavioural and economic factors.

Previous studies have pinpointed marital status, household composition, and gender as the contributing elements towards debt (Balmer et al. 2006; Patel et al. 2012; Russell et al. 2013). An individual who is divorced, widowed or is a single parent is more prone to experiencing financial issues. This is also unsurprisingly true for those who have many children, regardless of income level. Ponchio (2006) posits that those with low educational levels and women are more likely to be in debt, while older people have less of a propensity to be in debt. Bake and Hong (2004) challenged this by asserting that men are the more frequent users of revolving credit, while women have the stronger disposition to be better budget planners, have greater self-control, and generally make more sensible financial choices in comparison to men (Henry, Weber & Yarborough, 2001).

Keese (2010) examines household debt and analyses various demographic factors such as gender, education and age. It was discovered that younger adults under the age of 30 have a perception of their debt burden being considerably lower, while those who are 45 and older and also heads of families have a higher perception of their debt burden. Comparisons between high-income and low-income individuals as they relate to revolving credit reveal that low-income groups use revolving credit less often than high-income groups (Baek & Hong, 2004; Livingstone & Lunt, 1992). In fact, the high-income group has the propensity to overestimate their capacity to repay debts. On the other hand, Wang, Lu and Malhotra (2011) found that low-income groups utilise revolving credit more than high-income earners. This is congruent with the findings of Davies and Lea (1995) and Zhu and Meeks (1994) who asserted that the strong demand for basic necessities among low-income groups results in them using revolving credit at a higher rate.

Accordingly, Vitt (2004) points out how consumers make financial choices based on various physical, social and psychological premises, which typically also have emotional roots as established in theories of behavioural economics. Psychology and behavioural economics also posit several biases including the habit of control, overconfidence bias, locus of control and the inter-temporal balance of utility (Schicks, 2014).

Financial problems can be caused by endogenous or exogenous factors (Disney et al. 2008). Exogenous factors are external conditions which lie outside the individual’s range of autonomy such as unemployment or marital problems leading to divorce (Anderloni & Vandone, 2010). On the other hand, endogenous factors are exhibited in the individual's behaviours and attitudes towards debt and spending (Lusardi & Tufano 2009; Gathergood 2012). Endogenous and exogenous factors both give rise to the development of financial struggles (Gutierrez-Nieto, Serrano-Cinca & Cuesta-Gonzalez; 2016).

Over-Indebtedness: Current Measurements and Its Limitations

Presently, there is no agreed general definition for over-indebtedness, or any comprehensive agreement on how it should be measured (D'Alessio & Iezzi, 2013; Fatoki, 2015; Hiilamo, 2020; Idris et al., 2018; Liv, 2013; Marron, 2012). However, contemporary research has pinpointed three potential measurements or models for explaining consumer over-indebtedness (Betti, Dourmashkin, Rossi & Yin, 2007; Bylander et al., 2018) namely subjective measures, objective measures and administrative measures. An objective measure is, typically, a quantitative model which explains over-indebtedness as an extreme amount of debt in terms of debt ratio. The debt ratio, in this case, can be between 30% to 50% (Marron, 2012; Veliziotis, Bryan, & Taylor, 2010).

A subjective measure of over-indebtedness would be via self-reporting on the part of the debt-holder, as only the debt-holder or borrower is said to have a truly accurate picture of their own state of over-indebtedness. An individual can be said to be over-indebted if he/she is experiencing financial struggles such as issues with repayments, taking on extra jobs to sustain his/her needs, or defaulting on bills (Carlsson, Larsson, Svensson & Åström, 2017b; Disney, Bridges & Gathergood, 2008; Gathergood, 2012; Lusardi & Tufano, 2009; Schicks, 2014).

An administrative measure assesses over-indebtedness by taking account of incidents where debts have not been repaid, and when these non-payments have been officially declared as bankruptcy or stated in court. This can occur in a case where a borrower has declared bankruptcy and has been sent warning notices from relevant official parties due to defaulting on payments (Betti et al., 2007). However, all of the above definitions have several limitations.

Using debt-to-income-ratio as a cutting point for over-indebtedness will expose it to the preconception in judgement. The cutting point for debt-to-income-ratio varies among individuals. As such, 40% of debt-to-income-ratio might be considered as a burden for some individuals, but deemed acceptable for other group of borrowers. Moreover, it has been proven that default payments occur not because the borrower is unable to pay or is facing financial difficulties, but because of the borrower's attitude (Idris, 2019). Additionally, using self-reporting measures in determining individual over-indebtedness may result in biased reporting, where the borrower will over-judge himself as facing financial difficulties (Gathergood, 2016). Meanwhile, bankruptcy is often considered as a late stage or consequence of over-indebtedness (Betti, 2012; Guiterrez-Nieto et al., 2017).

On top of that, debt-to-income-ratio, default payment and bankruptcy are derived from the lender's point of view rather than the borrower, which is considerably different from the perspective of the consumers. Thus, it is clear that a there is a need to apply a measurement for over-indebtedness that cater from the viewpoint of the borrower, with less emphasis on issues of defaulting or repayments. As summarized in Table 1, previous studies demonstrate a wide variation in methodologies used to measure over-indebtedness, indicating the lack of consensus across disciplines. Meanwhile, Table 2 presents several self-reported instruments used in prior research to assess over-indebtedness, highlighting the role of borrower perception in determining debt burden.

As a conclusion, the growing knowledge of over-indebtedness mention four general criteria of over-indebtedness, which are: (i) making high repayments relative to income, (ii) being in arrears, (iii) making heavy use of credit and (iv) finding debt as a burden. In general, people are considered over indebted if they have difficulty meeting their financial commitments related to loans or the payment of bills (Disney & Gathergood, 2013). Over-indebtedness refers, then, to a situation where a person or household does not have enough money and faced with difficulty to pay debt instalments and interests after other necessary paid expenditures (Raijas et al., 2010). Table 1 and Table 2 present the definition of over-indebtedness and self-reported measures of over-indebtedness that gathered from past studies.

As summarized in Table 1, previous studies demonstrate a wide variation in methodologies used to measure over-indebtedness, indicating the lack of consensus across disciplines.

INTERNATIONAL JOURNAL OF RESEARCH AND INNOVATION IN SOCIAL SCIENCE (IJRISS)
ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue X October 2025

Table 1: Over-indebtedness from the literature

Author/Year	Unit of Analysis / Method	Measurement of over-indebtedness
(French & Mckillop, 2016)	• Probit model • Distribute questionnaires to problematic loans	• The scope of study from the credit problems respondents that is OID person. • The outcome, high DER, or low DER
(Schicks, 2014)	• 531 Ghanaians microfinance borrowers • Semi-structured interviews • Logistic regression	Subjective measures • Borrower admit on the struggle to repay • Borrower listed all the sacrifices that they experienced.
(Gutierrez-Nieto et al., 2017)	• Spanish • 61 experts; academia and business sector and 61 individuals • Questionnaires	• Borrowers and under mortgage payment problem and under the threat of eviction.
(Disney & Gathergood, 2013; Gathergood, 2012)	• Logistic regression	• Delinquency and self-reported measures
(Veliziotis et al., 2010)	• Interview	Five such measures: i. Being in credit arrears ii. Experiencing debt as a subjective burden iii. Number of credit commitments outstanding iv. The ratio of unsecured debt repayments to gross household income exceeding 25%, and v. The ratio of all debt repayments to gross household income exceeding 50%. *The first three indicators are defined at both the individual and household level, while the last two are defined at the household-level.
(Marron, 2012)		Define OID as in Kempson 2002. • The debt ratio is 25% on unsecured payments; • The debt ratio is more than 50% of total borrowing (secured and unsecured); • Individuals with four or more credit commitments; • Individuals experiencing arrears on a credit commitment or domestic bill for more than three months; • Individuals who perceive their household borrowing repayments to be a ‘heavy burden.’
(Liv, 2013)	• Microfinance borrowers in Ghana • Semi-structured Interview	• Struggle to repay their loans at least once • Made at least one sacrifice

	• 237 Microfinance borrowers • Multinominal logistical regression	
(Betti et al., 2007)	• Secondary data for EU members (Austria, Belgium, Denmark, Germany, Greece, Spain, France, Ireland, Italy, Portugal, Finland)	• Subjective measures: Over-indebted households are identified as those that expressed difficulty or serious difficulty in making debt payments, including credit debt, mortgage payments and hire purchase instalments.
(Carlsson et al., 2017)	• Youth • Descriptive	• Having 3 error; including bills

Table 2 presents several self-reported instruments used in prior research to assess over-indebtedness, highlighting the role of borrower perception in determining debt burden.

Table 2: Self-reported Measurement for Over-indebtedness

Author/year	**Questions**
(Lusardi & Tufano, 2009)	Which of the following best describes your current debt position? *1. I have too much debt right now and I have or may have difficulty paying it off. 2. I have about the right amount of debt right now and I face no problems with it. 3. I have too little debt right now. I wish I could get more. 4. I just don’t know.
(Disney & Gathergood, 2013)	A. ‘Which of the following statements best describes how well you [and your partner] are keeping up with your credit commitments at the moment?’ 1. I am/we are keeping up with all bills and commitments without any difficulties 2. I am/we are keeping up with all bills and commitments, but it is a struggle from time to time 3. I am/we are keeping all bills and commitments, but it is a constant struggle 4. I am/we are falling behind with some bills or credit commitments *5. I am/we are having real financial problems and have fallen behind with many bills or credit commitments 6. I/we don’t have any bills or credit commitments 7. Don’t know

Note: Those who answer the (*) will be considered as an over-indebted borrower

Over-Indebtedness from a Borrowers Perspective

Current studies on consumer over-indebtedness mostly focusing on the definition from the lender perspective, which are high Debt to Income Ratio (also known n as Debt to Service Ratio), repayment problems, and default payment. As mentioning in the previous section, these measurements have limitations, such as in justifying how much is too much for debt-income-ratio, loan default based on attitudes or in ability to pay, and also over-claim of indebtedness by applying the self-claim measurements.

As such, the development of studies on over-indebtedness literature have proposed a new measurement in defining over-indebtedness that more details and concern the definition from the borrower's point of view. For instance, Gutierrez-Nieto et al. (2017) and Schicks (2014) presented alternative descriptions for over-indebtedness by expanding the category of self-reporting. Schicks identifies an over-indebted individual as someone who is consistently having trouble meeting deadlines for payments and is forced to make unreasonably high sacrifices to compensate for their debt-related burdens. Table 3 summarizes Schicks's (2014) borrower-centric measurement framework, which categorizes over-indebtedness based on different types of sacrifices made by borrowers.

Considering the extent to which many over-indebted individuals make sacrifices in order to ensure that their debt repayments are fulfilled, situations such as defaults or delinquency are markers of extreme states of over-indebtedness than the norm. The over-indebted individual makes sacrifices to be able to manage his/her financial issues, such as by working overtime or taking part-time work, cutting down on basic needs such as particular foods, and enduring psychological burdens such as shame. From the researcher knowledge, there is only Liv (2013) and Schicks (2014) who have the over-indebtedness measurements from a borrower's perspective in the over-indebtedness literature. However, Schicks measurements are more details than Liv (2013) in describing the over-indebtedness, and Schick's measurements had been mentioned by others studies such as in Puliyakot & Pradhan, 2017 and Srivalosakul & Suwanragsa, 2018. Although Schicks' definition of a customer refers to a household, it can be applied to other economic units such as a person, a group of people or a firm (Debnath & Roy, 2018). Table 3 summarizes Schicks's (2014) borrower-centric measurement framework, which categorizes over-indebtedness based on different types of sacrifices made by borrowers.

Table 3: Over-indebtedness from a borrower's perspective measurements

Author	Measurement
Schicks (2014)	**Basic sacrifices** • Reduce food quantity/quality (cut down eating). • Reduce education (e.g., taking children out of school). • Postpone important expenses (e.g., for health, housing, business assets, etc.). • Work more than usual (e.g., take additional labour, work longer hours, on Sundays, and when ill). **Economic sacrifices** • Deplete your financial savings (e.g., money in the house or in a savings account). • Borrow anew to repay (take an additional loan from another lender). • Sell or pawn assets (e.g., jewellery, cattle, productive, or household assets). • Seizure of assets (Microfinance borrower's; MFI takes property by force to make up for missed payment). • Use family/friends' support to repay. **Psychological sacrifices** • Suffer from shame or insults (also gossip about you/ exclusion from a contract). • Feel threatened/harassed by peers/family/loan officer. • Suffer psychological stress yourself or in your marriage.

CONCLUSION

This paper reviews the various definitions and conceptualisations of over-indebtedness found in the literature. The findings confirm that most existing studies have approached the issue from the lender's perspective, focusing primarily on quantitative indicators such as debt-to-income ratios, default rates, and bankruptcy cases. However, this framework is limited, as it neglects the qualitative, lived experiences of borrowers. To bridge this gap, the paper advocates the adoption of borrower-centric frameworks such as those developed by Liv (2013) and Schicks (2014), which define over-indebtedness through the sacrifices borrowers make to meet their financial obligations. Future research should apply these frameworks across different cultural and institutional contexts to validate their robustness. Moreover, standardized instruments should be developed to capture borrower sacrifices and psychological stress indicators, offering policymakers and financial institutions richer data for designing sustainable debt-relief programs and responsible lending practices. By doing so, researchers can contribute to a more humane and comprehensive understanding of over-indebtedness and its broader socioeconomic implications.

REFERENCES

1. Afonso, J. S., Morvant-Roux, S., Guérin, I., & Forcella, D. (2016). Doing Good by Doing Well? Microfinance, Self-Regulation and Borrowers' Over-indebtedness in the Dominican Republic. Journal of International Development, 29(7), 919–935.
2. Betti, G., Dourmashkin, N., Rossi, M. C., & Yin, Y. (2007). Consumer over-indebtedness in the EU: Measurement and characteristics. Journal of Economic Studies, 34(2), 136–156.
3. Braucher, J. (2006). Theories of overindebtedness: Interaction of structure and culture. Theoretical Inquiries in Law, 7(2), 323–346.
4. Braun Santos, D., Mendes-Da-Silva, W., Flores, E., & Norvilitis, J. M. (2016). Predictors of credit card use and perceived financial well-being in female college students: A Brazil-United States comparative study. International Journal of Consumer Studies, 40(2), 133–142.
5. Bylander, M., Res, P., Jacoby, L., Bradley, P., & Pérez, Andra, B. (2018). Over-indebtedness and microcredit in Cambodia: Moving beyond borrower-centric frames. Development Policy Review.
6. Carlsson, H., Larsson, S., Svensson, L., & Åström, F. (2017). Consumer Credit Behavior in the Digital Context: A Bibliometric Analysis and Literature Review. Journal of Financial Counseling & Planning, 28(1), 76–94.
7. D'Alessio, G., & Iezzi, S. (2013). Household over-indebtedness: definition and measurement with Italian data. In Questioni di Economia e Finanza (No. 149; Occasional Papers).
8. Disney, R., & Gathergood, J. (2013). Financial literacy and consumer credit portfolios. Journal of Banking and Finance, 37(7), 2246–2254.
9. Fatoki, O. (2015). The causes and consequences of household over-indebtedness in South Africa. Journal of Social Sciences, 43(2), 97–103.
10. French, D., & Mckillop, D. (2016). Financial literacy and over-indebtedness in low-income households. International Review of Financial Analysis, 48, 1–11.
11. Gathergood, J. (2012). Self-control, financial literacy and consumer over-indebtedness. Journal of Economic Psychology, 33(3), 590–602.
12. Guérin, I., Roesch, M., Subramanian, V., & Kumar, S. (2011). The social meaning of over- indebtedness and creditworthiness in the context of poor rural South India households (No. 2011–1; RUME Working Papers Series, Issue January 2011).
13. Gutierrez-Nieto, B., Serrano-cinca, C., & Cuesta-Gonzalez, M. de la. (2017). A multivariate study of over-indebtedness ' causes and consequences. International Journal of Consumer Studies, 41(2), 188–198.
14. Hiilamo, H. (2020). The Legacy of Economic Recession in Terms of Over-Indebtedness : A Framework and Review of the Evidence. Social Policy and Society, 1–14.
15. Idris, N. H. (2019). Modelling Digital Technology Addiction for Individual Over-indebtednsss. The International Journal of Science & Technoledge, 7(2), 75–80.
16. Idris, N. H., Wee, M. F., Ismail, S., & Samad, K. A. (2018). Financial knowledge, debt literacy and over-indebtedness. The Journal of Social Sciences Research, 7(3), 22–29.

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue X October 2025

17. Liv, D. (2013). Study on the drivers of over-indebtedness of microfinance borrowers in Cambodia: An in-depth investigation of saturated areas. In Cambodia Institute of Development Study (Issue Final Report).
18. Lusardi, A., & Tufano, P. (2009). Debt literacy, financial experiences, and overindebtedness. Journal of Pension Economics and Finance, 14(04), 332–368. https://doi.org/10.1017/
19. Marron, D. (2012). Producing over-indebtedness. Journal Of Cultural Economy, 5(4), 407–421.
20. Schicks, J. (2014). Over-indebtedness in microfinance - An empirical analysis of related factors on the borrower level. World Development, 54, 301–324.
21. Veliziotis, M., Bryan, M., & Taylor, M. (2010). Over-indebtedness in Great Britain: An analysis using the wealth and assets survey and household annual debtors survey (Issue October). Crown.

Overall, these determinants—ranging from behavioural and psychological biases to exogenous economic shocks—demonstrate that over-indebtedness cannot be understood solely through financial ratios or repayment status. Instead, they highlight the importance of evaluating debt burdens from the borrower's lived experiences. Therefore, borrower-centric measurement approaches, such as those proposed by Schicks (2014), are essential for capturing the multidimensional realities of over-indebtedness.