

The Causes and Consequences of Household Over-Indebtedness in South Africa

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ABSTRACT The use of credit by households has expanded in South Africa. This has led many households to become over-indebted. The research analysed the causes and consequences of household indebtedness using both South African and international literature. The causes of household over-indebtedness include both demand and supply-side factors. In addition, there are internal and external factors that lead to over-indebtedness. Household over-indebtedness can have negative implications at household and macro-economic levels. There is a positive relationship between household over-indebtedness and an increase in insolvencies. One of the major risks associated with the rapid increase in household debt is the decrease in savings. Recommendations on how to reduce household over-indebtedness include preventive, alleviative and rehabilitative measures.

INTRODUCTION

Aliero et al. (2013) point out that the availability of credit positively impacts on a country's economic growth. Commercial banks play the role of an intermediary in the credit and growth process through the channelling of funds in the form of credit or loan for investment to those economic agents who need them and can put them into the most productive use. The availability of credit is a vital element of private sector led growth. Pazarbasioğlu (2014) notes that improved access to credit reduces household consumption volatility, improves investment opportunities and helps to diversify household and financial sector assets. According to Demirgüç-Kunt et al. (2008), lack of access to finance which includes access to credit is a critical mechanism for generating persistent income inequality and slower growth. Credit is one of the cornerstones of modern capitalism. Credit lubricates the economy and promotes commercial activity. Rising levels of household consumption expenditure generally stimulate the economy. In addition, declines in household consumption expenditure negatively impacts on a country's economic growth (Prinsloo 2002; Sassi and Gasmı 2014).

However, credit can also lead people and households to spend money that they don't have. The use of credit and poor money management skills can lead individuals to over-indebtedness where they are unable to service credit agreements (The Banking Association of

South Africa 2014). The reason for the current global consumer over-indebtedness problem is not because consumers are in debt but because they are too much in debt. Rising personal debt is not necessarily a problem as long as it is sustainable. Debt can be one of the ways to build wealth and smooth expenditure over an individual's life time. Debt becomes a problem when it leads to over-indebtedness (Dyanan and Kohn 2007). South Africa's real gross domestic product grew by 38 percent in the past decade, however, private sector loans increased by about 225 percent (Colombo 2014). Unsecured loans have witnessed the greatest growth. The South Africa Reserve Bank (2013) reports that household debt to disposable income ratio dropped from 82 percent in 2009 to 75.6 percent during the first quarter of 2013. This implies that household debt now accounts for approximately 76 percent of the disposable incomes of households in South Africa. The credit standing of customers as at March 2014 shows that 42.2 percent are current, 12.8 percent are in areas for between one and 2 months, 28.3 percent are in arrears for more than three months, 5.2 percent have an adverse listing and 11.4 percent have judgment and administrative orders (National Credit Regulator 2014). This suggests that more than half of credit-active consumers are struggling to meet their debt repayments.

Moroke et al. (2014) note that high level of household indebtedness has created economic and political concern in both developed and developing countries. The credit expansion in

South Africa will soon turn into a bust. As a consequence of the bust, highly indebtedness consumers will default on their debts. In addition, banks will experience losses in their credit portfolios, property prices will fall, unemployment will rise and the economy will contract (Colombo 2014). A rapid growth in household credit can create systemic vulnerabilities (Pazarbasoglu 2014). The aim of the study is to examine the causes and consequences of household over-indebtedness.

Objectives of the Study

Household over-indebtedness has many negative consequences at household and macro-economic levels. The primary objective of the study is to analyse the causes and consequences of household over-indebtedness. The study will also suggest recommendations that can help to reduce household over-indebtedness.

LITERATURE REVIEW

Household Debt

There are several theories that can be used to explain household indebtedness. Fisher (1930) remarks that there is a strong association between household debt and consumption. When the current income is not sufficient to support household's present consumption plans, households will borrow and transfer future consumption into the present. The permanent income hypothesis by Friedman (1957) argues that a person's consumption at a point in time is determined not only by their current income but also by their expected income in future years or their permanent income. A person's consumption

pattern is driven not by changes in temporary income but by changes in permanent income. Debt is used to smooth out consumption over time. The life cycle hypothesis by Ando and Modigliani (1963) contends that household savings and consumption reflect the life cycle stage of the household.

Household debt provides a means of smoothing consumption over an individual's expected lifetime.

Betti et al. (2001) point out that debt is an instrument used over different stages of an individual's lifecycle to maintain a stable level of consumption. Being indebted is a normal consumer behaviour and at the earliest stages of the lifecycle of most individuals or households, a certain level of debt is inevitable. Individuals use debt to shift expenditure from one period of their lives to another. Debt is the outcome of a contract between lenders and borrowers. Debt can be described as an amount of money borrowed by one party from another. A debt arrangement gives the borrowing party permission to borrow money under the condition that it is to be paid back at a later date, usually with interest. Household debt consists of debt incurred by the household sector (Prinsloo 2002). According to Chawla and Uppal (2012), household debt includes "mortgage debt on all residences and real estate, and consumer debt (including debt outstanding on credit cards, personal and home equity lines of credit, secured and unsecured loans from banks and other institutions, and unpaid bills)."

OBSERVATIONS AND DISCUSSION

Table 1 gives the composition of total loans and advances to the household and corporate sectors in South Africa. Total loans and advanc-

Table 1: Composition of total loans and advances by credit type in South Africa

<i>Type of credit</i> <i>Household sector</i>	<i>Percentage of</i> <i>total loans</i>	<i>Percentage of</i> <i>total loans</i>	<i>Percentage of</i> <i>total loans</i>
	<i>and advances</i>	<i>and advances</i>	<i>and advances</i>
	2009	2012	2013
Instalment sales credit and leasing finance	8.0	9.0	9.5
Mortgage advances	39.0	34.5	33.2
Other loans and advances	8.6	12.8	13.1
Overdrafts	1.4	1.3	1.4
General loans	4.4	8.2	8.1
Credit card advances	2.8	3.4	3.6
Total loans and advances to the household sector	55.5	46.3	55.8
Total loans and advances to the corporate sector	44.5	43.7	44.2

Source: South African Reserve Bank (2014)

es to the household and corporate sectors are 55.5 percent and 44.5 percent respectively. Mortgage advances form the largest part of credit extension to the household sector. The Banking Association of South Africa (2014) points out that the use of credit can lead to people to over-indebtedness especially with households with poor money management skills. This can lead to the inability of households to service credit agreements.

Definition of Over-indebtedness

D'Alessio and Iezzi (2013) point out that there is no consensus in the literature on the definition of over-indebtedness and how to measure it. Defining over-indebtedness is challenging, however, there are certain characteristics associated with over-indebtedness. (1) the capacity to meet the expenses associated with the contracted financial commitments. Over-indebtedness means being unable to meet such recurring expenses. (2) this inability is structural and has a time dimension: This implies that the definition of over indebtedness should take into consideration persistent and ongoing financial problems and ignore one-off occurrences that arise due to situations such as forgetfulness. (3) the standard of living: This means that the household must be unable to meet contracted commitments without reducing its minimum standard of living. (4) illiquidity: This implies that the household is unable to remedy the situation by recourse to (financial and non-financial) assets and other financial sources such as credit. (5) all contracted financial commitments such as mortgage and consumer credit commitments, utility and telephone bills as well as rent payments are included (European Commission 2008).

In South Africa, the National Credit Act (2005) gives the following definition of over-indebtedness. "A consumer is over-indebted if the preponderance of available information at the time a determination is made indicates that the particular consumer is or will be unable to satisfy in a timely manner all the obligations under all the credit agreements to which the consumer is a party, having regard to that consumer's- (a) financial means, prospects and obligations; and (b) probable propensity to satisfy in a timely manner all the obligations under all the credit agreements to which the consumer is a party, as indicated by the consumer's history of debt re-

payment" (Government Gazette Republic of South Africa 2006).

The National Credit Regulator (2014) notes that "over-indebtedness occurs when individuals are unable to pay all their debts in a timely manner, which results in feelings of panic, stress and being overwhelmed by the number and extent of these unpaid debts." According to Betti et al. (2001, 2007), "the critical level of debt differs between households. However, a person is over-indebted if he or she considers that he or she has difficulties in repaying debts, whether consumer debt or a mortgage". Disney et al. (2008) point out that a consumer who has failed to meet the most recent required payment on an outstanding credit commitment is deemed to be over-indebted. Liv (2013) gives two definitions of over-indebtedness: an objective one and a subjective one. The objective definition argues that a borrower is over-indebted when his/her total debt service is higher than his/her net income during a defined timeframe. The net indebtedness index (NII) can be used to measure if a borrower is over-indebted. Net indebtedness index is equal to monthly instalments on all business and household debt minus monthly net income (revenue from business and household minus expenses from business and household excluding debt expenses. If the net indebtedness index > 100 percent, the household is insolvent; If the net indebtedness index is between 76 percent and 100 percent, the household is at risk. If the net indebtedness index \leq 75 percent, the household is solvent. The subjective view argues that a borrower is over-indebted when he/she struggles to repay his/her loan to the point that he/she is making frequent and unacceptable sacrifices impacting his/her living standards. Nyaruwata and Leibbrandt (2009) point out that one of the most commonly used indicators of the increase in indebtedness that is the household debt-to-income ratio.

Table 2 shows that household to debt ratio declined in South Africa from 82 percent in 2008

Table 2: Household to debt ratio of South Africa

<i>Year</i>	<i>Household debt to income ratio (in percent)</i>
2008	78.2
2009	82
2013	75.6

Source: South African Reserve Bank Quarterly Bulletin (2014)

to 75.6 percent in 2013. This implies that household debt now accounts for approximately 76 percent of the disposable incomes of South Africans. In addition Table 3 depicts the credit standing of customers. The table shows that less than half (42.2%) of indebted customers are current in their payments. More than half 57.8 percent are in arrears, have judgement and administrative orders or an adverse listing. This suggests that more than half of credit-active consumers are struggling to meet their debt repayments.

Table 3: Credit standing of customers as at March 2014

<i>Credit standing of customers</i>	<i>Percentage</i>
Current	42.2
1-2 months in arrears	12.8
3+months in arrears	28.3
Judgment and administrative orders	11.4
Adverse listing	5.2

Source: National Credit Regulator 2014

Finmark (2013) observes out that the consumer financial vulnerability depends on factors outside an individual's control and those that are specific, including levels of debt. Consumer financial vulnerability index is made up of four indices. These are (1) income vulnerability: this includes job security, income growth, social grants and the ability to access transfers from family and friends; (2) savings vulnerability: this is influenced by the savings and assets that a person can access when times are tough; (3) expenditure vulnerability: this depends on various factors including whether a consumer is able to deal with rising costs of food and transport, or is living within his means; (4) debt service vulnerability: this includes the cost of servicing debt and the level of debt a consumer has. A consumer financial vulnerability index shows the overall vulnerability of a consumer and captures the different dynamics influencing a consumer's profile for income, savings, expenditure and debt. The overall index and sub-indices are based on a 10-point scale where 0 indicates total financial security and 10 indicates total financial vulnerability. The overall score for South Africa is 5.17 which indicates significant vulnerability. Debt is one of the factors leading to consumer financial vulnerability.

Factors Leading to Household Over-indebtedness

There are many factors that can lead to household over-indebtedness. External factors are factors outside the individual's control such as illness, death, loss of employment, or changes in macroeconomic variables (for example, a rise in interest rates). These factors which can be regarded as risky life events that can lead to income and expenditure shocks can cause over-indebtedness (Eurofound 2010). An additional child can lead to severe household indebtedness (Keese 2009). Another factor that can lead to over-indebtedness is the lack of financial literacy. The less literate tended to take credit at high interest rates (Lusardi and Tufano 2008). In addition, aggressive marketing by lenders and escalating consumption habits by individuals can lead to over-indebtedness. Financial imprudence is one of the causes of over-indebtedness (Disney et al. 2008; Anderloni and Vandone 2010).

Naerum (2012) points out that the literature on the causes of household over-indebtedness includes demand and supply-side factors. Demand-side factors examine consumer behaviour and the factors that influence their credit decisions. Supply-side factors focus on the behaviour of banks, stores, micro-lenders and their credit market practises of supplying credit to consumers. Low interest rates and financial deregulation have a role to play in household over-indebtedness (Worthington 2006). Deregulation and financial innovation have significantly increased household sector's access to credit. Financial innovation has made it much easier for households to borrow against their housing wealth and thus may accentuate the effect of house prices on debt (Davies 2006). The causes of household over-indebtedness in South Africa include supply and demand-side factors. The supply-side factors are a result of institutional changes such as the deregulation of the financial industry and the declining government control and interference in the financial industry, declining real interest rate leading to freer markets. In addition, increased competition between financial institutions and a deliberate attempt to penetrate new markets is another contributing factor to the increase in debt at the household level. A further supply-side assumption is the increase in house prices. Demand side factors

can be attributed to the increased appetite for credit by consumers, increased optimism and a degree of conspicuous consumption. Demand factors also include households' lack of patience and a decrease in risk aversion. Households are eager to satisfy current consumption needs and are unwilling to defer consumption (Roestoff and Renke 2005; Hurwitz and Luiz 2007; Paile 2013).

In addition, a good macroeconomic condition can influence household debt as households feel very comfortable in getting debt. Meniago et al. (2013) find that household debt is significantly affected by positive changes in consumer price index, gross domestic product and household consumption. In addition, the fiscal policy of a country can also impact on household debt by boosting income and ability to service debt. Factors that can lead to over-indebtedness include low interest rates, rapid house price appreciation, easier credit and new mortgage instruments (Kojucharov et al. 2008). The drivers of over-indebtedness can be summarised into three categories: financial imprudence, household income shocks and macro-economic shocks. Financial imprudence can be caused by the lack of financial literacy. Many consumers do not understand the true cost of repaying the credit commitment at the point at which they apply for credit, partly due to the obscurity of lenders' terms and conditions. Households can also become over-indebted by the failure to insure against adverse events and by failing to adjust their consumption patterns following reduced real income due to relative price shocks. Income shocks such as unemployment, family breakdown, divorce and ill health can lead to over-indebtedness. Macro-economic shocks such as changes in the cost of credit due to movements in market interest rates can lead also to over-indebtedness (Disney et al. 2008).

Effects of Household Over-indebtedness

Over-indebted households are more financially fragile and more likely to default, especially when hit by adverse shocks, such as unemployment or interest rates increases. Household over-indebtedness can have negative implications at household and macro-economic level. An over-indebted individual who has difficulty in paying back can be blacklisted and thus will not be able to obtain new loans when needed.

This increases a household's vulnerability. This can become stressful to the individual and negatively affect physical and mental health, work productivity, marriage and can lead to suicide. There is a positive relationship between household over-indebtedness and an increase in insolvencies. Another consequence of the higher level of indebtedness is that households may find themselves with insufficient savings when they retire. One of the major risks associated with the rapid increase in household debt is the decrease in saving. This can negatively affect the level of investment in a country. A large share of debt owed by over-indebted persons is never paid back. This has implications for the institutional setting, especially on the financial market. In addition, over-indebtedness can impact negatively on the economic growth of a country because indebted households find it difficult to spend. High levels of household debt can lead to the weakness in consumption and increase unemployment.

CONCLUSION

The study analysed the causes and consequences of household over-indebtedness. The causes of over-indebtedness can be broadly classified into demand and supply factors. Demand-side factors focus on consumer behaviour and the factors that influence their credit decisions. These include households' lack of patience and a decrease in risk aversion. Households are eager to satisfy current consumption needs and are unwilling to defer consumption. Supply-side factors examine the behaviour of banks, stores, micro-lenders and their credit market practises of supplying credit to consumers. Deregulation and financial innovation have significantly increased households' access to credit. Financial innovation has made it much easier for households to borrow against their house wealth and thus may accentuate the effect of house prices on debt. The negative consequences of household over-indebtedness were discussed. At the individual level, household over-indebtedness increases household vulnerability. This can become stressful to the individual and negatively affect physical and mental health, work productivity, marriage and can lead to suicide. At the macro level, household over-indebtedness negatively impacts on saving, consumption, investment, financial markets and economic growth.

RECOMMENDATIONS TO REDUCE HOUSEHOLD OVER-INDEBTEDNESS

The responses to household over-indebtedness can be preventive, alleviative and rehabilitative. Preventive measures include financial education and regulation. Alleviative measures include debt advisory services. Rehabilitative measures include consumer bankruptcy and legal debt settlement procedures. In addition, demand-side recommendations include self-discipline: When debt is inevitable, households should go for good debt. Good debt is a necessary and sustainable debt. It is sustainable because it enhances future income, which makes repayment a lot easier. Debt can be useful when invested in something that grows in value. Mortgages can be regarded as good debt because the value of real estate normally appreciates in the long-term. Over-indebted consumers should be proactive and go for debt counseling. The National Credit Regulator needs to improve communication on financial literacy and debt management strategies. All the lax parts of the National Credit Act need to be strengthened to prevent bad lending practices by banks and other financial institutions. There is the need for financial institutions to exercise caution in lending and follow strict affordability tests.

REFERENCES

- Aliero HM, Abdullahi YZ, Adamu N 2013. Private sector credit and economic growth nexus in Nigeria: An autoregressive distributed lag bound approach. *Med J of Soc Sci*, 4(1): 83-90.
- Anderloni L, Vandone D 2013. Risk of Over-indebtedness and Behavioral Factors. From <<http://papers.ssrn.com/sol3/papers.cfm?1653513>> (Retrieved on 1 September 2014).
- Ando A, Modigliani F 1963. The life cycle hypothesis of savings: Aggregate implications and tests. *Ame Eco Rev*, 53(1): 55-84.
- Banking Association of South Africa 2014. National Credit Act. From <<http://www.banking.org.za/index.php/consumer-centre/national-credit-act>> (Retrieved on 30 August 2014).
- Betti G, Dourmashkin N, Rossi M, Verma V, Yin Y 2001. Study of the Problem of Consumer Indebtedness: From <http://ec.europa.eu/consumers/archive/cons_int/fina_serv/cons_directive/fin_serv06_en.pdf> (Retrieved on 5 September 2014).
- Betti G, Dourmashkin N, Rossi M, Yin YP 2007. Consumer over-indebtedness in the EU: Measurement and characteristics. *J of Eco Stu*, 34(2): 136 - 156.
- Chawla R, Uppal S 2012. Household Debt in Canada. From <<http://www.statcan.gc.ca/ACCA>> (Retrieved on 7 September 2014).
- Colombo J 2014. A Guide to South Africa's Economic Bubble and Coming Crisis. From <<http://www.forbes.com/sites/jessecolombo/2014/03/19/a-guide-to-south-africas-economic-bubble-and-coming-crisis>> (Retrieved on 3 September 2014).
- D'Alessio G, Iezzi S 2013. Household Over-indebtedness: Definition and Measurement with Italian Data. From <http://www.bancaditalia.it/publicazioni/econo/quest_ecofin_2/qef149/QEF_149.pdf> (Retrieved on 1 September 2014).
- Demirgüç-Kunt A, Beck T, Honohan P 2008. Finance for All? Policies and Pitfalls in Expanding Access. From <<http://siteresources.worldbank.org>> (Retrieved on 5 July 2014).
- Disney R, Bridges S, Gathergood J 2008. Drivers of Over-Indebtedness, a Report to BERR. From <<http://www.berr.gov.uk/files/file49248.pdf>> (Retrieved on 5 August 2014).
- Dynan K, Kohn D 2007. The Rise in U.S. Household Indebtedness: Causes and Consequences. From <<http://www.federalreserve.gov/pubs/feds/2007/200737/200737pap.pdf>> (Retrieved on 8 August 2014).
- Engelbrecht L 2009. Indebtedness of financially vulnerable households: What do social workers do? *Soc Work J*, 45(2): 154-170.
- European Commission 2008. Towards a Common Operational European Definition of Over-indebtedness. From <http://www.oee.fr/files/c13_1.pdf> (Retrieved on 2 August 2014).
- Eurofound 2010. Over-indebtedness in the EU Causes and the Role of Unemployment. From <http://a1.ecdn.eu/ecdn/2014/images/dmdocuments/Hans-Dubois_Overindebtedness-in-the-EU_causes-and-the-role-of-unemployment-ECDN-Eurofound-EKPIZO-conference-Athens-22-November-2012.pdf> (Retrieved on 5 September 2010).
- Eurofound 2012. Household Debt Advisory Services in the European Union From <<http://www.eurofound.europa.eu/publications/htmlfiles/ef11891.htm>> (Retrieved on 1 September 2014).
- Finmark Trust 2013. The Financial Vulnerability of South African Consumers During Q3 2012. From <http://www.finmark.org.za/wp-content/uploads/pubs/CFVI_Q3_2012_Pres1.pdf> (Retrieved on 2 September 2014).
- Fisher I 1930. *The Rate of Interest*. New York: The Macmillan Co.
- Friedman M 1957. *A Theory of the Consumption Function*. New Jersey: Princeton University Press.
- Government Gazette Republic of South Africa 2006. National Credit Act, 2005. From <http://www.ncr.org.za/pdfs/NATIONAL_CREDIT_ACT.pdf> (Retrieved on 1 September 2014).
- Hurwitz I, Luiz J 2007. Urban working class credit usage and over-indebtedness in South Africa. *J of South Afri Stu*, 33(1): 107-131.
- Jappelli T, Pagano M, Di Maggio, M 2008. Households' Indebtedness and Financial Fragility. From <<https://www.imf.org/external/np/res/seminars/2008/arc/pdf/JPdM.pdf>> (Retrieved on 1 September 2014).
- Keese M 2009. Triggers and Determinants of Severe Household Indebtedness in Germany. From <<http://ideas.repec.org/p/rwi/repape/0150.html>> (Retrieved on 1 September 2014).
- Kojucharov N, Martin C, Martin R, Xu L 2008. The Subprime Mortgage Crisis: Irrational Exuberance or Rational Error? From <<http://www.frbsf.org/econom>

- ic-research/files/Kojucharov-Martin-Martin-Xu.pdf> (Retrieved on 5 September 2014).
- Liv D 2013. Study on the Drivers of Over-indebtedness of Microfinance Borrowers in Cambodia: An In-depth Investigation of Saturated Areas. From <<http://www.blueorchard.com/wp-content/uploads/2013/05/OID-Final-Report.pdf>> (Retrieved on 1 September 2014).
- Lusardi A, Tufano P 2009. Debt Literacy, Financial Experiences, and Over-indebtedness. From <http://www.dartmouth.edu/~alusardi/Papers/Lusardi_Tufano.pdf> (Retrieved on 1 September 2014).
- Meniago C, Mukuddem-Petersen J, Petersen MA, Mah G 2013. Shocks and household debt in South Africa: A variance. *Med J of Soc Sci*, 4(3): 379-388.
- Moroke ND, Petersen MJ, Petersen M 2014. A multivariate time series analysis of household debts during 2007-2009 financial crises in South Africa: A vector error correction approach. *Med J of Soc Sci*, 5(7): 107-118.
- Naerum K 2012. Consumer Credit Usage and Over-indebtedness in Low-income Households. From <<http://www.academia.edu>> (Retrieved on 4 September 2014).
- National Credit Regulator 2014. Credit Bureau Monitor Second Quarter June 2014. From <http://ncr.org.za/publications/Credit_Monitor/Credit%20Bureau%20Monitor%20June%202014.pdf> (Retrieved on 18 September 2014).
- National Credit Regulator 2014. The Consumer's Guide to Managing Debt. From <<http://www.ncr.org.za/publications/brochure5.pdf>> (Retrieved on 5 September 2014).
- Nyaruwata G, Leibbrandt M 2009. Personal Debt and Financial Access: Analysis of the NIDS Wave 1 Dataset From <http://www.psppd.org.za/MediaLib/Downloads/Home/AboutUs/Discussion%20Paper%208_Nyaruwata_Debt.pdf> (Retrieved on 1 September 2014).
- Organisation of Economic Co-operation and Development 2013. OECD Economic Survey, South Africa. From <<http://www.oecd.org/eco/surveys/South%20Africa%202013%20Overview%20FINAL.pdf>> (Retrieved on 1 September 2014).
- Paile K 2013. The Impact of the National Credit Act on Household Debt Levels in South Africa From <<http://wiredspace.wits.ac.za/bitstream/handle/10539/14754/The%20impact%20of%20the%20National%20Credit%20Act%20on%20household%20debt%20levels%20in%20South%20Africa.pdf?sequence=1>> (Retrieved on 1 September 2014).
- Pazarbasioglu C 2014. Household Credit Growth in Emerging Market Countries. From <<http://web.worldbank.org/archive/website01049/WEB/IMAGES/L1CEYLAP.PDF>> (Retrieved on 2 July 2014).
- Roestoff M, Renke S 2005. A fresh start for individual debtors: The role of South African insolvency and consumer protection legislation. *Int Ins Rev*, 14: 93-109.
- Sassi S, Gasmi A 2014. The effect of enterprise and household credit on economic growth: New evidence from European Union countries. *J of Mac*, 39: 226-231.
- South African Reserve Bank 2013. Quarterly Bulletin. From <<https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/5608/01Full%20Quarterly%20Bulletin.pdf>> (Retrieved on 2 September 2014).
- South African Reserve Bank 2014. Quarterly Bulletin March 2014. From <<https://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/6140/01Full%20Quarterly%20Bulletin%20E2%80%9393%20March%202014.pdf>> (Retrieved on 2 September 2014).
- Worthington AC 2006. Debt as a source of financial stress in Australian households. *Int J of Con Stu*, 30(1): 2-1.5