

SOCIAL GRANT RECIPIENT SPENDING ON SIN TAXED ITEMS

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DECLARATION

I, Ashley Deon Pietersen declare that “**Social grant recipient spending on sin taxed items**” is my own work; that all sources used or quoted have been indicated and acknowledged by means of complete references, and that this dissertation was not previously submitted by me or any other person for degree purposes at this or any other university.

Signature: _____

Date: _____

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ABSTRACT

Sin taxes have increased significantly during the past three years. There have been different opinions regarding the levying of sin taxes: in relation to whether it helps the government to raise revenue or reduces the consumption thereof. This study therefore investigates the actual purpose for these taxes by means of a literature and empirical review. An increase in sin taxes affects the poor more than the rich because such taxes are classified as a regressive type of tax. The primary research problem addressed by this literature study was to determine the percentage that the lower income earning group of South African citizens, who are funded by social grants, spend on sin taxed items. This study focused on two areas: the social grant system in conjunction with the Consumer Price Index (“CPI”) and the levying of sin taxes in South Africa.

Over the years, South Africa has experienced an increase in its levels of poverty. There are eight types of social grants in South Africa, to which the lower income earning South African citizens, who live below the poverty line, are entitled, depending on their circumstances. This study discusses only seven of the eight social grants, by considering the purpose of the social grant, criteria, means testing requirements and the monthly amount available. These grants include the child support grant, old age grant, disability grant, foster care grant, care dependency grant, grant-in-aid and war veteran grant. The CPI of South Africa is briefly addressed in this study, followed by the increases over the past three years. The escalations of the social grants and that of the CPI of South Africa have been compared in order to determine whether the government remains concerned for their lower income earning citizens most of whom live below the poverty line.

For purposes of this study, sin taxes have been narrowed down to include only alcoholic beverages and cigarettes. This study determined the increases of sin taxes on these substances over the past three years as well as the consumption thereof. Their consumption was determined by the sales volume. A comparison of the increases and consumption was made, the purpose of which was to determine government's motivation for these increases.

The empirical review of this study investigated the social grant recipients' spending habits on these items. This was done by means of a self- developed questionnaire. The purpose of the questionnaire was to determine the percentage of their grant money that the social grant recipients spend on alcoholic beverages and cigarettes. The results and findings led to a conclusion which addressed the problem of this study. This study makes recommendations for further investigation of the sin tax implications for the lower income earning South African citizens, who are funded by social grants.

Key words: Sin taxes. Excise taxes, Welfare, Government grant, Social grants, Poverty, South Africa, Citizens, Alcoholic beverages, Cigarettes

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LIST OF ABBREVIATIONS

AOD	Alcohol and Other Drugs
CDG	Care Dependency Grant
COLI	Cost-of-living Index
CPI	Consumer Price Index
CPIX	Consumer Price Index excluding Interest rates on mortgage bonds
CSG	Child Support Grant
DG	Disability Grant
DSD	Department for Social Development
Etc.	etcetera
FCG	Foster Care Grant
GI	Government Issue
GIA	Grant-In-Aid
HSL	Human Subsistence Level
ID	Identity Document
IFCO	International Foster Care Organisation
ml	millilitres
MLL	Minimum Living Level
MM	Mixed Method
OAG	Old Age Grant
OAP	Old Age Pension
OECD	Organization for Economic Co-operation and Development
pa	per annum
PDL	Poverty Datum Line
pm	per month

QUAL	Qualitative
QUAN	Quantitative
RSA	Republic of South Africa
SAGS	South Africa Government Services
SASSA	South African Social Security Agency
SLL	Supplementary Living Level
SPSS	IBM SPSS Statistics 22
Stats SA	Statistics South Africa
TTISA	The Tobacco Institute of South Africa
WVG	War Veteran Grant

CHAPTER 1

INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 BACKGROUND

The South African Revenue Service collects various types of taxes from South African citizens. Sin taxes on alcohol, tobacco and other items make up a sizeable percentage of the total tax collected from South African citizens, since the main purpose for these high taxes is to reduce the consumption thereof (Williams and Christ, 2009:1). The levying of sin taxes has become an important issue in South Africa, which led to large tax increases. In the latest national budget speech (National Treasury, 2014b), sin taxes were seen to have increased by 5.7% to 10%. In this study, an investigation will be carried out on the percentage of their income that social grant holders spend on sin taxes. The spiral effect of the collection and recovering of sin taxes and subsidising of social grants will be investigated throughout this study. Lalthapersad-Pillay (2007:16) is of the opinion that social assistance is a poverty alleviation measure which is an embedded part of the functions of government. The following paragraphs provide a brief overview of the background of the social grant system in South Africa, as well as the sin taxes that are levied in this country. The purpose of this background is to create a brief understanding of the types of social grants in South Africa and how the sin taxes are levied. These concepts are discussed in more detail in Chapter 2, where it will be determined whether the increases reduce consumption. This study will focus on the social grant recipients who live below the poverty line in South Africa.

1.1.1 Social grants

According to *Entrepreneur Media Inc.* (2014), government grants used synonymously with social grants are defined as “an award of financial assistance in the form of money by the federal government (South Africa does not have a federal government) to an eligible grantee with no expectation that the funds will be paid back. The term, government grant, does not include

technical assistance which provides services instead of money, or other assistance in the form of revenue sharing, loans, loan guarantees, interest subsidies, insurance, or direct appropriations". Budlender (2013:1) is of the opinion that the national sphere is responsible for grants while the provincial sphere is primarily responsible for the provision and funding of child welfare services. The Surt Foundation (2010:1) defines welfare services as:

"Actions or procedures that cover the basic well-being of the individuals and the society. Welfare services may be provided as a citizenship right, or negotiated in the market, and managed by governments and institutions or private sectors. These attempts usually strive to improve the financial situation of people in need, but may also strive to improve their employment chances and many other aspects of their lives including sometimes their mental health. In many countries, most such aid is provided by women (family members, relatives and members of the local community) and is only theoretically available from government sources."

Social grants and welfare programmes had a substantial impact on the wealth of citizens after the First World War in 1918 (Maxwell, 1952:3). Social security, used synonymously with social welfare, first came into existence in the United States of America in 1935, during the Great Depression, which quickly achieved a world-wide usage (Altmeyer, 1966:65). Neves *et al.* (2009:11) state that white South Africans have long been incorporated into social protection systems and that these were first devised in the 1920s, modelled on the classic European welfare model. State social pensions provided the architecture for recent developments during the 1960s and reflected highly skewed racially allocative principles of apartheid (Neves *et al.*, 2009:11). Potts (2012:1) is of the belief that since the implementation of the extensive social welfare policy in South Africa, after apartheid was dismantled in 1994, there has been an ongoing debate surrounding the expansion of social assistance in South Africa. Since the implementation of the social assistance system South Africa has been built on a solid framework which supports the principles that aim to stop the social and economic marginalisation of the poor (Potts, 2012:17).

South Africa Government services (“SAGS”) (2014:1) considers that there are eight types of social grants in South Africa:

- Child Support Grants (“CSG”);
- Old Age Grants (“OAG”);
- Disability Grants (“DG”);
- Foster Care Grants (“FCG”);
- Care Dependency Grants (“CDG”);
- Grants-In-Aid (“GIA”);
- War Veteran Grants (“WVG”); and
- Social relief of distress grant.

Potts (2012:1) is of the opinion that the largest social grants in South Africa are the CSG, DG and the OAG. SAGS (2014:1) states that any South African citizen who raises a child and is in need of financial assistance can apply for a social grant. There are, however, certain criteria that must be met in order for a South African citizen to qualify for a social grant, such as, for example in the case of CSG: he/she must be the primary caregiver, a South African citizen or permanent resident; should not earn more than R34 800 per year and the child must be under the age of 18 years (SAGS, 2014:1). SAGS points out that except for the criteria that must be met, one must also qualify through a means test, which refers to a test that is used to measure the financial status of the family (SAGS, 2014:1).

Concern about the administration of social assistance grants to the poor, the needy and the disabled has always been one of the highest priorities in South Africa, which led to the establishment of the South African Social Security Agency (“SASSA”) (Dutschke, 2008:12-15). SASSA has managed and administered social assistance grants since 1 April 2006 (Mirugi-Mukundi, 2010:7).

A discussion of sin taxes and the purpose for levying them follows.

1.1.2 Sin taxes

There are different categories of taxes in South Africa: regressive, proportional and progressive; the distinction between the differences is made on the performance of the tax as the taxable base (Beggs, 2014:1). Regressive taxes may be defined as taxes where lower-income entities or people pay a higher fraction of their total income in taxes than those who fall within the higher-income fraction (Beggs, 2014:3). Sin taxes may be categorised as a form of regressive tax (Snowdon, 2013:8). Sadowsky (2014:1) refers to sin taxes as a type of sumptuary tax which is levied on items such as alcoholic beverages, tobacco (cigarettes), sweets, soft drinks, fast foods and coffee as well as gambling. This is confirmed by Manuel (2014:1) who defines sin taxes as “taxes that are levied on products or services that are seen to be non-essential by society”. Sadowsky (2014:1) states that sin taxes is not a technical term in economics because it is simply a form of excise tax. James and Hines (2007:3) define excise taxes as “selective taxes on the sale or use of specific goods and services such as alcohol and gasoline”.

As Altman (2009:14) points out, historical amounts indicate that sin taxes have existed for hundreds of years in many forms, which are levied on a range of different goods. Such taxes were habitually imposed, especially during wars when cash was needed by politicians (Snowdon, 2012:5). Excise tax was first proposed on whiskey by Alexander Hamilton in 1790 to refund Revolutionary War debts which followed Adam Smith’s route in the *Wealth of Nations* (Anderson, 1997:32) and the fledgling United States’ government’s debt problem, which was addressed by George Washington in 1791 who introduced tax on whiskey (Snowdon, 2012:6). According to Lemboe and Black (2012:3), South Africa is no exception, due to it having also dramatically increased taxes on “sin” goods such as tobacco and alcoholic beverages over the past several years. Van Walbeek (2004:101) states that tobacco was first introduced in South Africa in the seventeenth century, after the arrival of the Dutch settlers.

The main purpose for sin taxes has always been for the benefit of governments; in this case it represents a source of revenue which is used for social grants for low income South African citizens (Snowdon, 2012:2) and to provide goods and

services to the public (Beggs, 2014:4). Concurring with Snowdon (2012:3) and Beggs (2014:4), James and Hines (2007:3) state that excise taxes may be seen as an externality which may impose tax burdens on those who benefit from government spending. A brief discussion of the poverty line and types of poverty lines in South Africa follows.

1.1.3 Poverty line

Dictionary.com (2014:1) defines a poverty line as a minimum income level which is used as a measuring tool to determine the proportion of a population who lives in poverty. Stats SA (2007:2) is of the opinion that an official poverty line is only essential once the reduction of poverty and social development programmes are well designed and effective. A list of the poverty lines which were previously used in South Africa are listed in Table 1.1 below.

Table 1.1: Poverty lines previously used in South Africa

Poverty lines	Purpose of the specific poverty line
Poverty Datum Line (“PDL”)	The PDL was based on seven household items, namely: food, clothing, cleaning materials, fuel and light, accommodation and transportation of workers.
Minimum Living Level (“MLL”)	The MLL replaced the PDL and included all the items of the PDL plus education, taxation, medical expenses and the replacement of household equipment.
Human Subsistence Level (“HSL”)	The HSL served as the MLL for African and Coloured population groups separately.
Supplementary Living Level (“SLL”)	The SLL replaced the MLL and also included items such as: personal care, pension, unemployment, insurance fund, medical aid and burial contributions.

Source: (Stats SA, 2007:8)

Table 1.1 lists the different poverty lines and the purpose of these. These are no longer used in South Africa today because of the implementation of the new

social grant system in South Africa which requires upfront means testing (Stats SA, 2007:8). The social grant system will be discussed in more detail in Chapter 2 (paragraph 2.2), with the focus specifically being on the lower income earning South African citizens who live below the poverty line.

1.2 SCOPE OF THE RESEARCH

For purposes of this study, sin taxes have been narrowed down to include only alcoholic beverages and cigarettes. Snowdon (2012:1) is of the belief that sin taxes on alcoholic beverages and cigarettes are designed to raise revenue and not to improve public health, while Williams and Christ (2009:1) are of the opinion that the actual purpose for the levying of sin taxes is to reduce the consumption on these particular items which can be seen as harmful to the society. Throughout this study the focus of the research will be to determine the percentage that low-income South African citizens, who receive social grants, spend on sin taxed items (specifically cigarettes and alcoholic beverages).

1.3 MOTIVATION OF TOPIC'S ACTUALITY

Williams and Christ (2009:1) explain that sin taxes in modern economic terms are mainly designed to reduce the use of such items, for example, by reducing the consumption of cigarettes and alcoholic beverages that are harmful to society (Gifford, 1998:57-77). Snowdon (2013:1) however, argues that the current tax system intensifies the problem by the additional levying of sin taxes on products such as cigarettes, tobacco and alcoholic beverages because these now take a greater share of the income from the poor than from the rich.

From the above-mentioned factors and the influence of sin taxes on the community it should be determined whether it is worthwhile to keep on increasing the tax on such items while it is evident that it only makes the poor poorer and the black-marketeers richer (Snowdon, 2012:2).

1.4 PROBLEM STATEMENT

Williams and Christ (2009:2) state that the levies for sin taxes are primarily to discourage the consumption of these products that are regarded as sinful, but

it is argued that the collection of sin taxes would be beneficial to raise revenue which can be used to finance projects such as federal (in South Africa, national) health insurance. Snowdon (2012:1) contends that sin taxes are ineffective in the reduction of consumption and that they do not recoup lost revenue. Sin taxes are classified as highly regressive taxes which, in some instances, force the lower income earning citizens to pay for public finances due to a lack of proper management by the government (Snowdon, 2012:1). The problem can be expressed as follows:

- What percentage do low-income citizens, who are funded by social grants, spend on sin taxed items, such as alcoholic beverages and cigarettes?

1.5 RESEARCH OBJECTIVES OF THE STUDY

The following objectives have been formulated for the study:

1.5.1 Primary objective

The primary objective of this study is to determine the percentage that low-income South African citizens, who receive social grants from the government, spend on sin taxed items such as cigarettes and alcoholic beverages. By determining the percentage that they spend on these items, an assumption can be made as to whether the yearly increases in sin taxes reduce the consumption thereof.

1.5.2 Secondary objectives

In order to achieve the primary objective, the following secondary objectives are formulated for the study:

1.5.2.1 Theoretical objectives

- Establish the types of social grants in South Africa, the amounts available per social grant and the increases thereof as well as how control over the social grant system is maintained;
- Determine whether the increases in the CPI are in line with the increases in social grants;

- Determine the increases in sin taxes, alcoholic beverages and cigarettes, compared to the consumption of alcoholic beverages and cigarettes; and
- Establish the government's motivation for the increases of sin taxes.

1.5.2.2 Empirical objective

- Determine the percentage of social grants used by low income South African citizens on sin taxed items such as alcoholic beverages and cigarettes.

1.5.3 RESEARCH DESIGN AND METHODOLOGY

The study comprises a literature review and an empirical study. Quantitative research, using the survey method, was used for the empirical portion of the study. Questionnaires were handed out to low income South African citizens in rural areas of South Africa, where either the heads of households or the grant recipient had to complete them.

1.5.4 Literature review

A literature study was performed on the following:

- Electronic journal articles to provide general information regarding welfare and sin taxes;
- The Social Assistance Act 13 of 2004; and
- Any other Acts that might be applicable to this study.

1.5.5 Empirical review

For the purpose of this study, a household survey, in the form of a questionnaire, was conducted in rural areas in South Africa, to obtain the necessary data for this study. The purpose of the questionnaire was in line with the objectives: to determine the percentage of social grants that low income South African citizens spend on items subject to sin taxes; in particular, alcoholic beverages and cigarettes.

The questionnaires were completed with the assistance of field workers. These identified selected households of the chosen township by means of a map. In those instances where people could not be reached to complete the questionnaire or where it was impossible to trace the household, an alternative, pre-selected household was identified to complete the questionnaire. The questionnaire could only be completed by an adult, preferably the head of the household or grant recipient, if possible. However, when both the head of household and grant recipient were unavailable, an immediate family member was interviewed instead, but the said family member had to be 18 years of age or older.

1.6 CHAPTER CLASSIFICATION

This study comprises the following Chapters:

Chapter 1: Introduction and background to the study:

Chapter 1 presents the background of sin taxes, social grants and the poverty line of South Africa. Chapter 1 also includes the problem statement, motivation of the topic, research methods and the objectives of the study.

Chapter 2: The impact of sin taxes on social grant recipients of South Africa who live below the poverty line:

This Chapter furnishes a detailed review of the social grant system in South Africa where each of the social grants are individually discussed. A brief discussion of the CPI is given. A comparison of the increases of the social grants and CPI over the past three years is undertaken in order to determine whether these increases were in line with each other. In this Chapter sin taxed items were narrowed down to alcoholic beverages and cigarettes, regarding which a full discussion is offered. In addition, the actual purpose of the levying of sin taxes in South Africa was also dealt with in this Chapter. The determination of whether the increases in the said taxes on alcoholic beverages and cigarettes are in line with the consumption levels was also determined in this Chapter. Lastly a comparison of the increases versus the consumption of

alcoholic beverages and cigarettes is made to determine the government's motivation for these increases.

Chapter 3: Research design and methodology:

Chapter 3 interrogated the research design and methodology conducted in this study in order to achieve the primary and secondary (theoretical and empirical) objectives.

Chapter 4: Data analysis and findings:

Resulting from the empirical research, Chapter 4 contains detailed illustrations and discussions of the percentage of social grants used on alcoholic beverages and cigarettes by lower income earning South African citizens.

Chapter 5: Summary, conclusions and recommendations:

In Chapter 5, the questions arising from the primary and secondary (theoretical and empirical) objectives are answered and recommendations are made. This Chapter also addresses the limitations that had an influence on the outcome of this study.

1.7 SUMMARY AND CONCLUSION

A brief overview of the background of the social grant system in South Africa was given. It is evident that social assistance plays a very important role in South Africa. The poverty lines were previously used as a measuring tool for poverty in South Africa, but were replaced by the social grant system in 1994. The significance of social assistance stated by Dutschke (2008:12-15) is to provide for the poor, needy and disabled.

As discussed in the introduction, the levying of sin taxes is an important issue in South Africa (National Treasury, 2014b) in order to reduce the consumption. A critical analysis, the aim of which is to determine whether the increases in sin taxes reduce the consumption of the taxed items, follows in Chapter 2.

CHAPTER 2

THE IMPACT OF SIN TAXES ON SOCIAL GRANT RECIPIENTS OF SOUTH AFRICA WHO LIVE BELOW THE POVERTY LINE

2.1 INTRODUCTION

Chapter 1 provided a brief discussion of the background of the social grant system in South Africa, sin taxes and poverty. Samson *et al.* (2005:1) states that as South Africa faces substantial challenges in addressing poverty, inequality and unemployment, it is a central initiative of the government to address these problems by maintaining a proper South African social security system. According to Saunders (2013:1), the government's White Paper on Social Development emphasised that a "social security system is essential for healthy economic development, particularly in a rapidly changing economy, and will contribute actively to the development process. It is important for immediate alleviation of poverty and is a mechanism for active redistribution". Hirschowitz *et al.* (2000:4) contend that poverty is, in some cases, caused by the poor of South Africa themselves due to: food insecurity, overcrowded homes, unsafe and inefficient usage of different forms of energy and unemployment. Saunders (2013:1) holds the view that South Africa has a well-structured social welfare system in place and that a large portion of its social spending goes towards social grants. Mr Pravin Gordhan, former minister of finance, was of the belief that the substantial growth in social spending over the past ten years has financed a threefold increase in the total number of people that are receiving a social grant (Saunders, 2013:1). As discussed in Chapter 1, the concern about the administration of social assistance grants to the poor, the needy and the disabled has always been the highest priority in South Africa, which led to the establishment of SASSA (Dutschke, 2008:12-15).

Hoffer *et al.* (2013:4) posit that the standard case for imposing sin tax on consumer goods arises when the said item has a negative external effect, meaning that it may lead to unintended consequences, which can damage health (Snowdon, 2012:3). By increasing the consumer's price of the goods

associated with negative externality, social welfare could be improved (Hoffer et al., 2013:4). In the case where such taxes are independently levied due to the concern of externality, they become revenue raising in nature rather than social welfare-enhancing-taxes (Hoffer et al., 2013:4).

Colbert (1919:181) observes that:

“The art of taxation consists in so plucking the goose as to procure the greatest quantity of feathers with the least possible amount of hissing”. (Own emphasis)

This chapter contains an overview of the social grant system in South Africa, including a brief overview of the types of social grants in South Africa. An overview of the impact of sin taxes, specifically regarding alcoholic beverages and cigarettes, will establish the correlation between the increases in sin taxes and the consumption levels thereof. The establishment of the impact of sin taxes on alcoholic beverages and cigarettes will be determined throughout.

2.2 SOCIAL GRANTS

Social grants, as well as government grants, as discussed in Chapter 1, may be defined as “an award of financial assistance in the form of money by the federal government (South Africa does not have a federal government) to an eligible grantee with no expectation that the funds will be paid back” (*Entrepreneur Media Inc. Encyclopaedia*, 2014). Saunders (2013:1) opines that the purpose of social grants is for the improvement of living standards and the redistribution of wealth in order to create an equitable society for all citizens. The Constitution of the Republic of South Africa (Act 108 of 1996) (Constitution) states that every South African citizen has the right to have access to social security, which includes appropriate social assistance when they (South African citizens) are unable to look after themselves and their dependents. The Constitution also points out that it is the responsibility of the state to lay hold of reasonable legislative and other measures to achieve the progressive realisation of each of these rights of the South African citizens. The reasonable legislative and other measures led to the establishment of the Social Assistance

Act 13 of 2004 (“Social Assistance Act”). The Government Gazette (2004:5) explains that the purpose of the Social Assistance Act is:

- To assign the mechanism for the rendering of such assistance;
- To provide for the establishment of an inspectorate for social assistance; and
- To provide for matters which are connected with the above.

As Saunders (2013:1) states, the Social Assistance Act created SASSA in 2004. SASSA is responsible to “ensure the provision of comprehensive social security services against vulnerability and poverty within the constitutional legislative framework” (Saunders, 2013:1). According to the Social Assistance Act SASSA must also:

- Provide assistance to all the social grant applicants to help them understand and exercise their rights to social security;
- Pay all the beneficiaries the amount they are entitled to receive;
- Give information about the social grants to beneficiaries and potential beneficiaries;
- Investigate any irregularities relating to the social grants; and
- Allow assistance from foreign grants if there is an agreement with other countries to do so.

A detailed discussion of the types of social grants in South Africa follows; the criteria, in order for a South African citizen to qualify for such a social grant will be given. In addition, a brief explanation of a means test is provided; this will be relevant later in this study where the relationship between social grants and sin taxes will be determined by means of a questionnaire. The purpose of the questionnaire, as mentioned, is to establish the percentage that lower income earning South African citizens spend on sin taxed items such as alcoholic beverages and cigarettes. In order to calculate the percentage, the current monthly amount per social grant is required, depending on the type of social grant. As stated by SASSA (2014:1): “paying the right social grant, to the right person, at the right time and place, NJALO!”

2.2.1 Types of social grants in South Africa

As discussed in Chapter 1, there are eight types of social grants in South Africa: CSG, OAG, DG, FCG, DG, GID, WVG and a social relief of distress grant (SAGS, 2014:1) of which the CSG, DG and OAG are some of the largest social grants in South Africa (Potts, 2012:1). The Social Relief of Distress Grant is a temporary grant from the Government for not more than three months (SASSA, 2014:1). For the purpose of this study The Social Relief of Distress Grant will not be discussed. All the social grants are administered by SASSA in terms of the Social Assistance Act under Section 27.

To qualify for any of the above mentioned social grants, a South African citizen must first qualify through a means test (SAGS, 2014:1). A means test, as defined in Chapter 1, is a test that enables SASSA to evaluate the income and asset value of a family applying for a social grant (SAGS, 2014a:7). SAGS (2014a:7) notes that the purpose of the means test is to determine whether the person's means are below a stipulated amount. Social assistance is intended for citizens who have insufficient means to support themselves; therefore such a test is of importance to assist those who are really in need of such social assistance (SAGS, 2014:1).

The social grant system in South Africa will be divided into each social grant individually. A detailed discussion of the different types of social grants follows, in terms of the purpose, criteria, and means testing requirements and current amount of the grant, in order to understand the said system.

2.2.1.1 Child Support Grant

Black Sash (2014a:1) states that the CSG is a monthly income support grant to adults in need who care for children who are under the age of 18 years. Heinrich *et al.* (2012:1) are of the view that the CSG is an important instrument of social protection in South Africa, which reaches over 10 million South African children each month. CSG was first introduced in 1998 in South Africa and since then the social grant programme has evolved in line with the most comprehensive social protection programmes (Heinrich *et al.*, 2012:1). According to Delany *et al.* (2008:7) the CSG is the state's largest social assistance programme. The

primary objective of the CSG is to ensure that the caregivers of young children, under the age of 18 years, who live in poverty are able to access financial assistance (Delany *et al.*, 2008:7).

The following criteria must be met in order to qualify for a CSG (SASSA, 2014a:1):

- The primary caregiver must be a South African citizen, permanent resident or refugee;
- Both the applicant and child must reside in South Africa;
- The applicant must be the primary caregiver of the child being considered;
- The child/children must have been born after 31 December 1993;
- The child must not be cared for by a state institution.

After the above criteria are met, the applicant must then qualify through a means test before the application can be approved and the grant may be awarded (Black Sash; 2014a:1). The income earned by the applicant must not exceed R34 800 per year (R2 900 per month) in the case of a single parent, while in the case of marriage the combined income earned may not exceed R69 000 per year (R5 750 per month) (SAGS, 2014b:1). The SAGS (2014b:1) clearly states that the applicant cannot receive this grant for more than six children (SAGS, 2014b:1). The government also prohibits a CSG for children who are not biological or legally adopted (SAGS, 2014b:1). The current CSG amount is R310 a month per child (SAGS, 2014b:1).

2.2.1.2 Old Age Grant

The Department of Social Development (“DSD”) (2008a:1) points out that an OAG can be defined as “a monthly income which is provided for by the SASSA to older people who reside in South Africa.” The grant to elderly South African citizens is only paid out to the people whose financial income falls below a certain level (DSD, 2008a:1). According to Hazell (2008:1), David Lloyd George, an opponent of the 1908 Poor Law in Britain, a campaign led by Herbert Asquith, was determined to take action, as his words “lift the shadow of the workhouse from homes of the poor” indicate. David Lloyd George, believed

that the best way would be to guarantee a monthly income to people who were too old to work (Hazell, 2008:1). Hazell (2008:1) outlines that he took the initial step by being the first person who brought in the Old Age Pensions Act in 1908. Pelham (2007:1) points out that South Africa was one of the first countries in Africa to implement a state pension. According to Pelham (2007:1), the (British) Labour Party proposed the first parliamentary proposal for an OAG in 1922. Bester *et al.* (2008:6) explain that the period of old-age starts at 60 years of age for a woman and 65 years of age for a man for the remainder of their lives.

The following criteria must be met in order to qualify for an OAG (SASSA, 2014b:1):

- The applicant must be a South African citizen, permanent resident or refugee;
- The applicant must live in South Africa;
- The applicant must be 60 years of age or older;
- Both the applicant and spouse must meet the requirements of the means test;
- The applicant must not be maintained or cared for in an institution funded by the state (such as a prison, rehabilitation centre or state or state old age home); and
- The applicant must not receive another social grant for himself/herself.

If a South African citizen wants to apply for an OAG, he/she must qualify through a means test to see whether the application will be successful (SAGS, 2014c:1). The means test states that the total income received by the applicant must not exceed R49 200 per year and that the applicant's assets must not have a value of more than R831 600 if the applicant is single (SAGS, 2014c:1). If the applicant is married, the total combined income must not exceed R99 840 per year and the applicant and spouse must not have assets with a value of more than R1 663 200 (SAGS, 2014c:1). The OAG amount is currently R1 350 per month if the applicant is younger than 75 years of age and R1 370 if the applicant is older than 75 years (SAGS, 2014c:1).

2.2.1.3 Disability Grant

Lalthapersad-Pillay (2007:23) points out that a DG is a social grant that provides social assistance to South African citizens with physical or mental disabilities who are unable to work or support themselves. Article 1 of the convention on the rights of such people defines disability as referring to “persons who have long-term physical, mental, intellectual or sensory impairments which are in interaction with various barriers that may hinder their full and effective participation in society on an equal basis with others” and as “the loss or elimination of opportunities to take part in the life of the community equitably with others that is encountered by persons having psychological, developmental, learning, neurological or other impairments, which may be permanent, temporary or episodic in nature, thereby causing activity limitations and participation restriction with mainstream society” (Convention on the Rights of Persons with Disabilities, 2006:1). These definitions clearly state the requirements that should be present for someone to be identified as a disabled person; once the condition of the person applying has been identified he/she can apply for a DG (SAGS, 2014d:1). According to Lalthapersad-Pillay (2007:23), the DG was extended to all the racial groups of South Africa in 1993.

A DG will only be granted to a person when the legislative requirements are met and once the medical assessment confirms that the applicant is unable to work because of his/her condition or disability (SASSA, 2014c:1). SASSA (2014c:1) also makes it clear that the medical assessment will determine whether the grant is temporary or permanent. However there are also certain criteria, other than the medical assessment, that must be met before the DG application may be approved (SAGS, 2014d:1):

- The applicant must be a South African citizen or permanent resident or refugee and must live in South Africa at the time of the application;
- The applicant must be between the ages 18 and 59 years;
- The applicant must not be cared for in a state institution;
- A 13-digit, bar coded identity document (“ID) is required;

- The applicant must undergo a medical examination where a doctor, appointed by the state, will assess the degree of the disability; and
- The applicant must bring along previous medical records and reports when he/she completes the application and when the assessment is done.

After the criteria have been met, the means testing calculation will also be performed to determine whether, the applicant qualifies for a DG based on the applicant's means (SAGS, 2014d:1). The applicant must not earn more than R49 200, if he/she is single or more than R98 840 per annum, in the case of marriage (SAGS, 2014d:1). Assets owned by the applicant must not exceed R831 600 if he/she is single or R1 663 200 if he/she is married (SAGS, 2014d:1). According to SAGS (2014d:1) the current monthly DG amount is R1 350 per person.

2.2.1.4 Foster Care/Child Grant

Jo'burg Child Welfare (2014a:1) defines foster children as children that have been removed from their biological parents and placed into foster care by the court. The International Foster Care Organisation ("IFCO") (2014:1) explains that foster care provides a family life for children who cannot live with their biological parents. Foster children desire love and care because of serious neglect and/or abuse, abandonment, alcohol and/or drug abuse of parents, the physical or mental illness of their parents, the unemployment or homelessness of the parents (Jo'burg Child Welfare, 2014b:1). IFCO (2014:1) adds that foster care is often used to provide care on a temporary basis while the parents of the foster children are obtaining help to sort out their problems or to assist them through a difficult period in their lives. Foster care may also be permanent in nature in that it may lead to adoption while in certain instances some children will later move on to live independently (IFCO, 2014:1). The aim of IFCO (2014:1) is to promote foster care worldwide in order to emphasise the fact that every child has the right to live in a family where they are being taken care of.

The Jo'burg Child Welfare (2014b:1) points out that the role of a foster parent is to provide the following to foster children that are placed in their care:

- Food and shelter;

- Personal care;
- Discipline and teaching of values and norms;
- Educational needs; and
- A safe, stable and loving environment.

It is the responsibility of foster parents to work alongside the social workers in order to ensure that the foster child's/children's physical and social needs are met and that access to the biological parents is allowed (Jo'burg Child Welfare, 2014b:1). The SAGS (2014e: 1) also provides financial assistance to foster parents in the form of a FCG; but before the FCG is granted there are requirements that must be met to qualify for such a grant:

- The applicant must be a South African citizen, permanent resident or refugee;
- The applicant must reside in South Africa;
- The foster child must be legally placed in the applicant's care and the child must remain in the applicant's care; and
- The child must be younger than 18 years.

Means testing is not applicable for FCG, with the only condition being that the above requirements must be met to qualify for a FCG. The current FCG amount is R830 per month per child (SAGS, 2014e:1).

2.2.1.5 Care Dependency Grant

Black Sash (2014b:1) defines CDG as "monthly income support to biological or foster parents, and to primary caregivers who look after children, under the age of 18 years, who are disabled and who require or receive permanent care or support services". The DSD (2008b:1) defines CDG as a type of grant which provides caring, in the form of a monthly income, for disabled children with severe disabilities and who are in need of care on a fulltime basis. The DSD (2008b:1) clarifies that parents, foster parents or those who have been appointed as caregivers by the court may apply for a CDG.

The following criteria must be met in order to qualify for a CSG (SASSA, 2014d:2):

- The applicant must be the biological parent, primary caregiver or foster parent;
- The applicant must be a South African citizen, permanent resident or refugee;
- The child must reside in South Africa;
- The child must be under the age of 18 years;
- The applicant must submit a medical assessment report confirming that the child is severely disabled and receives permanent care or support services; and
- The care dependent child/children must not be permanently cared for in an institution funded by the state.

CDG is also subjected to means testing which states that the applicant must not earn more than R151 200 per year if he/she is single and not more than R302 000 per year if he/she is married (SAGS, 2014f:1). The current monthly amount for a CDG is R1 350 per child.

2.2.1.6 Grant-In-Aid

The SAGS (2014g:1) defines GID as an additional grant that provides social assistance to those who already receive a social grant but are unable to look after themselves and requires fulltime care. In accordance with the SAGS (2014g:1), the DSD (2008c:1) defines GID as a grant that is awarded to South African citizens who are in receipt of an OAG, DG or WVG and need fulltime care from someone else. One can thus summarise the definition of a GID as an additional grant for a person who takes fulltime care of another person who already receives another social grant. To qualify for a GID the applicant must meet certain criteria (SAGS, 2014g:1):

- The applicant must already be the recipient of either a DG, WVG or an OAG;

- The applicant must not be able to look after him-/herself because of a physical or mental disability and therefore needs fulltime care from someone else;
- The applicant must be over the age of 18 years;
- The applicant must reside in South Africa; and
- The applicant must not be cared for in an institution.

GID requires no means testing and the current amount is R310 per month for a person who qualifies for a GID (SAGS, 2014g:1).

2.2.1.7 War Veteran Grant

A war veteran is defined by Coleman (1973:1) as “any Government Issue ordered to foreign soil or waters to participate in direct or support activity against an enemy. The operant condition: Any Government Issue sent in harm’s way”. South African citizens who are 60 years of age or older and served in the second World War (1939-1945) or the Korean War (1950-1953) may qualify for a WVG (Western Cape Government, 2014:1). The following requirements must be met in order to qualify for a CSG (SAGS, 2014h:1):

- The applicant must be a South African citizen or permanent resident living in South Africa;
- The applicant must be 60 years of age or older or be disabled;
- The applicant must have fought in the second World War or Korean War;
- The applicant must not receive any other social grant for themselves; and
- The applicant must not be cared for in a state institution.

The means testing applicable for a WVG indicates that a person who applies for such a grant must not earn more than R49 920 a year and owned assets must not be worth more than R831 600 if he/she is single (SAGS, 2014h:1). If the applicant is married, the combined income must not be more than R99 840 per year and the assets should not have a value of more than R1 663 200 (SAGS, 2014h:1). The SAGS (2014h:1) clearly states that if the applicant lives in a house that he/she or the spouse own, the value of the house should not be

taken into account for means test purposes. The WVG value is currently R1 370 per month (SAGS, 2014h:1).

From the above information about the different types of social grants in South Africa, it is evident that the country has a well-structured system when it comes to the administration of these social grants. A brief summary of the types of social grants, as discussed above, will be illustrated in Table 2.1 to point out the important factors of each social grant in South Africa.

2.2.1.8 Summary of the social grants in South Africa

Table 2.1 is a summary of the seven social grants in South Africa in order to simplify the comparison of them. The type of social grant, purpose, requirement for applying, current monthly amount, means testing requirements and the maximum income and assets to be eligible are clearly illustrated.

Table 2.1: Summary of social grants in South Africa

Social grant	Purpose	Who can apply?	Current monthly amount per grant	Means testing and maximum income and assets to be eligible
CSG	Income support to caregivers of children in need.	The parent or primary caregiver of children born on or after 31 December 1993. South African citizens who reside in South Africa.	R310 (Usually increases by R10 in October annually).	Income Single= R2 900 per month ("pm") or R34 800 per annum ("pa"). Married= R5750 pm or R69 000 pa. No Asset test.
OAG	Income support for the elderly.	South African citizens who permanently reside in South Africa. Women: 60 years of age. Men: 65 years of age.	R1 350 (If younger than 75 years of age) R1 370 (If older than 75 years of age).	Income Single= R4 100 pm or R49 200 pa. Married= R8 320 pm or R99 840 pa. Asset test Single= R831 600 or Married R1 663 200.
DG	Income support to adults who are not able to work because of a mental or physical disability.	Adults who are 18 years or older and who permanently reside in South Africa.	R1 350	Income Single= R4 100 pm or R49 200 pa. Married= R8 320 pm or R99 840 pa. Asset test Single= R831 600 or Married R1 663 200.

Social grant	Purpose	Who can apply?	Current monthly amount per grant	Means testing and maximum income and assets to be eligible
FCG	Income support to caregivers of children in foster care (applicant must have a court order).	Foster parents of children under the age of 18 years (or up to 21 years of age on recommendation of the social worker). South African citizens and permanent residents and refugees of South Africa.	R830	Not means tested.
CDG	Income support to caregivers providing permanent care to children with severe mental or physical disabilities (requires a medical assessment).	Parent or caregiver or foster parent of children between the ages of 1-18 years (Not applicable to infants). South African citizens and permanent residents.	R1 350	Income Single= R12 600 pm or R151 200 pa. Married= R25 167 pm or R302 000 pa. No Asset test

Social grant	Purpose	Who can apply?	Current monthly amount per grant	Means testing and maximum income and assets to be eligible
GIA	Income support to people (already entitled to an OAG, WVG or DG) who needs full-time care by a caregiver.	Adults who are 18 years of age or older. South African citizens and permanent residents.	R310	Not means tested.
WVG	Income support to older men and women who served in the 2 nd World War or the Korean War.	60 years or older South African citizens who permanently reside in South Africa.	R1 370	Income Single= R4 160 pm or R49 920 pa. Married= R8 320 pm or R99 840 pa. Asset test Single= R831 600 or Married= R1 663 200.

Source: (SAGS, 2014)

Table 2.1 demonstrates that each type of grant has its own requirements and criteria which, in the end, provide social assistance in its own unique manner. After a social grant has been approved, certain controlling measures fall into place to ensure that payment of the grant is made to the right person, at the right time and place and of the correct amount, this being the main purpose of the social grant system in South Africa, administered by SASSA. The social grant system in South Africa also employs certain controlling measures which include the review process (Table 2.2), reasons for the suspension of these social grants (Table 2.3) as well as the factors which may lead to the lapsing of these social grants (Table 2.4). The reason for the inclusion of these Tables (Table 2.2 to 2.4) is to emphasise the measures that are in place to exercise control over the social grants process.

2.2.2 Measures to control the social grants in South Africa and reasons that may lead to the discontinuation of a social grant

Section 24 of the Social Assistance Act points out that it is the duty of any beneficiary to inform SASSA of any changes in his/her general, medical and financial circumstances. Beneficiaries do not usually inform SASSA of such changes and therefore a review of the social grant on a regular basis has become an effective measure to accumulate current and up to date information regarding the beneficiary's circumstances (SASSA, 2014e: 2). The purpose of reviewing the applications is that this enables SASSA to determine the present circumstances of the beneficiaries (SASSA, 2014e: 2). The Social Assistance Act states that SASSA is required to:

- Review social grants regularly;
- Determine whether there are changes in the circumstances of beneficiaries;
- Ensure the records obtained during the reviewing process;
- Ensure that beneficiaries are updated; and
- Determine whether continuation of the grant is justified if circumstances have changed.

SASSA (2014e: 2) stipulates that the review process must be performed in a manner that will not lead to any form of inconvenience and that it will not disrupt any payments to which the beneficiaries are entitled. SASSA (2014e: 2) must review every application for the following reasons:

- To determine and update general or personal information of the beneficiaries (identity, banking details etc. to ensure records are accurate, complete, current and relevant);
- To update financial and medical information of the beneficiaries;
- To update a foster care order;
- To validate suspicious beneficiaries;
- To verify errors that may arise during the reviewing process; and
- To ascertain that beneficiaries are still alive.

There are four types of reviews, namely: Administrative review, medical review, FCG review and refugee status review (SASSA, 2014e:2). The administrative review covers the review of all the general or personal information of the beneficiary, for example: any changes in residential and postal addresses, marital status, financial information, banking details and pay-point information (SASSA, 2014e:2). SASSA (2014e:2) explains that the medical review refers to the reassessment of the beneficiary's medical status, whereas the FCG review constitutes the extension of the foster care placement court order of the foster child. The refugee status review determines the residential status (if the beneficiary still resides in SA) of the beneficiary (SASSA, 2014e:2). The review process consists of seven steps illustrated in Table 2.2 below (SASSA, 2014e:1).

Table 2.2: The review process

Steps	Purpose of the step
Step 1	A letter is sent to the beneficiary notifying him/her of a review.
Step 2	The beneficiary is given three months to review the grant.
Step 3	A second letter is sent to the beneficiary informing him/her of the agencies' intention to suspend the grant within 90 days.
Step 4	The grant is suspended if no response is received after 90 days.
Step 5	The beneficiary has 30 days for representation.
Step 6	A beneficiary has 30 days to restore a grant.
Step 7	Failure to have a grant restored within 30 days, will result in a grant lapsing.

Source: (SASSA, 2014:1)

Table 2.2 is an illustration of the steps which form part of the review process of the social grant system in South Africa. The purpose of the process outlined in Table 2.2 is to exercise control over the social grants which are granted to the lower income earning South African citizens. After the review of a social grant of a beneficiary, the grant could either continue as usual or it may be suspended, due to certain irregularities (SASSA, 2014e:1). The social grants will be suspended under the following circumstances, illustrated in Table 2.3 below, as laid down by SASSA (2014):

Table 2.3: Factors which may lead to the suspension of a social grant

Factor	CSG	AOG	DG	FCG	GIA	CDG	WVG
A change in the circumstances	✓	✓	✓	✓	N/A	✓	✓
The outcome of a review	✓	✓	✓	✓	N/A	✓	✓

Factor	CSG	AOG	DG	FCG	GIA	CDG	WVG
Failure to co-operate during the review	✓	✓	✓	✓	N/A	✓	✓
If fraud was committed or misrepresentation by the person who is entitled to the grant	✓	✓	✓	✓	N/A	✓	✓
If there was a mistake when the grant was initially approved	✓	✓	✓	✓	N/A	✓	✓
If the child is no longer in the applicant's care	✓				N/A		

Source: (SASSA, 2014:1)

As mentioned, Table 2.3 illustrates the factors which may lead to the suspension of a social grant. It is essential to inform SASSA immediately if there are any changes in circumstances. These suspension factors form part of the controlling measures included in the social grant system in South Africa. The purpose of the social grant system (as previously mentioned) is to provide social assistance to those citizens in need and the aim is on paying the correct social grant to the person in need at the time needed (SASSA, 2014:1) while maintaining control. SASSA (2014:1) also explains that a social grant may lapse under the following circumstances, as illustrated in Table 2.4 below

Table 2.4: Lapsing of social grants

Factor	CSG	AOG	DG	FCG	GIA	CDG	WVG
When a person/child passes away	✓	✓	✓	✓	N/A	✓	✓
If the person/child is admitted to a state institution	✓	✓	✓	✓	N/A	✓	✓
If the person/caregiver does not claim for three consecutive months	✓	✓	✓	✓	N/A	✓	✓

Factor	CSG	AOG	DG	FCG	GIA	CDG	WVG
If the person/child is absent from the country	✓	✓	✓	✓	N/A	✓	✓
At the end of the month in which the child turns 18 years of age	✓				N/A		
If the child is no longer in the applicant's foster care				✓	N/A		
If the applicant is no longer a refugee				✓	N/A		
When the child reaches 19 years of age					N/A	✓	

Source: (SASSA, 2014:1)

Table 2.4 illustrates the reasons that may lead to the lapsing of a social grant as these also comprise part of the controlling measures over the social grants.

Figure 2.1 is a summary that illustrates the connection between Tables 2.2 to 2.4 as all of these deal with how control is exercised over the social grant recipients to ensure that no irregularities take place.

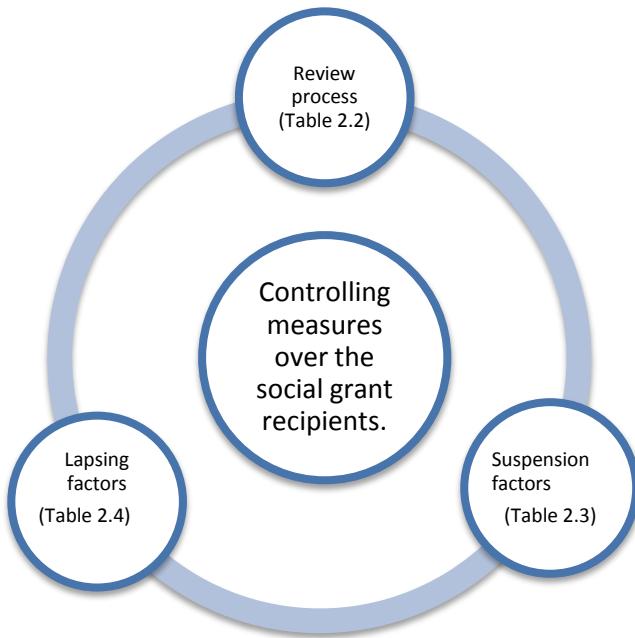


Figure 2.1: Controlling measures over the social grant recipients

Source: Own research

Each of the seven types of social grants increases annually, which usually takes effect from 1 April 2014 every subsequent year. These increases are normally announced at the annual national budget speech which is held in February (National Treasury, 2014a). A review of increases in social grants follows.

2.2.3 Increases in the social grants over the last three years

Over the past three years (since 2012) there has been a significant increase in the monthly amounts of the social grants in South Africa. These increases differ according to the type of social grant and are not necessarily aligned to each other (based on the percentage increase). The total monthly amount per social grant as from 2012 is illustrated in Table 2.5 below. The purpose of Table 2.5 is to illustrate the increases in these grants since 2012. Later in this Chapter the CPI will be critically investigated (including the increments in it) after which a comparison between the increases in the social grants and CPI will be illustrated (Figure 2.4). Figure 2.4 will determine whether the increments in the social grants are in line with the increases of the CPI.

Table 2.5: Social grant figures since 2012

Grant	2012/13	2013/14	2014/15	Increase 2012-2013	Increase 2013-2014
CSG	R280	R290	R310	3.57%	6.90%
OAG (<75 years)	R1200	R1260	R1350	5.00%	7.14%
OAG<br (>75="" b="" years)<=""/>	R1220	R1280	R1370	4.92%	7.03%
DG	R1200	R1260	R1350	5.00%	7.14%
FCG	R770	R800	R830	3.90%	3.75%
CDG	R1200	R1250	R1350	4.17%	8.00%
GIA	R280	R290	R310	3.57%	6.90%
WVG	R1220	R1280	R1370	4.92%	7.03%

Source: (Adjusted from the National Treasury, 2012 to 2014)

Table 2.5 illustrates the increases in the monthly amounts of the different social grants in South Africa over the period 2012 to 2014. The CSG will increase by R10 in October 2014. Individually, all the social grants have a higher increase percentage, except for the FCG which recorded a 0.15% (3.90% - 3.75%) decrease from 2013 to 2014. The data of Table 2.5 is illustrated in Figure 2.2 below.

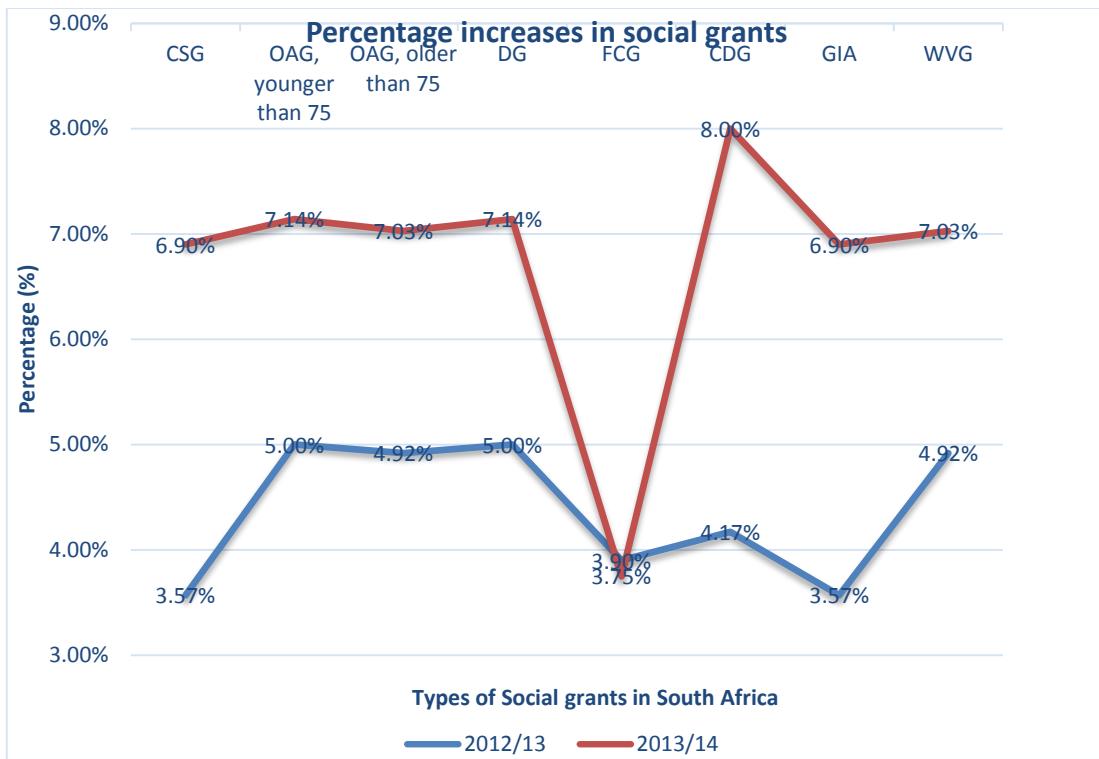


Figure 2.2: The percentage increases in the social grants in South Africa since 2012

Source: (Adjusted from the National Treasury, 2014b:13)

Figure 2.2 illustrates the total percentage increases in social grants between 2012/13 and 2013/14. Between 2012 and 2014 the social grants have increased by the following percentages:

- CSG has increased by 3.33% (6.90% - 3.57%);
- OAG (younger than 75) by 2.14% (7.14% - 5.00%);
- OAG (older than 75) by 2.11% (7.03% - 4.92%);
- DG by 2.14% (7.14% - 5.00%);
- CDG by 3.83% (8.00% - 4.17%);
- GIA by 3.33% (6.90% - 3.57%); and
- WVG by 2.11% (7.03% - 4.92%).

The FCG has shown a decrease between the years 2012 to 2014 with 0.15% (3.90% - 3.75%), which is an indication that the FCG is the only social grant

that is not in line with the other social grants. The CDG has increased the most during 2012 and 2014 (leading with 0.50% (3.83% - 3.33%)), followed by the CSG and the GIA.

Later in the study (paragraph 2.4) the average annual growth in the social grants is compared with the average annual growth of the CPI to investigate whether the increases in the social grants are in line with the increases in the CPI. A discussion of the CPI follows.

2.3 CONSUMER PRICE INDEX

The inclusion of the CPI in this Chapter is of relevance for the determination of whether the increases in it are in line with the increases in the social grants, so as to establish whether the government still cares for its lower income earning citizens living below the poverty line.

Statistics South Africa (“Stats SA”) (2013:1) defines the CPI as:

“A current social and economic indicator that is constructed to measure changes over time in the general level of prices of consumer goods and services that households acquire, use or pay for. The index aims to measure the change in consumer prices over time. This is done by measuring the cost of purchasing a fixed basket of consumer goods and services of constant quality and similar characteristics, with the products in the basket being selected to be representative of households’ expenditure during a year or other specified period. Such an index also aims to measure the effects of price changes on the cost of achieving a constant standard of living (level of utility or welfare). This concept is called a cost-of-living index (“COLI”).”

In accordance with Stats SA (2013:1), Mohr *et al.* (2008, 69-70) also defines the CPI as an index of prices of consumer goods and consumer services that represents the total cost of a basket (price of a representative basket) of goods and services that a South African household purchases.

Stats SA (2013:1) explains that the South African CPI has two equal objectives:

Objective 1: To measure inflation in the economy so that macroeconomic policy is based on comprehensive and up-to-date price information and to provide a deflator of consumer expenditure national accounts.

Objective 2: To measure changes in the cost of living of South African households to ensure equity in the measures taken to adjust wages, grants, service agreements and contracts.

In determining the composition of the CPI Stats SA must (Mohr *et al.*, 2008:69-70):

- Select and choose the goods and services to be included in the basket;
- Award a weight to every product and service to determine the relative importance of the basket;
- Choose a basis year for which the CPI can be calculated; and
- Determine the CPI by collecting the prices needed every month.

An illustration of the CPI follows by means of Tables and Figures with relevant discussions.

2.3.1 Increases in the CPI over the past three years

The increase in the CPI (households) over the past three years is illustrated by using Table 2.6 and Figure 2.3. The increases in the CPI takes place on a monthly basis, but Table 2.6 will illustrate the yearly average increases in the CPI since 2012. When this section was dealt with, only the averages from January to April were available and were used for the 2014 year. One of the primary objectives as discussed in Chapter 1 is to determine whether the increases of the social grants are in line with the increases of the CPI, motivating the importance of Table 2.6 and Figure 2.3. After the illustration of the CPI in Table 2.6 and Figure 2.3, it will be combined (with Table 2.5 and Figure 2.2) for purposes of comparison, in order to determine whether the increases of the social grants are in line with the increases of the CPI.

Table 2.6: The annual index figures of the CPI since 2012

	2012	2013	2014*	2012/13	2013/14
Average	97.8%	103.4%	107.8%	100.6%	105.6%

*Average of April 2014.

Source: Stats SA (2014:4)

The annual average increases of the CPI from 2012 to 2014 (January to April) are illustrated in Table 2.6 above. Table 2.6 indicates that the annual average of the CPI has increased between 2012 and 2013 by 5.6% (103.4% - 97.8%). There has also been a 4.4% (107.8% - 103.4%) increase from 2013 to 2014 (only from January to April). Between the years 2012/13 and 2013/14 there has been an overall increase of 5% (105.6% - 100.6%) which indicates that the CPI has increased since 2012. The overall effect of the increases in the CPI is illustrated in Figure 2.3, followed by a comparison. Figure 2.3 illustrates the annual average increases as well as the annual average since 2012.

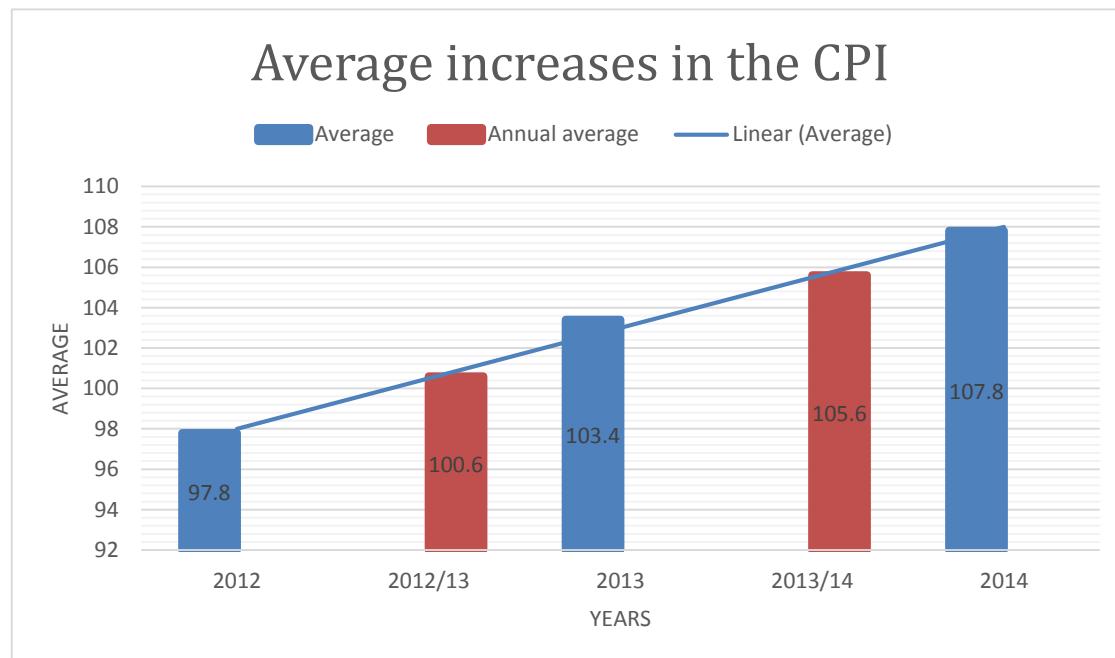


Figure 2.3: Average and annual average increases (%) in the CPI Headline index

Source: (Stats SA, 2014:4).

Figure 2.3 is an illustration of the average (%) and annual average (%) in the CPI Headline index since 2012 to 2014 (January to April). Figure 2.3 clearly indicates that there has been a significant increase in the CPI Headline index since 2012. The purpose of this figure (Figure 2.3) is to illustrate the increases in the CPI Headline index in order to compare it with the increases in social grants (Figure 2.2). A comparison between the annual average of the social grants and CPI follows, to determine whether these increases are in line with each other.

2.4 COMPARISON BETWEEN THE INCREASES IN THE SOCIAL GRANTS AND CPI OVER THE LAST THREE YEARS

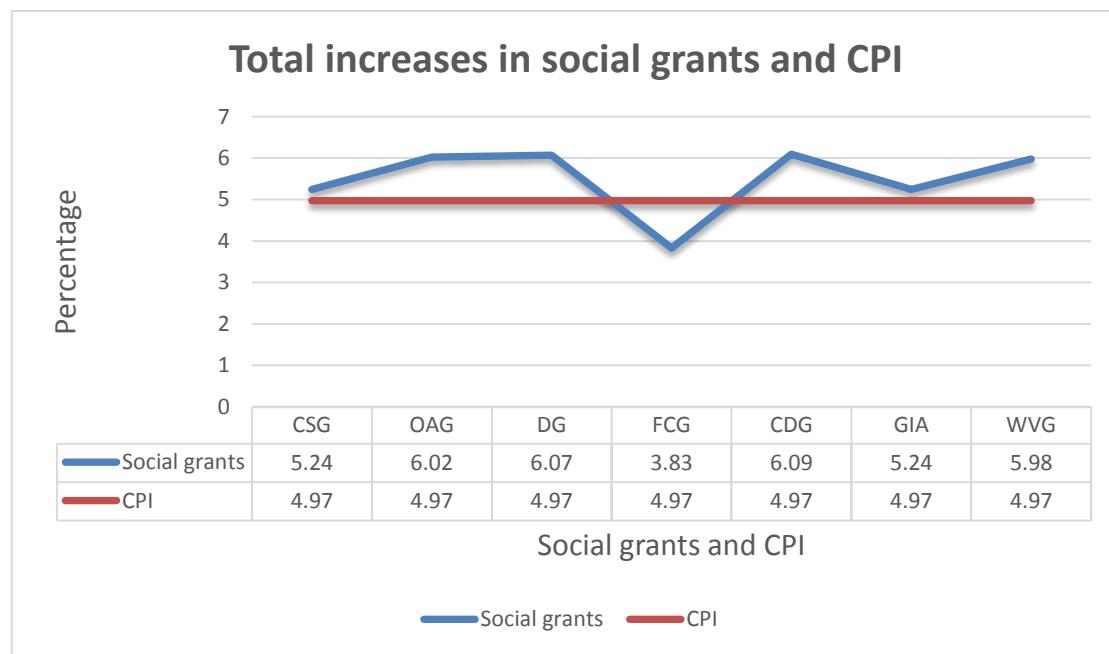


Figure 2.4: Comparison of increases in social grants and CPI

Source: Own research

Figure 2.4 is a comparison of the increases in social grants and the CPI since 2012. The overall increase in the CPI since 2012-2014 is 4.97%. The increases of the social grants since 2012-2014 are as follow: CSG 5.24%, OAG 6.02%, DG 6.07%, FCG 3.83%, CDG 6.09%, GIA 5.24% and WVG 5.98%. The percentages of the social grants were calculated by determining an average since 2012. All the social grants except for the FCG is above the overall

increase of the CPI. These percentages indicate that the social grants have shown significant increases since 2012, which is an indication that the government still cares for its lower income earning citizens, who are subsidised by social grants, since the increases in the social grants are greater than the increases of the CPI.

This section has dealt with the determination of the increases of the social grants and CPI. The main purpose of this section was to establish the types of social grants in South Africa, the amounts available per social grant as well as the increases thereof and how control is maintained. Another purpose was to briefly discuss the CPI and its increases in order to determine whether the increases of the CPI were in line with the increases of the social grants. A detailed discussion of sin taxes is provided in the paragraphs that follow; the items considered have been narrowed down to alcoholic beverages and cigarettes. The increases in taxes on these two goods are discussed and illustrated by means of Tables and Figures, and the average consumption levels are determined and illustrated. The purpose of the following section is to determine the increases in sin taxes on alcoholic beverages and cigarettes when compared to the consumption of alcoholic beverages and cigarettes.

2.5 SIN TAXES

Sin taxes, as discussed in Chapter 1, are taxes that are levied on products or services that are seen to be non-essential by society (Manuel, 2014:1). These taxes, as mentioned, are levied on products such as: alcoholic beverages, cigarettes, tobacco, sweets, soft drinks, fast foods, coffee and gambling (Sadowsky, 2014:1). According to Haile (2009:1041) some states are considering the enactment of new sin taxes on high sugar drinks and internet pornography.

There are several arguments regarding the actual purpose for the levying of taxes on sinful goods. Haile (2009:1041) is of the opinion that the purpose for the levying of taxes on sinful goods was originally to fill budget gaps. In congruence with this, as indicated Anderson (1997:139-161) stated that the first excise taxes were proposed on whiskey in 1790 to refund revolutionary war

debts. According to Haile (2009:1041) the governments of states have become dependent on the revenues that are generated through sin taxes and therefore they have developed an interest in maintaining sales of the sinful products. On the other hand, while Williams and Christ (2009:1) argue that the actual purpose of raising the taxes on sinful goods is to reduce the consumption thereof, Viscusi (2003:1) argues that in the past the tax implications of certain products have been accounted for as sources of revenue for governments, but there have been additional rationales for the taxes on cigarettes.

The purpose of sin taxes has ethical implications. If it is the purpose of sin taxes to increase government revenue, this is unethical as the government wishes to benefit from the weaknesses of users of sin taxed items. If it is the purpose of sin taxes is to reduce consumption of sin taxed items, this may be regarded as ethically sound.

It is clear that there are conflicting arguments around the actual purpose of raising taxes on such goods as alcoholic beverages and cigarettes. The focus of this study is specifically on this, to determine the actual purpose for the levying of taxes on these goods. The connection between the increases and consumption of the said goods will also be determined.

2.5.1 The levying of sin taxes on alcoholic beverages and cigarettes

Clark (2012: 11) states that Treasury believes increases in sin taxes will complement the broader efforts to reduce alcohol abuse. Jones (2007:1) explains that the increases in sin taxes are no longer a surprise, since the only thing that changes is the level of the punishment of the consumer. The constant increments in sin taxes influence the lower income quintile the most (Snowdon, 2013:12) due to the fact, alluded to earlier, that sin taxes are classified as regressive taxes, where the poor pay a higher percentage of their taxes than the rich (Stiglitz, 2000:1). The proportion of disposable income spent on indirect taxes (on sin goods) is illustrated in Figure 2.5 below, where it is evident that the poor pay a higher fraction. The purpose of this Figure (2.5) is to emphasise that regressive taxes, such as sin taxes, primarily affect the poor.

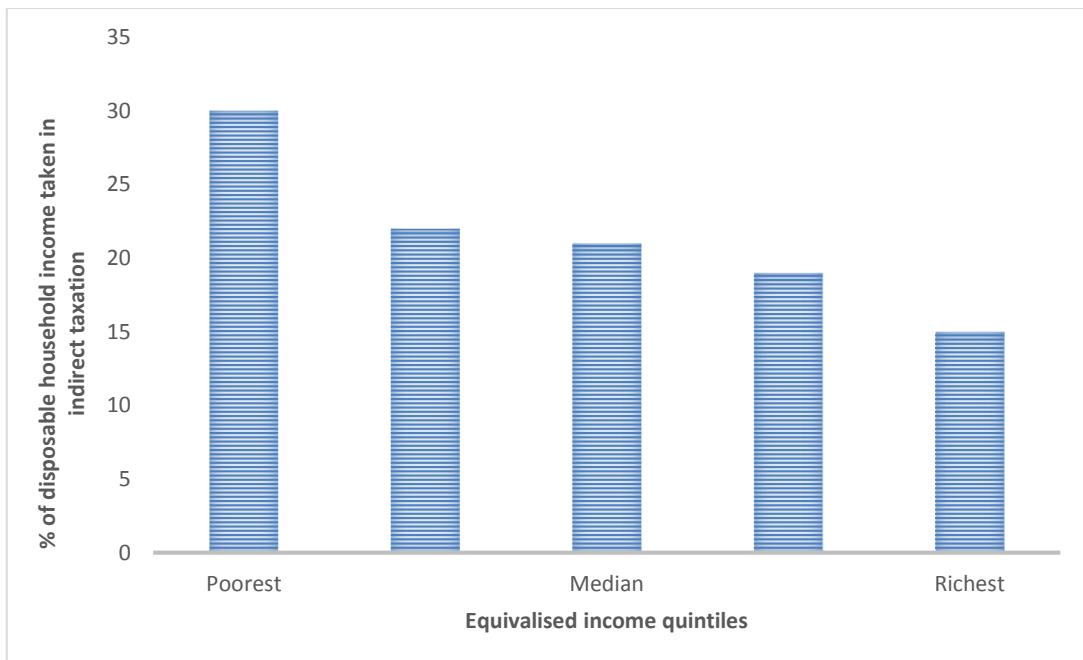


Figure 2.5: The proportion of disposable income spent on indirect taxes

Source: (Snowdon, 2013:12)

Figure 2.5 illustrates that the poorest households earning the least income spent most of their disposable income on goods which are subjected to indirect taxes. In this illustration it is evident that sin taxes are regressive in nature because the poorest are spending 30% of their income on these sin goods whereas the richest only spend 15%. Thus, there is a 15% (30% - 15%) difference between the poorest and richest. This substantiates the statement by Snowdon (2013:12) that the increases influence the lower quintile the most.

The discussion will be divided between the sin taxes imposed on alcoholic beverages and on cigarettes. Alcoholic beverages include “any fermented liquor, such as wine, beer or distilled spirits that contains ethyl alcohol or ethanol ($\text{CH}_3\text{CH}_2\text{OH}$) as an intoxicating agent” (*Encyclopaedia Britannica*, 2014).

2.5.1.1 Sin taxes on alcoholic beverages

According to Smith (2014:1) consumers who drink alcoholic beverages will have to dig deeper into their pockets due to the latest increases in sin taxes. Taxes on alcoholic beverages, in particular beer, sparkling wine and spirits

(also distilled beverages or hard liquor) will increase between 2% and 12% while the former minister of finance, Mr Pravin Gordhan, was of the opinion that excise duty will not increase on traditional African beer or beer powder (Smith, 2014:1). Over the years alcoholic beverages have attracted significant tax increases which usually take effect after the yearly budget speech. Table 2.7 is an illustration of the yearly increases of sin taxes on alcoholic beverages from 2011 to 2014.

Table 2.7: Increases of sin taxes on the specific alcoholic beverages since 2011

Alcoholic beverage	Per volume	2011	2012	2013	2014
Malt Beer	340 ml	6,4 cents	9 cents	7,5 cents	9 cents
Unfortified wine	750 ml	13,5 cents	13,5 cents	19,5 cents	13 cents
Fortified wine	750 ml	17,5 cents	17,5 cents	15 cents	27 cents
Sparkling wine	750 ml	30 cents	42 cents	56 cents	62 cents
Ciders and alcoholic fruit beer	340 ml	6 cents	8,6 cents	7,3 cents	9 cents
Spirits (Hard liquor)	750 ml	R2,86	R6	R3,60	R4,76

Source: (National Treasury, 2011:2; National Treasury, 2012:4; and National Treasury, 2012:4; Smith, 2014:1)

Table 2.7 illustrates the increases in alcoholic beverages since 2011 to 2014. Malt beer had a 9 cents per 340ml increase in 2014 which is 1.5 cents (9 - 7.5) higher than the increase of 7.5 cents in 2013. Unfortified wine had a 6.50 cents decrease (19.5 - 13) in 2014 while fortified wine had a 12 cents (27 - 15) higher increase than in 2013. Sparkling wine had a 60 cents increase per 750 ml bottle

in 2014 which is 6 cents (62 - 56) higher than in 2013. Ciders and alcoholic fruit beverages had a 9 cents per 340ml increase in 2014 which is 1.70 cents (9 - 7.3) higher than the 7.3 cents increase in 2013. Spirits record the highest amount of increases since 2011 (R2.86) per 750ml. In 2014 the cost of spirits have increased by R4.76 (2013: R3.60). Figure 2.6 below illustrates the increases of tax on alcoholic beverages since 2011 so that the overall increases may be readily compared. Table 2.7 is compared to in paragraph 2.5.2 (Figure 2.11) for purposes of establishing the relationship between the increases in alcoholic beverages and the total consumption levels in order to determine whether the government has succeeded in its goal of increasing the taxes in order to reduce consumption.

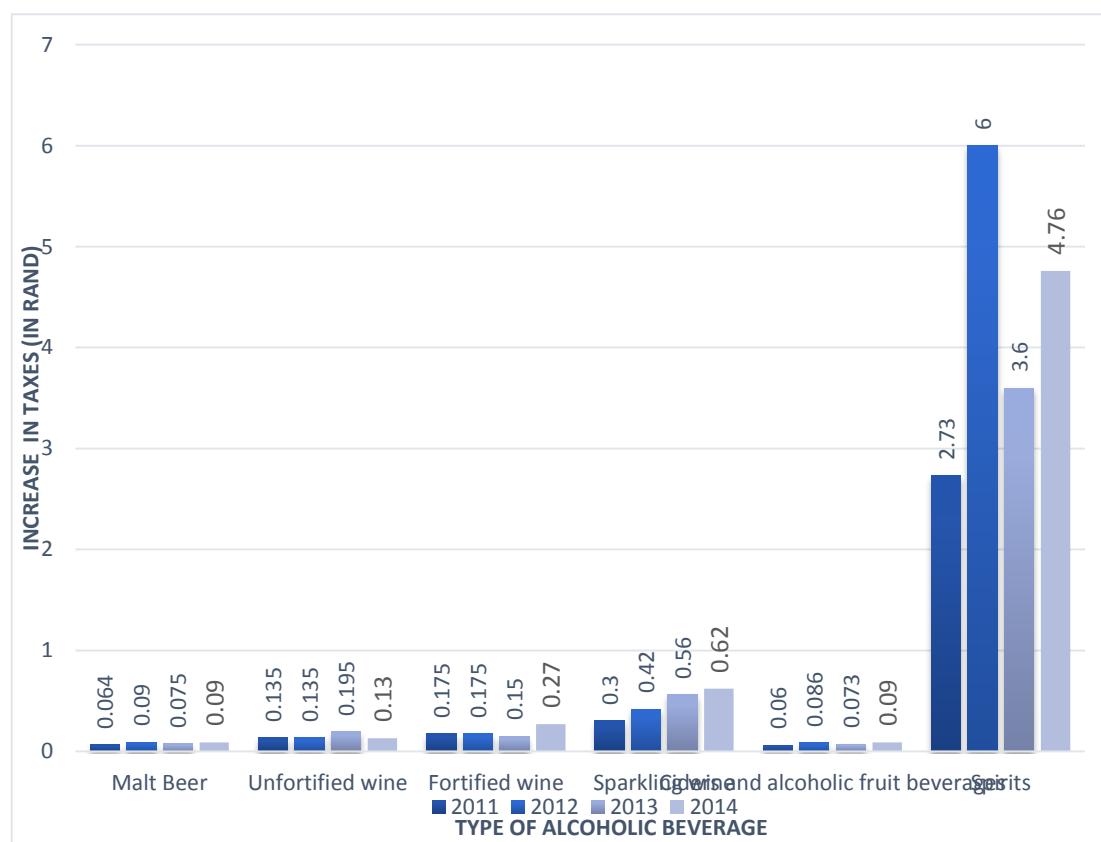


Figure 2.6: The increases in sin taxes (in Rands) on alcoholic beverages from 2011 to 2014

Source: (National Treasury, 2011:2; National Treasury, 2012:4; and National Treasury, 2012:4).

Figure 2.6 illustrates the total increases of sin taxes (in Rands) on alcoholic beverages from 2011 to 2014. In Figure 2.6 it is obvious that spirits record the highest increase in sin taxes each subsequent year while malt beer, ciders and other alcoholic fruit beverages are more or less in line with the lowest increase in sin taxes each year.

Bianchi (1996:2) states that the increase in alcohol excise taxes is one of the most effective ways of saving the lives of the young, because it reduces the incidence of mortality from liver cirrhosis. Bianchi (1996:2) adds that other studies have shown that price increases in alcoholic beverages help to raise college graduation rates and reduce crime rates.

There are three main reasons for an increase in alcohol excise taxes (Bianchi, 1996:2):

- It raises revenue;
- It reduces the consumption in alcoholic beverages and related problems; and
- It provides funding for key government programmes.

The total increases (%) of sin taxes on alcoholic beverages are indicated in Table 2.8. The total increases were calculated by using the total (in Rand) increases in alcoholic beverages which were illustrated in Table 2.7.

Table 2.8: The total increases (%) of sin taxes on alcoholic beverages

Type of alcoholic beverage	2011/12	2012/13	2013/14
Malt beer	4.062%	(16.67%)	20%
Unfortified wine	0%	0%	(3.70%)
Fortified wine	0%	(14.26%)	80%
Sparkling wine	40%	33.33%	10.71%
Ciders and alcoholic fruit beverages	43.33%	(15.12%)	23.29%

Type of alcoholic beverage	2011/12	2012/13	2013/14
Spirits	109.79%	(40%)	32%
Total Increases	197.182%	(52.72%)	162.30%

Source: Adapted and calculated from (National Treasury, 2011:2; National Treasury, 2012:4; and National Treasury, 2012:4).

Table 2.8 is an illustration of the total increases (%) of the taxes on various alcoholic beverages since 2011. Malt beer recorded a 4.062% increase in 2011/12, where after it had a decrease of 16.67% in 2012/13 and subsequently a high increase of 20% which was 36.67% ($16.67\% + 20\%$) higher than the previous period. Unfortified wine had no increase or decrease in 2011/12 and 2012/13 while there was a 3.70% decrease in 2013/14, whereas fortified wine recorded a decrease of 14.26% in 2012/13 and thereafter a high increase of 80% in 2013/14. Sparkling wine showed significant increases since 2011/12 (40%) to 2013/14 (10.71%). Ciders and alcoholic fruit beverages recorded a 23.29% increase in 2013/14 after the 15.12% decrease in 2012/13. Spirits had a total 32% increase in 2013/14 after the 40% decrease in 2012/13. It is evident that the increases and decreases differ from period to period and that the increases are not fixed every year. It may be concluded from the figures that government increases the most commonly used alcoholic beverage each year. The total increases of sin taxes on such beverages follow in Figure 2.7 below.

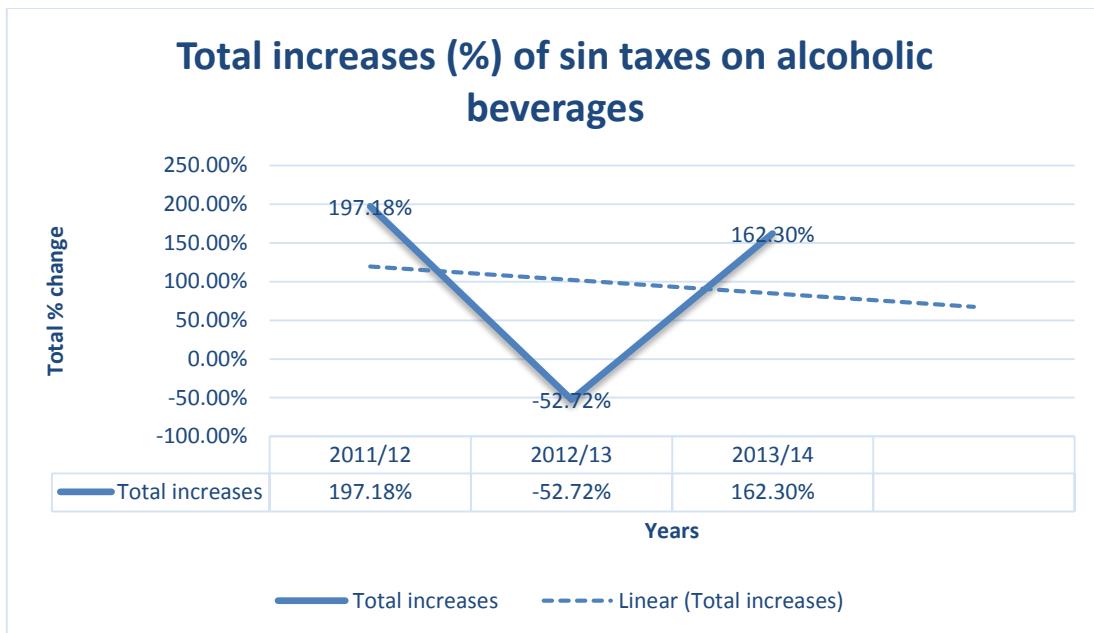


Figure 2.7: The total increases (%) of sin taxes on alcoholic beverages from 2011 to 2014

Source: Adapted and calculated from (National Treasury, 2011:2; National Treasury, 2012:4; and National Treasury, 2012:4).

Figure 2.7 is an illustration of the total percentage increases of taxes on alcoholic beverages in South Africa since 2011 to 2014. This figure is used again later in the study where the comparison between the increases and consumption of alcohol and cigarettes (discussed later in this Chapter) is illustrated (Figure 2.11).

Jones (2007:1) contends that the continual increases in excise taxes duties on alcohol provide a good reason to stop consuming alcoholic beverages and, rather, begin consuming non-alcoholic ones. The total percentage of the consumption levels of such beverages may be determined by the total increases in the sales volume per year. The total increases/decreases in the sales volume (%) of the different types of these beverages are depicted in Table 2.9, followed by an illustration in Figure 2.8.

Table 2.9: The total percentage of increases/decreases in the sales volume of alcoholic beverages

Type of alcoholic beverage	2011/12	2012/13	2013/14
Malt beer	1.46%	1.51%	1.49%
Unfortified wine	4.09%	1.42%	1.62%
Fortified wine	0.35%	(1.81%)	(3.57%)
Ciders and alcoholic fruit beverages	5.65%	6.49%	7.32%
Spirits	0.88%	1.98%	(1.68%)
Total	12.43%	9.59%	5.18%

Source: Adjusted from National Treasury (2014b:87).

Table 2.9 illustrates the total percentage sales volume of the different types of alcoholic beverages. It indicates that there are increases and decreases in the total percentage sales volume of the different alcoholic beverages. Malt beer, unfortified wine, ciders and alcoholic fruit beverages show significant increases from 2011 to 2014 while sales of fortified wine and spirits have decreased over the period (2011 to 2014). Based on previous Tables and Figures in this Chapter, it may be deduced that when the increases on certain alcoholic beverages are too high, consumers find a substitute. During 2011/12 to 2012/13 there has been a 2.83% (12.43% - 9.59%) decrease in the overall sales volume in alcoholic beverages, indicating that consumption has also dropped by 2.83%. During 2012/13 to 2013/14 there has been a 4.41% decrease in the sales volume, further indicating that the consumption has decreased by 4.41%, which is 1.58% higher than during the previous period. Based on these figures, it is evident that the overall consumption of alcoholic beverages has dropped. Figure 2.8 illustrates the overall decrease since 2011.

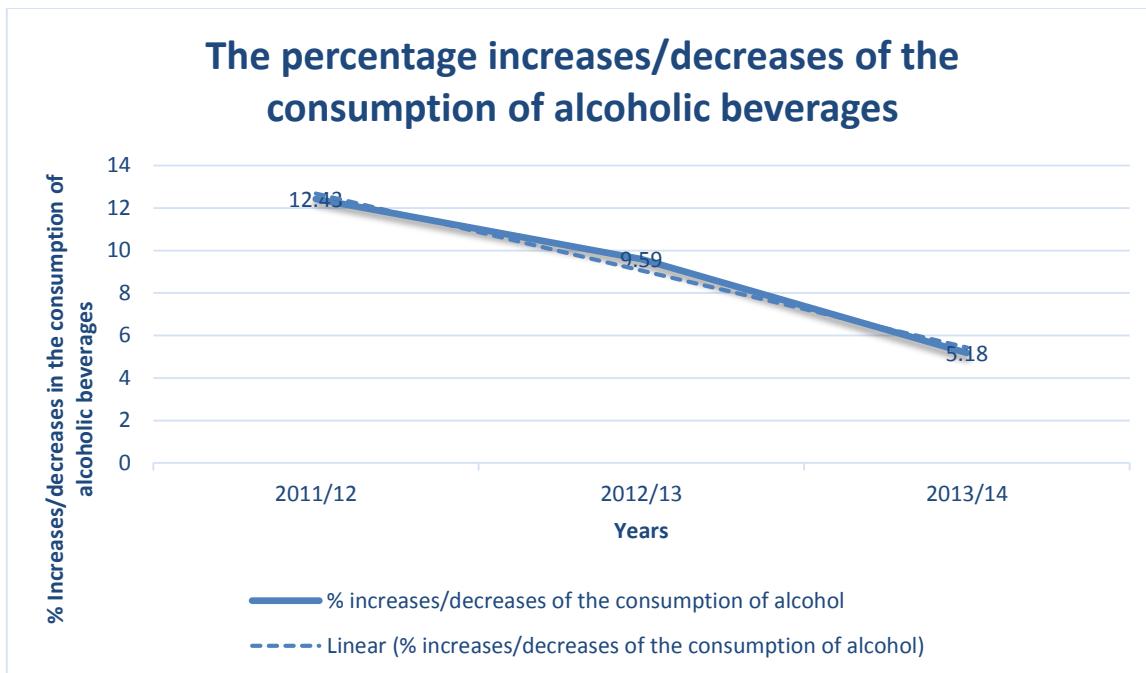


Figure 2.8: The total % increases/decreases in the consumption of alcoholic beverages

Source: Adjusted from National Treasury (2014a:87).

Figure 2.8 is an illustration of the total percentage of increases/decreases in the consumption of alcoholic beverages. In this figure it is evident that this consumption has decreased from 2011, which is an indication that the Government has achieved its goal of reducing their use by constantly increasing the sin taxes on them. A discussion of the sin taxes on cigarettes follows, including the overall increases in cigarettes and the consumption levels of cigarettes since 2011.

2.5.1.2 Sin taxes on cigarettes

As pointed out, Evans *et al.* (1999:1-56) indicate that economists see cigarette taxes as highly regressive taxes due to the fact that the poor pay a much higher percentage of their income in taxes than the wealthy. There are two reasons for cigarette taxes to be regressive:

- Because of the fact that the rich save more of their total income than the poor, whereas the poor spend a larger percentage of their income on the consumption of cigarettes (Fullerton and Rogers, 1993:43); and

- The prevalence of smoking is higher among the poor, which is an indication that cigarettes are in fact disproportionately consumed by the poor (Lyon and Schwab, 1995:77:389-406 and Wasserman *et al.*, 1991:10:43-64).

According to Dahlia and Remler (2004:225) and Snowdon (2012:1) the dramatic increases in cigarette taxes have made regressivity an even more pressing issue because it has driven smokers to the black market (cigarettes being sold on the black market are cheaper than the normal brands, no taxes levied thereon, and in some instances illegal). Dahlia and Remler (2004:225) moreover point out that the regressivity controversy focuses mainly on how to effect behavioural change to an extent which causes smokers to quit or cut back, due to higher taxes.

The increases in cigarettes taxes over the past three years and the current year are illustrated in Table 2.10 below and in Figure 2.9. Figure 2.9 will be used again in paragraph 2.5.2 where a comparison between the increases in alcoholic beverages and cigarettes is depicted.

Table 2.10: The increases of sin taxes on cigarettes since 2011

Year	2011	2012	2013	2014
Increased per packet of 20 cigarettes	80 cents	58 cents	60 cents	68 cents

Source: (National Treasury, 2011:2; National Treasury, 2012:4; and National Treasury, 2012:4).

Table 2.10 indicates the increases of taxes on a packet of 20 cigarettes from 2011 to 2014. There has been a 27.50% decrease from 2011 to 2012. From 2012 to 2013 there was a 3.33% increase and an increase of 11.76% from 2013 to 2014. Figure 2.9 (below) illustrates the effects of the increases of sin taxes on a packet of 20 cigarettes from 2011 to 2014.

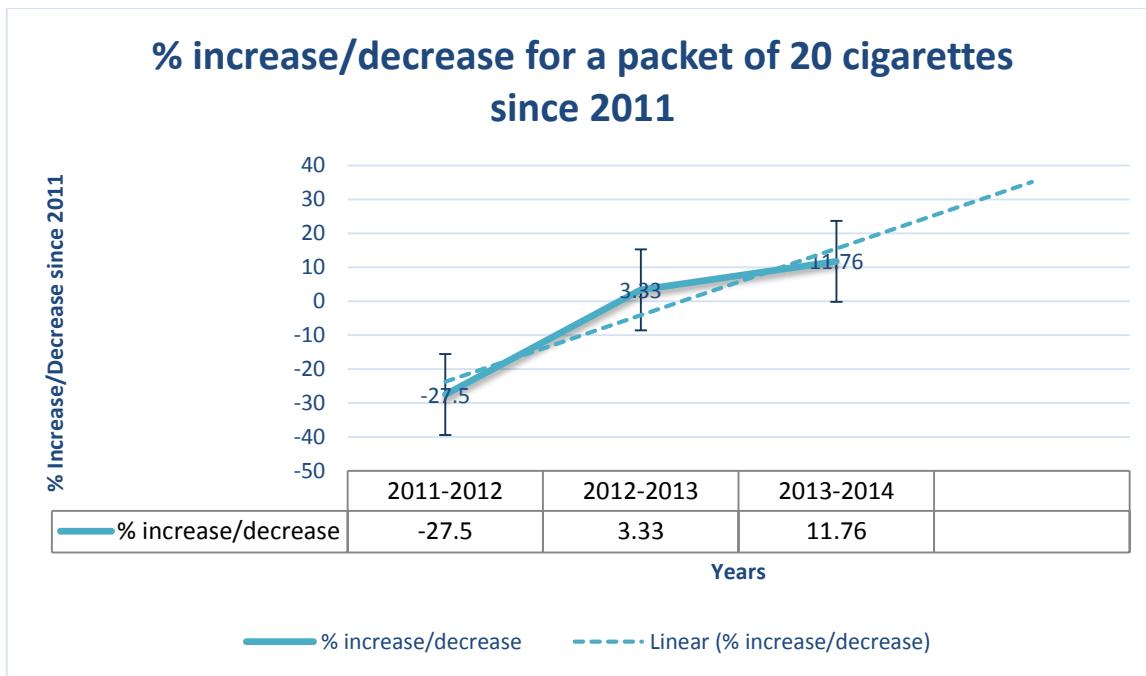


Figure 2.9: The increases (%) of sin taxes on a packet of 20 cigarettes since 2011

Source: (National Treasury, 2011:2; National Treasury, 2012:4; and National Treasury, 2012:4).

Figure 2.9 illustrates the tax increases, in cents, per packet of 20 cigarettes since 2011. In 2011 the total increase was 80 cents per packet, compared to 2012 where the total increase was only 58 cents, which means that the increase in a packet of 20 cigarettes was more in 2011 than in 2012. The increase of 60 cents per packet of 20 cigarettes in 2013 was slightly more (a 2 cents increase) compared to 2012. In 2014, the increase per packet of 20 cigarettes was 8 cents (68 cents – 60 cents) more than in 2013, indicating that after taxes decreased in 2012, the cost of cigarettes has increased significantly.

The overall effect on the increases of cigarettes will be illustrated by means of a table (Table 2.11) where the different types of smokers will be identified as well as the effect of the increases on each type of smoker. Government is of the opinion that the increases of cigarette taxes are intended to reduce the overall consumption of cigarettes, but this table explains what the consumers' attitude towards the increases in cigarettes is.

Table 2.11: The effect of higher cigarette taxes on different types of smokers measured under three alternative methods of assessing the tax burden

Different types of smokers	Response to tax increases	Accounting (Income-share tax burden)	Willingness to pay welfare based tax burden	Time inconsistent welfare based tax burden
Smoker A	Quits	Better off	Worse off owing to cigarette consumption decrease. Better off owing to lower tax bill. Overall worse off since not compensated for being forced to quit.	Better off owing to commitment device: eventual gains of quitting outweigh costs of quitting.
Smoker B	No change in smoking	Worse off	Worse off owing to higher expenditures on cigarettes.	Worse off owing to higher expenditures on smoking.
Smoker C	Cuts back to keep tax expenditure constant	Same as before	Worse off owing both to higher price paid per cigarette and cutting back on cigarette consumption.	Somewhat better off owing to commitment device: eventual gains of cutting back outweighs costs of cutting back.

Source: (Dahlia and Remler, 2004:228)

Table 2.11 explains the effect of higher cigarette taxes on different types of smokers, measured under three alternative methods of assessing tax burdens. Table 2.11 clearly indicates that the increases in cigarette taxes have different effects on the consumers' consumption behaviour and that in some instances these force the poor to quit due to the higher costs, which make cigarettes unaffordable for them.

Viscusi (2003:2) indicates that there are several rationales for limiting the level of cigarette taxes, as follows:

- To maximise tax revenues because higher tax rates do not necessarily boost tax revenues, due to the decline in the quantity being purchased;
- Cigarette taxes are not always the sole policy or best policy instrument when dealing with the different policy objectives that the society may have regarding cigarettes;
- The higher cigarette taxes will lead to lower welfare of smokers which will entail efficiency losses to the extent that consumer sovereignty will be overridden; and
- The taxes on cigarettes impose financial costs which are highly regressive in most countries.

Dahlia and Remler (2004:227) are of the belief that regardless of the extent to which people, especially the poor, have to cut back on consumption due to higher taxes, common sense would indicate that those people are worse off because they can simply no longer afford something they want to have. Figure 2.10 (below) is an illustration of the consumption of cigarettes since 2011. The consumption is calculated based upon the total packs of cigarettes sold (in millions) (Van Rensburg, 2013:2). The 2013 figure was determined by the number of cigarettes (sticks) smoked divided by 20 (a packet of cigarettes) (The Tobacco Institute of Southern Africa ("TTISA") (2014:1)).

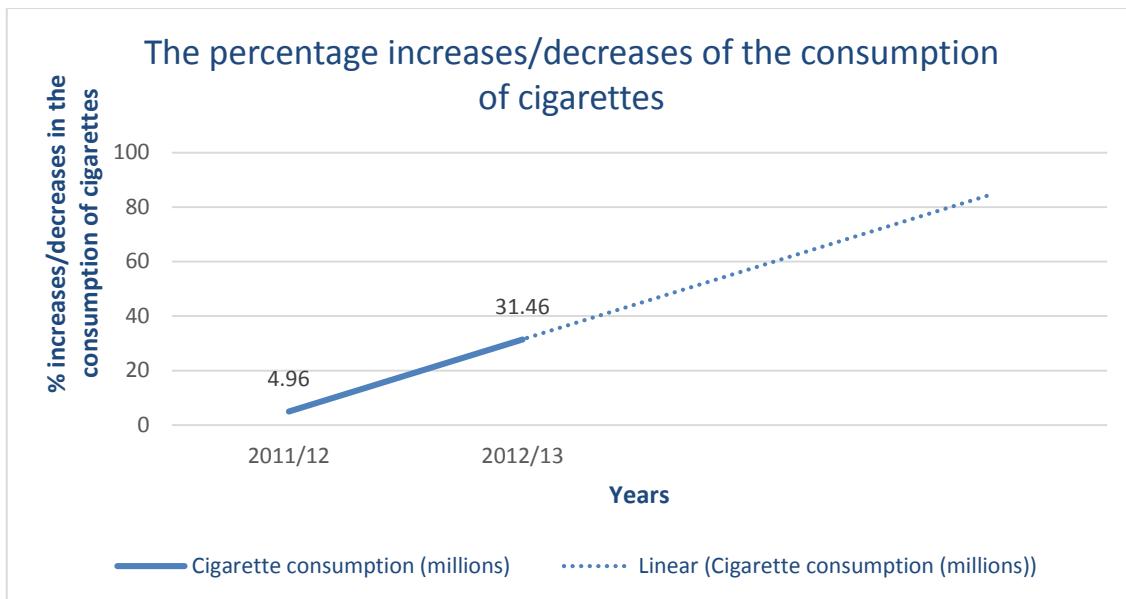


Figure 2.10: The total percentage increases in the consumption of cigarettes

Source: (Van Rensburg, 2013:2 and TTISA, 2014:1)

Figure 2.10 is an illustration of the total percentage increases of the consumption of cigarettes since 2011. From this figure it is observable that the consumption of cigarettes has increased despite of the yearly sin tax increases on cigarettes. There has been a 4.96% increase in consumption from 2011 to 2012 while there was a 31.46% increase from 2012 to 2013, which is 26.50% ($31.46\% - 4.96\%$) higher than the increase from 2011 to 2012. This graph states that it is 26.50% higher than the previous year. In this case, the Government does not succeed in its goal (reduction of the use of cigarettes). Figure 2.10 is repeated in paragraph 2.5.2 where the consumption of alcoholic beverages and cigarettes is compared to determine the overall effect.

2.5.2 Comparison between the increases and consumption of alcoholic beverages and cigarettes.

The above paragraphs (2.5.1.1 and 2.5.1.2) have indicated that the increases in use of alcoholic beverages and cigarette taxes have a number of effects on consumers, based on their levels of income and overall consumption of these sin goods. These high taxes have sought to discourage these activities through the imposition of taxes, which some tax proponents view as beneficial, because

alcoholic beverages and cigarettes constitute part of a highly risky consumer product (Viscusi, 2003:1). A comparison of the increases of alcoholic beverages and cigarettes is illustrated in Figure 2.11, below.

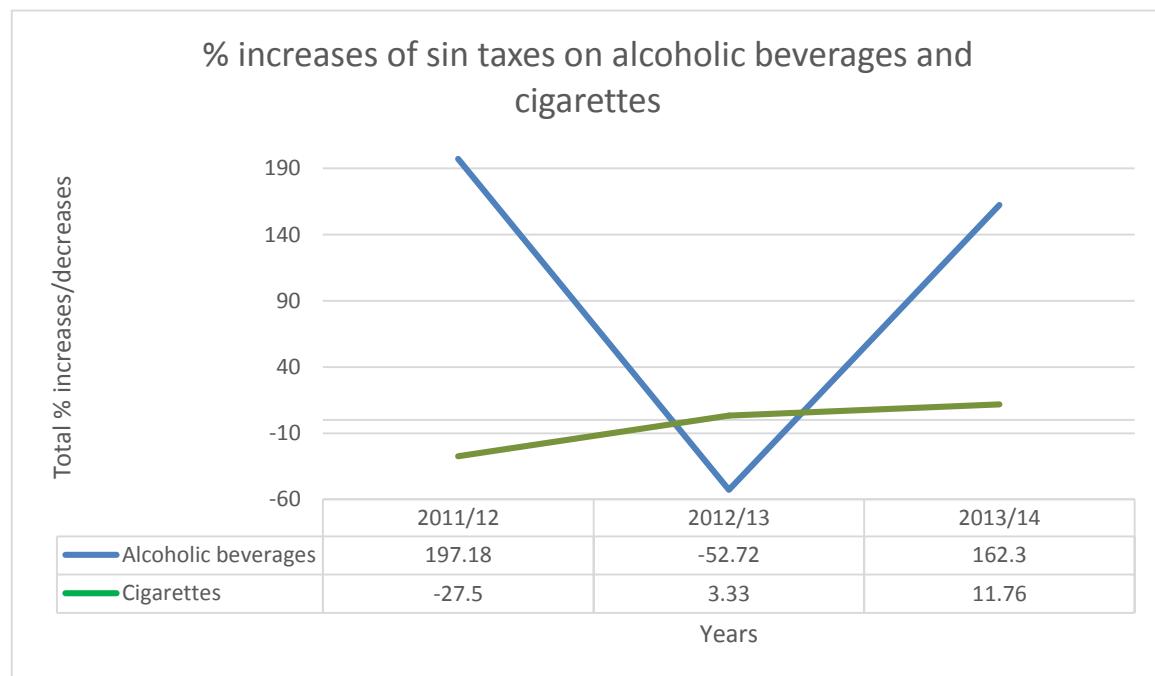


Figure 2.11: The total % increases of taxes on alcoholic beverages and cigarettes since 2011

Source: (National Treasury, 2011:2; National Treasury, 2012:4; and National Treasury, 2012:4)

Figure 2.11 illustrates the total increases/decreases (%) of sin taxes on alcoholic beverages and cigarettes. It indicates that the total % increases/decreases as regards alcoholic beverages are more than the increases/decreases regarding cigarettes, which means that the total percentage of sin taxes is greater on alcoholic beverages than on cigarettes. From this figure, it may be assumed that the increases of sin taxes have a greater impact on alcoholic beverages than on cigarettes. Snowdon (2012:1) holds the view, as do others, that sin taxes on alcoholic beverages and cigarettes are levied in order to boost government's revenue because of the fact that the minimum alcohol pricing will aggravate poverty and the lack of equality instead of discouraging the consumption thereof. Snowdon (2012:1) adds that even though cigarette taxes are currently so high, this only drives

smokers to the black market instead of discouraging consumption. Based on previous increases of cigarette taxes, research has shown that these only made 2.3% smokers quit, which leaves 97.7% of smokers who are simply paying more tax (Snowdon, 2012:1). Figure 2.12 below compares the consumption of alcoholic beverages and cigarettes with each other.

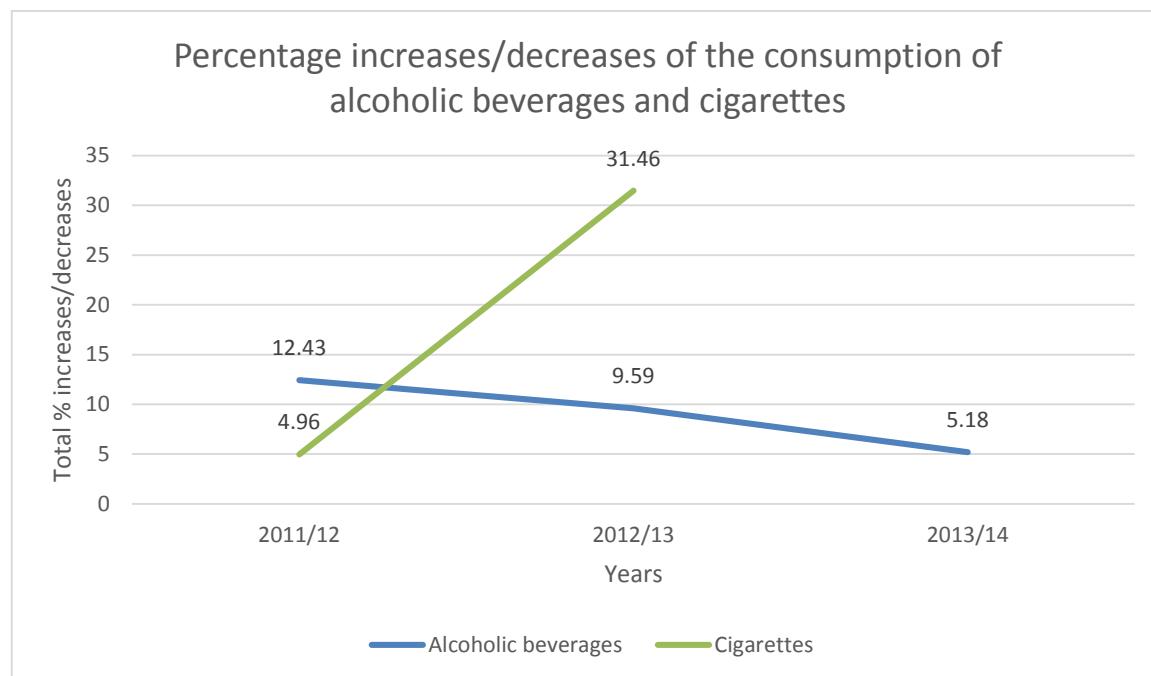


Figure 2.12: The consumption levels (%) of alcoholic beverages and cigarettes

Source: (Adjusted from National Treasury, 2014b:87, Van Rensburg, 2013:2 and TTISA, 2014:1)

Figure 2.12 is a comparison of the percentage increases/decreases of the consumption of alcoholic beverages and cigarettes since 2011. This figure indicates that based on the consumption levels, consumption of alcoholic beverages has decreased since 2011 while cigarette purchases have increased. In 2011/12, the cost of alcoholic beverages increased by 12.43% while the cost of cigarettes increased by 4.96%. The years 2012/13 revealed that alcoholic beverages had a 9.59% increase, which is 2.84% (12.43% - 9.59%) lower than the increase of the previous period, while cigarettes had a 31.46% increase, which is 26.50% (31.46% - 4.96%) higher than in the previous period. In 2013/14, alcoholic beverages recorded a 5.18% increase, which is

4.41% (9.59% - 5.18%) lower than the previous period. The estimated figures for the cigarette consumption of 2014 were not available when this study was conducted. Alcoholic beverages indicated an overall decline in consumption while cigarettes showed a significant increase. In comparison to Figure 2.11, alcoholic beverages also recorded a greater increase in sin taxes. Based on Figures 2.11 and 2.12, the government has succeeded in its goal to reduce consumption by the levying of a higher sin tax percentage on alcoholic beverages. The increase of sin taxes on cigarettes has had no impact on the consumption due to the fact that the consumption levels showed significant increases. To conclude, the overall effect is that even though the levying of sin taxes has increased by 5.7% to 10% with the aim of reducing the consumption of both alcohol and tobacco, it only succeeded in regard to alcoholic beverages.

2.6 SUMMARY AND CONCLUSION

Chapter 2 provided a detailed discussion of the social grant system in South Africa which distinguished between the different types of social grants, the increases in every type of social grant and how control is maintained over the social grant recipients. The CPI of South Africa was also briefly discussed and the annual increase was determined. A comparison between the increases of the social grants and CPI was undertaken to determine whether these increases were in line with each other. The increases in the social grants were far more than the increases in the CPI: an indication that the Government still cares for its lower income earning South African citizens who are primarily subsidised through social grants.

The sin tax system in South Africa was also discussed in this Chapter, where the aim was to arrive at a conclusion regarding the real purpose for the levying of sin taxes. Some authors (Anderson, 1997:32; Viscusi, 2003:1; Haile, 2009:1041 and Snowdon, 2012:5) express the view that the levying of sin taxes is intended for governments to raise revenue while others (Williams and Christ, 2009:1 and Clark, 2012:1) considered that the levying of sin taxes is designed to reduce the consumption thereof as such items are seen as harmful to the society. In this study, sin taxes were narrowed down to alcoholic beverages and cigarettes where the effect and increases were critically investigated. Findings

suggest that the high percentage of sin taxes on these had different effects. The levying of sin taxes on alcoholic beverages is higher than cigarettes which indicated that the overall consumption of alcoholic beverages has decreased. The overall consumption of cigarettes recorded an increase which indicates that the citizens cut back on other goods to continue with their smoking habits or to buy on the black market. Thus the South African government succeeded in the reduction of alcoholic beverages, but still need to focus on the reduction of cigarette consumption. The effect of the levying of sin taxes on the lower income earning South African citizens will be determined in Chapter 4 so as to reach an overall conclusion. The literature review (Chapter 2), in particular the figures stemming from it, was used as a tool to achieve the objectives of this study by means of comparison. Findings suggest that the purpose impose to cut back consumption. The research design and research methodology process follows in Chapter 3 where it is discussed in detail and made applicable to this study.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Chapter 2 discussed the social grant system of South Africa and the sin tax implications (increases and consumption) of alcoholic beverages and cigarettes. This Chapter contributes towards the empirical objective of this study by determining the percentage of social grants spent by lower income earning South African citizens on such items. In order to achieve this objective certain research methodologies were required in the research process.

Research may be defined as a process that involves the acquiring of scientific knowledge in the form of different objective methods and procedures (Welman *et al.*, 2011:2). Welman *et al.* (2011:2) indicate that the objective methods include sampling, the measuring of variables, the collection of relevant information (questionnaires and interviews) and the analysing of the information that was obtained. Burns (2000:3) points out that research consists of systematic investigations which are used to find answers to a problem.

Chapter 3 provides a brief overview of the research design, research methodology, validity and reliability, population and sampling (including: sampling, sample size and sampling errors) and household survey (including: pilot study and ethical considerations) in terms of the study.

3.2 RESEARCH DESIGN

Burns (2000:145) makes it clear that the research design forms part of an essential plan or strategy which is aimed at the answers of a research question. In concurring with Burns (2000:145), Bryman and Bell (2007:40) add that a research design includes a framework which contributes towards the collection and analysis of data. Mouton (2013:56) explains that the focus of any research design is on the end product, based on the study that is planned and the results thereon. According to Burns (2000:145), a research design is a plan or strategy

that is aimed at eliciting answers in order to obtain research questions. There are several research designs (Burns, 2000:145):

- Post-test comparison with randomised subjects;
- Pre-test and post-test comparison design with randomised subject;
- Factorial designs;
- Quasi-experimental designs; and
- Non-randomised control group pre-test/post-test design.

The research design used in this study was the pre-test and post-test comparison design with randomised subjects. This design enables the measurement of change, which ensures that both groups are equivalent because of the fact that the groups are randomly chosen (Burns, 2000:146). The research problem of this study, as indicated, was to determine the percentage that lower income earning South African citizens, who are funded by social grants, spend on certain sin taxed items. The government uses the money collected from the various taxes to provide for social assistance in the form of social grants; therefore, this study investigates the actual purpose for the levying of sin taxes. There are two research design types: empirical or non-empirical, depending on the data that are used in each study. An empirical study makes use of primary data surveys, experiments, case studies, programme evaluation and ethnographic studies (Mouton, 2013:144), while a non-empirical study makes use of existing data (Mouton, 2013:144). This study was based upon the empirical type, of which a detailed discussion follows.

3.2.1 Empirical review

Penn State University (2014:1) defines an empirical study as a study that is based on observation and measurement of phenomena, which derives knowledge from actual experience instead of making use of theory or belief. According to Mouton (2013:144) an empirical study utilises primary data surveys, experiments, case studies, programme evaluation or ethnographic studies. Explorable.com (2009:2) explains that an empirical study is based upon an empirical cycle consisting of the following stages:

- **Observation** - this involves the collection and organising of all the empirical facts which form the hypothesis;
- **Induction** - which refers to the process of forming the hypothesis;
- **Deduction** - the consequences are deducted from the empirical data which has been newly gained;
- **Testing** - This concept refers to the testing of the hypothesis by using the new empirical data; and
- **Evaluation** - which refers to the evaluation of the outcome of the testing concept.

The empirical part of this research consisted of a self-developed questionnaire in order to obtain the primary data needed for the completion of the study. The questionnaire determined the social grant recipient's spending habits on the given items. A detailed explanation regarding the questionnaire is provided in paragraph 3.6.1. A discussion on research methodologies follows here.

3.3 RESEARCH METHODOLOGIES

The focus of any research methodology falls primarily on the process, tools and the procedures that are used in a study (Mouton, 2013:56). Research methodology also includes the steps in the research process as well as the employment of the objective procedures (Mouton, 2013:56). According to Teddlie and Tashakkori (2009:4) researchers may be divided into three groups:

- Qualitative (“QUALs”), QUAL researchers are interested in narrative data and analysis;
- Quantitative (“QUANs”), QUAN researchers are interested in numerical data analysis; and
- Mixed Methodologies (“MM”), MM researchers are interested in both QUAL and QUAN.

Denzin and Lincoln (1994:4) assert that the word QUAL research “implies an emphasis on processes and meanings that are not rigorously examined or measured, if measured at all, in terms of quantity, amount, intensity or

frequency.” Creswell *et al.* (2010:38) point out that QUAL research requires the use of different strategies to increase validity. QUAN research sheds light on the gathering, analysis, interpretation and the presentation of numerical information (Teddlie and Tashakkori, 2009:5). Teddlie and Tashakkori (2003:711) define MM as “a type of research design in which QUAL and QUAN approaches are used in types of questions, research methods, data collection and analysis procedures, and/or inferences.” In accordance with Teddlie and Tashakkori (2003:711), Tashakkori and Creswell (2007:4) define MM as “research in which the investigator collects and analyses data, integrates the findings and draws inferences using both QUAL and QUAN approaches and methods in a single study or programme of inquiry.”

This study was based upon the MM research methodology where both the QUAL and QUAN methodologies are used in conducting this study in order to achieve its primary and secondary objectives. The QUAL research methodology was employed in order to obtain a deeper understanding of the social grant system in South Africa and to comprehend the connection between this system and the CPI. This study also attempts to understand the levying of sin taxes on the said items and to determine the effect between the increases and the consumption thereof. The QUAN part of this study consisted of a self-developed questionnaire, discussed later in this Chapter (paragraph 3.6.1), to determine the social grant recipients, the lower income earning South African citizens living below the poverty line, and their spending habits on alcoholic beverages and cigarettes. Bergman (2007:3) believes that the use of the MM research approach undermines many assumptions which are taken for granted across a wide range of research method topics.

Burns (2000:11) avers that the QUAN researchers expect QUAL researchers to demonstrate the validity and reliability of claims in order for them to demonstrate the generality of findings, so as to meet the same criteria as QUAN research. A discussion of validity and reliability follows, to determine their importance when making use of a particular research methodology approach.

3.4 VALIDITY AND RELIABILITY

Burns (2000:585) insists that attention must be given to the validity question, meaning, for instance, whether the interview or questionnaire is really measuring what it is supposed to measure while Welman *et al.* (2011:142) make it clear that validity directly relates to the accuracy of the actual research findings in a situation. According to Burns (2000:585) the most obvious type of validity is content validity, “which may be assessed by having some competent colleagues who are familiar with the purpose of the survey examine the items to judge whether they are adequate for measuring what they are supposed to measure, and whether they are a representative sample of the behaviour domain under investigation.” In accordance with Burns (2000:585), Jackson (2011:85) explains that content validity refers to a systematic examination, testing the content, to determine if the coverage is representative of the sample. For Burns (2000:351), content validity is mostly appropriate when considered in conjunction with achievement testing.

Jackson (2011:81) refers to reliability as “an indication of the consistency or stability of a measuring instrument.” Burns (2000:585) points out that if two different interviewers interview the same individuals to check the consistency of the results, this would represent one of the procedures for assessing the reliability of questionnaires or interviews.

The validity and reliability of this study can only be determined once the results and findings of the questionnaires are processed. The questions that were asked in the questionnaire are based upon the information and data needed in order to achieve the main purpose of the study. Before a questionnaire can be distributed amongst those identified as the population, the sampling method must first be determined.

3.5 POPULATION AND SAMPLING

Burns (2000:83) defines a population as “an entire group of people, objects or events which at least have one characteristic in common and must be defined specifically and unambiguously.” A population encompasses the total collection

of the units that may lead to certain conclusions (Welman *et al.*, 2011:52). Welman *et al.* (2011:53) note that a population consists of the total sum of elements from which a sample is taken. A discussion of the population of this study follows.

3.5.1 Population

This study focused on the social grant recipients of the South African citizens who live below the poverty line. The purpose of the data obtained was to determine their spending habits on alcoholic beverages and cigarettes; therefore a selected township was chosen in which to carry out the necessary research. The township in question consists of a population of 4 000 households. The number of households there was determined by means of an aerial photo taken by Dr Danie Meyer, who is a lecturer at the North-West University, Vaal Triangle Campus, when his team conducted their study on the poverty of the selected township. A word of thanks to Dr Danie Meyer for the use of this information regarding the population of the chosen township. Out of the total of 4 000 households (population) of the selected township, 10% (the sample), which consists of 400 households, were used for the completion of the questionnaires. The sample is thus representative of the specific township that were selected.

3.5.2 Sampling

Burns (2000:83) asserts that the first important task in sampling is to select a sample from the chosen population by using an appropriate technique which ensures that the sample is representative. Even though the defined population is rarely tested, the only hope of making any generalisation from the sample would be if the replica of that specific population accurately reflects the population or relative frequency of the relevant characteristics in the defined population (Burns, 2000:83). As Welman *et al.* (2011:56) indicate, sampling consists of probability and non-probability sampling. The former determines the probability that each participant of the population has an equal chance of being selected to form part of the sample, while the latter cannot determine the probability of the participants being selected (Jackson, 2011:117-119). Welman

et al. (2011:56) argue that the advantage of probability sampling is that it allows researchers to point out the probability in terms of which the sample results deviate. Probability sampling also enables the researchers to estimate sampling errors relating to the non-representativeness of a sample (Welman *et al.*, 2011:56-57). Probability sampling is used due to the selection of participants, objects or events having an equal chance of being selected (Martella *et al.*, 1999:120), while non-probability sampling is more frequently used because it less expensive and generates samples more easily (Jackson, 2011:119). The different types of probability and non-probability samples are illustrated in table 3.1 below.

Table 3.1: Different probability and non-probability samples

Probability samples	Non-probability samples
Simple random samples	Accidental or incidental samples
Stratified random samples	Quota samples
Systematic samples	Purposive samples
Cluster samples	Snowball samples
	Self-selection samples
	Convenience samples

Source: (Welman *et al.*, 2011:56)

The purpose of this table is to raise awareness of the different types of samples that exist. The table indicates that there is a bigger variety of samples which may be classified as non-probability than there is of probability samples. The type of sample to be used in a study depends on the type of information that the researcher wants to gather and the type of study he/she wishes to carry out.

The probability sampling method was utilised in this study, in which the random sampling technique was used in the completion of the questionnaires. Random sampling is the technique that is the most attractive type of probability sampling (Welman *et al.*, 2011:59). Burns (2000:85) observes that if the population has

been carefully defined, a representative sample must be drawn. According to Burns (2000:58) random sampling is a method of drawing a sample so that:

- Each member of the population stands a chance to be selected; and
- The selection of one subject is independent of the selection of any other.

Random sampling may be divided into simple and stratified random sampling (Welman *et al.*, 2011:59). In simple random sampling each member has an equal chance of being included in the sample (Welman *et al.*, 2011:59). The stratified sampling method adds an extra ingredient to random sampling which ensures that groups or strata of the population are sampled randomly; this increases the possibility of accuracy (Burns, 2000:90). Burns (2000:90) adds that the stratified sampling technique ensures that all of the groups in the sample are represented as they are within the population.

The stratified sampling method was used in this study where the field workers who were responsible for the administration of the questionnaires identified the strata of the sample that was used. The field workers randomly selected households in the sample to complete the questionnaire. If the randomly selected household was not available, another household was randomly selected. The stratified sampling method is able to derive a representative sample from the chosen population by means of strata that are distinguishable (Welman *et al.*, 2011:61). However, apart from simple random sampling, Welman *et al.* (2011:62) state that there are also advantages to using the stratified sampling method such as:

- If a normal population consists of one gender only, then the probability of sampling is zero; and
- The strata which are represented in the sample require a smaller sample than simple random sampling.

As previously explained, the method of sampling that is used in a study depends on the type of study and information which are required. The sample size also plays an important role when it comes to population and sampling. A discussion of sample size follows.

3.5.3 Sample size

As Burns (2000:93) indicates, the larger the sample the better, because of the fact that a larger sample tends to have lesser number of errors, although a large sample does not necessarily guarantee accuracy of the results. In certain instances, an increase in sample size increases accuracy, especially for a given design, but it will not eliminate or reduce any bias in the selection procedure (Burns, 2000:93). A sample of 400, which consists of 10% of the total number of households, was used to complete the questionnaires of this study. As stated in paragraph 3.5.1, the total number of households (population) was determined by an aerial photo. According to Burns (2000:93) one should take account of possible attrition of numbers due to sampling errors which may exist during the analysing process.

3.5.4 Sampling errors

Welman *et al.* (2011:74) emphasise that it is impossible to select a sample which represents the population perfectly; therefore sampling errors cannot be controlled. A lack of fit that can be expressed between the sample and population is regarded as a sampling error (Welman *et al.*, 2011:74). In this study provision for sampling errors was made by means of the completion of 10 additional questionnaires. The field workers were well trained in order to explain possible difficulties which the interviewees found problematic, but as Welman *et al.* (2011:74) indicated, the sampling errors cannot be controlled.

From the above paragraphs it may be deduced that the determination of the population and sample size is of importance when dealing with the collection of the data required for the completion of a study in order to meet the primary and secondary objectives. The next most important factor in the collection of the data is the measuring instrument and data collection method.

3.6 SURVEY METHOD

The survey method involves the questioning of individuals on a certain topic or topics in order to describe their responses (Jackson, 2011:20). The survey may be conducted by the use of an email, over the telephone, on the internet or by

means of a personal interview, which includes questionnaires (Jackson, 2011:20). The empirical part of this study was carried out by means of the survey method in the form of a questionnaire. According to Burns (2000:57), survey data may usually be obtained by means of a questionnaire which consists of a number of pre-determined questions. In this case, a self-developed questionnaire was designed and, with the aid of field workers, the questionnaires were completed by those in the sample. The field workers who were used were well trained regarding the questions in the questionnaire. They each had a stratum of the sample from which they were supposed to randomly select households to complete the questionnaires. The interviewees were provided with a brief explanation regarding the purpose of the questionnaire while an ethical clearance form was handed out upfront, explaining the purpose of the study in order to provide a better understanding to possible participants before they completed the questionnaires. Burns (2000:571) does make it clear that the use of questionnaires in research is based upon one fundamental assumption: "that the respondent will be both willing and able to give truthful answers." Although there are other descriptive methods, the survey method offers the advantage of using larger groups of individuals more easily in the conducting of a study (Jackson, 2011:20). Three kinds of questions can be formulated in a questionnaire (Burns, 2000:571-574):

- Closed questions;
- Open-ended questions; and
- Scale questions.

The closed questions allow the respondents to choose from two or more fixed alternatives (Burns, 2000:571-572), while open-ended questions supply a frame of reference for the respondent's answer and are coupled with a minimum of restraint on their expression (Burns, 2000:572). Scale questions consist of verbal questions where the respondent gives their opinion in writing (Burns, 2000:572). The questionnaire that was developed for this study made use of the closed questions approach because it has the advantage of achieving greater uniformity of measurement and greater reliability (Burns, 2000:571-572).

3.6.1 Questionnaire

A self-developed questionnaire was designed for this study; it consisted of four sections. Section A requested demographic information such as the gender, ethnic group, mother-tongue language, age and number of persons in the household. The purpose of this section was to gain an idea of the type of household interviewed, based on race and language (culture) and to determine the number of persons in the household because the figures were to be used in calculations based on the subsequent sections. Section B required answers concerning the smoking habits of the whole household, which included questions such as the number of members who smoke in the household, the total amount of cigarettes smoked per day and the type of cigarette brand which the members of the household prefer. The purpose of this section was to calculate the estimated amount of money which is spent on cigarettes by the household. Section C required information on the drinking habits of the household by means of the total number of members who consume alcoholic beverages, the type of alcoholic beverages consumed, and the total number of glasses which are consumed per week, by the members of the household. The purpose was to calculate the amount of money spent on alcoholic beverages. Section D required the household's income in terms of the number and type of social grants received by the household as well as other income received. The purpose of this section was to calculate the estimated amount of income which the household receives per month. The overall purpose of this questionnaire was to determine the amount these lower income earning South African citizens spend on alcoholic beverages and cigarettes. The questionnaire was also for use to determine the percentage of the grants receivable by these South Africans that constitute monopoly money (citizens paying for their own grant by paying several taxes in particular sin taxes). A copy of the questionnaire, as well as the form explaining the purpose of this study, may be found in Appendix A and B.

There are however, advantages and disadvantages when making use of questionnaires in order to collect the data needed. A number of disadvantages may limit the use of a questionnaire or may influence the sample size, based

on validity and reliability, but with a well-structured plan of action these disadvantages can be overcome.

It has been mentioned that the field workers who were responsible for the completion of the questionnaires were well trained beforehand in case the respondents had any questions regarding the questionnaire. Field workers each received a list explaining the differences between fortified and unfortified wine (Appendix C). As explained, the households were randomly selected; if the pre-selected household was not present, the next available household was selected and the field workers were present during the completion of the questionnaire. As noted, the decision as to whether the questionnaires were the correct method could only be made after the data have been processed and the results obtained. The questions that were asked in the questionnaire primarily consisted of closed questions which made the completion process easier for the respondents. A form was also distributed among the respondents beforehand, explaining the purpose of the questionnaire in order to avoid vagueness. The most important rule of the questionnaire was that it could only be completed by the head of household or the social grant recipient; under 18's were prohibited from responding. As previously said, the questionnaire was designed primarily with closed item types of questions, which required no writing because the questions provided alternative answers from which the respondents were required to choose.

Before a questionnaire is distributed to be completed, pilot testing is first necessary in order to determine whether the questions can be easily answered and are formulated in such a way that the respondents readily understand what is meant by every question.

3.6.2 Pilot study

Welman *et al.* (2011:148) define a pilot study as a measurement tool developed to test out the sample of the population. Furthermore Welman *et al.* (2011:148) add that a pilot study can be regarded as a “dress rehearsal” for the actual research investigation.

This study did not make use of a pilot study but it did employ pre-testing, which functions similarly to the pilot study. The pre-testing was conducted a week before the sampling was undertaken. During the pre-testing period all the difficulties in the questionnaire were dealt with in order to make the questionnaire as user friendly as possible. The difficulties that were faced were in respect of the level of the understanding of the questions, which led to the restructuring of the questions. Martella *et al.* (1999:43) emphasise that the pre-testing threatens the validity of the study when there is an improvement on the post-testing results of the participants. The questionnaires that were completed during the pre-testing period were excluded from the final sample of the population. A discussion of the statistical analysis follows.

3.6.3 Statistical analysis

The captured data gathered by means of the questionnaires were analysed using the statistical package for Social Sciences (“SPSS”), Version 22.0 for Windows. The following statistical methods were used on the empirical data sets:

- Reliability and validity analysis;
- Descriptive analysis; and
- Significance tests.

SPSS was used to capture the data that was acquired by the questionnaires because the results that were obtained in this questionnaire would consist mainly of calculations. As in any study, ethical considerations are of great importance and this study was conducted according to strict considerations of ethics. These are now discussed.

3.6.4 Ethical considerations

Burns (2000:17) notes that ethical principles, rules and conventions distinguish socially acceptable behaviour. Ethical behaviour, as in any other human activity, is of the utmost importance when conducting research (Welman *et al.*, 2011:181). Welman *et al.* (2011:181) explains that ethical considerations come into existence at three stages when conducting a research project, namely:

- The recruitment of participants;
- The process of intervening the measurement procedure of which the participants are subjected; and
- The releasing of the results acquired.

As emphasised, the questionnaire that was conducted for this study was only aimed at adults, in particular, the head of the household or the next available adult who was capable of completing the questionnaire. No under 18's were allowed to do so and the field workers made sure that no illegal activities (such as completing the questionnaire by themselves) took place during the completion of the questionnaires. In this study, ethical considerations were a very important factor at every stage.

The self-developed questionnaire was submitted to an ethics department of the university (North-West University, Vaal Triangle Campus) where it was determined whether the questions in the said questionnaire were acceptable. The ethics department issued a letter of approval (Appendix A) of the questionnaire which was provided with an ethics clearance number. This number was included in the letter that was given to each respondent for the purpose of emphasising that the information that was gathered from each respondent would be stored and treated with great confidentiality.

3.7 SUMMARY AND CONCLUSION

From the above mentioned information, it is evident that research methods play an important role in conducting any type of study. It is necessary to understand the different elements which form part of research in order to choose the correct methodology and design in the completion of a study. Chapter 3 provided essential information regarding the research design, research methodologies, population and sampling, validity and reliability and household survey (questionnaires, pilot study and ethical considerations) and the way in which these methods were used in the conducting of this study.

This study made use of the probability sampling method where the random sampling technique was used to obtain the necessary data. All of the

information that was provided in Chapter 3 was used in the processing of the data gathered by means of the aforementioned self-developed questionnaire. The data was analysed in the form of graphs, tables and figures, presented in Chapter 4, where the results and findings determine the outcome of this study. The results and findings also determine whether the correct method was chosen for obtaining the data.

CHAPTER 4

DATA ANALYSIS AND FINDINGS

4.1 INTRODUCTION

In Chapter 3 the particular research methodology was emphasised, as it forms part of the process of obtaining the data required in this Chapter. A self-developed questionnaire was utilised. The purpose of the questionnaire was to determine the social grant recipient's spending habits on sin taxed items such as alcoholic beverages and cigarettes. The questionnaires were distributed in a selected township of which the population consisted of 4 000 households. A sample of 400 households was selected. This Chapter focuses on the analysis of the data thereby gathered. The purpose of analysing the data, according to Burns (2000:430), is to discover meaning in the data through its arrangement and presentation by means of Figures, graphs and explanations.

This chapter provides the results and findings based on the information acquired. The data obtained through the questionnaires is initially presented as:

- i. graphs relating to each division of the questionnaire, and
- ii. calculations to determine the social grant recipients' spending habits on alcoholic beverages and cigarettes. A comparison between the theory (findings in Chapter 2) and results and findings (paragraph 4.3 is made in paragraph 4.5).

A detailed discussion of the response rate follows in order to evaluate the response that was received (total questionnaires completed).

4.2 RESPONSE RATE

Burns (2000:578) indicates that the response options which are used may affect the answers of the respondents and that there are numerous suggestions on how to improve the response rates of questionnaires, explained in Table 4.1 below.

Table 4.1: How to improve the response rates of the respondents by using a questionnaire

Suggestion number	Suggestion
1	Make use of a certain category for every conceivable answer that does not accurately reflect reality.
2	Indicate a “don’t know” option to avoid no responses on certain questions.
3	Balance all the scales around a middle point.
4	Make use of filter questions so that the respondents can only answer the questions which are relevant to them.
5	Label the middle point according to the exact meaning.
6	Arrange all the response options vertically instead of horizontally.
7	If there are fill-in questions, make sure that the respondents are aware of that.

Source: (Burns, 2000:578-579)

Table 4.1 illustrates several suggestions in this regard. The questionnaire that was developed for this study made use of the above ones, except for number 1,2 and 6 which was not appropriate for this study.

Four hundred questionnaires, with an additional 10 questionnaires in cases of incompleteness, were handed out to lower income earning South African citizens in the selected township. The response rate consisted of 373 questionnaires: 93.25% ($\frac{373}{400} \times 100 = 93.25\%$) of the total number of questionnaires that were handed out. Due to the validity and reliability, 15 of the total number handed back were excluded. After the exclusion of the 15 questionnaires, the response rate was 89.50% ($\frac{358}{400} \times 100 = 89.50\%$). The percentages used in paragraph 4.3 were calculated using the following formula:

$$\frac{\text{Response from respondents}}{\text{response rate (358)}} \times 100.$$

A discussion with relevant explanations follows, which forms part of the results and findings.

4.3 RESULTS AND FINDINGS

Chapter 3 provided the relevant information regarding the research methodology, which was followed in order to obtain the information needed for the present chapter. This study comprises the MM research methodology approach where a combination of the QUAL research and QUAN research methods was used. This Chapter is based on the QUAN research methodology using the empirical study research design type. A discussion of the results and findings ensues.

4.3.1 Demographic information

The demographic information was the starting point of the questionnaire (Section A); the purpose of this section was to gain an overall picture of the type of household being interviewed. This section asked questions such as the gender, ethnic group, mother-tongue, current age of the interviewee and the number of persons in the household. The information that was obtained is individually illustrated by means of a figure, starting with gender, in Figure 4.1 below.

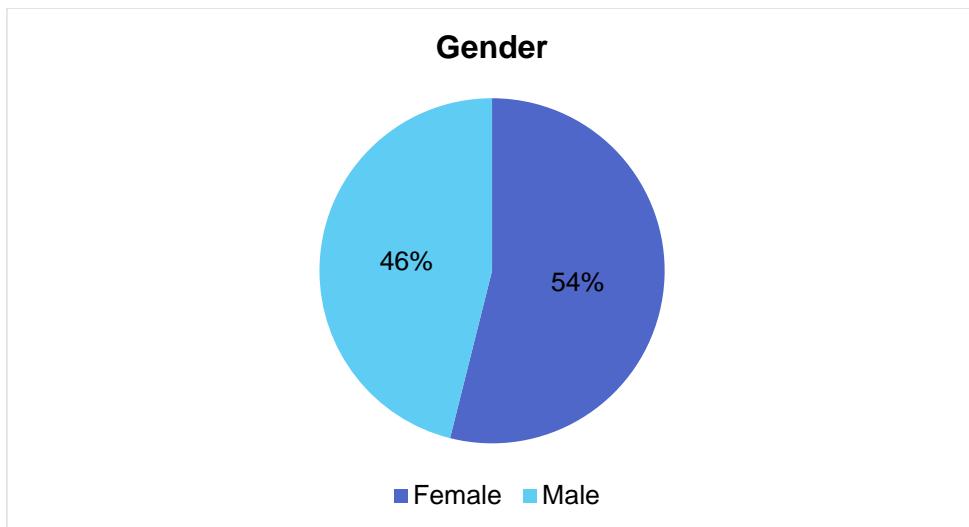


Figure 4.1: Gender of the respondents

Source: Own research

Figure 4.1 illustrates the gender of the respondents who completed the questionnaires. The total number of females who did so was 193 ($\frac{193}{358} \times 100 = 53.9\%$) while the total for males was 171 ($\frac{165}{358} \times 100 = 46.1\%$). The overall response that was received was from females indicating that the males were probably at work while the questionnaires were conducted. Thus an assumption can be made that the males primarily provides for the households. The ethnic groups of the respondents are illustrated in Figure 4.2 below.

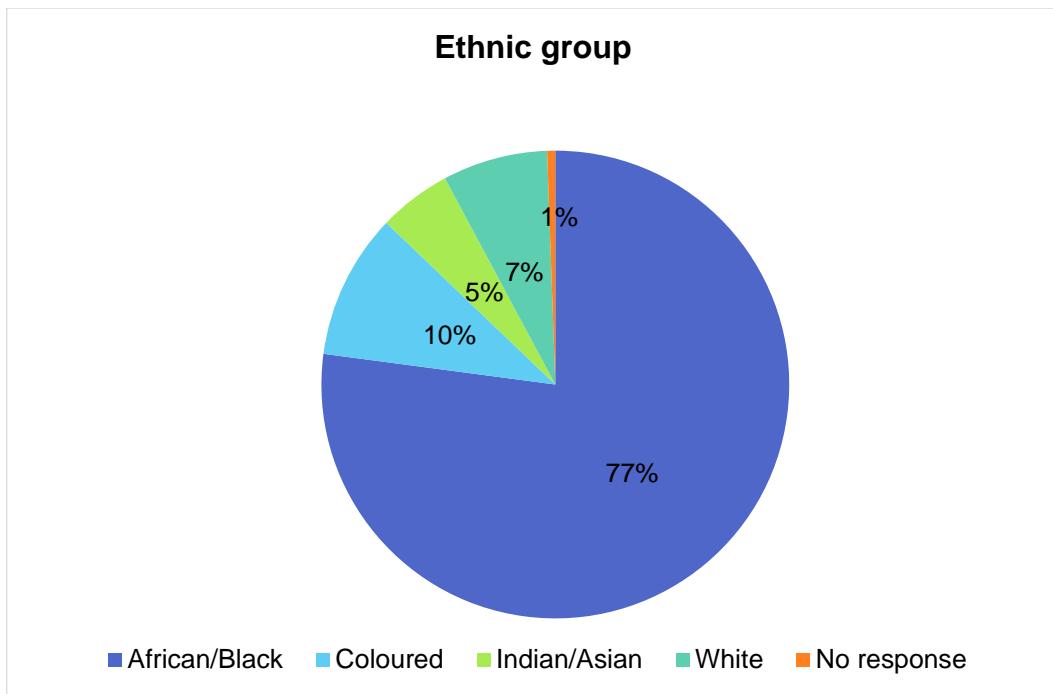


Figure 4.2: Ethnic group of the respondents

Source: Own research

Figure 4.2 is an illustration of the different ethnic groups who completed the questionnaires. This illustrates that the responses were mostly from the African/black ethnic groups, consisting of 276 responses out of the overall total of 358 responses. The Coloured group is second in size with a total of 36 responses. The number of responses from the white group is 26 while only 18 of the responses were from the Indian/Asian group. There were 2 questionnaires where the ethnic group was not indicated, which comprises 0.5% of respondents. The mother tongue was also requested, in order to establish the diversity of the response rate in general. The results follow.

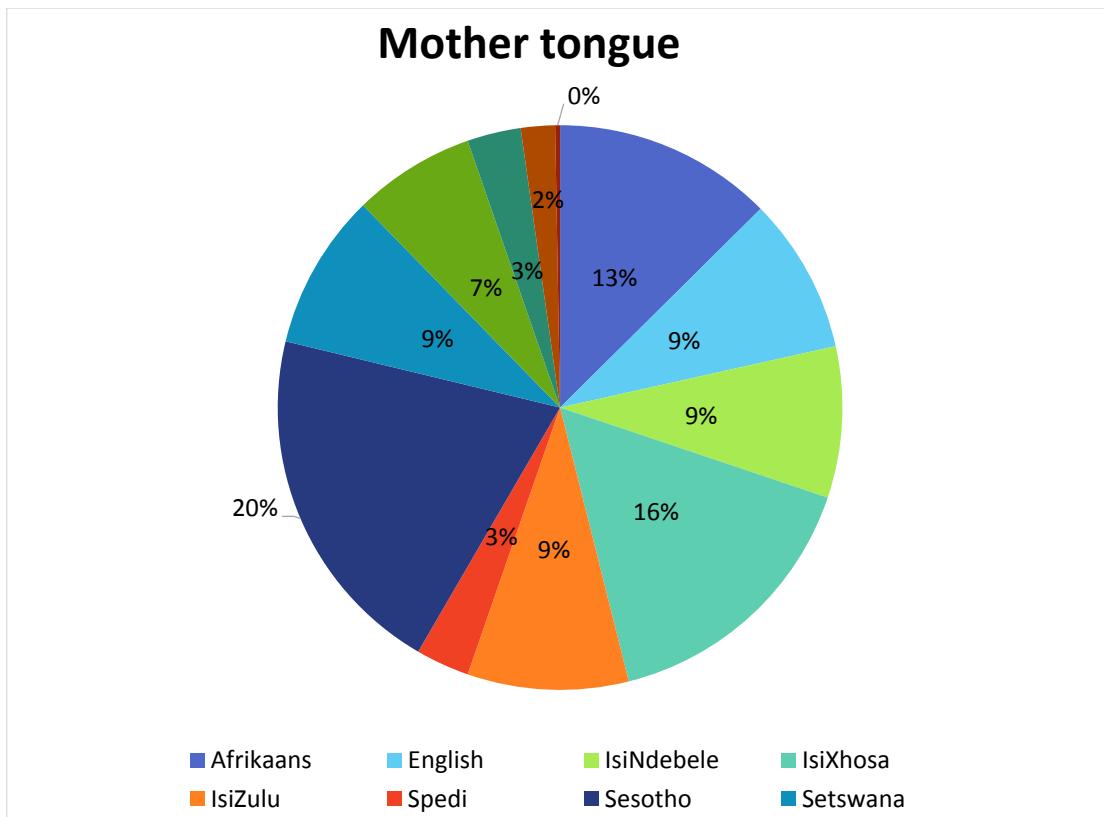


Figure 4.3: Mother tongue of the respondents

Source: Own research

The mother tongue of the respondents is illustrated in Figure 4.3: Sesotho was the language which was the most often spoken, with 73 respondents. Xitsonga was the language with the least number of respondents, consisting of only 7 respondents. There was 1 respondent who did not complete the question based on the mother tongue. In general, all of the 11 official languages are spoken among the responses which were received, indicating that the questionnaires were completed by a broad diversity of persons of different cultures. The interviewee/respondent who completed the questionnaire was also asked to indicate their current age; these responses are illustrated in Figure 4.4 below.

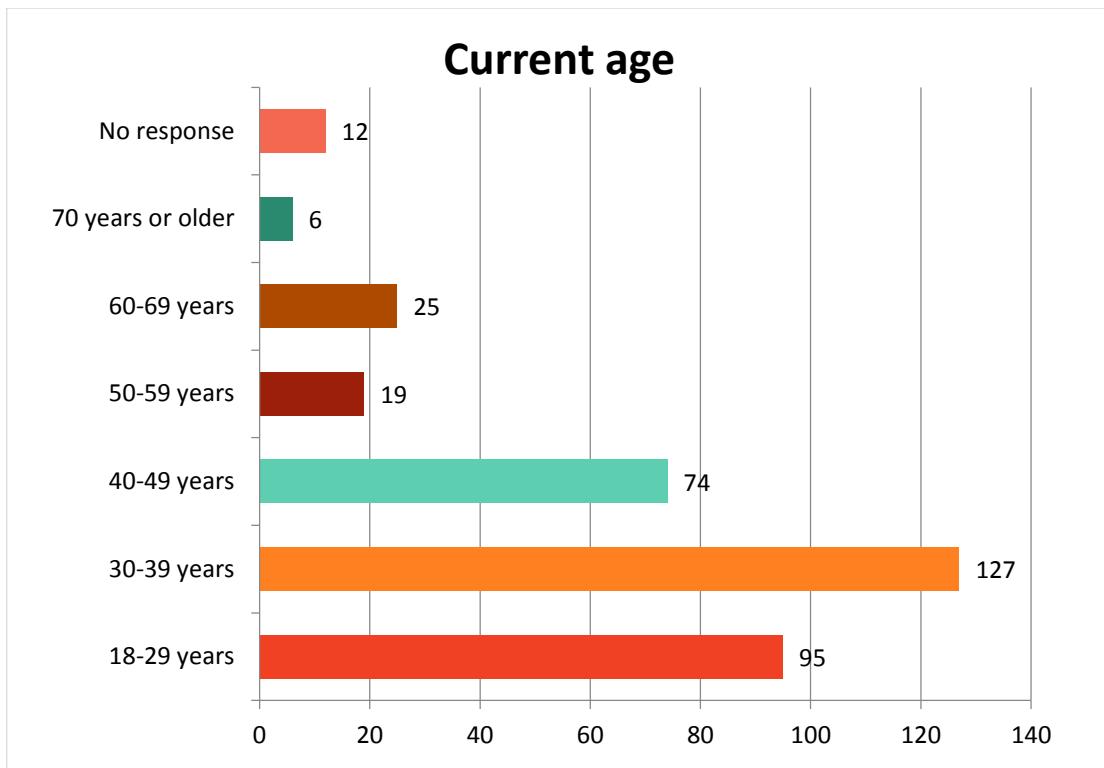


Figure 4.4: Current age of respondents

Source: Own research

Figure 4.4 illustrates the current age of the respondents who completed the questionnaires. The questionnaires were mostly completed by respondents between the ages of 30 to 39 years, making a total of 127 of the total number of respondents. A total of 12 respondents did not indicate their current age, which represents 3% ($\frac{12}{358} \times 100 = 3.4\%$) of the total respondents. The last question regarding the demographic information was intended to indicate the number of persons in the household, differentiated between adults (older than 20 years) and children (younger than 18 years).

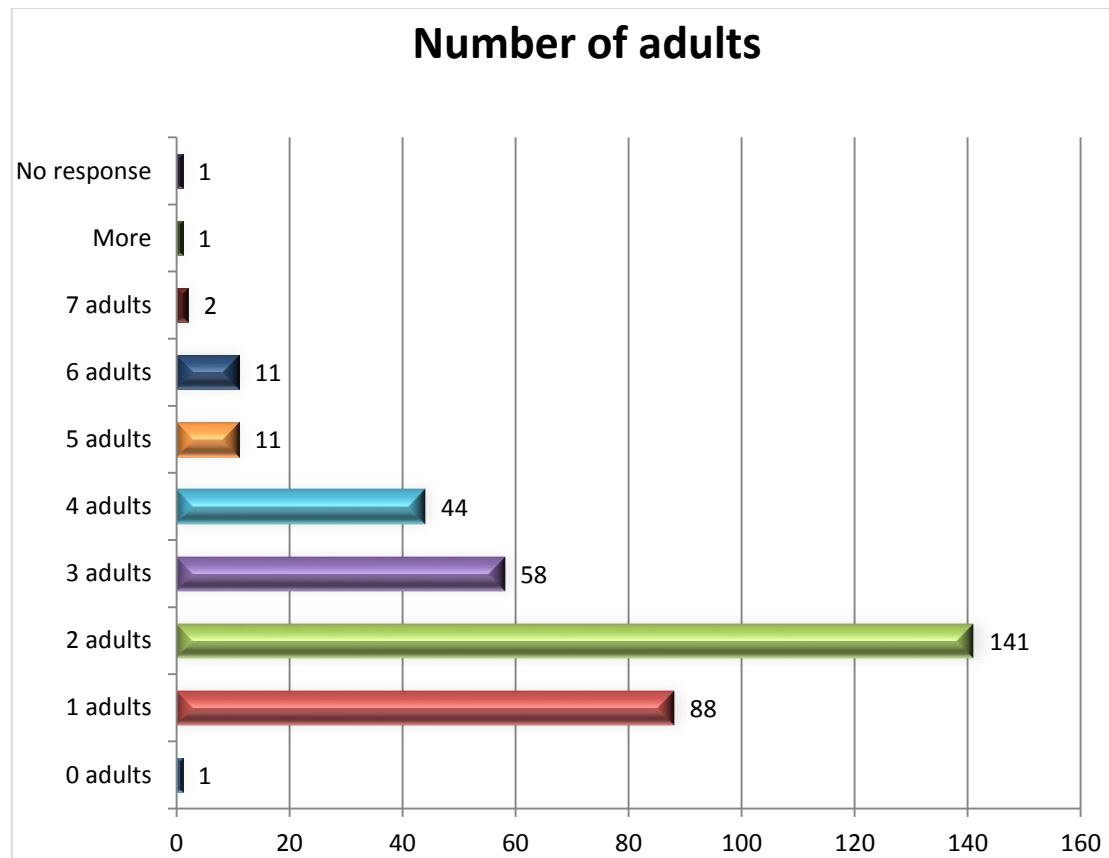


Figure 4.5: Number of adults in a household

Source: Own research

The respondents were asked to indicate the number of adults in the household. The results are illustrated in Figure 4.5 above and indicate that most households consist of 2 adults. Only 1 respondent did not indicate the number of adults. The number of children in the households is illustrated in Figure 4.6 below.

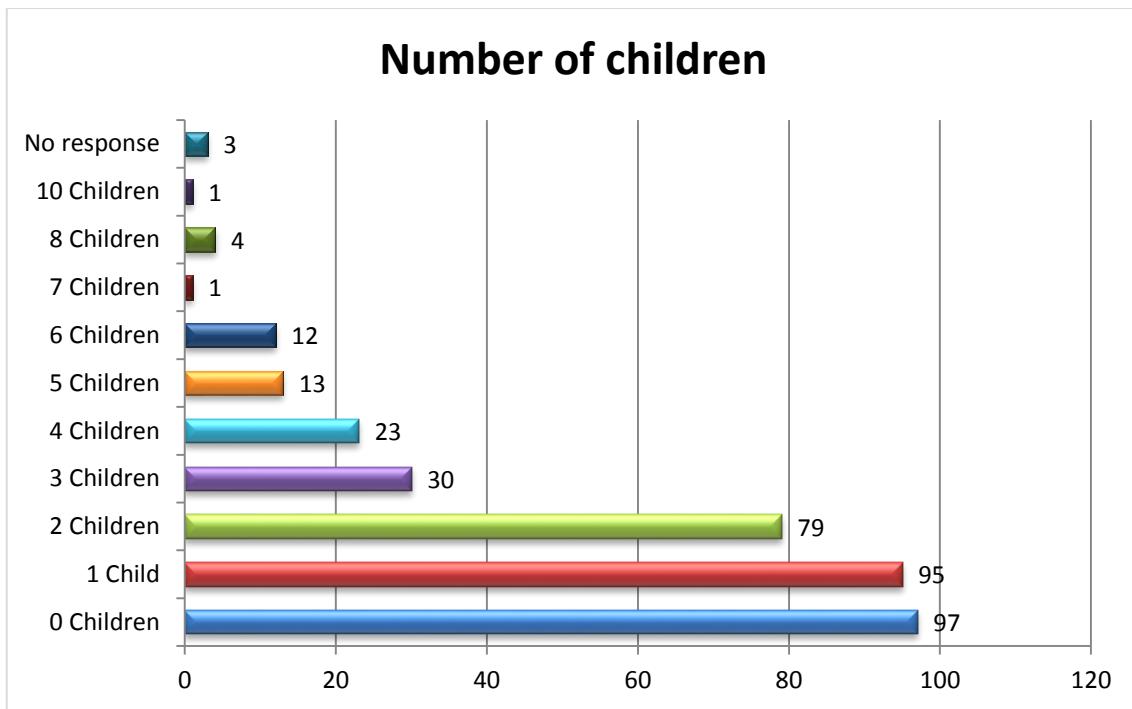


Figure 4.6: Number of children per household

Source: Own research

Figure 4.6 is an illustration of the number of children (younger than 18 years of age) who live in the households that completed the questionnaires. A total of 101 households contain 0 or 1 child, which is 53.63% ($\frac{192}{358} \times 100 = 53.63\%$).

Three respondents did not complete the question.

These were the results and findings from Section A of the questionnaire. These were mainly completed by females, which do not necessarily indicate that the heads of household are females; the reason for this could be that the males were working during the completion of the questionnaires. Most of the respondents were African/Black citizens whose main language was Sesotho. Overall, the respondents who completed the questionnaires were between the ages of 30-39 years. Primarily, the households consisted of 2 adults and 0 children per household. The purpose of this section, as stated in Chapter 3 (paragraph 3.5.1), was to acquire more information about the type of household who completed the questionnaires. The results and findings regarding the smoking habits of the households follow.

4.3.2 Smoking habits

Section B of the questionnaire concerned the smoking habits of the household. The purpose of this section, as stated in Chapter 3 (paragraph 3.5.1), is to determine the amount of cigarettes smoked in the household per day as well as the type of brand. This information is also used later in this study (paragraph 4.4) to calculate the amount of money that the average household spends on cigarettes. Figure 4.7 below illustrates the number of persons that smoke in the household.

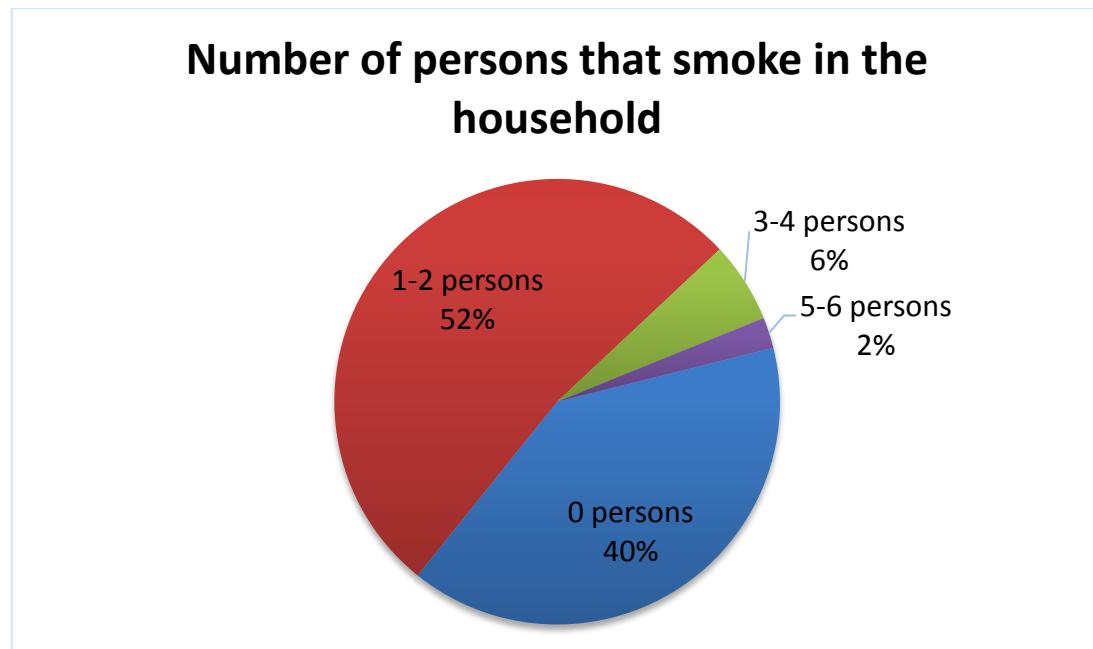


Figure 4.7: Number of persons smoking in the household

Source: Own research

The respondents were asked to indicate the number of members who smoke in their households as illustrated in Figure 4.7 above. From the 358 questionnaires that were received back, a total of 142 respondents indicated that none of them are smokers while 187 respondents indicated that 1 to 2 of their members in the household do smoke. This question attracted a very good response because all of the respondents completed this question. The numbers of cigarettes that the members in the household smoke per day are illustrated in Figure 4.8 below.

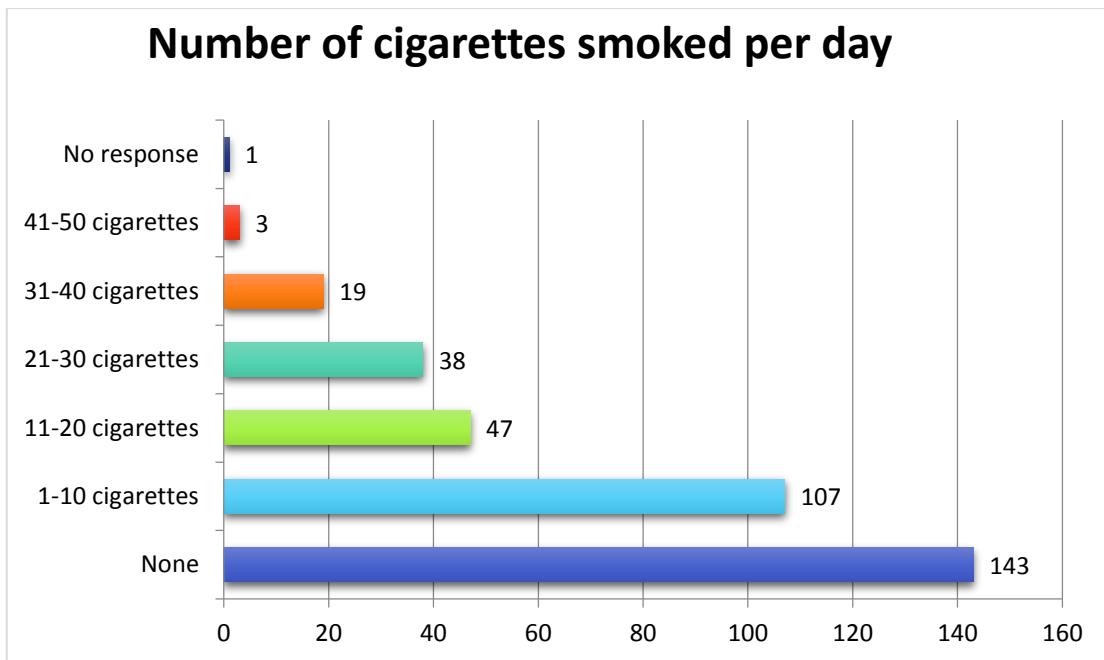


Figure 4.8: Number of cigarettes that are smoked per day

Source: Own research

Figure 4.8 illustrates the total number of cigarettes smoked by the household per day. In general, 40% of the respondents indicated that they are non-smokers (143 of 358 smoke none per day) while 107 (of the total of 358) smoke between 1 to 10 cigarettes per day. There were only 3 respondents (of the total of 358) who indicated that they smoke 41 to 50 cigarettes per day. There was also 1 respondent who did not complete this question. An illustration of the type of cigarette brand that the respondents and their household members smoke follows.

Table 4.2: Cigarettes smoked according to brand

Cigarette brand	Number of respondents
Stuyvesant	52
Princeton	79
Chicago	21
Dullas	46
BB tobacco	23

Source: Own research

Table 4.2 indicates the brands of cigarettes on which the respondents were requested to report. Overall, Princeton is the cigarette brand which was most common among the respondents: a total of 79 smokers, with Stuyvesant second in line with 52 smokers. However, there are 23 respondents who smoke BB tobacco. None of the respondents indicated another type of cigarette brand other than those mentioned in the questionnaire. Figure 4.9 (below) is an illustration of the information given in Table 4.2.

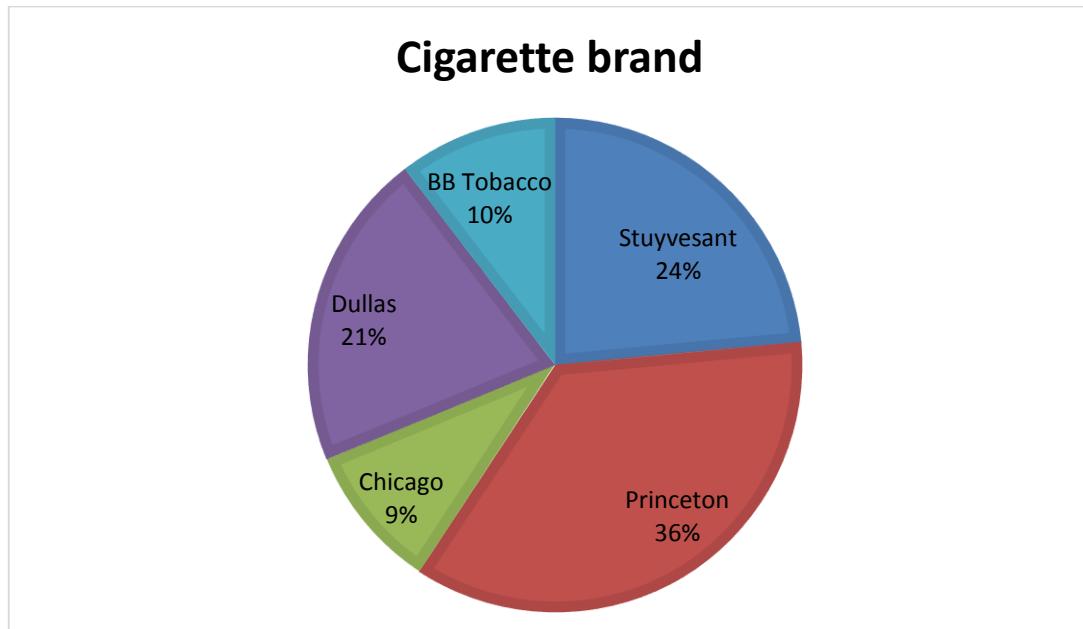


Figure 4.9: The type of cigarette brand

Figure 4.9 depicts the type of cigarette brand that the respondents and their household members smoke. As previously said, the most common brand is Princeton, selected by 36% of the respondents who do smoke. There are also respondents who indicated that they smoke more than one brand of cigarettes; the results of which are given in Table 4.3 below.

Table 4.3: Respondents smoking one or more than one brand

Number of cigarette brands	Response
One cigarette brand	203
Two cigarette brands	9
More than two brands	0
No response	146

Source: Own research

Table 4.3 indicates the number of respondents who smoke one or more of the cigarette brands. A total of 203 respondents indicated that they only consume one brand while there were 9 respondents that indicated that they consume two cigarette brands. The respondents that did not indicate the type of brand they use add up to 146 respondents. It is assumed that the reason for not indicating the type of cigarette brand is that it was not specified in the questionnaire.

These were the results and findings based on the smoking habits of the respondents and their household members. The results are used again in paragraph 4.4 where the consumption is measured against the income from social grants and other income in order to determine the percentage that these respondents spend on cigarettes. A detailed discussion of the drinking habits of the respondents and their household members follows.

4.3.3 Drinking habits

Drinking habits constitute part of the third section (Section C) of the questionnaire, which was intended to establish the these habits of the lower income earning group of South African citizens. This section contributes towards the achievement of the research objectives as stipulated in Chapter 1. The first question of this section asked about the number of members consuming alcoholic beverages; the results are illustrated in Figure 4.10 below.

Number of members drinking alcoholic beverages in the household



Figure 4.10: The consumption of alcoholic beverages among respondents

Source: Own research

Figure 4.10 illustrates the number of members consuming alcoholic beverages. A total of 244 respondents indicated that 1 to 2 members are consuming such beverages, whereas 17% ($\frac{61}{358} \times 100 = 17.0\%$) do not consume any of the given alcoholic beverages while 3% ($\frac{10}{358} \times 10 = 2.8\%$) did not respond to this question. Respondents were also asked to indicate the weekly usage (measured in 250ml glasses) of alcoholic beverages of all the members who consume alcoholic beverages in the household. The results are illustrated in Table 4.4 below.

Table 4.4: The total weekly usage of alcoholic beverages

Alcoholic beverage	None	1-4 glasses	5-8 glasses	9-12 glasses	13-16 glasses	17-20 glasses	21-24 glasses	25+ glasses	Total usage
Malt beer	92	18	30	30	14	19	14	2	127
Traditional beer	142	7	12	2	6	2	3	3	35
Spirits	144	9	0	1	0	0	0	0	10
Fortified wine	141	3	10	6	4	5	2	0	30
Unfortified wine	140	0	8	1	3	2	2	0	16
Ciders and other fruit alcoholic beverages	111	6	11	15	19	24	11	11	97
Other	145	0	1	0	0	0	0	1	2

Source: Own research

Table 4.4 is an illustration of the total weekly usage of alcoholic beverages per household, sorted according to the type of beverage. This question was intended to determine which alcoholic beverage is consumed the most amongst the selected households. The difference of 41 ($358 - 317 = 41$) in the total column is due to the fact that the respondents did not complete this particular question in the questionnaire. Figure 4.11 illustrates the information captured in Table 4.4.

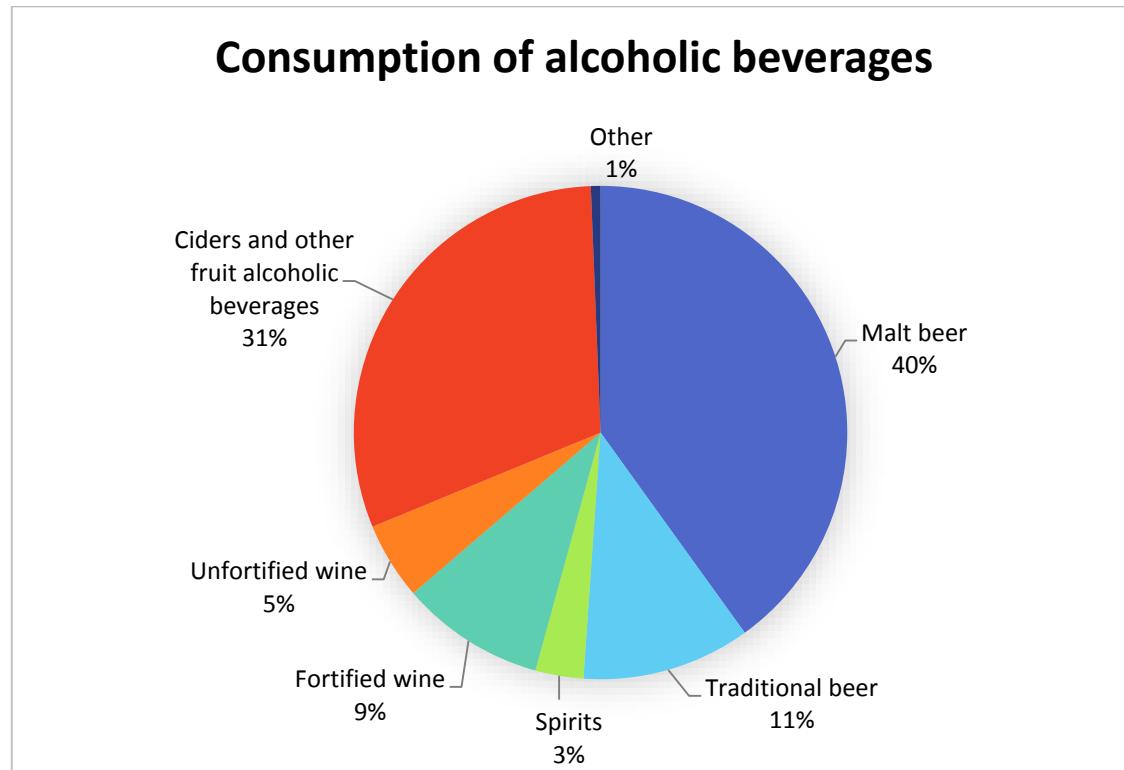


Figure 4.11: The consumption of alcoholic beverages

Source: Own research

The usage of the different types of alcoholic beverages is illustrated in Figure 4.11. A total of 40% ($\frac{127}{317} \times 100 = 40.1\%$) of the respondents and their household members prefer malt beer above any other type of alcoholic beverage whereas 31% ($\frac{97}{317} \times 100 = 30.6\%$) prefer ciders and other fruit based alcoholic beverages. Eleven percent ($\frac{35}{317} \times 100 = 11.04\%$) of the respondents consume traditional beer while 9% ($\frac{30}{317} \times 100 = 9.4\%$) drink fortified wine. Only 5% ($\frac{16}{317} \times 100 = 5.0\%$) of the respondents and their household members

consume unfortified wine, whereas only 3% ($\frac{10}{317} \times 100 = 3.1\%$) drink spirits (hard liquor) which is the most expensive type of alcoholic beverage. Only 1% ($\frac{2}{317} \times 100 = 0.6\%$) consume alcoholic beverages other than the alcoholic beverages that were listed in the questionnaire. This information is discussed later in the study (paragraph 4.4) where the determinations of the total amount of money spent on alcoholic beverages and cigarettes are made.

The above results regarding the drinking habits of respondents are used again in paragraph 4.4 where the consumption was measured against the income obtained through social grants and other income. The comparison of the drinking habits and income was carried out in order to determine the percentage of the latter that these respondents use on alcoholic beverages in comparison with cigarettes. A detailed explanation based on the receivable income of the respondents and their household members follows.

4.3.4 Income

The income receivable (total per month) of the respondent and his/her household was requested in section D of the questionnaire. The former was split between social grants and other income. The respondents had to indicate the type of social grant receivable as well as the number of dependants receiving a certain type of social grant. The results and findings were as follows, starting with the social grants.

Table 4.5: Analyses of the social grants receivable

Social grant	Number of dependants								Total Dependents
	None	1	2	3	4	5	5+		
CSG	70	81	82	33	22	12	2		232
OAG	144	12	8	2	0	0	0		22
DG	141	17	6	0	0	0	0		23
FCG	139	9	8	0	0	0	0		17

Social grant	Number of dependants							
	None	1	2	3	4	5	5+	Total Dependents
CDG	148	0	0	0	0	0	0	0
GID	149	1	0	0	0	0	0	1
WVG	149	0	0	0	0	0	0	0
Other	358	0	0	0	0	0	0	0

Source: Own research

Table 4.5 illustrates the types of grants which the respondents indicated they received, and for how many dependants they received a certain type of social grant. The CSG is the social grant which was most common among the respondents because 232 dependants indicated receiving one, of which 82 respondents received it for 2 children. The OAG, DG and FCG were mainly received for 1 member only.

This information, from Table 4.5, is illustrated in Figure 4.12 below.

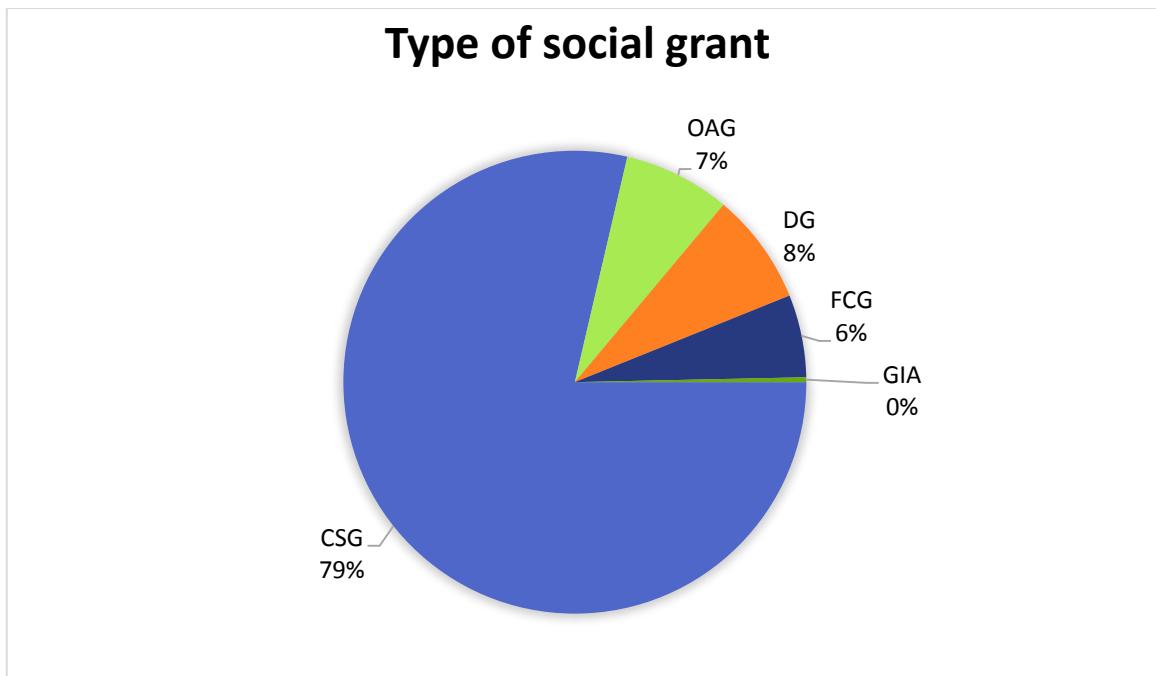


Figure 4.12: The types of social grants receivable by the respondents

Source: Own research

Figure 4.12 is an illustration of the types of social grants that are receivable by the respondents for themselves or their household members. The grant that is mostly receivable by the respondents is the CSG, which is a social grant providing social assistance for children under the age of 18 years. Seventy-nine percent ($\frac{232}{295} \times 100 = 78.6\%$) of the respondents received a CSG for 1 or more of their children; 7% ($\frac{22}{295} \times 100 = 7.4\%$) of the respondents received an OAG; whereas 8% ($\frac{23}{295} \times 100 = 7.8\%$) received a DG for members who are disabled and in need of special care. Only 6% ($\frac{17}{295} \times 100 = 5.8\%$) of the respondents received a FCG while none receive a GIA, WVG or any other type of social grant. The other sources of income receivable by the respondent and his/her household follow.

4.3.5 Other sources of income

These sources of income are receivable in the form of salaries and wages or another source. This question did not directly enquire into the amount of other income received, but intervals were provided where an average of other income

receivable could be calculated in order to determine the average amount of money that a lower income earning South African household receives per month. The results are illustrated in Figure 4.13 below.

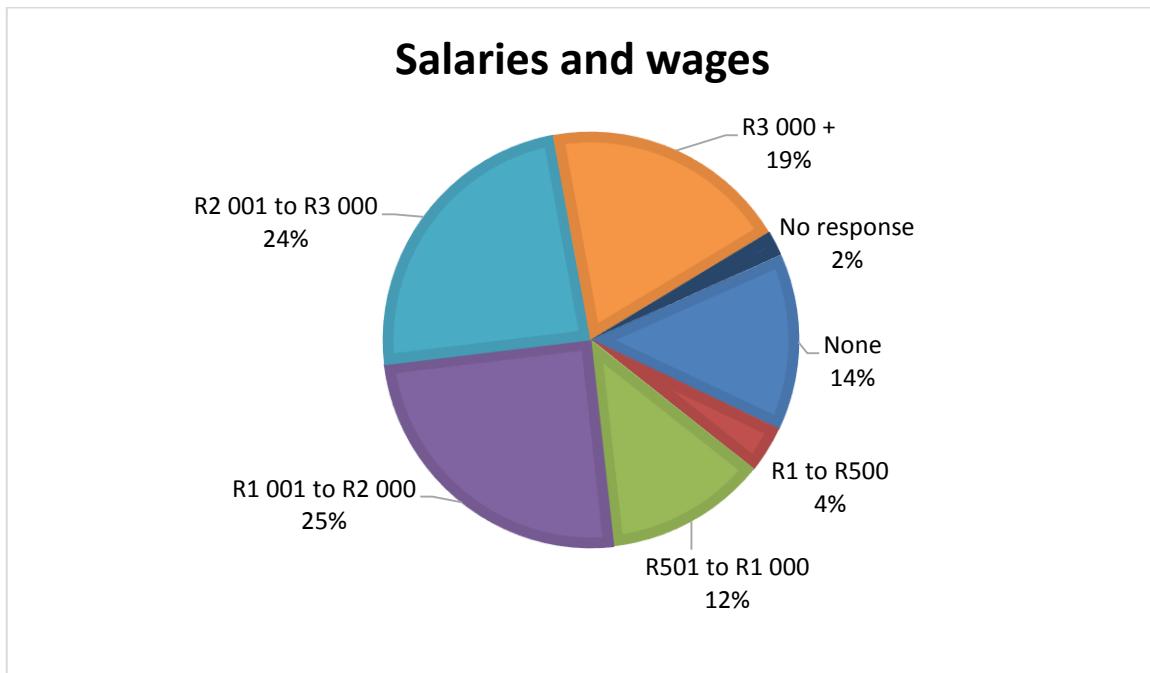


Figure 4.13: Average salaries and wages receivable by the household

Source: Own research

Figure 4.13 is an illustration of the average salary and wages that a lower income earning South African household receive per month. Most of the households receive between R1001 to R2000 ($\frac{89}{358} \times 100 = 24.9\%$) and R2001 to R3000 ($\frac{86}{358} \times 100 = 24.0\%$) per month. Nineteen percent ($\frac{69}{358} \times 100 = 19.3\%$) receive more than R3000 whereas 14% ($\frac{49}{358} \times 100 = 13.7\%$) receive between R1 to R500 per month. Twelve percent ($\frac{45}{358} \times 100 = 12.5\%$) receive between R501 to R1000 per month while 2% ($\frac{7}{358} \times 100 = 2.0\%$) did not respond. Arising from this information an assumption (own assumption) can was made that most of the lower income earning South African households receive between R501 to R3000 per month, which is an indication that they do qualify for the social grants due to the fact that their income is below the R2900 (if single) and R5800 (if married) bracket, which is part of the means test in order to qualify for any

type of social grant (Chapter 2 paragraph 2.2.1.8). There are also respondents who receive other sources of income; the results follow.

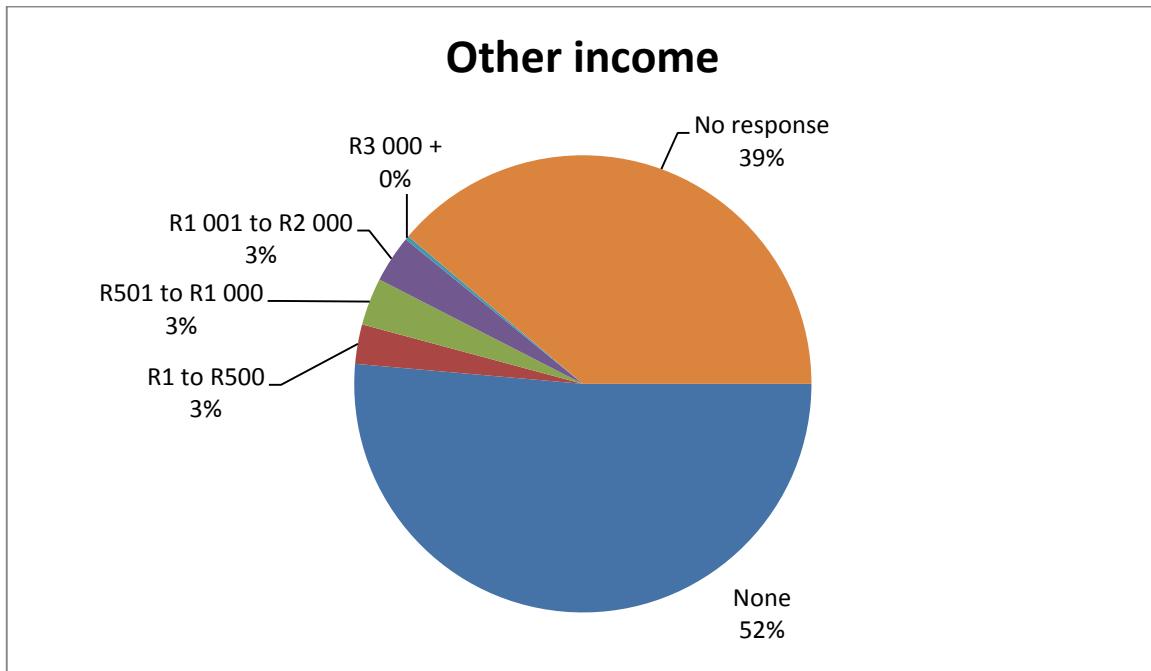


Figure 4.14: Other income receivable by respondents

Source: Own research

Figure 4.14 is an illustration of the other income receivable by the respondents and their household members. Overall $\frac{184}{358} \times 100 = 51.5\%$ do not receive other sources of income, whereas $\frac{12}{358} \times 100 = 3.4\%$ receive other income between R501 to R2000 a month. This Figure served as an indication that these people did live in poverty, as reflected by their total monthly income.

This section was based on the results and findings of the respondents' income receivable per month in the form of a social grant, salary and wages or other income. From this information, it was evident that these people live below the poverty line. The spending habits, of these respondents, on alcoholic beverages and cigarettes were determined and calculated in paragraph 4.4. The purpose of this paragraph was to determine the percentage of income that these respondents and their household members spend on alcoholic beverages and cigarettes, as this is the main purpose of the empirical study.

4.4 EXPLANATION OF FINDINGS

The data that was acquired through the questionnaires was individually analysed and interpreted in paragraph 4.3. This section (paragraph 4.4) deals with the relationship between alcoholic beverages, cigarettes, social grants and other income. From a total of 358 questionnaires, the results may be compared as follows.

Table 4.6: The findings of the smoking habits, drinking habits and income of the households

Element	Yes (usage of element per household)	No (Usage of element per household)
Smoking habits	216	142
Drinking habits	287	71
Social grants	255	103
Other income	314	44

Source: Own research

Table 4.6 illustrates the usage of cigarettes and alcoholic beverages of the households that completed the questionnaires. A total of 216 (60.3%) households did smoke while 142 (39.7%) households did not do so. The usage of alcoholic beverages is 287 (80.2%) whereas 71 (19.8%) households did not drink any type of alcoholic beverages. The income of the households indicated that 255 (71.2%) households received a type of social grant in comparison with the 314 (87.7%) households who received another source of income. Forty-four (12.3%) of the households received no other income, whereas 103 (28.8%) households did not receive a social grant. Overall, based on these figures the consumption of alcoholic beverages was 19.9% (80.2% - 60.3%) more than the consumption of cigarettes, which serves as an indication that in general, the households used more alcoholic beverages than cigarettes. The households that did not drink alcoholic beverages (19.8%) were fewer than the households not smoking (39.7%). A percentage of 28.8% of the households did not receive any type of social grant while only 12.3% of the households did receive other

income. A comparison between the usage of alcoholic beverages and cigarettes and social grants and other income follows to determine the relationship among these elements.

Table 4.7: The relationship between alcoholic beverages and cigarettes

	Consuming				
	Alcoholic beverages	Cigarettes	Alcoholic beverages and cigarettes	None	Total Response from questionnaires
Number of Households	287	216	192	47	358
Percentage	80.17%	60.34%	53.63%	13.13%	100%

Source: Own research

Table 4.7 illustrates the relationship between the consumption of alcoholic beverages, cigarettes, both or neither. As previously stated above, the consumption of alcoholic beverages was greater than the consumption of cigarettes. A total of 192 households, 53.63%, used both alcoholic beverages and cigarettes, whereas 47 households (13.13%) did not use either. An illustration of Table 4.7 follows.

Number of households using alcoholic beverages and cigarettes

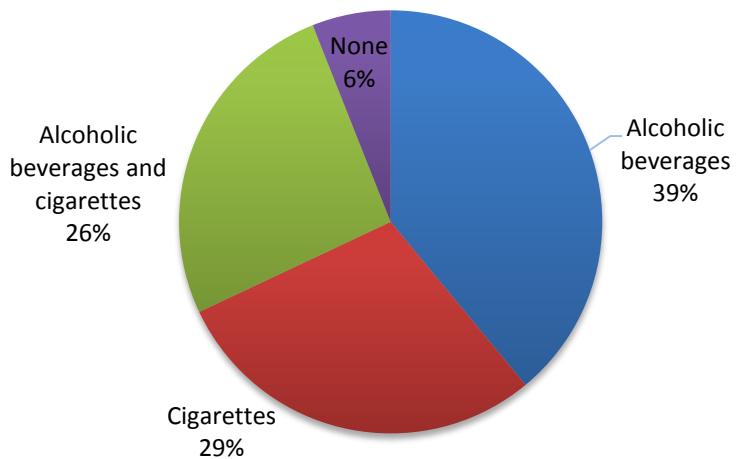


Figure 4.15: A comparison of the findings of alcoholic beverages and cigarettes

Source: Own research

Figure 4.15 is an illustration of the findings that were given in Table 4.7. The purpose of this illustration is to visualise the effect of the information acquired through the questionnaires regarding the smoking and drinking habits of the respondent and his/her household. Later in this study (paragraph 4.5) the theory obtained from the literature will be compared with the actual findings to determine the correlation between theory and the actual results. The relationship between the social grants and other income will be determined by means of Table 4.8 and Figure 4.16.

Table 4.8: The relationship between the social grants and other income

	Social grants	Other income	Social grants and other income	None	Total response from respondents
Number of Households	255	314	214	3	358
Percentage	71.23%	87.71%	59.78%	0.88%	

Source: Own research

Table 4.8 illustrates the relationship between social grants and other income of the households. Of the 358 households, 71.23% received a type of social grant while 87.71% received a different source of income. A total of 214 (59.78%) households receive both a type of social grant(s) and a source of other income. As illustrated in Table 4.8 there were, however, 3 (0.88%) households that do not receive any social grant or other income. In general, the households that served as the sample of the population received more income in the form of other income (salaries and wages or other income). The results and findings of Table 4.8 are illustrated in Figure 4.16 for a clearer understanding.

A comparison between the social grants and other income of the households

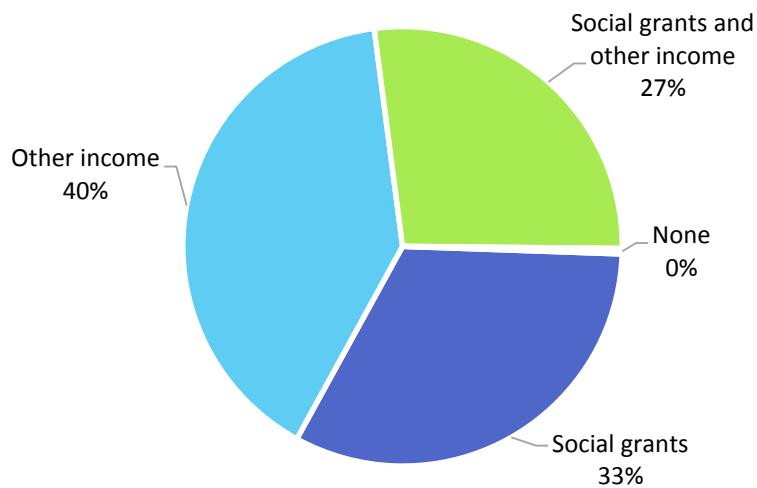


Figure 4.16: Comparison between the social grants and other income of the households

Source: Own research

Figure 4.16 is an illustration of the results that were presented in Table 4.8. This Figure illustrates that most of the households received other income instead of a social grant. Figure 4.13 (paragraph 4.3.4) indicated that most of the households received other income between R1 001 to R2 000 which is, on average, R1 500.50 ($\frac{R1\ 001+R2\ 000}{2} = R1\ 500.50$), indicating that these households were below the poverty line. A calculation of the average amount of spending on alcoholic beverages and cigarettes follows later in this study (paragraph 4.4.1). A discussion and illustration of the information of Table 4.7 and Table 4.8 ensues, in order to determine the overall relationship between income and sin taxed items (alcoholic beverages and cigarettes).

Table 4.9: The relationship between the spending habits on alcoholic beverages and cigarettes compared with the income receivable by the households

	Alcoholic beverages	Cigarettes
Receiving social grants and consumes either alcoholic beverages or cigarettes (per household member)	212	161
Receiving other income and consumes either alcoholic beverages or cigarettes (per household member)	249	188
Receiving no social grant but consumes either alcoholic beverages or cigarettes (per household member)	28	48
Receiving no other income but consumes either alcoholic beverages or cigarettes (per household member)	6	16
Receiving no social grant or no other income	76	22

Source: Own research

The said relationship is indicated in Table 4.9 above. A total of 212 households who received a type of social grant consume alcoholic beverages compared to the 161 households who purchase cigarettes and also receive a social grant. A number of 373 households received a social grant and consume either alcoholic beverages or cigarettes or a combination of both. This table also indicates that 249 households who receive other income drink alcoholic beverages while 188 in receipt of other income consume cigarettes. In total 437 households who receive other income consume either alcoholic beverages or cigarettes or a combination of both. The 437 may overlap the total respondents that were received back but it is combined by the different categories. A number of 28 households receive no social grants but consume alcoholic beverages whereas only 6 households consume alcoholic beverages but receive no other income. In total, 76 households who receive no social grants consume alcoholic

beverages and cigarettes, in comparison with the 22 households using alcoholic beverages and cigarettes but receiving no source of other income. An illustration of the results of Table 4.9 follows.

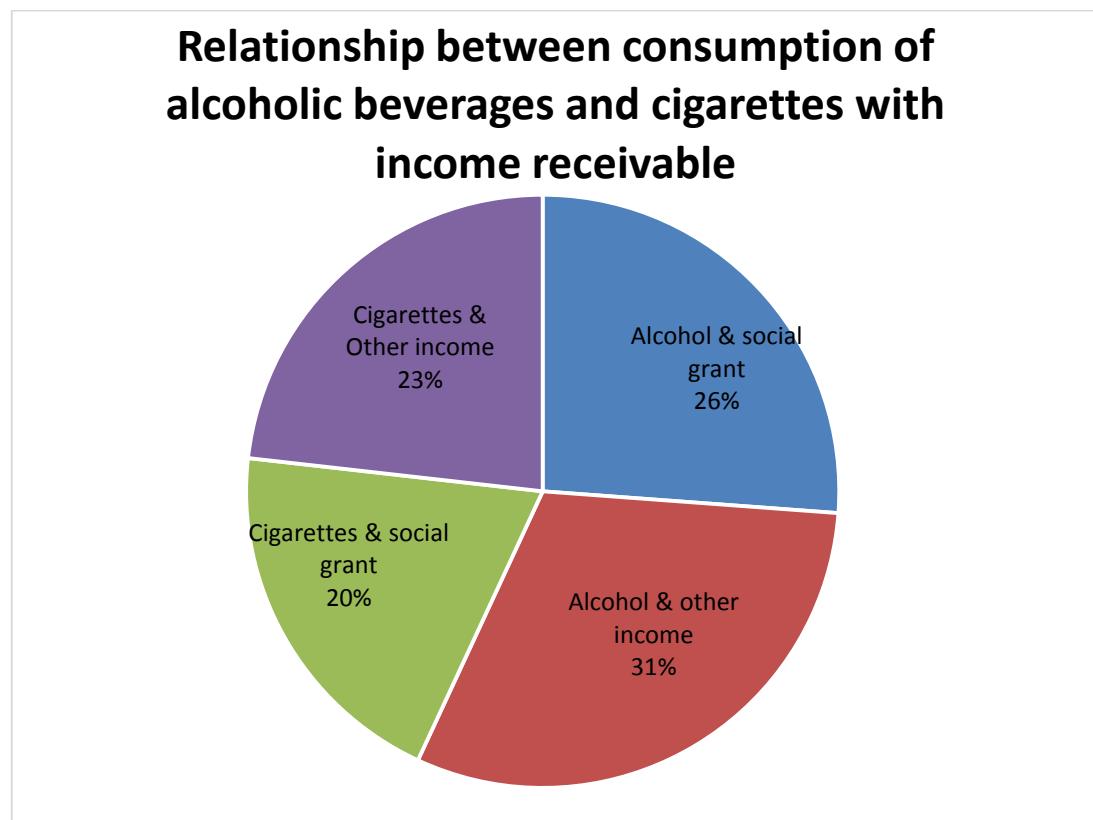


Figure 4.17: The relationship between the consumption of alcoholic beverages and cigarettes compared with the income receivable of the households

Source: Own research

Figure 4.17 is an illustration of the findings that were indicated in Table 4.9 above where a comparison between the consumption of alcoholic beverages and cigarettes compared with the income receivable of the households is shown. A discussion of the grant recipients' spending habits on alcoholic beverages ensues, to determine the percentage of sin taxes based on the usage of the respondents and their households.

4.4.1 Spending habits on alcoholic beverages

This paragraph focuses on the said spending habits in order to calculate an annual average spend on alcoholic beverages and the sin tax implications

thereof. Retail outlets near the township, from where the completed questionnaires were obtained, were visited in order to calculate the average prices per category of alcoholic beverages. These are set out in Table 4.10 below.

Table 4.10: Average prices of the different types of alcoholic beverages

Type	Prices per unit	Conversion to 250ml per unit
Malt Beer	R47.95/ 6 pack of 330ml = R7.99 per 330ml R60.95/ 6 pack of 330ml = R10.16 per 330ml R52.95/ 6 pack of 330ml = 8.83 per 330ml	R7.99 + R10.16 + R8.83 = R26.98/ 3 = R8.99 average per 330ml R8.99/330ml x 250ml = R6.81 per 250ml
Spirits	R93.95 per 750ml R89.95 per 750ml R100.95 per 750ml	R93.95 + R89.95 + R100.95 = R284.85/3 = R94.95 average per 750ml R94.95/750ml x 250ml = R31.65 per 250ml
Fortified wine	R49.95 per 750ml R27.95 per 750ml	R49.95 + R27.95= R77.90/2 = R38.95 average per 750ml R38.95/750ml x 250ml = R12.98 per 250ml
Unfortified wine	R28.95 per 750ml R28.95 per 750ml	R28.95 + R28.95 = R57.90/2 = R28.95 average per 750ml R28.95/750ml x 250ml = R9.65 per 250ml
Ciders	R54.95/ 6 pack of 275ml = R9.16 per 275ml R65.95/ 6 pack of 275ml = R10.99 per 275ml R66.95/ 6 pack of 275ml = R11.16 per 275ml	R9.16 + R10.99 + R11.16 = R31.31/3 = R10.44 average per 275ml R10.44/275ml x 250ml = R9.49

Source: Own research

Table 4.10 illustrates the average prices per 250ml of the different types of alcoholic beverages as they were set out in the questionnaire. The respondents were supposed to indicate their usage, per household, of alcoholic beverages per week by means of 250ml glasses. Prices of the alcoholic beverages were obtained from the nearest alcohol retail outlets, surrounding the selected township, in order to calculate an average as depicted in Table 4.10 above. The types of alcoholic brands that were selected were based on popularity and affordable prices. The average prices were converted into 250ml because the questionnaire asked for the usage per 250ml glass per week. The formula that was used in order to convert into 250ml is as follows:

$$\frac{\text{Average per unit}}{\text{original ml per unit}} \times 250\text{ml}.$$

For the purpose of these calculations in Table 4.10, traditional beer was not included due to the fact that no sin taxes are levied on it. The sin taxes calculation will follow later in this study. There were also 2 respondents who selected the “other” option, as regards the type of alcoholic beverage, but did not specify the alcoholic beverage that they consume; therefore the “other” option was also excluded from Table 4.10.

The respondents and their household members were required to indicate the consumption of the alcoholic beverages in the form of the number of glasses consumed per week by the household. These were divided into brackets (for example, 1 to 4 glasses) from which the respondent had to select the appropriate bracket based on the consumption by the household. The following table (Table 4.11) illustrates the average number of glasses drunk per week as well as the annual average. The information of Table 4.4 (paragraph 4.3.3) was used to calculate the number of glasses. The average glasses were calculated by the use of the following formula

$$\frac{\text{minimum glasses} + \text{maximum glasses}}{2} = \text{average.}$$

The annual average of each type of alcoholic beverage was calculated by using the average glasses consumed \times average price per unit \times 52 weeks.

Table 4.11: Average glasses of alcoholic beverages drunk per week by the respondents and their household members

Alcoholic beverages	Average glasses							Total	Annual average glasses	Annual amount spent
Average	2.5	6.5	10.5	14.5	18.5	22.5	27.5			
Malt beer	45	195	315	203	35.5	315	55	1163.5	60 502	R412 018.62
Spirits	22.5	0	10.5	0	0	0	0	33	1716	R54 311.40
Fortified wine	7.5	65	63	58	92.5	45	0	331	17 212	R223 411.76
Unfortified wine	0	52	10.5	43.5	37	45	0	188	9776	R94 338.40
Ciders and fruit alcoholic beverages	15	71.5	157.5	275.5	444	247.5	302.5	1513.5	78 702	R746 881.98
Total										R1 530 962.16

Source: Own research

Table 4.11 indicates the annual average glasses and annual amount spent on alcoholic beverages by the respondents and their household members. From this Table it is evident that ciders and other fruit alcoholic beverages are consumed the most, followed by malt beer. Spirits (hard liquor) are consumed the least; the reason might be due to the high price per unit. Regarding the wines that were on the list (in the questionnaire) fortified wines are more popular among these respondents and their household members than unfortified wine. In Chapter 2 (literature review) it was also evident that spirits are consumed the least (paragraph 2.5.1.1); from the averages of Table 4.11 above, it is observable that the respondents and their household members seek to find alternatives according to their income levels. The sin tax implications for the annual average of the alcoholic beverages are set out in Table 4.12 below.

Table 4.12: The sin tax implications for the annual average consumption of alcoholic beverages

Alcoholic beverage	Annual average glasses	Sin taxes per unit (converted to 250ml)	Total sin taxes per alcoholic beverage
Malt beer	60 502	R0.09/340ml x 250ml = R0.07	60 502 x R0.07 = R4235.14
Spirits	1 716	R4.76/750ml x 250ml = R1.59	1 716 x R1.59 = R2 728.44
Fortified wine	17 212	R0.27/750ml x 250ml = R0.09	17 212 x R0.09 = R1 549.08
Unfortified wine	9 776	R0.13/750ml x 250ml = R0.04	9 776 x R0.04 = R391.04
Ciders and other fruit alcoholic beverages	78 702	R0.09/330ml x 250ml = R0.07	78 702 x R0.07 = R5 509.14
Total	167 908	R1.86	R14 412.84

Source: Own research (Annual averages) (Sin taxes: National Treasury, 2011:2; National Treasury, 2012:4; and National Treasury, 2012:4; Smith, 2014:1)

Table 4.12 indicates the sin tax implications on the average total of the consumption of alcoholic beverages of the respondents and their household members. The sin taxes of the different types of alcoholic beverages were converted to 250ml by the usage of the following formula

$$\frac{\text{sin taxes per alcoholic beverage}}{\text{unit as it is represented in chapter 2 (par 2.5.1.1)}} \times 250\text{ml}.$$

It is evident that spirits attract the most sin taxes. The figures in this Table are used again in Table 4.21 (paragraph 4.4.4) where a comparison of the sin tax implications of alcoholic beverages and cigarettes is made. The annual consumption of cigarettes and the sin tax implications thereon follows. A discussion of the spending habits on cigarettes follows.

4.4.2 Spending habits on cigarettes

The respondents were also asked to indicate the cigarette consumption of the household. This paragraph focuses on these spending habits in order to calculate an annual average spend on cigarettes and the sin tax implications thereof. Cigarette prices of retail outlets near the selected township were used to calculate the average prices per cigarette brand. These are set out in Table 4.13 below.

Table 4.13: Average prices of the different types of cigarettes

Cigarette brand	Price per packet of 20 cigarettes	Average price per packet of 20 cigarettes
Stuyvesant	R28.95 R31.40 R32.50	R28.95 + R31.40 + R32.50 = R92.85/3 = R30.95 average
Princeton (Pall Mall)	R21.00 Recommended selling price	R21.00 average
Chicago	R15.50 R14.50 R16.50	R15.50 + R14.50 + R16.50 = R46.50/3 = R15.50 average

Cigarette brand	Price per packet of 20 cigarettes	Average price per packet of 20 cigarettes
Dullas	R14.00 R13.80 R12.70	R14.00 + R13.80 + R12.70 = R40.50/3 = R13.50 average
BB Tobacco	R12.50 R11.65 R11.70	R12.50 + R11.65 + R11.70 = R35.85/3 = R11.95 average per 100g

Source: Own research

Table 4.13 illustrates the calculations of the price of an average packet of 20 cigarettes arranged by the type of brands that were listed in the questionnaire (Section B: smoking habits). The prices differ from brand to brand as indicated in Table 4.13 above. Princeton has an overall recommended selling price of R21 per packet of 20 cigarettes; all three selected retail outlets stood by this. Dullas could not be found at the surrounding outlets near the township and therefore retail outlets selling this brand had to be searched for. Chicago is also a cigarette brand that can only be found at selected retailers. Dullas and Chicago technically form part of the brands which are sold on the black market and therefore constitute a limitation of this study regarding the calculation of sin taxes. As was said in Chapter 2 (paragraph 2.5.1.2), the increased cigarette prices drive the cigarette consumers to the black market. The average amount of cigarettes consumed per day and per annum is set out in Table 4.14 below. The respondent was requested to choose the number of cigarettes smoked per day by selecting the correct bracket (for example, 1 to 10 cigarettes). The averages used in this Table were calculated by using the following formula

$$\frac{\text{minimum cigarettes} + \text{maximum cigarettes}}{2} = \text{average.}$$

The average amount of cigarettes was rounded off to avoid working with half a cigarette.

Table 4.14: The average number of cigarettes consumed per day and per annum

Total members	Average cigarettes consumed	Average cigarettes consumed per day	Conversion to average cigarettes consumed per week	Average cigarettes consumed per annum
107	5	535	3 745	194 740
47	10	470	3 290	171 080
38	15	570	3 990	207 480
19	20	380	2 660	138 320
5	25	125	875	45 500
				757 120

Source: Own research

Table 4.14 illustrates the average number of cigarettes consumed by the respondents and their household members per annum. A total of 757 120 cigarettes are consumed per annum, which represents $37\ 856$ ($\frac{757120 \text{ cigarettes}}{20 \text{ (per packet)}} = 37\ 856 \text{ packets}$) packets per annum. The use of BB tobacco is insufficient for statistical purposes due to the fact that only 23 household members consumed it. Hence it was left out of the calculations. The total average annual amount spent on cigarettes is illustrated in Table 4.15 below, followed by the sin tax implications thereof.

Table 4.15: The total packets of cigarettes consumed and the annual amount spent on cigarettes

Total average packets of cigarettes consumed	Average amount per packet of 20 cigarettes	Total annual average spend on cigarettes
37 856	R20.24	R766 205.44

Source: Own research

Table 4.15 exemplifies the total annual average spend on cigarettes. The average amount based on the averages of the different cigarette brands was determined in order to calculate the estimated amount spent on cigarettes annually. $R766\ 205.44\ (R30.95 + R21.00 + R15.50 + R13.50 = R80.95/4 = R20.24 \times 37\ 856\ \text{packets} = R766\ 205.44)$ is the annual average amount that was spent on cigarettes. The sin tax implications of the annual amount spent on cigarettes are illustrated in table 4.16 below.

Table 4.16: The sin tax implications of the cigarette consumption based on the average annual consumption

Average total packets of cigarettes consumed	Sin taxes (rand) per packet of 20 cigarettes	Total average sin taxes (rand)
37 856	R0.68	R25 742. 08

Source: Own research (Average total packets) (Sin taxes: National Treasury, 2011:2; National Treasury, 2012:4; and National Treasury, 2012:4)

A calculation of the total average sin taxes of the cigarette consumption is illustrated in Table 4.16 above. The total of R25 742.08 refers to sin taxes for a total of 37 856 cigarette packets consumed per annum. However a limitation of this amount is that 2 of the cigarette brands are sold on the black market; therefore the total amount of sin taxes should only be regarded as an estimated figure. The total average sin taxes on both alcoholic beverages and cigarettes are used later in this study (paragraph 4.4.4) in order to compare them with the average income per household. Calculations of the income habits of the respondent and his/her household members follow.

4.4.3 Income sources of the respondents and their households

The last section (Section D) of the questionnaire required information regarding the sources of income of the respondents and their households. These sources were split between the social grants receivable by the households and other sources of income receivable by them. A discussion of the results of the social grants follows.

4.4.3.1 Social grants

As previously mentioned (paragraph 1.1.1) by Potts (2012:17), the social assistance system in South Africa is built on a solid framework which ennobles the principles that aim to stop the social and economic marginalisation of the poor. The respondents were asked to indicate the type of social grant (if any) receivable as well as the number of dependents receiving the certain type of social grant. It was established that the CSG was the most prevalent social grant (paragraph 4.3.4, Table 4.5) among the respondents. The total amount of social grants distributed to these respondents and their household members is illustrated in Table 4.17 below. The amount per social grant has been adapted from Table 2.1 paragraph 2.2.1.8.

Table 4.17: The total amount (in rand) of social grants distributed

Type of social grant	Number of household members who receive the grant	Monthly amount per social grant	Total amount per annum
CSG	504 ¹	R310	R1 874 880
OAG	34 ²	R1 350	R550 800
DG	29 ³	R1 350	R469 800
FCG	25 ⁴	R830	R249 000
CDG	0	R1 350	R0
GID	1	R310	R3 720
WVG	0	R1 370	R0
TOTAL			R3 148 200

Source: Own research (number of households receiving social grant) (Monthly amount available per social grant: SAGS, 2014)

Table 4.17 exemplifies the total annual amount of social grants receivable by the respondent and his/her household. The annual average was calculated by:

Household members receiving a social grant x monthly amount per social grant x 12 months.

The amount of R3 148 200 is the actual amount of social grants which were paid to these members who receive them. No averages were used for the calculations; therefore no limitations exist for the results based upon the social grants receivable. The respondents were also asked to indicate any other sources of income; the results follow.

¹ 81 (81x1) + 164 (82x2) + 99 (33x3) + 88 (22x4) + 60 (12x5) + 12(2x6) = 504

² 12 (12x1) + 16 (8x2) + 6 (2x3) = 34

³ 17 (17x1) + 12 (6x2) = 29

⁴ 9 (9x1) + 16 (8x2) = 25

4.4.3.2 Other income sources other than social grants

Other sources of income were contained in the very last part of the questionnaire wherein respondents were supposed to indicate any other sources of receivable income (if any). The question was not asked directly due to ethical considerations; therefore the respondents were required to choose from the options given (example R1 to R500). Averages were calculated in order to calculate an annual average amount. The formula that was used to calculate the averages is as follows

$$\frac{\text{minimum other income} + \text{maximum other income}}{2} = \text{average.}$$

The other sources of income were divided between salaries and wages and other income. Table 4.18 indicates the average total amount of salaries and wages per annum.

Table 4.18: Total average amount of salaries and wages receivable by respondents and their households per annum

Monthly average	R250.50	R750.50	R1 500.50	R2 500.50	R3 500	Total
Number of household members	13	45	89	86	69	302
Annual average	R39 078	R405 270	R1 602 534	R2 580 516	R2 898 000	R7 525 398

Source: Own research

Table 4.18 displays the average annual income receivable in the form of salaries and wages of the respondents and their household members. The formula used for the calculation of the average follows:

Members receiving salary and wages x average amount salary and wages x 12 months

There were also respondents who indicated that they received sources of income other than salaries, wages and social grants; the average is calculated in Table 4.19 below.

Table 4.19: Total average amount of other income receivable by respondents and their households per annum

Monthly average	R250.50	R750.50	R1 500.50	R2 500.50	R3 500	Total
Number of household members	10	12	12	1	0	35
Annual average	R30 060	R108 072	R216 072	R30 006	R0	R384 210

Source: Own research

Table 4.19 exemplifies the annual other income receivable by the respondents and their household members. The annual average was calculated as follows:

$$\text{Members receiving other income} \times \text{average amount of other income} \times 12 \text{ months}$$

A combination of Tables 4.18 and 4.19 follows in order to determine the total annual average receivable by the respondents and their household members, as this will be used in paragraph 4.4.4.

Table 4.20: The total annual income receivable

	Salary and wages	Other income sources	Total
Total members receiving income other than social grants	302 ⁵	35 ⁶	337
Annual average	R7 525 398	R384 210	R7 909 608

Source: Own research

Table 4.20 is an illustration of the total annual income receivable by the respondents and their household members. It is evident that most of the

⁵ 13 + 45 + 89 + 86 + 69 = 302 members receiving salary and wages

⁶ 10 + 12 + 12 + 1 = 35 members receiving other income

households received other income in the form of salaries and wages. This table is used again later in this study (paragraph 4.4.4) where a comparison of the income versus the spending habits of alcoholic beverages and cigarettes was carried out.

A comparison and discussion follows regarding the spending habits on alcoholic beverages (Table 4.11), and cigarettes (Table 4.15), versus the total annual income (Table 4.20).

4.4.4 Comparison of the spending habits on alcoholic beverages and cigarettes versus the total average income receivable

Paragraph 4.4.1 to 4.4.3 calculated the annual averages of alcoholic beverages, cigarettes, social grants receivable and other income receivable. This paragraph will compare the above results in order to achieve the primary objective of this study as stipulated in paragraph 1.5.1: to determine the percentage that lower income earning South African citizens, who receive social grants, spend on the given sin taxed items. A comparison of the annual average amounts is illustrated in Table 4.21 below.

Table 4.21: Comparison of the annual averages

Category	Annual average amount (inclusive of sin taxes)	Sin taxes levied on annual average	Annual average amount (exclusive of sin taxes)
Alcoholic beverages	R1 530 962.16	R14 412.84	R1 516 549.32
Cigarettes	R766 205.64	R25 742.08	R740 463.56
Social grants	R3 148 200	N/A	R3 148 200
Other income	R7 909 608	N/A	R7 909 608
Total	R13 354 975.80	R40 154.92	R13 314 820.88

Source: Own research (Annual averages)

Table 4.21 serves as an illustration of the annual average amount spent on alcoholic beverages and cigarettes by the respondents and their household members. The annual average amount of income receivable in respect of social grants and other income is also illustrated in Table 4.21 above. The average amount of sin taxes based on the annual average of alcoholic beverages and cigarettes is also illustrated in Table 4.21. It became evident that the consumption of alcoholic beverages was greater than the consumption of cigarettes, but the sin taxes levied are higher on cigarettes than on alcoholic beverages. A percentage of 35.89% ($\frac{14\ 412.84}{15\ 563.08+25\ 742.08} \times 100 = 35.89\%$) of the total sin taxes stemmed from the consumption of alcoholic beverages while 64.11% ($\frac{25\ 742.08}{14\ 412.08+25\ 742.08} \times 100 = 64.11\%$) stemmed from the consumption of cigarettes. The main source of income was other income in the form of salaries and wages and other income. A percentage of 28.47% ($\frac{3\ 148\ 200}{3\ 148\ 200+7\ 909\ 608} \times 100 = 28.47\%$) of the total income was in the form of social grants while the remainder of 71.53% ($\frac{7\ 909\ 608}{3\ 148\ 200+7\ 909\ 608} \times 100 = 71.53\%$) took the form of other income such as salaries, wages and other sources of income. The total percentage of sin taxes that these South African citizens pay on alcoholic beverages and cigarettes was calculated by the use of the following formula ($\frac{\text{Total sin taxes}}{\text{Total income receivable}} \times 100$): it was 0.36% ($\frac{40\ 154.92}{11\ 057\ 808} \times 100 = 0.36\%$); therefore if the above percentage regarding income is split between the effect of social grants and other income the results will be as follows:

- Social grants: ($\frac{28.47}{100} \times 0.36 = 0.10\%$); and
- Other income: ($\frac{71.53}{100} \times 0.36 = 0.26\%$).

The above calculations illustrate the percentage of social grant and other income that is used to pay sin taxes on alcoholic beverages and cigarettes. A percentage of 0.11% of the social grants receivable by these lower South African citizens was used to pay sin taxes, which comes to R11 154.14 ($\frac{40\ 154.92}{0.36} \times 0.10 = R11\ 154.14$). With regard to other income a total of R29 000.78

$(\frac{40\ 154.92}{0.36} \times 0.26 = 29\ 000.78)$ was used to pay for the sin taxes on the total annual average usage of alcoholic beverages and cigarettes.

However there were some limitations to these averages, which may be pointed out as follows:

- The number of glasses of alcoholic beverages consumed was based upon averages;
- Certain cigarette brands are sold on the black market which do not have sin tax implications;
- The amount of cigarettes smoked per annum was calculated by the use of averages; and
- The total income (salaries and wages and other income) was also based on averages.

Because of these limitations, the annual amounts may be regarded as estimated amounts whereas the social grants reflect actual amounts. A summary of the averages follows in Table 4.22.

Table 4.22: Summary of the percentage of sin taxes paid by the use of social grant money and other income

	Social grants	Other income	Total
Total income received	R3 148 200	R7 909 608	R11 057 808
Sin tax fraction	0.10%	0.26%	0.36%
Sin taxes paid	R11 154.14	R29 000.78	R40 154.92

Source: Own research

Table 4.22 is a summary of the sin taxes paid by using social grant money and other income (salaries and wages and other sources of income). It is evident that a greater amount of sin taxes is paid for by other sources of income. A comparison of theory versus the actual results of the consumption of alcoholic beverages and cigarettes follows.

4.5 THEORY COMPARED TO RESULTS

A comparison between the theory, which was discussed in Chapter 2, and the actual results and findings is undertaken in this paragraph to determine the differences between the theory and the actual results. For the purpose of the comparison Figure 2.12 (paragraph 2.5.2) will be used again. A comparison of the consumption of alcoholic beverages and cigarettes ensues.

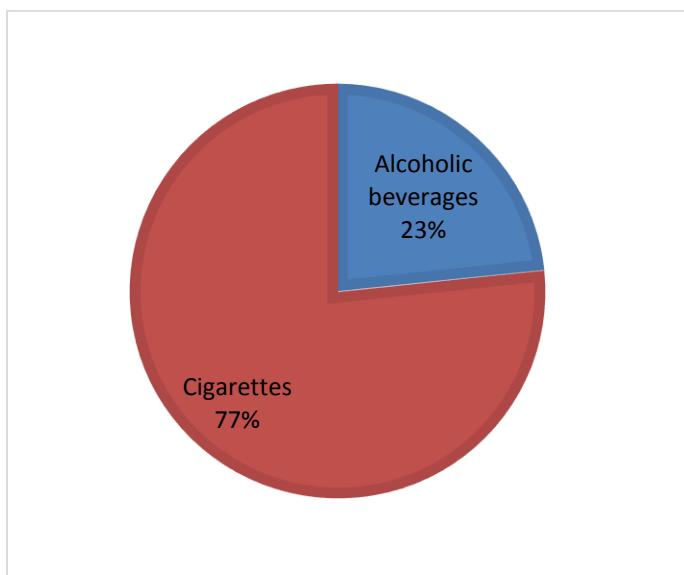


Figure 4.18: Consumption levels in theory

Source: Adapted from Figure 2.12 (Adjusted from National Treasury, 2014:87, Van Rensburg, 2013:2 and TTISA, 2014:1)

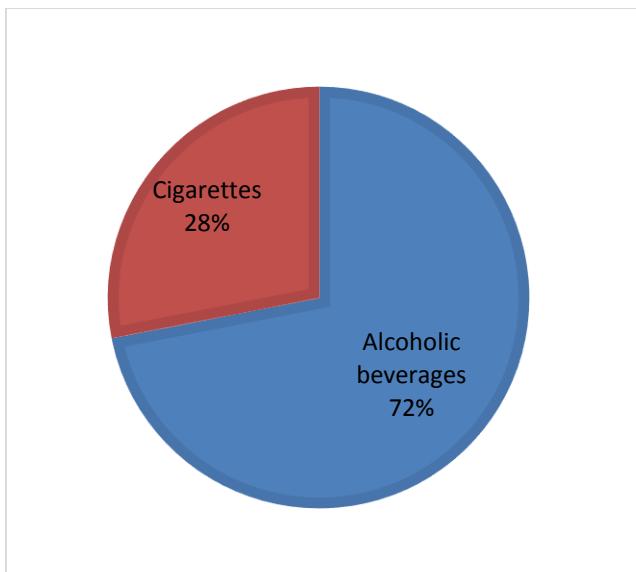


Figure 4.19: Consumption levels of actual results

Source: Own research

Figures 4.18 and 4.19 exemplify the consumption levels of alcoholic beverages and cigarettes based on theory (Chapter 2) and the actual results (Chapter 4). In these two Figures it is evident that the consumption of alcoholic beverages is based more on the actual results than on theory. However, the quantities involved in the consumption of cigarettes are more theoretically based than the actual results. The differences between theory and the actual results might occur because the estimated amounts used to determine the consumption of alcoholic beverages and cigarettes may have been theoretical amounts.

4.6 CONCLUSION

Chapter 4 has considered the results and findings of the self-developed questionnaire, which was distributed and completed by lower income earning South African citizens in a selected township. The results have indicated that the primary source of income of the selected township is through other sources of income (not grants). A total of $\frac{3\,148\,200}{11\,057\,808} \times 100 = 28.47\%$ of the lower income earning South African citizens in the selected township received a social grant representing less than 50% of total income.

Regarding the spending habits of these lower income earning South African citizens, the consumption of alcoholic beverages was greater than the consumption of cigarettes. The findings also suggest that if a selected category of alcoholic beverages was too expensive, a cheaper alternative was used. Spirits (hard liquor) are the most expensive alcoholic beverages; therefore they were consumed the least. The sin tax implications based on the annual average amount spent applied more to cigarettes than to alcoholic beverages. The reason may be because of the fixed amount of sin taxes levied on cigarettes (0.68 cent) regardless of the type of cigarette brand.

The primary objective of this study, has been achieved because the lower income earning South African citizens who receive social grants pay 0.10% sin taxes for the consumption of alcoholic beverages and cigarettes.

However, there were certain limitations which could have influenced the outcome of the results and findings. The overall effect was that the main source of income for these lower income earning South African citizens took the form of other income sources which were still not enough to pay for their basic needs. A summary and conclusion will be provided, and recommendations made, in the final chapter.

CHAPTER 5

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

The primary objective of this study was to determine the percentage of income that low income South African citizens, whom are social grant recipients, spend on sin taxed items, narrowed down to alcoholic beverages and cigarettes. The purpose of the determination of the percentage was to calculate the percentage of monopoly money (citizens paying for their own grant by paying several taxes in particular sin taxes) in the process. This study was divided into two sections: the social grant system of South Africa and the sin taxes that are levied in South Africa. Chapter 5 contains a summary of the study, gives the limitations that were faced throughout this study and provides recommendations for further study as well as a conclusion. A summary of how the objectives of this study were achieved follows.

5.2 SUMMARY

The objectives that were formulated for the study were achieved in Chapters 1 to 4. This study comprised a literature review (Chapter 2) and an empirical review (Chapters 3 and 4). A summary of how the objectives were achieved is given below with reference to each Chapter.

5.2.1 Chapter 1

In Chapter 1 the background to the study and the problem statement were provided. The problem statement in respect of the study was to determine the percentage that low income South African citizens, who are funded by social grants, spend on sin taxed items such as alcoholic beverages and cigarettes. In order to answer the problem statement, the following theoretical objectives were set (paragraph 1.5.2.1, Chapter 1):

- Establish the types of social grants in South Africa, the amounts available per grant and the increases thereof as well as how control over the social grant system is maintained;
- Determine whether the increases in the CPI are in line with the increases in social grants.
- Determine the increases in sin taxes, alcoholic beverages and cigarettes, compared to the consumption of alcoholic beverages and cigarettes; and
- Establish the Governments' motivation for the increases of sin taxes;

The following empirical objective was also set in order to answer the problem statement (paragraph 1.5.2.2, Chapter 1):

- Determine the percentage of social grants used by low income South African citizens on sin taxed items such as alcoholic beverages and cigarettes.

Chapter 1 outlined the background to the study, the problem statement and the objectives that were set. The problem statement and objectives are achieved throughout the study (Chapters 2 to 4).

5.2.2 Chapter 2

Chapter 2 contained a literature review of the social grant system, CPI and sin taxes in South Africa. It included a discussion of the different types of social grants in South Africa. The CPI of South Africa was briefly discussed in Chapter 2 which led to a comparison between the increases of the social grants and the increases of the CPI: one of the objectives of this study. The levying of sin taxes in South Africa was investigated in terms of their purpose and the overall effect that these taxes have on the consumers. Chapter 2 achieved the following research objectives as formulated in Chapter 1.

Establish the types of social grants in South Africa, the amounts available per grant and the increases thereof as well and how control over the social grant system is maintained.

The first of the theoretical objectives (paragraph 1.5.2.1), establish the types of social grants in South Africa, the amounts available per social grant and the increases thereon and how control is maintained, was considered in Chapter 2. Social welfare is important in South Africa as it contributes towards the uplifting of the lower income earning South African citizens who are living below the poverty line. The poverty line of South Africa was briefly discussed including the different types of poverty lines which were previously used in South Africa. In South Africa there are eight different types of social grants, as listed in paragraph 1.1.1 (Chapter 1), which forms part of the social grant system of South Africa namely:

- Child Support Grant;
- Old Age Grant;
- Disability Grant;
- Foster Care Grant;
- Care Dependency grant;
- Grants-In-Aid;
- War Veteran Grant; and
- Social relief of distress grant.

A detailed discussion of the different types of social grants, except for the social relief of distress grant was given, which provided more information regarding the social grants in respect of:

- The main purpose of the specific social grant;
- The requirements to qualify;
- Amount available per social grant; and
- Means testing requirements.

(See paragraphs 2.2.1.1 to 2.2.1.7, Chapter 2)

The CSG (paragraph 2.2.1.1, Chapter 2) provides income support to adults, who are financially unstable, caring for their children who are under the age of 18 years. The current monthly amount for a CSG is R310. The OAG (paragraph 2.2.1.2, Chapter 2) finance the elderly South African citizens, over the age of 65, whose monthly income falls below a certain level. The current monthly amount available for an OAG per month is R1 350 if younger than 75 years of age and R1 370 if older than 75 years of age. South African citizens who are classified as disabled and who are unable to support for themselves are entitled to a DG (paragraph 2.2.1.3, Chapter 2) once the criteria has been met. The DG currently amounts to R1 350 per month. A FCG (paragraph 2.2.1.4, Chapter 2) is paid out to parents who are in the possession of a foster child that was placed in foster care only by the court and the current amount is R830. A CDG (paragraph 2.2.1.5, Chapter 2) is a social grant providing income support to primary caregivers who look after disabled children (under the age of 18 ears) who requires permanent care. An amount of R1 350 are available per month in respect of the CDG. The GID (paragraph 2.2.1.6, Chapter 2) serves as an additional social grant to those already receiving an OAG, DG or WVG and requires fulltime care. The monthly amount receivable in respect of a GID amounts to R310. Citizens who have fought in the second World War or Korean War are entitled to a WVG (paragraph 2.2.1.7, Chapter 2) only once the criteria has been met. The WVG currently Amounts to R1 370 per month.

The controlling measures (paragraph 2.2.2, Chapter 2) of the social grants are also important as it ensures that the social grants are paid to the citizens who are in need and were discussed in paragraph 2.2.2, Chapter 2. The controlling measures included the review process (Table 2.2, paragraph 2.2.2, Chapter 2) and the factors that may lead to the suspension (Table 2.3, paragraph 2.2.2, Chapter 2) and lapsing (Table 2.4, paragraph 2.2.2, Chapter 2) of a social grant.

Determine whether the increases in the CPI are in line with the increases in social grants

The second theoretical objective (paragraph 1.5.2.1), determine whether the increases in the CPI are in line with the increases in the social grants, was also discussed in Chapter 2. The CPI of South Africa was briefly discussed and the relevance of the inclusion of the CPI was for the determination of whether the increases of the CPI were in line with the increases of the social grants. Findings showed (Figure 2.4, paragraph 2.3.1, Chapter 2) that the yearly increases of the social grants (overall increase since 2012 to 2014 was 53.75%) were more than the yearly increases of the CPI (overall increase since 2012 to 2014 was 4.97%) which indicated that the government still cares for their lower income earning citizens who are primarily funded by social grants and who live below the poverty line of South Africa.

Determine the increases in sin taxes, alcoholic beverages and cigarettes, compared to the consumption of alcoholic beverages and cigarettes

The third of the theoretical objectives (paragraph 1.5.2.1), determine the increases in sin taxes, alcoholic beverages and cigarettes, compared to the consumption of alcoholic beverages and cigarettes, was likewise addressed in Chapter 2. Sin taxes were briefly discussed in terms of the type of tax and the purpose for the levying of sin taxes. Sin taxes are taxes which are levied on goods that have negative effects on human beings such as alcoholic beverages and cigarettes. The different opinions of what the actual purpose for the levying of sin taxes lead to further investigation. Therefore this study investigated the actual purpose for the levying of sin taxes by means of a literature review (Chapter 2). The literature review (Chapter 2) contained the increases of alcoholic beverages and cigarettes from 2011 as well as the consumption thereof in order to determine the consumption levels. By the determination of the consumption levels since 2011 to the current year (2014) it can indicate whether the government succeeded in their goal of reducing the consumption of these goods. A reduction in the consumption levels will be an indication that the levying of higher sin taxes is to stop the consumption thereon.

Research indicated that where a certain type of alcoholic beverage was too expensive consumers choose another, cheaper alternative. The overall usage of alcoholic beverages has decreased from 9.59% (figure 2.8, paragraph 2.5.1.2 and table 2.9) (2012/13) to 5.18% (2013/14) which is an indication that the consumption of alcoholic beverages has decreased since 2011. The government has succeeded in its goal of reducing the consumption of alcoholic beverages among the citizens.

The consumption of cigarettes (based on total packs of cigarettes sold) was determined and it was established that the consumption of cigarettes has increased by 26.50% from 2011/2012 to 2012/2013 (Figure 2.10, paragraph 2.5.1.2, Chapter 2). The findings of the implications of higher cigarette taxes suggest that the government did not succeed in its goal to reduce the consumption of cigarettes.

A comparison of the sin tax implications of alcoholic beverages and cigarettes (Figure 2.11, paragraph 2.5.1.2, Chapter 2) indicated that the sin taxes levied on the former are greater than the sin taxes on the latter. The sin taxes levied on alcoholic beverages differ because of the different types of such beverages, whereas on cigarettes a fixed amount of sin taxes is levied whatever the brand. The research showed that the consumption of cigarettes is more than the consumption of alcoholic beverages (Figure 2.12, paragraph 2.5.1.2, Chapter 2).

Establish the Government's motivation for the increases of sin taxes

In Chapter 2 (paragraph 1.5.2.1), the fourth of the theoretical objectives, namely to establish government's motivation for the increases of sin taxes, was similarly discussed. Based on the findings that was obtained by the determination of the increases of sin taxes on alcoholic beverages and cigarettes, the assumption can be made that the main purpose for the levying of sin taxes is to reduce the consumption of these goods. As said above the government has succeeded in the reduction of the consumption of alcoholic beverages whereas the consumption of cigarettes is higher than previous years, presumably due to cigarettes purchased on the black market.

5.2.3 Chapter 3

Chapter 3, that formed part of the empirical review of this study, provided a brief overview of the research design, research methodologies, validity and reliability, population and sampling (including: sampling, sample size and sampling errors) and survey method (including: questionnaire, pilot study, statistical analysis and ethical consideration).

The empirical part of the study was done by the use of a self-developed questionnaire. The purpose of the questionnaire was to determine the social grant recipient's spending habits on alcoholic beverages and cigarettes.

The research design of this study was based on the pre-test and post-test comparison design with randomised subjects enabling the measurement of change. The MM research methodology was used to conduct this study in order to achieve the primary objective. The QUAL research methodology was used in Chapter 2 which was the literature review whereas the QUAN research methodology was used in Chapters 3 and 4.

The population that was used in this study consisted of 4 000 households of which a sample of 10% (400 households) was randomly selected to complete the questionnaires. The probability sampling method was conducted in this study of which stratified random sampling (random sampling technique) was used in the completion of the questionnaires.

Chapter 3 focussed on the research design and research methodology which contributed towards the achievement of the empirical objective (paragraph 1.5.2.2) of this study. The results and findings of this study were discussed and illustrated (by means of tables and figures) in Chapter 4.

5.2.4 Chapter 4

Chapter 4 discussed and illustrated the results and findings of this study. The purpose of this chapter was to determine the actual percentage of social grants used by low income South African citizens on alcoholic beverages and

cigarettes. This chapter also compared the actual results with the findings of Chapter 2 (literature review). A discussion follows.

Determine the percentage of social grants used by low income South African citizens on sin taxed items such as alcoholic beverages and cigarettes

The empirical objective of this study (paragraph 1.5.2.2), determine the percentage of social grants used by low income South African citizens on sin taxed items such as alcoholic beverages and cigarettes, which was discussed in Chapter 4.

The response that was received back was 358 fully completed questionnaires which represented a response rate of 89.50% ($\frac{358}{400} \times 100 = 89.50\%$). Based on the results of Section A of the questionnaire, the questionnaires were completed by a diversity of citizens. Results showed that the consumption of alcoholic beverages are more than the consumption of cigarettes (Table 4.6, Chapter 4). The primary source of income of these citizens are through other income (Table 4.6, Chapter 4). The other income receivable by these lower South African citizens was still the minimum wage which was an indication that these citizens do live below the poverty line of South Africa.

Results and findings have shown that 0.10% (paragraph 4.4, Chapter 4) of social grants receivable are spent on alcoholic beverages and cigarettes. Differences between the actual results and findings based on theory occurred. However, certain limitations encountered throughout the study may have had a direct effect on the results and findings. These are discussed next.

5.3 LIMITATIONS OF THE STUDY

Throughout the study several limitations were identified such as:

- No estimated figures of the usage of cigarettes for the 2014 year;
- The number of glasses of alcoholic beverages consumed is based upon averages;

- There are cigarette brands which are sold on the black market not subject to sin taxes;
- The number of cigarettes smoked per annum is calculated by the use of averages; and
- The total income (salaries and wages and other income) is also based on averages.

The limitations of this study may have a negative influence on the result and findings in respect of the accuracy of the outcome. In the literature review (Chapter 2) there was no estimated amount for the consumption of cigarettes for the current year (2014) whereas for alcoholic beverages there was an estimated amount of consumption (based on estimated sales volume for the 2014 year). These limitations had an influence on the actual results which was obtained from the questionnaires. Due to the limitations faced in this study the consumption figures of 2013 was compared to the estimated figures for 2014. The consumption of alcoholic beverages by these lower income earning South African citizens was calculated by the use of the consumption of average glasses.

The amount of cigarettes smoked per annum is also based on averages. In the questionnaire there was cigarette brands included which are sold on the black market meaning that there are no sin taxes levied on those cigarette brands. Those cigarette brands had to be included because it is the most common cigarette brands consumed by these lower income earning South African citizens of the selected township. As previously said the higher cigarettes taxes drives the consumers to the black market. The high volume usage of cigarette brands sold on the black market due to the fact that sin taxes are classified as regressive taxes which influenced the poor more than the rich. Thus these lower income earning South African citizens seek cheaper alternatives rather than to stop the consumption thereon. The limitations that were faced in this study influence the outcome of the results and findings because it is based on averages and not on actual amounts.

5.4 RECOMMENDATIONS

Resulting from this study, certain recommendations could be implemented regarding the spending habits of the lower income earning South African citizens who are social grant recipients and who live below the poverty line of South Africa. The following recommendations are made:

- Further investigation could be carried out regarding the other goods on which sin taxes are also levied;
- The determination of the total taxes (income taxes, value added taxes, capital gains taxes, donations tax etc.) payable by the lower income earning citizens per annum. They are taxed by various methods depending on their income levels (other sources of income) and on which other taxes come into existence. A study could be done to determine these and then compare whether the social grants receivable per month are enough to cover their basic needs;
- How taxes can be accounted for on cigarettes sold on the black market. An investigation could be done in respect of how these cigarettes could be banned from South Africa in order to force the poor to reduce the consumption of cigarettes as this is the goal of the government.

5.5 CONCLUSION

The brief overview of the background of the social grant system in South Africa indicated that social assistance plays a very important role in South Africa. Furthermore, South Africa's social grant system provides for all races, genders and ages who are in need of social assistance.

In South Africa, the citizens pay several taxes, therefore the levying of sin taxes is no exception. The main purpose for the levying of sin taxes, as suggested by the research is to reduce the consumption of these goods. Overall research indicated that the consumption of alcoholic beverages has decreased, unlike the consumption of cigarettes that has increased. It was concluded that the governments' motivation for the increases in sin taxes is not to use the taxes solely as a source of revenue, but to stop the consumption of these goods as

they are harmful. As seen in the research and findings the primary source of income of the selected township is through other income (salaries and wages and other sources of income) but the social grants receivable do play a vital part in an attempt to alleviate poverty.

The primary objective of this study was to determine the percentage that the lower income earning South African citizens, who receives social grants, from the government, spend on sin taxed items such as alcoholic beverages and cigarettes. It was determined that 0.10% of the total social grants receivable by these lower income earning South African citizens, of the selected township, is spent on the consumption of alcoholic beverages and cigarettes of upon which sin taxes are levied.

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APPENDIX A

ETHICAL CLEARANCE NUMBER



NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
VAAL TRIANGLE CAMPUS

Faculty of Economic Sciences and Information Technology **North West-University**

Dear Participant

RESEARCH PROJECT

I Ashley Deon Pietersen am conducting research in taxation about the percentage of grants low income South African citizens spend on sin taxed items. The **main objective** of this research is to determine the percentage that low income South African citizens spend on sin taxed items.

I therefore urge you to complete the enclosed questionnaire yourself and confidentially. I assure you that the information that you provide will be treated with the strictest confidentiality, and you will remain anonymous at all times. The responses will be used for academic purposes only.

I thank you for your time and effort in completing the questionnaire enclosed.

Ashley Deon Pietersen (Masters Student)
School of Accounting
Faculty of Economic Sciences and Information technology
North West-University
PO BOX 1174
Vanderbijlpark 1900
e-mail ashleydeon.pietersen@gmail.com
Ethical clearance number: ECONIT-ACC-2014-001

APENDIX B

QUESTIONNAIRE



Questionnaire

Dear Participant

My name is Ashley Pietersen. I am registered as a full-time student for a Masters' degree in Accounting at the North-West University (Vaal Triangle Campus) under the supervision of Lana Harmse.

Please take a few minutes to assist me and complete the attached questionnaire. It should not take you longer than 20 minutes to complete. All responses are confidential and will merely be outlined in the form of statistical data in the analysis. All data will only be used for research purposes.

Thank you for your important contribution to this study.

Section A: Demographical information

Please mark each question with a cross (X) in the appropriate box.

A1	Your gender	Female	Male			
A2	Your ethnic group	African/black	Coloured	Indian/Asian	White	Other (specify)
A3	Please indicate your mother tongue:					
	Afrikaans	English	IsiNdebele	IsiXhosa	IsiZulu	Spedi
	Sesotho	Setswana	SiSwati	Tshivenda	Xitsonga	Other (specify)
A4	Please indicate your current age:					
	Younger than 18	18-29 years	30-39 years	40-49 years	50-59 years	60-69 years
	70 years and older					
A5	Please indicate the number of persons in your household:					
	Adults (older than 20 years)			Children (younger than 18 years)		

Section B: Smoking habits

Please mark each question with a cross (X) in the appropriate box.

B 1.	How many members of your household smoke?	0	1-2	3-4	5-6	6+
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B 2.	In total, how many cigarettes do the members of your household smoke per day ?								
	None	1-10	11-20	21-30	31-40	41-50	51-60	60+	
B 3.	What type of cigarette brand do the members of your household prefer? (Mark all applicable brands)								
	Stuyvesant	Princeton	Chicago	Dallas	BB Tobacco				
	Other (please specify)								

Section C: Drinking habits

Please mark each question with a cross (X) in the appropriate box.

C 1.	How many members of your household use alcoholic beverages on a regular (daily/weekly) basis?					0	1-2	3-4	5-6	6+
C 2.	In total, how many glasses (250ml) of each of the following alcoholic beverages do the members of your household consume per week ? (One glass per day = 7 glasses per week)									
	1. Malt beer	None	1-4 glasses	5-8 glasses	9-12 glasses	13-16 glasses	17-20 glasses	21-24 glasses	More than 25 glasses	
	2. Traditional beer	None	1-4 glasses	5-8 glasses	9-12 glasses	13-16 glasses	17-20 glasses	21-24 glasses	More than 25 glasses	
	3. Spirits	None	1-4 glasses	5-8 glasses	9-12 glasses	13-16 glasses	17-20 glasses	21-24 glasses	More than 25 glasses	
	4. Fortified wine	None	1-4 glasses	5-8 glasses	9-12 glasses	13-16 glasses	17-20 glasses	21-24 glasses	More than 25 glasses	
	5. Unfortified wine	None	1-4 glasses	5-8 glasses	9-12 glasses	13-16 glasses	17-20 glasses	21-24 glasses	More than 25 glasses	
	5. Ciders, etc.	None	1-4 glasses	5-8 glasses	9-12 glasses	13-16 glasses	17-20 glasses	21-24 glasses	More than 25 glasses	
	6. Other (please specify)	None	1-4 glasses	5-8 glasses	9-12 glasses	13-16 glasses	17-20 glasses	21-24 glasses	More than 25 glasses	

Section D: Income Please mark each question with a cross (X) in the appropriate box.

D 1.	How many members of your household receive each of the following grants?							
	1. Child support grant	None	1	2	3	4	5	5+
	2. Old age grant	None	1	2	3	4	5	5+
	3. Disability grant	None	1	2	3	4	5	5+
	4. Foster care grant	None	1	2	3	4	5	5+
	5. Care dependency grant	None	1	2	3	4	5	5+
	6. Grant-in-aid	None	1	2	3	4	5	5+
	7. War Veteran grant	None	1	2	3	4	5	5+
	8. Other (Please specify grant and amount)							
D 2.	Please specify the amount of any other income received by the members of your household.							
	Salary and wages	None	R1-R500	R501-R1000	R1001-R2000	R2001-R3000	R3000+	
	Other income	None	R1-R500	R501-R1000	R1001-R2000	R2001-R3000	R3000+	

APENDIX C

FORTIFIED AND UNFORTIFIED WINE

What is Fortified Wine?

A fortified wine is a wine that is “fortified” with additional alcohol that’s been added to the base wine during fermentation, bringing the **average alcohol content up around 17 to 20%**. Fortified wines can be made in either dry or sweet styles (with the middle-ground of medium-sweet or medium-dry covered in virtually all types of fortified wine categories). The most common types of fortified wines are Port, Sherry, Marsala and Madeira. Fortified wine means any wine, of **more than sixteen (16%) and no more than twenty-four percent (24%) alcohol** by volume.

What is Unfortified Wine?

Unfortified wine means **any wine of sixteen percent (16%) or less alcohol by volume**, made by fermentation from grapes, fruits, berries, rice, or honey; or by the addition of pure cane, beet, or dextrose sugar; or by the addition of pure brandy from the same type of grape, fruit, berry, rice, or honey that is contained in the base wine and produced in accordance with the regulations of the United States.

Source: ABC Commission North Carolina (2014:1)