Furthering financial inclusion through retail asset management in South Africa

Grant Steppe

A research report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Business Administration

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ABSTRACT

This study looks to increase the level of financial inclusion in South Africa by providing insight around the local savings environment and in particular the unit trust industry. The study therefore looks to asses the determinants of unit trust investment in South Africa.

Although a large quantity of research has been done in order to better understand savings and financial inclusion in South Africa, relatively little research has been conducted on the role that collective investment schemes play in engendering savings and creating a more financially inclusive environment. Collective investment schemes, such as unit trusts, are an effective way of exposing savings to higher rates of compound interest and should form an integral part of any savings portfolio. The study has found that various elements such as education and the nature of bank account usage have a direct impact on the rate of unit trust investment in the country. This presents an initial step towards better understanding the determinants of unit trust investment in South Africa, but there is still much to be done.

The research follows a mixed method approach and used an anonymous survey to gather data from banked South African citizens.

It is hoped that the research will go some way towards aiding financial service providers to better understand their customer base in South Africa.

DECLARATION

I, Grant Steppe, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

GRANT STEPPE

Signed at ……

On the …….. day of …… 20…..

DEDICATION

This research is dedicated to the memory of the late Nelson Mandela. It is in line with his dream of a more equitable society that this research was conducted.

ACKNOWLEDGEMENTS

It is with great thanks to my parents, Alex and Heather Steppe, without whom I would not have pushed myself to obtain my MBA degree.

Mention must also be made of Brandon Jones who's help and guidance was of the utmost importance in completing my research.

I would also like to thank my research supervisor, Eric Schaling for his patience and guidance through the research process.

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CHAPTER 1. INTRODUCTION

1.1 Purpose of the study

The purpose of this research is to analyse the determinants of unit trust ownership among banked citizens in South Africa. The paper aims to build on the knowledge around unit trust consumer behaviour in the local unit trust industry

1.2 Context of the study

In *Asset Management 2020: A Brave New World,* PricewaterhouseCoopers estimates that global mutual fund assets under management (AUM) will grow at a compound annual growth rate (CAGR) of 5.4% from $27 trillion in 2012 to $41.2 trillion in 2020 (PwC, 2014). This is forecast to take place in what the World Bank predicts to be a subdued global growth environment, anticipating global GDP growth to average about 2.6% between 2013 and 2018 (World Bank, 2016).

South Africa's first unit trust, Sage Fund, was established in June 1965 with R600 000 under management (Bertolis & Hayes, 2014). The local Collective Investment Scheme (CIS) industry, largely made up of unit trusts, has experienced immense growth since its humble beginnings in 1965. As of September 2016 CIS AUM stood at R2 trillion, having doubled since March 2012. A considerable achievement given that it took the industry over 40 years to reach the R1 trillion mark (Campher & Dempsey, 2016).

The stellar growth in local unit trust AUM conceals the true picture of household savings in the country. The World Bank estimates that of South Africans over the age of fifteen, 69% had an account with a financial institution in 2014 (World Bank, 2015). However, only a third of South Africans saved at a financial institution during the same year.

The South African government has recognised the role that access to financial services can play in alleviating poverty and has made expanding financial inclusion a cornerstone of policy (Wentzel, Diatha, & Yadavalli, 2013). Although various savings and investment vehicles, each with its own advantages and disadvantages, are available to South Africans (Rootman & Kruger, 2016), less than half of all adult South Africans are familiar with unit trusts, provident funds or investment policies (Struwig, Roberts, & Gordon, 2013).

1.3 Problem statement

1.3.1 *Main problem*

To further understand the relationship between financial inclusion and capital market savings by identifying and assesing the determinants of unit trust ownership among banked citizens in South Africa.

1.3.2 *Sub-problems*

The first sub-problem is to understand if the nature of bank account use is a determinant of unit trust investment in South Africa.

The second sub-problem is to understand if savings behaviour is a determinant of unit trust investment in South Africa.

The third sub-problem is to understand if elements within the unit trust industry and unit trust products are determinants of unit trust investment in South Africa.

1.4 Significance of the study

Financial inclusion, typically defined as the use of formal financial services, has become a subject of growing interest for researchers, policy makers, and other financial sector stakeholders (Allen, Demirguc-Kunt, Klapper, & Peria, 2016). In the developing world the role of savings in enhancing sustainable economic

growth through its effect on investment has attracted much attention in academic and policy discourse (Precious & Asrat, 2014). Keynes (1937) outlined eight main reasons for saving, namely: precautionary, foresight, calculations, improvement, independence, enterprise, pride and avarice motives. In the context of South Africa, understanding savings and its determinants is complicated by the legacy of colonial disenfranchisement through legislative instruments, which left the majority of people outside the mainstream economy, excluding them from conventional savings and saving instruments (Zwane, Greyling & Maleka 2016; Carter & May, 2001; May & Norton, 1997).

Whilst domestic saving in South Africa, and the benefits thereof are well covered in academic research, relatively little has been said of the local unit trust industry. Bertolis & Hayes (2014) state that the earliest research conducted on South African unit trusts was that of Du Plessis (1974) and Kerbel (1974). Due to limited availability of reliable data that study focused solely on the performance of two general equity portfolios. Since the work of Du Plessis (1974) and Kerbel (1974) subsequent research has focused almost entirely on the performance of unit trusts as an investment vehicle (Meyer-Pretorius & Wolmarans, 2006).

Most recently, Rootman & Kruger (2016) have broadened the discourse by looking to determine consumers' intention to use unit trusts in South Africa by testing for relationships between benefits, accessibility, cost structure and the intention to use unit trusts. Their research serves as an initial step towards understanding South African consumer behaviour as it pertains to investing in a unit trust.

Rootman and Kruger (2016) argue that there is a need to increase the use of unit trusts and thus the savings rate, and ultimately the financial wellbeing of consumers. This study aims to add to the research already conducted on the South African unit trust industry. It looks to build on the work of Rootman and Kruger (2016), but differs by assessing factors that influence banking clients' ability and willingness to invest in unit trust products. It is hoped that the work

conducted is of benefit to local financial service providers and that it goes some way towards furthering financial inclusion in South Africa.

1.5 Delimitations of the study

The study focuses on South African citizens who have a transactional banking account at any financial services provider. The study only pertains to South African domiciled retail unit trusts as outlined by ASISA (ASISA, 2014). Hedge funds are not part of this study due to their complex nature and limited retail access. The focus of the research is on discretionary savings and does not cover pension or provident fund savings. Financial intermediaries such as financial advisors and wealth management firms are considered as distribution channels, but because of the additional layer of cost they add the study focuses mainly on direct investment channels such as bank branches and online.

1.6 Definition of terms

- Direct investment – a disintermediated distribution strategy, effectively removing financial advisors, but not necessarily advice from the sales channel chain.
- Financial services provider – any company that is registered with the Financial Services Board of South Africa.
- Inflows/ outflows – any investment or disinvestment from a financial product.
- Linked investment service provider – an aggregation platform that serves as a unit trust market place.
- Net flow – all investments less disinvestments.
- Unit trust – A unit trust is a type of collective investment scheme (CIS) where an investor owns part of a diversified, professionally managed portfolio of securities as he/she invested a once-off or monthly amount of funds (Rootman & Kruger, 2016).

- Upper-middle-income - Those economies with a GNI per capita of more than $4,035 but less than $12,475 (World Bank, 2015).

1.7 Assumptions

- It is assumed that all interviewees and respondents reflected their true perspectives and experience.
- Respondents have performed sufficient banking activity to be able to comment.
- It is assumed that citizens who engaged in transactional banking were able to access unit trust investments be it via a branch or online.

CHAPTER 2. LITERATURE REVIEW

2.1 Introduction

Guided by the propositions, the literature review aims to present factors that determine whether or not banked citizens invest in a unit trust in South Africa. In order to unearth these factors attention is paid to contemporary research on the fields of financial inclusion and household savings behaviour. A comprehensive review of unit trusts and the domestic unit trust industry is also provided.

The first section looks to explore literature around the measurement and determinants of financial inclusion. The focus of the section is on the evolution of the concept over time, aiming to prove that it has become more about the nature of access to financial services than just access itself.

The second section presents theory around the topic of household savings, focusing on factors that influence the nature of savings and the decision to save. A review of the financial product usage hierarchy literature is also included.

Section three focuses on the South African unit trust industry and unit trusts as an investment vehicle. To begin, a brief description of the industry will be provided, focusing on development since its inception in 1965. The section will finish with considering unit trusts as an investment vehicle in the context of the South African savings landscape.

In conclusion, and taking into account the literature review, the paper will put forward a set of propositions to be tested.

2.2 Financial inclusion and the nature of bank account use

Effective financial systems play an integral role in the economy, offering savings, credit, payment, and risk management products to people with a wide range of needs (Demirguc-Kunt & Klapper, 2012). Beck, Senbet & Simbanegavi (2015) define financial inclusion as enterprises and households having access

to such services. More recently, definitions of financial inclusion highlight the importance of the characteristics of access to financial services, placing emphasis on the efficacy and quality of the services (Garcia, 2016). We are therefore seeing an evolution of the definition of financial inclusion, focusing more on the nature of use of financial services than just access to a transactional bank account. For the purpose of this study, financial inclusion is deemed to be more complex than just bank account access and incorporates elements such as savings.

2.2.1 *Measuring financial inclusion*

Financial inclusion falls into the broader ambit of financial development theory. Chiba (2009) suggests that four key financial development pillars need to be in place in order to further financial inclusion in a country. Those four pillars are: private (financial and non-financial) sector development, financial literacy, microfinance and public sector support. Cihak, Demirguc-Kunt & Feyen (2013) have gone a long way towards quantifying the functioning of financial systems across countries, measuring financial development in 205 countries between 1960 and 2010. Their focus is on a well-functioning financial market and sector as a determinant of financial development, using depth, access, efficiency and stability as indicators.

The World Bank's Global Findex database presents probably the most comprehensive analysis of cross-country financial inclusion indicators. The Global Findex indicators measure the use of financial services, building understanding around how people interact with financial services. The Global Findex uses three sets of indicator categories; formal accounts, savings behaviour and sources of borrowing (Demirguc-Kunt & Klapper, 2012).

Although these studies present a great leap towards measuring financial inclusion around the globe, they do not delve into country-specific determinants or barriers (Zins & Weill, 2016).

2.2.2 *Financial inclusion in South Africa*

South Africa presents a unique case for financial inclusion due to the majority of the population being legally excluded from the formal economy prior to democracy (Zwane et al., 2016; Carter & May, 2001; May & Norton, 1997). Requiring focused initiatives to broaden ownership of the economy, the financial services sector voluntarily developed the Financial Sector Charter (FSC) (Moyo & Rohan, 2006). The FSC speaks of access to first order retail financial services, compelling firms to provide sustainable and affordable banking services, contractual savings schemes and credit for small and micro-enterprise and poor households (NEDLAC, 2002).

South Africa ranks amongst its upper-to-middle income peers in bank account access, with 69% of people over the age of fifteen owning an account with a financial services provider (World Bank, 2015). This number is far ahead of Sub-Saharan Africa (SSA) at 29% (World Bank, 2015). The financial sector in South Africa is sophisticated and well-developed compared to its SSA peers. The sector has a variety of institutions and instruments, namely the South African Reserve Bank (which is the apex institution), commercial banks, life insurance companies, the Post Office Savings Bank, asset managers and micro-lenders among others (Odhiambo, 2009).

Despite its developed financial system South Africa still struggles to reap the rewards of financial inclusion due to the weak nature of account usage. A variety of social and structural factors limit the efficacy of account usage toward deeper financial inclusion. Demirguc-Kunt & Klapper (2012) find that lack of enough disposable income, cost, distance, and onerous documentation all have a negative impact on financial inclusion in SSA.

Technology, specifically internet and mobile connectivity, has had a massive impact on the ways in which we are able to interact with financial services providers. The ability of technology to create more efficient distribution channels has brought financial services closer to consumers, particularly in developing economies. In their analysis of user adoption of electronic banking channels Hoehle, Scornavacca & Huff (2012) find there to be five prevalent models

covered in the discourse around the topic, the Technology Acceptance Model (TAM) being the most prevalent (Davis, 1989). TAM aims to predict how users accept and use technology with perceived usefulness (PU) and perceived ease of use (PEU) as determinants (Hoehle et al., 2012). Durkin, Jennings, Mulholland & Worthington (2008) find that lack of face-to-face contact, lack of trust, and lack of security reassurance contribute negatively to consumer's willingness to use of electronic banking portals. Applying the Tam to mobile banking in South Africa, Wentzel et al. (2014) propose that 5 additional constructs influence adoption, namely social factors, self-efficacy, fun, trust and task.

2.3 Household savings

In its simplest sense savings can be defined as the excess of income over expenditure on consumption (Keynes, 1937). However, behavioural economic theory has brought to light that saving and investing is a function of the decision whether to consume now or later. With myriad financial products available to investors this paper sees savings as dynamic topic with the ultimate motive of wealth creation and preservation. Specifically, net financial wealth is defined as the sum of total interest earning assets in banks and other institutions, total stocks and mutual funds, and total other investments minus the total value of unsecured debt (Cobb-Clark, Kassenboehmer & Sinning, 2016).

2.3.1 *Savings and consumption theory*

Modern theory on saving and consumption behaviour is almost all based on or a combination of Samuelson's discounted utility model (DUM) (1930), Friedman's permanent income hypothesis (PIH) (1957) and Modigliani & Brumberg's life-cycle hypothesis (LCH) (1954). Rooted in intertemporal choice theory, these works attempt to explain savings and consumption decisions made by the rational consumer.

DUM departs from the assumption that the rational consumer aims to maximise their utility through decisions involving trade-offs between consumption and

saving. The model assumes that the value of a future reward (utility) is discounted because of the risk involved in waiting for it (Myerson & Green, 1995). The traditional DUM assumes a constant discount rate over time, however, Johnston, Tether & Tomlinson (2015) argue that empirically observed discount rates appear to decline (hyperbolic discounting) over time.

Although PIH basis itself in the theoretical constructs of DUM, it uses income as a major determinant of saving and consumption. Central to the theory is the distinction between measured and permanent income. Measured income is that which is recorded for a particular period. Permanent income, a longer-period concept, influences the decision over saving versus consumption (Friedman, 1957). Early practice in the literature has been to proxy permanent income by a fixed distributed lag of current and past disposable income. Predicting permanent income in this fashion has drawn much criticism (Flavin, 1981; Hall, 1978; Sargent, 1978; Lucas, 1976) almost all of which argues that current and past income do no predict future income.

Modigliani and Brumberg developed their theory of consumer expenditure based on considerations relating to the life cycle of income and consumption needs of households. LCH posits that individuals are rational beings, attempting to maximise utility against budget constraints. Thus, households can spread their lifetime consumption over their lives by building savings during their earning years and drawing from these savings to smooth consumption during retirement (Zwane et al., 2016). According LCH the rate of consumption in any given period is a piece of a longer-term plan that extends over the balance of an individual's life, while the income accruing within the same period is but one element which contributes to the shaping of such a plan (Ando & Modigliani, 1963). LCH incorporates motives into theory, motives which are determined by a person's net-wealth and period of their lifecycle, namely schooling, work and retirement. The first of these motives is the desire bequeath wealth to one's heirs, the second motive arises out of the fact the pattern of current income receipts may not meet that of preferred consumption, and finally the precautionary motive, i.e., the desire to accumulate assets through saving to meet possible unpredictable needs (Modigliani & Brumberg, 1954).

Whilst the above theories serve as an excellent foundation upon which numerous studies have been built, there is overwhelming evidence that saving is complex and fickle in nature. Determinants of savings may differ across nation groups, gender, income levels, education levels and age to name a few.

2.3.2 *Determinants of household savings in South Africa*

This section of the literature review will present determinants of household savings in South Africa which will ultimately be used as propositions for testing as determinants of unit trust investment in South Africa.

There have been numerous studies conducted around the determinants of saving in South Africa, but this study draws from three recent works all of which present a comprehensive list. Namely that of Zwane et al. (2016), Precious & Asrat (2014) and Simleit, Keeton & Botha (2011).

Income - Zwane et al. (2016) find that income is a major determinant of household savings South Africa. Their findings show that as household income raising so too does the household savings rate. They found savings to increase at a rate of 1.3x to that of the increase in income. This satisfies Modigliani & Brumberg's LCH (1954). In contrast to Zwane et al. (2016), Simleit et al. (2011) find that during a recession households are likely to behave in a more frugal and cautious manner. Believing their cut in income to be permanent, they cut back on consumption and increase savings.

Age – Zwane et al. (2016) argue that age is a determinant of the level of savings in a household. Their findings validate LCH and suggest that that as the age structure increases by one year, household saving also increases in the same direction. Precious & Asrat (2014) also find there to be a positive correlation between savings and age, up to the point when senior members of the household become dissavers in their retirement.

Education – Whilst Simleit et al. (2011) find that young adults engaged in education and in starting a family are thought of as dissavers Zwane et al.

(2016) find that level of education has a positive impact on savings rates. Precious & Asrat (2014) find that educational attainment is among the most important determinants of household saving behaviour.

Household size - Zwane et al. (2016) find that increased household size places an extra burden on consumption to the detriment of savings.

Financial literacy level – According to national and international studies, financial literacy has an impact on people's perceptions of the importance of saving as well as their knowledge of the financial products Stedall & Venter (2016).

2.3.3 *Financial product usage hierarchy*

Very recently Stedall & Venter (2016) conducted a study to determine if LCH can be applied to financial product usage among South Africans. The study is the first of its kind to be conducted in South Africa, presenting an initial foray into understanding financial product usage hierarchy in the country.

Adapting Lindqvist's (1981) saving motives hierarchy, Stedall & Venter (2016) propose the following hierarchy for South Africa:

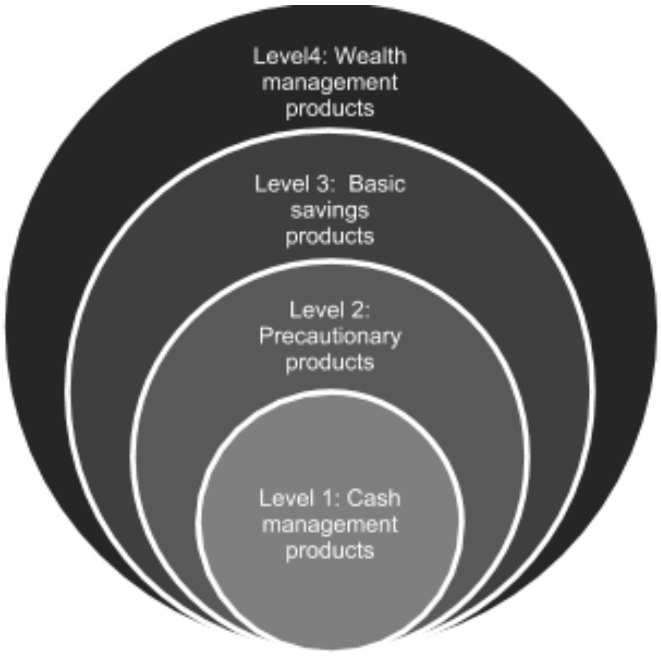

Figure 1: South African financial product usage hierarchy (Stedall & Venter, 2016)

Using data from SAARF's All Media and Products Study their analysis consisted of 25 444 respondents from across life stages as defined by SAARF. The study finds that life stages have a significant impact on the amount of respondents that save, as well as the types of products they use (Stedall & Venter, 2016).

CIS products fall into the basic savings category as the authors found that these products were entered into with a shorter investment horizon than wealth management products (Stedall & Venter, 2016). Interestingly, the authors found that there was no statistical significance in the use of CIS products between households in the different life stages (Stedall & Venter, 2016).

2.4 Unit trusts

Mutual funds or unit trusts play an important role in household finances. The first mutual funds were established in Europe in 1774. Early funds were of the closed-end type with a fixed number of shares, more common today are open-

end funds with redeemable shares (Padmaja, 2013). In *Asset Management 2020: A Brave New World,* PricewaterhouseCoopers estimates that global mutual fund AUM will grow at a compound annual growth rate (CAGR) of 5.4% from $27 trillion in 2012 to $41.2 trillion in 2020 (PwC, 2014).

2.4.1 *The South African unit trust industry*

Last year the South African mutual fund, or unit trust industry celebrated its 50 year journey from the birth of a single unit trust with R600 000 under management in June 1965. The industry has experienced immense growth since its humble beginnings, growing overall AUM at a CAGR of 25% as of end September 2016 (Campher & Dempsey, 2016). The figure on the following page provides a view of the growth in the industry since 2012.

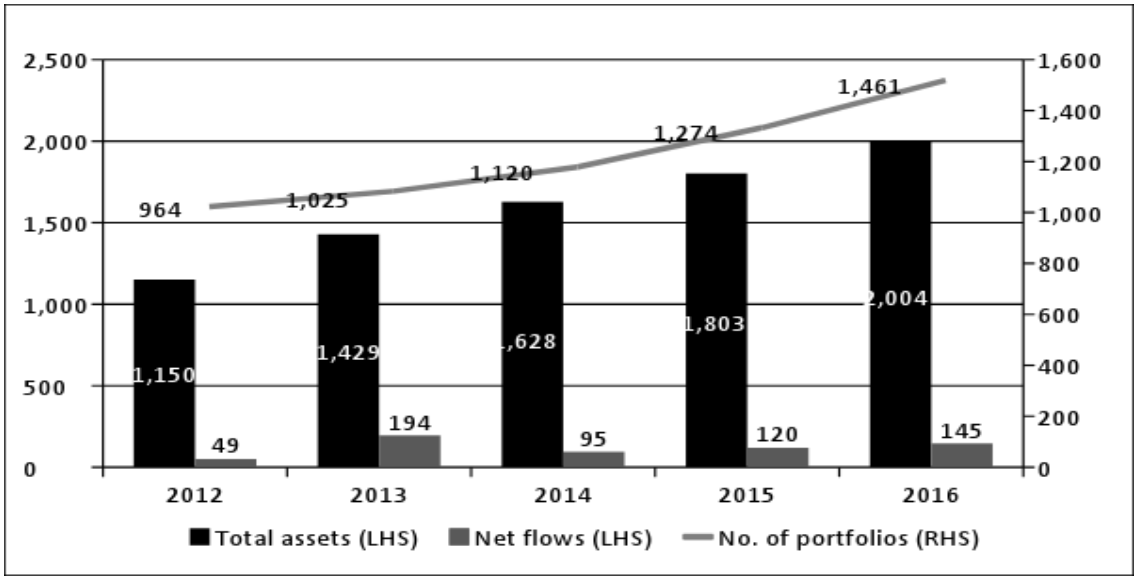

Figure 2: South African asset management industry (ASISA, 2016)

Unit trusts in South Africa are governed by the Collective Investment Schemes Control Act 45 of 2002, and ultimately the Financial Service Board (Swart & Lawack-Davids, 2010). ASISA plays an oversight role in the industry, setting codes, standards and guideline for financial services providers. ASISA also sets the classification standards for unit trusts sold in South Africa.

Unit trusts can be bought through a variety of distribution channels, either through an intermediary like a financial advisor or directly from the management

company (direct investment). Due to the relatively simplistic nature of unit trust investments direct investment seems to be gaining in popularity with 32% of inflows coming from direct investors (Campher & Dempsey, 2016).

2.4.2 *Determinants of unit trust purchases*

This section looks to present factors which impact a person's decision to purchase a unit trust. Due to the lack of literature on South African examples, the study looks to research conducted elsewhere in order to present propositions for testing.

From the literature under consideration the following three determinants of a unit trust purchase are most common:

Performance – Wermers (2003) argues that there is an inverse relationship between the probability of sale and past mutual fund performance. Past fund performance has been found to be an important determinant of fund flows (Gualtieri & Giovanni, 2005). Although there is scant evidence of which performance measures are most important, Del Guercio & Tkac (2002) argue that past performance guides a consumer's choice of fund manager and plays a large role in the decision to disinvest.

Visibility – Gualtieri & Giovanni (2005) argue that media coverage increases fund size and flows.

Complexity of information – Johnston et al. (2015) find that complex fund disclosure information has a negative impact on mutual fund flows.

2.5 Propositions

From the literature review in section 2.2 the following proposition is derived:

- The nature of bank account use has a significant impact on the decision to purchase a unit trust in South Africa.

From the literature review in section 2.3.2 the following propositions are presented :

- Income level will have a significant impact on the decision to purchase a unit trust in South Africa.
- Age will have a significant impact on the decision to purchase a unit trust in South Africa.
- Education level will have a significant impact on the decision to purchase a unit trust in South Africa.
- Household size will have a significant impact on the decision to purchase a unit trust in South Africa.

2.6 Summary of Literature Review

There has been a large amount of literature around financial inclusion and savings in South Africa. Notably less work has been done to understand the unit trust industry in the country. The literature has brought these three elements under the lens in an effort to understand elements that have an impact on South African's decision around unit trust purchases.

2.6.1 *Proposition 1:*

The nature of bank account use will have a significant impact of the decision to purchase a unit trust in South Africa.

2.6.2 *Proposition 2:*

Income level will have a significant impact of the decision to purchase a unit trust in South Africa.

2.6.3 *Proposition 3:*

Age will have a significant impact of the decision to purchase a unit trust in South Africa.

2.6.4 *Proposition 4:*

Education level will have a significant impact of the decision to purchase a unit trust in South Africa.

2.6.5 *Proposition 5:*

Household size will have a significant impact of the decision to purchase a unit trust in South Africa.

CHAPTER 3. RESEARCH METHODOLOGY

This section outlines the methodology used in this research. The chosen research methodology will be discussed, followed by a review of the research design and research instrument. Careful consideration is paid to the literature reviewed in section 2, guiding the research in its scope and form. Procedure for data collection and forms of analysis are also discussed.

3.1 Research methodology

The study is best described as descriptive research as it looks to outline factors that impact unit trust purchases by South African citizens.

The methodology follows a mixed approach similar to that of Rootman & Kruger (2016) in their assessment of consumers' intention to use unit trusts. The propositions drawn from the literature review serve as the independent variables for the study; the decision to purchase unit trust is the dependent variable.

3.2 Research Design

Rootman and Kruger (2016) found that a structured questionnaire was an effective instrument to gather information pertaining to people's investment habits. The advantage of the survey method is that it allows a large sample of respondents to be asked the same questions, and lends itself well to testing multiple propositions (Neuman, 2000). This study also adopts an anonymous survey approach as it asks for sensitive personal information from respondents.

3.3 Population and sample

3.3.1 *Population*

The population for the sample selection is defined as all individuals in South Africa who hold a bank account.

3.3.2 *Sample and sampling method*

Rootman & Kruger (2016) suggest using a non-probability convenience sampling approach due to the accessibility and availability of respondents.

Rootman and Kruger (2016) suggest a ratio of ten observations per independent variable in order to conduct a satisfactory statistical analysis. This study has three independent variables with a minimum of five observations per variable, translating to a target of 150 respondents. Failing which, the study hopes for at least 50 respondents in order to conduct parametric tests.

3.4 The research instrument

In the main, a closed ended questionnaire is to be used as the research instrument. Rootman and Kruger (2016) use a five-point Likert-scale continuum of the ranging from ‘strongly disagree’ (1) to ‘strongly agree’ (5). Section A of this study has followed the same approach. Section B investigates the nature of account usage using multiple choice type responses. Section C used an ordinal scale to collect biographic and demographic data from the respondents. Gathering the same data as Rootman and Kruger (2016), namely; gender, population group, age, education level and data on the current investment vehicles they use. Section C posed an open-ended question asking respondents how they would define unit trusts.

3.5 Procedure for data collection

Data was gathered using the Qualtrics survey application. Qulatrics serves as a cost-effective method of gathering mass amount of data in an anonymous

fashion. The survey was disseminated through the author's network via social media and email form.

3.6 Data analysis and interpretation

The SPSS (version 24) statistics programme was used to capture and analyse the data. A Cronbach's Alpha test was conducted to assess the reliability of the instrument; Rootman and Kruger (2016) suggest a coefficient limit of 0.60.

To ensure construct validity Rootman and Kruger (2016) suggest using exploratory factor analysis. Factors with more than three items and factor loadings of at least 0.4 were considered as valid in their study.

Analysis of Variance (ANOVA) tests were performed by Rootman and Kruger (2016) to determine whether the respondents from the various population groups, age groups, employment statuses and educational levels perceive the independent variables differently.

Lastly, the study assesses correlations or linear relationships between dependent and independent variables, calculated using the Pearson Product-Moment correlation coefficient.

3.7 Limitations of the study

The sample restricts itself to banking clients in South Africa. The study was only distributed through electronic means; those that do not have access to internet were not able to participate.

3.8 Validity and reliability

Wilson and Mclean (2011) define external validity as the extent to which the results of the research are descriptive of the general population. Internal validity, on the other hand, is the fit of the research approach against the hypotheses it was designed for.

3.8.1 *External validity*

Rootman and Kruger (2016) confirm their instrument as valid and reliable. Although the instrument used in this study was not be identical it has been modelled as closely as possible on Rootman and Kruger's (2016) approach. The use of a Cronbach's Alpha test also reaffirmed the validity of the data under review.

Although a best effort was pursued, the sample does not reflect the true demographics of South Africa.

3.8.2 *Internal validity*

Internal validity was maximised through the use of plain, easy to understand language. The questions were asked in layman's terms, paying no reference to complex industry jargon.

3.8.3 *Reliability*

(Blanche, Durrheim & Painter, 2009) suggest using the test-retest reliability test, accordingly the pilot group retook the test a week apart.

3.9 Demographic profile of respondents

This section presents the demographic profile of the sample group that was obtained through the research instrument. Of the 75 respondents that began the survey, 70 completed the demographic profile section. A sample profile was drawn from these 70 respondents.

3.9.1 *Sample age profile*

The majority (64.3%) of respondents were between the ages of 18 and 35 years of age, this is pleasing as this captures a segment of the population that is beginning to engage with financial services products. Precious & Asrat (2014)

find that senior members of the household become dissavers in their retirement; it is therefore pleasing that 95.7% of respondents were below the age 60 years.

Table 1: Sample age profile

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 years - 25 years	3	4.0	4.3	4.3
	26 years - 30 years	20	26.7	28.6	32.9
	31 years - 35 years	22	29.3	31.4	64.3
	36 years - 40 years	11	14.7	15.7	80.0
	41 years - 50 years	9	12.0	12.9	92.9
	51 years - 60 years	2	2.7	2.9	95.7
	61 years and above	3	4.0	4.3	100.0
	Total	70	93.3	100.0	
Missing		5	6.7		
Total		75	100.0		

3.9.2 *Sample gender profile*

In its 2017 mid year population estimate Statistics South Africa estimated the gender split of the South African population to be 49% male and 51% female (Statistics South Africa, 2017). The sample group is therefore skewed towards male respondents and not fully representative of South African gender demographics.

Table 2: Sample gender profile

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	42	56.0	60.0	60.0

	Female	28	37.3	40.0	100.0
	Total	70	93.3	100.0	
Missing		5	6.7		
Total		75	100.0		

3.9.3 *Sample race profile*

According to Statistics South Africa (2017) the local population is 80.8% black; 8.8% coloured; 8% white and 2.5% Indian/Asian. The sample group differs in that 55.7% of respondents were black; 22.9% white; 11.4% Indian and 7.1% coloured.

Table 3: Sample race profile

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Black**	39	52.0	55.7	55.7
	Coloured	5	6.7	7.1	62.9
	Indian	8	10.7	11.4	74.3
	White	16	21.3	22.9	97.1
	Other	2	2.7	2.9	100.0
	Total	70	93.3	100.0	
Missing		5	6.7		
Total		75	100.0		

3.9.4 *Sample province profile*

81.4% of respondents were from Gauteng, this is in line with expectations as the survey was sent mostly to Gauteng residents. There were no respondents from Mpumalanga, North-West province or the Northern Cape.

Table 4: Sample province profile

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Eastern Cape**	3	4.0	4.3	4.3

	Free State	2	2.7	2.9	7.1
	Gauteng	57	76.0	81.4	88.6
	KwaZulu-Natal	4	5.3	5.7	94.3
	Limpopo	1	1.3	1.4	95.7
	Western Cape	3	4.0	4.3	100.0
	Total	70	93.3	100.0	
Missing		5	6.7		
Total		75	100.0		

3.9.5 *Sample education profile*

58.6% of respondents had achieved a postgraduate qualification, this is due to the survey being distributed in the main to Wits Business School students.

Table 5: Sample education profile

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Primary school**	1	1.3	1.4	1.4
	High school	5	6.7	7.1	8.6
	Diploma	8	10.7	11.4	20.0
	Undergraduate degree	15	20.0	21.4	41.4
	Postgraduate degree	41	54.7	58.6	100.0
	Total	70	93.3	100.0	
Missing		5	6.7		
Total		75	100.0		

3.9.6 *Sample income profile*

The sample monthly income before deductions profile was higher than expected and can be attributed to the high number of postgraduate respondents in the sample. It is also interesting to note that 75.7% of respondents were the highest income earners in their household.

Table 6: Sample monthly income after deductions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than R6 000	2	2.7	2.9	2.9
	R6 000 - R10 000	2	2.7	2.9	5.7
	R10 001 - R15 000	7	9.3	10.0	15.7
	R15 001 - R25 000	8	10.7	11.4	27.1
	R25 001 - R35 000	11	14.7	15.7	42.9
	R35 001 - R45 000	15	20.0	21.4	64.3
	R45 001 and above	25	33.3	35.7	100.0
	Total	70	93.3	100.0	
Missing		5	6.7		
Total		75	100.0		

Table 7: Respondents as highest income earners in their household

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	53	70.7	75.7	75.7
	No	17	22.7	24.3	100.0
	Total	70	93.3	100.0	
Missing		5	6.7		
Total		75	100.0		

3.9.1 *Sample Household size profile*

Interestingly, over half (52.9%) of respondents either live alone or with one other person.

Table 8: Sample household size profile

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	16	21.3	22.9	22.9
	2	21	28.0	30.0	52.9
	3	8	10.7	11.4	64.3
	4	14	18.7	20.0	84.3
	5	9	12.0	12.9	97.1
	6 and above	2	2.7	2.9	100.0
	Total	70	93.3	100.0	
Missing		5	6.7		
Total		75	100.0		

CHAPTER 4. PRESENTATION OF RESULTS

4.1 Introduction

The following chapter will begin by presenting the statistical reliability and internal consistency of the instrument through the use of a Cronbach's Alpha test as suggested by Rootman & Kruger (2016).

Following, the results of the survey will be discussed in line with each of the afore mentioned propositions. The survey results for each proposition will be presented as descriptive statistics using frequency tables and crosstabs, an analysis of variance will be provided using one way anova tests. Where appropriate any correlations relating to the applicable proposition will be highlighted through the use of a Pearson Product Moment Correlation Coefficient.

4.2 Statistical reliability

Cronbach's Alpha provides a measure of internal consistency and hence reliability of a test or scale. Internal consistency describes the extent to which all the items in a test measure the same concept or construct (Dennick & Tavakol, 2011). In their research, Rootman and Kruger (2016) suggest using a lower limit of 0.6 with regard to the Cronbach's Alpha. It is therefore pleasing to note that this research instrument scored a Cronbach's Alpha of 0.626 and is deemed to be reliable.

4.3 Results pertaining to Proposition 1

Proposition 1 - The nature of bank account use will have a significant impact of the decision to purchase a unit trust in South Africa.

In order to test whether the nature of bank account use has a significant impact on the decision to purchase a unit trust the survey asked respondents to provide details around the following:

- Which bank the respondent holds their primary bank account with
- Whether the respondent holds an account with more than one bank
- The respondent's preferred channel of access to their bank account
- How often the respondent interacts with their bank account

Respondents were also asked questions based on a five point likert scale that solicited their opinion on what the most important factors are when considering investing in a unit trust. The variance in these answers is tested to see if there are any significant relationships between the opinions and the nature of bank account usage of respondents.

4.3.1 *Frequency tables*

This section provides a basic look at the frequency of different answers to questions that focus on the nature of bank account usage.

Table 9: Respondent primary bank brand

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**ABSA**	13	17,3	17,8	17,8
	Capitec	5	6,7	6,8	24,7
	FNB	27	36,0	37,0	61,6
	Nedbank	6	8,0	8,2	69,9
	Standard Bank	17	22,7	23,3	93,2
	Other	4	5,3	5,5	98,6
	I do not have a bank account	1	1,3	1,4	100,0
	Total	73	97,3	100,0	
Missing		2	2,7		
Total		75	100,0		

The above table displays the frequency of different banking brands given by respondents as their primary bank account. Although this does not give insight into the nature of bank account usage, when cast against the dependent

variable of unit trust investment it provides valuable information as to which bank's clients are saving.

Table 10: Does the respondent have an account with more than one bank?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Yes**	29	38,7	40,3	40,3
	No	43	57,3	59,7	100,0
	Total	72	96,0	100,0	
Missing		3	4,0		
Total		75	100,0		

The above table displays the split between those respondents that hold a bank account with only one bank and those that have an account with more than one bank. This provides insight into how respondents are engaging with the financial sector. Interestingly, an unexpectedly high number of respondents (40,3%) held an account with more than one bank.

Table 11: What is the respondent's preferred channel of access to their bank account?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**ATM**	4	5,3	5,6	5,6
	App	31	41,3	43,1	48,6
	Branch	3	4,0	4,2	52,8
	Online	33	44,0	45,8	98,6
	Other	1	1,3	1,4	100,0
	Total	72	96,0	100,0	
Missing		3	4,0		
Total		75	100,0		

The above table provides insight into how respondents interact with their bank account. Interestingly, an overwhelming majority of respondents (88,9%) use either an app or online portal when conducting banking activities.

Table 12: How often does the respondent interact with their bank account?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Every day**	49	65,3	68,1	68,1
	Once a week	22	29,3	30,6	98,6
	Once a month	1	1,3	1,4	100,0
	Total	72	96,0	100,0	
Missing		3	4,0		
Total		75	100,0		

The above table shows how often respondents interact with their bank account by either withdrawing money from an ATM, using a debit or credit card or logging on to internet banking.

4.3.2 *Crosstabs*

The following section will use crosstab tables to cast the independent variables as discussed above against the dependent variable of unit trust ownership.

Table 13: Bank brand and unit trust investment

			Are you currently invested in a unit trust product?			
			Yes	No	Unsure	Total
Which bank do you hold your primary account with?	ABSA	Count	7	6	0	13
		Percentage	53,8%	46,2%	0,0%	100,0%
	Capitec	Count	0	5	0	5
		Percentage	0,0%	100,0%	0,0%	100,0%
	FNB	Count	15	12	0	27
		Percentage	55,6%	44,4%	0,0%	100,0%
	Nedbank	Count	4	2	0	6
		Percentage	66,7%	33,3%	0,0%	100,0%
	Standard Bank	Count	5	10	2	17
		Percentage	29,4%	58,8%	11,8%	100,0%
	Other	Count	2	2	0	4
		Percentage	50,0%	50,0%	0,0%	100,0%
	I do not have a bank account	Count	0	1	0	1
		Percentage	0,0%	100,0%	0,0%	100,0%
Total		Count	33	38	2	73
		Percentage	45,2%	52,1%	2,7%	100,0%

The above table shows the split between those that are and are not invested in unit trust products for each banking brand. The table gives a depiction of how each brand's clients are interacting with the savings environment, specifically unit trust savings vehicles.

Table 14: More than one bank account and unit trust investment

			Are you currently invested in a unit trust product?			
			Yes	No	Unsure	Total
Do you hold an account with more than one bank?	Yes	Count	13	15	1	29
		Percentage	44,8%	51,7%	3,4%	100,0%
	No	Count	20	22	1	43
		Percentage	46,5%	51,2%	2,3%	100,0%
Total		Count	33	37	2	72
		Percentage	45,8%	51,4%	2,8%	100,0%

The above table shows unit trust ownership between those respondents that only have an account with one bank and those that have an account with more than one bank.

Table 15: Preferred channel of access and unit trust investment

			Are you currently invested in a unit trust product?			Total
			Yes	No	Unsure	
What is your preferred channel of access to your bank account?	ATM	Count	1	3	0	4
		Percentage	25,0%	75,0%	0,0%	100,0%
	App	Count	13	17	1	31
		Percentage	41,9%	54,8%	3,2%	100,0%
	Branch	Count	0	3	0	3
		Percentage	0,0%	100,0%	0,0%	100,0%
	Online	Count	19	13	1	33
		Percentage	57,6%	39,4%	3,0%	100,0%
	Other	Count	0	1	0	1
		Percentage	0,0%	100,0%	0,0%	100,0%
Total		Count	33	37	2	72
		Percentage	45,8%	51,4%	2,8%	100,0%

The above table shows unit trust ownership between the various channels through which respondents interact with their bank accounts.

Table 16: Frequency of bank account interaction and unit trust investment

			Are you currently invested in a unit trust product?			Total
			Yes	No	Unsure	
How often do you use your bank account?	Every day	Count	24	24	1	49
		Percentage	49,0%	49,0%	2,0%	100,0%
	Once a week	Count	8	13	1	22
		Percentage	36,4%	59,1%	4,5%	100,0%
	Once a month	Count	1	0	0	1
		Percentage	100,0%	0,0%	0,0%	100,0%
Total		Count	33	37	2	72
		Percentage	45,8%	51,4%	2,8%	100,0%

The above table shows unit trust ownership among groups of respondents that are designated by the frequency with which they interact with their bank account by either withdrawing money, using a debit or credit card or using an app or online portal.

4.3.3 *Analysis of variance*

This section looks at whether there are any significant relationships between answers to questions which focused on the nature of bank account usage and answers to questions that solicited the opinion of the respondent on what matters when considering investing in a unit trust. One way anova tests were used to generate a significance coefficient. A coefficient of less than 0,05 is deemed to represent a significant relationship.

Table 17: Anova results for bank brand and unit trust investment opinions

	Sig. Coefficient
I will be likely to start investing, or increase my investment in unit trusts if my income increases	0,638
I will be likely to start investing, or increase my investment in unit trusts as I get older	0,310
The performance of a unit trust is likely to have an impact my decision to invest	0,668
A positive return on my investment is the most important outcome for me	0,539
Maintaining my wealth through an investment is the most important outcome for me	0,611

I am likely to read available marketing material before investing in a savings product	0,977
I prefer in depth information when I am deciding whether to invest in a savings product	0,214
I prefer to invest in savings products from financial services providers that I am familiar with	0,294
I usually understand the language that is used in advertisements for savings products	0,993

The table above shows the significance coefficient as a result of the anova test for respondent bank brands and their opinions on the above questions. None of the relationships meet the coefficient threshold.

Table 18: Anova results for more than one bank and unit trust investment opinions

	Sig. Coefficient
I will be likely to start investing, or increase my investment in unit trusts if my income increases	0,575
I will be likely to start investing, or increase my investment in unit trusts as I get older	0,187
The performance of a unit trust is likely to have an impact my decision to invest	0,917
A positive return on my investment is the most important outcome for me	0,467

Maintaining my wealth through an investment is the most important outcome for me	0,771
I am likely to read available marketing material before investing in a savings product	1,000
I prefer in depth information when I am deciding whether to invest in a savings product	0,005
I prefer to invest in savings products from financial services providers that I am familiar with	0,073
I usually understand the language that is used in advertisements for savings products	0,877

The table above shows the significance coefficient as a result of the anova test for respondents and their opinions on the above questions. A significant relationship is presented by the highlighted cell.

Table 19: Anova results for channel of access and unit trust investment opinions

	Sig. Coefficient
I will be likely to start investing, or increase my investment in unit trusts if my income increases	0,776
I will be likely to start investing, or increase my investment in unit trusts as I get older	0,961
The performance of a unit trust is likely to have an impact my decision to invest	0,546

A positive return on my investment is the most important outcome for me	0,850
Maintaining my wealth through an investment is the most important outcome for me	0,858
I am likely to read available marketing material before investing in a savings product	0,667
I prefer in depth information when I am deciding whether to invest in a savings product	0,268
I prefer to invest in savings products from financial services providers that I am familiar with	0,301
I usually understand the language that is used in advertisements for savings products	0,211

The table above shows the significance coefficient as a result of the anova test for respondent's preferred channel of access to their bank account and their opinions on the above questions. None of the relationships meet the coefficient threshold.

Table 20: Anova results for frequency of account interaction and unit trust investment opinions

	Sig. Coefficient
I will be likely to start investing, or increase my investment in unit trusts if my income increases	0,136
I will be likely to start investing, or increase my investment in unit trusts as I get older	0,132

The performance of a unit trust is likely to have an impact my decision to invest	0,231
A positive return on my investment is the most important outcome for me	0,269
Maintaining my wealth through an investment is the most important outcome for me	0,034
I am likely to read available marketing material before investing in a savings product	1,000
I prefer in depth information when I am deciding whether to invest in a savings product	0,987
I prefer to invest in savings products from financial services providers that I am familiar with	0,986
I usually understand the language that is used in advertisements for savings products	0,266

The table above shows the significance coefficient as a result of the anova test for respondents and their opinions on the above questions. A significant relationship is presented by the highlighted cell.

4.3.4 *Correlations*

Due to the categorical nature of the data in this section correlations cannot be drawn.

4.3.5 *Conclusion*

From the above information it can be concluded that in some respects the nature of account usage has an impact on the decision to purchase a unit trust.

This is most apparent in the frequency with which respondents accessed their bank and the different channels through which they access their bank accounts. This will be elaborated in Chapter 5.

4.4 Results pertaining to Proposition 2

Proposition 2 - Income level will have a significant impact of the decision to purchase a unit trust in South Africa.

In order to test whether income level has a significant impact on the decision to purchase a unit trust the survey asked respondents to provide their monthly income after deductions.

Respondents were also asked questions based on a five point likert scale that solicited their opinion on what the most important factors are when considering investing in a unit trust. The variance in these answers is tested to see if there are any significant relationships between the opinions and different levels of income.

4.4.1 *Frequency table*

Table 21: What is your monthly income after deductions?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than R6 000	2	2,7	2,9	2,9
	R6 000 - R10 000	2	2,7	2,9	5,7
	R10 001 - R15 000	7	9,3	10,0	15,7
	R15 001 - R25 000	8	10,7	11,4	27,1
	R25 001 - R35 000	11	14,7	15,7	42,9
	R35 001 - R45 000	15	20,0	21,4	64,3
	R45 001 and above	25	33,3	35,7	100,0
	Total	70	93,3	100,0	
Missing		5	6,7		
Total		75	100,0		

The above table shows the distribution of monthly income after deductions of the sample population.

4.4.2 *Crosstabs*

Table 22: Monthly income and unit trust investment

			Are you currently invested in a unit trust product?			
			Yes	No	Unsure	Total
Select your monthly income after deductions	Less than R6 000	Count	1	1	0	2
		Percentage	50,0%	50,0%	0,0%	100,0%
	R6 000 - R10 000	Count	0	2	0	2
		Percentage	0,0%	100,0%	0,0%	100,0%
	R10 001 - R15 000	Count	2	5	0	7
		Percentage	28,6%	71,4%	0,0%	100,0%
	R15 001 - R25 000	Count	3	5	0	8
		Percentage	37,5%	62,5%	0,0%	100,0%
	R25 001 - R35 000	Count	7	4	0	11
		Percentage	63,6%	36,4%	0,0%	100,0%
	R35 001 - R45 000	Count	7	7	1	15
		Percentage	46,7%	46,7%	6,7%	100,0%
	R45 001 and above	Count	11	13	1	25
		Percentage	44,0%	52,0%	4,0%	100,0%
Total		Count	31	37	2	70
		Percentage	44,3%	52,9%	2,9%	100,0%

The above table shows unit trust ownership among different levels of monthly income for respondents.

4.4.3 *Analysis of variance*

Table 23: Anova results for monthly income and unit trust investment opinions

	Sig.
I will be likely to start investing, or increase my investment in unit trusts if my income increases	0,470
I will be likely to start investing, or increase my investment in unit trusts as I get older	0,361

The performance of a unit trust is likely to have an impact my decision to invest	0,887
A positive return on my investment is the most important outcome for me	0,935
Maintaining my wealth through an investment is the most important outcome for me	0,581
I am likely to read available marketing material before investing in a savings product	0,720
I prefer in depth information when I am deciding whether to invest in a savings product	0,031
I prefer to invest in savings products from financial services providers that I am familiar with	0,855
I usually understand the language that is used in advertisements for savings products	0,298

The table above shows the significance coefficient as a result of the anova test for respondent's monthly income and their opinions on the above questions. A significant relationship is presented by the highlighted cell.

4.4.4 *Correlations*

Table 24: Correlation results for monthly income and opinion based answers

		Less than R6 000	R6 000 - R10 000	R10 001 - R15 000	R15 001 - R25 000	R25 001 - R35 000	R35 001 - R45 000	R45 001 and above
I will be likely to start investing, or increase my investment in unit trusts as I get older (Strongly Agree)	Pearson Correlation						.232*	
	Sig. (2-tailed)						0,048	
I will be likely to start investing, or increase my investment in unit trusts as I get older (Strongly Disagree)	Pearson Correlation	.255*						
	Sig. (2-tailed)	0,029						
Maintaining my wealth through an investment is the most important outcome for me (Agree)	Pearson Correlation					.262*		
	Sig. (2-tailed)					0,025		
I prefer to invest in savings products from financial services providers that I am familiar with (Agree)	Pearson Correlation						.284*	
	Sig. (2-tailed)						0,015	
I usually understand the language that is used in advertisements for savings products (Disagree)	Pearson Correlation	.398**						
	Sig. (2-tailed)	0,000						

The above table above shows correlations between levels of monthly income and opinion-based answers for likert scale questions. There are apparent correlations that will be discussed in Chapter 5.

4.4.5 *Conclusion*

Although it does not seem that an increased levels of monthly income translate into unit trust investment, there are definite discussion points that are unique to different income levels. These will be elaborated on in Chapter 5.

4.5 Results pertaining to Proposition 3

Proposition 3 - Age will have a significant impact of the decision to purchase a unit trust in South Africa.

In order to test whether age has a significant impact on the decision to purchase a unit trust the survey asked respondents to provide their age according to given age groups.

Respondents were also asked questions based on a five point likert scale that solicited their opinion on what the most important factors are when considering investing in a unit trust. The variance in these answers is tested to see if there are any significant relationships between the opinions and different age groups.

4.5.1 *Frequency table*

Table 25: Please select your age group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 years - 25 years	3	4.0	4.3	4.3
	26 years - 30 years	20	26.7	28.6	32.9
	31 years - 35 years	22	29.3	31.4	64.3
	36 years - 40 years	11	14.7	15.7	80.0
	41 years - 50 years	9	12.0	12.9	92.9
	51 years - 60 years	2	2.7	2.9	95.7
	61 years and above	3	4.0	4.3	100.0
	Total	70	93.3	100.0	
Missing		5	6.7		
Total		75	100.0		

The table above shows the age group distribution of respondents.

4.5.2 *Crosstabs*

Table 26: Age and unit trust investment

			Are you currently invested in a unit trust product?			
			Yes	No	Unsure	Total
Select your age group	18 years - 25 years	Count	1	2	0	3
		Percentage	33,3%	66,7%	0,0%	100,0%
	26 years - 30 years	Count	10	10	0	20
		Percentage	50,0%	50,0%	0,0%	100,0%
	31 years - 35 years	Count	9	12	1	22
		Percentage	40,9%	54,5%	4,5%	100,0%
	36 years - 40 years	Count	5	5	1	11
		Percentage	45,5%	45,5%	9,1%	100,0%
	41 years - 50 years	Count	4	5	0	9
		Percentage	44,4%	55,6%	0,0%	100,0%
	51 years - 60 years	Count	0	2	0	2
		Percentage	0,0%	100,0%	0,0%	100,0%
	61 years and above	Count	2	1	0	3
		Percentage	66,7%	33,3%	0,0%	100,0%
Total		Count	31	37	2	70
		Percentage	44,3%	52,9%	2,9%	100,0%

The above table shows unit trust ownership among different respondent age groups. Although there appears to be higher unit trust ownership among older respondents and lower among younger respondents there is no apparent pattern showing an increase in ownership as age increases.

4.5.3 *Analysis of variance*

Table 27: Anova results for age and unit trust investment opinions

	Sig.
I will be likely to start investing, or increase my investment in unit trusts if my income increases	0,519
I will be likely to start investing, or increase my investment in unit trusts as I get older	0,183
The performance of a unit trust is likely to have an impact my decision to invest	0,855
A positive return on my investment is the most important outcome for me	0,476
Maintaining my wealth through an investment is the most important outcome for me	0,756
I am likely to read available marketing material before investing in a savings product	0,937
I prefer in depth information when I am deciding whether to invest in a savings product	0,658
I prefer to invest in savings products from financial services providers that I am familiar with	0,621
I usually understand the language that is used in advertisements for savings products	0,415

The above table shows the anova results for respondent age groups and opinions on unit trust investment. No significant relationships were highlighted.

4.5.4 *Correlations*

Table 28: Correlation results for age and opinion based answers

		18 years - 25 years	26 years - 30 years	31 years - 35 years	36 years - 40 years	41 years - 50 years	51 years - 60 years	61 years and above
I will be likely to start investing, or increase my investment in unit trusts if my income	**Pearson Correlation**							.287*
	Sig. (2-tailed)							0,014
I will be likely to start investing, or increase my investment in unit trusts as I get older	**Pearson Correlation**						.269*	
	Sig. (2-tailed)						0,022	
A positive return on my investment is the most important outcome for me	**Pearson Correlation**	.305**						
	Sig. (2-tailed)	0,009						
I prefer to invest in savings products from financial services providers	**Pearson Correlation**	.255*						
	Sig. (2-tailed)	0,029						
I usually understand the language that is used in advertisements for	**Pearson Correlation**		.256*					
	Sig. (2-tailed)		0,029					
I usually understand the language that is used in advertisements for	**Pearson Correlation**			.299*				
	Sig. (2-tailed)			0,010				

The above table above shows correlations between age and opinion-based answers for likert scale questions. There are apparent correlations that will be discussed in Chapter 5.

4.5.5 *Conclusion*

Although some patterns have emerged in relation to age and unit trust ownership there seems to be no clear indication that unit trust ownership increases with age among respondents.

4.6 Results pertaining to Proposition 4

Proposition 4 - Education level will have a significant impact of the decision to purchase a unit trust in South Africa.

In order to test whether education level has a significant impact on unit trust investment respondents were asked to give their education level from primary school to postgraduate degree.

Respondents were also asked questions based on a five point likert scale that solicited their opinion on what the most important factors are when considering investing in a unit trust. The variance in these answers is tested to see if there are any significant relationships between the opinions and different levels of education.

4.6.1 *Frequency table*

Table 29: Please select your education level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary school	1	1.3	1.4	1.4
	High school	5	6.7	7.1	8.6
	Diploma	8	10.7	11.4	20.0
	Undergraduate degree	15	20.0	21.4	41.4
	Postgraduate degree	41	54.7	58.6	100.0
	Total	70	93.3	100.0	
Missing		5	6.7		
Total		75	100.0		

The above table shows the different education levels of respondents.

4.6.2 *Crosstabs*

Table 30: Education level and unit trust investment

			Are you currently invested in a unit trust product?			
			Yes	No	Unsure	Total
Select your highest education level	Primary school	Count	0	1	0	1
		Percentage	0,0%	100,0%	0,0%	100,0%
	High school	Count	1	4	0	5
		Percentage	20,0%	80,0%	0,0%	100,0%
	Diploma	Count	2	6	0	8
		Percentage	25,0%	75,0%	0,0%	100,0%
	Undergraduate degree	Count	6	9	0	15
		Percentage	40,0%	60,0%	0,0%	100,0%
	Postgraduate degree	Count	22	17	2	41
		Percentage	53,7%	41,5%	4,9%	100,0%
Total		Count	31	37	2	70
		Percentage	44,3%	52,9%	2,9%	100,0%

The above table shows unit trust investment at different education levels. A clear pattern has emerged showing higher levels of unit trust investment as education level increases.

4.6.3 *Analysis of variance*

Table 31: Anova results for education level and unit trust investment opinions

	Sig.
I will be likely to start investing, or increase my investment in unit trusts if my income increases	0,154
I will be likely to start investing, or increase my investment in unit trusts as I get older	0,120
The performance of a unit trust is likely to have an impact my decision to invest	0,901

A positive return on my investment is the most important outcome for me	0,078
Maintaining my wealth through an investment is the most important outcome for me	0,911
I am likely to read available marketing material before investing in a savings product	0,024
I prefer in depth information when I am deciding whether to invest in a savings product	0,002
I prefer to invest in savings products from financial services providers that I am familiar with	0,818
I usually understand the language that is used in advertisements for savings products	0,008

The above table shows the anova results for respondent education levels and opinions on unit trust investment. Three cells are highlighted showing a strong relationship between education levels and how respondents treat information surrounding unit trust investments.

4.6.4 *Correlations*

Table 32: Correlation results for education level and opinion based answers

		Primary School	High School	Diploma	Undergraduate Degree	Postgraduate Degree
I will be likely to start investing, or increase my investment in unit trusts if my income increases (Disagree)	Pearson Correlation	.314**				
	Sig. (2-tailed)	0,007				
I will be likely to start investing, or increase my investment in unit trusts as I get older (Strongly Agree)	Pearson Correlation					.243*
	Sig. (2-tailed)					0,038
I will be likely to start investing, or increase my investment in unit trusts as I get older (Strongly Disagree)	Pearson Correlation	.394**				
	Sig. (2-tailed)	0,001				
I am likely to read available marketing material before investing in a savings product (Strongly Agree)	Pearson Correlation					.289*
	Sig. (2-tailed)					0,013
I am likely to read available marketing material before investing in a savings product (Strongly Disagree)	Pearson Correlation	.489**				
	Sig. (2-tailed)	0,000				
I prefer in depth information when I am deciding whether to invest in a savings product (Strongly Agree)	Pearson Correlation					.299*
	Sig. (2-tailed)					0,010
I prefer in depth information when I am deciding whether to invest in a savings product (Strongly Disagree)	Pearson Correlat	.489**				
	Sig. (2-tailed)	0,000				

The table above shows the correlation results for respondent education level and opinion based questions on unit trust investment. Correlations appear to show a relationship between the lowest education level and a lack of interest in unit trust investment and inability to asses information related to investment. The opposite is true when compared to respondents with a postgraduate level of education. This will be discussed further in Chapter 5.

4.6.5 *Conclusion*

Education level has produced notable relationships with unit trust investment and the ability to engage with financial services. Respondents with higher levels of education have either already invested in unit trust or are willing to invest at a later stage.

4.7 Results pertaining to Proposition 5

Proposition 5 - Household size will have a significant impact of the decision to purchase a unit trust in South Africa.

In order to test whether household size has a significant impact on unit trust investment respondents were asked to give the number of people that reside at their primary residence.

Respondents were also asked questions based on a five point likert scale that solicited their opinion on what the most important factors are when considering investing in a unit trust. The variance in these answers is tested to see if there are any significant relationships between the opinions and different household sizes.

4.7.1 *Frequency table*

Table 33: Number of people living at respondent primary household

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	16	21.3	22.9	22.9
	2	21	28.0	30.0	52.9
	3	8	10.7	11.4	64.3
	4	14	18.7	20.0	84.3
	5	9	12.0	12.9	97.1
	6 and above	2	2.7	2.9	100.0
	Total	70	93.3	100.0	
Missing		5	6.7		
Total		75	100.0		

The table above shows the household size of respondents.

4.7.2 *Crosstabs*

Table 34: Number of people living at respondent primary household and unit trust investment

			Are you currently invested in a unit trust product?			
			Yes	No	Unsure	Total
How many people live in your household?	1	Count	8	8	0	16
		Percentage	50,0%	50,0%	0,0%	100,0%
	2	Count	12	9	0	21
		Percentage	57,1%	42,9%	0,0%	100,0%
	3	Count	2	6	0	8
		Percentage	25,0%	75,0%	0,0%	100,0%
	4	Count	3	11	0	14
		Percentage	21,4%	78,6%	0,0%	100,0%
	5	Count	4	3	2	9
		Percentage	44,4%	33,3%	22,2%	100,0%
	6 and above	Count	2	0	0	2
		Percentage	100,0%	0,0%	0,0%	100,0%
Total		Count	31	37	2	70
		Percentage	44,3%	52,9%	2,9%	100,0%

The table above shows household sizes and unit trust investment among the different sizes. Unit trust investment appears to reduce between households with two and four people.

4.7.3 *Analysis of variance*

Table 35: Anova results for household size and unit trust investment opinions

	Sig.
I will be likely to start investing, or increase my investment in unit trusts if my income increases	0,678
I will be likely to start investing, or increase my investment in unit trusts as I get older	0,580
The performance of a unit trust is likely to have an impact my decision to invest	0,193
A positive return on my investment is the most important outcome for me	0,811
Maintaining my wealth through an investment is the most important outcome for me	0,655
I am likely to read available marketing material before investing in a savings product	0,279
I prefer in depth information when I am deciding whether to invest in a savings product	0,287
I prefer to invest in savings products from financial services providers that I am familiar with	0,576
I usually understand the language that is used in advertisements for savings products	0,233

The table above shows the anova results for household size and unit trust investment opinions. No significant relationships exist.

4.7.4 *Correlations*

No significant correlations were produced in this test.

4.7.5 *Conclusion*

Although there seems to be some evidence from the crosstab results that unit trust investment differs with household size, there is no evidence to state that a significant relationship exists between the two variables.

4.8 Summary of the results

4.8.1 *Proposition 1:*

The nature of bank account use will have a significant impact of the decision to purchase a unit trust in South Africa.

From this section we can infer that he frequency with which South African citizens appears to have a positive relationship unit trust investment. That is to say that people that use their bank on a day-to-day basis are more likely to have invested in a unit trust than those that use their bank account less often.

4.8.2 *Proposition 2:*

Income level will have a significant impact of the decision to purchase a unit trust in South Africa.

From this section we can infer that South African citizens at the very lowest income brackets do not seem to want to engage with financial service products such as unit trusts or simply do not believe that they will have the disposable income to invest in such a product. Respondents at higher income levels seem

comfortable with financial services products but do not necessarily see themselves in one.

4.8.3 *Proposition 3:*

Age will have a significant impact of the decision to purchase a unit trust in South Africa.

From this section we can infer that younger citizens are more comfortable investing with financial service providers that they are familiar with and older generations do no necessarily see themselves investing or increasing their investment in unit trusts. However, no clear pattern has emerged that suggests unit trust ownership increases with age.

4.8.4 *Proposition 4:*

Education level will have a significant impact of the decision to purchase a unit trust in South Africa.

Education has by far shown the strongest relationship with unit trust investment. From this section we can infer that South African citizens are more willing to engage with financial services and are more likely to invest in unit trusts as they reach higher levels of education.

4.8.5 *Proposition 5:*

Household size will have a significant impact of the decision to purchase a unit trust in South Africa.

Although different household sizes appear to have different levels of uit trust ownership, we cannot infer that unit ownership decreases with household as not clear pattern has emerged.

CHAPTER 5. DISCUSSION OF THE RESULTS

5.1 Introduction

The following section will take a deeper look into the survey results in conjunction with the previous literature pertaining to each proposition. The sections will discuss the results obtained in the survey and seek to provide an explanation.

5.2 Discussion pertaining to Proposition 1

Technology, specifically Internet and mobile connectivity, has had a massive impact on the ways in which we are able to interact with financial services providers. The ability of technology to create more efficient distribution channels has brought financial services closer to consumers, particularly in developing economies. This is apparent in the results of the survey as it appears that those people that engage with their bank accounts through the use of either internet banking or a banking app have higher levels of unit trust ownership than those that use branches or ATMs as their point of contact. Durkin, Jennings, Mulholland & Worthington (2008) find that lack of face-to-face contact, lack of trust, and lack of security reassurance contribute negatively to consumer's willingness to use of electronic banking portals. However this does not hold true for unit trust ownership. We may infer here that citizens that engage with electronic banking services are more comfortable with the financial service world and are possibly more sophisticated in their approach to financial services.

Indeed this does point to the suggestion that the nature of bank account usage has an impact on unit trust investment among citizens of South Africa.

5.3 Discussion pertaining to Proposition 2

Zwane et al. (2016) find that income is a major determinant of household savings South Africa. Their findings show that as household income raising so too does the household savings rate. This satisfies Modigliani & Brumberg's LCH (1954). Although no pattern emerged to suggest that unit trust investment rises as income rises, as suggested by Zwane et al. (2016), the results do suggest that unit trust ownership is at its highest at income levels above R25000 per month. It is perhaps due to the limited number of respondents that this pattern did not emerge stronger.

Therefore, from the results of the survey it cannot be conclusively said that income has a significant impact on unit trust investment for South African citizens.

5.4 Discussion pertaining to Proposition 3

Zwane et al. (2016) argue that age is a determinant of the level of savings in a household. Their findings validate LCH and suggest that that as the age structure increases by one year, household saving also increases in the same direction. Precious & Asrat (2014) also find there to be a positive correlation between savings and age, up to the point when senior members of the household become dissavers in their retirement.

The survey results do not confirm that that there is a positive relationship between age and unit trust investment. However, repondents that are in their retirement years do not see themselves increasing their investment I unit trusts which does suggest that that are within their dissaving years as suggested by Precious and Asrat (2014).

5.5 Discussion pertaining to Proposition 4

Simleit et al. (2011) find that young adults engaged in education and in starting a family are thought of as dissavers Zwane et al. (2016) find that level of education has a positive impact on savings rates. Precious & Asrat (2014) find

that educational attainment is among the most important determinants of household saving behaviour.

The survey results confirm the above notions as a clear pattern emerged showing citizens to become more engaged with financial services as their level of education was raised. The financial services world is an inherently complex one and it makes intuitive sense that those with higher levels of education would both see the need for savings and be confortable with the savings environment.

5.6 Discussion pertaining to Proposition 5

Zwane et al. (2016) find that increased household size places an extra burden on consumption to the detriment of savings.

This did not come through in the survey results. This is perhaps due to the limited number of respondents that were gathered by the survey.

5.7 Conclusion

5.7.1 *Proposition 1:*

The nature of bank account use will have a significant impact of the decision to purchase a unit trust in South Africa.

This proposition is partly accepted in that people that engage with electronic banking services have higher rates of unit trust ownership.

5.7.2 *Proposition 2:*

Income level will have a significant impact of the decision to purchase a unit trust in South Africa.

This proposition is rejected.

5.7.3 *Proposition 3:*

Age will have a significant impact of the decision to purchase a unit trust in South Africa.

This proposition is rejected.

5.7.4 *Proposition 4:*

Education level will have a significant impact of the decision to purchase a unit trust in South Africa.

This proposition is accepted, as there is compelling evidence to suggest that higher levels of education result in higher levels of unit trust ownership.

5.7.5 *Proposition 5:*

Household size will have a significant impact of the decision to purchase a unit trust in South Africa.

This proposition is rejected.

CHAPTER 6. CONCLUSIONS & RECOMMENDATIONS

6.1 Introduction

This section will draw the research report to a close by concluding the study and providing recommendations for future research.

6.2 Conclusions of the study

The study found that education and nature of bank account use had the most significant impact on unit trust ownership. This supports the notion that financial inclusion is a broader concept than merely interacting with financial services but more about the quality and nature of such interactions.

6.3 Recommendations

It is clear that financial service providers need to take a broader view of their client base considering the diverse nature of the South African population. The results of the research show that electronic services aid the purchase of unit trust investments and financial service providers should look to use this toothier advantage. It may also be incumbent on financial service providers to educate their client base on the efficacy of savings products through the use of simple, easy to understand language.

6.4 Suggestions for further research

The largest shortfall of this research project was the limited number of respondents and their concentration around the Wits Business School. Future research should look to cast the net wider by incorporating a broader segment of South African society.

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APPENDIX A

Actual Research Instrument

Furthering financial inclusion through retail asset management in South Africa

Start of Block: Section A - Savings and Unit Trusts

Section A Are you currently invested in a unit trust product?

- ○ Yes (1)
- ○ No (2)
- ○ Unsure (3)

	Preferences				
	Strongly Agree (1)	Agree (2)	Unsure (3)	Disagree (4)	Strongly Disagree (5)
I will be likely to start investing, or increase my investment in unit trusts if my income increases (1)	(○		○	○	○
I will be likely to start investing, or increase my investment in unit trusts as I get older (2)	(○		○	○	○
The performance of a unit trust is likely to have an impact my decision to invest (3)	(○		○	○	○
A positive return on my investment is the most important outcome for me (4)	(○		○	○	○
Maintaining my wealth through an investment is the most important outcome for me (5)	(○		○	○	○

I am likely to read available marketing material before investing in a savings product (6)	○	○	○	○	○
I prefer in depth information when I am deciding whether to invest in a savings product (7)	○	○	○	○	○
I prefer to invest in savings products from financial services providers that I am familiar with (8)	○	○	○	○	○
I usually understand the language that is used in advertisements for savings products (9)	○	○	○	○	○

End of Block: Section A - Savings and Unit Trusts

Start of Block: Section B - Nature of Bank Account Usage

Which bank do you hold your primary account with?

- ABSA (1)
- Capitec (2)
- FNB (3)
- Nedbank (4)
- Standard Bank (5)
- Other (6)
- I do not have a bank account (7)

Skip To: End of Block If Which bank do you hold your primary account with? = I do not have a bank account

Do you hold an account with more than one bank?

- Yes (1)
- No (2)

What is your preferred channel of access to your bank account?

- ○ ATM (1)
- ○ App (2)
- ○ Branch (3)
- ○ Online (4)
- ○ Other (5)

How often do you use your bank account by either depositing money, withdrawing money or using a debit/credit card?

- ○ Every day (1)
- ○ Once a week (2)
- ○ Once a month (3)
- ○ Once a year (4)
- ○ Less than once a year (5)

End of Block: Section B - Nature of Bank Account Usage

Start of Block: Section C - Personal Information

Select your age group

- ○ 18 years - 25 years (1)
- ○ 26 years - 30 years (2)
- ○ 31 years - 35 years (3)
- ○ 36 years - 40 years (4)
- ○ 41 years - 50 years (5)
- ○ 51 years - 60 years (6)
- ○ 61 years and above (7)

Select your gender

- ○ Male (1)
- ○ Female (2)

Q15 Select your race

- ○ Black (1)
- ○ Coloured (2)
- ○ Indian (3)
- ○ White (4)
- ○ Other (5)

Select your highest education level

- ○ Primary school (1)
- ○ High school (2)
- ○ Diploma (3)
- ○ Undergraduate degree (4)
- ○ Postgraduate degree (5)

Select your monthly income after deductions

- ○ Less than R6 000 (1)
- ○ R6 000 - R10 000 (2)
- ○ R10 001 - R15 000 (3)
- ○ R15 001 - R25 000 (4)
- ○ R25 001 - R35 000 (5)
- ○ R35 001 - R45 000 (6)
- ○ R45 001 and above (7)

Are you the highest income earner in your household?

- ○ Yes (1)
- ○ No (2)

How many people live in your household?

- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 and above (6)

Q14 In which province is your primary residence?

- Eastern Cape (1)
- Free State (2)
- Gauteng (3)
- KwaZulu-Natal (4)
- Limpopo (5)
- Mpumalanga (6)
- Northern Cape (7)
- North West (8)
- Western Cape (9)