

Household Debt Rate Management in a Credit Economy: An Empirical Review of South African Context

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ABSTRACT

Purpose: The purpose of this paper was to ensure that household debt burden is minimised, and savings provision is made to smoothen future household expenses, practical household management knowledge needs to be acquired to manage these challenges most especially in a country that practices credit economy like South Africa. **Methodology:** This study was conducted on this context to ascertain a practical knowledge model for household debt management in a credit economy with a major focus on the South African context. To achieve this objective, an empirical review of previous works of literature on household financial management and debt management was conducted to build a practical knowledge model for household debt management that applies to the South African context. Although, the empirical review shows that limited logical theories and models exist within this area of study, as such concept and constructs that apply to household debt management was exploited from previous scholarly contributions in this area of study. **Findings** revealed that South African household with financial knowledge has more potential to manage and control their level of indebtedness. Secondly, it was also revealed that there is a continuous increase in household debt in South Africa as the credit economy has created room for continuous usage of credit facilities. **Implications,** a practical knowledge Model such as financial planning model, financial discipline model and knowledge of financial environment model was recommended to assist both households and policymakers. **Originality** this paper strategically manages the increase of household debt growth amidst the credit economic system that is practiced in South Africa.

Keywords: *Household Debt; Debt Management; Practical Knowledge Model; Credit Economy.*

INTRODUCTION:

Household includes every individual that cohabit in a home. Household debt, however, includes the combination of all debts (consumer debts and mortgage loans) owned by entire member of the household. A substantial increase in the amount of this class of debt relates generally with several significant economic crises and was a source of the U.S. subprime and associated European economic crises of 2007–2012 (Mian & Sufi, 2014). The US subprime crisis subsequently developed into a financial collapse that has profoundly influenced much of the world's economies and has since been commonly referred to as the global financial crisis. Similarly, at the onset of the 2008–2009 financial crisis, South Africa has seen a substantial rise in its household debt to income ratio. According to Meniago, Mukuddem-Petersen, Petersen and Mongale (2013), continuous household debt was identified to be significantly influenced by changes in consumer price index, gross domestic product and household consumption in South Africa. Besides, household borrowing was also identified to have significant influence by negative variation in household income and prime rate. On the contrary, an economy with low level of household debt is associated with healthy

financial situation. Thus, several economists have concluded that reducing household debt is key to economic growth both local and international.

Individual households, however, are not left out in this situation as it was ascertained that households with low level of indebtedness have better future financial well-being (Mbukanma, Rena & Musvoto, 2020; Lusardi & Mitchell, 2014). Perhaps, South Africa practices credit economy and as such, credit facilities are the order and structure that most South African household employ to meet their immediate household needs. In lieu of this, it become unfortunate as household debts are continually created as individuals utilizes numerous credit options that are presented to them by credit providers and financial institutions. Rena (2006); Ahmad and Khattak (2020) and Meniago *et al.* (2013) suggested that in order to manage low levels of household debt, financial institutions acting as the principal source of credit in several countries, and especially in South Africa, must be very prescriptive and discerning when it comes to providing loans to consumers. To this end, it becomes important to evaluate household debt situation in South Africa to assist stakeholders in policymaking concerning improving household debt to income in South Africa. Thus, this study was carried out on this context to provide a model for household debt management in South Africa, as current statistics on South African household consumption expenditure occupies over 60 percent of South African GDP.

Problem Statement and Objective of the Study:

The continuous household debt to income that results from household exposure to varieties of financial credit products and services has drawn the attention from both affected households, academicians and stakeholders within the ambit of household financial management. Previous studies such as Cole, Iverson and Tufano, (2017); Precious and Asrat (2014) and Mahlo, 2011 highlighted the negative effect of the continuous debt rate on individual savings rates within South African households, which thereby creates potential imbalances in household future financial well-being. Perhaps, when household expense exceeds their disposable income, their upkeep becomes their financial downfall. Financial success begins with sound financial management, goal setting and planning of income and expenditures (Nguyen, Rózsa, Belás & Belásová, 2017 & Lusardi & Mitchell, 2014). Thus, household debts are created in the absence of proper management of household income flow. Accordingly, in the absence of sound debt management strategy, individuals are found wanted on misappropriation of financial resources, thereby creating financial imbalance and continuous debt for their households (Nguyen *et al.*, 2017; Lusardi & Mitchell, 2014). On the other hands, every household is affected by the economy regardless of where they live. The economy in this context refers to all activities related to distribution of goods and services in a given geographical area. Perhaps, the study of economics focuses on the management of scarce resources, which occurs because people need and wants are unlimited whereas resources are limited.

Nevertheless, South Africa practices a credit economy, which operates based on the laws of creditor and debtor. Thus, South African households are exposed to several credit options as a medium to meet their immediate household needs. Consequently, debts are incurred over a continuous period of time, giving room for little or no savings and unhealthy financial situation for both the households and the national economy. The report of South African Reserve Bank (2019) shows that household's debt in South Africa remained unchanged at 71.90 percent of gross income in 2018 from 71.90 percent in 2017. Households Debt to Income in South Africa averaged 57.86 percent from 1969 until 2018, reaching an all-time high of 86.40 percent in 2008 and a record low of 40.30 percent in 1980, a record that is alarming when compared to other emerging economics and to the global average. Indeed, the interpretation entails that a growing percentage of household income has been consumed by accumulated household debts. The implication goes beyond the deficit burden on household financial future but also implies a decrease rate of household savings, which affects the South African GDP negatively.

Furthermore, the rate of household debt in South Africa has becomes more worrisome despite different policies by the government and private sectors to encourage savings and reduce household debt, because household savings contribute significantly to economic growth while household debt contributes otherwise. Perhaps, it becomes inevitable to ascertain solution to the problem on how South African households can control the predominate level of household debt to improve their future financial wellbeing and raise the national GDP growth by saving. Consequently, household debt management becomes inevitable, as debt are continually serviced and most times severe consequences befall credit defaulting, causing more financial discomfort to the household and derailed economic growth. It is on this context that this study was engineered to identify a practical green process (model) for household debt management in a credit economy with major focus on the South African context.

RESEARCH METHOD:

A qualitative research method was employed in this study. The choice of research method was informed by the nature of this study, as major focus was on the review of previous literature to identify logical model of household debt management in South Africa. As qualitative research, a descriptive analysis of literature was used for the benefit of this study. Thus, the descriptive analysis of literature mostly summarizes and synthesizes accessible studies on a specific subject field. However, due to the limited number of logical theories and models in this field of study, a detailed descriptive analysis of previous literatures was conducted, which aids in revealing variables that would enhance the management of household debt. Thus, one primary and three secondary models of household debt management (Financial Planning Model, Financial Discipline Model and Knowledge of Financial Environment Model) was extracted from the theoretical contributions of precious scholars. It was however believed that the choice of research method for this study assisted in achieving and providing solutions to the study’s objective and problem statement.

South African Household Debt to Income:

Household debt consists of all household liabilities (both secured and unsecured) that require payment or payment of interest or principal by the debtor (household) to the creditor at a future date. Hiilamo and Grundy (2020) and Mian, Sufi and Verner (2017) sees household debt as a combined debt of every member of the household ranging from consumer debts to mortgage loans. Household debt to income is however, that portion of household income that is used to services (monthly, quarterly or annually) household debts. Perhaps, a high debt to income ratio signifies too much debt on the income earned by the household (Cloyne & Surico, 2017; Formicola, 2017). All debt instruments are therefore liabilities, but some liabilities like equity and investment fund shares and financial derivatives are not considered household debt in this study. However, common household debt types include home mortgages, home equity loans, auto loans, personal loans, student loans, and credit cards to mention but few. As in many other credit economies like South Africa, most households acquire debt in their daily lives. Many buy non-durable items on their credit cards, and most often take out a loan from the bank to buy durable goods such as houses and cars. Nevertheless, most families find it very difficult to repay such debts, raising the repayment period and the sum to be repaid.

As in many other countries financial institutions in South Africa are regarded as the primary source of credit to households, and that is why it is maintained that the bulk of their debt comes from bank borrowing (Krige, 2019). Easier access to the fund promotes consumption for households. The simplicity of credit exposure allows consumers to buy immediately rather than in the future. This easy access to credit which informs household debts has caused increase rate of household debt in South Africa over a continuous period of time (see Figure 1).

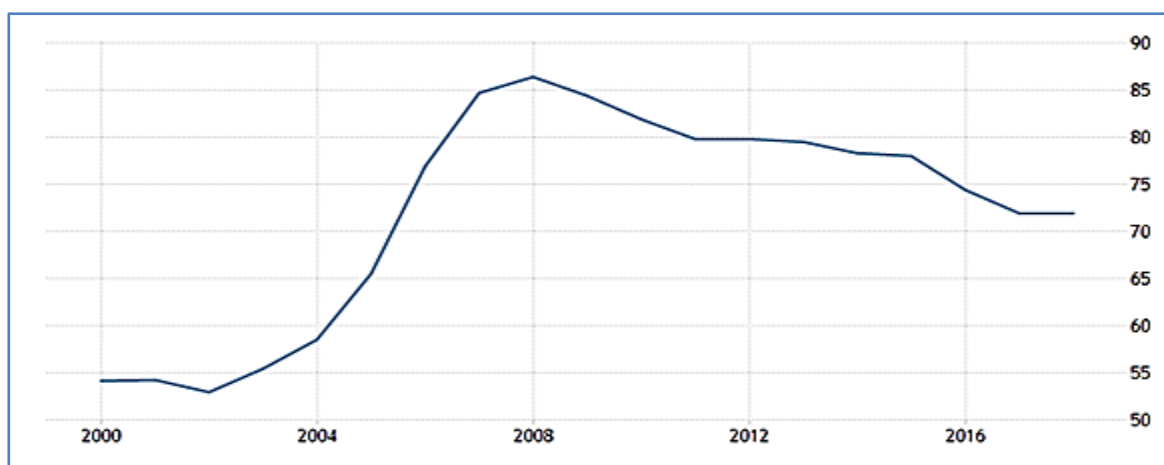


Figure 1: Household Debt in South Africa a % of Gross Income (STATSA, 2019).

The illustration in Figure 1 shows a devastated rate of household debt in South Africa, as the growth remained unchanged at 71.90 percent of gross income in 2018 from 71.90 percent in 2017. The implications of this debt rate indicates that less than 29 percent of household gross income will be left to cover household immediate household needs after debts has been serviced. It therefore become inevitable for most South African household to survive without acquiring an additional debt. Thus, there are several kinds of

consumer credits that inform this debt; some are relatively inexpensive and easy to manage, others are restrictive, expensive and can result in financial disaster such as high interest rate and penalties are often imposed on those who are rated as poor credit risk (Krige, 2019; Abid, Zaghdene, Masmoudi & Ghorbel, 2017). Hence, household debts in South Africa comprise of several components as detailed by Swart (2016:67-83) namely, mortgage, auto loans, personal loans, student loans, credit cards, lease transactions, overdraft, lay-by to mention but few. For the benefit of this study as informed by the methodology of this study, below are the details of some common household debts in South Africa.

Mortgage:

A mortgage is a loan in which land or immovable properties are often used as security. The debtor enters a deal with the creditor (usually a bank), whereby the creditor finances the purchase of asset for the debtor and in return the debtor makes instalments over a specified period of time until the loan is paid back in full (Ozel, Nathanael, Raberto, Teglio & Cincotti, 2019; Stanton, Walden, & Wallace, 2018). In this study however, mortgage forms part of household debt as majority of South African households use this medium to acquire real estate properties. Accordingly, debt is created in the process, which demands that the debtor can only become the owner of the property when the loan is fully paid (Ozel *et al.*, 2019; Adelino, Schoar, & Severino, 2016). On economic terms, mortgages are seen as an investment in real estate for capital growth. However, in the event of default in instalment payments, financial penalties are enforced, which also create additional debt to the principal mortgage.

Auto Loans:

Auto loans are structured as close-end instalment loans as a medium of breaking down the purchase price into easily met monthly payment. Unlike mortgage (house loan) which has increase in value over the instalment period, cars only decrease in value (Jiang, 2019; Guo, Zhang, & Zhao, 2018). Fewer individuals in South Africa opt to pay cash when buying car; majority of car buyers finance their cars by getting a loan from a financial institution or credit union. A car loan, however, is set up as an instalment loan, which demands the customer (debtor) to make regular instalment payment for a set period of time (in most cases 5 to 6 years). Although, the instalment period and the amount of monthly payment is usually based on loan amount and the interest charged. In some cases, the customer is made to make down cash deposit towards the purchase price that is paid up front (Chakrabarti & Pattison, 2019).

Based on data issued by the South African Reserve Bank (SARB), which monitors the average interest rate paid on instalment purchase deals (basically lending arrangements for buying vehicles, appliances, etc.), contracts signed by South Africans with credit suppliers had an average interest rate of 11.17% in September 2018, 11.37% in December 2018 and now hit 11.38% in March 2019. Nevertheless, the customer's monthly income and other living expenses determines how much they can afford to pay each month for the car payment. Hence, most auto loans in South Africa are structured within a specific number of months to fit what the customer is qualified. Thus, the longer the instalment period, the lesser the amount of monthly payment *visa vice*.

Credit Card:

Credit card is a plastic card linked to a credit account for the purpose to make purchases. Financial institutions through the assistance of service provider such as Visa, MasterCard or Discover issue credit cards. Credit cards are kinds of financing offered by financial institutions to their clients. This kind of finance allows clients to purchase goods and services within the threshold of the amount credited to the credit card account (Slemrod, Collins, Hoopes, J.L., Reck, D. & Sebastiani, 2017; Abulafia & Cohen, 2016). The most credit cards used in South Africa are MasterCard and Visa card; financial institutions are the authorised institutions to issue these cards. However, most departmental stores like Woolworth, Clicks, Edger's to mention but few, also issue credit store-cards that can only be used in their individual retail franchises. According to Van der Watt (1991:57), there are two kinds of accounts that may be used for credit card purchase namely:

- a. A straight account which requires payment within the first three weeks of the following month of the purchase; thereafter interest is payable on the outstanding balance and
- b. A budget account, which is mostly use for bigger purchase and require payment over a several months with interest charged, regardless of when the payment occurred.

Thus, the process of financing these credit cards creates debt for the holder, which consume a percentage of the holder's disposable income. Consequently, a default of the monthly-agreed instalment attracts a

defaulting fee, which creates an additional debt burden on the holder (Slemrod *et al.*, 2017; Abulafia & Cohen, 2016).

Personal Loans:

This form of loan is among the unsecured loans. Unsecured loans are loans that are extended directly to consumers mostly on the grounds of their financial standing such as credit history, credit worthiness and general reputation. Personal loan is mostly given to customers that has an account with a particular bank (Kreiner, Leth-Petersen, & Willerslev-Olsen, 2020; Dou, Masulis, & Zein, 2019). Nevertheless, personal loans may also be granted to individuals who do not have an account at the lending institution. With the characteristic of being an unsecure loan, the lender of such institutions might entail a co-signer or guarantor. However, the interest rate for this loan tends to be very high, creating an additional debt burden on the holder plus the principal amount borrowed.

Impact of Household Debt on South African Economy:

Household debt is one of the main components of the economic growth of a nation. Researchers in developed and developing countries have extensively studied the relationship between macroeconomic factors and household debt efficiency. Similarly, GDP growth represent the progress (positive or negative) in the gross domestic product of a nation. The rate of the growth is mostly measured on quarterly or annually bases in most countries. However, the GDP is made up of four major components namely, personal consumption, investment, government expenditure and net exports (Drobyshevsky, Idrisov, Kaukin, Pavlov & Sinelnikov-Murylev, 2018). In addition, the GDP is the monetary value of all finished goods and services created in a nation during a given period of time. It thus provides a country's economic overview, used to measure the size of the economy and the growth rate (Yang, Wang, Xia, & Zhang, 2019). Thus, South African economy obtained an annualized 0.6 percent on quarter in the three months to September of 2019, following an upwardly revised 3.2 percent growth in the previous period and much worse than market expectations of a 0.1 percent expansion. However, some significant sectors such as mining, manufacturing and transport, storage and communication industries contributed to the growth of GDP (see Figure 2).



Figure 2: South Africa GDP Growth Rate (SARB, 2019).

Figure 2 shows that GDP growth rate in South Africa averaged 2.68 percent from 1993 until 2019, reaching an all-time high of 7.60 percent in the fourth quarter of 1994 and a record low of -6.10 percent in the first quarter of 2009. The trend of the GDP shows a downwards slope movement, which indicates a reduction of economic growth caused by a responding reduction in the domestic output of South Africa. However, at the macroeconomic level though, increased household debt can have tremendous macroeconomic consequences in the economy, since households are vulnerable to several economic shocks (Buchan, Drometer, Oesing mann & Wollmershäuser, 2016; Kim, 2016). These shocks involve mainly caused by changes in asset prices, shocks caused by changes in interest rates and shocks at wages. It is noted that high

debt levels, like the one experienced in the financial crisis of 2007/2008, would cause economic recession. It was maintained that the 2007/2008 financial crisis was caused largely by the US housing bubble. Ironically, housing is the mortgage balance sheet's most important asset, and is also one of the most important reasons that families are moving into debt. However, the consequence of continuous household indebtedness of different form becomes a threat to not only future household financial wellbeing but also a backdrop in economic growth.

The Impact of Credit Economy on Household Debt Rate:

The economic system in every country as earlier mention informs the purchasing characteristics of individuals that lives in that country. South Africa among other economy practice credit economy, which allows purchase of goods and services, and other finance of household needs without immediate payment. A great percentage of South African households, however, make use of credit facilities to meet their immediate household needs. Lombardi, Mohanty and Shim (2017) and Nomatye and Phiri (2017) emphasized that debts are created in such purchasing process, which results to a burden of future payment upon the debtor (household). In recent time, many South African households desire far more than their basic household needs and for this, they acquire more credit than they can handle, which often result to huge financial challenges with far reaching financial consequences (Nomatye & Phiri, 2017). Nevertheless, the consequences of utilising credit are profound, and every individual should be fully aware of how credit affects household financial wellbeing. However, credit economy has been supported by some school of thoughts as one significant variable that boost the engine of domestic purchasing power (Bethune, Hu & Rocheteau, 2018; Stiglitz, 2016). This informs the reason why most countries like South Africa adopted the system. Nevertheless, the prevailing effects on household financial wellbeing has become worrisome. On the other hands, it is unhealthy for economic growth as household debt to income (which were informed by credit transactions) has been on the increase trend, thereby creating room for negative rate of household savings, which supposed to boost economic growth.

Household Debt Management Model:

Over the past three decades, household debt in many countries has risen drastically, both in absolute terms and relative to household income, exceeding record levels. This sharp rise has gained a great deal of attention due to its significant macroeconomic and financial consequences. Although, intellectuals have treated debt as a way of fulfilling regular household needs since 3200 BC. Household needs such as, mortgage loans, home repairs, daily needs, investments on old age, valuables, cars, schooling, fitness, marriage, credit cards, household equipment, social events, leisure, social gathering, leisure, and enjoyment were met through the use of debt (Herispon, 2019). Problems occur when, within few days of payday, monthly income runs out, causing households to struggle to survive the remainder of the month. In the other hand, the modern appetite for consumerism cannot be resisted by households, urging households to spend more than they earn. And this debt attitude is cut across middle-income, lower-income and high-income families. It is on this context that this study was developed, to identify a practical knowledge model that when put into consideration could assist households in managing and controlling their debt attitudes. Nevertheless, the concept of building practical knowledge model has assumed relevance in the behavioural science in alliance with refinement of research method and increase rigor and precision in the statement of theoretical dynamics. As such, practical knowledge model is a tool used to promote theory constructions. The theoretical construction, however, is burn out from a desire to give better understanding to a behavioural irregularity, which is informed by a theoretical problem (da Veiga, Güths, & da Silva, 2020). In essence, the issue of household debt management especially in South Africa, has been neglected and logical solutions are needed to address this problem. Unfortunately, this area of study lacks existing practical theoretical models for household debt management. As such, after an in-depth review of previous literatures, it was ascertained that several constructs need to be consider in developing a practical household debt management model. Perhaps, da Veiga *et al.* (2020) and Belafi, Hong and Reith (2019), posits that the concept of theoretical building provides guidance for defining constructs, thinking through relationships and processes that links constructs, and deriving logical theoretical models (or building on existing ones) based on those relationships.

Consequently, constructs such as, concept of financial planning, financial discipline and knowledge of financial environment was identified from the contributions of previous scholars as key constructs that underpins the practical knowledge model for household debt management. Accordingly, these constructs

were incorporated together to build a household debt management model. Thus, this practical knowledge model is presented as both primary and secondary model in a linear Equation.

$$HDM = \beta_0 + \beta_1FP + \beta_2FD + \beta_3KFE + \varepsilon_t \dots \dots \dots \text{Equation 1}$$

Where, HDM represents Household Debt Management; β_0 represents Y-intercept; $\beta_1 \dots \beta_3$ represents slope coefficient, FP represents Financial Planning; FD represents Financial Discipline; KFE represents Knowledge of Financial Environment and ε_t represents random error term.

The presentation of linear equation 1, was to provide better understanding of the components in the model for household debt management. It is evident that for an individual to manage personal debt properly, it must have some grasps of financial planning, which presents potentials of control and understanding of income and every other financial activity and decision (Mbukanma, 2019; Lusardi & Mitchell, 2014). Secondly, control and management of household debt is associated with some level of personal financial discipline, which assists the individual to properly monitor and control financial expenditures (Mbukanma et al., 2020). In addition, the knowledge of financial environment is a key variable that provides the household the required financial information to take sound and logical financial decisions (Kreiner et al., 2020 & Mbukanma et al., 2020). Thus, incorporating these concepts and constructs together, it is evident that household debt management is a holistic theory that cuts across several behavioural knowledge of both the individual attributes and the environmental inter-play. However, this practical knowledge model (as presented in equation 1) was further developed into secondary models by identifying micro-variables under each of the constructs that made up the component of equation 1.

FINANCIAL PLANNING MODEL:

The preceding section presents constructs such as concept of financial planning, financial discipline, and knowledge of financial environment, which were incorporated together to build a household debt management practical knowledge model as explored from previous literature. Accordingly, financial planning is a logical approach, which households employ to manage their income and expenditure (Lusardi & Mitchell, 2014). Perhaps, when household earnings are properly planned, decision on household debt will be critically evaluated and managed. To this end, financial planning construct was extracted from initial equation 1 in collaboration with its micro-variables which is made up of but not limited to financial control, knowledge of financial products and financial understanding to form a financial planning practical knowledge model of household debt management as presented in Equation 2:

$$HDM = \beta_0 + \beta_1FP \sum_{n=0}^{\infty} (FC + KFP + FU) + \varepsilon_t \dots \dots \dots \text{Equation 2}$$

Where, HDM represents Household Debt Management; β_0 represents Y-intercept; $\beta_1 \dots n$ represents slope coefficient, FP represents Financial Planning; FC represents Financial Control; KFP represents Knowledge of Financial Products; FU represents Financial Understanding and ε_t represents random error term.

The representation in equation 2 entails that to manage household debt using financial planning theoretical model, key variables such as financial control, which involves budgeting and income flow management should be employed. Perhaps, it is a common notion that when you fail to plan financially, you plan to fail. As such, control and monitoring of household income and expenditure is key to manage household debt (Abd Samad, Mohd Daud, & Mohd Dali, 2020). Secondly, the concept of consumerism cannot be over emphasised, as households are continually confronted with the decision to make beneficial choices among financial product and services. Thus, as financial product providers continue to lure consumers with varieties of products, knowledge of financial products and services for households becomes relevant to manage the decision of purchases of these products and services that could increase their level of indebtedness (Abd Samad et al., 2020 & Liu, Zhong, Zhang & Li, 2020).

Accordingly, financial understanding provides the basic familiarities of numeric and financial concepts, such as the effect of inflation on wealth creation and on cost of living, interest rate on loan, real interest rate, return on investment risk, compound interest and risk diversification (Lusardi, Michaud & Mitchell, 2017). Thus, it becomes relevant for household to have better understanding of financial concepts to manage household debt by balancing between the consequences of debt and the returns on savings and investment. Perhaps, financial understanding does not only assist household in debt management, but also provides them with the sound knowledge to invest on financial products that can generate them with better

financial returns. Hence, a crucial consideration of financial planning theory would improve the rational of managing household debts.

Financial Discipline Model:

Discipline as a concept is a behaviour that presents wiliness to obey rules and order. However, personal financial discipline according to Mahapatra, Raveendran, and De (2019) is the behavioural attributes that shows the ability and wiliness of an individual to conform and obey personal financial plans and goals. Although most individuals equate social behaviour with discipline, it also relates to how you handle your income. Thus, financial discipline extends to how well an individual adheres to the plans they have set for meeting their monetary objectives amid their expenditures and savings (Mbukanma et al., 2020). In essence, financial discipline becomes a crucial component of personal debt management and financial success, which focuses on micro-variables under income management, expenditure control and financial evaluation as presented in Equation 3:

$$HDM = \beta_0 + \beta_1 FD \sum_{n=0}^{\infty} (IM + EC + FE) + \varepsilon_t \dots \dots \dots \text{Equation 3}$$

Where, HDM represents Household Debt Management; β_0 represents Y-intercept; $\beta_1 \dots n$ represents slop coefficient, FD represents Financial Discipline; IM represents Income Management; EC represents Expenditure Control; FE represents Financial Evaluation and ε_t represents random error term.

According to Abd Samad et al. (2020) and Liu et al. (2020), an increase in household debt emanates from mismanagement and control of household income and excessive expenditure. In other words, the financial success of every household depends majorly on their ability to manage and control their inflow and outflow earnings. Thus, equation 3 presents a practical knowledge model that household debt management depends on financial discipline, which is a summation of both income management, expenditure control and personal financial evaluation. However, these variables under the construct of financial discipline were identified from the contributions of different scholars within the ambit of personal financial management. Accordingly, Lusardi et al. (2017) and Mian and Sufi (2014) emphasised that personal income management and expenditure control do not only provide households with future financial safe heaven but also provides financial leverage and the ability to provide for savings amid financial challenges.

Secondly, the variable of personal financial evaluation serves as a systematic audit process to checkmate the adherence to financial plans and balance off between income and expenditure (Vieira, Potrich & Bressan, 2020). Most people look at their bank and credit card accounts months after months and are shocked that they have paid more than they thought they had. One easy way of accounting for income and expenditures is to make personal financial records to mitigate this concern. Financial statements provide you with an indication of your financial situation, much as those used by companies, which will assist with budget making. Thus, financial evaluation could be conducted on a periodic term, depending on the financial plan and goals of the household. Accordingly finding your net cash balance is the aim of evaluating your cash inflows and outflows. Your net cash balance is the result of your outflow being subtracted from your inflow. A positive net cash balance means that you gained more than you spent and that from that time you have some cash left over. A negative net cash balance, on the other hand suggests that you have expended more money than you received. Perhaps, it becomes more beneficial to understand the spending characteristics of the household by evaluating the balance between income and expenditure. To this end, household financial discipline becomes a crucial variable to manage household debt.

Knowledge of Financial Environment Model:

The motive behind this practical knowledge model was engineered by the chains of financial externalities as reported in the previous literatures. Accordingly, Oliver-Márquez, Guarnido-Rueda and Amate-Fortes (2020) and Mahapatra et al. (2019) emphasised that for an individual to properly manage and take sound financial decisions, they must be familiar with the economic and political activities within their domains. Perhaps, the variation in the financial environment has a significant impact on the prices and rates of financial products and services. Thus, this school of thought believed that the financial features surrounding an individual plays a greater role in their financial behaviours. However, the better the knowledge of the financial environment by an individual, the greater advantage they have to make sound financial decisions and the lesser their knowledge of the features of financial activities around their environs, the lesser their ability to make sound financial decisions. Thus, this planning practical knowledge model as presented in equation 4, provides a concept were the knowledge of financial environment such as, economic

information, knowledge of political situation and demographic influence could be used to manage household debts.

$$HDM = \beta_0 + \beta_1 KFE \sum_{n=0}^{\infty} (KEI + KPS + DI) + \varepsilon_t \dots \dots \dots \text{Equation 4}$$

Where, HDM represents Household Debt Management; β_0 represents Y-intercept; $\beta_1 \dots n$ represents slope coefficient, KFE represents Knowledge of Financial Environment; KES represents Knowledge of Economic Information; KPS represents Knowledge of Political Situation; DI represents Demographic Influence and ε_t represents random error term.

Knowledge of financial environment theory as presented in equation 4, provides details of how household debt management depends on the variables of knowledge of financial environment. These variables as extracted from previous literature includes but not limited to economic information, political situation, and demographic influence. According to [Damstra, Boukes and Vliegthart \(2019\)](#), economic information such as prices of goods and services, inflation rate, lending rate, real interest rate, direction of economic growth to mention but few, impacts significantly on the financial decisions of an individual. Perhaps, good grasp of economic information provides households with potential knowledge to manage their earnings and provide for savings. However, this study argued that perfect consumerism is informed by the economic and financial information acquired by an individual, which assist them in allocation of their financial resources. Thus, the knowledge of economic information as it concerns lending rate and the trend on economic indications, helps individuals to manage and address their attitude towards credit and debts.

Accordingly, political situation, which comprises of both stable and instability within the political jurisdictions of any nation significantly influence consumerisation among individuals ([Kozubikova, Kotaskova, Dvorský & Ključnikov, 2019](#)). Similarly, a stable political situation provides individuals with better potentials to take advantage of financial products and services and visa vice. However, an unstable political situation has its own negative impact on consumerism, as inflation rate and lending rates tend to increase during instability as well as prices in financial products and services ([Kozubikova et al., 2019](#)). Hence, the knowledge of political situation becomes crucial for household to not only make sound financial decisions but also provide them with the ability to manage their credit and debt attitude. Similarly, the influence of demographic factors significantly plays a crucial role in household debt management as age, race and social-economic variable are considerable factors of most households when taking financial decisions.

Perhaps, as government, corporation and nongovernment organisation use demographics to understand more about a populations characteristic for several purposes such as, policy and economic development, however, at the household level, individuals also employ same concept when taking financial decision that will benefit their entire family. Besides, consideration of demographic variables when planning for household financial well-being according to [Damstra et al. \(2019\)](#) presents a coherent financial decision on income, credit and expenditure management for not only the immediate family but also the extended family members. To this end, the influential variables of one's demography becomes inevitable of consideration when taking up credit facilities, as credit repayment are spread into generation of years.

Policy and Managerial Implication:

Policy and Managerial Implication serves as an outline of concerns that would assist policymakers to make informed decision. The following Implications should therefore be considered by stakeholders of financial planning as well as South Africans households:

- a. It was revealed that household credit and debt has been used over the years by South Africans to meet up with their immediate household needs. However, the excessive use of it has caused them significant financial distress as well as deficiencies in their future financial well-being. Hence, a considerable level of management and control should be employed to provide for future financial responsibilities.
- b. Household debt management was identified as a crucial concept towards stabilizing household financial attitude as it concerns obtaining credit facility and making sound financial decisions.
- c. The credit economic system practiced in South Africa, has provided households with credit facilities to meet the immediate household needs. However, consideration on the long-term negative financial and growth impact on the household and the government is needed to be readdressed by the concern stakeholders.

- d. For over a decade, South African household debt to income has increased drastically, the implication of this increment is critical on the future financial well-being of these households. Hence, household debt management is eminent for both concerned households and stakeholders.
- e. Considering South African economic growth, there exist a negative relationship with household debt, while household savings serves as an engine for economic growth and development. Thus, there is need for concern stakeholders to strike a balance between a credit economy policy and the policies that encourages household savings and
- f. Finally, the concept of management finance has provided several options concerning management and control of individuals and organisational finance. Consequently, this study has succeeded in formulating some personal knowledge models (See Equation 1, 2, 3 and 4) as per concepts and contributions gathered from previous literatures. Thus, households are advised to incorporate, adopt, and put into practice these models to enhance their debt management.

CONCLUSIONS AND RECOMMENDATIONS:

The economic system in every country as earlier mention informs the purchasing characteristics of individuals that lives in that country. South Africa among other economy practice credit economy, which allows purchases of goods, services and other finances of household needs without immediate payment. Thus, a great percentage of South African households, however, make use of these credit facilities to meet their immediate household needs. Although, the consequences of utilising credit are profound, and every individual should be fully aware of how credit affects household financial wellbeing. However, credit economy has been supported by some school of thought as one significant variable that boost the engine of domestic purchasing power. Nevertheless, household financial planning and debt management is a critical component for financial success, as such, it involves the process of planning, managing, and controlling of all financial transaction that will promote financial well-being of the household.

Thus, this study has succeeded in providing an insight on household debt management through an in-depth review of previous literatures. In line with the objective of the study, which was to reveal the household debt situation in South Africa as well as identifying theoretical models for household debt management, it was revealed that South African household debt to income has increased drastically over the past two decades. Accordingly, mortgage, auto loan, credit card and personal loans were highlighted as most common financial transaction that creates household debt in South Africa. This study also succeeded in revealing the negative effect of household debt on the South African economy as well as the individual households, which has not favoured the growth of GDP of South Africa for over a decade. However, to enhance the management of household debt in South Africa, the suggested practical knowledge models in equation 1, 2, 3 and 4 are recommended to individuals and stakeholders in-charge of campaign and initiatives of South Africa household future financial well-being.

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REFERENCES:

- Abd Samad, K., Mohd Daud, S.N. & Mohd Dali, N.R.S. (2020). Determinants of household debt in emerging economies: A macro panel analysis. *Cogent Business & Management*, 7(1), p.1831765.
- Abid, L., Zaghdene, S., Masmoudi, A. & Ghorbel, S.Z. (2017). Bayesian Network Modeling: A Case Study of Credit Scoring Analysis of Consumer Loan's Default Payment. *Asian Economic and Financial Review*, 7(9), pp.846-857.
- Abulafia, D. & Cohen, E. (2016). Internet payment system using credit card imaging. U.S. Patent 9, 305, 230.
- Adelino, M., Schoar, A. & Severino, F. (2016). Loan originations and defaults in the mortgage crisis: The role of the middle class. *The Review of Financial Studies*, 29(7), pp.1635-1670.

- Ahmad, M. & Khattak, S.I. (2020). Is aggregate domestic consumption spending (ADCS) per capita determining CO2 emissions in South Africa? A New Perspective. *Environmental and Resource Economics*, 75(3), pp. 529-552.
- Belafi, Z.D., Hong, T. & Reith, A. (2019). A library of building occupant behaviour models represented in a standardised schema. *Energy Efficiency*, 12(3), pp.637-651.
- Bethune, Z., Hu, T.W. & Rocheteau, G. (2018). Indeterminacy in credit economies. *Journal of Economic Theory*, 175, pp.556-584.
- Buchen, T., Drometer, M., Oesingmann, K. & Wollmershäuser, T. (2016). *Managing Household Debt in Croatia*. In *CESifo Forum* (Vol. 17, No. 1, pp. 12-16). München: ifo Institut-Leibniz-Institut für Wirtschaftsforschung an der Universität München.
- Chakrabarti, R. & Pattison, N. (2019). Auto credit and the 2005 bankruptcy reform: the impact of eliminating cramdowns. *The Review of Financial Studies*, 32(12), pp.4734-4766.
- Cloyne, J.S. & Surico, P. (2017). Household debt and the dynamic effects of income tax changes. *The Review of Economic Studies*, 84(1), pp.45-81.
- Cole, S., Iverson, B. & Tufano, P. (2017). Can gambling increase savings? Empirical evidence on prize-linked savings accounts.
- da Veiga, A.P., Güths, S. & da Silva, A.K. (2020). Evaporative cooling in building roofs: Theoretical modeling and experimental validation (Part-1). *Solar Energy*, 207, pp.1122-1131.
- Damstra, A., Boukes, M. & Vliegthart, R. (2019). Taking it personal or national? Understanding the indirect effects of economic news on government support. *West European Politics*, pp.1-22.
- Dou, Y., Masulis, R.W. & Zein, J. (2019). Shareholder wealth consequences of insider pledging of company stock as collateral for personal loans. *The Review of Financial Studies*, 32(12), pp.4810-4854.
- Drobyshevsky, S.M., Idrisov, G.I., Kaukin, A.S., Pavlov, P.N. & Sinelnikov–Murylev, S.G., (2018). Decomposition of Russian GDP growth rates in 2007-2017 and forecast for 2018-2020. *VOPROSY ECONOMIKI*, 9.
- Formicola, A.J. (2017). Considering Students' Cost of a Dental Education: Return on Investment and Debt to Income Ratio. *Journal of dental education*, 81(8), pp.eS28-eS32.
- Guo, Z., Zhang, Y. & Zhao, X.S. (2018). *Risks of Long-Term Auto Loans*. Available at SSRN 3290841.
- Herison, H. (2019). An Empirical Analysis of Household Debt Behavior Determinants. *Economics and Finance in Indonesia*, 65(2), pp.132-148.
- Hiilamo, A. & Grundy, E. (2020). Household debt and depressive symptoms among older adults in three continental European countries. *Ageing & Society*, 40(2), pp.412-438.
- Jiang, Z. (2019). An Empirical Bargaining Model with Digit Bias: A Study on Auto Loan Monthly Payments. Available at SSRN 3445171.
- Kim, Y.K. (2016). Macroeconomic effects of household debt: an empirical analysis. *Review of Keynesian Economics*, 4(2), pp.127-150.
- Kozubikova, L., Kotaskova, A., Dvorský, J. & Ključnikov, A. (2019). The impact of political factors' perception on suitability of international business environment: the case of startups. *Economics & Sociology*.
- Kreiner, C.T., Leth-Petersen, S. & Willerslev-Olsen, L.C. (2020). Financial trouble across generations: Evidence from the universe of personal loans in Denmark. *The Economic Journal*, 130(625), pp.233-262.
- Krige, D. (2019). Debt/credit, money and social relationships in the underground credit markets of Soweto, South Africa. *Social Science Information*, 58(3), pp.403-429.
- Liu, Z., Zhong, X., Zhang, T. & Li, W. (2020). Household debt and happiness: evidence from the China Household Finance Survey. *Applied Economics Letters*, 27(3), pp.199-205.
- Lombardi, M.J., Mohanty, M.S. & Shim, I. (2017). The real effects of household debt in the short and long run.
- Lusardi, A. & Mitchell, O.S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), pp.5-44.
- Lusardi, A., Michaud, P.C. & Mitchell, O.S. (2017). Optimal financial knowledge and wealth inequality. *Journal of Political Economy*, 125(2), pp.431-477.
- Mahapatra, M.S., Raveendran, J. & De, A. (2019). Building a Model on Influence of Behavioural and Cognitive Factors on Personal Financial Planning: A Study among Indian Households. *Global Business Review*, 20(4), pp.996-1009.

- Mahlo, N. (2011). *Determinants of household savings in South Africa*. Doctoral dissertation, University of Johannesburg.
- Mbukanma, I. (2019). *Structural guideline interfacing financial literacy and savings behaviour of South African households: a study of Tshwane and Mahikeng municipality employees*. Doctoral Thesis, North-West University South Africa.
- Mbukanma, I., Rena, R. & Musvoto, W.S. (2020). Conceptual Dimension of Financial Literacy Variables towards Improving Household Savings Behaviour in a Credit Economy: A South African Perspective. *Gender & Behaviour*, 18(1): 14660-14674.
- Meniago, C., Mukuddem-Petersen, J., Petersen, M.A. & Mongale, I.P. (2013). What causes household debt to increase in South Africa? *Economic Modelling*, 33, pp.482-492.
- Mian, A., Sufi, A. & Verner, E. (2017). Household debt and business cycles worldwide. *The Quarterly Journal of Economics*, 132(4), pp.1755-1817.
- Mian, Atif & Sufi, Amir. (2014). *House of Debt*. University of Chicago. ISBN 978-0-226-08194-6.
- Nguyen, T.A.N., Rózsa, Z., Belás, J. & Belásová, Ľ. (2017). The effects of perceived and actual financial knowledge on regular personal savings: Case of Vietnam. *Journal of International Studies*, 10(2), pp.278-291.
- Nomatye, A. & Phiri, A., (2017). Investigating the macroeconomic determinants of household debt in South Africa.
- Oliver-Márquez, F.J., Guarnido-Rueda, A. & Amate-Fortes, I. (2020). Measuring financial knowledge: a macroeconomic perspective. *International Economics and Economic Policy*, pp.1-46.
- Ozel, B., Nathanael, R.C., Raberto, M., Teglio, A. & Cincotti, S. (2019). Macroeconomic implications of mortgage loan requirements: an agent-based approach. *Journal of Economic Interaction and Coordination*, 14(1), pp.7-46.
- Precious, C. & Asrat, T. (2014). Determinants of Household Savings in South Africa: An Econometric Approach (1990-2011). *Mediterranean Journal of Social Sciences*, 5(15), p.183-190.
- Rena, R. (2006). *Financial Institutions in Eritrea*, Dar Es Salaam: New Africa Press.
- SARB. (2019). Annual Economic Report, Pretoria: South African Reserve Bank.
- Slemrod, J., Collins, B., Hoopes, J.L., Reck, D. & Sebastiani, M. (2017). Does credit-card information reporting improve small-business tax compliance? *Journal of Public Economics*, 149, pp.1-19.
- Stanton, R., Walden, J. & Wallace, N. (2018). Mortgage loan flow networks and financial norms. *The Review of Financial Studies*, 31(9), pp.3595-3642.
- Stiglitz, J.E. (2016). *The capitalist economy as a credit economy*. In Towards a General Theory of Deep Downturns: Presidential Address from the 17th World Congress of the International Economic Association in 2014 (pp. 47-60). Palgrave Macmillan, London.
- Swart, N., (2016). *Personal financial management: The Southern African guide to personal financial planning*. Juta (Pty) Limited. ISBN 978-0-70218-917-3.
- Van der Watt, T. (1991). *The beginner's money manual*. Cape Town: Human & Rousseau.
- Vieira, K.M., Potrich, A.C.G. & Bressan, A.A. (2020). A proposal of a financial knowledge scale based on item response theory. *Journal of Behavioral and Experimental Finance*, 28, p.100405.
- Yang, H.J., Wang, Y.X., Xia, J.J. & Zhang, Y. (2019). *China GDP Prediction on Traffic and Transportation by PCA*. In Proceeding of the 24th International Conference on Industrial Engineering and Engineering Management 2018 (pp. 388-394). Springer, Singapore.

