



The determinants of household saving: The South African Black middle class perspective.

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## Abstract

Saving is critical for the economic development of a country and can insulate it from unwanted inflation and financial instability as a result of international exposure. South Africa is currently experiencing low savings rates and many South Africans have difficulty servicing their debts.

Black Africans form the majority in South Africa and they are therefore of critical importance with regard to saving and this country's ability to finance future projects. It can be argued that the White South African population is becoming older and will therefore begin to withdraw its savings.

A literature review has been undertaken to distil the determinants of saving in general and to observe the applicability of these determinants to Black middle class South Africans.

Therefore, this paper seeks to identify the determinants of household savings of the Black middle class, with reference to questionnaires and quantitative answers from the respondents in four of South Africa's provinces.

The key findings of the research indicate that the South African Black middle class is financially illiterate and not disciplined with regard to budgeting. They show a high dependency ratio, and the need for instant gratification. In addition, people are hindered by cultural norms that inhibit them from discussing their

finances. These findings can be traced back to this class's previous exclusion from the main economy.

The recommended outcome of this paper indicates that the South African government should implement budgeting as part of the curriculum in primary and high schools. People leaving employment before retirement should not be allowed to cash out more than 50% of their pension fund, and the private sector should be involved in educating its employees with regard to budgeting and the benefits of saving, while creating an environment that facilitates access to financial providers.

**Key words:** Household savings, budgeting discipline, middle class, saving rate.

### **Declaration**

I declare that this thesis project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorization and consent to carry out this research.

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Date:

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## 1. Introduction to the research problem

### Background: the importance of saving

Saving plays a very important societal role as a source of future sustainability and development (Nga, 2007). It provides an economic link between the past, present and future development of a country (Kazmi, 1993). An adequate national saving rate is an essential circumstance for the attainment of investment and growth rates targets (Kazmi, 1993). Through saving, individuals may accumulate wealth and gain financial independence (see saving motives outlined below), and a nation's saving rate determines the rate of its economic development (Athukorala & Sen, 2003). Saving is a shield that protects individuals and the nation from economic shocks (Mboweni, 2008). During the financial difficulties of 2008, the global economy suffered; and even though well insulated, the South African economy was not an exception.

One of the motives for saving is the precautionary motive – the desire to accumulate assets to meet possible emergencies whose occurrence, nature, and timing cannot be perfectly foreseen (Modigliani & Brumberg, 1954). It follows that people need to save in good times in preparation for the bad. Reducing debt exposure – while the interest rates are low – will allow one to pay off one's debt quicker, allowing one to save and invest as one should (Finlogic, 2011).

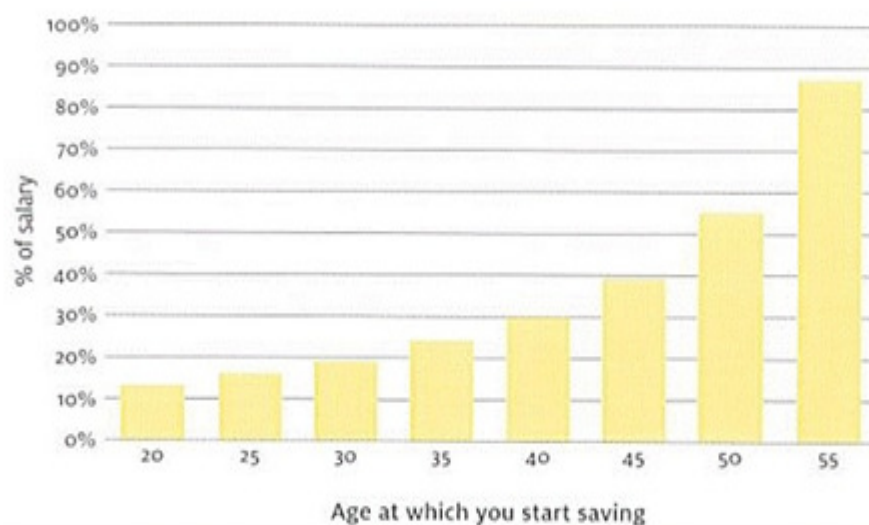
Household debt has rapidly increased this decade, mainly because debt has become more easily accessible to the average South African. At the same time, interest rates have been relatively low. The need for instant gratification and materialism has burdened South Africans, forcing them to increase their debt levels. Current debt levels stand at approximately 80% of household income,

which leaves very little for savings and investments (Old Mutual Saving Monitor, 2010). It is unfortunate that people spend their income on goods that do not appear to eliminate poverty or create long-term wealth (Moav & Neeman, 2010). They spend their money on items that offer short-term gratification and depreciate quickly, for example expensive vehicles. There is a strong argument that even property will create value if paid off quicker than required by the contract. This could be achieved by halving the payment period, or by paying more or double the required instalment due. However, this requires consumers to make sacrifices elsewhere.

It is emerging that people are also spending large amounts on funerals and festivals (Moav & Neeman, 2010), which are treated equally in terms of budget allocation, and are associated with status.

Figure 1 shows that delaying saving is not beneficial, as so-called 'late starters' end up having to pay a high percentage of their monthly income in order to retire financially secure.

Figure 1: The age at which people start saving



(Source: Finlogic)



## Research objectives, scope and relevance

### *a) The research objectives*

The objective of this research is to distil the reasons why there is a poor saving culture among South African households – particularly those that are Black middle class. It then seeks to formulate guidelines to help improve the saving culture in South Africa. For the purpose of this paper, ‘Black’ means people of African origin and exclude Indians, Coloureds and Chinese.

### *b) The research scope*

The focus is on Black middle class South African households, with regard to saving behaviour, and disregards financial vehicles used for such savings. Literature pertaining to financial literacy, emotional intelligence, intertemporal choice and hyperbolic discount function has been studied, as has the structure of Black families.

The scope includes an examination of the following:

- I. Financial literacy and saving behaviour;
- II. The question of poor saving due to debt accessibility; or the issue of discipline and/ or instant gratification;
- III. Saving habits of Black South Africans; and
- IV. The formulation of proposals on how to improve the situation.

### *c) The research relevance*

There is a need to improve saving in South Africa as the competitiveness of a country depends on its ability, among other things, to save, and therefore improve the level of investments. The continuance of conspicuous expenditure will undermine the democratic achievements of the country and the country’s

economic development. Figure 2 below shows clearly that household saving is in a dire state at negative R4072 million.

**Figure 2: Financing of gross capital formation – at current prices**

R millions

	2003	2004	2005	2006	2007	2008	2009	2010
Saving by households <sup>1</sup> ..... (6200J)	4 960	3 351	1 142	-9 229	-12 850	-13 261	-4 374	-4 072
Corporate saving <sup>1</sup> ..... (6201J)	55 155	63 685	44 519	33 019	7 908	37 800	110 380	195 280
Saving of general government <sup>1</sup> ..... (6202J)	-22 907	-25 770	-5 816	14 155	40 027	24 467	-66 557	-105 273
Consumption of fixed capital <sup>2</sup> ..... (6002J)	162 099	171 594	187 790	216 251	252 595	301 840	333 377	352 159
<b>Gross saving<sup>3</sup> ..... (6203J)</b>	<b>199 307</b>	<b>212 860</b>	<b>227 635</b>	<b>254 196</b>	<b>287 680</b>	<b>350 846</b>	<b>372 826</b>	<b>438 094</b>
<b>Foreign investment ..... (6206J)</b>	<b>12 599</b>	<b>42 948</b>	<b>54 495</b>	<b>93 799</b>	<b>140 551</b>	<b>161 874</b>	<b>97 062</b>	<b>74 958</b>
Net capital inflow from rest of the world ..... (6204J)	9 652	83 425	91 336	118 138	180 736	180 179	111 375	103 581
Change in gold and other foreign reserves <sup>4</sup> ..... (6205J)	2 947	-40 477	-36 841	-24 339	-40 185	-18 305	-14 313	-28 623
<b>Gross capital formation ..... (6180J)</b>	<b>211 906</b>	<b>255 808</b>	<b>282 130</b>	<b>347 995</b>	<b>428 231</b>	<b>512 720</b>	<b>469 888</b>	<b>513 052</b>

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1. After consumption of fixed capital and inventory valuation adjustment.
2. At replacement value.
3. After inventory valuation adjustment.
4. Increase -, decrease +.

(Source: Reserve Bank Quarterly Bulletin. June, 2011)

As a result of the combination of employment equity policies and high crime levels, many promising White youths have left the country. This leaves the Black middle class and ageing White South Africans with a responsibility to fund future investments and economic development. It is important that this Black middle class develop a conservative attitude towards money if it is to play a significant role in future economic growth and investment. It is worth noting that the ageing White community in South Africa could start disinvesting in the near future.

The middle class is the backbone of each country's economic development and is seen as a source of economic stability (Torche & Lopez-Calva, 2010); the

sustainability of the middle class is therefore of the highest importance in a society, and South Africa is not an exception. The middle class's sustainability is dependent on its ability to save (Torche & Lopez-Calva, 2010).

Currently, South Africa has low interest rates, which increase people's disposable income. This means that the country is in a better position to save for when interest rates go up.

The potential positive impact that household saving can have on the South African economy, given the local impact of the global financial crisis and South Africa's growth challenges, renders the discussion about household saving rates particularly relevant at this point in South Africa's economic development.

### **Compressed definition of savings**

Saving is a long-term or short-term decision about what to do with residual income after expenditure. Therefore:

$$\text{Saving} = \text{Income} - \text{Expenditure}.$$

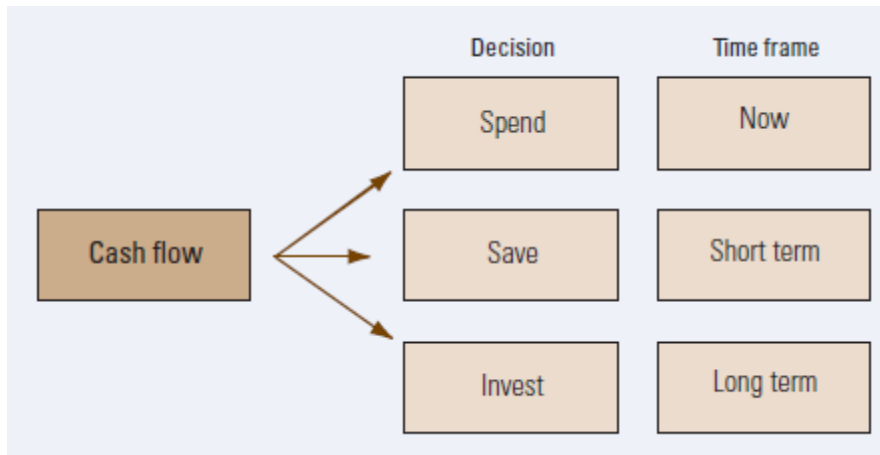
It is a function of income, expenditure, tax, interest rates, inflation, the banking system, family structure, investment opportunities and political stability.

$F(S) = \{Y, E, T, ir, r, Bs, Fs, I, Ps\}$  where; Y=Income, E=Expenditure, T=Tax Rate, ir=Interest rate, r=Inflation, Bs=Banking System, Fs=Family Structure, I=Investment Opportunities and Ps=Political Stability.

Planned saving is a conscious decision regarding how much to consume today, what future consumption requirements will be and at what rate one must put aside money to finance future consumption. Once individuals have money they have to do one, or a combination of the following (Vanguard, 2006): 1) spend now; 2) save for either the long term or short term; or 3) invest for either the

long term or short term. Figure 3 below sets out these options. An expanded definition is given in Chapter Two below.

Figure 3: Options for cash-flow management



(Source: Vanguard’s Investment Philosophy)

### What is middle class?

‘Middle class’ is a well-accepted concept globally, but it is very difficult to draw the line and point to exactly what constitutes the middle class (Deutsche Bank Research, 2009). It can, however be identified as the class between the rich and the poor (Deutsche Bank Research, 2009). This further requires the definition of ‘poor’ and ‘rich’. People who are ‘rich’ can be defined as High Net Worth Individuals (HNWI) – those individuals with a net worth of at least \$1 million. People who are ‘poor’ are those individuals that live below the poverty line.

A person who is middle class can be defined as having the following characteristics (Lehohla, 2006): Lives in a formal house; has a water tap in the dwelling; has a flush toilet in the dwelling; electricity is the main source of light; electricity or gas is the main cooking source; has a land line phone or a household member has a cell phone.

The above definition is not comprehensive enough and could include people who do not necessarily qualify as middle class. In research by Kharas (2010), middle class is defined as the 'Consumer Class'. This definition will be not used here because this research looks at saving behaviour and not consuming behaviour. Birdsall et al. (2000), in Ravallion (2009) defines middle class as those individuals that have income in a range of 75% to 125% of the median of income in a country.

Consumer Scope (2011) defines middle class in terms of Lifestyle Levels:

Level D – the poor. This is identical to the previous Level 1. It comprises LSM 1-3. Level 1 comprises 20% of South African households and accounts for only 4% of income and expenditure. Level D will not be considered in this study, as the middle class is a level above this.

Level C – LSM 4, 5 and 6. This is the mass market, middle class or average and was previously referred to as Level 2. It accounts for 48% of households and 30% of expenditure.

Level B – the upper middle market. This is made up of LSM 7 and 8 and the bottom half of LSM 9. These people comprise a fifth of households and account for a third of consumption. Level 2 was previously LSM 6, 7 and 8.

Level A – the rich. This is made up of the top half of LSM 9 and LSM 10. They comprise 10% of households and account for around half the income and expenditure in South Africa. This group will not be considered for this paper as it lies outside the middle class definition.

The Lifestyle Level definitions set out above will be used in this research as they are much more comprehensive than all the other definitions listed.

## 2. Literature Review

### Expanded definition and relevance of saving

Saving means putting aside money for future use (Saving = Income – Expenditure). This can be in the form of investments, bank deposits and policies (Old Mutual Saving Monitor, 2010). However, ‘saving’ for the purpose of this paper refers to money set aside to create future value or wealth. This includes holding back on spending and using that money to pay debt faster, for example putting extra money into a home loan (Old Mutual Saving Monitor, 2010).

Saving can further be defined as that part of after-tax income that is not used for current consumption (Cronje, 2010). This definition is expanded by Prinsloo (2000), in Du Plessis (2008), by stating that saving:

- Includes (a) current disbursements made in a reduction of household liabilities (such as repayment of capital on loans for housing and consumer durables), (b) regular and recurring employer and employee contributions to pension and insurance funds and interest charged on those funds, and (c) retained income of unincorporated business enterprises and non-profit institutions serving households; and
- Excludes (a) current household expenditure financed by credit and (b) capital gains and losses.

According to Prinsloo (2000), saving by the household sector, or personal saving, is divided into two categories: contractual and discretionary saving. Contractual saving involves individuals committing themselves to a series of payments such as premiums on insurance policies, contributions to pension funds and the capital amount payable on households’ mortgage loans.

Discretionary saving, by contrast, refers to types of saving where households are not bound by any fixed commitments. Contractual saving normally stems from discretionary saving to the extent that contractual obligations are made on a voluntary basis. This is with the exception of a case where an employee is bound by a contract of service to contribute to a pension fund.

Saving is influenced by the following factors (Hoos, 2010):

- The more young dependents in a household, the less money will be saved.
- The more elderly persons in a household, the less money will be saved.
- The higher the level of income, the higher the rate of saving will be.
- The higher the education level, the higher the rate of saving will be.
- The more women in the work place, the higher the saving rate will be.
- The higher the life expectancy, the more money will be saved.
- The higher the inflation rate, the less money will be saved.

The idea is to analyse and explain a person's saving behaviour and understand the extent to which households differ (Hoos, 2010). Although the research unit is Black middle class, there is a clear understanding that households are not similar and therefore do not display the same saving behaviour (Hoos, 2010). All households experience their livelihood in different ways and each household has a different composition and education level (Hoos, 2010).

### **Modigliani's Life Cycle Hypothesis (LCH) of saving behaviour**

The life cycle hypothesis (LCH) proposes that individuals plan their consumption and saving behaviour considering all the different ages of their life (Modigliani & Brumberg, 1954). The LCH assumes that individuals will spread

their income in such a way that today's income will be used to finance tomorrow's consumption (Modigliani & Brumberg, 1954).

The LCH is based on utility maximization and seeks to prove that the resources that a consumer allocates to consumption at age  $t$ . depend only on his life resources and not on current income (Du Plessis, 2008).

The LCH has two embedded rationality assumptions. The explicit assumption is that savers save today and withdraw the assets to maximize some lifetime utility function (Horioka & Wan, 2007). The implicit assumption is that savers are time consistent (DellaVigna, 2009), will be able to list items that will be needed for a lifetime, and will be able to draw a plan of how to accumulate them. As an example, these may include medication, housing, groceries, transportation and electricity (Horioka & Wan, 2007).

### **Friedman's permanent income hypothesis (PIH)**

Friedman's permanent income hypothesis (PIH) states that individuals will smooth consumption in order to cover their life span (Meghir, 2002). This assumes that individuals are able to determine what their long-term needs are and then proportion consumption accordingly (Carroll, 2001). It assumes people appreciate that income will decline sometime in the future (Wang, 2005). This means that people will therefore value precautionary saving, since they do not know what the future holds. The literature supports this view in that when wealth decreases, precautionary saving increases (Carroll, 2001).

Meghir (2002) states that the ingredients of Friedman's model are permanent consumption ( $pc$ ), permanent income ( $py$ ), transitory consumption ( $tc$ ), and transitory income ( $ty$ ). Measured income ( $pty$ ) is the sum of permanent and



transitory income ( $t_y$ ) and measured consumption ( $p_t c$ ) is the sum of permanent and transitory consumption ( $t_c$ ), i.e.

$$p_t c = p c + t_c \text{ and}$$

$$p_t y = p y + t_y$$

Permanent consumption is determined by the equation:

$$p p c = k(r, z) y$$

where  $k(r, z)$  is the average (or marginal) propensity to consume out of permanent income, which depends on the rate of interest and on taste shifter variables  $z$ .

Looking at the above equation as described by Meghir (2002), it is of interest that permanent consumption is the sum of permanent income and transitory income, which means that in order to reduce total permanent income one can reduce transitory income. This requires adjustment to current transitory income.

### **Motives for saving**

People save for different reasons (Modigliani & Brumberg, 1954). According to Modigliani (1954), people save for the following motives:

- I. The desire to add to the estate for the benefit of one's heirs;
- II. The fact that the pattern of current and prospective income receipts will generally not coincide with the preferred consumption;
- III. The precautionary motive – the desire to accumulate assets through saving to meet possible emergencies whose occurrence, nature, and timing cannot be perfectly foreseen, and
- IV. Finally, as a result of the presence of uncertainty, it is necessary or at least cheaper to have equity in certain kinds of assets, before an individual can receive services from them.

## Keynes and saving

Keynes, in his famous book, *The General Theory of Employment, Interest and Money*, defines saving as the excess of income over expenditure on consumption. And expenditure on consumption during any period is defined as the value of goods sold to consumers during that period. Investment is defined as the value of the current output that is not consumed and therefore equals saving.

The Keynesian savings function is a linear with a constant marginal propensity to save (MPS) as follows (Keynes (1937), in Du Plessis, 2008):

$$S = a_0 + a_1 Y_g$$

S = gross domestic saving

$a_0$  = the intercept (with  $a_0 < 0$ )

$a_1$  = constant marginal propensity to save (with  $0 < a_1 < 1$ )

$Y_g$  = gross national product

With the result that, as the level of income rises, the average propensity to save (APS) will also increase (Keynes (1937), in Du Plessis, 2008). However, if the intercept  $a_0$  is positive or  $a_1$  is negative then the APS will decrease (Du Plessis, 2008).

The Keynesian definition of saving is supported by the formula that will be applied in this study which is: Saving = Total family income – Total family expenditure and therefore ‘saving rate’ is saving divided by total family income, multiplied by one hundred (Hoos, 2010).

The Keynesian motives for saving are as follows:

- I. To build up a reserve against unforeseen circumstances

- II. To provide for anticipated future relationship between income and the needs of the individual
- III. To receive interest and capital appreciation
- IV. To enjoy a gradually-increasing level of expenditure
- V. To enjoy a sense of independence and the power to do things, though without a clear idea or definite intention of specific action
- VI. To secure a 'masse de manoeuvre' to carry out speculative or business projects
- VII. To bequeath a fortune
- VIII. To satisfy pure greed, i.e. unreasonable but insistent inhibitions against acts of expenditure as such (avarice)

The above list does not differ from the saving motives set out by Modigliani, except Keynes provides an extended and more comprehensive list.

### **South Africans do not save**

Keynes suggests a linear relationship between income and saving (Keynes, 1936) which contradicts the current state in this country, which displays a 'buy now pay later' mentality (Cronje, 2010). South Africans have a culture of debt rather than one of saving even though the pay scales for the middle class are improving. The table in Figure 4 below shows that, except for Quarter 2, South Africa saw a negative net saving rate in 2010.

**Figure 4: Households and non-profit institutions serving households**

R millions

	2009				2010				2011	
	Q2	Q3	Q4	2009	Q1	Q2	Q3	Q4	2010	Q1
Compensation of employees <sup>2</sup> ..... (6240K)	258 830	271 384	298 066	1 081 403	280 599	288 118	302 850	324 129	1 195 696	308 870
Disposable income <sup>3</sup> ..... (6246K)	374 199	369 472	390 505	1 451 715	371 702	396 819	380 720	422 107	1 571 348	402 279
Net saving <sup>3</sup> ..... (6200K)	16 938	6 832	2 756	-4 374	-2 084	9 873	-11 475	-386	-4 072	-5 434
<b>Seasonally adjusted annualised rates</b>										
Compensation of employees <sup>2</sup> ..... (6240L)	1 049 135	1 092 303	1 149 860	1 081 403	1 139 180	1 163 189	1 224 783	1 255 632	1 195 696	1 253 410
Disposable income <sup>3</sup> ..... (6246L)	1 430 722	1 459 430	1 490 766	1 451 715	1 535 924	1 552 671	1 574 761	1 622 036	1 571 348	1 672 087
Net saving <sup>3</sup> ..... (6200L)	-5 452	-2 767	-1 981	-4 374	-2 629	-4 002	-5 079	-4 578	-4 072	-3 902

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1. The data in this table refer to private households (including pension and provident funds and long-term insurance funds), non-incorporated business enterprises and private non-profit institutions (e.g. churches, welfare organisations and sport clubs) that render social and community services to households.
2. After adjustment for net compensation paid to non-residents.
3. Gross saving after consumption of fixed capital and inventory valuation adjustment.

(Source: Reserve Bank-Quarterly Bulletin, June 2011)

Debt drives consumption upwards, resulting in low saving levels (Cronje, 2010); this will have a serious long-term impact. It can be argued that a debt-driven economy is not sustainable. However, debt can also be used in a positive way, for example to create new business. Borrowers appear to underestimate the amount by which their interest rates can change (Bucks & Pence, 2006), increasing vulnerability during economically uncertain times (Manuel, 2008). This can serve as evidence to suggest that people are financially illiterate, as they cannot project the cost of credit in the long run. People also do not seem to understand what drives interest rates up, hence their inability to predict the interest rate movement before accepting credit.

People often find that they are forced into relative poverty immediately after retirement as a result of large consumption decline at the onset of retirement, relative to other pre-retired households (Hurst, 2006). Previous researchers have found that one out of three respondents have given no thought to retirement, even when they are only five-to-ten years away from retirement (Lusardi, 2006). People will live a decade, even two, after retirement and, if not well planned, these decades can be financially harsh.

However, even in sophisticated economies such as the USA, it is evident that most people will struggle financially post retirement.

### **Financial literacy, saving behaviour and its impact**

Previous researchers postulate that individuals are in a position to decide their long-term financial position; in fact individuals are increasingly in charge of their own financial security after retirement (Lusardi, 2008), which could be a challenge especially in African countries where illiteracy rates are very high. High illiteracy rates compromise the ability of those individuals to make well-informed saving decisions (Lusardi, 2008). Even in large economies such as the USA, citizens have limited investment knowledge, (Brown, Ivkovic, Smith, & Weisbenner, 2006). One would expect this problem to be even more serious in developing economies, especially where credit is readily available.

There is a need to investigate people's knowledge of basic financial concepts, such as the working of interest rates (simple and compound), the difference between nominal and real values and the basics of risk diversification. Previous researchers have found that a lack of financial knowledge is the reason for people's inability to save and secure a comfortable retirement (Lusardi, 2008).

Lusardi (2008) has concluded that ignorance about financial concepts is associated with a lack of retirement planning and a lack of wealth creation.

The situation in South Africa is complicated by additional factors such as culture, which could play a role in retirement planning. There is a need to acknowledge that many financial products are complex and difficult to understand and making the best choices takes knowledge, intelligence, and skill (Agarwal, Driscoll, Gabaix, & Laibson, 2007). Therefore, it is difficult for people who do not know much about money to plan their long-term investment strategy.

### **Planning, budgeting and wealth creation**

Lusardi (2008) argues that people who lack information have poor plans or no plans at all, and that people who plan and commit themselves to those plans are likely to accumulate more wealth than those that do not plan or budget.

The budgeting process requires basic arithmetic, as well as the highest level of discipline. As suggest by Clark and D'Ambrosio (2008), individuals must develop a lifetime plan based on two retirement goals: the age at which they will stop working; and the level of desired income during retirement. This plan can be used as a guide. In fact, a budget is to saving as a business plan is to a business. However, lack of knowledge and procrastination are usually prohibitive (Laibson, 1996). Unfortunately, it is a basic principle, as found by other authors, that financial independence can only be attained through rigorous planning and commitment to such a plan (Lusardi, 2008).

### **Dependency ratio**

The dependency ratio is measured as the percentage of a population that is dependent on the working population. Dependents include both children and

old-age populations. The United Nations defines the dependency ratio as the sum of the population aged 0-14 and aged 65+, compared to the working population aged between 15 and 64. All ratios are presented as the number of dependants per 100 persons of working age (15-64). Therefore, if the total dependency ratio is 50, it means there are 50 dependents (both children and the elderly) for every 100 working persons (Agrawal, 2011).

The effects of the dependency ratio are as follows (Hoos, 2010):

- The more young dependents in a household, the less money will be saved;
- The more elderly in a household, the less money will be saved.

Black South Africans are faced with a high dependency ratio (Roberts, 2000), which may hinder the country's saving rate (Horioka & Wan, 2007). The importance of the research done by Roberts in 2000 and its findings is that the middle class in question are people whose sisters, brothers, mothers, fathers, wives, husbands and extended family members were studied.

There is enough evidence to suggest a high fertility rate among Black women, at about 4.6 children per female, even though this figure is in decline (Kaufman, 1997). This rate has serious implications for education and the distribution of resources between children, with older children having to work to support their younger siblings through school. This results in the educated sibling eventually having to repay the 'loan' by taking care of the older children, eroding the available money for saving. This can be argued as investment, but who should be making this investment?

People, and especially elderly people in Black communities in South Africa, are highly dependent on each other. Parents raise children so that in later stages of

life these children will take care of them. The children end up 'paying a lifetime loan', which is the amount that children have to set aside to take care of their parents. Unfortunately, even after the death of their parents there are still siblings to take care of.

Women live longer than men (Noumbissi & Zuberi, 2001), which could mean that children need to take care of their mothers for longer. This increases the cost of living and therefore erodes the money that could be saved. Other authors have linked a low dependency ratio with an increased saving rate (Horioka & Wan, 2007). In South Africa, it seems the middle class is burdened by a high dependency ratio, finding it very difficult to save for the future.

### **The seductive 'now' moment**

Individuals prefer gratification in the present discretely more than consumption in the momentarily delayed future (Harris & Laibson, 2001). This is not surprising considering that the instantaneous-gratification model is dynamically inconsistent (Harris & Laibson, 2001) and therefore a model which, if followed, results in long-term poverty and short-term wealth. The majority of middle class Black South Africans are urbanised, but they come from rural areas and buying a new vehicle may be their only symbol of new-found wealth.

There is a fundamental tension in humans between seizing available rewards in the present, and being patient for rewards in the future (Laibson in Lambert, 2006). It seems that an expensive vehicle will be preferred today than in the long term, as it will satisfy a present need as well as boost an individual's ego (Lambert, 2006). One can relate this situation to the famous student syndrome, where a student delays studying or doing an assignment but still hopes to get a good mark. The difference is that a student may still pass even if it is with a



poor mark, but in reality, if one uses all future income to finance today's consumption; there is no hope for a better retirement.

Laibson (1996) postulates that people have a tendency to choose earlier, small rewards over later, larger rewards when the earlier reward offers immediate consumption (Laibson (1997) in Pesendorfer, 2006), however Laibson does not deal with social issues that an individual may be facing, but rather takes a view of what an average person may do. In the South African context, this can be observed in terms of people who own cars but do not own houses. People have to deal with egos and, in order to elevate their status, they engage in expensive, debt-financed lifestyles.

The hyperbolic function (HF) shows that discount functions are generalised hyperbolas in that there is a conflict between today's preferences and the preferences which will be held in future (Laibson, 1996).

While the LCH assumes that people are rational enough to plan for future consumption, the HF shows that people are rather irrational in their decision-making. Individuals deviate from a standard model and prefer short-term consumption (DellaVigna, 2009).

The most important question to ask is what kind of information people use to make decisions, since these decisions seem to be time-inconsistent. People tend to behave in terms of the rewards they get (Levitt & List (2007) in DellaVigna, 2009) which suggests that the society in which we live does not reward long-term saving. DellaVigna (2009) asserts that individuals deviate from a standard model in three respects: (1) nonstandard preferences, (2) nonstandard beliefs; and (3) nonstandard decision making.

Nonstandard preferences are explained in terms of three dimensions, namely: time preferences; risk preferences; and social preferences. Time preferences can be explained in terms of self-control, such as setting a time to start exercising but always postponing (DellaVigna, 2009) or every month planning to save but never actually doing so because of postponements.

The nonstandard belief can be explained in terms of systematic overconfidence and over projection of future achievement, even if not supported by historical performance and/ or a scientific approach (DellaVigna, 2009).

Nonstandard decision making is explained by the use of suboptimal heuristics when choosing from a menu of options (DellaVigna, 2009). One famous menu involves having to do something, 'now or later', and it seems 'later' always wins.

### **Culture and saving**

The Black people in South Africa live in a nuclear family structure with the father being the head, the protector and the provider but with a high level of responsibility to extended family members (Gouveia, 2008). Traditionally, young children were taught how to look after cows and to hunt. These family structures were such that money was not spoken about and was viewed as a source of evil. Love of money is associated with dirtiness (Gouveia, 2008).

An individual's culture can be defined in terms of the generation and geographical location of his birth (Wilson, 2002).

While the current middle class may talk about money and savings, these people are born of parents who, in terms of where they were born and the time at which they were born, grew up not talking about money. This resulted in those parents lacking the practice, language and intelligence to create wealth, leaving them with only the language of spending. It will be of interest to know what Black

people list as the main uses of money. Gouveia (2008) suggests that not talking about money at an early age leads to an individual having a poor or no understanding of banks and banking systems. This suggests that people may go to the bank when they apply for vehicle financing and may associate the bank with the ability to own a car or a house, without conducting a proper risk analysis in terms of the associated cost of credit (Dong, 2008).

The post-1994 South African environment has seen growth in the Black middle class; this group was deprived of opportunities by the previous governmental regime, including the opportunity to spend. Their new-found freedom and growth has led Black people to buy expensive cars, houses, and move to previously White suburbs in their quest to compete with the White man (Moav & Neeman, 2010). They want to elevate their status to that of their White counterparts. White people do not have to show how much they have. By virtue of being White, they are perceived to have, while the Black man uses material to satisfy his ego (Moav & Neeman, 2010). The success of the Black man is still measured by what he can show, and he needs to show something for his acceptance. It is painful to be poor or to be born poor in a country that is so rich in comparison to other economies (Du Bois, 1903), therefore people will try any means available to overcome poverty, including spending large amounts of money on non-durable items, simply to boost their egos.

### **Availability of credit**

The current high levels of credit usage (Dong, 2008) suggest that people are becoming comfortable using credit to finance expenditure (Chicn & De Vancy, 2001). People have become used to credit because it is readily available. Chicn & De Vancy (2001) argues that because of high levels of credit availability,

individuals are no longer risk averse. Credit cards and loans are readily available and highly marketed to improve demand, and this creates a mentality of 'consume now and work tomorrow' (Cronje, 2010). Easy credit drove the property market sky high; unfortunately during the 2008 recession those properties lost equity, in the process eroding people's savings and wealth (Oliver & Shapiro, 1997). People are so comfortable with credit that it is seen as a source of income (Chicn & De Vancy, 2001); money can be transferred from one account to the next, and credit cards can be paid back one day and used the following day. Young people are willing to finance current consumption with future earnings (Chicn & De Vancy, 2001). People do not hesitate to get into debt, as it is an acceptable way of living.

### **Historically disadvantaged**

The Black population in South Africa has been denied opportunities to study and to participate in the main economy (Gouveia, 2008). The implication being that there was little or no accumulation of wealth among Black communities compared to their White counterparts (Oliver & Shapiro, 1997). Black communities do not own land, as only 20% of South African land was reserved for Blacks (Gouveia, 2008). Even though they are the majority, the land reserved for Blacks, as defined above for the purpose of this paper, was in fact less than 20%. The lack of land ownership by Black people creates a situation where they do not have collateral; therefore credit is supposedly expensive for Blacks and they lack power to negotiate.

The Bantu education that was designed for Black people did not assist them because it ensured that they received a substandard education. This is now hurting the country (Gouveia, 2008). The lack of proper education could have

prevented parents from teaching their children how to budget, and develop a financial intelligence, as the parents themselves could not have known how to budget properly (Lusardi, 2008).

### **Emerging Markets**

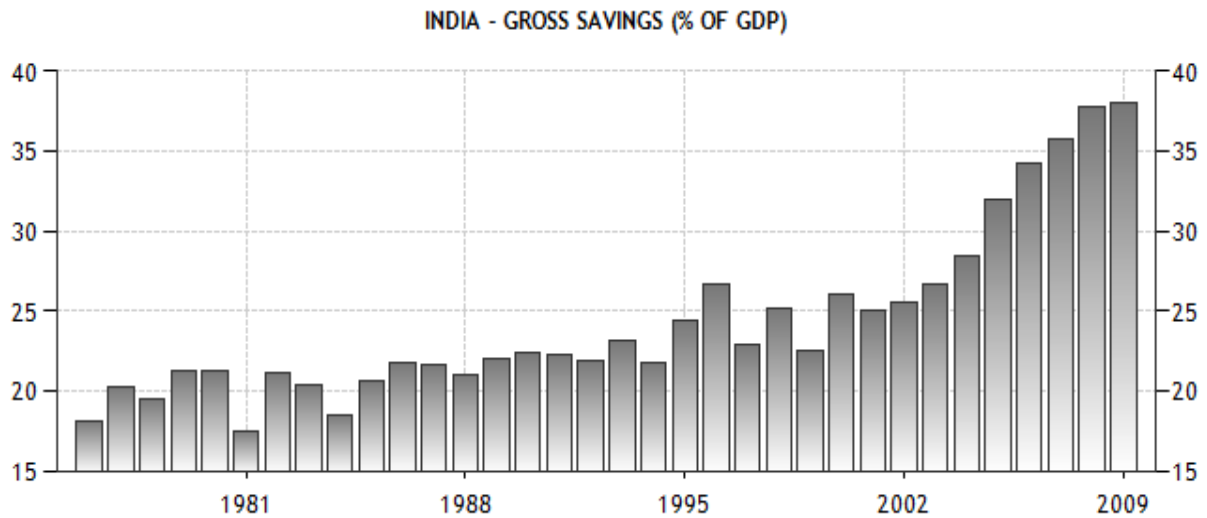
China, Brazil and India are included here because they have the largest economies of the emerging markets and while Brazil's economy is larger than South Africa's, it is South Africa's competitor. In terms of saving rates, China and India are what South Africa dreams of becoming. Collectively, these countries provide saving determinants that may be somewhat common to the South African environment. These countries are success stories as far as economic development is concerned and other authors have linked this with high saving rates. Therefore, they provide a good case study, as well as benchmarking opportunities.

### **Saving rate in India**

The saving rate of Indians is relatively high compared to most developing countries, with the exception of East Asian countries (Muhleisen, 1997). The high saving rate is dominated by an accumulation of physical assets and a high rate of deposits (Das, 2011). As of March 2011, the commercial banks in India held 492 million savings bank accounts, comprising 74% of the total number of deposit accounts (Das, 2011). The majority of such deposits are from the household sector. This is contrary to the position in South Africa where the private sector holds the largest savings.

Figure 5 below shows India's high saving rate.

Figure 5: India Gross Savings



(Source: Tradingeconomics)

The high saving rate is proof of how serious Indians are when it comes to wealth creation and long-term commitments. However, the number of savings accounts alone does not necessarily translate into money saved or invested. It is important to note that Indians measure national savings in terms of Gross Domestic Savings, which includes current transfers from Indian immigrants and net factor income from abroad (Athukorala & Sen, 2003).

India has been characterised by high saving rates across the board, and this has been the reason for its meeting domestic demand for capital for investment, as well as capital outflows (Horioka & Hagiwara, 2010).

The main reason for India's high saving rate is the high gross domestic product (GDP), or high growth that results in high saving. These high savings continue to provide a source of capital for further economic development (Horioka & Hagiwara, 2010).

Other authors argue that the reason for high rates of saving in India is the underdeveloped public pension system, which encourages precautionary saving by households.

The fact that when the public savings go up 1%, private saving declines by 0.25% is worrying because of the nature of their substitutionary relationship and the need for them to be viewed collectively (Loayza & Shankar, 1998).

The growth in personal disposable income is also seen as a very important determinant of savings in India. This is supportive of the concept of low tax rates and interest rates, and will prove difficult to maintain as the age dependency ratio begins to take over.

The population structure is such that the majority is over the age of 65. This will have a serious, negative impact on the saving rates of the Indian populace.

### **Saving rate in China**

The developing Asian countries have experienced high saving rates and China is not an exception (Muhleisen, 1997), with it having the highest saving rates in the world, beating the average of the east Asian countries (Kraay, 2000).

Saving rates are so high in China that 200 million people (the equivalent to the SADC region) have been lifted out of poverty (Kraay, 2000).

Figure 6 below shows the saving rates of China reported at 55% (as percentage of GDP) in 2008.

Figure 6: Household saving rates in China and USA



(Source: Tradingeconomics)

Previous authors have questioned the reasons for this high saving rate because China contradicts the LCH. China has experienced high growth rates, which explains saving rates, but there has also been an increase in wages (Baldacci, Callegari, Coady, Ding, Kumar, Tommasino & Woo, 2010). According to the LCH, the saving rate should drop as people consume more in anticipation of rising income levels.

Researchers have found that the sex imbalance in China is partly responsible for wealth accumulation in order to compete in marriage market (Wei & Zhang, 2009).

In addition, it is a known fact that China is one of the fastest-growing economies in the world. The high household saving rate has helped the country to internally finance its own growth (Kraay, 2000; Mckinsey Global Institute, 2006). This created a surplus in China's economy, which is now used for foreign investment (Song, Steesletten & Zilibotti, 2011).



However, previous work suggests that the reasons for China's high saving rates are: low old age dependency ratio; low urbanisation; strong economic growth; and a weak social net (Hung & Qian, 2001).

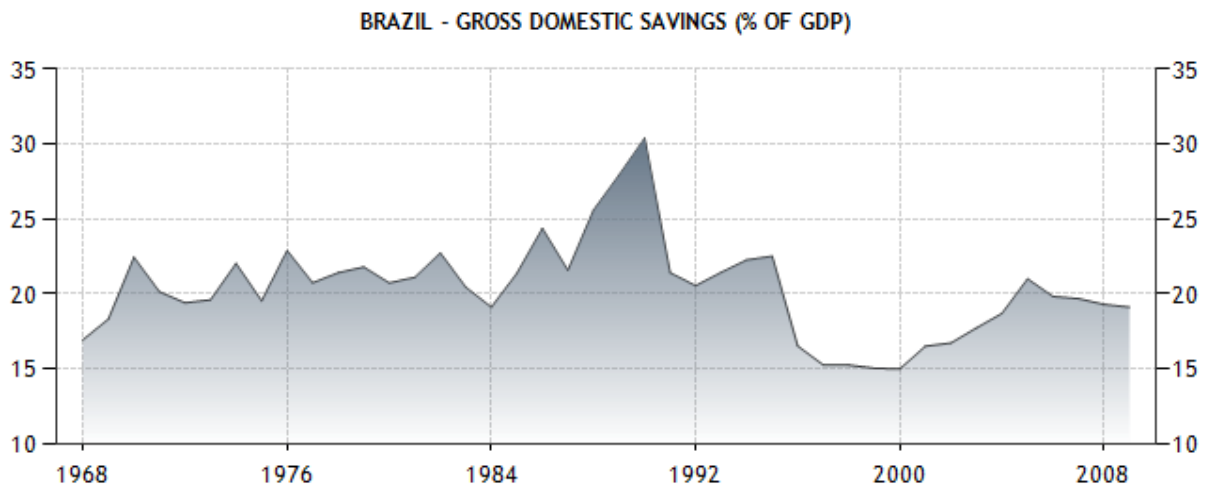
The research suggests that the primary drivers for precautionary saving are the high cost of education, poor pension fund systems and uncertainty about future income (Wang & Wen, 2011).

The saving behaviour in China takes a U shape. In other words, young people save for future education and marriage as they prepare themselves for adulthood (Chamon, Liu & Prasad, 2011). Older people are saving for old age and medication and insulate themselves against the lack of a pension fund system.

### **Saving rate in Brazil**

Brazil has a saving rate that is higher than South Africa at 19.10% (figure 7) as reported in 2008 (Tradingeconomics, 2011), but still low compared to China and India. The saving rates in Brazil are threatened partly by factors such as age (see figure 8), a regressive tax system and high lending rates. A regressive tax system taxes the poor at higher rates than the rich. Brazil is one of the fastest-growing economies and its saving rates are not high enough to internally finance investment at reasonable rates (Hausmann, Rodrik & Velosco, 2006).

Figure 7: Household saving rates in China and USA

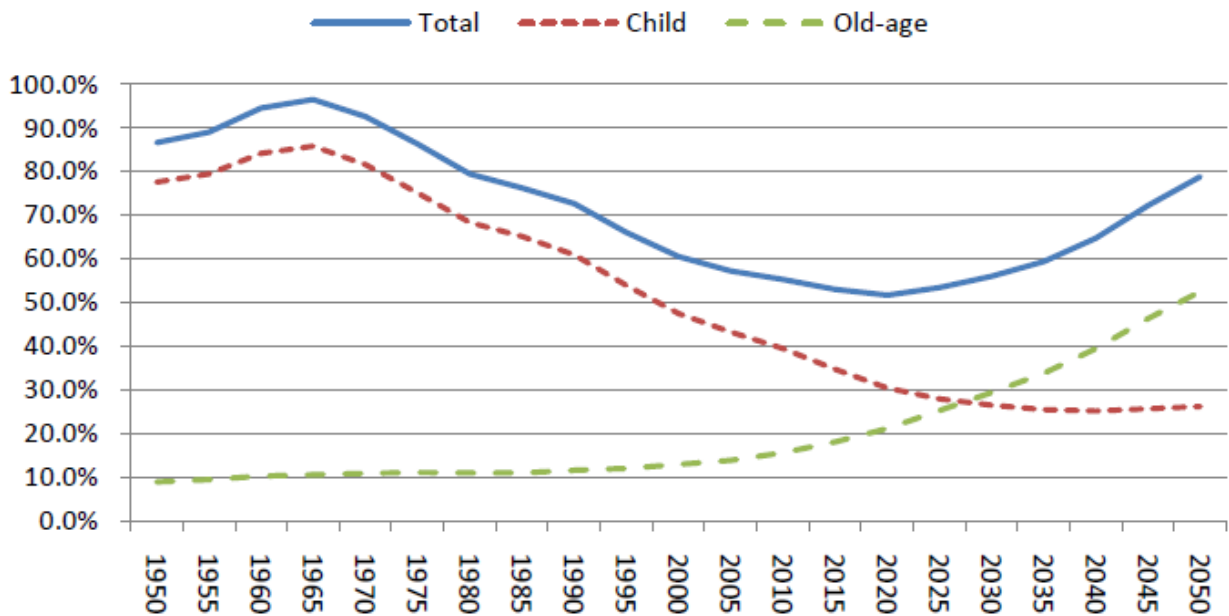


(Source: Tradingeconomics)

Brazil's need to develop economically increases its demand for investment, but there is not enough domestic saving to support it.

Due to an ageing population in Brazil, which increases the dependency ratio, it could see a further drop in public saving. This is because the fraction of the people that are 'prime' savers will decrease and dis-saving will increase as implied by the LCH (Jorgensen, 2011). Figure 8 below shows the decline in young people and an increase in aged people in Brazil between 1950 and 2050. When the number of aged people increases and is combined with children under 14 years, the total dependency ratio increases. An increase in the dependency ratio tends to decrease the saving ratio because it puts pressure on available funds.

**Figure 8: Brazil’s total child and old-age dependency ratio, 1950-2050**



(Source: United Nations Population Division World Prospectus (2008), in Diop, 2011)

Brazil’s regressive tax system reduces the money available for saving through reducing the number of potential savers (Johnson, 2006). Coupled with a high dependency ratio, this makes saving very difficult.

Unfortunately, an insufficient saving rate leads to foreign savings flowing into the country with detrimental effects, which could include importing the inflation of the lending country (Bresser-Pereira & Nakano, 2003).

Insufficient national saving rates are the most serious impediments to the achievement of and sustainability of growth rates in Brazil (Paiva & Jahan, 2003). The country needs to deal with this situation. Some of the challenges to this include the fact that Brazil scores very low in terms of rule of law and control of corruption (Bonelli, 2010). It must be noted that compared to South

Africa, the Brazilian saving rate is high. It is low compared to China and India, but still not high enough for its developmental needs.

## Summary

This chapter provides the theory around why people need to save. It provides the rationale for what makes people want to save, and at the same time, looks more deeply at the possible reasons that make people delay the decision to save.

In China and India it seems that the precautionary motive is a strong driver for saving. China's low dependency ratio also contributes to high saving rates.

India, on the other hand, has a relatively high dependency ratio, yet the saving rate is high. This leaves one with a clear understanding that with an internal locus of control, saving is possible regardless of the family structure.

Brazil brings in a different perspective – one that points to the fact that high tax rates reduce savings and investment because tax reduces on disposable income. Empirical evidence points to the impact of the old-age dependency ratio.

The literature review shows that people will save for different motives but they also need certain enabling conditions. Conditions such as family structure, financial education, taxes, low crime levels, level of income, economic participation, history of the population, and personal discipline all play a role.

### 3. Research questions

The literature review on saving behaviour notes various factors that influence the saving behaviour of individuals. These factors can be classified into the following categories:

- Psychological factors such as instant gratification versus long-term benefit, narrow framing;
- Educational factors such as financial literacy and emotional intelligence; and
- Demographics such as age and gender.

Therefore, the research seeks to provide answers to the following research questions:

1. Is the Black middle class in South Africa financially educated, and to what extent do they save?
2. How does instant gratification manifest itself in South Africa?
3. What is the impact of the dependency ratio in South Africa?
4. What influence does culture have on the saving behaviour of the Black middle class in South Africa?

While there are many financial instruments available on the market, the question remains: do people understand the advantages of saving and do they understand the financial language so as to be interested in and take an active role in saving? Do South Africans understand compound interest and how it can be used to investors' advantage?

The need for instant gratification is one of the reasons why people do not save for retirement (Laibson, 1996). This is why people delay making commitments like stopping drinking alcohol, stopping smoking or starting to exercise (Laibson

1996). It could also be the reason why people procrastinate when it comes to saving.

One of the demographics of our country is the diverse culture and therefore different behaviour across the demographics. The research seeks to understand demographical differences in South Africa.

## 4. Research methodology

### Research design

#### a) *Background*

A literature review was undertaken to understand the underlying factors that impact the saving behaviour of individuals. The literature review does not provide factors that are unique to South Africa, but the research seeks to understand what is unique about this country. It seeks to categorise what constitutes saving behaviour.

The following elements were studied:

Education: Is there a link between educational background and saving behaviour and, if it does exist, does a tertiary qualification, and its nature, have an impact?

Age: The research will seek to determine whether age has an influence on saving behaviour. If ownership of property is considered, it needs to be questioned whether people purchase property as they grow older. The question of age also addresses the issue of dependency, in the sense that older people are likely to have more children than younger people.

Culture: This will seek to establish people's attitudes towards money in relation to when monetary topics were introduced in their lives.

Level of income: This will be used to determine whether a person's capacity to save increases with an increased income.

Gender: Is there a difference in the saving attitudes of the different genders? Previous authors have claimed that women are natural savers (Du Plessis, 2008).

### Qualitative versus quantitative research

When a probability sample is taken, a researcher has the opportunity to make probability-based confidence estimates with various parameters that cannot be made with non-probability samples (Blumberg, 2008, p. 240-250).

However, choosing a probability sampling has several consequences and a researcher has to follow appropriate procedures so that:

- Interviewers or others cannot modify the selections made;
- Only those selected elements from the original sampling frame are included; and
- Substitutions are excluded except as clearly specified and controlled according to predetermined decision rules.

### Questionnaires

Questionnaires were developed and include:

- Classification questions; and
- Structured Target questions.

Classification questions are usually demographic variables that allow participants' answers to be grouped so that patterns are revealed and can be studied.

Target questions address the investigative questions of a specific study. Structured target questions present the participants with a fixed set of choices, also called closed-ended questions.



## Description of research methodology

### *b) Data collection*

Questionnaires were sent to respondents and collected for analysis. There were no one on one interviews conducted with the target sample.

### *c) Scaling defined*

Scaling is a procedure for the assignment of numbers (or other symbols) to a property of objects in order to impart some of the characteristics of numbers to the properties in question (Blumberg, 2008, p. 460).

### **Response form**

There are three types of measurement scales – rating, ranking and categorisation, and for the purpose of this research, rating and categorisation were used.

A rating scale is used when participants score an object or indicate without making a direct comparison to another object or attitude (Blumberg, 2008, p. 461).

Categorisation asks participants to put themselves or property indicants in groups or categories (Blumberg, 2008, p. 461). In this case the categories were in the form of age, education, gender and monthly income brackets.

### **Response method**

Questioning is a widely-used stimulus for measuring concepts and constructs (Blumberg, 2008, p. 463). A manager, for example, may be asked his or her views concerning an employee. His response could be, 'good mechanist', or 'trouble maker', or 'reliable' (Blumberg, 2008, p. 463). These answers, because they represent such different frames of reference for evaluating the worker, and

thus lack comparability, would be of limited value to the researcher (Blumberg, 2008, p. 463).

Two approaches improve the usefulness of such replies (Blumberg, 2008, p. 463). First, various properties may be separated and the participant asked to judge each specific facet (Blumberg, 2008, p. 463). The researcher substitutes several distinct questions for a single one. Second, the researcher can replace the free-response reply with structuring devices. To quantify dimensions that are essentially qualitative, ranking or rating scales are used (Blumberg, 2008, p. 463).

### **Rating scale**

Rating scales were used to judge properties of objects without reference to other similar objects (Blumberg, 2008, p. 463). These ratings are 'strongly agree' or 'strongly disagree', or any other classification.

### **Likert scale**

The Likert scale is the most frequently-used variation on the summated rating scale (Blumberg, 2008, p. 466). The summated scale consists of statements that express either a favourable or unfavourable attitude towards the object of interest (Blumberg, 2008, p. 466). The participant is asked to agree or disagree with each statement. Each response is given a numerical score to reflect its degree of attitudinal favourableness and the score may be totalled to measure the participant's attitude (Blumberg, 2008, p. 466).

The Likert scale helps to compare one person's score with a distribution of scores from a well-defined sample group (Blumberg, 2008, p. 466).

## Numerical Scale

The numerical scale has equal intervals that separate their numeric scale points (Blumberg, 2008, p. 467). The verbal anchors serve as the labels for the extreme points. Numerical scales are often five-point scales (Blumberg, 2008, p. 467). The participant writes a number from the scale next to each item (Blumberg, 2008, p. 467).

## Why not personal interviews?

The greatest value lies in the depth of information and detail that can be secured (Blumberg, 2008, p. 281). The interviewer can also do more to improve the quality of the information received than with another method. The interviewer can note conditions of the interview, probe with additional questions and gather supplemental information through observation (Blumberg, 2008, p. 281).

However, personal interviews will not be conducted. Only questionnaires will be used for this research, due to lack of time and the fact that the study is quantitative and will avoid mixing quantitative and qualitative. The researcher will facilitate the completion of questionnaires without influencing the outcome.

## Research limitations

- Research only covered Gauteng, Mpumalanga, Limpopo and North West Province, and excluded the other five provinces. It can be argued that the inclusion of Gauteng compensates for this as it is one of the most diverse provinces in terms of ethnicity and culture.
- Qualitative research provides robust analysis, but its weakest point is that it is not explorative and therefore does not provide unique findings.

- The field data collectors may not have clear enough understanding of the research to be able to collect data properly and therefore information may be biased. To mitigate this, the researcher was the main collector of the data.
- From a convenience point of view, the data collector may choose individuals that look friendly. This could compromise the quality of the research and reduce randomisation.
- It will be very difficult to tell who is middle class is and who is not. The definition is wide enough to be representative.

## Consistency matrix

### The determinants of household saving: The Black South African perspective

Research questions	Literature review	Data collection tool
<b>Research question 1</b> Is the Black middle class financially educated, and to what extent are they educated?	Lusardi (2006), Agarwal, Driscoll, Gabaix & Laibson (2007) and Clark & D'Ambrosio (2008)	Questions 1 to 10 and 20 to 21
<b>Research question 2</b> How does instant gratification manifest itself in South Africa?	Laibson (1997) in Pasendorfer (2006), Lambert (2006) and Harris & Laibson (2001)	Questions 11 to 14 and 19 to 26
<b>Research question 3</b> What is the impact of the dependency ratio in South Africa?	Roberts 2000, p. 587), Horioka & Wan (2007) and Hoos (2010)	Questions 34 to 37
<b>Research question 4</b>	Lusardi (2008) and Oliver & Shapiro	Questions 15 to 18, 27 to 28 and 30 to 33

## Questionnaires

(See appendices)

## 5. Results

### Introduction

This chapter presents findings based on the statistical analysis, without linking the facts to the literature review.

The statistical analysis used is mainly descriptive, because the population being studied is not compared with other groups, and the purpose is not to compare or rank in terms of importance but to address four key areas. Also, to find the variables which explain poor savings in the country, particularly in Black communities.

### How and from where was the data sourced?

A total of 242 respondents were found through questionnaires over a period of five days. The data was sourced from four provinces, namely: Gauteng, Mpumalanga, North West Province and Limpopo. It was sourced from respondents in shopping malls, except for 21 respondents that were from mines and Kendal Power station. The shopping malls covered were: Eastgate, Festival Mall (Tembisa), Southgate, Highveld Mall, Nelspruit Mall, Rustenburg Mall and Polokwane Mall.

### Demographics

One of the key factors to be considered is the issue of demographics. This section will address the male: female ratio, education levels, salaries and age.

Males comprise 52.89% of the respondents. The majority of the respondents are between the ages of 18 and 35 and the education level is acceptable, with the majority of the respondents having at least a National Diploma.

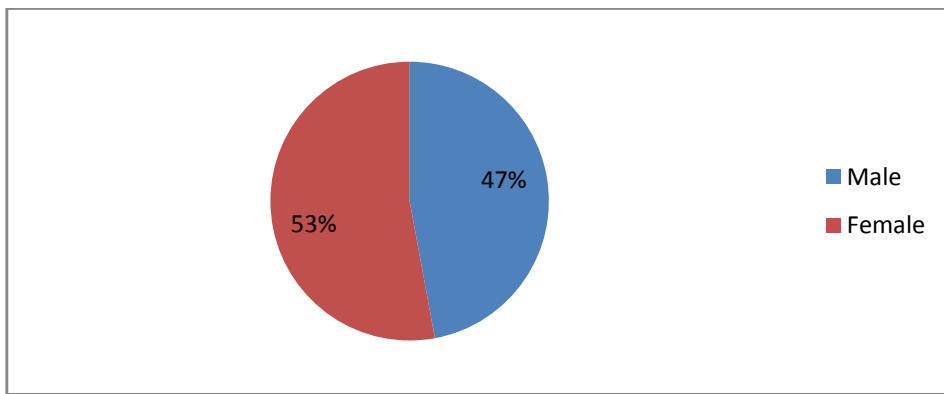
Most respondents work in the field of engineering, while banking is the third most common occupation.

The levels of income are well distributed; most of the people studied work in the engineering field and are employed in engineering-related industries. One of the respondents did not complete the Income section of the questionnaire.

One of the respondents did not respond to the Marital Status question. 84% of the respondents were married.

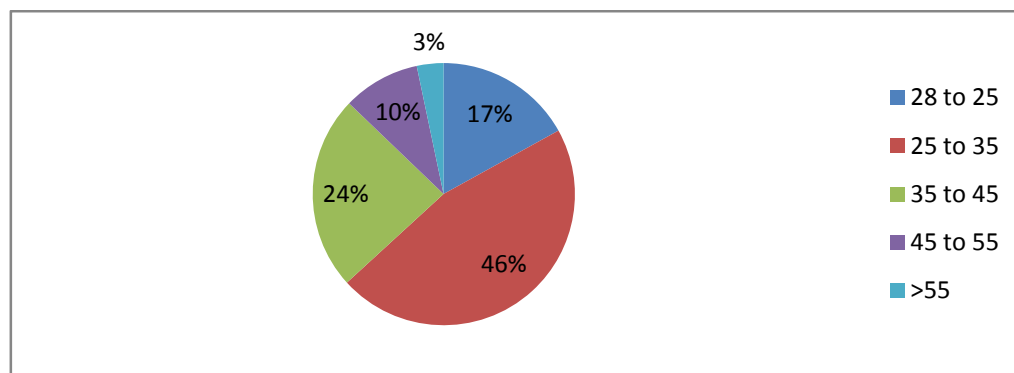
All the respondents answered 'yes' to the questions in the Middle Class section of the questionnaire. Therefore, it can be concluded that all respondents comply with the criteria of the middle class.

**a) Gender**



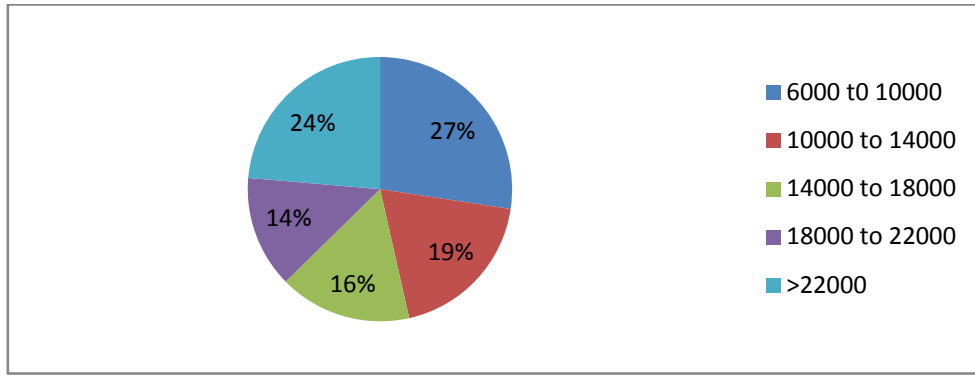
There was a fair distribution across both genders of the respondents; however males dominated with 53%.

**b) Age**



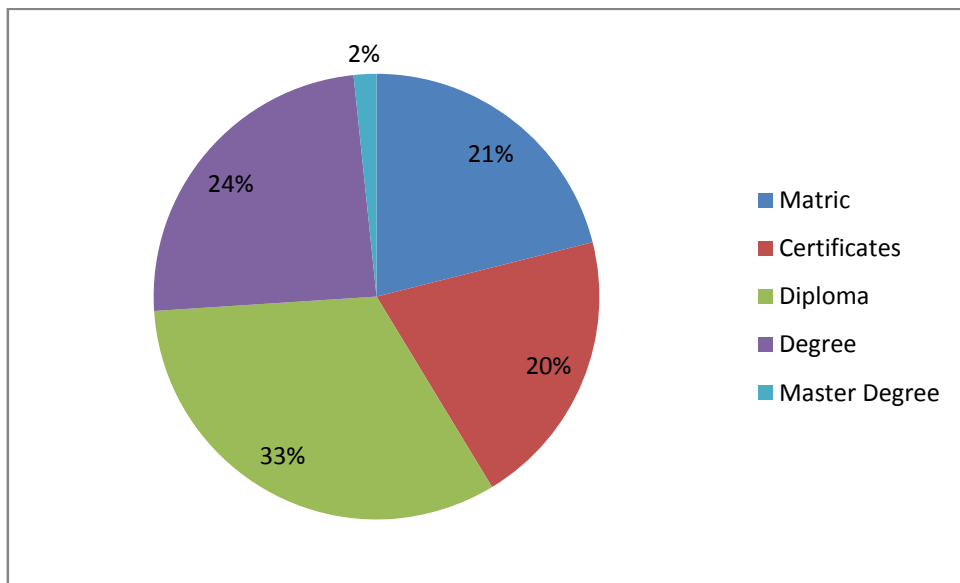
The majority of the respondents were between the ages of 25 and 35, followed by those between 35 and 55. Only 3% of the individuals were above 55 years of age.

**c) Gross income per month**



While many respondents earn between R6 000 and R10 000, many earn over R14 000. Money does not seem to be an issue; in fact, more than 24% of the respondents earn above R22 000 per month.

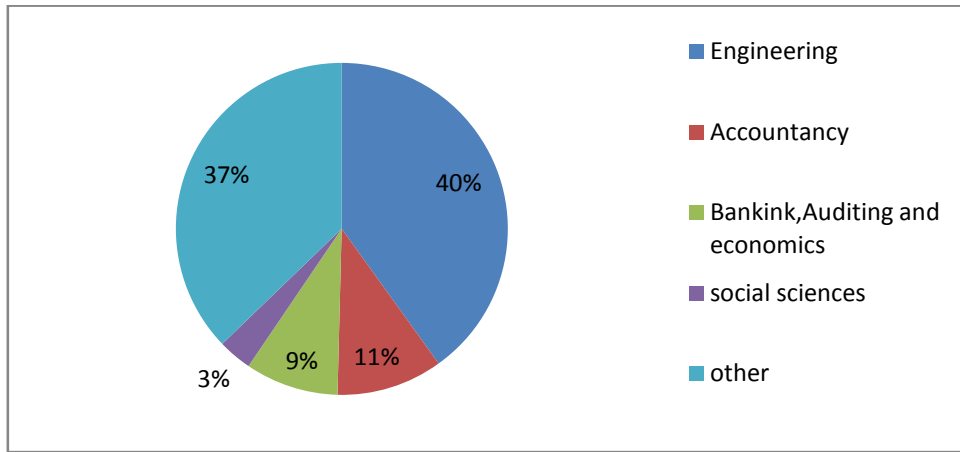
**d) Qualifications**



There are very few respondents with a Master’s Degree, but in general they are educated, with 20% having trade certificates, 33% with diplomas and 24% with University degrees.

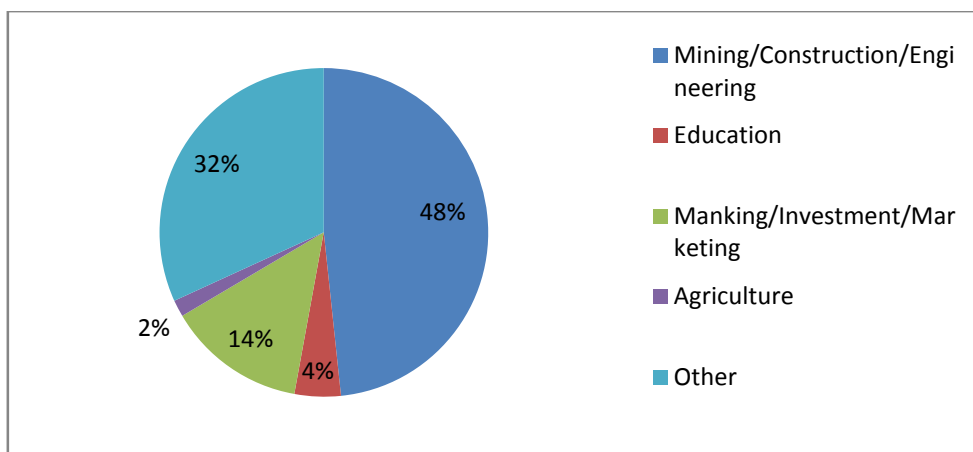


**e) Field of Study**



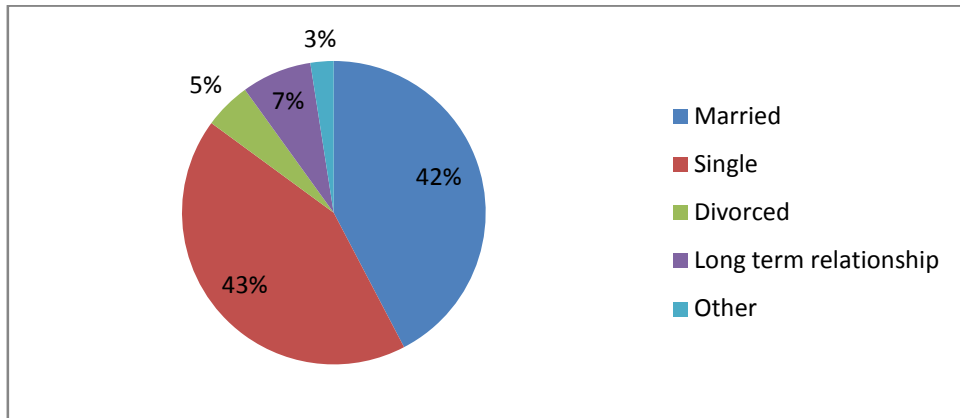
Most of the respondents are in the engineering field, while some are accountants and bankers.

**f) Industry**



The combination of Mining, Construction and General Engineering industries dominated at 48%, while the education-related industry had few respondents at 4%.

**g) Marital Status**

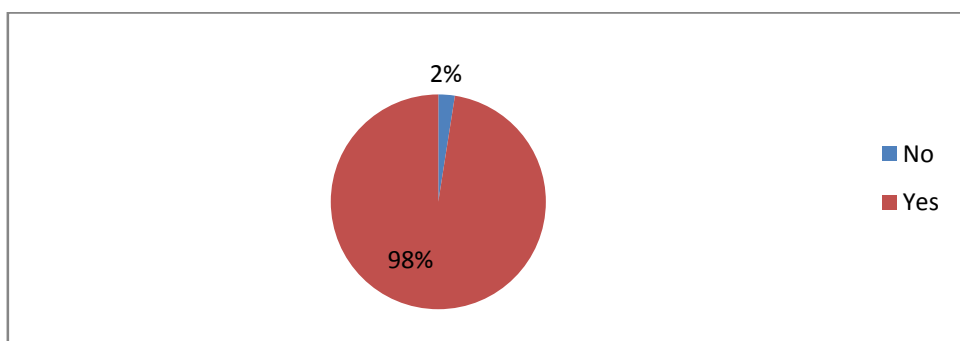


There is an equal amount of married and single individuals in the sample. There are only 5% divorced individuals.

**h) Middle class definition**

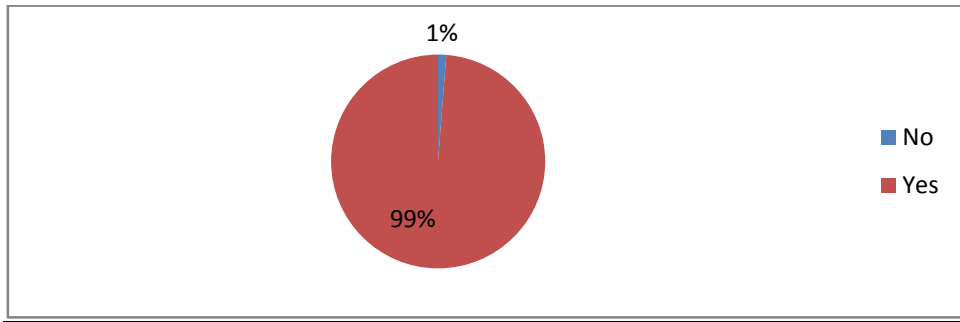
Below are the results, which determine whether the sample is middle class or not. By just looking, one could not tell who falls into the definition of middle class and who does not. Using LSM criteria, together with the income, there were eight respondents who did not qualify as middle class, leaving only 234 respondents qualifying. However, these eight people qualify in terms of their gross income; hence they were included in the study.

**I. Access to flushing toilets**



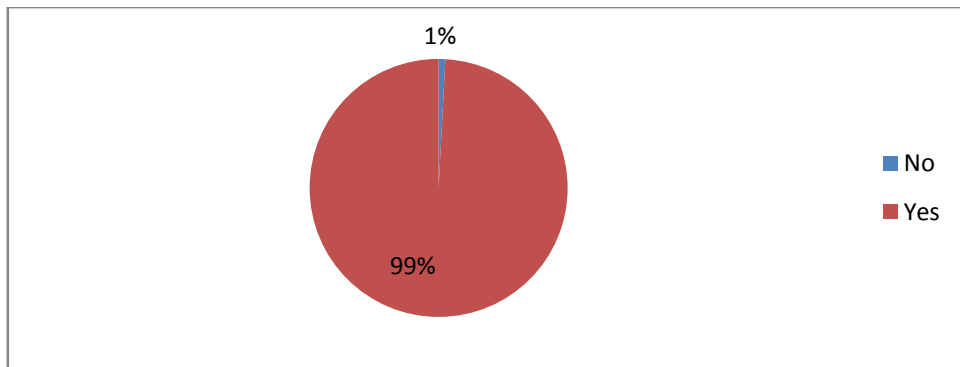
Only 2% of the respondents do not have access to flushing toilets.

## II. Access to electricity



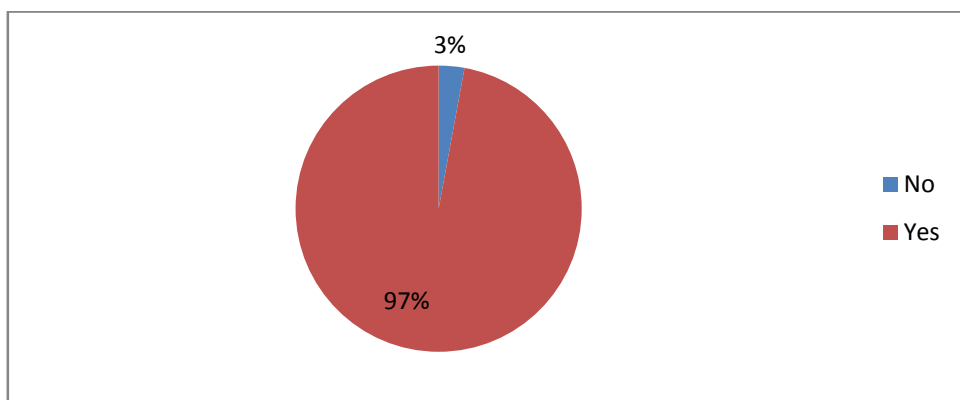
One percent of the respondents do not have access to electricity; 99% have access.

## III. Access to cell phone



One percent of the respondents do not have access to a cell phone.

## IV. Electricity as main source for cooking



Three percent of the respondents do not use electricity as a main source for cooking.

## Research questions

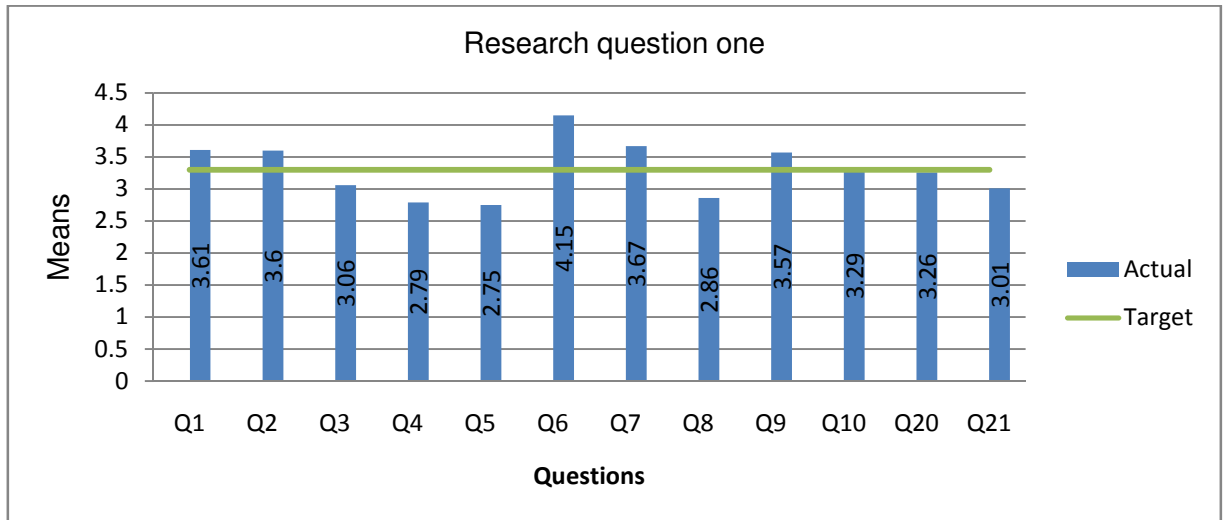
### Research question one

- Is the Black middle class financially educated, and to what extent do they save?

Ten questions were asked to test whether South Africans are financially educated enough to be able to understand financial dynamics. A reliability test was conducted. The Cronbach coefficient alpha is greater than 0.6, and is therefore accepted. The actual standardized Coefficient is 0.77.

According to Academic Technology Services Cronbach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. A "high" value of alpha is often used (along with substantive arguments and possibly other statistical measures) as evidence that the items measure an underlying (or latent) construct. However, a high alpha does not imply that the measure is one-dimensional. If, in addition to measuring internal consistency, you wish to provide evidence that the scale in question is one-dimensional, additional analyses can be performed. Exploratory factor analysis is one method of checking dimensionality. Technically speaking, Cronbach's alpha is not a statistical test - it is a coefficient of reliability (or consistency).

Descriptive statistic one



The majority of the questions were under 3.33, meaning that the respondents were not financially educated.

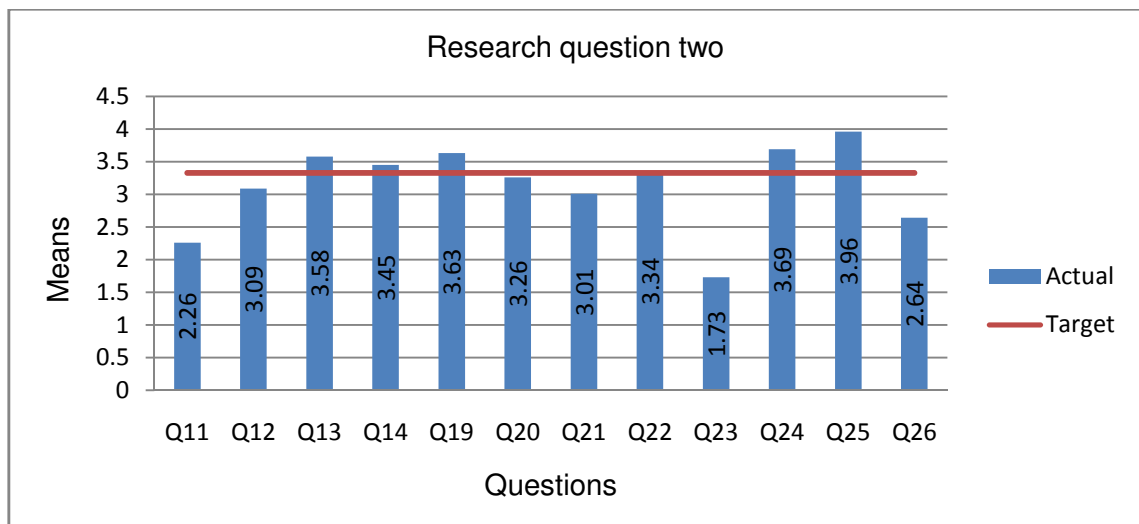
Research question two

- How does instant gratification manifest itself in South Africa?

The Cronbach coefficient alpha is 0.57, which is less than 0.6 and therefore not acceptable.

After leaving out questions 23, 24 and 26 the Chronbach alpha reliability coefficient improved to 0.63.

Descriptive statistic two

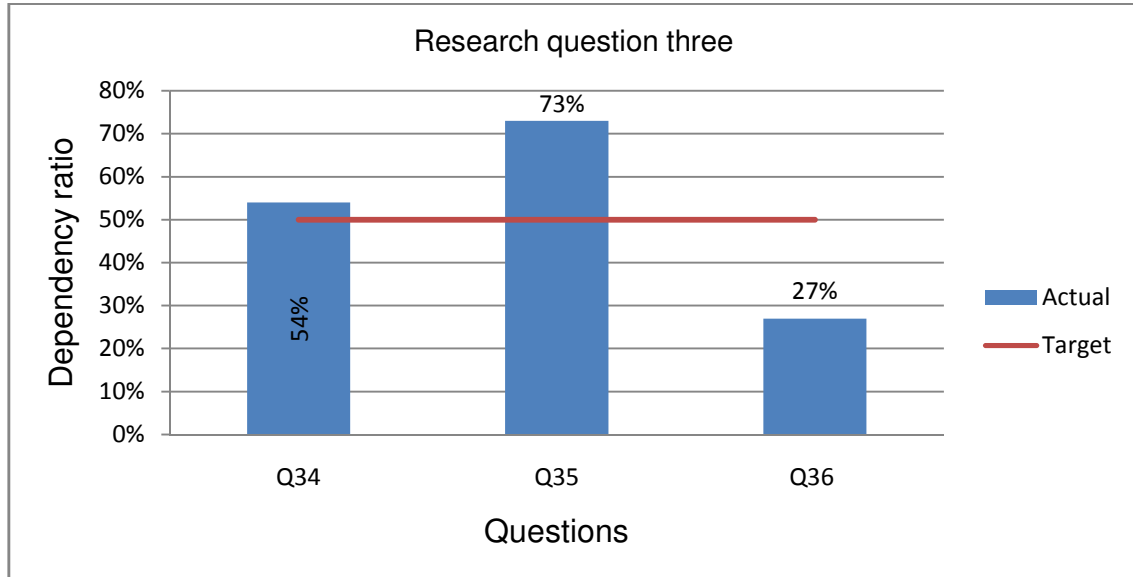


### Research question three

- What is the impact of dependency ratio in South Africa?

These items have a Cronbach alpha reliability coefficient of 0.70

### Descriptive statistic three



The answers to questions 34 and 35 revealed a high dependency ratio, while the answers to question 36 suggest a low dependency ratio. Question 36 relates to the number of children of the respondents. The majority of the respondents were between 25 and 35 years of age, so the dependency ratio could still grow, but even if it does not, questions 34 and 35, which are about number of dependents and siblings respectively, are strong enough to conclude that there is a high dependency ratio.

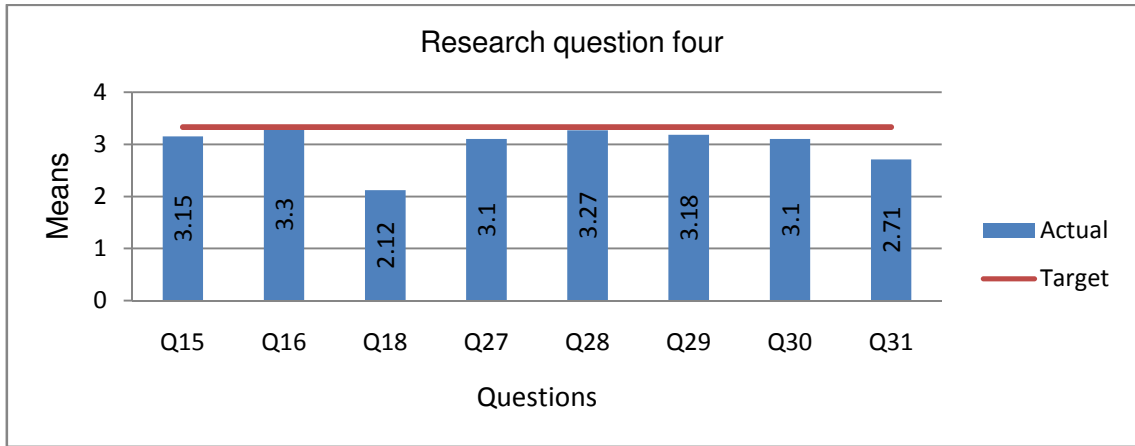
### Research question four

- What influence does culture have on the saving behaviour of the Black middle class in South Africa?

This group of has a Coefficient Alpha of 0.26. Question 18 seemed to be the problem and. was therefore was removed; however the resulting Chronbach Alpha did not improve at 0.33. Question 18 failed, probably because of the way

in which it was asked. Instead of scaling it should have been a ‘yes’ or ‘no’ question.

Descriptive statistic four



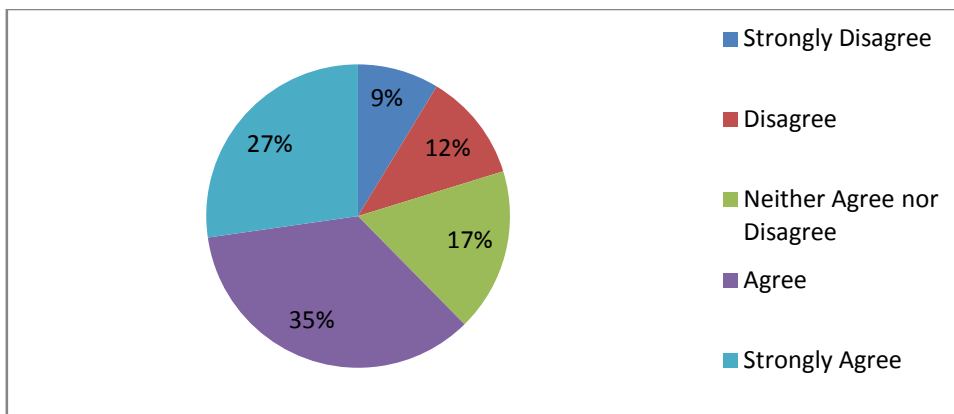
All questions had a mean of less than 3.33.

**Questionnaire analysis**

Below is the descriptive statistic of each of the questions, showing frequencies, where the author will analyse the answers to each question and see how they link with the other answers.

Question 1

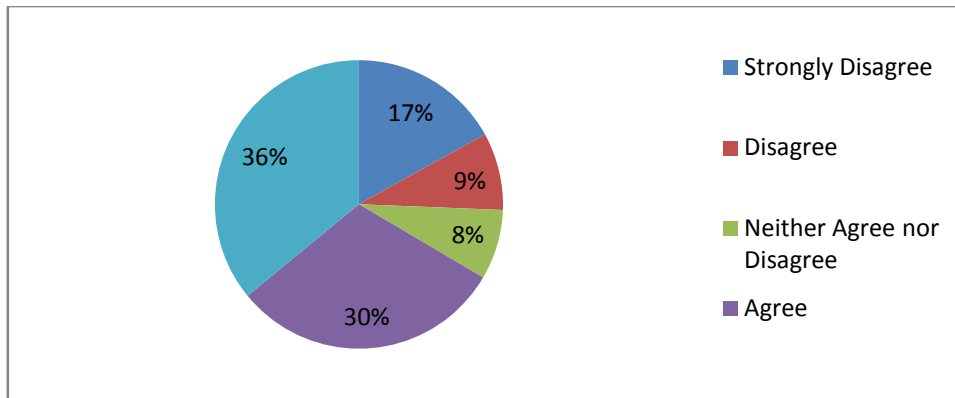
I know how much I spent last week.



More than 50% know how much they spend, 21% do not know how much they spend and 17% neither know nor not. Only 27% were strongly confident about their knowledge of how much they spend.

Question 2

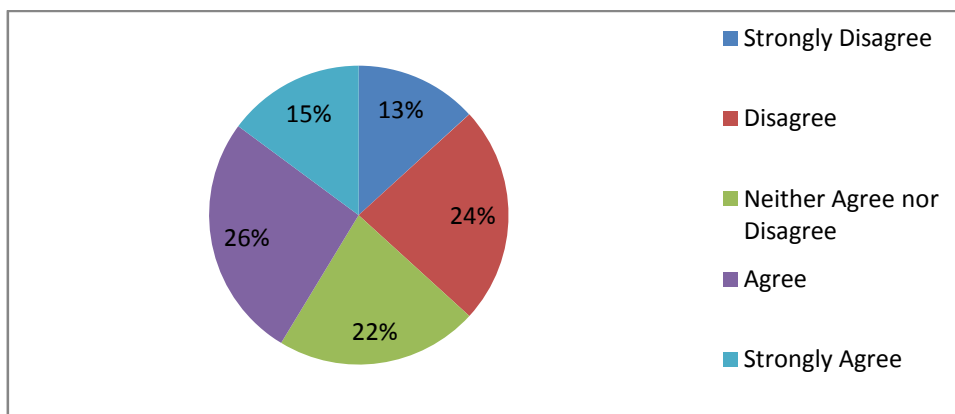
I know how much a litre of petrol costs.



The majority of respondents know how much petrol costs, but there are still more people who do not.

Question 3

I am happy with my budgeting skills.

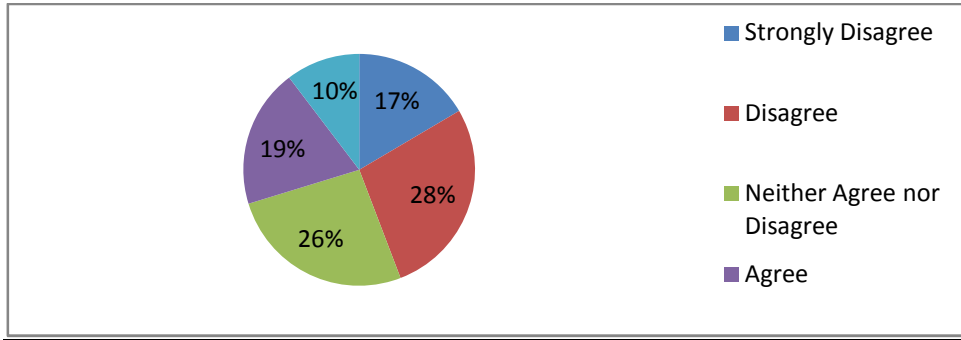


37% of the respondents are not happy with their budgeting skills, while 22% are not sure of themselves.

Question 4

I stick to my budget and reconcile every month.

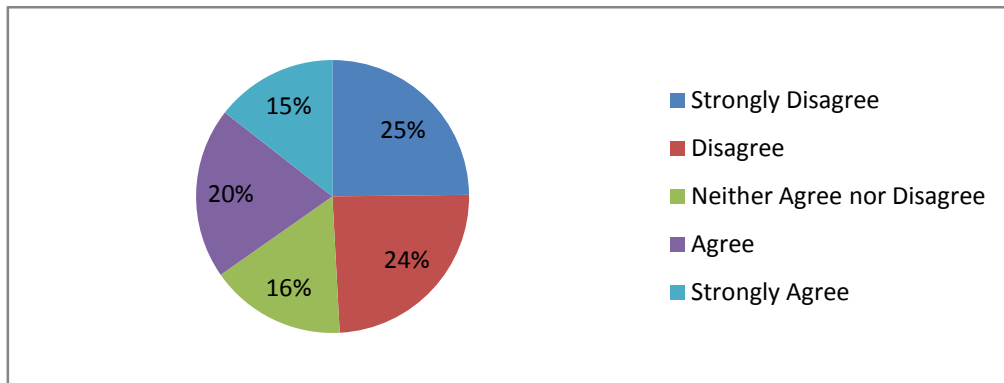




45% of the respondents confirmed that they do not follow or stick to their budget, nor reconcile it monthly.

**Question 5**

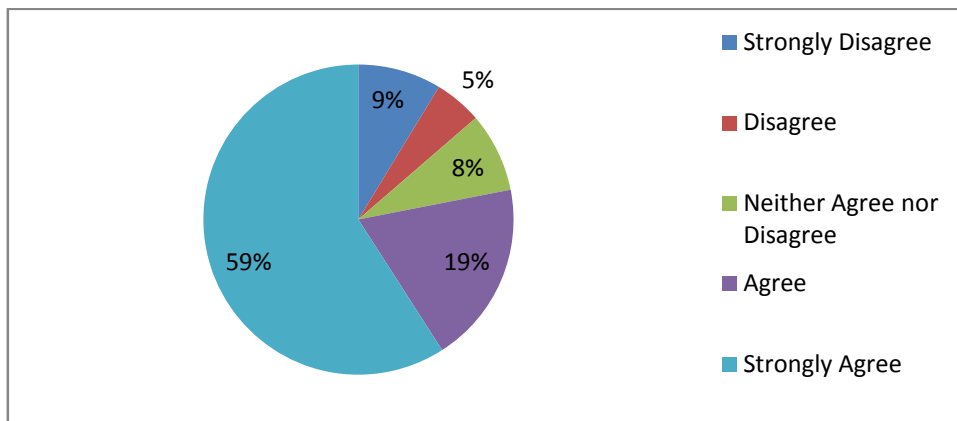
I know what today's exchange rate is.



Only 35% know what the exchange rate is.

**Question 6**

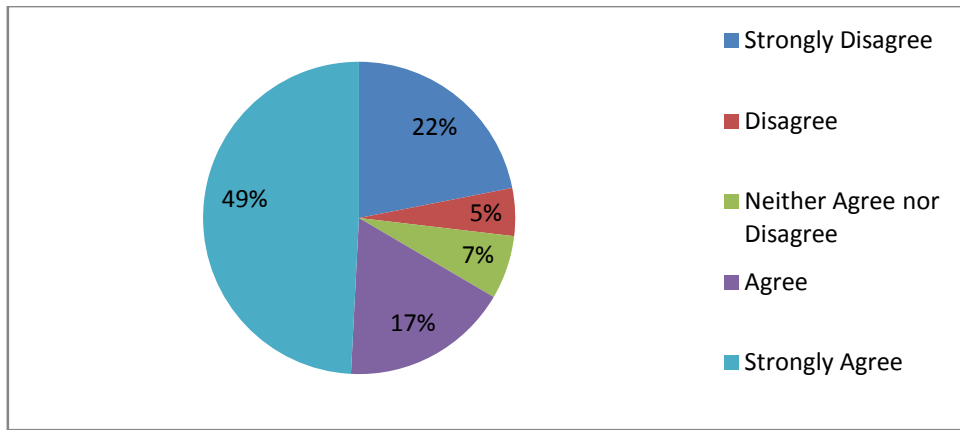
I know how much I pay on my house/rent.



The majority of people, at 59%, know what they spend on their rent or mortgage bond. To this can be added another 19%, giving a total of 78% people who know what they are paying for their rent or mortgage bond.

Question 7

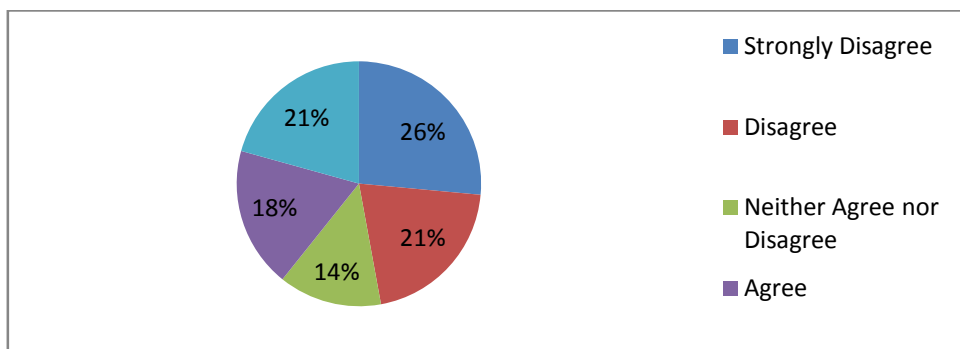
I know how much I pay on my car instalment.



Motor vehicle repayments do not enjoy the same status as bond repayments or rental instalments. Only 66% know what they pay on their cars compared to 78% of respondents who know how much they pay on their rent and house bond.

Question 8

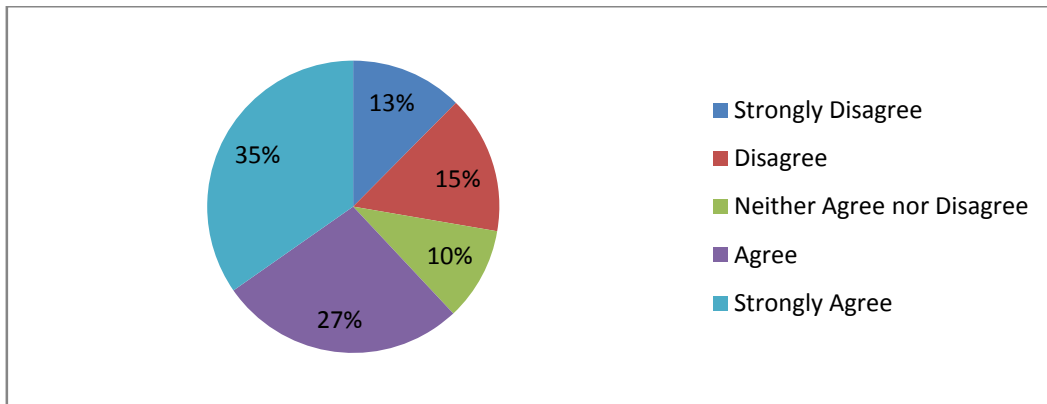
I know what compound interest rate is.



Only 39% are sure about their knowledge of the compound interest; the majority do not know.

**Question 9**

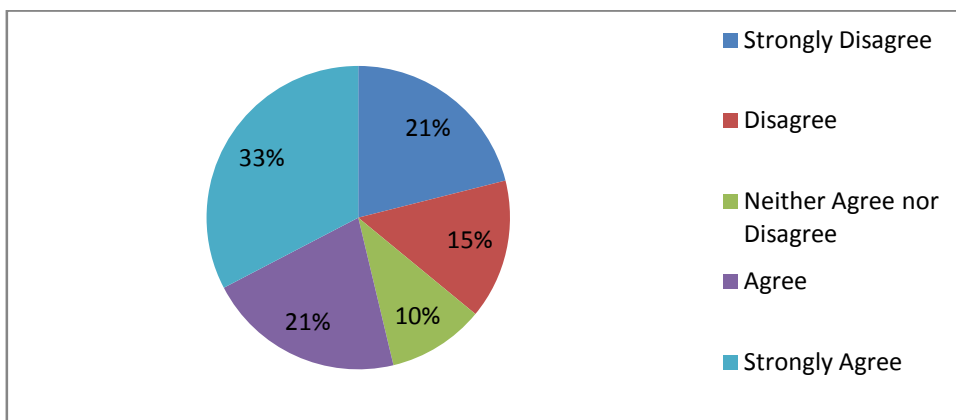
I know the bank monthly charges on my cheque and/or savings account.



Of all the respondents, 63% know what their bank charges are, but it is worrying that 28% do not, while 10% are unsure.

**Question 10**

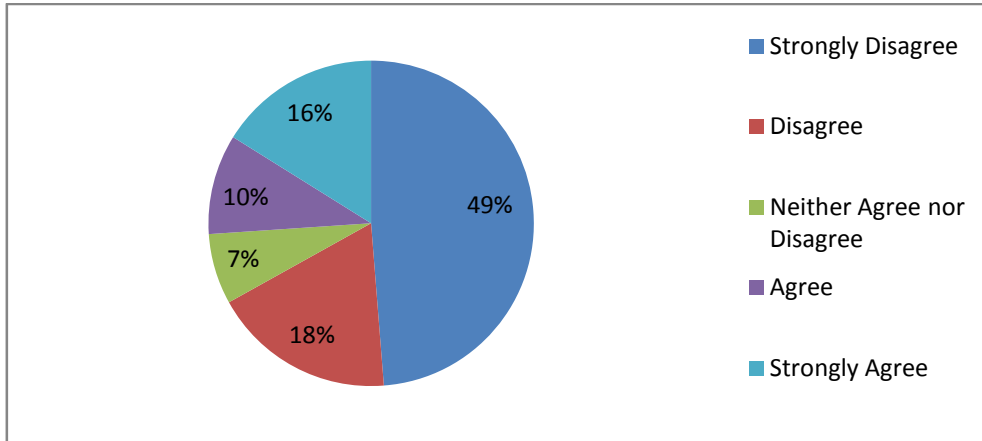
I know the interest rate I am paying on my house repayments.



About 55% of the respondents know the rate of interest they pay on their mortgage bonds, but 36% do not know, while 10% are unsure.

**Question 11**

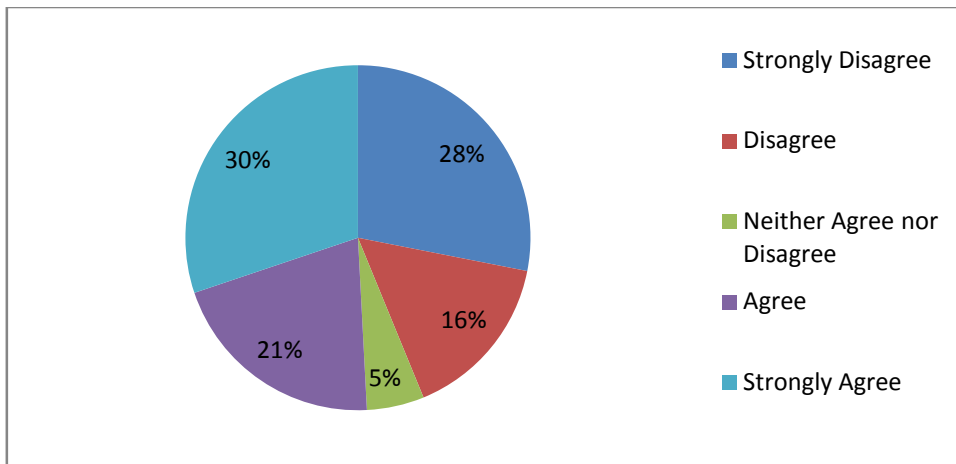
I own shares.



Share ownership remains a challenge as 67% of the respondents fall into the categories of ‘disagree’ and ‘strongly disagree’. However, it is heartening that 16% are confident about direct ownership of shares and 10% ‘agree’.

**Question 12**

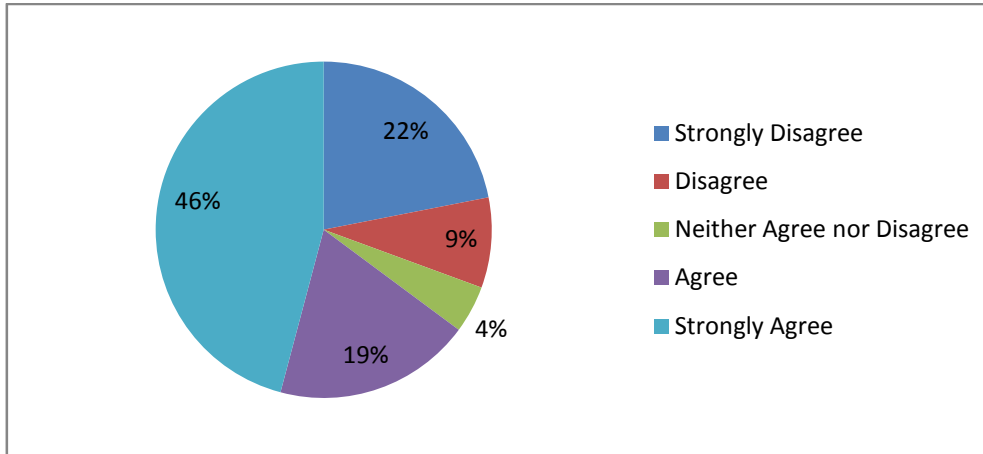
I have an investment account.



Including those who are not sure, 49% of the respondents do not have investment accounts and 28% strongly confirmed that they don’t have investment accounts.

**Question 13**

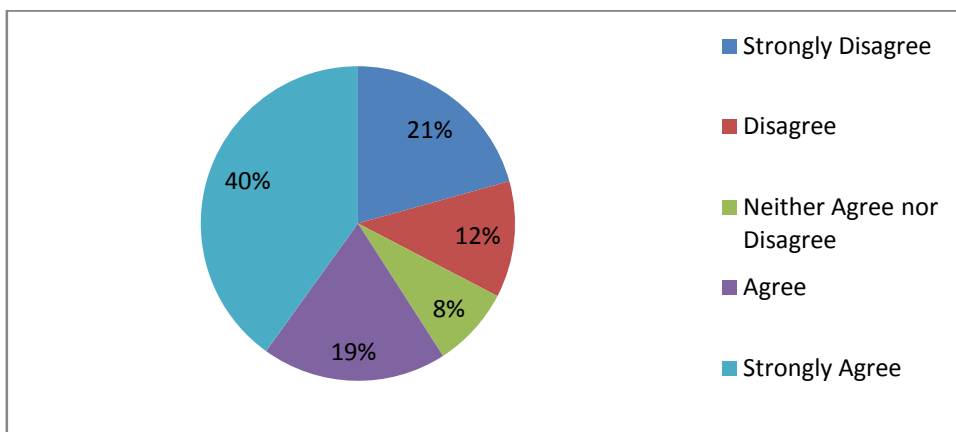
I have life cover.



The majority of the respondents have life cover; 46% strongly agreed to having life cover, while 19% agreed.

**Question 14**

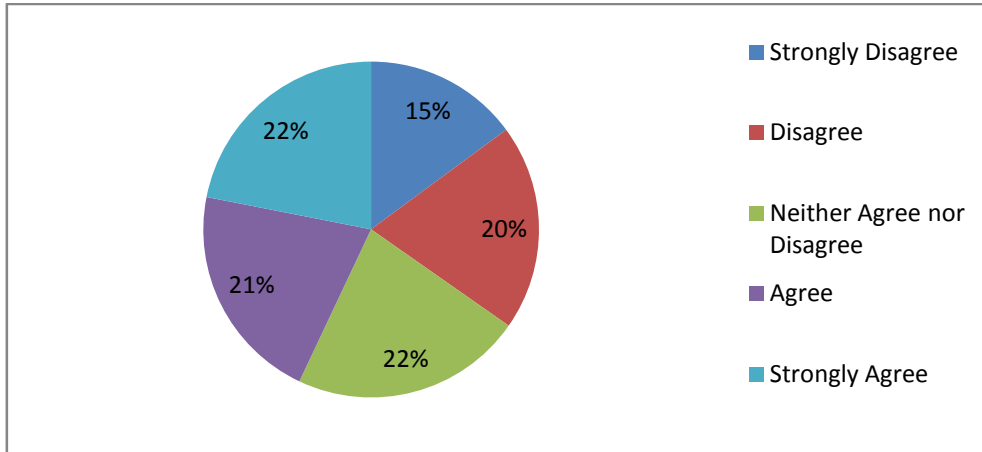
I have a life cover policy and a retirement annuity



The results were the same as those for question 13, but question 14 looks at the combination of life cover and a retirement annuity.

**Question 15**

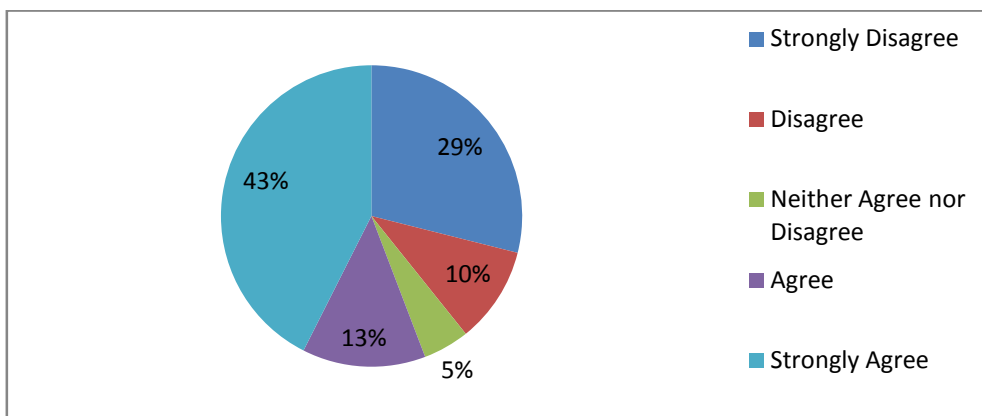
I save at least 10% of my monthly salary.



Only a total of 43% think they save at least 10% of their monthly income; 22% are not sure; while the remaining 35% do not save at all.

**Question 16**

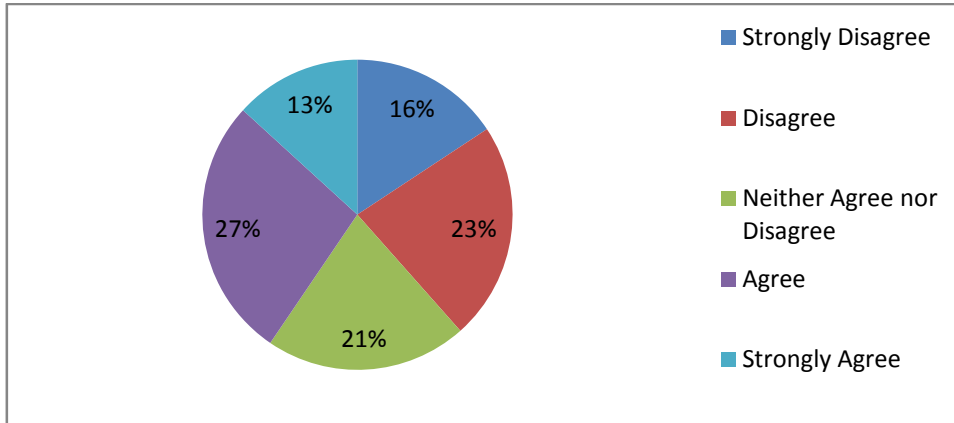
I own a house.



Only 43% of the respondents own a house.

**Question 17**

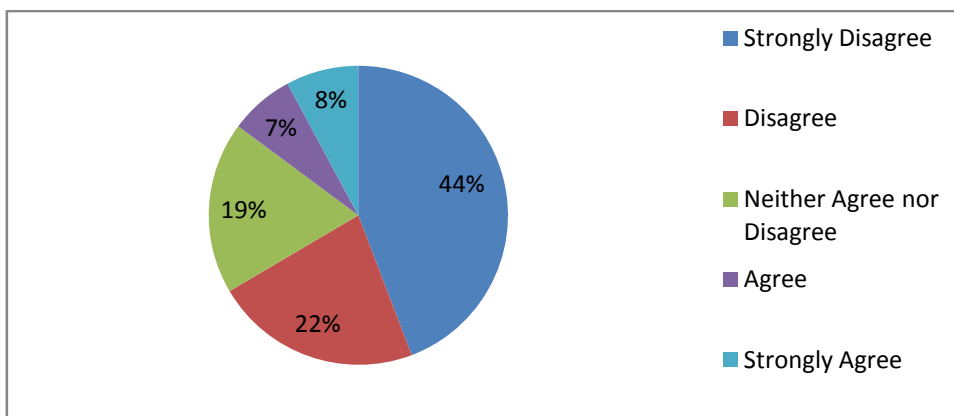
I only save for short term (e.g. for furniture, holidays)



The majority of the respondents save for the long term, but 40 % do not. In fact, if the 21% of those who are unsure were to be considered as not saving for the long term, the picture would be worse.

**Question 18**

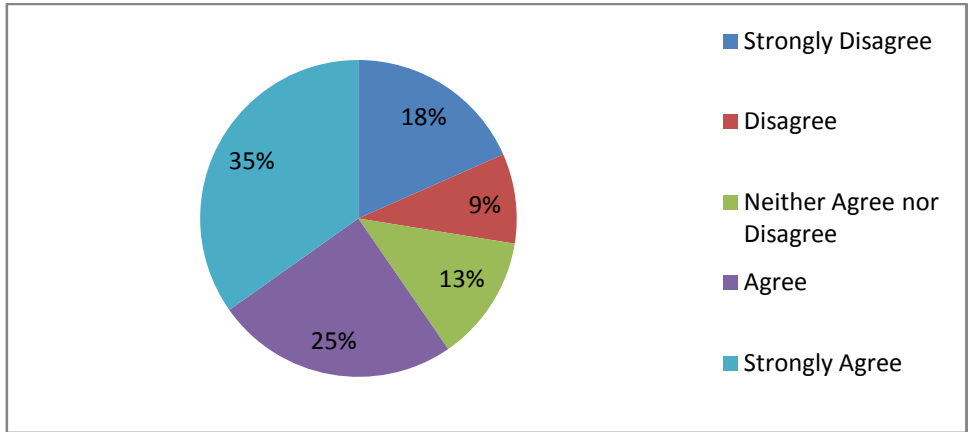
I am highly indebted (I have too much credit, personal loans, credit cards and car loans).



This question was poorly asked; it should have been a ‘yes’ or ‘no’ type of question. However, based on the question as it stands, the majority of the respondents are not highly indebted.

**Question 19**

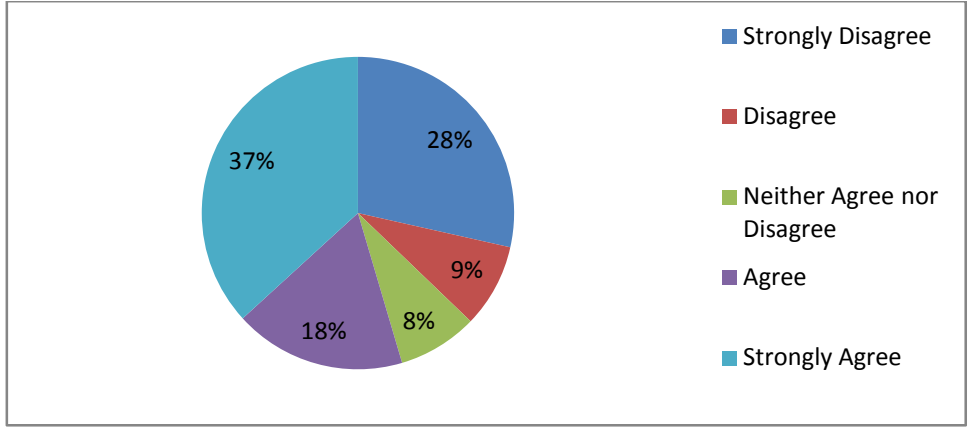
I think it is possible to pay off a house in 10 years or less from the date of purchase.



Half of the respondents do not think it is possible to pay off a house in 10 or less years.

Question 20

My partner knows how much I earn.

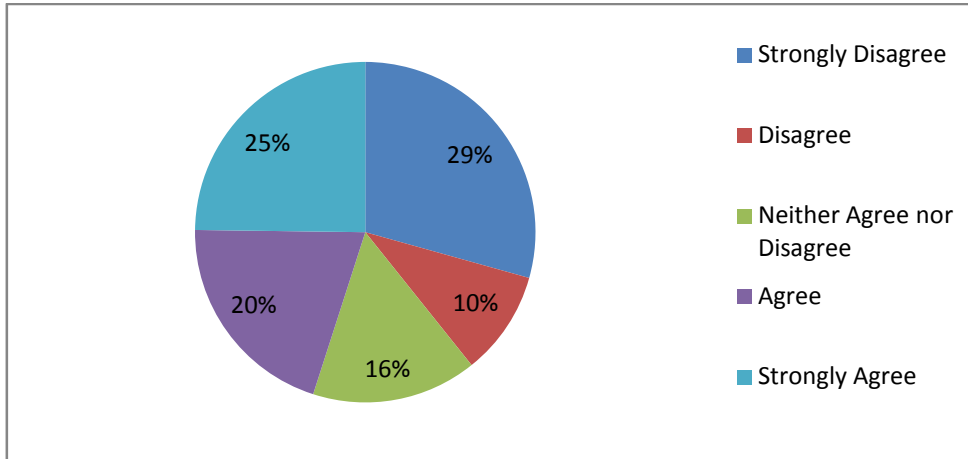


The majority of the respondents agreed or strongly agreed that they share financial information with their spouses.

Question 21

My partner and I discuss and plan our budget monthly.

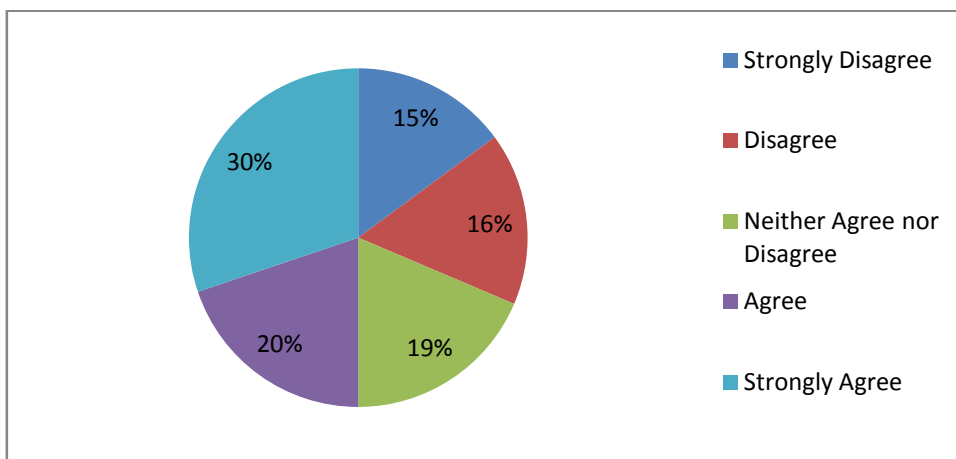




Only 45% of the respondents communicate or discuss salaries and budgeting with their partners.

**Question 22**

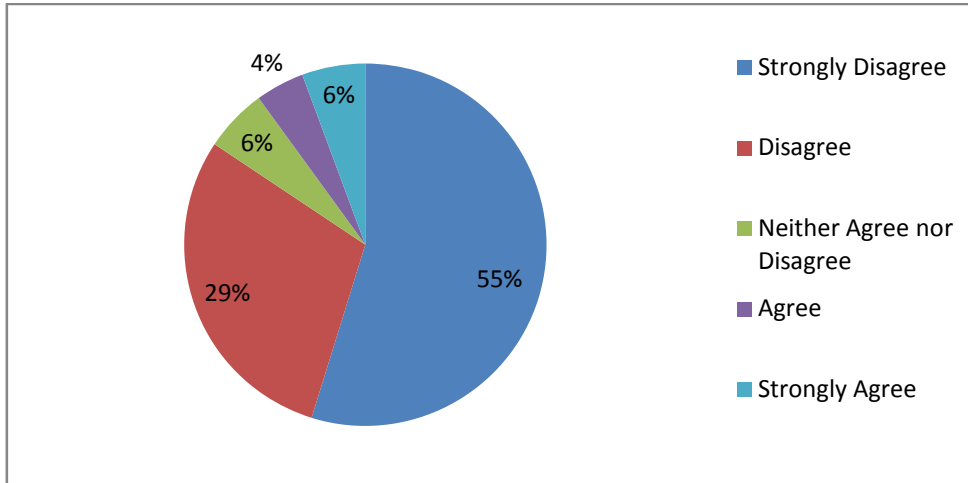
I consider investing for my grandchildren.



Half of the respondents consider saving for their grandchildren, but 19% are not sure about saving for grandchildren, while the rest do not consider saving for their grandchildren.

**Question 23**

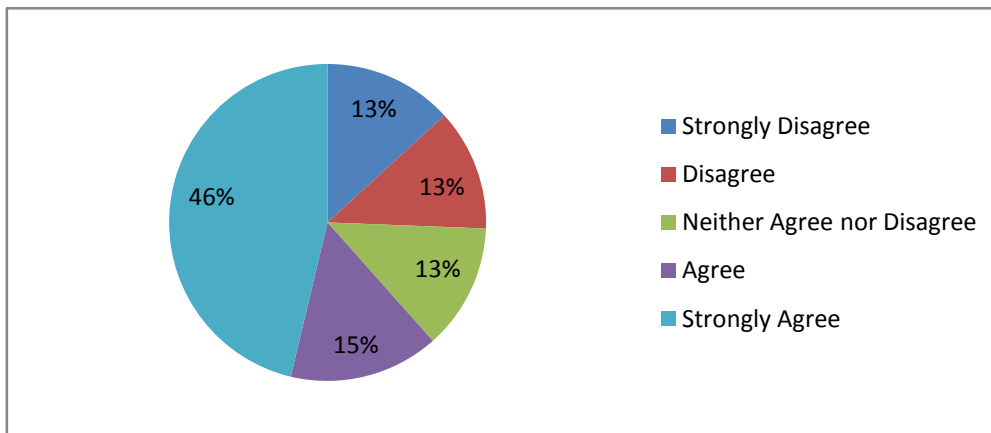
Have you inherited money/property/shares from your grandparents?



Only 10% of the respondents have inherited something from their grandparents. The majority of the respondents do not agree to having inherited anything from their grandparents.

**Question 24**

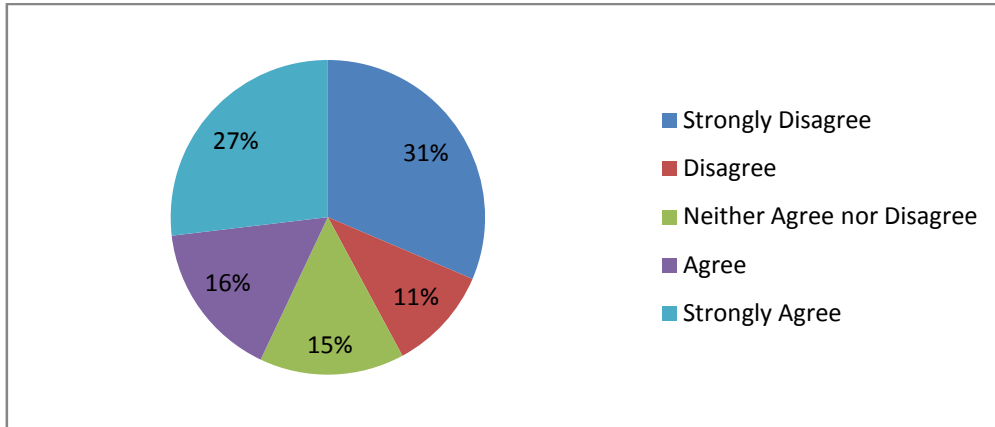
If you could win a million Rand today, would you change your lifestyle?



The majority of the respondents think they would change their lifestyle if they were to win a million Rand. About 46% of the respondents strongly agree that they would change their lifestyles.

**Question 25**

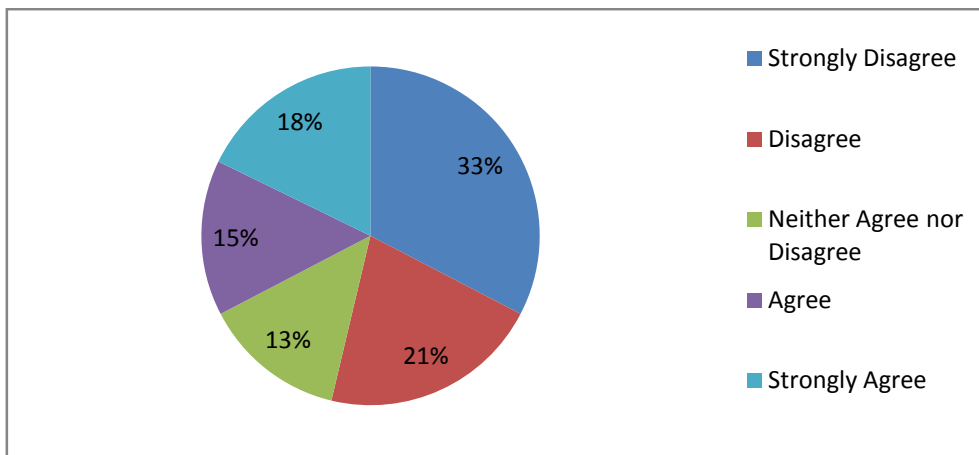
I know how much I spend on liquor per month.



About 43% of the respondents know how much they spent on liquor, but there is a possibility that others do not drink.

**Question 26**

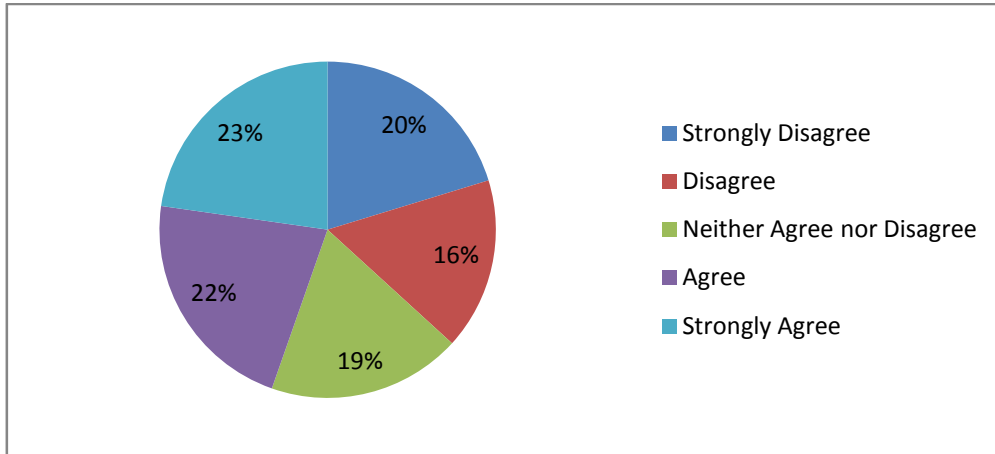
If you were to resign today from your current job would you cash out your pension fund?



While there are more people who think they would not cash out their pension funds, there are still 33% of respondents that think they would cash out, and 13% that are undecided.

**Question 27**

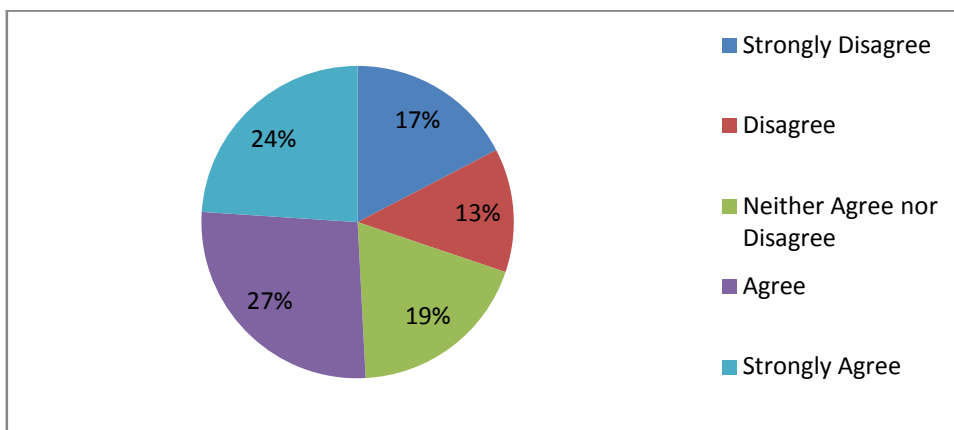
If you were to lose your job today, would you be able live at least six months out of your savings?



Only 45% of the respondents think they would survive retrenchment and 19% are not sure.

**Question 28**

I do not wait for a sale; I buy today, when I need it.

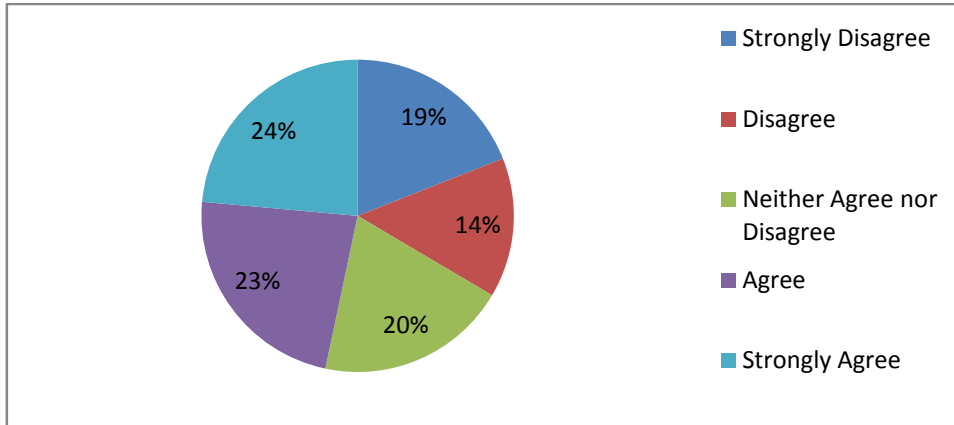


51% of the respondents do not wait for a sale, but buy as they want something.

19% are undecided about waiting for sales.

**Question 29**

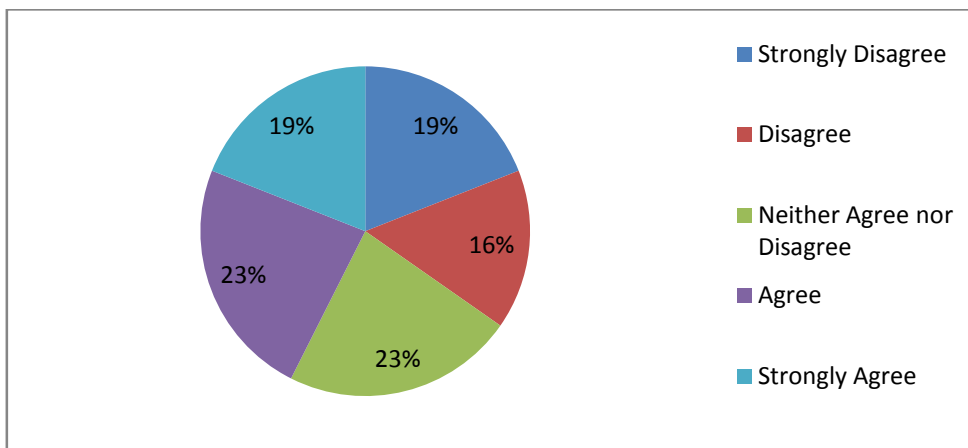
I know when I will go onto pension.



This is about forward planning, and only 47% of the respondents think they know when they will retire.

**Question 30**

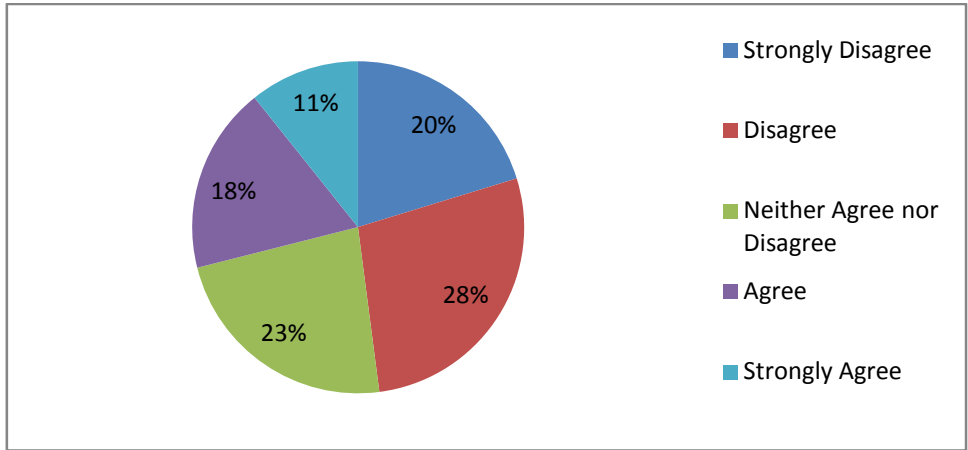
I always think about the years after pension.



Very few people agreed to thinking about the years after pension, however 23% of the respondents are undecided.

**Question 31**

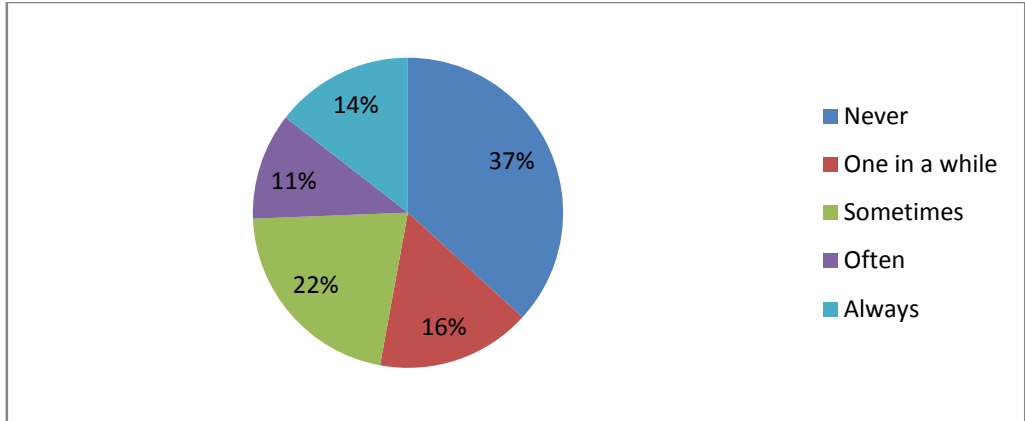
I honestly think I have invested enough on my pension.



48% of the respondents acknowledge that they have not saved enough for retirement, and only 29% are sure about their savings for their lives after retirement.

**Question 32**

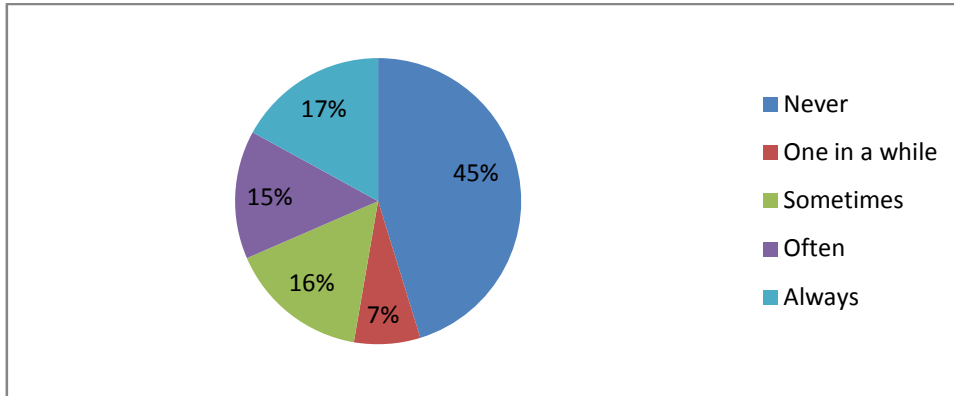
How often did your parents speak to you about money?



Only 25% of the respondents were spoken to about money matters by their parents. However, a large number of the respondents were spoken to, but not regularly.

**Question 33**

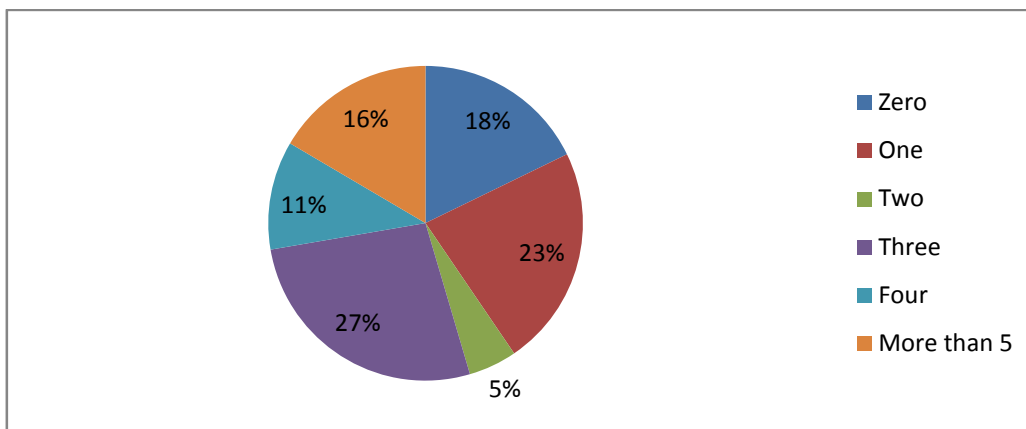
How often do you speak to your children about money?



The majority were not spoken to about money matters by their parents, but as the above graph shows, the majority of the respondents do not speak to their children about money either.

Question 34

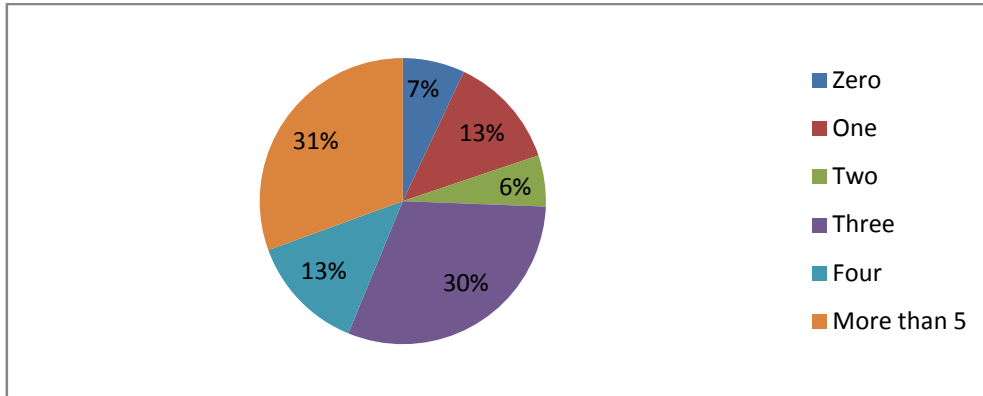
How many dependents do you have?



More of the respondents agreed to having at least three dependents, while 16% of the respondents agreed to having more than five dependents.

Question 35

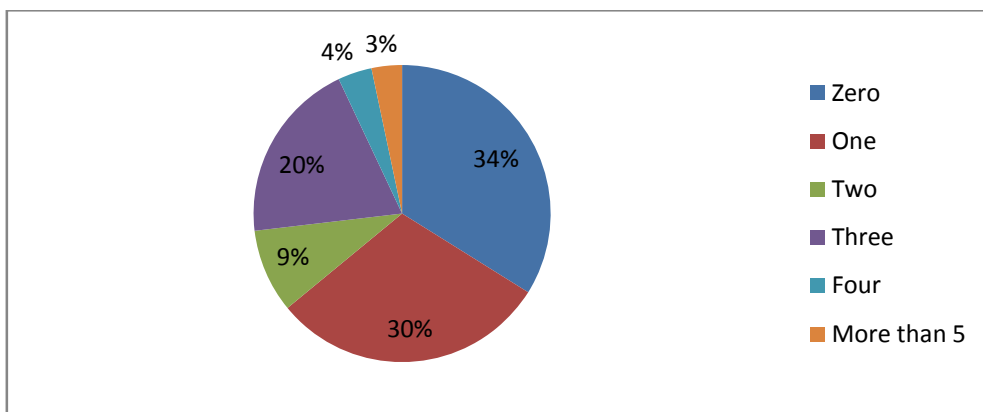
How many siblings do you have?



31% of the respondents have more than five siblings and 13% have four siblings, while 30% have three siblings.

**Question 36**

How many children do you have?

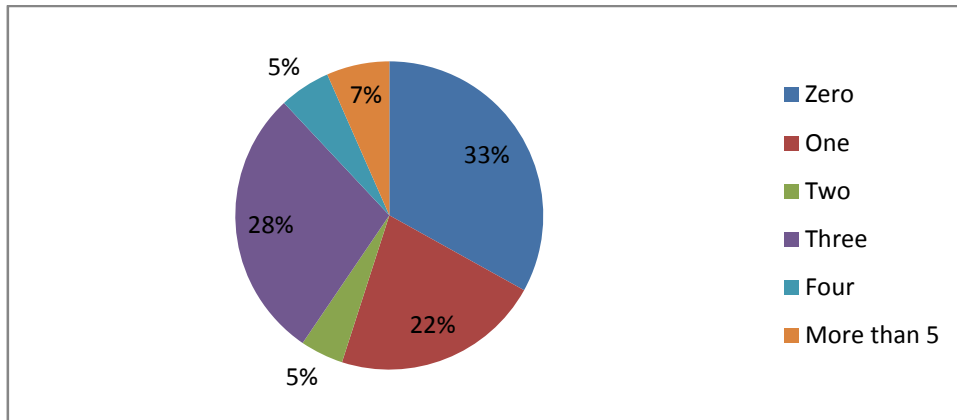


27% of the respondents have at least three children, while the majority have less than three children. However, the majority of the respondents are between the ages of 25 and 35. The number of children that they have can still increase.

**Question 37**

How many times have you changed companies?





40% of the respondents have changed companies at least three times.

### Summary

There are a few questions in the questionnaire that were incorrectly asked. A question such as 18, which wanted to establish the debt level of the respondents, was poorly structured because it should have been a 'yes' or 'no' answer rather than using a scale. Another example is question 16, which asked the respondents whether they own a house or not. There should not have been any middle ground – one either owns a house or one does not. These types of questions will be treated with greater care.

## 6. Discussion of results

### Research question one

Research question one seeks to establish whether the South African Black middle class is financially educated or not. Previous writers have found that lack of financial literacy is one of the reasons why people are not capable of saving (Lusardi, 2008). Lack of financial knowledge inhibits people from making financially sound decisions, or anticipating future costs relating to a decision made today (Brown et al., 2006).

People showed a reasonable understanding of financial basics; however 36.72% of the respondents are not happy with their budgeting skills, which are worrying, as it could be argued that budgeting skills and discipline form the foundation of saving behaviour.

The inability to budget may cause individuals to use, plan and manage their finances poorly. Budgeting is a core component of financial discipline. Even though 41.33% of the respondents are happy with their budgeting skills, it is a concern that the country still has a high number of individuals who cannot budget (Lusardi, 2008). This does not give a positive picture for a country that has a poor saving rate (Cronje, 2010). To have half the population not being able to budget is tragic. Even more worrying is the fact that all the people studied have at least a Grade 12 certificate. This brings into question the quality of the education system. However, this paper will not entertain the issue of the quality of education.

21.9% of the respondents are unsure of their budgeting skills. Adding respondents who are unsure about their budgeting skills, to those who do not know how to budget at all, increases the population of those who are not well

equipped with budgeting skills to 58.62%. With a mean of 3.06, this suggests that over 66% of the respondents accept that they cannot budget. The standard deviation is, however, wide resulting in a large variation gap. Based on standard deviation, one could conclude that perhaps people are being modest, but considering that people tend to overestimate their abilities, this probably reflects the truth.

What makes the picture worse is the fact that only 29% of the respondents are happy with their discipline in sticking to their budgets (Wang, 2005). This means that 70.35% do not stick to nor reconcile their budgets at the end of the monthly budgeting period (Lusardi, 2008). This brings about a difficulty in terms of people's ability to identify problematic areas and therefore their ability to cut costs (Brown et al., 2006). To be able to build wealth, one needs discipline and to follow one's budget. Staying disciplined is a crucial step that is unfortunately lacking in the country (Wei & Zhang, 2009).

The mean for question four, which asked if people were sticking to their budget, is 2.79, with a standard deviation of 1.23, which means that people are not reconciling or sticking to their budget.

One of the most important wealth multipliers is the compounding of interest. It is therefore concerning that only 39.25% of the respondents know what 'compound interest' is. Lusardi (2008) argues that people who are likely to make correct financial decisions know about how simple and compound interest work. A knowledge and understanding of compounding is critical for decision making in terms of duration and allocation of investments.

With 47.11% of the respondents admitting to not knowing what compound interest is and 13.64% are hanging in the balance. This raises the question of

how people would build wealth if they do not know the most powerful tool to wealth creation. With a mean of 2.86 it could be argued that people do not know much about compound interest, but the standard deviation is too wide at 1.51, which raises the question of confidence levels.

One of the questions asked, which is perceived as advanced and applicable to people in financial management, relates to the exchange rate. 65.29% of the respondents do not follow the exchange rate trends (Lusardi, 2006). This tells something about the attitude that individuals have towards the economy of the country. The exchange rate is important because economic trends guide people in terms of how to act if they correctly anticipate a though economic environment. To illustrate this point, in the mining or manufacturing sectors, when the Rand strengthens for extend periods, companies find it difficult to report profits and they are forced to cut costs. One of the best ways to cut costs, and unfortunately so, is to reduce payroll costs. People must be aware of the behaviour of the currency in order to use it as a tool to assess the economic environment, and therefore adjust their behaviour accordingly. The mean from the respondents is 2.79 with a high standard deviation of 1.40. This leads to a difficult conclusion, namely a shift to the wrong direction, which suggests people do not know much about exchange rates. What is worrying is the level of the standard deviation.

Based on the respondents' answers, the South African Black middle class does not seem to understand or appreciate the importance of interest rates. This can be concluded since 26.88% of the respondents do not know the cost of their bank charges, 38.02% do not know how much interest they pay on their mortgage bonds, and 33.47% do not know the interest rate for their vehicle

repayments (Bucks & Pence, 2006). This is however not surprising considering that Black South Africans do not know how to budget and struggle to stick to their budget (Carroll, 2001).

The above findings have a huge impact in terms of planning for the future and financial decisions. Interest rates erode disposable income and when making the decision to buy a house or a car, one is expected to know and keep an eye on the interest rates, as they determine one's future ability to service one's debt (Bucks & Pence, 2006).

However, the Black middle class takes into account short-term market drivers such as petrol prices. The majority of the respondents, 62.39%, reported to know their weekly expenditure. While the results showed that the majority of respondents do not reconcile nor stick to their budget commitments people seem to keep track of day-to-day expenses. There is, however the issue of memory – how long can one remember and how many people can remember what they spend if expenses are not written down?

66.53% know how much they pay for petrol per litre. This is quite positive as it may help individuals plan their monthly mileage.

### **Summary**

The South African Black middle class has acceptable levels of financial education as the mean for the first ten questions is above three. However, they are not disciplined, as shown by a mean of 2.79 in question four. Question four dealt with the ability to stick to budget and reconcile. They do not stick to their budget, which fuels impulse buying. The mean for question eight is 2.86, suggesting a poor understanding of the power of compounding, which

discourages long-term savings as they cannot visualise the long-term effects this may have.

In an economy that has high levels of credit accessibility, it is important for citizens to know the interest charged on repayments on their properties, cars and other debts. Black South Africans do not manage their bank charges, mortgage bonds, and vehicle financing repayments well. It is worth mentioning that there are people who have a perfect understanding of financial markets, and an understanding of personal financial management, but as a country, it is a concern that there is still a high percentage of people who do not have a handle on the cost of their bank charges, car instalments and interest charged on their bond repayments.

Overall the Black middle class cannot be classified as financially educated because they lack an understanding of the most critical characteristics of personal finance. They lack the discipline to stick to budgets and they lack an understanding of how compound interest works.

### **Research question two**

Research question two seeks to establish whether or not the Black middle class in South Africa only thinks of the short term. Saving equals investment (Keynes, 1936). The mean for question 11 is 2.26, suggesting that the population being studied does not invest in equity and does not have investment accounts. The number of direct accounts correlates with the saving levels of a country (Das, 2011). About 73.96% of the respondents admit to not having direct ownership of equity in the Johannesburg Stock Exchange. 49.17% do not have investment accounts. The term 'investment account' is referred to here rather than 'savings account', because an investment account shows a long-term commitment and a

measure of financial control (Das, 2011). In addition, the majority of people use their savings account as a day-to-day consumption account. The question of equity could be skewed because many people own shares through their pension funds. The concept of direct ownership does, however link very well with financial education.

It could also be argued that money markets are investment or saving instruments used for financial planning. In addition to this, equity ownership could measure the sophistication of the population being studied and help policy makers anticipate whether or not there will be a transfer of wealth through market forces.

Poor equity ownership is unfortunate and could be caused by a lack of financial knowledge (Gouveia, 2008), as established above (see research question one). This means that people will not be able to build or create wealth that could in turn refinance projects that will not create jobs, but increase black ownership and economic development (Nga, 2007).

42.47% of the respondents claim to be saving at least 10% of their income. The question posed in the questionnaire did not, however outline the type of saving, and respondents may have confused having a savings account with saving. It is also possible that these results were optimistic, considering the conclusions arising from research question one. Even so, in a country of 50 million people with 25% unemployment rate, the 10% savings of 42.47% of the Black working class would not compete with the likes of China and India.

The majority of the Black middle class would upgrade their lifestyle if they were to have more money. This is supported by the fact that 61.57% of the respondents agreed that they would change their lifestyle if they were to win

one million Rand; this behaviour contradicts the LCH, in that the income for tomorrow is being used to finance today's consumption (Modigliani & Brumberg, 1954). The LCH assumes that individuals would only consume according to their needs, but the respondents reported that they consume what they can afford today, and as long as they have more money they will consume more, regardless of the future impact of such behaviour.

What is of concern is that 53.71% of the respondents would cash out their pension if they were to change their job. This is a particularly worrying statistic among Black professionals who, due to employment equity, are changing jobs more often than their White counterparts. This means that as they change jobs and cash out their pension, they risk retiring poor (Hurst, 2006), with no future income. This behaviour is a typical example of using tomorrow's income to finance today's consumption (Modigliani & Brumberg, 1954).

It is interesting that about 63% of the respondents agreed it is possible to repay a home loan in ten years or less. However, these responses contradicted the answers they gave with regard to their understanding of the interest rate and the discipline of budgeting. It is a positive sign that people know that they could pay off their home loans quicker. The questions that remain unanswered are whether people are actually doing this and whether they understand why it is important to pay off a house earlier than required by the mortgage bond. It would be difficult for the majority of the respondents to pay off their bonds early, because even though they said their partners know how much they earn, they still do not sit down and discuss financial matters, nor do they budget together. Communication is key in financial planning, especially in a relationship.



Long-term plans are less important to the Black middle class; they do not consider investing for their grandchildren, which should be an important consideration. However, in White communities, long-term investments, regardless of which generation will enjoy the benefits, are a big consideration. Most of the respondents did not inherit any money from their grandparents, but with a disregard for long-term saving, this means that their grandchildren will inherit nothing.

### **Summary**

The Black middle class considers the present when it comes to financial matters, but forgets the future. This supports the instant gratification theory – people are delaying saving to be able to finance today's consumption. The instant gratification theory suggests that an individual will delay doing anything as long as it does not provide them with instant punishment or rewards. Because a long-term saving compromise today's consumption, people delay it. The fact that 73.96% of the respondents do not have direct ownership of equity could be attributed to the fact that they lack financial or investment knowledge, but it could be that people are more preoccupied with today than tomorrow.

### **Research question three**

Looking at the question of dependents, and combining this with the number of children per family, there is a high dependency rate among the respondents. There is an average of two children per household, but the majority of people studied are an average of 35 years old, with only 7.03% of the respondents saying they have four or more children. Asked about the number of dependents, only 27.69% have more than four dependents. However, 30.58% of the respondents have five or more siblings, while 13.22% have four siblings.

This could be burdening, especially for elderly children who might have to look after the young ones (Kaufman, 1997). In Black communities there is high reliance on the older children and successful family members not only take care of their siblings, but also their extended family (Harioka & Wan, 2007). This sheds a different light on the issue of dependency in middle class households.

The research questionnaires might not have adequately dealt with the definition of a dependent. Respondents might have thought of a dependent as a person within the immediate family, such as siblings but not as extended family, such as cousins. In addition, it could be the case that the population being studied pays money to extended family members, which is difficult to account for (Gouveia, 2008).

### **Summary**

The dependency ratio is not a major problem among the Black middle class; however there are many individuals with four or more siblings. In a country with a high unemployment rate, this could place a burden on the working siblings, making it difficult for them to save (Horioka & Wan, 2007).

### **Research question four**

Research question four seeks to establish the cultural attitude of Black people towards money. This is to be established by the willingness of the Black middle class to discuss money matters with their spouses and children. It also looks at how people deal with issues like immediate spending on an expensive item, rather than buying an item later, when it is less fashionable and cheaper (Lambert, 2007). The core issue to be established is whether the Black middle class has the will and the mental power to delay today's rewards for something better that will only come in the long run (DellaVigna, 2009).

The question also looks at whether the population being studied deems it necessary to save for the next generation or not, and how often they have financial discussions with their children.

It is worth noting that 50.01% of the respondents do not consider investing for their grandchildren. This could be because people do not have enough money, or simply because long-term considerations are not prioritised (Moav & Neeman, 2010). The concept of investing for future generations is very important. One could also argue that wealth is built over time. In addressing research question one, it was evident that compounding was not well understood and investing for the long term (e.g. investing for grandchildren) uses compound interest very effectively (Lusardi, 2006).

When asked if the respondents' parents ever spoke to them about money matters, 74.39% responded negatively. The current Black middle class was not taught about money when they were young. This links back to the issue of lack of budgeting skills and the discipline to stick to a budget. Not being educated about money matters could result in extravagance as people know nothing other than spending.

Unfortunately it is not only the current Black middle class adults that are found wanting when it comes to money issues. These adults are not talking to their children about money matters. The trend of poor financial education will grow unless it is reversed (Oliver & Shapiro, 1997).

Price is very important in money matters, but sometimes patience has to be exercised for individuals to fully benefit. 50.83% of the respondents agree that they do not wait for sales or specials; if they need something they buy it immediately. It has been said repeatedly that every cent counts, so it is

surprising that people do not want to delay gratification to benefit from sales. In fact, if one considers the 19.01% of the people who are on the middle ground, it worsens the picture, bringing to 69.84% the number of people who do not wait to buy.

This trend also links back to the 'instant gratification' issues addressed in research question three. People buy now rather than wait until prices favour them because they do not want to wait (Laibson in Lambert, 2007). It also shows that people's attitude towards money is very bad.

One would think that people would know when they will be on pension. However, 33.47% of respondents did not know the answer to this question. To this can be added 19.83% of those individuals on the middle ground. This brings to 53.30% the number of people who do know when they are will go on pension (Lusardi, 2008). It is also interesting that 34.71% of the respondents do not think of the days after they retire. This attitude is either due to bias or is because people do not have a positive attitude towards money, especially when it comes to the long term.

## 7. Conclusion

### The importance of household savings

Household saving forms the cornerstone on which the economy of a country is built and future development can only be financed if there is enough household saving to reduce dependency on foreign investors. With saving comes financial freedom, especially for the Black middle class that was previously oppressed.

South African citizens are currently highly indebted, though this research does not examine this, *The Sowetan* (September, 2011) newspaper reports that South Africans are struggling with personal finance and there is an increase of people who are failing to repay their debt.

Household saving in general has declined, and the Black middle class is unfortunately the majority that will have to carry the country forward.

The world has witnessed amazing growth rates in countries like China, India and Brazil, and research has shown that both China and India have some of the highest saving rates. It can be argued that if South Africa is to grow and be in a better position to compete globally, the saving rate of the country has to improve.

### Determinants of household saving

Saving habits are determined by various factors that differ from country to country, and region to region, but there are commonalities.

South Africa, by its nature, is a diversified country. Even among the group of Black Africans, there are wide cultural differences, and attitudes towards money may differ.

Saving behaviour in principle can be categorised in four major categories (Du Plessis, 2008): demographic categories; macro-economic indicators; consumer behaviour; and structural impacts.

Demographic characteristics include age, gender and income; macroeconomic indicators include measures such as inflation and interest rates; consumer behaviour and structural impacts will consider taxations levels and structure of the pension fund system.

### **Research method**

Questionnaires were issued and respondents were assisted with completing them. Questions were grouped in terms of the following: education (including budgeting skills and discipline, understanding of compound interest); instant gratification (wanting to spend today, cashing out of pension fund); attitude towards money/culture (does the Black middle class discuss money matters with their children?); and dependency levels (such numbers of dependents, number of siblings). Once the results were collected from the 242 respondents, a quantitative analysis was conducted to give a mainly descriptive statistic.

### **Research results**

There is evidence that suggests that the Black middle class is not financially educated and this is key to their inability to save (Lusardi, 2006). The major issue is that they are not disciplined with their budgeting and they lack the financial understanding to be able to set long-term financial goals.

The Black middle class also focuses on the short-term and has an instant gratification mentality. This means they prefer rewards that are receivable today over bigger rewards sometimes in future.

Also evident is that the current middle class grew up in an environment where money was never discussed. They also do not discuss money issues with their children, which perpetuates poor savings going forward.

While the majority of the respondents do not have many children, the dependency ratio is problematic. Many of the respondents had four or more siblings.

The lack of financial education and discipline in compiling and reconciling a budget is the single-biggest problem. Even if income was low, which is not the case, with financial education one would be able to save.

### **Proposals to improve household savings**

The level of saving in any country is critical for its development and for the wellbeing of its citizens. It is therefore important for government to seek ways in which savings can be improved in the country.

The following are some suggestions to improve savings in South Africa:

Private sector and financial education – there is a need for private sector to get involved and educate its employees in terms of the dangers of overconsumption. The private sector can also help with budgeting education. It needs to form partnerships with financial services providers to encourage saving, taking of life policies and access to investment products from work.

Primary and secondary schools – the curriculum at primary and high schools must include budgeting and expose learners to practical examples. This should be a core subject with the same emphasis as mathematics.

Withdrawal of pension fund – there must be a rule that prohibits 100% withdrawal of a pension fund when people change jobs. They should not be able to withdraw more than 50% of their pension fund.

Tax benefit – the government should give tax rebates to individuals with healthy bank accounts. For example, the rebate could be linked to saving as a percentage of income.

### **Proposed future research**

The research discussed here focuses on the views of the respondents with regard to factors that influence the focused saving behaviour of the South African middle class.

With regard to future research in respect of Black middle class saving behaviour, it is proposed that the following could be examined:

- Determinants of household saving behaviour with specific relationship to type of qualification (i.e. do people with financial degrees save more than people with engineering degrees?);
- Determinants of household saving behaviour with respect to specific demography (for example with reference to gender); and
- How people in rural areas compare with those from urban areas.

### **Conclusion**

In conclusion, it is noted that it is critical but complex to research saving in South Africa, and in particular among Black middle class South Africans. Further research is needed to clearly understand the challenges facing South Africans and to try to find ways to improve saving. There is a need to research and educate Black communities in this country to improve self-dependency and economic sustainability.



## 8. References

- Agrawal, A. (2011). *Demographics: A game changer in global economics. Growth Prospects*. STCI, Primary Deale Ltd.
- Argawal,S., Driscoll,J., Gabaix,X., & Laibson,D. (2007). *The age of reason: financial decisions over the lifecycle*. National Bureau of Economic Research, Working Paper 13191. Retrieved from <http://www.nber.org/papers/w13191> (accessed 03/03/2011).
- Athukorala, P. (2001). *National savings rates of India and Pakistan: A macroeconometric analysis*. *The Pakistan Development Review* 32 (4), 1313-1324.
- Athukorala, P., & Sen, K. (2003). The determinants of private saving in India. *Word Development* 32 (3), 491-503.
- Baldacci, E., Callegari, G., Coady, D., Ding, D, Kumer, M., Tommasino, P., & Woo, S. (2010). *Public Expenditure on Social Programmes and Household consumption in China*. IMF Working Paper WP/10/69.
- Blumberg, B. (2008). *Business research methods* (2<sup>nd</sup> European ed.). (pp. 15-p666). McGraw Hill.
- Bonelli, R. (2010). *Strengthening long-term growth in Brazil*. Institute Brasileiro de Economia, Getulio Vargas Foundation, Rio de Janeiro. Paper prepared for the OECD Seminar: *Beyond the crisis – returning to sustainable growth in Latin America*. OECD, Paris, November 24, 2010.
- Bresser-Pereira, L., & Nakano, Y. (2002). “*Economic Growth With Foreign Savings?*” Paper presented at the *Seventh International Post Keynesian Workshop, Fighting Recession in a Globalised World: Problems of Developed*

*and Developing Countries*. Kansas City, MO, June 2002. (Available at [www.bresserpereira.org.br](http://www.bresserpereira.org.br) ).

Brown, R., Ivkovic, Z., Smith, P., & Weisbenner, S. (2006). *Neighbors matter: causal community effects and stock market participation*. University of Illinois at Urbana-Champaign and NBER.

Bucks, B., & Pence, K. (2006). *Do homeowners know their house values and mortgage terms?* Federal Reserve Board of Governors, Federal Reserve of the United States of America, 1-38.

Carroll, C. (2001). *A Theory of the consumption function, with and without Liquidity constructs*. Journal of Economic Perceptive 15, Summer 2001, 23-45

Chamon, M., Liu, K., & Prasad, E. (2011). *The puzzle of China's rising household saving rate*. Retrieved from <http://voxeu.org/index.php?z=node/6028>.

Chicn, Y., & De Vancy, S. (2001). *The effects of credit attitude and socioeconomic factors on credit card and instalment debt*. The Journal of Consumer Affairs 35 (1).

Clark, R., & D'Ambrosio, M. (2008). *Adjusting retirement goals and saving behaviour: the role of financial education*, TIAA-CREF INSTITUTE: Trends and Issues.

Cronje, M. (2010). *Creating a savings culture for the black middle class in south Africa-policy guidelines and lessons from China and India*, USB LEADERS' LAB Volume 4 no 2, 2010, University of Stellenbosch.

Das, A. (2011). Savings Bank Account - Interest Rate Deregulation Technical Report 2011, Department of Mathematics, Indian Institute of Technology Bombay Mumbai-400076, India. Retrieved from <http://dspace.Library.iits.ac.in/ispui/handle/10054/1734>.

DeJuan, J., & Seater, J. (2006). *A simple test of Friedman's Permanent Income Hypothesis. Economica* 73, 27-46.

Delong, J. (2001). *India Since Independence: An Analytic Growth Narrative*. Available at

[http://www.j-bradforddelong.net/Econ\\_Articles/India/India\\_Rodrik\\_DeLong.PDF](http://www.j-bradforddelong.net/Econ_Articles/India/India_Rodrik_DeLong.PDF).

Deutsche Bank Research, 2009. Retrieved from [http://www.dbresearch.com/PROD/DBR\\_INTERNET\\_EN-PROD/PROD0000000000245808.pdf](http://www.dbresearch.com/PROD/DBR_INTERNET_EN-PROD/PROD0000000000245808.pdf).

Diop, M. (2011). *Implications of Population Ageing on Growth, Poverty*. Public Finance and Service Delivery Human Development Department Locating America and the Caribbean Region, Document of the World Bank.

Dong, M. (2008). *Inflation, University, Money Demand and Credit*. Department of Economics, Simon Frazer University. Available at, <http://www.clevelandfed.org/research/seminars/2008/credit.pdf>.

Dong, M. (2011). *Money and Costly Credit: Working Paper/Document de travail* 2011-7. Available at <http://boc-en.ets.net/wp-content/uploads/2011/02/wp11-7.pdf>.

Du Bois, W.E.B. (1903). *The souls of black folk*. The Journal of Pan African Studies 2009 Retrieved from

<http://www2.hn.psu.edu/faculty/manis/webdubois/DuBoisSoulsBlackFolk6x9.pdf>

. Accessed on 24/July/2011.

Du Plessis, G. (2008). *An explanation of the determinants of South Africa's personal savings rate – why do South African households save so little? A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Masters of Business Administration.*

Finlogic (2011). Retrieved from, <http://finlogic.org/faq/archives.aspx> (accessed 07/04/2011).

Gouveia, J. (2008). *Money, conflict and reproductivity in rural black families. South Africa 1*. A research report submitted to the Faculty of Humanities, University of the Witwatersrand, Johannesburg, in fulfilment of the requirements for the degree Master of Arts (Research Psychology).

Harris, C. & Laibson D. (2001). *Instantaneous gratification*. Available at:

<http://cep.lse.ac.uk/seminarpapers/05-11-02-LAI.pdf>. Accessed 23 May, 2011.

Hausmann, R. (2008). *In search of the chains that hold Brazil back - CID Working Paper No. 180*. Available from:

<http://www.drclas.harvard.edu/files/Hausmann-In-search-of-the-chains-that-hold-Brazil%20back-CLP.pdf>. Accessed on 27 April 2011.

Hausmann, R., Rodrik, D., & Velosco, A. (2006). *Getting Diagnosis Right*- Finance and Development 43 (1). A quarterly magazine of the IMF.

Hoos, K. (2010). *Saving Behaviour in Cebu City*, Master's Thesis. Utrecht University.

Horioka, C.Y., & Hagiwara, A. (2010). *Determinants and long-term projections of saving rates in developing Asia*. ADB Economics Working Paper Series No. 228.

Horioka, C.Y., & Wan, J. (2007). *The determinants of Household Saving In China: A Dynamic Panel Analysis of Provincial Data*. Journal of Money, Credit, and Banking, 39(8), 2077.

[http://www.consumerscope.co.za/four\\_lifestyles](http://www.consumerscope.co.za/four_lifestyles).

<http://www.resbank.co.za/Publications/Detail-ItemView/Pages/Publications.aspx?sarbweb=3b6aa07d-92ab-441f-b7bf-bb7dfb1bedb4&sarblast=21b5222e-7125-4e55-bb65-56fd3333371e&sarbitem=4677>.

Hung, J., & Qian, R. (2010). *Why is China's Saving Rate so high? A comparative study of cross-country panel data*. CESifo, The International platform of the IFO institute of Economic Research and the Center for Economic Studies of Ludwig-Maximilians University 19-24 July 2010.

Hurst, E. (2006). *Grasshoppers, Ants and Pre-Retirement Wealth: A Test of Permanent Income Consumers*. University of Chicago, Graduate School of Business NBER.

Introduction to SAS. UCLA: Academic Technology Services, Statistical Consulting Group. From, <http://www.ats.ucla.edu/stat/sas/notes2/> (accessed October 28, 2011).

Johnson, E. (2006). *Brazil's elevated interest rate: A case of irrational pessimism or guarded optimism*. A thesis presented to the Graduate School of the University Florida.

- Jorgensen, O. (2011). *Macroeconomic and policy implications of population aging in Brazil*. Policy Research Working Paper 5519.
- Kaufman, C. (1997). *Reproductive control in South Africa – social movements and social change in a globalizing world*. Advanced Study Center, The International Institute, University of Michigan.
- Kazmi, A. (1993). *National savings rates of India and Pakistan: A macroeconomic analysis*. *The Pakistan Economic Development Review* 32:4 (2), 1313-1324.
- Keynes, J. (1936). *The General Theory of Employment, Interest and Money* (pp 54-90). BN Publishing.
- Kharas, H. (2010). *The Emerging Middle Class in Developing Countries*. Brookings Global Economy and Development – Wolfensohn Centre for Development at the Brookings Institution.
- Kraay, A. (2000). *Household saving in China*. Published in *World Bank Review*, 14(3)545-570.
- Laibson, D. (1996). *Hyperbolic discount functions, under saving, and savings*. Policy Working Paper 5635. National Bureau of Economic Research 1050 Massachusetts Avenue Cambridge, MA 02138.
- Lambert, C. (2006). *The Market of Perceptions*. Harvard Magazine Inc. March-April 2006. 50-95.
- Lehohla, P. (2009). *Profiling South African middle-class households*. Statistics South Africa, 1998–2006 (Report No. 03-03-01).
- Loayza, N., & Shankar, R. (1994). *Private saving in India*. *The World Bank Economic Review*, 14 (3), 571-94.

- Lusardi, A. (2006). *Planning and financial literacy: how do women fare*. WP 2006-136, University of Michigan Retirement Research Centre.
- Lusardi, A. (2008). *Household saving behaviour: the role of financial literacy, information, and financial education programs*, Dartmouth College and NBER.
- Manuel, T. (2008). Budget Speech. Retrieved from <http://www.treasury.gov.za> (accessed 05/03/2011).
- Mboweni, T. (2008). Monetary Policy, inflation targeting and inflation pressures: an address by Governor of the South African Reserve Bank, to the Bureau for Economic Research Annual Conference, Johannesburg, 22 May. Retrieved from <http://www.reservebank.co.za/internet/publications.nsf> (accessed 10/04/2011).
- Mckinsey Global Institute, (2006). Form 'Made in China' to 'Sold in China': The rise of the Chinese urban consumer.
- Meghir, C. (2002). *A Retrospective on Friedman's Theory of Permanent Income*. The institute Fiscal Studies WP 04/01/, University College and Institute for Fiscal Studies.
- Moav, O., & Neeman, Z. (2010). *Saving rates and poverty: The role of conspicuous consumption and human capital*. Available at: <http://portal.idc.ac.il/He/schools/economics/about/Documents/Omer%20Moav.pdf>.
- Modigliani, F., & Brumberg, R. (1954). *Utility analysis and the consumption function: An interpretation of cross-section data*. *The Collected Papers of Franco Modigliani*, 6, 3-46.
- Mulleisen, N. (1997). *Improving India's saving performance*. IMF working paper

No.97/4, (Washington: International Monetary Fund).

Nakona, Y., & Pereira, L. (2003). *An empirical study of private savings. Brazilian Journal of Political Economics* 23 1 (89), January-March/2003.

Noumbissi, A., & Zuberi, T. (2001). *Household Structure and Note Prepared for Virtual Conference on African Household*. Population Studies Center, University of Pennsylvania. Retrieved from <http://www.Pop.Upenn.edu/africahh>, accessed 18 June 2011.

Nga, M. (2007). *An investigative analysis into saving behaviour of poor households in developing countries: with specific reference to South Africa*. Research report for the degree of Masters in Economics, University of Western Cape.

Old Mutual Saving Monitor, (2010). Retrieved from <http://www.oldmutual.co.za/documents/Retirement/Monitor.pdf> (accessed 10/02/2011).

Oliver, L., & Shapiro, M. (1997). *Black Wealth/White Wealth. A new perspective on racial inequality*. New York and London: Routledge.

Pasendofer, W. (2006). *Behavioral Economics Comes of age: a review essay on Advances in Behavior economics*. Journal of Economic Literature XLIV, 712-721.

Prinsloo, J. (2000). *The saving behaviour of the South African economy*. South African Reserve Bank Occasional Paper 14, 1-34.

Paiva, C., & Jahan, S. (2003). *An Empirical Study of Private Saving in Brazil*. Brazilian Journal of Political Economy, vol. 23, n<sup>o</sup> 1 (89), January-March/2003.

Ravallion, M. (2009). *The Developing World's Bulging (but Vulnerable) "Middle Class"* Policy Research Working Paper 4816.



Roberts, B. (2000). *Chronic and Transitory Poverty in Post Apartheid South Africa: Evidence from Kwazulu-Natal*. CSDS Working paper No. 28.( Available at: <http://sds.ukzn.za/files/wp28.pdf> ).

Song, Z., Steresletten, K., & Zilibotti, F. (2011). *Growing like China*. *American Economic Review* 101, 202-241. Retrieved from <http://www.aeaweb.org/oetieles.php?doi=10.1257/acr.101.1.202>.

Torche, F., & Lopez-Calva, L.F. (2010). *Stability and Vulnerability of the Latin American Middle Class*. Available on: [http://files.nyu.edu/ft237/public/Torche&Lopez-Calva\\_Middle\\_Class\\_Latin\\_America.pdf](http://files.nyu.edu/ft237/public/Torche&Lopez-Calva_Middle_Class_Latin_America.pdf) accessed 16 June, 2011.

Vanguard, (2006). Vanguard investment principles. From [www.vanguard.com](http://www.vanguard.com) > [research@vanguard.com](mailto:research@vanguard.com). Accessed 12 June 2011.

Wang, N., (2005). *Generalizing the permanent income hypothesis: Revisiting Friedman's conjecture on consumption* *Journal of Monetary Economics* 53 (2006), 737-752. Retrieved from [www.Sciencedirect.cory](http://www.Sciencedirect.cory).

Wang, X., & Wen, Y. (2011). *Can rising housing prices explain China's high household saving rate*. *Federal Reserve Bank of St Louis Review*, March/April 2011, 13 (2), 67-87.

Warg, N. (2003). Caballers meets Bevly: *The permanent income hypothesise in general equilibrium*. William E. Simon School of Business Administration, University of Rochester, NY 14627.

Wei, S., & Zhang, X. (2009). *Sex ratios and savings Rates: evidence from "Excess Men" in China*. NBER Working Paper 15093. Cambridge, Mass: NBER.

Wilson, M. (2002). *Critical understanding race-connected Practice: A Reading*

of W.E.B. Du Bois and Richard Right, *The Professional Geographer* s4 (1), 31-41. (Available at: <http://www.praxis-express.org/CGR/20-Wilson.pdf> ).

Zungu, T. (2011). *Millions caught in debt trap*. Retrieved from: <http://www.sowetanlive.co.za/helpline/2011/09/26/millions-caught-in-debt-trap>. (Accessed on 27 September 2011).

## Appendices

### Questionnaire

a	Male/Female	F	M			
b	Age	18-25	25-35	35-45	45-55	>55
c	Gross Income Range (Income Before Tax and other Deductions)	6000 - 10000	10000 - 14000	14000 - 18000	18000 - 22000	>22000
d	Highest qualification	Matric	Certificates	Diploma	Degree	
e	Field of Study	Engineering	Accountancy	Banking, Auditing, Economics	Social Sciences	Others
f	Industry (e.g. Mining, Construction)	Mining/ Construction/ Engineering	Education	Banking/ Investment/ Marketing	Agriculture	
g	Marital status	Married	Single	Divorced	Long-term relationship	
	<b>Questions</b>	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neither agree nor disagree</b>	<b>Agree</b>	<b>Strongly agree</b>
1	I know how much I spent last week	1	2	3	4	5
2	I know how much a litre of petrol costs	1	2	3	4	5
3	I am my happy with my budgeting skills	1	2	3	4	5
4	I stick to my	1	2	3	4	5

	budget and reconcile every month					
5	I know what today's exchange rate is	1	2	3	4	5
6	I know how much I pay on my house, rent	1	2	3	4	5
7	I know how much I pay on my car instalment	1	2	3	4	5
8	I know what the compound interest rate is	1	2	3	4	5
9	I know the bank monthly charges on my cheque, savings accounts	1	2	3	4	5
10	I know the interest rate I am paying on my house	1	2	3	4	5
11	I own shares	1	2	3	4	5
12	I have an investment account	1	2	3	4	5
13	I have a life cover	1	2	3	4	5
14	I have a life cover policy and	1	2	3	4	5

	retirement annuity					
15	I save at least 10% of my monthly salary	1	2	3	4	5
16	I own a house	1	2	3	4	5
17	I only save for short term (e.g. For furniture, holidays)	1	2	3	4	5
18	I am highly indebted (I have too much credited, personal loans, credit cards and car loans)	1	2	3	4	5
19	I think it is possible to pay off a house in 10 years or less from the date of purchase	1	2	3	4	5
20	My partner knows how much I earn	1	2	3	4	5
21	My partner and I discuss and plan our budget monthly	1	2	3	4	5
22	I consider investing for my grandchildren	1	2	3	4	5

23	Have you inherited money/property/shares from your grandparents?	1	2	3	4	5
24	If you could win a million rand today, would you change your lifestyle?	1	2	3	4	5
25	I know how much I spend on liquor per month	1	2	3	4	5
26	If you were to resign today from your current job, would you cash out your pension fund?	1	2	3	4	5
27	If you were to lose your job today, would you be able to live at least six months out of your savings?	1	2	3	4	5
28	I do not wait for a sale, I buy today, when I need it					
29	I know when I	1	2	3	4	5

	will go on pension					
30	I always think about years after pension	1	2	3	4	5
31	I honestly think I have invested enough on my pension					
		Never	Once in a while	Sometimes	Often	Always
32	How often did your parents speak to you about money?	1	2	3	4	5
33	How often do you speak to your kids about money?	1	2	3	4	5
34	How many dependents do you have?	0	1	3	4	More than 5
35	How many siblings do you have?	0	1	3	4	More than 5
36	How many kids do you have?	0	1	3	4	More than 5
37	How many times have you changed companies?	0	1	3	4	More than 5