

## Determinants of household over-indebtedness in South Africa

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### Keywords

South Africa, household, debt, income, consumption

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### Abstract

*The proportion of household debt to disposable income is high in South Africa, signifying over-indebtedness which reduces the welfare of households. High debt leads to low savings, negatively impacting economic growth. This paper presents the determinants of household debt distress in South Africa and comes up with recommendations on how to manage household debt. The objectives are achieved through systematic literature review. Findings suggest that households are over-indebted because of several reasons. They lack necessary finance management skills and proper protection from predatory practices by lenders. Household indebtedness is also caused by the rising cost of living which leads to low household disposable income and savings, high interest rates, misfortunes and adverse trigger events and income inequalities. Education, age and being a recipient of a social grant all have positive and negative impacts on household indebtedness. Findings also suggest that female-headed households, renting households, large households, urban based households, households with a mortgage and households where the head is not working, is sick or disabled are more likely to be over-indebted. A framework is presented with recommendations on how household debt can be effectively managed in South Africa. Upskilling in finance management can help improve the way households manage their finances. Moneylending institutions should avoid predatory lending and disclose vital information affecting household borrowing decisions. A downward review of interest rates on debt is necessary with a balance between profitability and sustainability of loan repayments. Consumption insurance on loans is recommended to cushion debt distressed households.*

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### Introduction

Household debt is beneficial to families as it enables them to buy goods and services that they would not be able to pay for in one go, raising their standard of living. They therefore smoothen their consumption over time providing stability to the economy (Harari, 2018). However, when households fail to repay their loans with commercial banks and other money lending institutions, it poses a threat to the wellbeing of the whole economy as the funds are taken from savings and the banks would in turn fail to honour their obligations with depositors (Zimunya & Raboloko, 2015). In the financial sector household debt increases non-performing loans, weakens balance sheets of financial intermediaries, and reduces

availability of credit. This ultimately results in a fall in household consumption (Albuquerque & Krustev, 2015). In South Africa, there has been continued increase in household debt coupled with a high debt to income ratio and growth in repayment default, posing a challenge to the credit sector and the stability of the economy. Rises in debt levels increase borrowers' likelihood to default and leads to irregular financial cycles essentially risking the financial system collapse similar to what happened in the 2007-2009 global financial crisis (Klein, 2015).

The objectives of the paper are therefore to understand the nature and determinants of household debt and to come up with a framework for managing the household debt in South Africa. This will ensure reduction of debt burden amongst households and reduce the negative impact of excessive debt on the economy. Further, the government of South Africa provides social security grants to vulnerable households, yet a significant number of families still borrow large amounts of money, leading to high debt burden. This paper highlights impact of these grants on household debt. Our findings suggest that households are over-indebted because they lack financial management skills necessary to practice responsible spending and lack proper protection from the predatory practices by lenders at the same time. The increasing cost of living coupled with low household disposable income leads to low or no savings leading to increased household debt. Other causes of over-indebtedness are high interest rates on loans and misfortunes or adverse trigger events. Household debt is also affected by educational level, gender, age, health and employment status of the household head. Other determinants are when the household is renting, has a mortgage, is a recipient of a social security grant or is large.

### South Africa's household debt

According to Allen, Babus & Carletti (2009), household debt has been associated with many financial crises and recessions. South Africa experienced a significant increase in its household debt to income ratio from the beginning of the financial crisis of 2008–2009 Meniago, Mukuddem-Petersen, Petersen & Mongale (2013). South Africa's middle class is facing a massive debt problem, many people are borrowing to pay for necessities such as food and transport while on average those in bad debt spend 63% of their after-tax income on repayments (Business Tech, 2018). The worst first-time credit defaults for personal loans in South Africa are mainly young or single co-habiting couples reliant on social grants in one or two roomed informal dwellings (Business Tech, 2018). Table 1 shows composition of debt in South Africa.

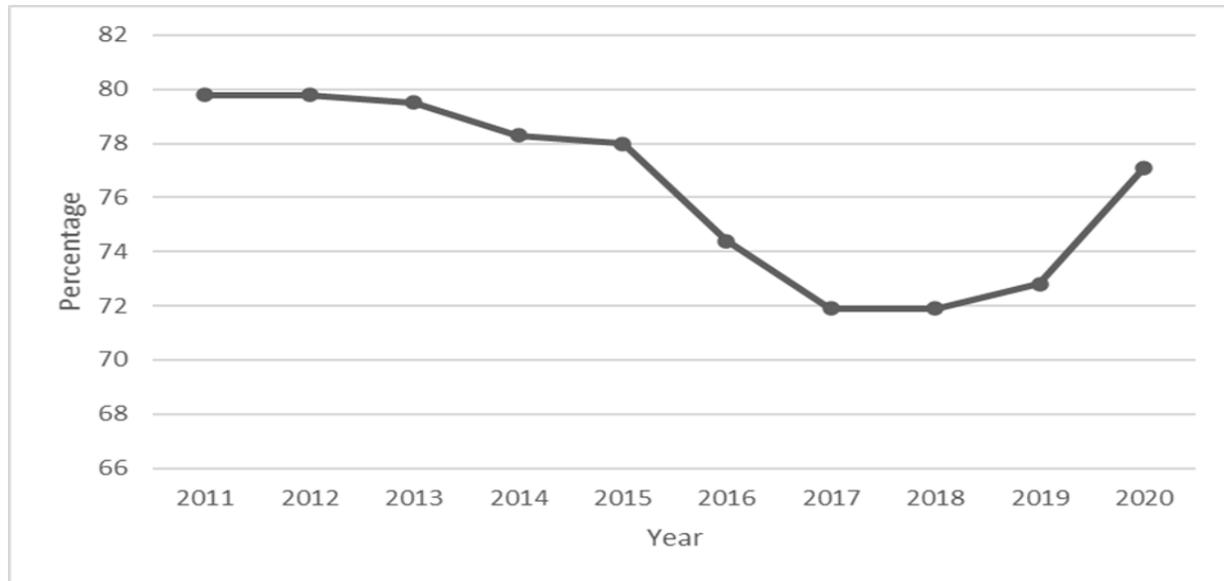
Mortgages	52%
Secured credit agreements	22%
Credit facilities	13%
Unsecured credit	10%
Developmental credit	2%
Short-term credit	0.2%

Table 1: Composition of debt in South Africa  
Data Source: National Credit Regulator (2016a)

With reference to Table 1, mortgages constitute most of the household debt at 52% of all debt while short-term credit constitute the least at 0.2%. According to the National Credit Regulator (2016a), most of the household debt is from the banking sector at 83%, retailers at 2%, nonbank financiers at 5% and other credit providers at 10%. Unsecured loans grew in South Africa by more than 53% between 2010 and 2011 (National Credit Regulator, 2012). This has caused concern for policymakers as the unsecured loans continue to increase faster than disposable income per household (Mutero, 2014). South Africa's household sector's debt level reached 86.4% of personal disposable income in 2008 following the global financial crisis (Trading Economics, 2020). However, the ratio of household debt to disposable income

decreased slowly to 74.7% in the first quarter of 2012 (Meniago et al., 2013). It however fell to 79.8% in 2011 and to 78,5% in 2015 reaching 71.9 in 2018. In 2020 the ratio had increased to 77.1% and is now on an upward trajectory as shown on Figure 1.

Figure 1: South Africa Household Debt to Income Ratio



Data Source: Trading Economics (2020)

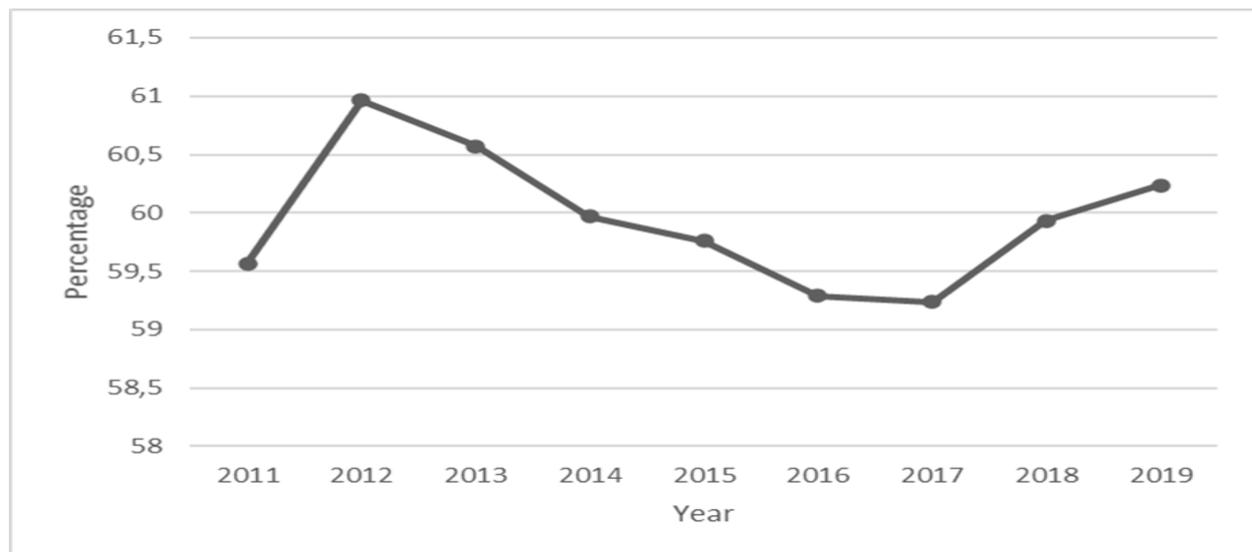
Both demand and supply side factors account for the high household debt in South Africa. These include overall decrease in interest rates, greater financial inclusion post-independence, lack of financial education and debt contracts that are vague and reckless lending by financial intermediaries (Hurwitz & Luiz, 2007; National Credit Regulator, 2012). The indebtedness of households in South Africa has been worsened by natural disasters such as drought and floods and pandemics such as the HIV - AIDS and recently the covid-19 pandemic. These have caused reduced capacity to repay loans as people's capacity to generate income has been drastically reduced. Further, South Africa is amongst the countries with the highest income inequalities in the world and income inequality exacerbates the household debt problem (Barba & Pivetti, 2009). There are macroeconomic variables such as consumption, housing prices, interest rates, inflation rates, economic growth, unemployment rates and money supply that determine the growth of household debt (Petersen, & Mongale, 2013). Managing household debt is necessary for poverty reduction and economic growth.

South Africa was found to have the lowest number of economically literate people, and second lowest number of financially literate people from a survey of 50 countries, highlighting a serious problem of lack of necessary skills and knowledge to manage finances (Jappelli, 2010). The National Credit Act No. 34 of 2005 was implemented in South Africa for the National Credit Regulator to provide consumers with the required skills and knowledge to understand the ever-changing financial market, protect already over-indebted households and prevent reckless credit granting. Several programmes and initiatives were implemented to educate citizens on making wise financial choices, to avoid being indebted and to seek assistance if already in debt (National Credit Regulator, 2012). Despite some criticism on National Credit Regulator's effectiveness in training, it may not be realistic for them to provide the necessary financial

training to all South Africans as all industry stakeholders need to assist and households need to take the responsibility (Seane, Mah and Saah 2016).

Extremely high household debt can have potential negative effects on the strength of households as they are left with less disposable income (Harari, 2018). The higher the proportion of disposable income individuals pay towards their debt, the less they would be able to save, leaving the households vulnerable and poorer. It also leaves less funds for investment in the economy thus reduces capital formation domestically. With reduced domestic investment comes a sluggish economic growth and increase in poverty and unemployment. South Africa's GDP growth has been falling in the recent past due to reduced domestic savings amongst other reasons. The severe consequences of indebtedness are that it can affect a person's physical or mental health by causing depression, stress, suicidal thoughts and feeling helplessness and shameful (Fatoki, 2015). It may also become difficult for a person who is failing to pay to obtain a home for rental, employment, new credit, subscription for telephone or internet, pension policies or life insurance (Cuesta & Budria, 2015). High indebtedness results in high interest rates on repayment and high principal repayments which may reduce ability of households to cover living expenses. This leads to a decrease in the standard of living and in the end reduces consumer spending, ultimately slowing down economic growth (Schmitt, 2000). This is more so given that over 60% of Gross Domestic Product (GDP) of South Africa comes from consumption expenditure as shown on Figure 2. The share of consumption on GDP is on the increase as shown on the figure.

Figure 2: Households' final consumption expenditure (% of GDP) in South Africa



Data Source: World Bank Development Indicators (2021)

Most of the studies on household debt are from other countries hence there is limited available empirical literature on the household debt in South Africa. This paper is of strategic importance as it provides an extensive overview of the nature and determinants of household debt in South Africa. The paper also presents a framework for managing the household debt in the country.

### Methodology

The objectives of the paper are achieved through systematic literature review, with consideration of both international and South African literature to ensure further understanding of the household debt

problem. The systematic literature review method is employed by identifying and synthesising existing literature on household debt in an unbiased way to provide evidence for policymaking. During the review, the researcher identifies the type of information that is searched, given critique or reported within a specific period of interest. The method provides a clear and comprehensive overview of available evidence and helps to identify research gaps and questions for which the available evidence provides clear answers (Poklepović Peričić & Tanveer, 2019). Systematic literature review can enhance and promote evidence-informed policymaking, and this is particularly in areas with a strong and well-developed evidence base (Mallett, Hagen-Zanker, Slater & Duvendack, 2012). The review identifies, selects and critically appraises research so that a clearly formulated question can be answered. It follows a clearly defined plan with clear stating of criteria beforehand.

The review is conducted using multiple databases and literature that can be replicated and reproduced by other researchers. In this paper, literature was searched for and gathered in a systematic way by using key search engines namely Google, Google Scholar, EBCOHOST, IDEAS/REPEC, Jstor, amongst others, making variations of key search words and phrases. The paper is based on the life-cycle hypothesis by Modigliani & Brumberg (1954) and Modigliani (1975), which suggests that households plan their consumption and savings behaviour over their life cycle, they opt for large amounts of debt to smoothen their consumption and to possess long-lasting commodities such as houses. The hypothesis also suggest that households have a negative saving rate during the early stage of their working life, but their savings increase while indebtedness decrease as they grow older.

### **Literature Review**

This section pertains a presentation of literature and concepts underlying the study. Household debt results when surplus cash balances that are deposited with financial intermediaries are mobilised and transformed into loanable funds for households. The funds get back into circulation as credit to the household sector (Dos Santos, 2009). Harari (2018) differentiates between two types of household debt, namely secured and unsecured debt. The difference between the two debts lies in the fact that the first uses an asset as security and the latter does not. An example of secured debt could be a mortgage loan, and on the other hand, a student loans is a perfect example of unsecured loan (Harari, 2018). Access to credit helps poor households to escape poverty as they can spend even without current income (Cecchetti, Mohanty, & Zampolli, 2011). When households borrow to finance a more desirable consumption pattern, it becomes as sensible to borrow as it is to save assuming that they have the capacity to service the debt (Bertola, Disney, & Grant, 2006). When debt is used prudently, it can be a determinant of economic growth. Households however become more vulnerable to economic shocks when they borrow beyond their capacity, and this can be worsened by factors such as poor risk management, ineffective legal and institutional infrastructure, and weak macroeconomic environment (IMF, 2006).

### ***Theoretical Literature Review***

Over the years, several principles or theories have been developed to explain household debt and these theories have established substantial economic foundations for future researchers. The theories help in understanding why and when households obtain debt. The permanent income hypothesis, which explains some features of consumption states that individuals divide their lifetime resources equally among each period of life (Friedman, 1957). The individual's consumption in each period is not determined by income that period but by income over his or her lifetime, called permanent income and the individuals smoothen consumption expenditure over their life-time income each period. Changes to current income have little effect on current consumption unless the individual believes that the changes have long-term consequences. Transitory income is difference between permanent income and current income and is roughly uncorrelated with permanent income. Individuals can borrow but any outstanding

debts are repaid at the end of life. However, time pattern of income is very important to savings and the savings are high when current income is high and negative when current income is less than permanent income. Thus, individuals use saving and borrowing to smoothen the consumption path.

The debt overhang theory by Sachs (1989) and Krugman (1988) explains that debt overhang is a situation in which either a business, a government, or a household has such high levels of existing debt that they cannot easily borrow more money, even in the case whereby the new borrowing would constitute a good investment that would more than pay for itself (Diamond & He, 2014). Debt maturity influences debt overhang through reducing incentive for highly levered borrowers to make real investments because some value accrues to debt (Diamond & He, 2014). Consumer debt delinquencies are a result of a genuine inability to pay as resources become constrained according to the 'cash flow' theory of defaults. The theory assumes that debtors will avoid arrears as long as their income flows are sufficient to cover their debt repayments without undue financial stress (Bhutta et al., 2010). Keynes (1936) developed the absolute income hypothesis where an economic agent will, by nature, consume more as income increases. The key assumption of this theory suggest that consumption is determined by the current levels of income. The marginal propensity to consume (MPC) plays an essential role in Keynesian economics as it measures the consumption-income relation.

The life-cycle hypothesis suggests that individuals plan their consumption and savings behaviour over their life cycle (Modigliani & Brumberg, 1954; Modigliani, 1975). Households mainly opt for large amounts of debt to smoothen their consumption and for the possession of long-lasting commodities such as houses. A household can maximize utility over its life-time subject to an intertemporal budget constraint. Households intend to smooth out their consumption as efficiently as possible over their entire lifetimes by hoarding when they earn and dissaving when they are retired (Modigliani & Brumberg, 1954). During the early stage of their working life, households have a negative saving rate, but their savings increase while indebtedness decrease as they grow older (Meniago et al., 2013). Households may then enter into debt in periods where their income is extremely low, to finance their consumption but they repay these loans in period when their income are relatively high (Meniago et al., 2013). When they retire, households again dissave and their consumption is principally financed by the income they earned during their working age. The key assumption of the life cycle hypothesis is that all households choose to maintain stable standard of living. This suggests that they would usually not accumulate a lot in one period to actively spend in the next period. The next section is an analysis of relevant empirical literature.

### *Empirical Literature Review*

This section pertains a discussion of previous studies that have been undertaken on determinants of household debt to fulfil paper objectives. An analysis of determinants of household debt is carried out both internationally and in South Africa to enable further understanding of issues under study. The financial crisis triggered by the collapse of the United States of America (USA) mortgage market motivated increased empirical studies on household indebtedness (Klein, 2015). From international literature there are conflicting findings on the impact of interest rates. Taylor (2009) concluded that the failure of the USA central bank to increase interest rates in the early 2000s was the main cause of the financial crisis and an over indebted household sector. On the contrary, Sinn & Valentinyi (2013) found out that the European monetary unification led to low interest rates in Southern Europe, which resulted in a debt boom. Meng, Hoang & Siriwardana (2013) studied the determining factors of household debt in Australia using the Cointegrated Vector Autoregression (CVAR) model and found interest rates were to be the most significant. They also concluded that housing prices, GDP and the population in the economy have a positive effect on household debt. On the other hand, unemployment rate, inflation, number of new dwellings and inflation were found to have a negative impact on household debt.

Other findings were presented by Turinetti & Zhuang (2011) who used a linear regression model to investigate the determinants of USA household borrowing. They concluded that unemployment rate, interest rates, disposable personal income per capita, share of retiring population, and educational attainment were negatively related to the household indebtedness in the USA, while housing prices, consumer confidence, and the share of working-age population are positively associated with the household debt. Barba & Pivetti (2009) analysed the causes and the long-run macroeconomic effects of the increase in household debt in the USA. The rising household debt was presented to be the outcome of growing income inequalities and fluctuations in income distribution in USA. Furthermore, low wages were related to high levels of aggregate demand through household debt. House prices were found to have a positive effect on household debt. Stockhammer & Wildauer (2018) estimated the determinants of household borrowing using a panel of 13 OECD countries from 1980 to 2011 and concluded that that real estate prices were the most important drivers of household debt.

Rising real estate prices play a major role in household debt accumulation as concluded by Égert, Backé and Zumer (2006) who estimated the determinants of credit to the private sector using simple fixed effects models as well as the mean group estimator. They found a significant and positive effect of house prices on private credit. Similarly, Goodhart & Hofmann (2008) estimated a panel VAR based on a sample of quarterly data from 1970- 2006 of 17 OECD countries and found out that house prices positively influence private credit and money. Ryoo (2016) used the Minsky model to conclude that household debt is driven by property prices. Another determinant of debt is income level as concluded by Radipotsane (2007) who studied the determinants of household saving and borrowing in Botswana. Their findings revealed a negative short-run relationship between income and savings as households expect income adjustment to be permanent. The study revealed that households increase consumption more than the increase in their real income implying an increase in household debt and a decline in savings. Kumhof et al., (2012) used a two-class DSGE model to find out the determinants of debt and concluded that poor households are pushed into debt as they try to maintain their consumption levels. However, on the contrary, rapidly growing incomes lead to rising household debt as consumers imitate the lifestyle and expenses of richer peers (Kapeller & Schütz, 2014).

Seane et al., (2016) concluded that lack of financial literacy contributes to risk of being indebted and that there is a positive correlation between financial literacy and savings. They recommended that households need to have the necessary financial skills to avoid misusing credit. Training on financial literacy can take place in schools to stress the importance of good financial management at an early age before debt happens (Seane et al., 2016). Nomatye & Phiri (2018) aimed at understanding the relationship between household debt and other macroeconomic variables for the South African economy. Using the quantile regression methodology, an insignificant relationship between household debt and both consumption and inflation was found. It was also established that GDP growth and house prices were only related at moderate level with household debt while interest rates and investment were found to be related to household borrowing across all quantile distributions. Expansion of the banking sector and diversification of its products were also found to contribute to the growth of household debt. In South Africa, Van Der Walt & Prinsloo (1995) found a positive relationship between household debt and real assets (especially housing), spending on durable goods and consumer prices.

Generally, South Africans have experienced a rising cost of living in the recent past resulting in disproportionately large amounts household incomes being commitment to consumption expenditure rather than saving. With increased access to credit, families easily supplement consumption expenditure, increasing debt burden and probability of failure to repay debt (Centre for Social Science Research, 2016). For South Africans, the probability of over-indebtedness increases significantly with living in an urban area (Nyaruwata, 2009). This is supported Collins (2008) who reports that high indebtedness is found

among the high-income groups in urban areas as they have access to financial services. However, to the contrary, Kempson et al., (2004), assert that over-indebtedness was much more likely in the poorest areas. Further, the Department for Business Enterprise and Regulatory Reform (2007) observed a persistent reduction in the prevalence of over-indebtedness as income rose. Household disposable income, debt service ratio, household savings, interest rate, consumer price index jointly do Granger cause household debt in South Africa (Seane et al., 2016). Social grants in South Africa were found to reduce the probability of being over indebted Nyaruwata (2009). However, to the contrary, households relying on social grants for more than 25% of their income had a high chance of being over-indebted (Russell et al., 2011). Thus, there is conflicting evidence on the relationship between debt and income level in South Africa.

Over-indebtedness can be triggered by some misfortunes or adverse trigger events often unanticipated such as medical emergencies, or sudden unemployment (Avery, Calem & Canner, 2004) According to Hurwitz & Luiz (2007), in such cases South African households are forced to abandon their financial obligations due to emergencies straining their cash flows while on the other side some have a reckless culture of non-payment due to financial illiteracy and lack of education financial literacy. However, Disney et al., (2008), contends that it is not the changes in the debtors' circumstances and massive shifts in earnings that cause delinquencies to occur but the surprise factor and the attempts to survive the immediate consequences. Consumers may be forced to suspending manageable obligations if they realise that continuing to honour them might lead to further deteriorations in their wellbeing (Centre for Social Science Research, 2016).

Households can overestimate the immediate benefits of credit, undervaluing the cost of the debt repayment or inflate expectations of future earnings resulting in them being over- indebted (Heidhues & Kőszegi, 2010; Hoffmann et al., 2012; Bachmann et al., 2015). If families feel that their financial situation is poorer than it should be, they are likely to exercise greater caution when choosing how to spend their money (Centre for Social Science Research, 2016). Lenders fail to disclose vital information pertaining credit which affects decision to borrow by consumers. The predatory practices by lenders are the cause of indebtedness amongst the low-income groups, not financial illiteracy (Guerin, 2012). Due to growing competition in the financial sector, households in South Africa are able to borrow large amounts while meeting less stringent credit application requirements. However, lenders have no control over the risks incurred by borrowers with unsecured loans, thereby increasing the likelihood that borrowers will default (Zimunya & Raboloko, 2015). There is need for legal mechanisms to help debtors if they find themselves under over indebted situations, in the form of consumption insurance and protection them from creditor actions such as, repossessions, or wage garnishments (Van Apeldoorn, 2008). What is necessary also are sanctions for predatory lending to reduce the propensity for bad loan origination (Goodman & Smith, 2010; Ho & Pennington-Cross 2006).

Other studies suggest that over-indebtedness is unavoidable. There is no compelling evidence to suggest that excessive spending is related to consumer debt delinquency, and it is unlikely that there will be enough information to warn lenders of the possibility that debtors will experience economic shock post-consumption. Therefore, it makes sense to accept consumer over-indebtedness as an inevitable feature of the credit system (Centre for Social Science Research, 2016). The occurrence of high household debt can be a cause or a result of poverty (Dubois & Anderson, 2010). With high servicing costs towards debt a household's disposable income is reduced significantly leading to deprivation materially while on the contrary with poverty households have insufficient income and they become over indebted ending up below the poverty line with continued rising debt. Households that are over-indebted are likely to have a higher rate of basic deprivation (Russell et al., 2011). Debt problems negatively affect the well-being of people and well-being is affected more by debt than low income (Howell & Howell, 2008). Studies on the

debt-poverty nexus found a link between low income and over indebtedness (Kempson, 2002; Bryan et al., 2010)

There are studies carried out to find out the relationship between the demographic aspects of household head and debt. On the impact of educational level of the household head on over-indebtedness, there are contrasting views. Some evidence suggest that education reduces the probability of over-indebtedness (Bryan et al., 2010). According to Russell et al., (2011) where the head of the household has no educational qualifications, the household is likely to be over indebted. However other literature suggests that having tertiary education increases the probability of over indebtedness (Nyaruwata, 2009). Studies show that the problems of debt decline with age and the 25–35-year age group experiencing the most financial difficulties (Kempson, 2002; Kempson et al., 2004). On the contrary, Nyaruwata (2009) argued that although statistically insignificant, the probability of over-indebtedness increased with age, given that older household heads had more dependents to look after. Bryan et al., (2010) gives an alternative view that age has little impact on the probability of being over-indebted. Biyase & Fischer (2017) investigated the determinants formal credit in South Africa by low-income households using the Heckman selection model. Their findings revealed that variables such as age of the household head, gender, educational level, employment, race and geographic location of households in South Africa have an impact poor households' propensity to borrow.

There is also a relationship between household characteristics and indebtedness, as there is a lower risk of over-indebtedness when the household owns the house they live in as compared to renting (Kempson et al., 2004). Further, households with mortgage have a higher risk of being overindebted than households who buy outright (Department for Business Enterprise & Regulatory Reform, 2007; Bryan et al., 2010). Studies also found that tenants are more likely to be overindebted than mortgage holders (Kempson, 2002; Kempson et al., 2004; Department of Trade and Industry, 2005; Russell et al., 2011). A household that is larger in size has a higher probability of being over-indebted (Nyaruwata, 2009; Bryan et al., 2010). Studies on the relationship between family circumstances and over indebtedness concluded that family events such as having a baby or a breakdown in relationship increase the likelihood of over-indebtedness (Department of Trade and Industry, 2005). This can be attributed to increased costs or reduced income that comes as a result.

Other studies suggest that divorce or separation or being a lone parent increase probability of over indebtedness (Russell et al., 2011; Bryan et al., 2010). On the contrary, Kempson et al., (2004) found no significant association between over-indebtedness and separation or having a new baby. Literature also suggest that female-headed households are more likely to be over-indebted than male-headed households possibly because women work fewer hours and get less incomes ultimately as they have maternal responsibilities (Russell et al., 2011; Department of Trade and Industry, 2005). Where the household head is not working, is sick or disabled, over indebtedness is likely to be experienced (Russell et al., 2011). The next section gives the results of the study.

## Results and Discussion

The problem of household over-indebtedness in South Africa negatively affects the well-being of households as well as economic performance of the country. The proportion of household debt to disposable income has been on an upward trajectory since 2018, with unsecured debt increasing faster than household disposable income. Several findings are presented in this paper pertaining determinants of household debt in South Africa. There are both demand and supply-side factors that account for the high household debt. Mortgages constitute most of the debt held, followed by secured credit agreements. The least held debt is short-term credit. Thus, policies to address growth of debt should target mostly mortgages and secured credit agreements. Results suggest that households with a mortgage have a higher

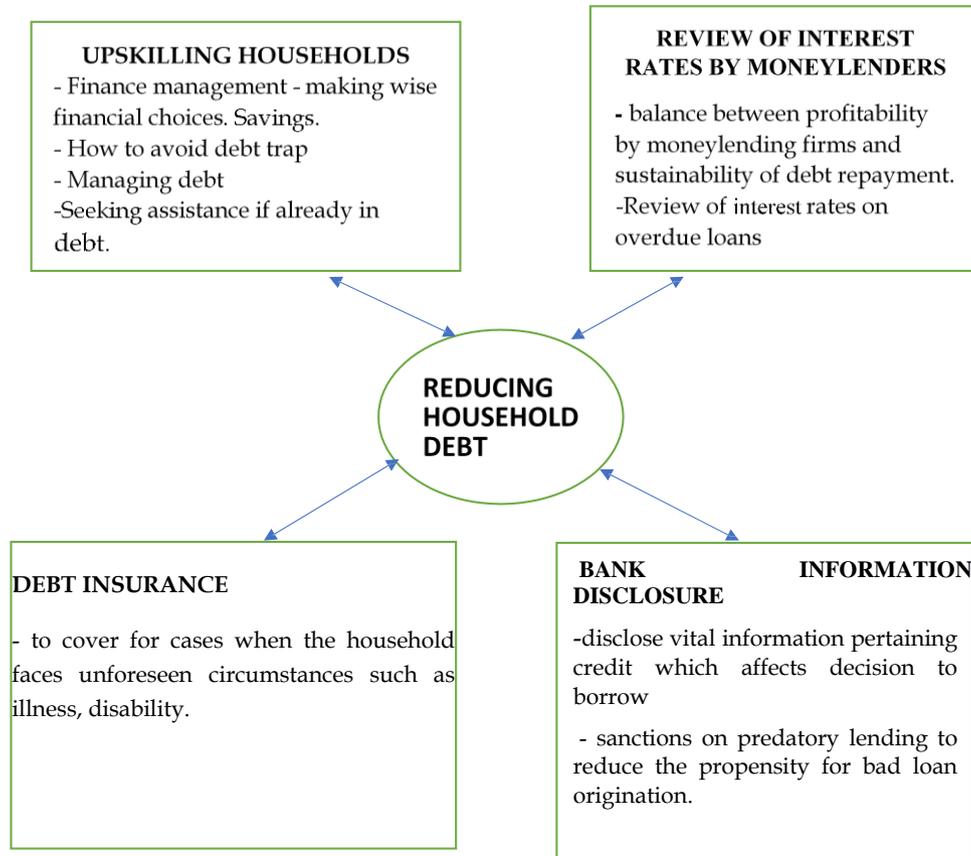
risk of being overindebted than households who buy outright. Further, households in South Africa are highly indebted because they lack the necessary financial skills and need upskilling to avoid overborrowing or misusing credit. This resonates with findings by Seane et al., (2016). Debtors lack proper protection from the predatory lending practices by lenders which cause over indebtedness. Thus, sanctions are needed for predatory lending to reduce the propensity for bad loan origination. Lenders should disclose vital information pertaining credit which affects decision to borrow by consumers. Further, expansion of the banking sector and diversification of its products are found to contribute to the growth of household debt.

Other factors related positively to indebtedness are rising cost of living which leads to low household disposable income and savings, income inequalities and high interest rate on borrowing. Findings by Meng, Hoang & Siriwardana (2013) also suggest high interest rate as the main cause of household debt. Some misfortunes or adverse trigger events have also been found to trigger over indebtedness while some shifts in earnings can cause delinquencies to occur. The paper findings also suggest that households overestimate the immediate benefits of credit, undervalue the cost of the debt repayment or inflate expectations of future earnings resulting in them being over- indebted. Findings also suggest that female-headed households and households where the head is not working, is sick or disabled are more likely to be over-indebted. These findings were noted by Russell et al., (2011) and Department of Trade and Industry (2005). The risk of over-indebtedness is lower for households that own the house as compared to renting. This finding is similar to the conclusion by Kempson et al. (2004). Life events such as having a baby or a breakdown in relationship increase the debt likelihood. Large households have a higher probability of being over-indebted and tenants are more likely to be over-indebted than mortgage holders.

There are also conflicting results from literature pertaining causes of household over-indebtedness. Results suggests that indebtedness increases significantly with living in an urban high-income area, as there is access to financial services. This finding however is refuted by Kempson et al., (2004). There is also conflicting evidence on relationship between education and age with respect to debt. Results from some literature suggest that being educated or being older in age reduces the probability of over-indebtedness while other literature suggest that having tertiary education or being older in age increases the probability of over-indebtedness. Other findings are that age has little impact on indebtedness. There are also conflicting results on social security grants as some literature concludes that the grants reduce the probability of being over indebted while other literature suggests that households relying on social grants for more than 25% of their income have a high chance of being over-indebted.

### **Recommendations on managing household debt**

From the review of literature, a framework for managing household debt in South Africa is developed. The framework has 4 components as shown in Figure 3 namely upskilling households, review of interest rates, information disclosure by moneylenders and availability of insurance. These components are a summary of measures that can be implemented to reduce household over indebtedness. South Africa was found to have the lowest number of economically literate people, and second lowest number of financially literate people from a survey, meaning that there is need to upskill households to ensure they have necessary skills and knowledge to manage finance.

**Figure 3: A framework for managing household debt in South Africa**

**Source: Author's compilation using results**

Although several programmes and initiatives were implemented to educate people on debt, the initiatives have not been very effective judging by high debt-to-income ratio. This calls for participation by different stakeholders such as learning institutions, to support the National Credit Regulator in upskilling households so that they learn how to effectively manage their finances and debt. Findings suggest that there are both demand and supply-side factors that account for the high household debt in South Africa. As money lending institutions expand and diversify their products, they need to be wary of the impact on growth of household debt. It is important for them to disclose vital information pertaining credit which affects decision to borrow by consumers. Thus, predatory lending should be discouraged, and debt contracts should not be vague.

Another issue to be considered is that of interest rates on debt repayment and on overdue repayments. Moneylending firms need to consider a downward review of interest rates and make a balance between their profitability and sustainability of debt repayment by households. Debt or consumption insurance on all loans to cover for cases when the household faces unforeseen circumstances such as illness, disability may also help relieve households from the debt burden. Thus, moneylenders need to work with insurance companies to enable debt insurance to protect households. There is need for legal mechanisms by the Government of South Africa to protect and help debtors if they find themselves

over indebted and distressed. Above all, households need to practice responsibility by gathering vital information and considering their ability to repay before borrowing.

### Conclusion

There are several determinants of household over indebtedness in South Africa. These include lack of financial literacy and lack proper protection from the predatory practices of lenders which cause households to enter into debt without considering the impact and affordability. The increasing cost of living coupled with low household disposable income leads to low or no savings leading to household increased debt. Other causes are high interest rates and misfortunes or adverse trigger events. Household debt is also affected positively or negatively by educational level, gender, age, health and employment status of the household head, whether the household is renting, has a mortgage or whether it receives a social security grant and household size. The measures to reduce household over indebtedness in South Africa are upskilling households on financial literacy, downward review of interest rates on debt, information disclosure by moneylenders and availability of insurance for debtors. Mortgages constitute most of the household debt in South Africa.

### Contribution to knowledge and implications for different stakeholders

This paper contributes to new knowledge as it explains the nature of household debt and comes up with a new framework on how best to manage household over indebtedness, using the case of South Africa. This framework can be adopted by the stakeholders concerned. These include learning institutions and their role in upskilling financial literacy and debt management skills as well as banks and moneylenders whose role is information disclosure and downward review of interest rates. Insurance companies have a role in providing debt or consumption insurance while the government's role is ensuring legal mechanisms to help and protect over indebted households. The households need to act more responsibly and seek more information to avoid falling into the debt trap.

### Limitations and direction for future research

The limitation faced is that literature on household debt specifically on South Africa is limited. For future research, it is suggested that focus be econometrically determining the variables that determine household debt.

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