

**AN INVESTIGATION INTO FACTORS CONTRIBUTING TO THE FAILURE OF THE  
ALCOHOL LEVY TO REDUCE ALCOHOL ABUSE IN BOTSWANA**

Dissertation submitted in partial fulfilment of the requirements for the Degree of  
Master of Business Administration at the North-West University (Mafikeng Campus)

by

**CALLAGHAN MOTLALENG**

22577696

Supervisor: Professor Theuns Pelsier

October 2013

<b>LIBRARY MAFIKENG CAMPUS</b>
Call No.: 2015 -09- 1 0
Acc. No.: 151024
<b>NORTH-WEST UNIVERSITY</b>

## ACKNOWLEDGEMENTS

This work is dedicated to my dearest late mother who had been an indispensable pillar of support through-out. Like every loving mother she wanted to see me on top of the world and pushed me to the very end to see to it that this project is a success. My sincere gratitude goes to my siblings Elvy, Tlotlo and Abigail who held my hand during the toughest times of my life. I pass my heartfelt thanks to my little niece Lentle for giving me hope for tomorrow.

I am also very much indebted to my supervisor Professor Theneus Pelsler for the invaluable contribution he made to this dissertation. Although despondency crept in from now and then, he never lost heart but encouraged me to the very end. From him I learnt that despondency and gloom can never defeat adversity and trying times need courage and resilience.

Last and most importantly my beautiful wife Sharon, she could have demanded her time but watched me work tirelessly instead. I love you baby.

## Table of Contents

List of abbreviations .....	1
Abstract .....	2
<b>1. INTRODUCTION TO THE STUDY .....</b>	<b>3</b>
1.1 INTRODUCTION .....	3
1.2 OVERVIEW OF THE ALCOHOL LEVY AND THE ALCOHOL INDUSTRY.....	3
1.3 OPERATING ENVIRONMENT OF KGALAGADI BREWERIES .....	6
1.4 BACKGROUND TO THE STUDY .....	7
1.4.1 Background to the introduction of the alcohol levy.....	8
1.4.2 Analysis of alcohol-related social - ills before and after levy.....	9
1.4.3 Financial performance of KBL before and after alcohol levy.....	11
1.5 PROBLEM STATEMENT.....	13
1.6 AIM OF THE STUDY .....	13
1.7 RESEARCH OBJECTIVES.....	14
1.8 RESEARCH QUESTIONS.....	14
1.9 CONCEPTUAL CLARIFICATION .....	15
1.10 SIGNIFICANCE OF THE STUDY .....	16
1.11 METHODOLOGY .....	17
1.12 ORGANISATION OF THE STUDY .....	18
1.13 CONCLUSION.....	18
<b>2. LITERATURE REVIEW .....</b>	<b>19</b>
2.1 INTRODUCTION .....	19
2.2 CONCEPT OF ALCOHOL ABUSE.....	19
2.3 ALCOHOL-RELATED SOCIAL ILLS .....	20
2.4 MEASURES FOR MANAGING ALCOHOL ABUSE .....	24
2.5 ALCOHOL LEVY - A STRATEGY FOR REDUCING ALCOHOL ABUSE.....	27
2.6 APPLICATION OF AN ALCOHOL LEVY IN SELECTED COUNTRIES .....	28
2.6.1 Impact of the levy.....	30
2.6.2 Effectiveness of the application of the levy .....	32
2.7 FACTORS CONTRIBUTING TO THE FAILURE OF THE ALCOHOL LEVY ...	33
2.8 CONCLUSION.....	34

<b>3.</b>	<b>RESEARCH METHODOLOGY</b> .....	35
3.1	INTRODUCTION .....	35
3.2	RESEARCH DESIGN .....	35
3.3	TARGET POPULATION OF STUDY .....	36
3.4	RESEARCH SAMPLE .....	36
3.5	RESEARCH INSTRUMENT .....	37
3.6	LIMITATIONS OF THE STUDY .....	38
3.7	DATA COLLECTION .....	38
3.8	DATA ANALYSIS.....	39
3.9	ETHICAL CONSIDERATIONS .....	40
3.10	CONCLUSION.....	40
<b>4.</b>	<b>RESEARCH DATA PRESENTATION AND ANALYSIS</b> .....	41
4.1	INTRODUCTION .....	41
4.2	UNDERSTANDING THE DEMOGRAPHICS .....	41
4.3	UNDERSTANDING ALCOHOL ABUSE .....	49
4.4	PERCEPTION OF THE LEVY .....	61
4.5	CONCLUSION.....	76
<b>5.</b>	<b>CONCLUSION</b> .....	77
5.1	INTRODUCTION .....	77
5.2	DEMOGRAPHICS OF THE RESEARCH SAMPLE .....	78
5.3	PUBLIC KNOWLEDGE OF ALCOHOL ABUSE .....	78
5.4	PUBLIC PERCEPTION ON ALCOHOL LEVY .....	79
5.5	CONCLUSION.....	80
5.6	RECOMMENDATIONS .....	82
<b>6.</b>	<b>REFERENCES</b> .....	84

## LIST OF ABBREVIATIONS

BAC	Blood Alcohol Concentration
BBL	Botswana Breweries Limited
CIF	Cost, Insurance and Freight
CSO	Central Statistics Organization
DSM	Diagnostic and Statistical Manual
GST	Goods and Services Tax
KBL	Kgalagadi Breweries Limited
SAB Limited	South African Breweries Limited
SBHL	Sechaba Brewery Holdings Limited

## **ABSTRACT**

The study deals with the postulated effect of the introduction of an alcohol levy in Botswana. The idea behind the introduction of an alcohol levy is to increase the pricing structure of alcohol as one way of trying to curb the social ills associated with excessive consumption of alcohol.

The subject of an alcohol levy as a means to manage alcohol consumption has never been short of controversy the world over. A number of public discourses and debates in many different countries have been held but it remains a subject with no common consensus. Studies conducted by different scholars have not yielded conclusions that are in harmony.

While the alcohol industry has been one of the fastest growing industries in the world, it has always been subjected to criticism in the sense that it is considered to grow at the expense of a breakdown of the social fabric of our societies. It is against this backdrop that Botswana was used as a case in hand.

More often governments have resorted to imposing taxes in the form of excise duties and levies with a mandate of instilling a particular behaviour among people in their societies. The results of literature, however, are mixed in this regard as some are for these taxes while some are against them.

A qualitative and quantitative study was undertaken to measure the level of understanding of the imposition of an alcohol levy in Botswana and to determine the level of success achieved through this.

At the current rate, the alcohol levy seems not to be making much difference in the society's welfare as was anticipated at its inception. It remains to be seen what formula would bring about the desired results of low and responsible alcohol intake among consumers. At present, revenues are collected from both the levy and excise duties, but the future is not promising as far as social ills and abuse are concerned.

## **CHAPTER ONE: INTRODUCTION TO THE STUDY**

### **1.1 INTRODUCTION**

This chapter introduces a study which focuses on the alcohol levy and alcohol abuse in Botswana. It gives an overview of the alcohol industry and the background to the study. The chapter goes on to describe and explain the research process; justification for the study; definition of key concepts; methodology; and the organization of the study. It ends with a conclusion and recommendations.

### **1.2 OVERVIEW OF ALCOHOL LEVY AND THE ALCOHOL INDUSTRY**

Although the alcohol industry is one of the fastest growing and profitable industries in the world, it is the social costs of alcohol abuse which remain a challenge to many governments and civil societies which always seek to reduce them. In view of this, many governments have been using an alcohol levy as a means to deter consumers from excessive consumption of the substance.

According to Richupan (2005:7) the concept of an alcohol levy emanates from the quest to manage the use of alcohol by way of imposing taxes to discourage excessive consumption. The reasoning behind this levy is that due to higher prices, affordability would be reduced and people would now consume smaller quantities of alcohol and therefore there would be fewer incidences of alcohol-related crimes.

Parry (2011:2) justifies the use of the alcohol levy in South Africa by outlining social ills that result from the abuse of alcohol. He further states that alcohol is ranked the fourth largest risk factor for causing premature death and third in terms of causing disability. He adds that alcohol causes intentional and unintentional injuries in which it is identified as a factor in 29% of driver injuries and 45% of driver deaths and that alcohol abuse causes neuropsychiatric disorders, which are experienced by 6% of South Africans each year.

In addition, Parry (2011:2) also postulates how alcohol abuse would impact the South African economy. He contends that alcohol abuse can have an impact on the economy's productivity in that employees would come to work under the influence of alcohol and not be as productive as they would be if they were sober. Some employees would completely stay away from work without any notification to the employer, he notes. For instance, if a surgeon were to stay away from work because he/she was drunk, then people's lives would be at risk when they need his/her expertise. He estimates tangible economic costs linked with harmful use of alcohol in South Africa to be in the order of R38 billion a year (Parry, 2011:2).

In view of what Parry (2011) notes, it follows that the main aim of the levy is to curtail the abuse of alcohol so as to avoid or at least reduce the aforementioned social ills in South Africa. This levy which was proposed by the South African Health Promotion Foundation was to fund a foundation in which it would kick-start new initiatives for supporting the alcohol policy framework (Parry, 2011:3).

Collins et al. (2008:14), who are in favour of the alcohol levy, record that strong evidence exists in Australia and internationally that higher alcohol taxation can be very effective in reducing alcohol consumption although there has been no recent research on the responsiveness of alcohol demand to price changes (or price elasticity of demand). In the same vein, the government of the Soviet Union (now the Russian Federation, led by former president Mikhail Gorbachev) launched a campaign against drunkenness and alcoholism in 1985. This was in response to sagging productivity in industry and agriculture; rising mortality rates; and high incidences of family crises, all of which were blamed on excessive alcohol usage.

A review of the above discussion demonstrates the universal nature of the application of an alcohol levy to reduce social and economic ills associated with alcohol abuse. Nonetheless, one controversy surrounding the alcohol levy has been to establish the extent to which it has helped countries achieve their goals and objectives for introducing it, or in short to establish an inverse relationship between alcohol levy and alcohol



abuse and social ills which means that an increase in the levy would result in a decrease in alcohol abuse and corresponding social ills.

Commenting on the possible relationship between the alcohol levy and alcohol abuse and related ills, Richupan (2005:7), notes that while the belief is that alcohol consumers are price-sensitive and that all indirect taxes imposed on alcoholic beverages would effect some changes in consumption behaviour, the relationship between humans and alcohol remains intact despite numerous at for prohibition. This suggests that the alcohol levy does not reduce alcohol abuse.

However, other studies such as those by Anderson and Raumberg (2006:264) on alcohol demand elasticity indicate variations per individual country and often over time, but universally confirming that higher prices lead to lower demand. It is these conflicting results that provide a basis for a continuing debate on whether or not an alcohol levy reduces the abuse of alcohol and or social ills.

In spite of the debate on the effect of alcohol levy on alcohol abuse; what has been clearly established is the negative impact this tax has on the national economy and the financial performance of alcoholic and beverage companies. Accordingly, the results that the alcohol levy brings about are usually far-reaching in terms of the national economy, like loss of jobs because alcohol traders are usually forced to restructure and retrench because of sudden shrinking in their income; reduction in the alcohol industry's contribution to the Gross Domestic Product (GDP); and inflation resulting from price hikes<sup>1</sup>.

The above overview sets the context for considering the current study on the alcohol levy and the alcohol industry in Botswana. The following section describes the operating environment of Kgalagadi Breweries Limited (KBL), that is, Botswana.

---

<sup>1</sup> Sebastian(as cited in Parry, 2011)

### 1.3 OPERATING ENVIRONMENT OF KGALAGADI BREWERIES (KBL)

Botswana is a landlocked country measuring 582,000 km<sup>2</sup>, about the same size as Kenya and France; with a small population of 1.8 million (CSO, 2006). It is situated in Southern Africa, nestled among South Africa, Namibia, Zimbabwe and Zambia. Since its independence from Britain in 1966, Botswana has maintained one of the fastest growth rates in per capita income in the world. President Mogae stated that through prudent financial management, Botswana has transformed herself from being one of the twenty-five poorest countries in the world at independence to a middle-income country with a per capita GDP of \$9,200 in 2004<sup>2</sup>.

The economy, one of the most robust on the continent, has been dominated by diamond mining, accounting for 80% of exports, 50% of government revenues and 33% of the GDP<sup>3</sup>. But the need to diversify the economy has long been in the forefront of economic policy, with emphasis currently placed on manufacturing, agriculture, tourism and small business.

On the downside, the Botswana Government has also been preoccupied with tackling challenges confronting the country; notably, the high rates of unemployment, estimated at 17.8% of the total labour force; and poverty estimated at 20.7%; coupled with high HIV/AIDS infection rates considered to be the second highest in the world; with the potential to seriously threaten the country's impressive economic prosperity<sup>4</sup>.

The HIV/AIDS infections and other social ills such as suicides, rape, domestic violence, road traffic accidents; with their high incidences in the country (see 1.4.1 and 1.4.2 below) have unfortunately been associated with alcohol abuse which the Government is keen to reduce. This has therefore projected a negative perception of the alcohol industry and companies like KBL which could be seen to be contributing to these social

---

<sup>2</sup> Botswana.State of the Nation Address, November 13,2006

<sup>3</sup> Botswana.Ministry of Finance and Development Planning Report 2005-2008

<sup>4</sup> Botswana. Budget Speeches,2008 & 2012

ills through their promotion of their products. Thus the environment in which KBL is operating could be seen to be hostile and requiring a lot of tact, mitigating strategies, and empathetic behaviour to persuade stakeholders that it is committed to fighting alcohol abuse while manufacturing and selling its products.

#### **1.4 BACKGROUND TO THE STUDY**

The need to reduce or stop alcohol abuse in Botswana, just as in other countries in the world, prompted this study. This emanates from the empirical evidence which has confirmed that despite the introduction of the alcohol levy by government to curb alcohol abuse three years ago; the trends of alcohol-related social ills keep on rising. This therefore necessitated an investigation into factors contributing to the failure of this tax to reduce alcohol abuse in Botswana. This is also against the background of the levy's negative effect on KBL's financial performance.

KBL was formed in May 1978 after taking over from Prinz Beau Botswana. KBL's stakeholders by then were the Botswana Development Corporation (40%), Sechaba Trust (20%) and Linzer (40%). Currently, Sechaba Breweries Holdings Ltd (SBHL) is the holding company of KBL and its sister company, Botswana Breweries (Pty) Ltd (BBL), holding 60% of the shares of the two companies while SABMiller Plc has the remaining 40%. SABMiller also has management control of both operating entities (KBL and BBL) in a partnership. The group, with its two beer and beverages plants employs 1,040 people and is represented throughout Botswana<sup>5</sup>.

KBL specializes in clear or lager beer brewery and carbonated soft drink production. Its product lines include clear beer; alcoholic fruit beverages; wines and spirits; and beverages. In terms of market segmentation, the company has since its inception been holding a dominant market share in terms of its products in the country, resulting in an almost monopolist market with a market share estimated at 98% of all beer and beverages with the remaining 2% for the traditional home brew.

---

<sup>5</sup> Sechaba Brewery Holdings Limited Annual Report - 2009

KBL's products are distributed to the end customer through "Segwana distribution channel" (KBL's products main distributor). The Segwana distributors consist of six sales and distribution depots countrywide. KBL's main customers are hotels and restaurants; retailers and wholesalers; bars and bottle stores. Thus for 28 years, KBL has been able to position itself as the major brewer and distributor of beer and beverage products and consequently priding itself as one of the best performing manufacturing companies in Botswana<sup>6</sup>.

However, it is the changed business environment in the past 5 years, punctuated by the introduction of the 30% alcohol levy by Government in 2008 on local alcoholic products, which has since been negatively impacting on the financial performance of KBL and thus posing a serious challenge to KBL.

#### *1.4.1 Background to the introduction of the alcohol levy*

In 2008, the President of Botswana, Seretse Ian Khama appointed a commission of inquiry into causes of social vices that were confronting the society. These social vices as highlighted in 1.3 above included a high incidence of suicides, rape, domestic violence, road traffic accidents, HIV/AIDS infections, just to mention a few; all of which were perceived to be associated with alcohol abuse. This commission, which was composed of tribal chiefs and the clergy, was mandated to go around the country consulting the nation to unearth the underlying causes of the deterioration of the nation's moral stature and social structures.

While the findings of the commission cited alcohol abuse as one of the major problems in the country, the other key aspects of the findings were the collapse of families and abandoned traditional family values and norms which were apparently influencing undesirable behaviour patterns especially among the youth. The absence of corporal punishment, which was by then legally not sanctioned was highlighted as one of the factors which was also contributing to the aforementioned social ills.

---

<sup>6</sup> Sechaba Brewery Holdings Limited Annual Report - 2009

Having accepted the Khama Commission's Report, the Government sought to minimise the social costs of alcohol abuse while maintaining optimally the undoubted benefits of alcohol in both the Botswana economy and society. In August 2008, the President announced the planned 30% Alcohol Levy to be taxed on all local alcoholic products effective from first November 2008; and which was later increased by 40%, starting on the first of December 2010.

The primary objective of the levy was to minimise excessive alcohol consumption or curtail the abuse of alcohol with the associated social ills emanating from it - drunken driving, sexual immorality and domestic violence. The levy was to be applied to the cost price of all alcoholic products, both imports and locally produced even though only imports were taxed at cost while local production was applied at selling price. This therefore meant that imports were more competitive than KBL products for they were taxed differently. This made KBL sales volumes to drastically drop after the levy had been imposed as analysed below.

#### *1.4.2 Analysis of alcohol-related social ills before and after the levy*

A preliminary investigation into the effectiveness of the alcohol levy in reducing alcohol abuse-related social ills in Botswana has revealed that it has not helped government to achieve this objective (see Appendices 1 and 2 for analysis of individual social ills). Overall, results for the four alcohol-related social ills – road traffic accidents, drunken driving, domestic violence and suicides, reveal a positive increasing trend indicating percentage increases between 2006 and 2011 with positive growth rates. The escalation in the two social ills of drunken driving and suicide cases by 133.2% and 6.2% respectively after the introduction of alcohol levy, demonstrates the defiance of people with regard to the levy, thus confirming it has not been effective in reducing them.

With respect to HIVAIDS statistics (see Appendices 1 and 2) the important ones to the study are those relating to the total of new HIV infections associated with alcohol which

are contributing to an increase in people living with HIV/AIDS. Comparing adult infections for drinking-age and non-drinking age groups reveals that the drinking-age group was more susceptible to infections than the non-drinking age group. The infections for the drinking-age group only decreased by 33.8% in 2007 before the levy and increased by 6.5% in 2009 after its introduction. This was not the case with the non-drinking age group which experienced a dramatic decrease of 73.6% in 2007 before the levy and a further decrease of 17.7% in 2009 after its introduction; confirming that non-drinking subjects performed better.

On the whole, the decreasing trend in the number of infections for the non-drinking age group between 2001 and 2009 is more significant with a decrease of 78.3% decrease and a growth of -45.7% (indicative of rewarding efforts in reducing high HIV/AIDS infection rates as noted in Section 1.39); compared to a decreasing trend in the number of infections for drinking-age group between 2001 and 2009 of only 29.4% decrease with a growth -13.6%.

A further analysis of these two infection types, i.e. adult infections of drinking age and of non-drinking age groups, reveals that out of the total new HIV infections of 57,489; 89.5% constituted adult infections of drinking age compared to only 10.5% of non-drinking age infections. Another feature revealed in these results is that there was more progress made in reducing infections for the non-drinking age category compared to adult infections of drinking age category after the introduction of the alcohol levy. For instance, it is the increase of 6.5% in adult infections of drinking age in 2009 after introducing the levy in November 2008 which increased the total new HIV infections by 4.8% in 2009 after the levy. The implication is that alcohol induces infections. Based on the above analysis of 1.4.2, it can safely be concluded that alcohol has a confounding effect on social ills, i.e. it increases the incidences of these ills.

### 1.4.3 Financial performance of KBL before and after the alcohol levy

A review of KBL's financial performance reveals that the alcohol levy has substantially eroded its profitability, increased its operating costs and reduced its competitiveness. A quick review of KBL's financial performance within 12 months of introducing the levy revealed that:

- Total KBL beer volume of clear beer sales declined by 34.4% within 12 months of introduction of the alcohol levy, while BBL sales volumes declined by 7.8%.
- In the last quarter of 2008, a 30% alcohol levy resulted in 25% decline in profits as clear and sorghum beer dropped by 26.2% and 7.8% respectively.
- The Group's turnover for the 2009 financial year declined by 16% while gross profit was down 11.5% compared to the foregoing year.
- KBL's operating profit declined by 32.6% while that of BBL went down 5.6% from the prior year. Profit after Tax (PAT) was down by 34% and 4% respectively for the two operating entities (KBL Internal Beer Report; November 2008-October 2009; KBL Financial Report, 2009).

To emphasize the effect of cost on profit margin and assess the effect of the alcohol levy on profitability, the costs:sales ratio analysis was used (see Appendices 1 and 2 for an analysis of individual financial indicators).

This revealed the relationship between beer sales and PAT as shown in Figure 1.1.

Figure 1.1: Costs to Sales Ratio and Profit Margin - 2006 to 2011

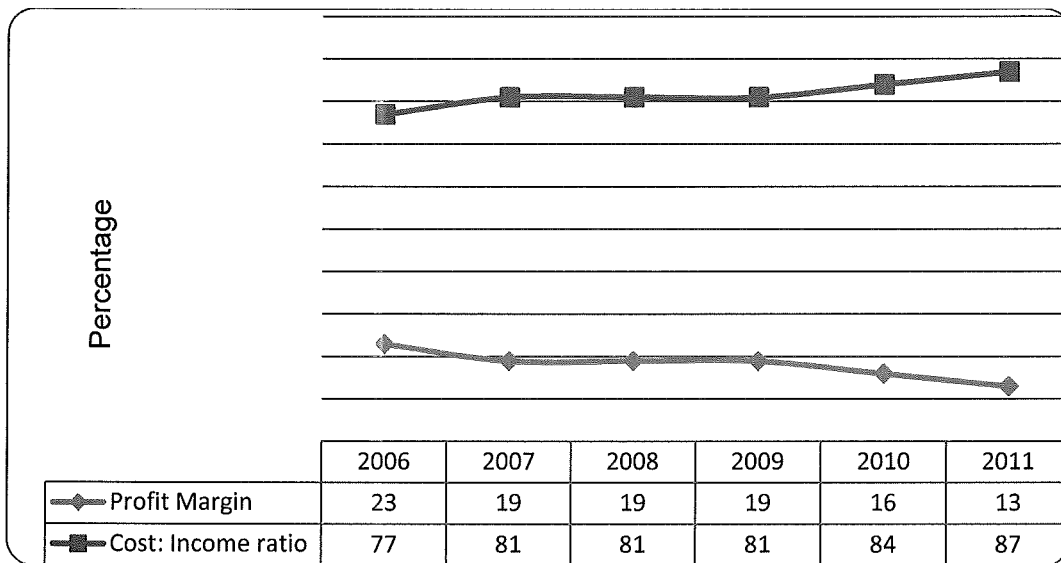


Figure 1.1 shows a causal relationship between the costs:sales ratio and profit margin. Whereas the costs:sales ratio shows an increasing positive trend, the profit margin reflects a decreasing negative trend. The costs: sales ratio increased by 12% between 2006 and 2011, with an annual growth rate of 2%. The profit margin on the other hand showed a decrease of 42% with an annual growth of -10%, reflecting a significant decline.

On the basis of findings in sub-sections 1.4.2 and 1.4.3, it can be concluded that the alcohol levy has not reduced the alcohol-related social ills in Botswana but it has negatively reduced KBL's profitability. It is from this understanding that this study was undertaken to critically evaluate the effectiveness of the levy in addressing the social ills in the light of its negative impact on the financial performance of KBL. This evaluation will also include examining the effectiveness of strategies and measures management was putting in place to mitigate the impact of the levy and ensure sustainable performance in the wake of declining profitability and non-competitiveness in the market. Being able to contribute to the search for factors contributing to apparent ineffectiveness of the alcohol levy and suggest measures for improving on its



application should be beneficial to the Government, the alcohol industry, KBL management and the community.

### **1.5 *PROBLEM STATEMENT***

Although the rationale behind the introduction of the alcohol levy by the Government of Botswana is well articulated, it is its failure to reduce excessive alcohol consumption or alcohol abuse in the country that is of concern. What also appears to be worrying is the negative impact this tax has had on KBL's financial performance; a key player in the alcohol industry. This may in the long run affect its viability with ghastly economic and social implications for the economy of Botswana.

The research problem is therefore defined as the "inability of the Alcohol Levy to reduce or stop alcohol abuse in Botswana". This has resulted in high rates of alcohol-related social ills in the country; and decreased revenue, high operating costs, low competitiveness; and low profitability for KBL. The purpose of the study is to highlight factors making it difficult for the alcohol levy to reduce alcohol-related social ills and make recommendations for improving its application, taking into account its negative impact on the financial performance of KBL and the alcohol industry.

### **1.6 *AIM OF THE STUDY***

The aim of the study is to investigate factors contributing to the failure of the alcohol levy to reduce alcohol abuse in Botswana and recommend measures for addressing them. The study will also assess the effectiveness of strategies and measures KBL management put into place to mitigate the impact of the levy, a PEST factor, remain viable and sustain its performance now and in the future in the light of declining profitability.

## **1.7 RESEARCH OBJECTIVES**

These are to:

- 1) Examine stakeholder perceptions on the role of the alcohol levy as a tool for alcohol abuse reduction in Botswana.
- 2) Carry out a statistical alcohol-related analysis of selected social ills and profitability indicators of KBL in the past six years to establish the extent and trends of these indicators.
- 3) Examine factors contributing to failure of the alcohol levy to reduce alcohol-related social ills in Botswana.
- 4) Assess the effectiveness of strategies KBL used in mitigating the impact of the intervention from Government so as to remain in business and be profitable.
- 5) Recommend strategies for effective application of the alcohol levy

## **1.8 RESEARCH QUESTIONS**

The research question is:

To what extent is the alcohol levy an appropriate strategy for reducing alcohol abuse in Botswana, thereby resulting in lower rates of alcohol-related social ills; with minimal impact on the financial performance of the alcohol industry?

The investigative questions are:

- 1) What are stakeholder perceptions on the alcohol levy as a tool for alcohol abuse reduction in Botswana?
- 2) What are the extent and trends of alcohol-related social ills and profitability indicators of the industry in the past six years?
- 3) What factors have contributed to the failure of the alcohol levy to reduce alcohol-related social ills in Botswana?

- 4) How effective are the strategies the alcohol industry has been using in mitigating the intervention from Government so as to remain in business and be profitable?
- 5) What strategies should be recommended for effective application of the Alcohol Levy in Botswana?

## **1.9 CONCEPTUAL CLARIFICATION**

Defining key concepts is important because it gives operational definitions to the concepts as they will be applied in the study. The following key terms have been defined within the context of this study:

### **Investigation**

Thorough examination of causes or factors associated with the problem.

### **Factors**

Refers to those things that prevent or constrain normal or optimal performance.

### **Failure**

This is inability to meet a desired objective.

### **Alcohol levy**

A tariff imposed on alcohol and alcohol-related products by the authorities.

### **Alcohol abuse**

Misuse or irresponsible consumption of alcoholic products

### **Alcohol industry**

Business entities that trade in alcohol and its related products.

**Alcohol-related social ills**

Societal harms or problems that are brought about by alcohol.

**Profit margin**

Returns or yields that result from business operations.

**Cost:sales ratio**

A financial measure used to value stock relative to its cost.

**Profitability**

Financial or economic effectiveness or viability of an entity.

**1.10 SIGNIFICANCE OF THE STUDY**

Over the years many countries have come up with different interventions with the aim of doing away with alcohol abuse and its related ills. Among them was the use of an alcohol levy on alcoholic products which has been tried before in many countries including USA, Australia and the Russian Federation. The results do not convincingly show that this strategy has been effective in achieving this objective. This appears to set a good precedence for its failure to achieve the same objective in Botswana. In view of this, the value of this study should be seen in making an attempt to investigate factors contributing to a failure of the levy to reduce alcohol abuse and suggest measures for improving on its effective application; while also taking care not to negatively impact on financial viability of the alcohol industry.

While the focus of many studies done around this subject has mostly been on effects of the levy on the socio-economic well-being of a country in terms of employment, costs, GDP of sector; this study has principally been orientated towards alcohol-abuse related ills which have been rising with many interventions including the alcohol levy to reduce

them. In short the aftermath effects of alcohol are the key to this study as opposed to generally socio-economic effects and how the economy is affected. Thus the views generated on these issues are expected to be helpful to those concerned with a morally alcohol-abuse free society in Botswana.

The introduction of an alcohol levy was met with mixed feelings from the general public and incited a discourse from among different political institutions and spheres of the society. The value added in this research will be to provide baseline information to inform all stakeholders regarding the levy and its intended benefits. This then will remove all doubts, misunderstandings and misconceptions which have permeated the levy at the moment. In the researcher's view, the research report will bring about a different school of thought where the conversation will move away from 'why the levy' and 'is it effective' to how it can be made effective to curtail abuse and related ills.

The findings of this study are expected to benefit the alcohol industry in that it will be able to devise measures that will enable it to maintain profitability in its operations while at the same time being socially responsible and dealing away with abuse. This will also help the alcohol industry in putting together a case to the government on better alternatives to manage alcohol abuse in Botswana.

At a personal level, the researcher is expected to gain experience and insight in debating issues of national concern. This would be a great contribution in terms of findings and facts of importance to the debate around the alcohol levy and ultimately its policy formulation.

### **1.11 METHODOLOGY**

In carrying out this research, the researcher took a positivist view of the world hence the research will be done through the use of a quantitative research design. The study uses three sample groups, alcohol industry employees, customers (hotels and restaurants; retailers and wholesalers), and experts (economists, government policy makers, and civil society) who are involved with tax issues and social issues affecting

society. A quantitative survey using a questionnaire as an instrument of data collection was used to collect primary data; while document review generated secondary data relating to alcohol abuse social ills and the financial performance of KBL. This section is covered in great detail in chapter three.

### **1.12 ORGANISATION OF THE STUDY**

This study is composed of five chapters. Chapter one lays the foundation of the study or gives a research overview. The second chapter discusses the theory underlying the subject matter while the third chapter gives the research methodology used in the research process. Chapter four presents the results and analyses the data thereof as well as interpreting the findings with implications and conclusions. Chapter five discusses the findings of the research with particular reference to the problem statement and relative to theory or literature; including conclusions and recommendations as well as reflections drawn from the study.

### **1.13 CONCLUSION**

This chapter presents the scope of the study which focuses on an alcohol levy's ineffectiveness to reduce alcohol abuse in Botswana. It is against this backdrop that a research question was conceived to look into factors that impact on the ability of the levy to deliver on its mandate. The next chapter deals with the literature review.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 INTRODUCTION**

This chapter contains a discussion of some of the theoretical and empirical literature in the field of alcohol consumption and abuse. It is organized into six sections: the concept of alcohol abuse; measures for managing alcohol abuse; an alcohol levy as a strategy for reducing alcohol abuse; application of an alcohol levy in selected countries; factors contributing to the failure of an alcohol levy to reduce alcohol-related social ills; strategies required by affected companies and lastly an overview of alcohol levy application in Botswana. The chapter ends with a conclusion and the discussion continues under other sections.

### **2.2 CONCEPT OF ALCOHOL ABUSE**

Alcohol is a psychoactive substance and its consumption in moderation can lead to feelings of relaxation and euphoria, causing it to be consumed widely in many social scenarios and across the socio-economic spectrum<sup>7</sup>. It is also an addictive drug, however, and its misuse is associated with a wide range of dose-related adverse consequences that can lead to significant harm to the individual and society.

While alcohol abuse has been the subject of discussion and research for so many years now, there has not been one common definition for it. Different scholars have deliberated on it and defined it differently based on their individual contexts. According to Dryden–Edwards (2011:1) alcohol abuse is a disease characterized by maladaptive patterns of drinking that result in negative work, medical, legal, educational and/or social effects on a person's life.

It is also defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), as a maladaptive pattern of alcohol use leading to clinically significant impairment as

---

<sup>7</sup> British Medical Association 2008:VI

manifested by one or more of the following symptoms during a 12-month period, recurrent drinking resulting in failure to fulfil obligations at work, home or school, recurrent substance use in situations in which it is physically hazardous, substance-related legal problems, and continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance<sup>8</sup>. Moreover, it is also described as a pattern of alcohol consumption causing health problems directly related to alcohol and this could include psychological problems such as depression, alcohol-related accidents or physical illness such as acute pancreatitis<sup>9</sup>.

### **2.3 ALCOHOL-RELATED SOCIAL ILLS**

When consumed in moderation, alcohol is a product which is widely enjoyed by most communities and, when consumed appropriately, can even have health benefits and depending on the pattern of consumption, alcohol can provide protection against diseases, most important among them being coronary heart disease (Rehm et al., 2004:960). However, it also has a darker side. The excessive consumption of alcohol is usually associated with a range of problems, including health issues and lower life expectancy, reduced workplace productivity, accidents, drunken driving, violence and other forms of crime<sup>10</sup>.

Collins and Lapsley (2008:29) estimate that the social costs of alcohol abuse in Australia in between 2004 and 2005 were over \$15 billion.

The effects of alcohol abuse usually go far beyond an individual user; it affects the family of which the given individual is part. Since that family is part of the larger society, in the long run the adverse effects are notable within the society in which we live and ultimately the impact of alcohol abuse in the society cuts across all sectors of society,

---

<sup>8</sup> British Medical Association 2008:VI

<sup>9</sup> Nice Clinical Guideline 115,2011

<sup>10</sup> WHO Global Status Report 2004



notably the health sector, the police, social welfare and the criminal justice system just to mention but a few.<sup>11</sup>

Ezzati (2002:10) notes that 4% of the global burden of diseases is attributable to alcohol, or about as many deaths and disabilities globally as are attributable to tobacco and hypertension. Some alcohol consumers become generally negligent which increases the risk of transmission of sexually transmissible diseases including AIDS. This therefore means that alcohol contributes significantly to the public health problem that is already dominated by diabetes, HIV/AIDS and cancer.

Gartner (1994:11A) contends that alcohol is a leading factor in 68% of manslaughters, 62% of assaults, 54% of murders and attempted murders, 48% of robberies and 44% of burglaries. Gartner (1994:11A) further notes in the same study that two-thirds of child abuse cases are alcohol related as are 72% of rape cases. Alcohol is highlighted as a factor in all road traffic arrests and leads to all the injuries and deaths associated with road traffic accidents. A declaration has been made that affirmed a clear association between alcohol and road traffic injury within six hours of the alcohol consumption<sup>12</sup>.

Other alcohol-related social ills include teen-suicide, pregnancy, drop-out and other violent crimes. To underscore the latter, the statistics released by the Federal Bureau of Prisons, in the United States of America revealed that 49% of prison inmates confessed to having been under the influence of alcohol, other than drugs when they committed the crime for which they were incarcerated for (Hall, 1993:8A).

Alcohol has been named as a leading risk factor that leads to suicides in so many ways, more indirectly than directly and the combined effect of alcohol use and depression is a major risk factor for suicides<sup>13</sup>. Accordingly the use of alcohol at the time of a frustrated

---

<sup>11</sup> WHO Global Status Report 2004

<sup>12</sup> The Bangalore Study 2004

<sup>13</sup> The Bangalore Study 2004

phase in life often makes a person less inhibited about committing suicide by hanging, poison or by self-inflicted injuries<sup>14</sup>.

About 26.8% of alcohol users reported that they had problems maintaining a healthy sexual relationship with their partners. Due to the uninhibited behaviour as an effect of alcohol use, there is a likelihood of risky sexual behaviour that contributes to the spread of HIV and AIDS<sup>15</sup>. In simple truth, alcohol abuse encourages people to engage in dangerous sexual activities and wrong decision-making that might otherwise be prevented by sobriety.

Alcohol abuse can have far-reaching repercussions on the economy of a country in that it can reduce productivity in both the public service sector and the private sector as a result of a number of factors. According to Bacharach et al. (2010:334), one of the effects of alcohol abuse is employee absenteeism from work as people are too drunk to work or frequently seek leave after a drinking spree. Alcohol abuse may also contribute to below par productivity at work resulting from lack of self-direction or consciousness<sup>16</sup>. Due to the risks associated with alcohol like domestic violence, road traffic accidents that may impact on the workforce, productivity at firms and public service may be affected thereby negatively affecting the country's domestic output and therefore economy.

Alcohol abuse is a key factor in influencing society's cultural and moral decay. People, especially youths, are engaged in despicable acts due to alcohol abuse like rapes, drunken driving and ill manners. It also brings about domestic violence resulting in the breakdown of family structures and education<sup>17</sup>. Drinking can affect one's performance as a parent as well as the contribution of parents to the upkeep of the household making children's social and psychological environment not conducive<sup>18</sup>. Drinking

---

<sup>14</sup> Guruja(as cited in the Bangalore Study)

<sup>15</sup> The Bangalore Study 2004:40

<sup>16</sup> WHO Global Status Report 2004

<sup>17</sup> Obot (as cited in WHO Global Status Report 2004:63)

<sup>18</sup> Molamu (as cited in WHO Global Status Report 2004:61)

outside the home would mean little time spent with the family and the financial burden of alcohol purchase as well as lost wages can leave other family members destitute<sup>19</sup>.

The ideal result of a reduced level of alcohol abuse would most likely lead to minimized levels of alcohol-attributable social ills like an improved gross domestic output and effectively a better performing economy. For example, reducing the burden of alcohol abuse in the work place would mean less shortage of the workforce through absenteeism and underperformance but higher productivity through a highly performing and motivated labour force.

The reduced level of alcohol abuse would also minimize public expenditure for governments in areas of health, policing and road safety. This means governments would spend less in medical resourcing as injuries associated with alcohol abuse would be no more or at most minimal, no heavy policing for criminals influenced by alcohol and no more chasing after road offenders like drunken drivers.

While it has been observed that the burden of diseases attributable to alcohol is considerable, reducing alcohol abuse would accordingly reduce the occurrence of such diseases and save lives. Moderate alcohol consumption may provide some health benefits as it may reduce the risk of developing heart diseases and consequently deaths through heart attacks, and moderate use of alcohol can reduce one's risk of strokes, particularly ischemic strokes, gallstones and possibly the risk of diabetes (Rehm et al., 2004:960).

Managing alcohol abuse would be great news for victim families of domestic violence associated with alcohol abuse, in that peace may reign within the household and family ties and therefore the family structure would be strengthened. The stronger the family structure, the more disciplined our communities would be, with well-defined and strong social fabrics.

---

<sup>19</sup> WHO Global Status Report 2004

## **2.4 MEASURES FOR MANAGING ALCOHOL ABUSE**

Taxation on alcoholic beverages is one of the commonly used measures to curtail the misuse of alcohol. A large literature establishes that alcohol prices or taxes have an inverse relationship with drinking, and public policies that raise alcohol prices, can be a very effective means of reducing alcohol consumption (Alexander et al., 2009:3).

There has, however, been a wealth of international research on elasticity in other countries. The relevant literature by Anderson and Baumberg (2006:265) suggests that in many studies of alcohol demand elasticities indicate variations from country to country (and often over time), but universally indicate that higher prices will lead to lower demand.

Anderson and Baumberg (2006:264) summarise the results of the international research as follows: An increase in the price of alcohol reduces alcohol consumption, hazardous and harmful alcohol consumption, alcohol dependence, the harm done by alcohol, and the harm done by alcohol to others than the drinker. The research goes on to suggest that the exact size of the effect will vary from country to country and from beverage to beverage but there is strong evidence for the effectiveness of alcohol taxes in targeting young people and the harms done by alcohol.

Strong research evidence exists that the Australian government has, in its tax instruments, a potent tool to influence alcohol prices, and therefore alcohol demand. It has four types of tax instruments which are currently applied to alcohol, that is Goods and Services Tax (GST) which is applied across the board at a flat rate on goods and services, customs duties which are imposed only on imported alcohol, excise duties which are based on alcohol content per litre of alcohol and the Wine Equalization Tax which is levied at wholesale price (Anderson & Baumberg 2006, Table 7.7). This provides a good illustration of the fact that alcohol taxes are capable of being designed explicitly and collectively to target the types of alcohol known to be the subject of abuse and successfully curtail the abuse.

Along the same line of thought, the Botswana Government introduced the alcohol levy in 2008 with the objective of managing alcohol abuse and its associated social problems. Nonetheless, a controversy has always existed around this intervention as to the extent to which it has helped Botswana achieve its goals and objectives for introducing it. Since the focus of this study is on an alcohol levy, it will be discussed in detail in the following sections.

Bans on alcohol advertising are another alternative for managing alcohol abuse which has been a subject of public discourse for many years, the area of contention being whether advertising increases alcohol consumption or merely influences brand choice. The alcohol industry and the public health advocates have not seen eye to eye on this matter although later studies have revealed a positive correlation between alcohol advertising and consumption thereof.

Akinson (2012:1) argues that an advertising ban on alcohol will not significantly alleviate the problem of alcohol abuse. He contends that Britain's drinking culture is a societal issue emanating from a number of factors which cannot be resolved with a simplistic ban on alcohol.

Anderson and Bamberg (2006:287) who are believed to have done the most consistent and comprehensible research work around this area summarise their findings on the matter as follows: restricting the volume of commercial communications of alcohol products is likely to reduce harm as a strong relationship exists between alcohol consumption and advertising. This therefore means that bans on alcohol advertising might be a viable alternative to help manage alcohol abuse.

A Lower Blood Alcohol Concentration (BAC) drink driving limit is yet another option that can be used to curtail alcohol abuse and therefore the associated social ills. While there is substantial evidence that random breath testing loses much of its effect if levels of enforcement are too low or if the enforcement effort is insufficiently well targeted, it can be safely concluded that greater enforcement of the BAC drink driving limit can yield

desirable results in managing alcohol abuse. For example, Henstridge et al. (1997:40) found that the New South Wales RBT, which was introduced in that state in 1982, 'almost ceased to have any impact on some series of accidents in the late 1980s due to the decay in the introduction effect and was "saved" only by increased levels of enforcement that had a substantial "residual deterrent" effect'. Residual deterrence represents the lagged effects of enforcement.

In their findings, Anderson and Baumberg (2006:250) also conclude that the drink-driving policies that are highly effective include lowered blood alcohol concentration (BAC) levels, unrestricted and random breath testing, administrative license suspension, and lower BAC levels and graduated licences for young drivers. Reduced hours of sale in retail outlets are meant to control availability and access of alcohol by way of controlled trading hours like it is the case in Botswana where the Liquor Trading Act was reviewed to try curtailing excess consumption. Trading hours are limited to two in the afternoon to ten at night during week days and no trading on Sundays and public holidays.

Alcohol selling has always been subjected to some restrictions regarding where it should be taken and the allowed drinking age. Despite these measures, abuse has not declined, hence the need to put some more stringent controls around it, that is, controlling drinking environments. One form of controlling the drinking environment of alcohol is to limit access of alcohol by limiting the number of alcoholic outlets by way of licensing. Most European Union member states prohibit the sale of alcohol to young persons below a determined age while others have resorted to limiting alcohol trading hours (Anderson & Baumberg, 2006:255).

A New South Wales study reported that assaults at licensed premises were more likely to occur during extended trading periods, most frequently between midnight and three o'clock in the morning (Briscoe & Donnelly 2003:18-33). Chikritzhs et al. (2007:1610) also found in Australia that a prolonged trading period, from midnight to one in the morning was accompanied by an increase of 70% in alcohol-related violent incidents.

It can henceforth be inferred that the increased problems associated with later trading result from increased alcohol consumption. Given this strong evidence regarding the relationship between alcohol trading hours and abuse, it can be concluded that controlling the drinking environments of alcohol by way of shortening trading periods can be effective in curtailing alcohol abuse.

Collins (2008) discusses an anti-drink-driving intervention, the alcohol ignition lock, which of late has been popular in several European countries, the purpose of which is to prevent convicted drink-driving offenders from driving while under the influence of alcohol, by the use of ignition interlocks. For one to drive a vehicle fitted with this device, they must first provide a breath specimen that is within the permissible BAC. It is complemented by random retests to prevent circumvention of the device by getting other people blowing into the mouthpiece for the driver to be able to drive the car.

Worldwide experience shows that a total prohibition on production, sale and consumption of alcohol usually does not succeed, unless firmly rooted in the local culture or strong religious beliefs of the majority of the population<sup>20</sup>. There is a contention that although there is some evidence that total prohibition of alcohol does reduce consumption and alcohol-related problems, it could also promote organized crime and corruption through cross-border smuggling and brewing of illicit liquor<sup>21</sup>.

## **2.5 ALCOHOL LEVY - A STRATEGY FOR REDUCING ALCOHOL ABUSE**

An alcohol levy, otherwise termed an alcohol tax, is a tax on the sale or use of alcoholic products that is usually passed on to end-users or the people that consume alcohol. The revenue obtained through this tax is often used to fund government functions such as construction of infrastructure like rehabilitation centres, maintaining public order like resourcing police and education campaigns on alcohol abuse. These funds can as well be used for supplementing the government budget, for example road construction,

---

<sup>20</sup> Ritson (as cited in Alcohol Control Policies in the South East Asia Region 2006:37)

<sup>21</sup> Levine (as cited in Alcohol Control Policies in the South East Asia Region 2006:37)

building schools, health infrastructure, pensions for the elderly and youth empowerment initiatives, to mention but a few.

Taxes imposed on particular commodities are sometimes hypothecated, that is pledged for a particular purpose rather than for general revenue, for example, a fuel excise is sometimes used to pay for road construction, bridges and the protection of the environment or rehabilitation thereof (Anon, 2003:1). The same principle as alluded to earlier can as well be adopted for alcohol levy to fund alcohol educational campaigns and rehabilitation centres or resource policing in the roads.

Levies usually have one of two purposes, either to generally raise revenue and/or to discourage a particular behaviour (Anon., 2006:2). For example, taxes such as those on fuel, alcohol and tobacco can be justified on either end. The same author continues to argue that, while alcohol taxes may sometimes be used as a mode of collecting revenue for the government to supplement its budget, it is generally used by governments to raise product prices with an objective of managing alcohol accessibility and cutting down on consumption and its related social ills (Anon., 2006:2).

When used with an objective of modifying usage patterns, an alcohol levy is premised on the idea that its misuse is a risk to one's life or health. It can, therefore, be categorized as sin tax, and increases on the product price would discourage people from consuming it or at least lessen the use of it.

## **2.6 APPLICATION OF AN ALCOHOL LEVY IN SELECTED COUNTRIES**

Alcoholic beverages have always been subjected to tax in most countries and while this comes mostly as an excise tax, there are other taxes that are imposed on alcohol manufacturing and consumption, for example, sales taxes otherwise known as an alcohol levy. The burden of this tax is passed through the supply chain and onto the final consumer exerting pressure on consumer demand. Hence the alcohol levy is usually meant for modifying the societal drinking patterns and most importantly to alter behaviour with regard to alcohol consumption.



The concept of 'alcohol levy' emanates from the quest for managing the use of alcohol by way of imposing taxes to discourage excessive consumption (Richupan, 2005:7). The reasoning behind this levy is that due to higher prices, affordability would be reduced and people would now consume less quantities of alcohol and therefore less incidents of alcohol related crimes.

The rationale behind increasing taxation on alcohol in Botswana as a policy measure was premised on this concept, that is, by making alcohol beverages more expensive, buying power would diminish and per capita consumption would be decreased and with it the incidence of social ills. Simply put, the need to reduce or stop alcohol abuse in Botswana just like any other country in the world prompted this approach of alcohol taxation. This approach is supported by Collins and Lapsley (2008:14) in their findings on the alcohol levy that strong evidence exists in Australia and internationally that higher alcohol taxation can be very effective in limiting alcohol consumption.

In a study conducted in the United States of America, there was evidence that alcohol demand may not respond proportionately to price changes as previously claimed (Nelson, 1997:83–102). The data analysis comes from a number of sources, including quarterly data from 1974 through 1990 on per capita consumption, real income, real alcohol prices, and the age composition of the U.S. population. The study revealed less responsive price elasticity of  $-0.16$  for beer,  $-0.58$  for wine, and  $-0.39$  for spirit and in the same analysis a strange trend line emerged on alcohol prices and consumption. While the real prices of alcoholic beverages have been declining in the US since 1978, per capita consumption also declined for the same period (Nelson, 1997:100). These trends contradict the law of demand, which predicts that falling prices will lead to higher consumption, *ceteris paribus* and vice versa.

In contrast, Dee (1999) reported that alcohol levies have a somewhat insignificant statistical effect on teenage drinking in the United States. The results accentuated the fact that alcohol prices were a less salient determinant of the drinking behaviour of college students than in other population groups. This finding contrasts with most other

studies, which have relied mainly on variations in taxes or prices to identify the effects of these variables on consumption. The research suggested that raising the legal drinking age beyond eighteen years considerably reduced the number of high school seniors in each drinking category. The contrast between these research findings and the accumulated weight of previous research indicates a clear need for additional studies to clarify how alcohol levies or taxes and other factors affect various patterns of drinking among different groups.

### 2.6.1 *IMPACT OF THE LEVY*

As highlighted in chapter one, the preliminary studies into the effectiveness of the alcohol tax in reducing alcohol-related social evils in Botswana has shown that it has not yielded positive results since its introduction (as seen in Appendices 1 and 2).

As regard HIV/AIDS statistics (see Appendices 1 and 2) the results show an indifferent picture of the relationship between alcohol tax and HIV/AIDS infections. While the infections for the drinking-age group declined by 33.8% in 2007 before the levy and increased by 6.5% in 2009 after its introduction, it was not the case with the non-drinking age group which recorded a dramatic decrease of 73.6% in 2007 before the levy and a further decrease of 17.7% in 2009 after its introduction. Based on the above analysis of Section 1.4.2, there is reason to conclude that alcohol has a puzzling effect on social ills in Botswana, that is, some may argue it increases incidences while some argue otherwise.

The positive contribution of alcohol to society takes a number of forms, some quantifiable and others difficult to quantify or even non-quantifiable. Some of these benefits are economic in nature, whereas others impact directly on society and health. These socio-economic benefits of alcohol include those that are directly and indirectly derived from employment in alcohol manufacturing and logistics around it. The retail industry in bars, hospitality and advertising creates a significant percentage of employment for members of society.

A complex relationship has always existed between an increase in the alcohol levy and alcohol consumption. While some researchers have shown that increases in price emanating from an increase in tax brought about decreases in alcohol consumption, other studies did not support such a conclusion (Dee 1999). This paper, however, does not seek to take a position on the matter but merely intends highlighting conflicting views of scholars. The general principle of economics is that upon increasing the price of consumer goods, consumer demand for those goods would go down and since alcohol is classified as a consumer good then the same principle should apply.

It has been noted that while increased taxation may reduce consumption of commercially produced alcohol like clear beer, it also makes a significant contribution to harmful drinking patterns of other beverage drinks, both licit and illicit. An increased trade in illicit beverages is usually associated with a new range of social problems like the emergence of residential shebeens and can be attributed to the alcohol levy. Residential shebeens then mean poor controls around the alcohol trade and therefore it becomes difficult to impose the levy. Moreover, in an instance where a part objective of the levy is to raise revenue to supplement government budget, revenues may actually decline as non-taxed beverages like home-made brews substitute those that are controlled and taxed.

In its published results the year ended 31 March 2010, Sechaba Holdings, which is the holding company of KBL and Botswana Breweries Limited (BBL), recorded a twenty-five percent decline in profits attributed to the thirty percent alcohol levy as clear beer and sorghum beer dropped by twenty-six point two percent (26.2%) and seven point eight(7.8%) percent respectively. "KBL alcoholic beverage sales decreased by 34.5 percent while BBL sales volumes declined by 7.8 percent during the financial year," Sechaba says in a statement (Benza, 2010).

Proposals to tighten alcohol policies have almost inevitably met opposition on the grounds that they would have a negative impact on, among other things, employment and economic growth of the country in an already turbulent economic climate as the

alcohol industry has always made a significant contribution to the national Gross Domestic Product. These counter arguments are however, usually founded on models which do not necessarily take into consideration the changes in consumer spending habits which would result from the new alcohol policies.

Pitso and Obot (2011:898) sought to assess the state of alcohol policy in Botswana in the context of a tax imposed on alcoholic beverages. The study noted legislation targeted at managing the problem of excessive alcohol consumption in Botswana that has been enacted since independence in 1966 and a draft National Alcohol Policy which was then a subject of debate.

While the policy recognized the need for the protection of the rights of citizen consumers in terms of safe purchase and consumption, the role of government in ensuring that communities are protected against harmful use of alcohol had to be defined by way of a levy. A clash of interests erupted and it is this discourse that called for a more defined role of the alcohol industry in influencing alcohol-related debates and public health.

#### *2.6.2 EFFECTIVENESS OF THE APPLICATION OF THE LEVY*

Initially, the levy was collected at the point of entry in Botswana and charged on Cost, Insurance and Freight (CIF) of imports whereas it was charged on ex-factory selling price on locally produced products, being those of KBL and BBL. The resultant quantum was thus significantly lower in the case of imported products as compared to local production. Consequently, competitor importers of alcoholic beverages were able to under-cut KBL and BBL pricing significantly, resulting in consumers migrating to more affordable imported alcoholic beverages offered by competitors.

The Group's Director of Corporate Affairs and Strategy, Thapelo Letsholo, says the levy has resulted in comparable locally produced alcoholic beverages being disadvantaged compared to imported alcoholic beverages because the levy is charged on ex-factory selling price for KBL, while in the case of competitor imports it is charged on Cost

Insurance & Freight on import<sup>22</sup>. It is against this backdrop that competitor pricing was able to undercut KBL, hence realize higher volumes because of their cheaper pricing.

While KBL beer volumes showed a dramatic decline, competition was striving, that means more beer was still consumed even after the levy, it was an issue of shifting to cheaper beer brands as opposed to shifting to non-alcoholic beverages. Furthermore, there was the emergence of home-made brews that were not subjected to this alcohol taxation and could not be easily managed by relevant authorities.

## **2.7 FACTORS CONTRIBUTING TO A FAILURE OF AN ALCOHOL LEVY**

Alcohol taxation as a stand-alone intervention has always been shown to have minimal impact if not being ineffective at best. Although there are mixed findings from a number of researchers as to its effectiveness on delivering per the set objectives, in areas where the taxation yields positive results, it has always been more effective coupled with other interventions aimed at curtailing alcohol misuse.

Poor controls and regulatory measures on traditional beverages have had an impact on the effectiveness of the levy in that, unlike clear beer, traditional beers are freely drunk at any time and place. This led to a migration of consumers to traditional beers thereby defeating what alcohol tax could achieve. Raw materials and therefore prices are relatively cheap and provide more access to consumers and likelihood of abuse.

The disparity of the taxation of alcoholic beverages between imports and locally produced beer as alluded to in section 2.5.2 above is yet another contributor to the failure of alcohol tax to deliver on its objectives. Initially alcohol tax was collected at the point of entry in Botswana and charged on Cost, Insurance and Freight (CIF) of imports while for locally produced beverages it was charged on ex-factory selling prices. As a result, import alcoholic beverages were significantly affordable, resulting in more consumers migrating to them. When taxation is based upon absolute alcohol the

---

<sup>22</sup> Sunday Standard, 10 August 2011

reduced distortion of consumer preferences results in very significant welfare benefits (Crowley & Richardson, 1997:27). This therefore defeats the purpose of the levy.

## **2.8 CONCLUSION**

Like many other commodities, beverage alcohol is subject to taxation. These taxes are levied by national governments, and often in combination with each other. The main purpose of taxation is to generate government revenue (Anon., 2006:2). However, governments also use taxes on beverage alcohol for several other purposes to attempt to reduce abuse and harm by making alcohol less accessible; to create trade barriers; to encourage the purchase of domestic products over imported products (Manning et al. (as cited in Anon., 2006:3)).

In establishing alcohol policies, governments must weigh commercial freedoms and consumers' rights of access to a product against protecting their citizens. This includes determining levels of taxation that do not impose an undue burden on consumers and restrict their choices or penalize producers by restricting fair trade practices. Like any policy measure that addresses the general population, taxation is a blunt tool and does not differentiate between problematic and unproblematic drinking patterns.

While an alcohol levy has been widely used as a measure to curtail abuse in many countries, there has always existed a debate as to its effectiveness. Many researchers have conducted studies around it but conflicting views have always existed as to its effectiveness. Some countries like Australia have experienced positive outcomes when it is coupled with other interventions when some have seen somewhat insignificant changes after its introduction. Although taxation manages affordability and accessibility, its implementation alone as an intervention does not bear much fruits unless it is complemented by other strict controls like tough penalties for example, on drinking and driving and very limited alcohol trading hours.

## CHAPTER THREE: RESEARCH METHODOLOGY

### 3.1 INTRODUCTION

Research methodology can be described as a framework that defines how a research project is to be carried out. Kothari (2006:13) defines it as a systematic way to solve a problem. It is essentially a structure within which a researcher goes about his work to describe, explain or predict a phenomenon. This chapter is structured as follows: research design, target population of study, research sample and research instrument, limitations of the study, data collection and analysis. This chapter ends with ethical considerations and conclusion.

### 3.2 RESEARCH DESIGN

According to Taylor and Bogdan (1998:15) research design refers to the entire process of research from hypothesizing a problem to writing the narrative, not simply the methods such as data collection, analysis, and report writing. While a positivist view of the world has been adopted, the researcher used both Qualitative and Quantitative approaches in the execution of this research.

A qualitative design was adopted to achieve the following,

- It uses subjective information and observations to describe the context or natural setting of the variables under scrutiny.
- It does not require a strict design plan in the elementary stages.
- It can foster innovation and creativity.
- It is possible to gain more detailed and rich data in the form of comprehensive written descriptions.
- Is useful during the early stages of a study when the researcher is unsure about what to focus on.

Reasons for using a quantitative design,

- It helps the researcher become more objective about the findings.
- It allows the researcher to measure and analyse data.
- Helpful in testing hypothesis because of its ability to measure data and use statistics.
- It is an excellent way of finalizing results and proving hypotheses or disproving a hypothesis.

### **3.3 TARGET POPULATION OF STUDY**

The target population of study refers to all people who the researcher intended to include in a survey. The researcher targeted three sample groups in this study, viz.

- Alcohol industry employees (breweries, restaurants and retailers).
- Consumers (in different income groups),
- Experts (economists, government policy makers, and civil society) who are involved with tax issues and social issues affecting society

### **3.4 RESEARCH SAMPLE**

According to Barker et al. (2002:148) a research sample is a selected set of elements (or units drawn from a larger whole of all the elements, the population). Stratified random sampling was used to sample the data. A stratified random sampling is a sampling procedure in which there is first a separation of the population into non-overlapping groups or sub-groups called strata and then the selection of a random sample from each stratum. In this case, the population was divided into four strata according to location of the respondent i.e. Gaborone, Mogoditshane, Tlokweng and other areas around Gaborone. Gay (cited by Anon, 2012:24) agrees that stratified random sampling is an appropriate methodology in order to make proportionate and therefore meaningful comparisons between sub-groups in the population. Robson (cited by Anon, 2012:24) postulates that sampling theory supports stratified random sampling as an efficient choice because the means of the stratified samples are likely to be closer to the mean of the population overall.



It is important to note that since selections in different groups are made independently, this means that estimators of variance of the whole population can be obtained by adding the variances of the estimators for individual strata. Although one stratum may differ markedly from another, a properly stratified sample will approximately give a representative of the population as a whole. Consequently, the sample in this study was disaggregated by residential location to address the fact that there is wide variance in the locations.

### **3.5 RESEARCH INSTRUMENT**

The research instrument is a tool a researcher uses to collect and structure data, thus transforming data into useful information (Wilkinson, 2000:41). The instrument that was used in this research to collect data is a questionnaire. A questionnaire was a preferred tool to use in this study because the information sought is not complex.

Questionnaires are less invasive as the interviewees can complete them at their own convenience and time. There is also less bias as there is uniform question presentation and no middle-man bias. The respondents are not influenced by the researcher's own opinions in giving their answers. Furthermore, there are no clues, verbal or visual, to influence the respondents.

Questionnaires are very cost-effective when compared to face-to-face interviews. This is especially true for studies involving large sample sizes and large geographical areas. Written questionnaires become even more cost-effective as the number of research questions increases. They are easy to analyse and data entry and tabulation for nearly all surveys can be easily done with many available computer software packages. Questionnaires are familiar to most people and almost everyone has had some experience in completing questionnaires and they generally do not make people apprehensive.

The survey items were divided into four sections. The first section is the demographic information. Questions 1–6 sought demographic information about the selected

respondents in the survey - that is, the items measured the respondent perception according to the following variables: age, gender, marital status, employment, location and gross income.

The second section measures the respondent's general knowledge of alcohol, social ills, alcohol abuse, effects of alcohol abuse and alcohol education policies. The third section measures the respondents' understanding of the alcohol levy in Botswana while the fourth section measures the respondent's knowledge of alcohol levy implications.

### **3.6 LIMITATIONS OF THE STUDY**

- Some respondents did not fully complete the questionnaires while some did not return them at all.
- Some respondents did not cooperate to the point of refusing participation especially government officials who indicated that they were forbidden from participating in alcohol levy related researches.
- Government-owned research findings around the alcohol levy are not readily accessible.
- Participants take long to complete and return the questionnaire.
- Research funding was a challenge as the researcher had to print, distribute and collect the questionnaires to and from different areas respectively.
- Time for conducting the study was also a challenge as the researcher had to juggle in between professional commitments and the research.

### **3.7 DATA COLLECTION**

A survey was administered to a selected sample from a specific population identified by the researcher. The term 'survey' is commonly applied to a research methodology designed to collect data from a specific population, or a sample from that population, and typically utilizes a questionnaire or an interview as the survey instrument. Surveys are used to obtain data from individuals about themselves, their households, or about

larger social institutions. Sample surveys are an important tool for collecting and analysing information from selected individuals and they are widely accepted as a key tool for conducting and applying basic social science research methodology. The Botswana population was the target population with special interest directed at Gaborone and its surrounding areas like Mogoditshane, Tlokweng and other areas in the vicinity.

Two hundred questionnaires were distributed across the targeted geographical locations, allowing for a response rate of at least 75% that is about 150 responses. The questionnaire was hand-delivered to the selected recipients and was given two weeks to complete them. A week later the recipients were called to remind them to complete the questionnaire and also inform them that the questionnaire would be collected the following week. This timetable was important in reminding the recipients to complete the survey and it also increased the likelihood of doubling the initial response rate.

### **3.8 DATA ANALYSIS**

This is the process of systematically applying statistical and/or logical techniques to describe and illustrate, review and evaluate data (Resnik, 2003:93). The researcher analysed data as follows:

- a) Sorting out the questionnaires answered.
- b) Counting each frequency.
- c) Changing all the numbers into frequencies.
- d) Applying the findings into graphs.

The data are largely qualitative with some elements of the quantitative. The data were analysed using descriptive statistics and chi-Square tests analysis. Descriptive statistics are used to examine the relationship between socio- demographic variables and attitudes towards alcohol levy. Chi – Square testing is used to test the hypothesis of relationships between variables or aspects in question. It is used to make informed inferential decisions. IBM SPSS 21 is used to capture and analyse the data. Pictures,

## CHAPTER FOUR: RESEARCH DATA PRESENTATION AND ANALYSIS

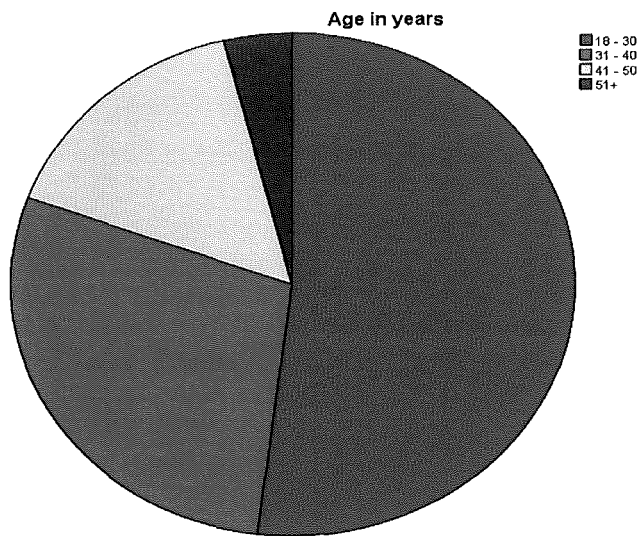
### 4.1 INTRODUCTION

This chapter deals with and/or interrogates the data that were collected through the questionnaires. Here follows a systematic application of statistical and logical techniques to describe, illustrate and evaluate data (Resnik, 2003:93). The chapter begins with an analysis of the sampled population.

### 4.2 UNDERSTANDING THE DEMOGRAPHICS

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	18 – 30	67	44.4	51.9	51.9
	31 – 40	37	24.5	28.7	80.6
	41 – 50	20	13.2	15.5	96.1
	51+	5	3.3	3.9	100.0
	Total	129	85.4	100.0	
Missing	System	22	14.6		
Total		151	100.0		

Fig 4.0 Age in years of respondents



The table and pie chart above show that the survey involved a sample population of 151 people and 129 disclosed their age or age group. More than 50% of those who talked about their age are in the age group 18 – 30 years, with almost 29% being 31 – 40 years, almost 16% being in the age group 41 – 50 years and almost 4% being 50+ age categories. This survey targeted young adults, that is those in the age group 20 to 40 years or we can say most people who responded to the survey are young adults and very few mature adults responded.

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Female	73	48.3	54.5	54.5
	Male	61	40.4	45.5	100.0
	Total	134	88.7	100.0	
Missing	System	17	11.3		
Total		151	100.0		

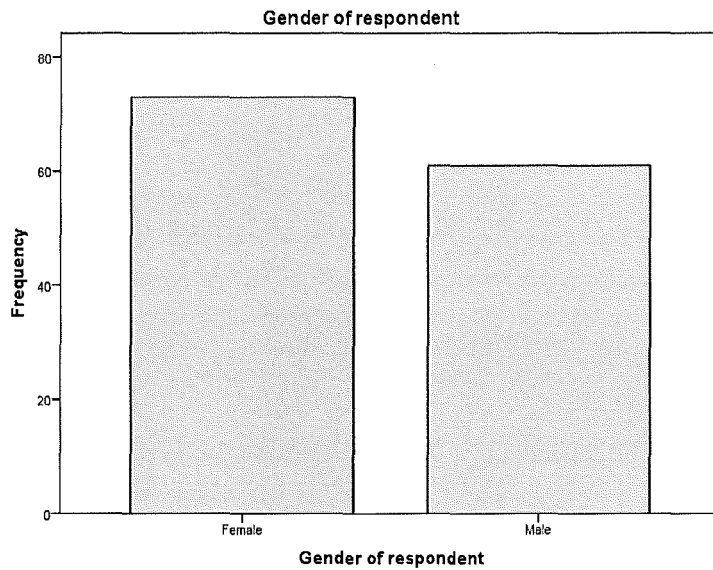


Fig 4.1 Gender of respondents

The respondents were almost balanced in terms of gender, though women seemed to be slightly more than men.

A cross-tabulation of the gender and age in years of the respondents was conducted and table 4.2 shows that women were slightly more than the males in all age groups with a clear-cut difference in the age group 18 – 30 years. Table 4.3 shows the Chi-Square test of age and gender and a P-value of 0.857 indicates that there is no evidence of any relationship between gender and age of respondents. The Chi – Square test was conducted at a 5% level of significance with the hypotheses



$H_0$ : Age and gender are independent vs.  $H_1$ : Age and gender are related.

**Table 4.2 Age in years \* Gender of respondent Cross tabulation**

Count				
		Gender of respondent		Total
		Female	Male	
Age in years	18 – 30	39	27	66
	31 – 40	20	16	36
	41 – 50	9	8	17
	51+	3	1	4
Total		71	52	123

**Table 4.3 Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.768 <sup>a</sup>	3	.857
Likelihood Ratio	.798	3	.850
Linear-by-Linear Association	.005	1	.942
N of Valid Cases	123		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 1.69.

Table 4.4 and Fig 4.2 below show the marital status of the respondents. The ratio of the married to the single is 1: 2 i.e. the number of single respondents is twice that of the married and only 3 and 1 were divorced and widowed respectively. The target population is made up of a lot of young adults who are single.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	2	1.3	1.4	1.4
	Married	44	29.1	31.9	33.3
	Single	88	58.3	63.8	97.1
	Divorced	3	2.0	2.2	99.3
	Widowed	1	.7	.7	100.0
	Total	138	91.4	100.0	
Missing	System	13	8.6		
Total		151	100.0		

Fig 4.2 Marital status of respondents

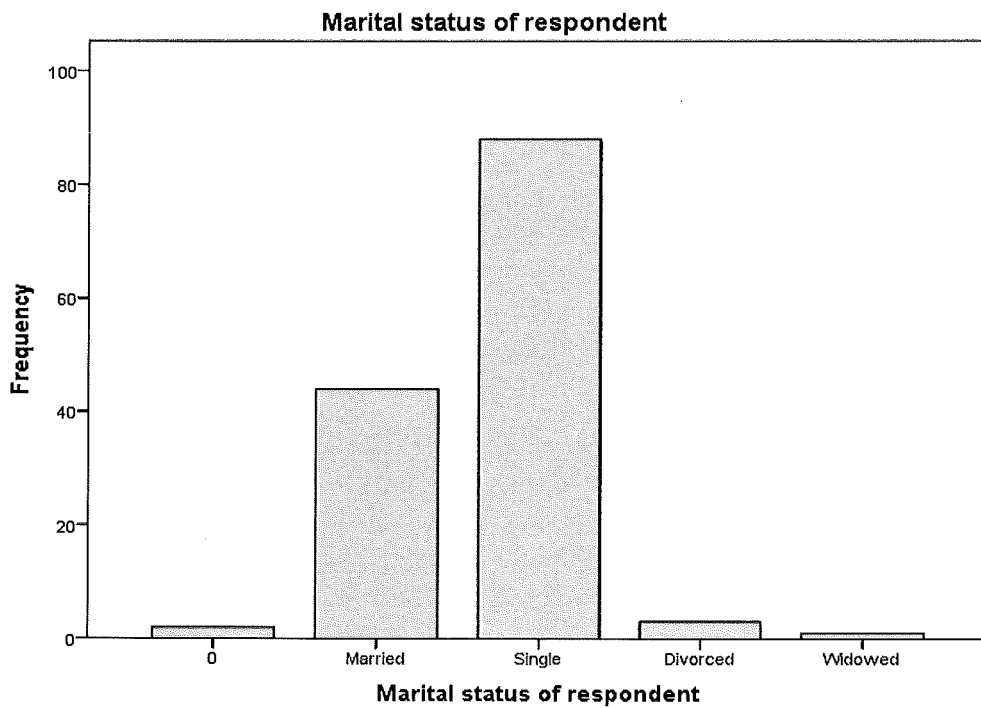
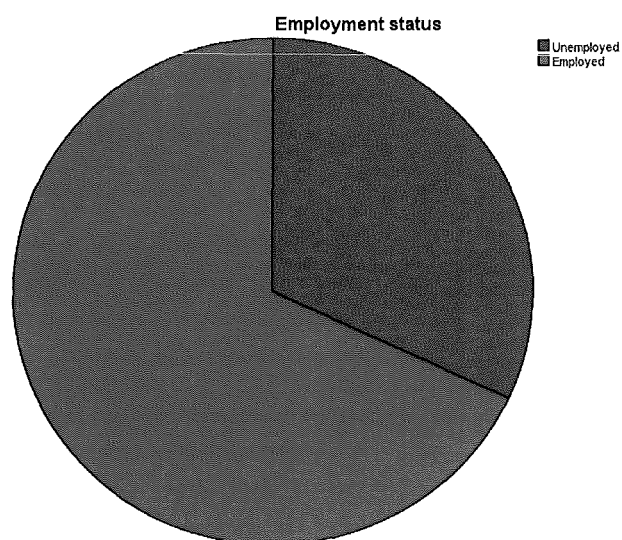




Table 4.5 Employment status					
		Frequency	Percent age	Valid Percent	Cumulative Percentage
Valid	Unemployed	44	29.1	31.9	31.9
	Employed	94	62.3	68.1	100.0
	Total	138	91.4	100.0	
Missin g	System	13	8.6		
Total		151	100.0		

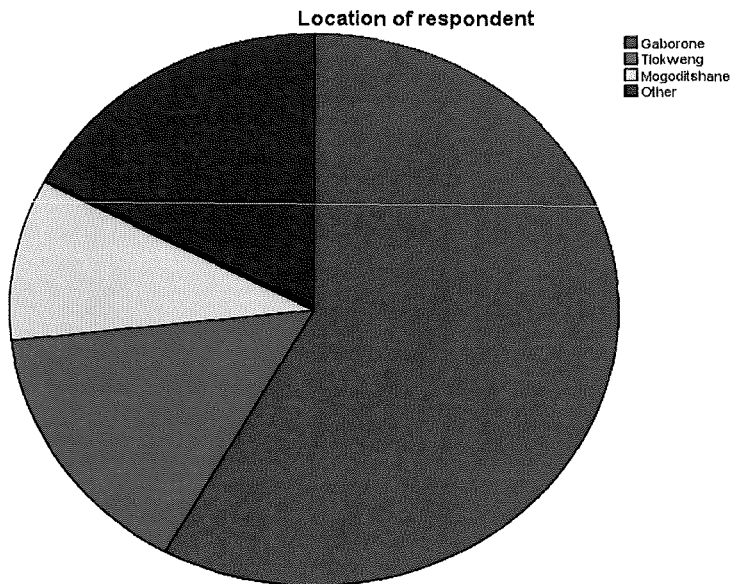
Fig 4.3 Employment Status



Most of the people interviewed are somehow employed. This can be used to show that most of the people in the survey are professionals of some kind. People who can be employed are literate to an extent, meaning that they have some level of education or they are trainable.

Table 4.6 Location of respondent					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Gaborone	80	53.0	58.0	58.0
	Tlokweng	21	13.9	15.2	73.2
	Mogoditshane	13	8.6	9.4	82.6
	Other	24	15.9	17.4	100.0
	Total	138	91.4	100.0	
Missing	System	13	8.6		
Total		151	100.0		

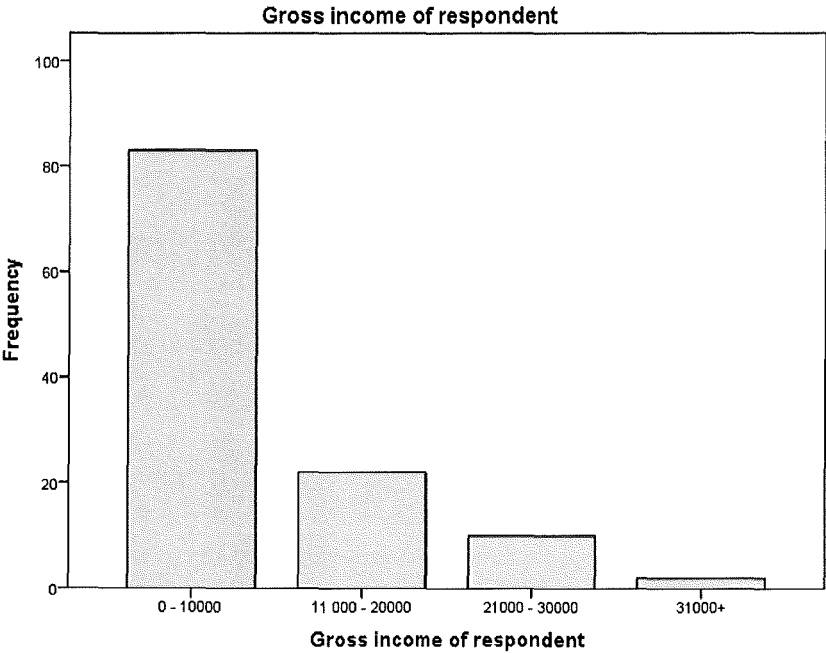
Fig 4.4



The location of respondents was spread from Gaborone, Tlokweng, Mogoditshane and other localities around Gaborone. Most respondents were from Gaborone followed by others from Tlokweng and Mogoditshane. This was so to differentiate between the opinions of people residing in town and those in the rural outskirts of Gaborone.

Table 4.6 Gross income of respondent					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 - 10000	83	55.0	70.9	70.9
	11 000 - 20000	22	14.6	18.8	89.7
	21000 - 30000	10	6.6	8.5	98.3
	31000+	2	1.3	1.7	100.0
	Total	117	77.5	100.0	
	Missing	System	34	22.5	
Total		151	100.0		

Fig 4.5



The majority of the respondents have a gross monthly income of 0 – 10 000 Pula and less than 30% have a gross income above P11 000. With the rate at which the cost of living is changing, this shows that the majority of the professional population are lowly paid.

### 4.3 UNDERSTANDING ALCOHOL ABUSE

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Yes	48	31.8	32.0	32.0
	No	77	51.0	51.3	83.3
	Sometimes	25	16.6	16.7	100.0
	Total	150	99.3	100.0	
Missing	System	1	.7		
Total		151	100.0		

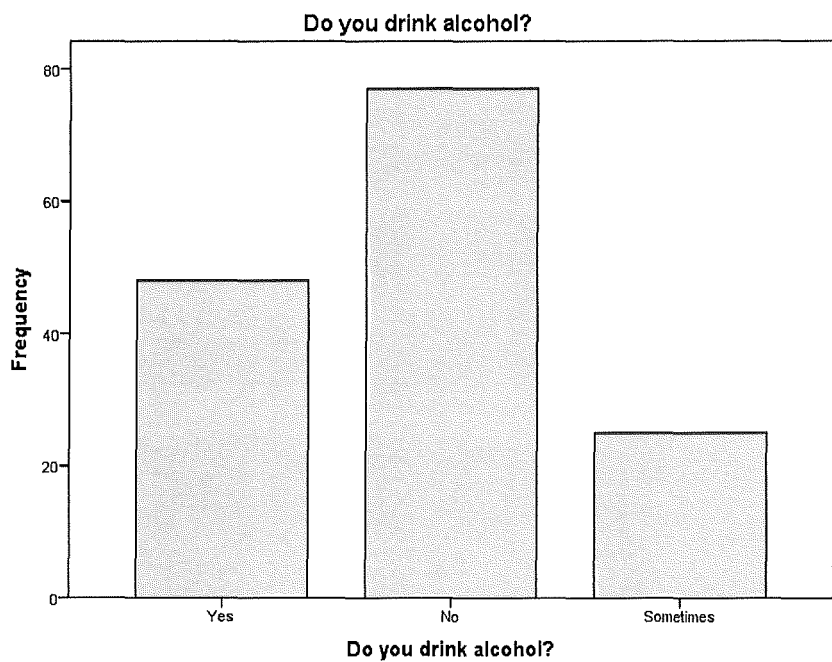


Fig 4.6

Considering the findings above, it shows that the ratio between the number of people who drink alcohol and those who don't drink is almost 50:50. This is because 77 respondents, representing 51% of the study population said they do not drink and 48 plus 25 which is equals to 73 said they drink always and sometimes. Drinking always and sometimes could mean that the person drinks alcohol or they take alcohol of some sort at certain particular times. This indicates a high level of alcohol consumption among the population, that is, if indeed this survey is truly representative of the Botswana population.

Among those who do not take alcohol, women constitute 65.5% while 34.4% are men. Of those who can go for a year without drinking, women make up 85% and men 54.3% (from Mmegi online, 8 April 2013- Botswana drinking rate fell before alcohol levy). Tables 4.8 and 4.9 below show that there is no relationship between age and alcohol consumption.

<b>Table 4.8 Age in years * Do you drink alcohol? Cross tabulation</b>						
Count						
		Do you drink alcohol?			Total	
		Yes	No	Sometimes		
Age years	in	18 - 30	18	39	10	67
		31 - 40	17	15	5	37
		41 - 50	8	8	4	20
		51+	0	4	1	5
Total			43	66	20	129

A p – value of 0.258 against a 5% level of significance confirms that alcohol consumption is independent of age. The findings show that alcohol consumption increases with age.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.741 <sup>a</sup>	6	.258
Likelihood Ratio	9.195	6	.163
Linear-by-Linear Association	.008	1	.929
N of Valid Cases	129		

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is .78.

Crossing alcohol consumption as related to gender (the Chi – Square test) shows that there is a significant relationship between gender and alcohol consumption. A p – value of 0.034 (which is less than a significance level of 0.05) shows that there is somehow a relationship between alcohol consumption and gender of the respondents. Men seem to be drinkers to a larger extent when compared with women who have a high number of “sometimes” cases.

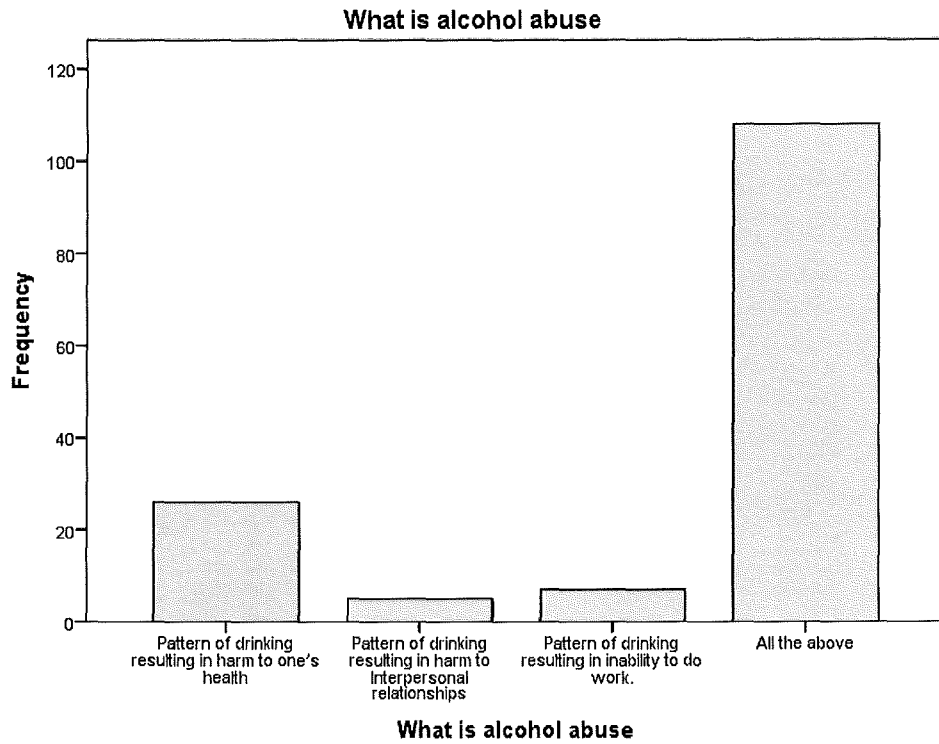
Count				
		Gender of respondent		Total
		Female	Male	
Do you drink alcohol?	Yes	17	27	44
	No	41	26	67
	Sometimes	15	8	23
Total		73	61	134

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.741 <sup>a</sup>	2	.034
Likelihood Ratio	6.768	2	.034
Linear-by-Linear Association	5.599	1	.018
N of Valid Cases	134		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 10.47.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Pattern of drinking resulting in harm to one's health	26	17.2	17.8	17.8
	Pattern of drinking resulting in harm to Interpersonal relationships	5	3.3	3.4	21.2
	Pattern of drinking resulting in inability to do work.	7	4.6	4.8	26.0
	All the above	108	71.5	74.0	100.0
	Total	146	96.7	100.0	
Missing	System	5	3.3		
Total		151	100.0		

Fig 4.7

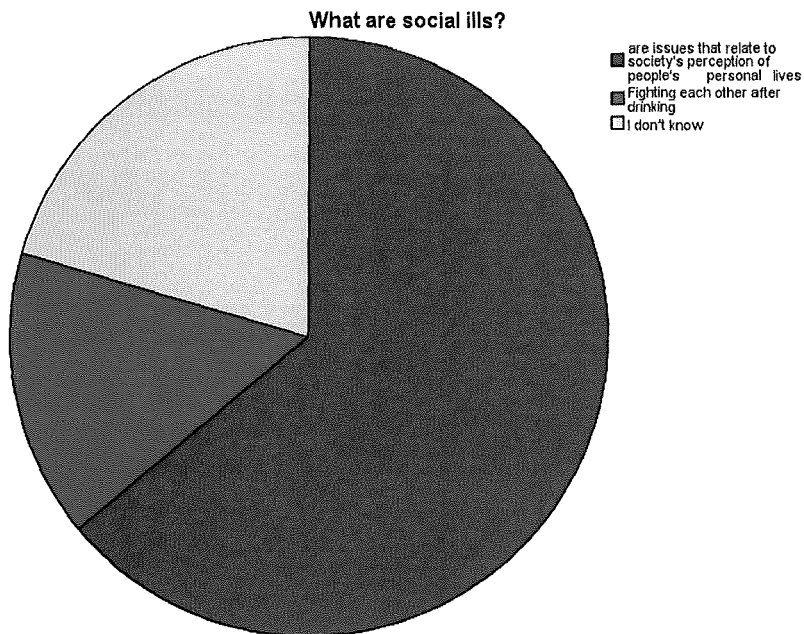


From Table 4.12 and Fig 4.7 above, most people seem to know or understand what alcohol abuse is. The majority were able to pick out all the different forms in which alcohol abuse manifests itself in communities. This shows some level of awareness of alcohol abuse and its consequences.



Table 4.13 What are social ills?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Are issues that relate to society's perception of people's personal lives	90	59.6	63.8	63.8
	Fighting each other after drinking	22	14.6	15.6	79.4
	I don't know	29	19.2	20.6	100.0
	Total	141	93.4	100.0	
Missing	System	10	6.6		
Total		151	100.0		

Fig 4.8



Almost 80% of the respondents have an idea of what social ills are and about 20% don't know what social ills are. In a way the people of Botswana are informed about alcohol consumption and its negative effects.

**Can you associate social ills in Botswana with alcohol abuse?**

Table 4.14		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	89	58.9	61.0	61.0
	No	28	18.5	19.2	80.1
	Not sure	29	19.2	19.9	100.0
	Total	146	96.7	100.0	
Missing	System	5	3.3		
Total		151	100.0		

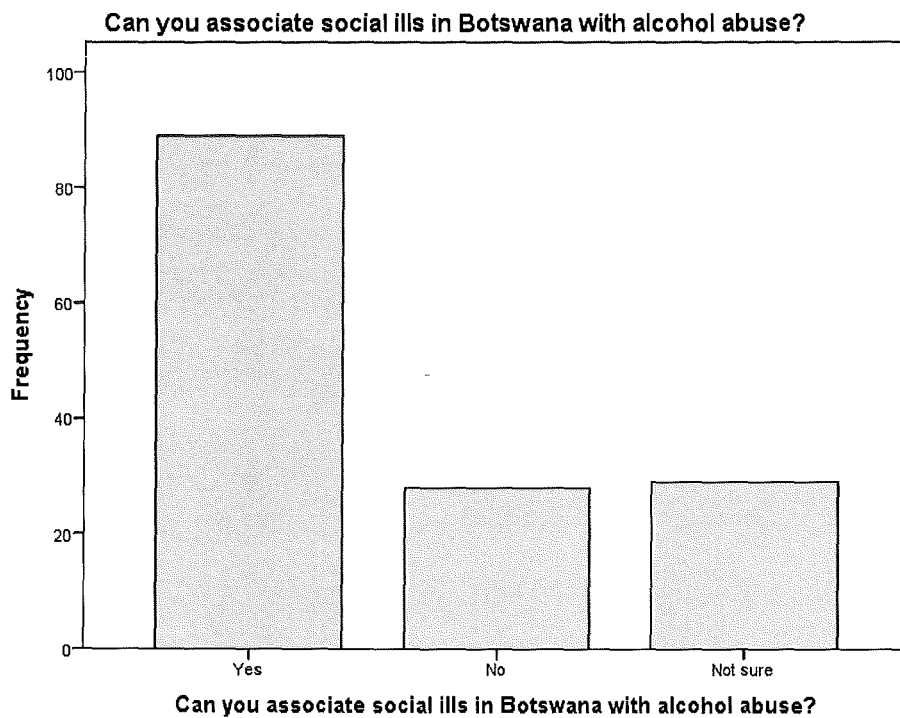


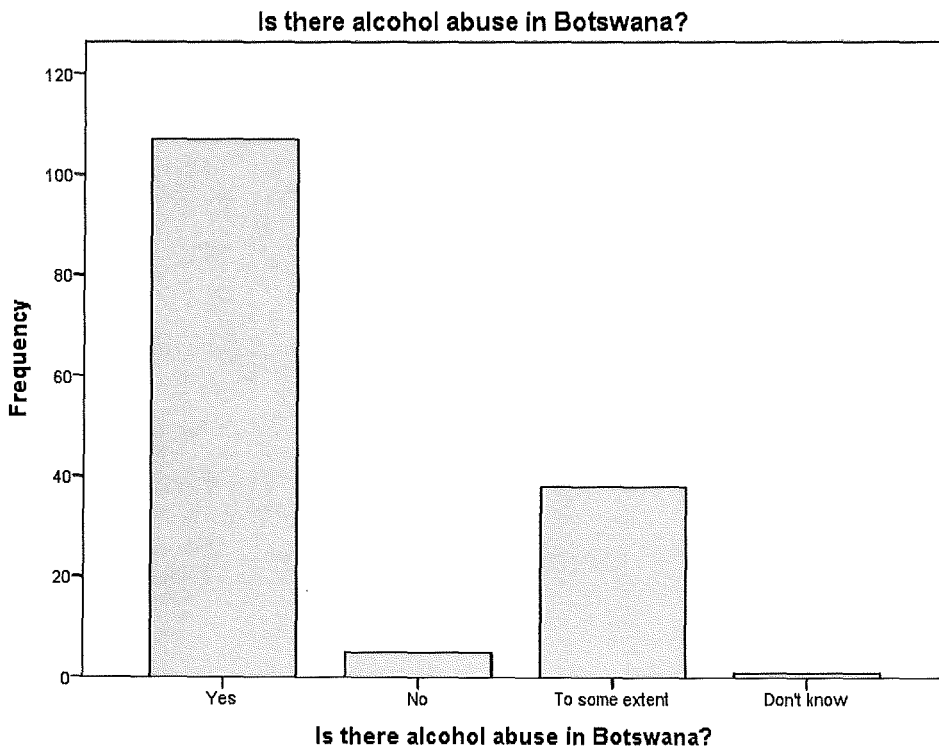
Fig 4.9

Most respondents associate social ills in Botswana with alcohol abuse. A paltry 20% did not think there is a relation between alcohol abuse and the prevalent social ills manifesting in the country.

**Is there alcohol abuse in Botswana?**

<b>Table 4.15</b>		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	107	70.9	70.9	70.9
	No	5	3.3	3.3	74.2
	To some extent	38	25.2	25.2	99.3
	Don't know	1	.7	.7	100.0
	Total	151	100.0	100.0	

Fig 4.10



A significant percentage of the respondents acknowledged that there is alcohol abuse in Botswana, with a significant few noting that there is abuse to some extent. It can thus be concluded that people who drink are conscious of the fact that they use alcohol inappropriately.

**Are there measures available to reduce alcohol abuse?**

<b>Table 4.16</b>		Frequency	Percent	Valid Percent	Cumulative Percent
Yes		118	78.1	78.1	78.1
No		16	10.6	10.6	88.7
Valid I don't know		17	11.3	11.3	100.0
Total		151	100.0	100.0	

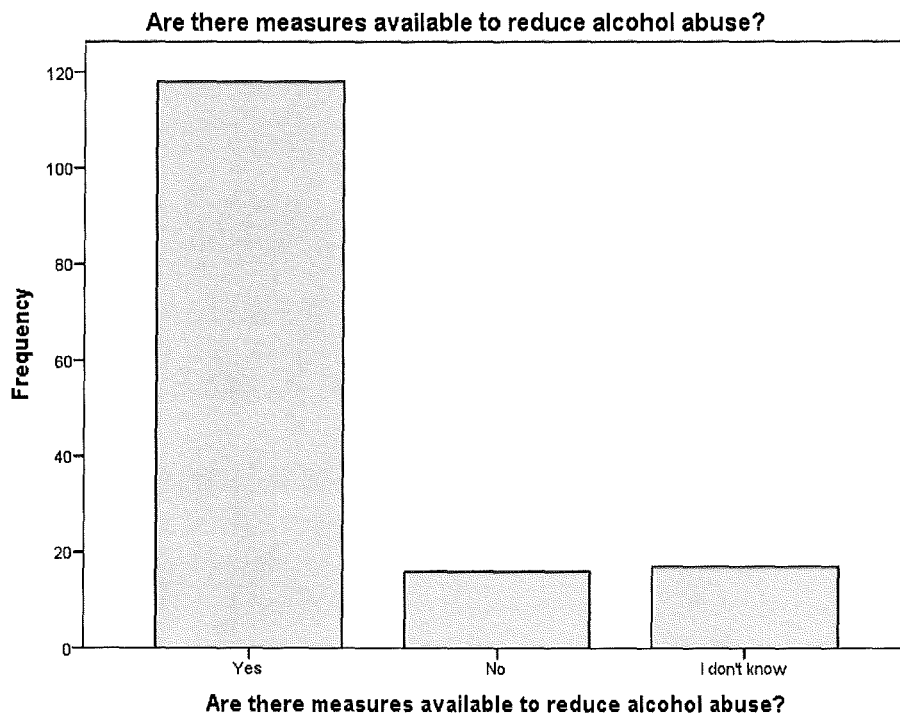


Fig 4.11

A massive percentage of the sample seemed to be aware of the interventions aimed at reducing alcohol abuse and only a few do not know of them. It can be safely said that communication in this regard has been well done as the reach is significant in society.

**Does Botswana have alcohol education policies**

<b>Table 4.17</b>		Frequen	Percent	Valid	Cumulative
		cy		Percent	Percent
Valid	Yes	81	53.6	54.0	54.0
	No	36	23.8	24.0	78.0
	I don't know	33	21.9	22.0	100.0
	Total	150	99.3	100.0	
Missing	System	1	.7		
Total		151	100.0		

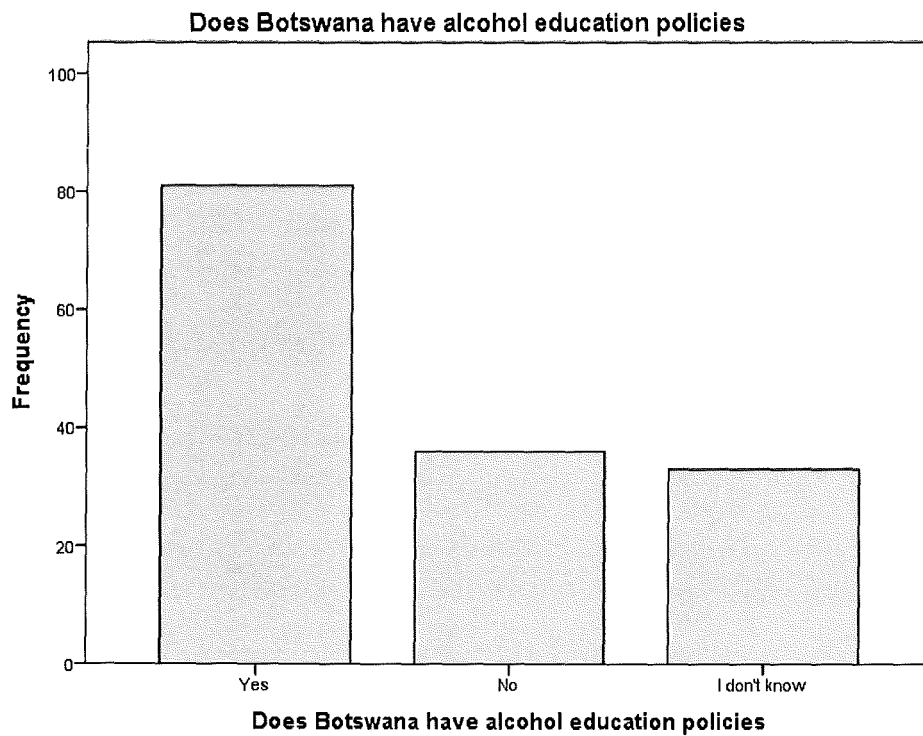


Fig 4.12

It seems that people are also aware of the existence of alcohol education policies in Botswana that are aimed at informing people about the dangers of abuse and responsible drinking.

**Are there facilities available to help people with drinking problems in Botswana**

Table 4.18		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	62	41.1	41.3	41.3
	No	51	33.8	34.0	75.3
	I don't know	37	24.5	24.7	100.0
	Total	150	99.3	100.0	
Missing	System	1	.7		
Total		151	100.0		

**Are there facilities available to help people with drinking problems in Botswana**

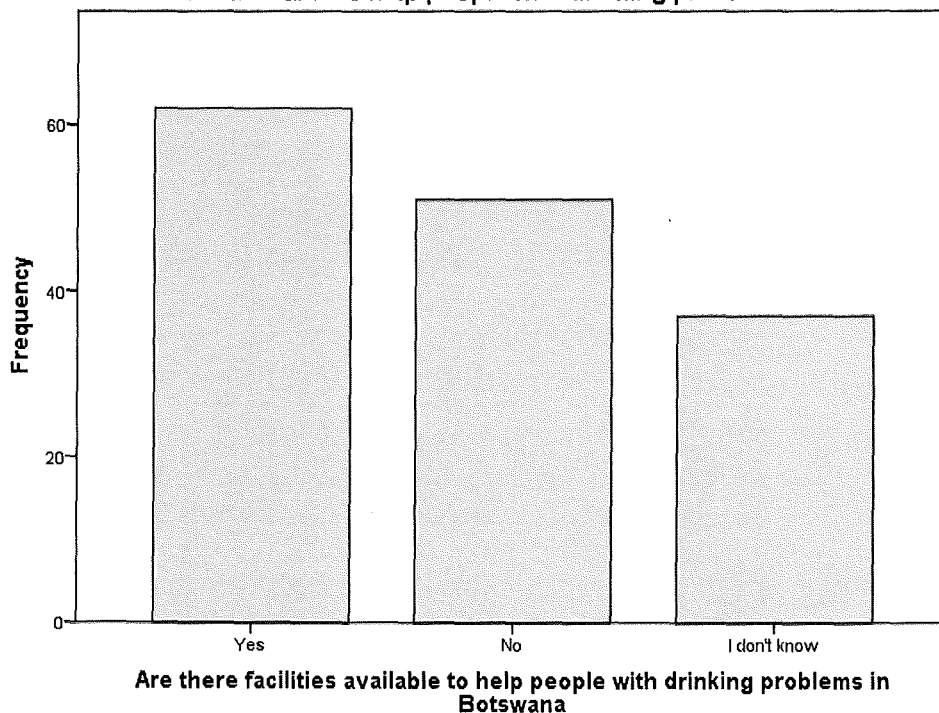


Fig 4.13

**What are the effects of alcohol abuse in one's life?**

<b>Table 4.19</b>	Frequency	Percent	Valid Percent	Cumulative Percent
Family disintegration	16	10.6	10.6	10.6
Financial instability	14	9.3	9.3	19.9
Involvement in crime	7	4.6	4.6	24.5
Valid because of alcohol consumption				
All the above	114	75.5	75.5	100.0
Total	151	100.0	100.0	

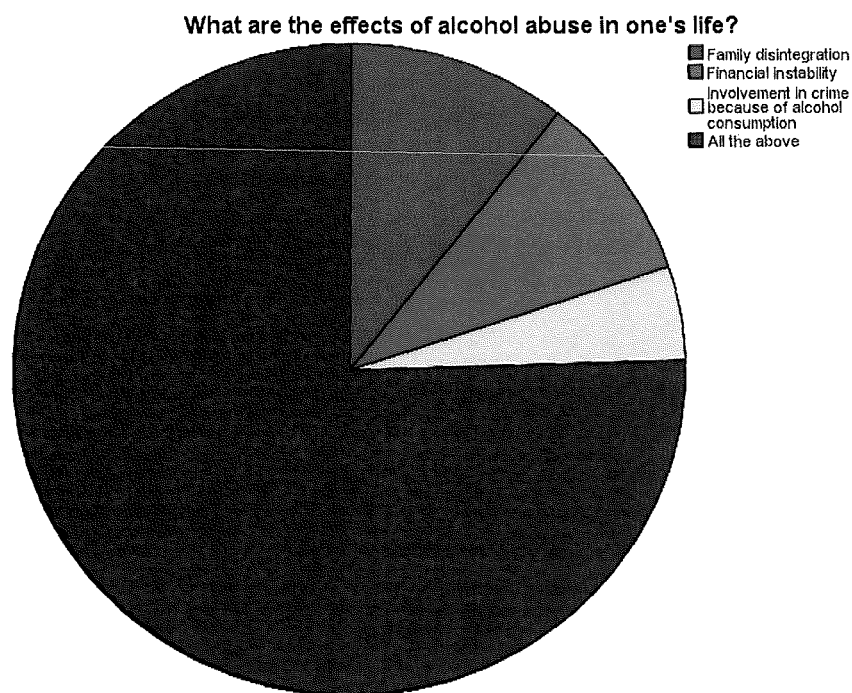


Fig 4.14

The majority of the respondents are knowledgeable about an array of problems that come about due to irresponsible drinking. This, however, does not deter them from drinking irresponsibly.

#### 4.4 PERCEPTION OF THE LEVY

##### What is an alcohol levy?

Table 4.20		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A fee charged (levied) by a government on alcoholic drinks.	136	90.1	90.1	90.1
	Extra money charged on alcoholic products by business people.	7	4.6	4.6	94.7
	I don't know	8	5.3	5.3	100.0
	Total	151	100.0	100.0	

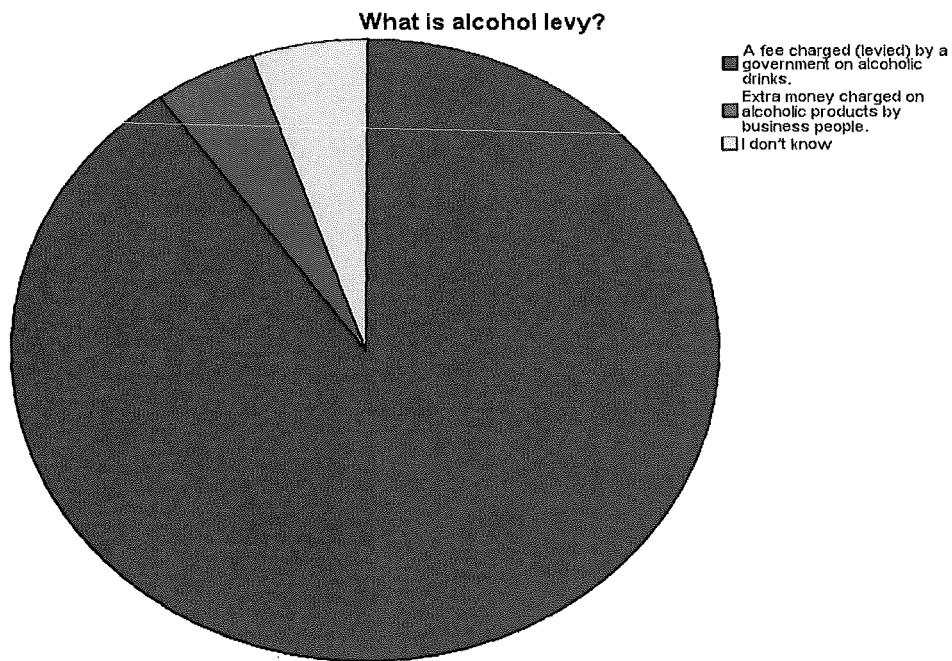


Fig 4.15

Almost everyone knows about the alcohol levy and the products subjected to it.



### What is the purpose of an alcohol levy in Botswana?

Table 4.21		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	To reduce alcohol consumption and the associated social ills	109	72.2	72.7	72.7
	To raise money for the government	23	15.2	15.3	88.0
	To reduce production of alcohol	8	5.3	5.3	93.3
	. I don't know	10	6.6	6.7	100.0
Total		150	99.3	100.0	
Missing	System	1	.7		
Total		151	100.0		

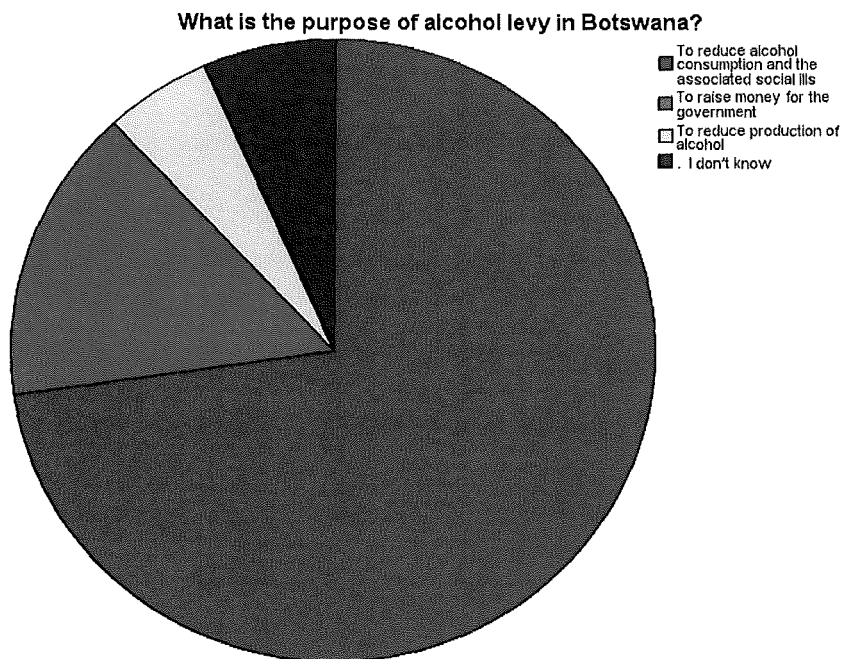


Fig 4.16

Only a few of the respondents are less informed about the objectives of the levy. That being the case, the purpose of alcohol tax in Botswana seems to be common knowledge to the masses.

**What is the impact of alcohol levy to the alcohol industry?**

Table 4.22		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Positive impact	21	13.9	14.0	14.0
	Negative impact	81	53.6	54.0	68.0
	No impact	32	21.2	21.3	89.3
	I don't know	16	10.6	10.7	100.0
	Total	150	99.3	100.0	
Missing	System	1	.7		
Total		151	100.0		

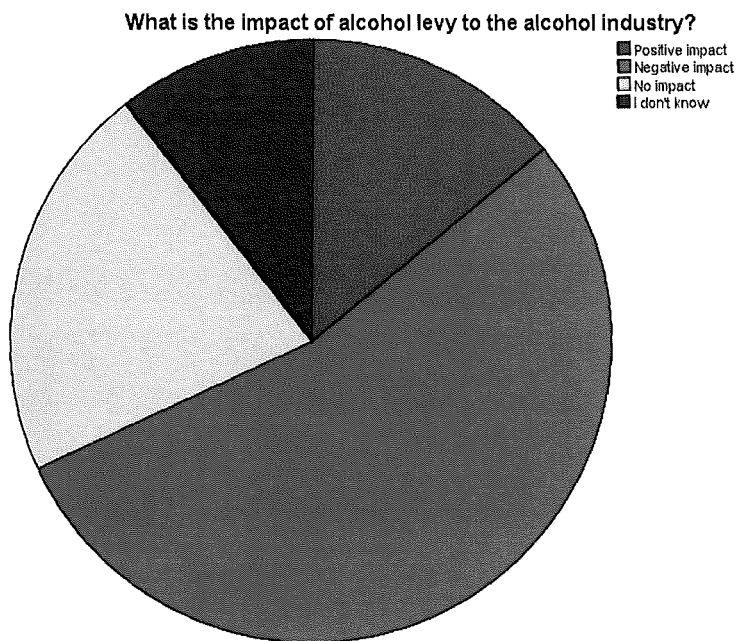


Fig 4.17

The majority of the target population sees the adverse effect of an alcohol levy on the industry. Thus while this taxation is well known and the objective of it is understood in society, only a few believe that it adds a positive value to the alcohol industry.

**Which stakeholders are most affected by alcohol levy?**

Table 4.23		Frequenc	Percent	Valid	Cumulative
		y		Percent	Percent
Valid	Producers	40	26.5	27.6	27.6
	Retailers	26	17.2	17.9	45.5
	Consumers	79	52.3	54.5	100.0
Total		145	96.0	100.0	
Missing	System	6	4.0		
Total		151	100.0		

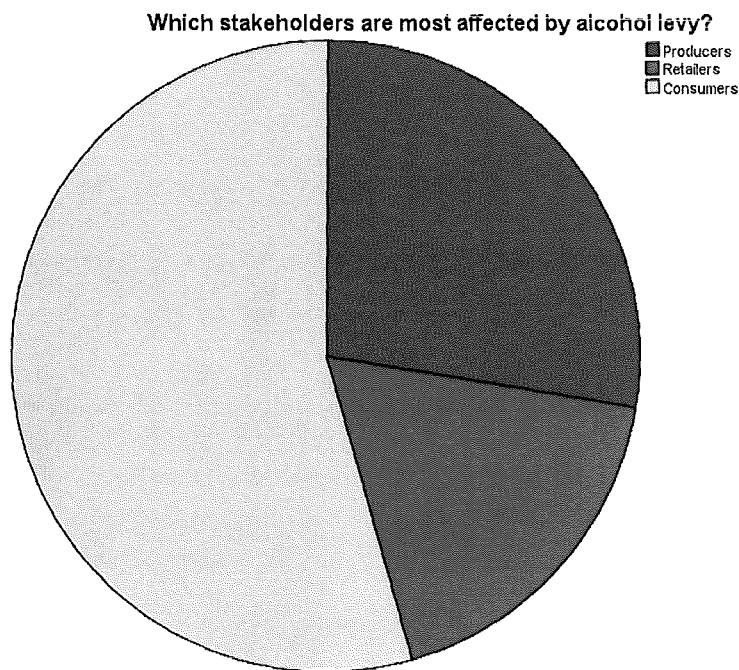


Fig 4.18

Alcohol consumers are cognizant of the fact that the levy is ultimately borne by them. More than a quarter of the respondents believe that alcohol producers are most affected by this tax.

**How do you as a stakeholder perceive alcohol levy**

Table 4.24		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Positive initiative	38	25.2	26.4	26.4
	Negative initiative	54	35.8	37.5	63.9
	Neutral	52	34.4	36.1	100.0
Total		144	95.4	100.0	
Missing	System	7	4.6		
Total		151	100.0		

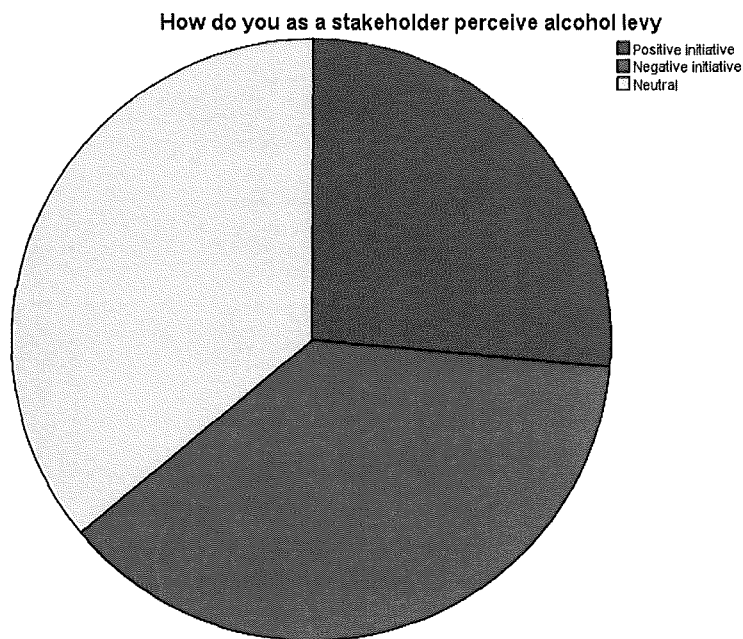


Fig 4.19

While a negative perception and neutral views are significant in this survey, only a small part of the population feels positive about the alcohol tax.

**Is an alcohol levy an appropriate strategy for reducing alcohol abuse in Botswana**

Table 4.25		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	24	15.9	16.2	16.2
	No	67	44.4	45.3	61.5
Valid	To some extent	57	37.7	38.5	100.0
	Total	148	98.0	100.0	
Missing	System	3	2.0		
	Total	151	100.0		

Is alcohol levy an appropriate strategy for reducing alcohol abuse in Botswana

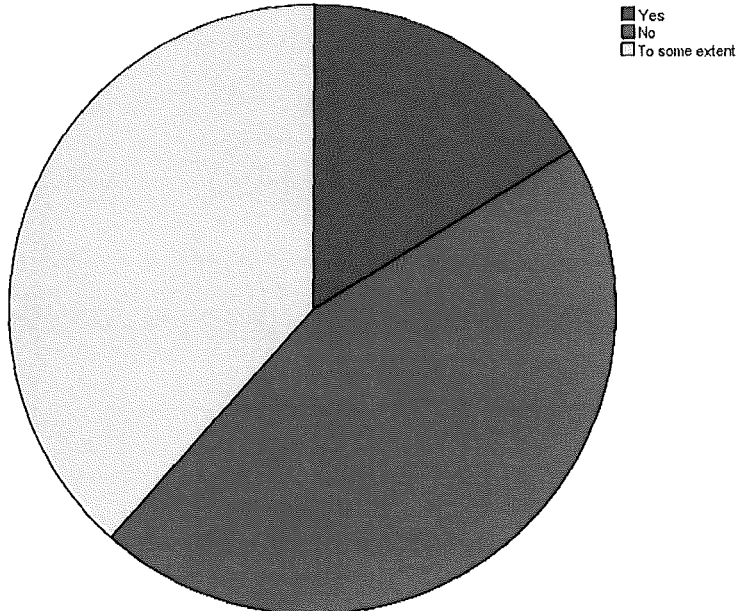


Fig 4.20

Almost half of the respondents feel that the alcohol levy is not the appropriate strategy to curtail abuse. Another significant fraction is to some extent of the opinion that it is appropriate for reducing abuse while only 16.2% perceive it as an appropriate intervention.

**Can the increased price of alcohol resulting from the levy stop you from taking alcohol**

Table 4.26		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	26	17.2	17.7	17.7
	No	85	56.3	57.8	75.5
Valid	To some extent	36	23.8	24.5	100.0
	Total	147	97.4	100.0	
Missing	System	4	2.6		
	Total	151	100.0		

Can the increased price of alcohol resulting from the levy stop you from taking alcohol

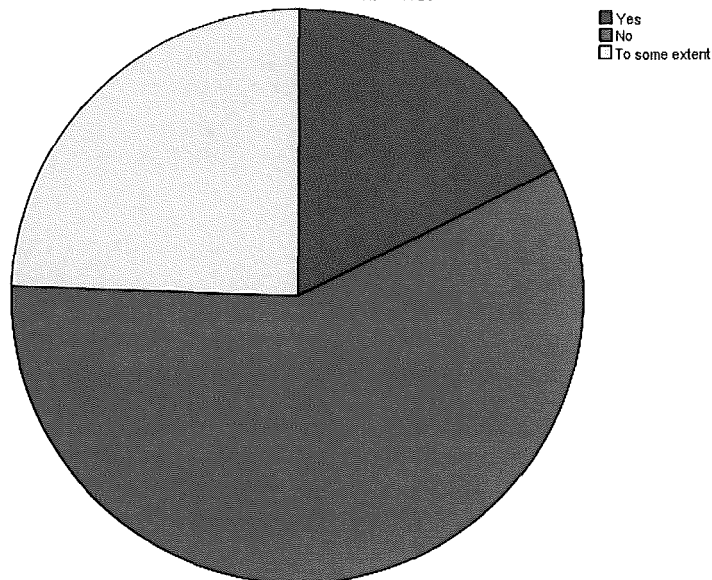


Fig 4.21

More than half of the respondents are of the opinion that a price increase for alcohol would not keep them from taking alcohol. Three out of four times, people would not stop drinking due to price increases. The conclusion is thus that alcohol consumers are unresponsive to price in Botswana that is, price inelasticity.

**Are alcohol related social ills common in Botswana**

Table 4.27		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	70	46.4	46.4	46.4
	No	7	4.6	4.6	51.0
	To some extent	59	39.1	39.1	90.1
	I don't know	15	9.9	9.9	100.0
	Total	151	100.0	100.0	

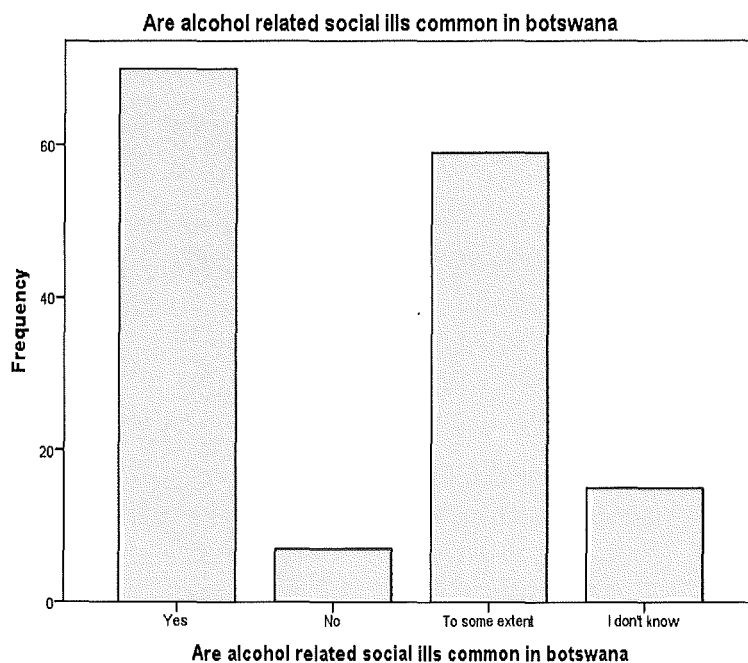


Fig 4.22

Just as the majority of people believe that there is alcohol abuse in Botswana, an affirmation of it being a source of social ills is noted in the survey by the highest frequency recorded.

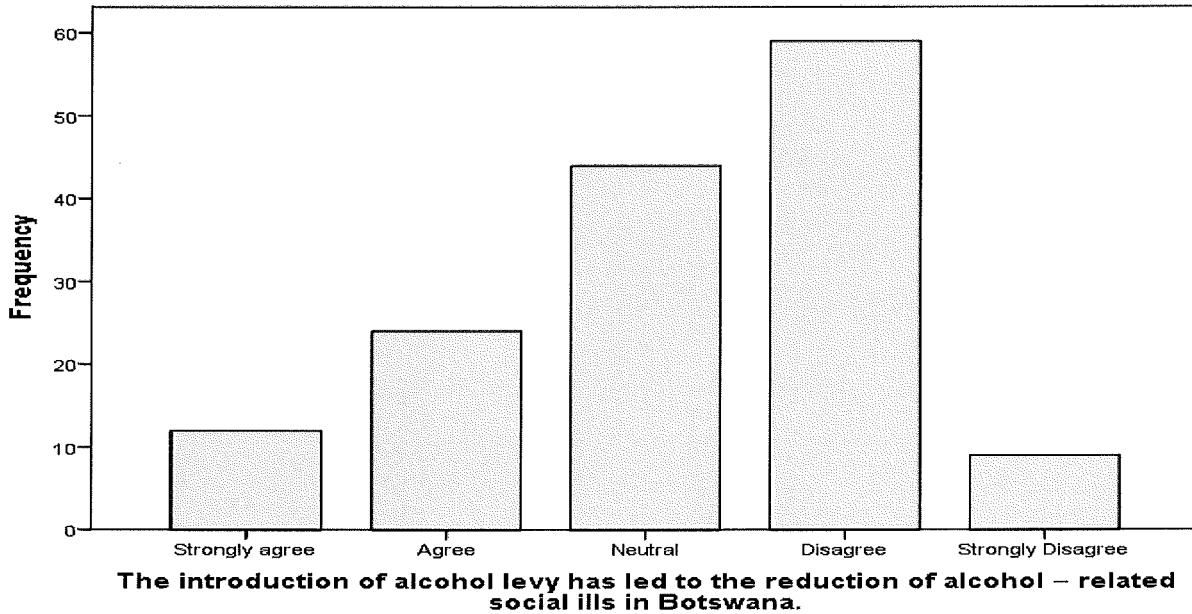
**The introduction of alcohol levy has led to the reduction of alcohol – related social ills in Botswana.**

Table 4.28		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly agree	12	7.9	8.1	8.1
	Agree	24	15.9	16.2	24.3
	Neutral	44	29.1	29.7	54.1
Valid	Disagree	59	39.1	39.9	93.9
	Strongly Disagree	9	6.0	6.1	100.0
	Total	148	98.0	100.0	
Missing	System	3	2.0		
Total		151	100.0		



Fig 4.23

**The introduction of alcohol levy has led to the reduction of alcohol – related social ills in Botswana.**



The majority of the people do not believe that the introduction of the alcohol levy has had any positive impact on alcohol-related social ills. Cumulatively, the highest percentage either disagrees or strongly disagrees with the notion that the introduction of the levy has led to a reduction in alcohol-related social ills.

**Are there laws guiding the selling and consumption of alcohol?**

Table 4.29		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	120	79.5	80.0	80.0
	No	21	13.9	14.0	94.0
	I don't know	9	6.0	6.0	100.0
Total		150	99.3	100.0	
Missing	System	1	.7		
Total		151	100.0		

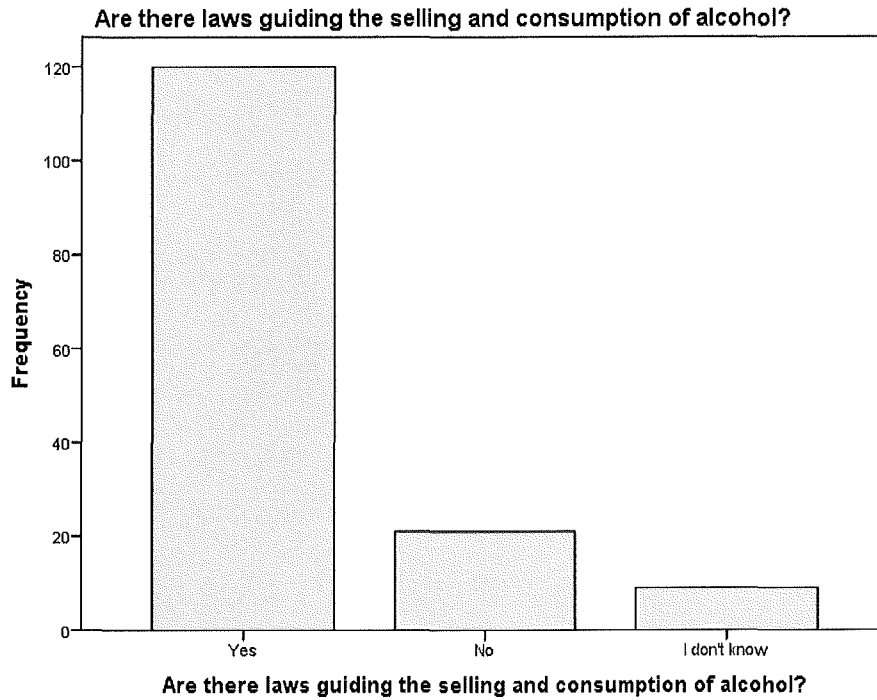


Fig 4.24

People are generally informed of the laws guiding the selling and consumption of alcohol like the restrictions on hours of operation for alcoholic retailers, alcohol-licensed premises, the drinking age limit and the laws forbidding drinking and driving.

**Are you employed in the alcohol beverage business**

Table 4.30		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	27	17.9	18.9	18.9
	No	116	76.8	81.1	100.0
	Total	143	94.7	100.0	
Missing	System	8	5.3		
Total		151	100.0		

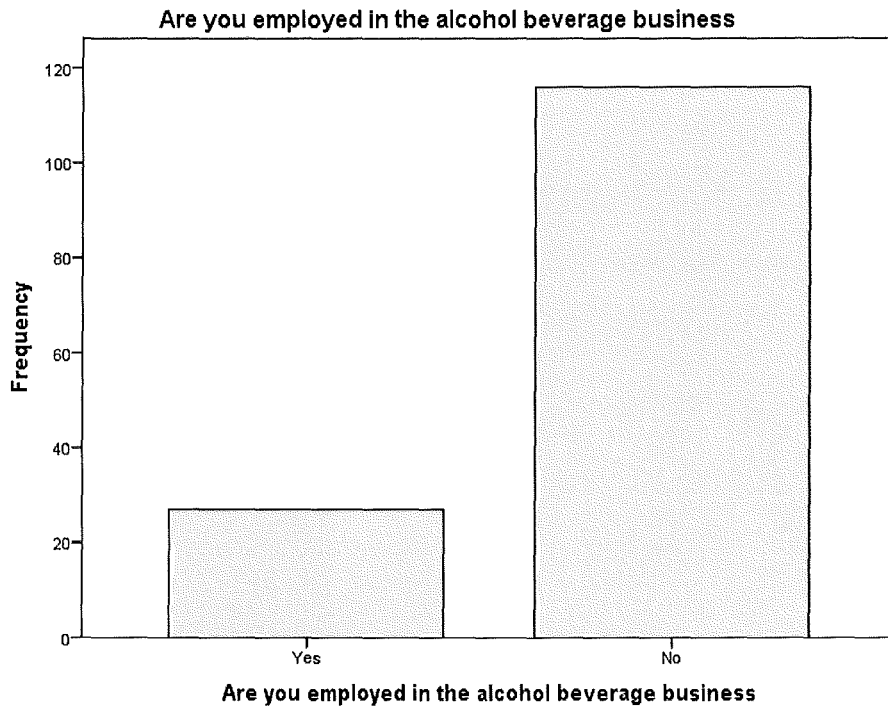


Fig 4.25

A significant fraction of the respondents are non-industry employees, which eliminates the leniency or bias towards the alcohol industry. A more objective feedback is henceforth likely.

**What is the impact of alcohol levy on production of alcohol?**

Table 4.31		Frequenc y	Percent	Valid Percent	Cumulative Percent
Valid	Increased production	7	4.6	9.5	9.5
	Reduced production	35	23.2	47.3	56.8
	No change	32	21.2	43.2	100.0
Total		74	49.0	100.0	
Missing	System	77	51.0		
Total		151	100.0		

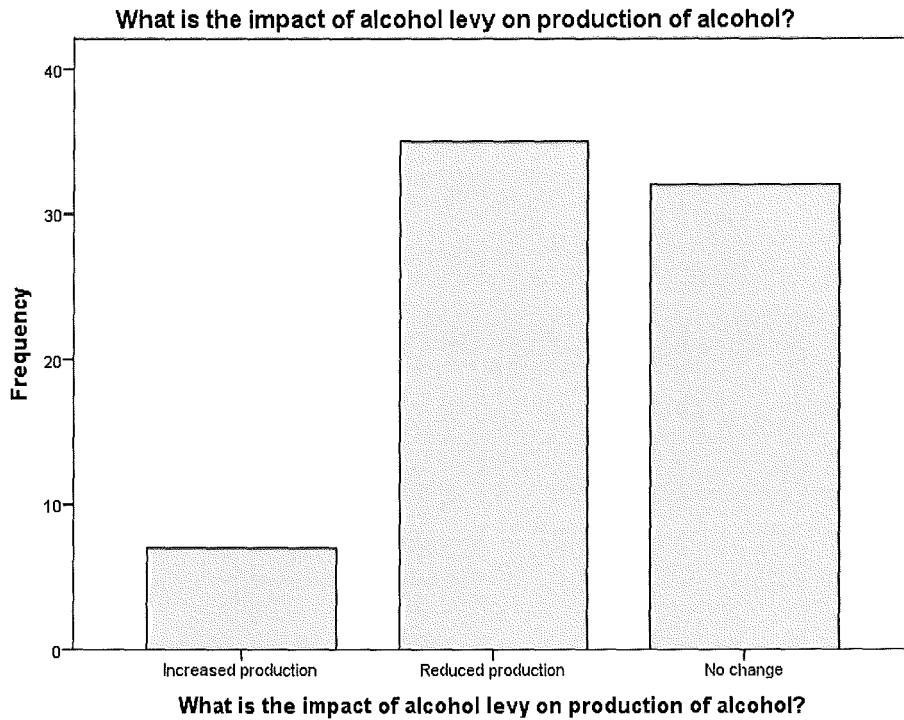


Fig 4.26

Reduced production and no change to alcohol production appear with the highest frequencies on the survey. This therefore means the respondents believe that the production of alcohol has at best remained constant due to the introduction of the levy.

**What is the impact of an alcohol levy on the selling of alcohol?**

<b>Table 4.32</b>		Frequenc y	Percent	Valid Percent	Cumulative Percent
Valid	Increased sales	13	8.6	19.1	19.1
	Reduced sales	36	23.8	52.9	72.1
	No change	19	12.6	27.9	100.0
	Total	68	45.0	100.0	
Missing	System	83	55.0		
	Total	151	100.0		

Just over 50% of the respondents noted reduced sales of alcoholic drinks due to the alcohol levy. A significant 27.9% indicated no change in the status quo, that is, the levy has made no difference in the selling of alcoholic products.

**What is the impact of an alcohol levy on the consumption of alcohol?**

Table 4.33		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Increased	15	9.9	22.7	22.7
	Reduced	18	11.9	27.3	50.0
	No change	33	21.9	50.0	100.0
	Total	66	43.7	100.0	
Missing	System	85	56.3		
Total		151	100.0		

The majority of the respondents felt no change in the levels of consumption of alcohol since the levy introduction. Increased levels and reduced consumption levels came out with almost the same frequencies. The general conclusion that can be deduced from this table is that the levy has not made a positive mark on alcohol consumption as far as its mandate is concerned.

**What are the trends of profitability indicators of your business in the past 6 years**

Table 4.34		Frequency	Percent	Valid Percent	Cumulative Percent
Valid trends	Increased trends	22	14.6	46.8	46.8
	Decreased	16	10.6	34.0	80.9
	Constant trends	9	6.0	19.1	100.0
	Total	47	31.1	100.0	
Missing System	104	68.9			
Total	151	100.0			

Profitability across the alcohol industry generally seems to have had a temporary glitch but had been resuscitated since the introduction of the levy. This is evidenced by the majority showing a recovery in increased trends of profitability and following closely behind decreased trends with 16 times frequency.

**What are the trends of alcohol related social ills in the past 6 years?**

Table 4.35		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Increased trends	40	26.5	32.8	32.8
	Decreased trends	10	6.6	8.2	41.0
	Constant trends	19	12.6	15.6	56.6
	I don't know	53	35.1	43.4	100.0
	Total	122	80.8	100.0	
Missing	System	29	19.2		
Total		151	100.0		

The highest frequency of 40 is noted on the increased trends of alcohol-related trends versus constant trends at 19 and a decrease at 10. This shows that despite the levy, alcohol-related social ills have been on the rise, thus discrediting the possible intended effect of the levy.

**4.5 CONCLUSION**

Simple tables and graphical charts were used in dissecting the data collected here above so as to present and discuss it in the most comprehensible manner possible. Data interpretation and summary were done under each and every question and an in-depth discussion and conclusion on the research question follows in the next chapter.

## CHAPTER FIVE: CONCLUSION

### 5.1 INTRODUCTION

The subject of an alcohol levy as a means to manage alcohol consumption has never been short of controversy the world over. While a number of public discourses and debates in many different countries have been held, it remains a subject with no common consensus. Studies have been conducted by different scholars for some time now but their conclusions are hardly in harmony.

While the alcohol industry has been one of the fastest growing industries in the world, it has always been subjected to criticism in the sense that it is considered to grow at the expense of a breakdown of the social fabric of our societies. It is on the basis of this notion that the industry has always been subject to countless regulations and interventions to monitor its business. It is against this backdrop that Botswana was used as a case in hand.

More often governments have resorted to imposing taxes in the form of excise duties and levies with a mandate of instilling a particular behaviour among people in their societies. This view is underscored by anonymous (2002:2) when identifying two purposes for which the taxes are used for: either to generally raise revenue for governments or to discourage a particular behaviour. The results of literature are mixed in this regard as some are for these taxes while some are against them.

Although alcohol taxation has always been used as a measure to control alcohol abuse in many countries, there has always existed a debate on its success in attaining this objective. Many studies have been conducted around it but conflicting views have always existed as to its effectiveness. Some countries like Australia have achieved favourable outcomes when it is coupled with other interventions, while other countries have seen more insignificant changes after its introduction.



## **5.2 DEMOGRAPHICS OF THE RESEARCH SAMPLE**

The majority of this sample was the youth, mostly employed and in the mid-income category. Females dominated the sample and mostly resided in the city as opposed to its outskirts. This could also mean that they are well-off financially and thus able to afford city life and all its costly entertainment activities.

While no particular trend was observed regarding marital status, half of the population, dominated by the younger generation, do consume alcohol. People in the outskirts of the city seem less informed about a number of issues regarding alcohol abuse. Most of them do not recognise the association of alcohol abuse with the social ills. They are not aware of the educational policies available to teach people about alcohol and the facilities availed to people with alcohol problems.

By virtue of them being in the mid-income working class, most of them would not stop drinking because of an increase in price. That is, an alcohol levy would not deter them from taking alcohol for they could afford it anyway. Males are more often consumers of alcohol as opposed to their female counterparts. This is so because traditional values play a part here in that women have always been seen as housekeepers and that gives them less idle time to go and drink alcohol.

Moreover, the young generation starts working at a very tender age and according to them they have more disposable income as most of them still live in parents' homes. This therefore makes them more susceptible to spending their money on entertainment, mostly alcohol consumption. Attaining financial independence at a tender age also makes them prone to start consuming alcohol early especially when there is less supervision.

## **5.3 PUBLIC KNOWLEDGE OF ALCOHOL ABUSE**

Most of the people are knowledgeable about issues of alcohol abuse as they could identify forms in which alcohol abuse manifests itself, viz. an inability to work,

breakdown of interpersonal relations and harm to one's health. They are also familiar with the social vices common in Botswana.

The majority (61%) of the respondents do associate alcohol abuse with the social ills in Botswana, and an overwhelming 71% acknowledged the existence of abuse in Botswana. This implies that people are aware of all the abuse and the social ills emanating from alcohol abuse in the country but continue to drink irresponsibly. When asked about the anti-alcohol abuse campaigns in the country, most of them confirmed knowing them but admitted not internalizing their message.

About 78.1% of people are aware of the measures available to curtail alcohol abuse. This refers to measures like the levy, regulated operating times for alcoholic retailers and licensed drinking premises. The frequency of affirmation of knowledge of the education policies on alcohol is significant and the facilities for people with drinking problems are known yet alcohol abuse and the inherent social ills do not decrease. Furthermore, people are very informed about the bad effects of alcohol abuse, breakdown of families, financial woes and involvement in crime. The inference that can be drawn out of here is that all necessary information is out there, people just choose not to make use of it even though it could benefit them.

#### **5.4 PUBLIC PERCEPTION ON ALCOHOL LEVY**

Collectively, 87.4% of the respondents understand the purpose and mandate of alcohol taxation in Botswana. However, the majority believe the intervention has had a more detrimental than positive impact on the alcohol industry. The profitability of companies trading in alcohol has been eroded, leaving the industry and its stakeholders worse off. People are still complaining about loss of jobs and worsening social welfare as a result.

The majority of the public still see the consumers as the most hard-hit by the intervention as they understand the burden is passed on to them. Some, however, believe producers and retailers are the most affected by the levy as they post lower

profits and retrench employees. This perception may increase alcohol consumption as consumers do not think they can bear the burden.

A significant portion of the population perceives an alcohol levy as a negative intervention to use, followed by another substantial group that remains neutral. Only a minority of 26.4% would support all levy initiatives as they see them as a positive move. Although some portion of the population believe to some extent that an alcohol levy is the appropriate strategy for reducing alcohol abuse and its related social ills, a majority of the population do not think it is the best strategy to curtail this abuse as evidenced by people affirming that they will not stop drinking because of a price increase of alcoholic products. About 57.8% of people are assertive about the fact that they would not stop drinking because of an increase in price while 24.5% would stop to some extent but not entirely and that makes people who would not stop drinking because of price an overwhelming majority at 82.3%.

## **5.5 CONCLUSION**

Although alcohol taxation manages affordability and accessibility, its implementation alone as an intervention would not bear much fruit unless it is complemented by other strict controls like tough penalties - for example, on drinking and driving and very limited alcohol trading hours.

Alcohol abuse also results from too much idle time, especially among the youth who are unemployed and living with the frustration of a bleak future. This group is eventually tempted to indulge in alcohol as an option to pass time and keep busy. In the same breath one should mention the poverty-stricken families who indulge in alcohol consumption to keep themselves away from sobriety and dealing with their harsh realities of life.

Furthermore, taxation on multinational breweries like the SABMiller Group, to which KBL is a subsidiary, would not deliver any long-term benefits as they have the financial muscle to share the burden of the levy with their consumers. They can also contain their

production and operational costs by mass production and distributing regionally from a central location. As it was the case when the levy was introduced in Botswana, SAB Limited in South Africa supplied its sister company KBL in Botswana and managed the cost quite substantively, thus benefiting from economies of scale.

While alcohol producers and traders alike have been banned from extensive advertising, especially on television, this has in fact motivated them to embark on very aggressive marketing strategies. Since the introduction of the levy, there have been massive consumer promotions with winnings including trips to the Spanish and Brazilian F1 Grand Prix and the Dakar rally to mention but a few, all of which consumers desire a lot.

There have also been discounts and deals offered to distributors and dealers to sell at recommended retail prices, and set by manufacturers to encourage more sales and consumption of alcohol. Beverage companies have also been seen as sponsors for a lot of entertainment functions across the country and in the process they encourage loyalty of consumers to their brands.

As it has been noted, consumers of alcohol are price inelastic, that is, they are not responsive to price changes of alcohol and that makes it almost impractical for the levy to make any impact in terms of its mandate. The legal Blood Concentration Level may be the best option to manage consumption and abuse. This would also require stricter enforcement of the law, perhaps through empowering bartenders to monitor the conditions of their customers and with law enforcers visible at every corner of a drinking area.

The proliferation of unregulated home brews poses a more daunting task to managing alcohol abuse and its social ills. Despite alcohol retailers being monitored in terms of trading hours, these home brews are available round the clock at very competitive prices, and this also renders the alcohol levy irrelevant. There is also the emergence of

the black market, where alcohol is smuggled across the borders and sold at very favourable pricing compared to local produce.

At the current rate, the alcohol levy seems not to be making much difference in the society's welfare as was anticipated at its inception. It remains to be seen what formula would bring about the desired results of low and responsible alcohol intake among consumers. At present, revenues are collected from both the levy and excise duties, but the future is not promising as far as social ills and abuse are concerned.

## **5.6 RECOMMENDATIONS**

While the subject of alcohol levy may continue as a topic of discussion and debate into the future, there are some interventions which can be done and bring about desirable results. These would continue to differ from country to country depending on the culture of a given nation, just as has been seen that alcohol consumers are price sensitive in Australia whereas it is the opposite in the case of Botswana.

It is clear from this investigation that alcohol levy is not the perfect measure to curtail alcohol abuse and the inherent social ills. While it cannot be dismissed altogether, its implementation complemented by other custom made interventions may deliver the best results. Management of the purchasing power of consumers especially that of the youth, urging them to participate in worthy investments may limit their idle disposable income.

Another key intervention in the Botswana case would be changing the cultural mind-set that men go out drinking as a norm. This can be achieved by availing alternative entertainment activities and providing effective information on alcohol abuse so consumers restrain from alcohol abuse voluntarily. Furthermore, engaging the unemployed youth who are usually the most prone to alcohol abuse would assist in keeping them from these social ills. This could be attained in a number of ways, one being to include them in policy formulation to address their social challenges. Secondly, by creating employment opportunities for the unemployed would take them out of the streets and reduce social frustrations which lead them into alcohol abuse.

Research has shown that advertising alcohol has some impact on the decisions made by either consumers or would be consumers of alcohol. It is on this basis that completely banning alcohol advertising would help stop influencing consumption which may turn out abusive. While above the line advertising has been banned, alcohol manufacturers resorted to below the line advertising which then needs to be outlawed altogether to manage public perception on alcohol. Home brews are somewhat difficult to manage since they are not regulated and effecting laws governing them would go a long way in restricting excessive drinking, therefore reducing alcohol abuse.

The other challenge that the government faces in its endeavour to curtail alcohol abuse is the existence of the black market that smuggles alcohol across the border unaccounted for. Subverting and stopping this would have a significant contribution to the course. Over and above all, there needs to be tough penalties on abuse and strict enforcement of laws on these. Aggressively enforcing the law on alcohol abuse interventions would come in handy to support government efforts in curtailing abuse.

## REFERENCES

- About Management – Business Management – People Management and More, viewed 26<sup>th</sup> June 2011, [management.about.com](http://management.about.com)
- Akinson, V. 2012. 'Banning alcohol adverts will not stop Britain boozing', viewed 23 July 2012, p.1. [www.telegraph.co.uk/health/](http://www.telegraph.co.uk/health/)
- Alexander, C.W., Matthew, J.S. & Kelli, A.K. 2009. Effects of Beverage Alcohol Price and Tax Levels on Drinking, A Meta-analysis of 1003 Estimates from 112 Studies, viewed 11 June 2013, p.2.
- Anderson, P. & Baumberg, D. 2006. Alcohol in Europe. A Public Health Perspective – European Commission. Institute of Alcohol Studies, UK. Viewed 7 July 2012 [ec.europa.eu/health/ph\\_determinants/life.../alcohol/.../alcohol\\_europe.pdf](http://ec.europa.eu/health/ph_determinants/life.../alcohol/.../alcohol_europe.pdf)
- Anderson, P. Chisholm, D & Fuhr, D. 2006. Effectiveness and cost – effectiveness of policies and programs to reduce the harm caused by Alcohol, Alcohol and Global Health 2, vol. 373, viewed 6 October 2011. [http://www.who.int/choice/publications/p\\_2009\\_CE\\_Alcohol](http://www.who.int/choice/publications/p_2009_CE_Alcohol)
- Andrikopoulos, A. A., Brox, J.A., & Carvalho, E. 1997. The demands for domestic and Imported alcoholic beverages in Ontario, Canada: A dynamic simultaneous equation approach. *Appl Econ.*, 29(7):945–953.
- Anon. 2011. October 7. Alcohol Levy – Time for Procurers to shine. Mmegi Online. Retrieved from <http://www.mmegi.bw/index>
- Anon. 2012. Chapter 3. Methodology. <http://scholar.lib.vt.edu/theses/available/etd-82098-1946/unrestricted/chapter3.pdf>
- Anon. 2003. Alcohol Taxation. Viewed 15 July 2012, p.1. [www.irs.gov/publications](http://www.irs.gov/publications)

- Anon. 2006. 'Alcohol Taxation. Viewed 15 July 2012, p.2. [www.icap.org](http://www.icap.org)
- Anon. 2004. 'What social and economic problems are linked to alcohol use? ' (In WHO Global Status Report on Alcohol, p.65-p.66), viewed 6 July 2012, p.3. [www.greenfacts.org/en/alcohol/1-2/05-Social-economic-problems.htm](http://www.greenfacts.org/en/alcohol/1-2/05-Social-economic-problems.htm)
- Anon. 2008. 'NHS policies to address alcohol related problems', viewed 22 July 2012, p.5. <http://www.publications.parliament.uk/pa/cm200910/cmselect/cmhealth/15>
- Anon. 2012. 'What is alcohol abuse? Signs of alcohol abuse. Viewed 5 July 2012, p.2. <http://www.healthmad.com/addiction/what-is-alcohol-abuse/>
- Bacharach, S.B., Bamberger, P. & Biron, M.2010.'Alcohol Consumption and workplace absenteeism: Author manuscript; available in PMC 2011 March 1. Published in final edited form in: *J Appl Psychol.* 2010 March; 95(2):3. V viewed 13 May 2013, p.334.
- Barker, C., Pistrang, N., & Elliot, R. 2002. *Research Methods in Clinical Psychology: An Introduction to Students and Practitioners.* 2<sup>nd</sup> ed. Chichester: John Wiley & Sons Ltd.
- Benza, B. 2010. , May 21. Levy, weather bedevils Sechaba profits. *Mmegi.* Retrieved from <http://www.mmegi.bw/index>.
- Botswana. Ministry of Finance. Central Statistics Office 2006.Gaborone. Viewed 20 May 2011. [www.gov.bw](http://www.gov.bw)
- Briscoe, S. & Donnelly, N. 2003. Problematic licensed premises for assaults In inner Sydney, Newcastle and Wollongong. *Australian and New Zealand Journal of Criminology*, 36, 18-33.
- British Medical Association. 2008. Alcohol misuse: tackling the U.K epidemic, BMA.



- Chikritzhs, T., Catalano, P., Pascal, R. & Henrickson, N. 2007. Predicting Alcohol-related harms from licensed outlet density: A feasibility study. National Drug Law Enforcement Research Fund, Monograph Series No.28.
- Chikritzhs T. & Stockwell T. 2002. Impact of later trading hours for Australian public houses (hotels) on levels of violence. *Journal of Studies on Alcohol*, 63(5):591–9. National Centre for Research into the Prevention of Drug Abuse, Curtin University, Perth.
- Collins, D.J. & Lapsley, H.M. 2008. , The avoidable costs of alcohol abuse in Australia and the potential benefits of effective policies to reduce the social costs of alcohol. Report prepared for the Department of Health and Ageing in Australia. Viewed 6 October 2012 [www.health.gov.au/internet/drugstrategy/publishing.nsf](http://www.health.gov.au/internet/drugstrategy/publishing.nsf)
- Coppola, G. 2010. Philippines Hunts Tax Cheats, May Change Alcohol Levy. *BusinessWeek*, 3 July, p.4. [businessweek.com/news/2010-09-22/Philippines-hunts-tax-cheats\\_may-change-alcohol-levy](http://businessweek.com/news/2010-09-22/Philippines-hunts-tax-cheats_may-change-alcohol-levy)
- Crowley, S. & Richardson, J. 1997. Alcohol Taxation to Reduce the cost of Alcohol Induced Ill Health. Centre for Health Programme Evaluation. Working Paper 4.
- Dee, T. S. 1999). State Alcohol policies, Teen Drinking and Traffic Fatalities. *Journal of Public Economics*, 72, 289–315.
- Dryden-Edwards, R. 2013. Alcohol Abuse and Alcoholism. Viewed 5 July 2013, p.1.[www.medicinenet.com/alcohol\\_abuse\\_and\\_alcoholism/](http://www.medicinenet.com/alcohol_abuse_and_alcoholism/)
- Ezzati et. Al. 2002. World Health Organization. Reducing risks, promoting healthy life, *World Health Report*.

- Gartner, M. 1994. Booze and Crime. *USA TODAY*. Retrieved from <http://www.dawanet.com/>
- Hall, M. 1993. Typical inmate: Abused, abuser, repeater. *USA TODAY*. Retrieved from <http://www.dawanet.com/>
- Henstridge, J., Homel, R. & Mackay, P. 1997., The long-term effects of random breath testing in four Australian states: a time series analysis, Federal Office of Road Safety.
- Kothari, C.R. 2006. Research Methodology. Methods & Techniques. 2nd ed. New Delhi: New Age International Publishers.
- Levine H & Reinerman, C. 2004. Alcohol prohibition and drug prohibition. Lessons from alcohol policy for drug policy. Amsterdam: CEDRO.
- Management. 2008. Imdb, viewed 21 May 2011, [imdb.com](http://www.imdb.com).
- Manning, W.G., Blumberg. & Moulton, L. 1995. The Demand for Alcohol: The differential Response to Price. *Journal of Health Economics*, 14,123 – 148.
- Mayo Clinic staff, 'Nutrition and healthy eating', viewed 23 July 2012, p.1. [www.mayoclinic.com/health/alcohol/SC00024](http://www.mayoclinic.com/health/alcohol/SC00024)
- Mogapi, S. 2011. KBL rises from the dead. *Sunday Standard*. Retrieved from <http://www.sundaystandard.info/article>.
- Nelson, J.P. 1997. Economic and demographic factors in U.S. alcohol demand: A growth-accounting analysis. *Empirical Econ*, 22(1):83–102.
- Nice Clinical Guideline 115, 'Diagnosis, assessment and Management of harmful drinking and alcohol dependences', viewed 25 July 2012, p.4. [guidance.nice.org.uk/cg115](http://guidance.nice.org.uk/cg115).

- Parry, C. 2011. . Alcohol Levy is good for SA's health. *Mail&GuardianOnline*. Retrieved from <http://www.mg.co.za/article/2011-04-08>
- Pitso, J.M.N. & Obot, I.S. 2011. Botswana Alcohol Policy and the presidential levy controversy. *Addiction*,106:898-905.doi:10.1111/j.1360-0443.2011.03365.x
- Rehm, J., Room, R., Monteiro, M., Gmel, G., Graham, K., Rehn, N., et al. 2004. Alcohol Use. In: Ezzati, M., Lopez, A.D., Rogers, A, Murray, C.J.L. (Eds.), *Comparative Quantification of Health Risks*, 1:959-1108. Geneva: World Health Organization.
- Resnik, D.B., & Shamoo, A.E. 2003.*Responsible Conduct of Research*.2nd ed. New York: Oxford University Press.
- Richupan, S. 2005. Alcohol Products Taxation International Experiences selected Practices in Asia, viewed 7 Feb 2012, pp.4-13. <http://contohskripsiku.com/pdf/alcohol+products+taxation+taxation+international+experiences>
- Ritson, B. 1994. Preventive strategies for alcohol-related problems. *Addiction*, 89(11):1491–6.
- Room, R. 1998. Drinking patterns and alcohol related social problems: Frameworks for analysis in Developing Societies. *Drug and Alcohol Review*, 17:389-398. <http://onlinelibrary.wiley.com/doi/10.1080/09595239800187231>
- Sechaba Breweries Holdings Limited, Annual Report 2008
- Taylor, S.J., & Bogdan, R. 1998. *Introduction to Qualitative Research Methods*.3rd ed. Michigan: Wiley.
- The Bangalore Study. 2004., 'Burden and Socio-Economic Impact of Alcohol', 2004, p.8-54.

UNGASS 2010, 'The Republic of Botswana Progress Report of the National Response to the 2001 Declaration of Commitment on HIV & AIDS', 2008–2009.

Vyuzhny, I. 2011. 'Tax rises hit drinkers and smokers hard in Russia', Viewed 19 July 2012, p.1. <http://www.telegraph.co.uk/sponsoredrussianow/society/8859964>

What is management? Definition and meaning, viewed 11 July 2011, Business dictionary.com

Wilkinson, D. 2000. The Researcher's Toolkit: The Complete Guide to Practitioner Research. London: Routledge.

## APPENDIX 1 STATISTICS

	Unit	2006	2007	2008	2009	2010	2011	Growth	Avg.	Total
<b>Road Traffic Accidents</b>	<b>No.</b>	<b>17,034</b>	<b>19,487</b>	<b>20,415</b>	<b>20,000</b>	<b>18,978</b>	<b>18,002</b>		18,986	113,916
Percentage Change	%	-	14.4	4.8	-2.0	-5.1	-5.1	1.4		
Trend Percentage	%	100	114.4	119.8	117.4	111.4	105.7			
<b>Drunken Driving Cases</b>	<b>No.</b>	<b>953</b>	<b>833</b>	<b>1,175</b>	<b>1,491</b>	<b>2,464</b>	<b>2,740</b>		1,609	9,656
Percentage Change	%	-	-12.6	41.1	26.9	65.3	11.2	26.4		
Trend Percentage	%	100	87.4	123.3	156.5	258.6	287.5			
<b>Domestic Violence</b>	<b>No.</b>	<b>237</b>	<b>494</b>	<b>523</b>	<b>540</b>	<b>252</b>	<b>239</b>		381	2,285
Percentage Change	%	-	108.4	5.9	3.3	-53.3	-5.2	11.8		
Trend Percentage	%	100	208.4	220.7	227.8	106.3	100.8			
<b>Suicides</b>	<b>No.</b>	<b>429</b>	<b>497</b>	<b>455</b>	<b>475</b>	<b>397</b>	<b>483</b>		456	2,736
Percentage Change	%	-	15.9	-8.5	4.4	-16.4	21.7	3.4		
Trend Percentage	%	100	115.9	106.1	110.7	92.5	112.6			
<b>Total Social Ills</b>		<b>18,653</b>	<b>21,311</b>	<b>22,568</b>	<b>22,506</b>	<b>22,091</b>	<b>21,464</b>			<b>128,593</b>

(Source: Compiled by Police Office in Gaborone, 2012)

	Unit	2001	2007	2009	Growth	Avg.	Total
<b>People with HIV/AIDS</b>	<b>No.</b>	<b>270,607</b>	<b>303,916</b>	<b>316,363</b>		296,962	
Percentage Change	%	-	12.3	4.1	8.2		
Trend Percentage	%	100	112.3	116.9			
<b>Adults infections (drinking age)</b>	<b>No.</b>	<b>21,724</b>	<b>14,390</b>	<b>15,330</b>		17,148	51,444
Percentage Change	%	-	-33.8	6.5	-13.6		
Trend Percentage	%	100	66.2	70.6			
<b>Non-drinking age infections</b>	<b>No.</b>	<b>4,082</b>	<b>1,077</b>	<b>886</b>		2,015	6,045
Percentage Change	%	-	-73.6	-17.7	-45.7		
Trend Percentage	%	100	26.4	21.7			
<b>Total new HIV infections</b>	<b>No.</b>	<b>25,806</b>	<b>15,467</b>	<b>16,216</b>		19,163	57,489

(Source: Compiled by NACA, in Gaborone, 2012)

Performance Indicators	Unit	2006	2007	2008	2009	2010	2011	Total	Growth	Avg
<b>Beer sales</b>	<b>P' 000</b>	<b>981</b>	<b>875</b>	<b>1,025</b>	<b>1,100</b>	<b>883</b>	<b>1,006</b>	<b>5,870</b>		<b>978</b>
Percentage change	%	-	-11	17	7	-20	14		2	
Trend percentage	%	100	89	105	112	90	103			
<b>Cost of Sales</b>	<b>P' 000</b>	<b>547</b>	<b>571</b>	<b>669</b>	<b>716</b>	<b>560</b>	<b>677</b>	<b>3,741</b>		<b>623</b>
Percentage change	%	-	4	17	7	-22	21		6	
Trend percentage	%	100	104	122	131	102	124			
<b>Gross Profit</b>	<b>P' 000</b>	<b>433</b>	<b>304</b>	<b>356</b>	<b>384</b>	<b>323</b>	<b>329</b>	<b>2,129</b>		<b>355</b>
Percentage change	%	-	-30	17	8	-16	2		-4	
Trend percentage	%	100	70	82	89	74	76			
<b>PAT</b>	<b>P' 000</b>	<b>222</b>	<b>164</b>	<b>194</b>	<b>209</b>	<b>138</b>	<b>133</b>	<b>1,060</b>		<b>177</b>
Percentage change	%	-	-26	18	8	-34	-3		-7	
Trend percentage	%	100	74	87	94	62	60			

(Source: Compiled by Reseracher from KBL Annual Financial Reports 2007 to 2011)

## **APPENDIX 2**

### **ANALYSIS OF SOCIAL AND FINANCIAL STATISTICS**

#### **1.4.2 Analysis of Alcohol-related social-ills before and after Levy**

##### **a) Road traffic accidents**

These increased from 17,034 in 2006 to 18,002 in 2011 representing an increase of 5.7%. For six years, a total of 113,916 accidents occurred with an average of 18,986 accidents and a growth rate of 1.4% per annum. However the number of accidents which increased by 19.8% in 2008 when the levy was introduced only decreased by 11.8% in 2011; and was not significant enough to negatively impacts the positive growth of 1.4%.

##### **b) Drunken driving**

These cases increased from 953 in 2006 to 2,740 in 2011 representing an increase of 187.5%. Over six years, a total of 9,656 drunken driving cases occurred with an average of 1,609 accidents and a growth rate of 26.4% per annum. The number of these drunken driving cases which only registered an increase of 23.3% in 2008 when the levy was introduced further escalated by 133.2% in 2011. These results suggest that more people took alcohol while driving after the levy than before.

##### **c) Domestic violence**

The number of domestic violence cases increased from 237 in 2006 to 239 in 2011 reflecting an increase of 0.8%. For six years, a total of 2,285 cases occurred with a mean of 381 cases and a growth rate of 11.8% per year. However the number of domestic violence cases which increased by 120.7% in 2008 when the levy was introduced only decreased by 54.3% in 2011; and was not significant enough to negatively impacts the positive growth of 11.8%.

##### **d) Suicides**

These increased from 429 in 2006 to 483 in 2011 representing an increase of 12.6%. Over six years, a total of 2,736 suicides were committed with a mean of 456 accidents and a growth of 3.4% per year.



These suicide cases which only increased by 6.1% in 2008 when the levy was introduced; only increased by 6.2% in 2011. These results suggest that more people committed suicides after the levy than before.

The statistics pertaining to HIV/AIDS infections are analysed in Tables 1.2 (Appendix 1) and summarised below

**a) People living with HIV/AIDS**

These increased from 270,607 in 2001 to 316,363 in 2009 representing an increase of 16.9%. Over eight years, an average of 296,962 people was living with HIV/AIDS (16.5% of the population), with a growth rate of 8.2% per year. The number of the people with HIV/AIDS which increased by 12.3% in 2007 before the levy only increased by 4.1% in 2009 after it took effect. These results indicate an overall increase in infections.

**b) Total new HIV infections**

These decreased from 29,806 in 2001 to 16,216 in 2009 reflecting a decrease of 37.2% decrease. Over eight years, a total of 57,489 new HIV infections occurred with an average of 19,163 infections and a growth of -17.6% per year. These new infections which decreased by -40.1% in 2007 before the levy was introduced increased by 4.8% in 2009 after it was effected. Although a decreasing trend in the number of infections between 2001 and 2009 is significant (with a 37.2% decrease) resulting in negative growth (-17.6%), an increase of 4.8% is not desirable.

The significance of alcohol in contributing to increase in infections and to the number of people living with HIV/AIDS is made clearer when statistics of total new HIV infections is broken down into infections of drinking-age adults and non-drinking age group as analysed below.

**i) Adult infections (drinking-age)**

These decreased from 21,724 in 2001 to 15,330 in 2009 reflecting a 29.4% decrease. Over eight years, a total of 51,449 infections occurred with an average of 17,148 infections and a growth of -13.6% per year.

These infections which decreased by 33.8% in 2007 before the levy was introduced increased by 6.5% in 2009 after it was effected. Although a decreasing trend in the number of infections between 2001 and 2009 is significant (with a 29.4% decrease) resulting in negative growth (-13.6%), an increase of 6.5% is not encouraging.

ii) Non-drinking age infections

These decreased from 4,082 in 2001 to 886 in 2009 reflecting 78.3% decreases. For eight years, a total of, 6,045 infections occurred with an average of 2,015 infections and a growth of -45.7% per annum. These Infections which decreased by 73.6% in 2007 before the levy was introduced further decreased by 17.7% in 2009 after it took effect. This decreasing trend in the number of infections between 2001 and 2009 is very significant (with a 78.3% decrease), resulting in negative growth (-45.7%) is indicative of rewarding efforts in reducing high HIV/AIDS infection rates as noted in Section 1.3.

**1.4.3 Financial performance of KBL before and after Alcohol Levy**

The results in Table 1.3 (Appendix 1) shows financial highlights of KBL for the past 5 years covering two periods before and after the implementation of alcohol levy.

**a) Beer sales**

The value of beer sales increased from P0.981 million in 2006 to P1.006 million in 2011 representing an increase of 2.6%. For six years, a total value of beer sales amounted to P5.870 million with an average value of P0.978 million and a growth rate of 1.6% per annum. However; the value of beer sales which increased by 4.5% in 2008 when the levy was introduced registered a decrease of 1.9% in 2011 indicating a drop in revenue from P1.025 million to P1.006 million.

**b) Cost of sales**

This increased from P0.547 million in 2006 to P0.677 million in 2011 reflecting an increase of 23.8%. Over six years, the total cost of sales was P3.741 million with an average cost of P0.623 million and a growth of



5.5% per annum. It is also worth noting that the cost of sales which had significantly increased by 22.3% in 2008 when the levy was introduced was significantly reduced and only increased by 1.2% in 2011. This indicated more prudent cost management to mitigate the impact of high alcohol levy (of 40% by 2010) which constrained beer sales, reduced competitiveness and profitability for KBL. Thus cost management was therefore an imperative to circumvent the intervention.

**c) Gross Profit**

This decreased from P0.433 million in 2006 to P0.329 million in 2011 reflecting a decrease of 24.1%. For six years, total gross profit was P2.129 million with an average of P0.355 million and a growth rate of -3.8% per annum. The gross profit which decreased by 17.9% in 2008 before the levy only decreased by 7.6% in 2011 after the levy. Two factors explaining this reduction in gross profit are low and declining beer sales and rising cost of sales. Hence the reduction in cost of sales between 2008 and 2011 helped to reduce the gross profit deficit by 7.6% in 2011.

**d) Profit after-tax (PAT)**

This decreased from P0.222 million in 2006 to P0.133 million in 2011 reflecting a 40.0% decrease. For six years, total PAT was P1.060 million with an average of P0.177 million and a growth rate of -7.5% per annum. The PAT, which decreased by 12.8% in 2008 before the levy further decreased by 31.2% in 2011 after it took effect.