national treasury

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REPUBLIC OF SOUTH AFRICA

A REVIEW OF THE TAXATION OF ALCOHOLIC BEVERAGES IN SOUTH AFRICA

A Discussion Document

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EXECUTIVE SUMMARY

The Minister of Finance announced in the 2010 Budget Review his intention to review the excise duties structure of alcoholic beverages. This discussion document analyses the experience of the current excise duty structure for alcoholic beverages since its implementation in 2002, recent developments in excise policy formulation both locally and internationally, and the scope of using the excise duty system to internalise the social external costs arising from alcohol abuse.

Consultations since 2010 elicited contributions from government, industry, and other stakeholders helped inform this review.

Current alcohol excise tax regime

South Africa applies a transparent alcohol excise duty rate structure that differentiates between alcoholic beverages in accordance with benchmarks determined in 2002 and adjusted in 2012. The total consumption tax burden (excise duties plus VAT) as a percentage of the weighted average retail selling price for wine, clear beer and spirits were set at 23, 33, and 43 per cent respectively in 2002. Budget 2012 increased the target tax burden for beer and spirits to 35 and 48 per cent respectively. Alcohol excise duties were increased above inflation since 2002/03 to achieve and maintain the targeted indirect tax burdens on alcoholic beverages.

Differential alcohol excise taxation

Appropriate excise rates for different types of alcoholic beverages need to be informed by a combination of factors that include, attempts to address the social and health concerns of alcohol abuse, comparisons with international benchmarks, local conditions of the various alcoholic beverages industries and markets, absolute alcohol content, and social and political perceptions and values.

Besides revenue raising objectives, the rationale for excise taxes on alcoholic beverages is to reflect their harmful external costs. Since these are primarily related to the volume of alcohol rather than the type of alcohol beverage, some argue that alcohol taxes should be based on alcoholic content. In practice, the taxation of alcoholic beverages often deviates from alcohol content and to differentiate between beer, wine and spirits based on health and social considerations, price elasticities, alcohol concentration, and special considerations related to the domestic wine industry, and the practise to tax “hard liquor” (spirits) at higher rates.

Concerns with the current alcoholic beverage tax regime include the need to update the current benchmarks, anomalies in the ready-to-drink (RTD), cider, and alcoholic fruit beverages (AFB) beverage market, structural changes in

alcoholic beverages market, the appropriate classification and taxation of mixed and fermented alcoholic beverages, and the displacement of some lower priced products into the illegal sector.

Technological advances in production techniques and product development on the traditional demarcation / classification and taxation of alcoholic beverages.

International trends

Internationally there is no straight-forward relationship between tax rates and alcohol consumption levels, as a range of psychological and cultural considerations influence alcohol consumption. Rates of alcohol taxation tend to differ much more widely between countries than any reasonable variance in estimates of social costs of alcohol abuse. International comparisons of alcohol taxation tend to reflect country-specific histories, revenue needs and in some instances protectionism and not necessarily the true or reasonable estimate of external cost.

Most south-east Asian countries have mixed systems of multi-tiered alcohol taxation, applying both specific excise duties by alcohol content and ad valorem excise duties by product value. Australia's wine industry is protected to promote rural employment. Small and medium producers using mostly local raw materials, qualify for alcohol tax rebates.

Alcohol taxation varies among Southern African countries due to differences in revenue potential (size of tax base, price elasticity and smuggling) and different degrees of concern about the externalities associated with alcohol. Different country patterns of excise taxation often reflect domestic features and do not easily lend themselves to cross-country comparisons.

Reliable and up-to-date data on alcohol tax burdens on various alcoholic beverages in comparable countries is often difficult to obtain. Also, the difference between official and actual alcohol tax rates limits the unqualified use of international comparisons.

External costs associated with alcohol abuse

The external costs associated with alcohol abuse are borne by those other than the person who engages in alcohol abuse. These externalities are borne by broader society due to the failure of liquor markets to adequately internalise the costs of alcohol abuse. The public sector attempts to mitigate the impact of alcohol abuse on society through a range of expenditure programmes and regulatory interventions. These costs incurred by government and taxpayers in general can be viewed as a very conservative proxy for the externality costs associated with alcohol abuse.

Based on conservative estimates, the national government allocated more than R10 billion and provincial governments allocated almost R7 billion in 2009/10 to deal with the direct consequences of alcohol abuse, reduce the extent of alcohol abuse, and address its negative social impact. After the revenue gained through excise duties on alcoholic beverages, VAT collected on alcohol sales and provincial liquor licenses, net alcohol-related expenditure of about R890 million remained to be funded through general tax revenue and borne by the taxpaying public at large.

If excise taxation is meant to internalise the social and external costs of alcohol abuse, excise duties on alcoholic beverages would need to increase further. However, social problems arising from excessive alcohol consumption might be exacerbated if sharp increases in excise duty result in some drinkers turning to unsafe illicit products and potentially harmful home brews.

Complimentary non-tax interventions

The literature suggests that the link between alcohol consumption per capita, health and social problems arising from alcohol abuse is not linear. Some experts argue that not all forms of alcohol consumption cause negative costs to society and penalising non-problem drinkers might not be an effective intervention. Given the range of social and cultural considerations that influence alcohol consumption, alcohol abuse should be addressed through a combination of excise taxation and complementary non-tax policy interventions.

Some commentators argue that patterns of drinking are more reliable indicators of alcohol abuse than absolute levels of alcohol consumption. Educational programmes and regulatory interventions aimed to discourage risky and hazardous alcohol consumption, such as binge drinking, under-age drinking, drunk-driving and drinking during pregnancy are important complimentary measures to support pricing (including tax) interventions. However, the success of non-tax interventions to encourage behavioural changes depends largely on effective enforcement and outreach.

Economic overview of alcoholic beverages sector

The economic contribution of the alcoholic beverages sector for the year 2009/10 was estimated at R73 billion, or 2.9 per cent of South Africa's gross domestic production (GDP). The sector sustained an estimated total of 522 533 employment opportunities.

The beer industry dominates the alcoholic beverages sector with 77 per cent of total liquor sold by volume, compared to that of wine at 9 per cent, spirits at 3 per cent and RTDs / AFBs at 10 per cent.

The beer industry accounted for almost 55 per cent of the GDP added by the alcoholic beverages sector, compared to that of wine at 27 per cent, spirits at 10 per cent and RTDs/AFBs at 8 per cent. The beer industry accounted for 47 per cent of total employment (direct and indirect) by the sector. Despite the lower market share of wine by volume, it accounted for 43 per cent of total employment in the sector due to the wine industry's labour intensity through its rural and agricultural economic linkages.

Small (less than 100 tons) to medium (less than 500 tons) wine grape farmers make up over 77 per cent of primary producers in the wine industry. It is argued that in order to keep retail prices competitive, wine makers and traders do not fully recover excise duty increases in their retail price adjustments. Instead, increases in alcohol taxes are 'shifted' back to primary producers who are essentially price takers.

Excise duties on alcoholic beverages generated an estimated R14 billion in 2012/13.

Illicit trade

Illicit trade in alcoholic beverages threatens government's broader alcohol-related policy objectives, deprives the fiscus of tax revenue as a result of unpaid customs duties, excise duties and value-added tax, and harms legitimate traders. It is in the interest of both government and the alcohol industry to improve methods to assess the nature and extent of illicit alcohol markets, and address enforcement and compliance constraints in combating illicit trade.

A Southern African Development Community (SADC) study into illicit trade found that South Africa is both a main destination and major source for illicit excisable products in the region.
Education has a large part to play in making harmful consumption patterns less socially and culturally acceptable. The SADC study recommends the need of a high level commitment to fight illicit trade, zero tolerance of corruption, regional harmonisation of enforcement strategies and anti-illicit action plans. It advises that tax rates should be balanced to maximise revenue, and achieve health and social objectives without being set so high as to lead to increased illicit trade.

Estimates of alcohol demand elasticities

Econometric estimates suggest that malt beer is the least price sensitive. AFBs and RTDs are very responsive to changes in consumer income, are the most price sensitive, and are also influenced by factors other than price and income, more so than other beverages. The income sensitivity of unfortified wine is marginally higher than for malt beer and lower than for fortified wine and spirits. Standard priced wine responds negatively to increases in income and could be seen as an inferior product. Standard priced wine also has the highest substitution effect (compared to other wines) in relation to malt beer prices.

Fortified wine is more income sensitive compared to unfortified wine, but its price sensitivity and substitution effect relative to unfortified wine prices are low. The income elasticity of spirits is comparable with that of fortified wine. Spirits are reasonably sensitive to changes in malt beer and unfortified wine prices.

Cross price elasticities suggest that tax interventions might have the perverse effect to shift consumption towards alcoholic beverages with higher alcohol content due to cross-substitution effects.

Summary

Raising alcohol excise taxes may reduce general alcohol consumption levels, while simultaneously increasing fiscal revenue. However, it should be noted that price and income elasticities of demand differ between the various types of alcoholic beverages and heavy drinkers tend to be less price sensitive. Alcohol tax increases may also give rise to unintended shifts in consumer behaviour with substitution between alcohol products that could undermine government's health objectives. The effectiveness of alcohol tax policy depends on the extent to which alcohol taxation discourages excessive alcohol consumption and its impacts on the economy and illicit trade. It is important that tax measures be complemented by regulatory and other non-price interventions to combat alcohol abuse.

The tax regime for alcoholic beverages should provide certainty to both government and industry, and not be open to manipulation or undue lobbying. The complexity of the tax regime, the tax administration and compliance costs, the impact on the economy and the potential impact of illicit trade should all be considered in reforming the excise taxes on alcoholic beverages.

1. INTRODUCTION

The Minister of Finance announced in the 2010 Budget his intention to review the excise duties structure of alcoholic beverages. The 2010 Budget Review states: "Given that the tax burden benchmarks for the various alcoholic beverages were set as far back as 2002, and considering the social need to curb alcohol abuse, a consultation process to increase these benchmarks will be initiated during 2010."

Besides revenue-raising objectives, one of the economic rationales for additional taxes on alcoholic beverages is to internalise the socio-economic costs (i.e. negative externalities) associated with the use of these products. The excise duties structure therefore aims to internalise the external costs of alcohol abuse, by adjusting alcoholic beverages prices, and to re-assign these costs to the relevant alcohol producers and consumers. By so doing, some of the various alcohol-related externalities, such as increased health costs, loss of productivity (absenteeism), domestic violence, road accidents (both motor vehicles and pedestrians), etc. are re-assigned from broader society to alcohol producers and consumers.

This excise tax intervention has two objectives. Firstly, a more optimal allocation of scarce resources is achieved, which puts the economy on a more efficient and sustainable long term economic growth path. Secondly, in theory, alcohol consumers base their economic decisions inter alia on the prices of such beverages. The price increase that results from the increased excise duties should therefore help to curb alcohol consumption and thereby reduce the associated external costs of alcohol abuse on society.

In practice, however, there is a limit to the extent that these socio-economic objectives can be pursued through the tax system. The addictive nature of alcohol may sometimes lead to a perverse outcome where consumers are not guided by the corrected price signal, but instead forgo other “meritorious” expenditure to maintain their now more expensive alcohol consumption habits. Also, illicit trade and smuggling of alcoholic beverages may be encouraged by significant excise duty increases, as the profitability of illicit trade tends to increase with increased levels of taxation. Illicit trade not only undermines tax policy objectives, but also encourages an illegal and largely invisible informal market beyond the reach of government's regulatory powers. This market has negative social consequences especially for the poor and vulnerable. Shortcomings in and limitations of enforcement measures by authorities to curtail illicit trade may therefore limit efforts to contain the social costs of alcohol abuse.

Excise taxes can be defined as selective taxes on goods and services, whether imported or produced locally. Broadly speaking, the distinguishing features of excise taxation are the selectivity in coverage, discrimination in intent and often some form of quantitative measure linked to the tax liability. Excise tax rates

could be levied in specific or ad valorem terms, and is usually guided by controls over production and classification for enforcement purposes.[1]

Excise taxes levied on alcoholic beverages aim to correct a market failure, whereby the negative external costs are not necessarily reflected in the retail price of such beverages. These costs include costs that alcoholic beverage consumers impose on others, cost to the fiscus, and to a lesser extent personal cost.

In order to deal with the consequences of alcohol consumption, and more specifically alcohol abuse, Government has three policy measures at its disposal, namely alcohol taxation, regulation and expenditure interventions. The combined packaging of these interventions is important as it impacts on the efficiency of Government's response to alcohol related externalities.

As a starting point these interventions should aim to reduce aggregate levels of alcohol consumption throughout the entire population. Population based interventions aim to have an effect on non-drinkers, moderate consumers of alcohol and "problem" drinkers. Such a broad approach is due to the "insidious" nature of alcohol, and also because of the nonlinearity of the external cost associated with alcohol consumption. For example, a person that starts drinking with the intention of having one or two drinks, ends up having more that than this as their judgement and perceptions change as a direct result of alcohol consumed.[2]

This discussion document seeks to summarise the experience with the current excise duty structure since its implementation in 2002, recent developments in excise policy formulation both locally and internationally, and the scope for utilising the excise duty system to internalise the social costs arising from alcohol abuse. It also briefly discusses the World Customs Organisation (WCO) classification of certain stripped fermented alcohol products and the impact that new technology used by industry has on the alcohol excise tax administration and compliance.

The purpose of the discussion document is to elicit stakeholder inputs and comments into the process of updating and / or reforming the current policy framework and benchmarks relating to the taxation of alcoholic beverages.

It should be noted that certain analyses in the 2002 National Treasury policy paper *The Taxation of Alcoholic Beverages in South Africa (and its impact on the consumption levels of alcoholic beverages)* are still applicable in the current alcohol excise taxation debate. These include the theoretical tax policy analysis of alcohol taxes and cost benefit considerations of alcohol production and consumption. This discussion document therefore does not address these issues again in detail.

[1] African Tax Institute, 2013. Excise taxation.

2 Professor Melvyn Freeman, 2013. (National Department of Health)

This discussion document is a refinement of an earlier draft that formed the basis of the National Treasury's consultations with the alcoholic beverages industry, government, and other role-players since 2010. In addition to the review of current alcohol taxation, the importance of complementary non-tax policy interventions and the impact of tax administration on the alcohol excise tax structure have been highlighted during the consultations. Inputs and comments from this consultative process have been processed and incorporated into the current discussion document to reflect a consolidated summary of issues raised by all stakeholders.

2. CURRENT SOUTH AFRICAN ALCOHOL EXCISE TAX REGIME

In almost every country, the manufacturing, sale, and consumption of alcoholic beverages are subject to government interventions, regulations, and special taxation through excise duties in addition to sales / value-added taxes. Excise duties on alcoholic beverages are justified as both an instrument to raise general tax revenue and as a means to control the consumption of such beverages due to their potential harmful effects on society. It also contributes to broader health and social policy objectives.

Health, safety and social concerns relating to alcohol abuse tend to support higher levels of excise taxes in addition to complementary non-price measures to combat alcohol abuse. However, increases in excise duties must be balanced against the economic contribution of the alcohol industry, e.g. employment, the risks of increased levels of smuggling and illicit brewing, together with the need for measures to combat illicit trade. Attempts to outlaw the production and consumption of alcoholic beverages have been unsuccessful in most countries.

a) Current alcohol excise duty policy approach

South Africa applies a specific alcohol excise tax regime. Domestic excise duties on alcoholic beverages generally follow the international practice of taxing high-alcohol content products at a higher rate than low-alcohol products, with the exception of wine that receives a beneficial alcohol tax treatment in line with international practices based on various socio-economic, agricultural and tourism arguments. The aim is to tax beer, wine and spirits broadly in line with international benchmarks.

The National Treasury attempted over the seven years from 1996 to 2002 to streamline the taxation of alcoholic beverages in South Africa in line with international benchmarks and to enhance internal consistency of excise duties on all types of alcoholic beverages. These efforts culminated in 2002 in a policy paper, *The Taxation of Alcoholic Beverages in South Africa*, which addressed the structure of the excise duty regime, the level of duties, and the impact thereof on the level of alcohol consumption. This 2002 paper was the result of extensive consultations with key stakeholders to develop the current “consistent” and predictable framework for the taxation of alcoholic beverages.

The current excise duty policy framework takes a long-term view of specific excise duties on alcoholic beverages and sets the excise duties on alcoholic beverages at fixed percentages of the weighted average retail prices of specific categories of alcoholic beverages. These percentage targets were phased in as follows:

- The total consumption tax burden (excise duties plus VAT) as a percentage of the weighted average retail selling price for wine, clear beer and spirits has been fixed at 23, 33, and 43 per cent respectively. (Budget 2012 increased

the target tax burden for beer and spirits to 35 and 48 per cent respectively. The excise duties on alcoholic fruit beverages and ciders are set equal to that of clear beer on a per litre basis.

- The excise duty burden on spirit coolers is based on the excise duty for spirits, as was already the practice.
- The tax incidence for the first nine months of the current fiscal year is used as reference point for the annual adjustments in excise duties for each category of alcoholic beverage. However, the actual adjustment in excise duties is calculated based on tax burdens derived from projected prices for the next fiscal year or the expected consumer inflation rate, whichever is higher. This fall-back position ensures that the market is not flooded with low–price alcoholic beverages in order to minimise the annual adjustment in excise duties.

b) Experience with the current alcohol excise regime

The current alcohol excise tax regime has been acknowledged as a transparent basis for determining the level of excise taxes on alcoholic beverages. The National Treasury has thereby provided industry with a clear basis on which to plan and also successfully discouraged undue lobbying by the various stakeholders.

The pragmatic approach adopted by the National Treasury in applying the alcohol excise tax policy has allowed sufficient flexibility to respond to unforeseen market fluctuations and operational concerns from industry. The gradual phasing in of target rates and the use of survey information, provided by industry in some instances, has also encouraged constructive dialogue between alcoholic beverage industries and government.

Domestic alcohol excise duties were broadly increased in line with the consumer price index between 1994/95 and 2001/02. Since South Africa's revised alcohol excise tax regime was announced in 2002, excise duties have risen consistently above inflation. In nominal terms, excise rates increased between2002/03 and 2013/14 by 149 per cent for beer, 233 per cent for wine (from very low levels), and 234 per cent for spirits. The inflation rate as measured by cumulative CPI increased by 62 per cent over the same period. The historical year on year increases in alcohol excise duty rates, both by volume and alcohol content, are outlined below.

Table 1: Specific excise duties by volume (cents per litre) 1994 - 2013

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Malt Beer (5% alc.)	74	84	91	99	103	106	112	119	128	141	154	168	183	198	212	232	251	270	297	319
Unfortified wine (12%)	29	36	43	53	61	64	68	75	81	90	117	141	158	172	184	198	214	232	250	270
Spirits (43%)	806	883	972	1059	1161	1236	1304	1435	1579	1736	1971	2168	2374	2623	2912	3340	3637	4000	4800	5280
Percentage change year on year																				
Malt Beer		14%	8%	9%	5%	3%	6%	6%	8%	10%	9%	10%	9%	8%	7%	10%	8%	8%	10%	7%
Unfortified wine		24%	18%	25%	15%	6%	6%	10%	8%	11%	31%	20%	13%	9%	7%	8%	8%	8%	8%	8%
Spirits		10%	10%	9%	10%	6%	5%	10%	10%	10%	14%	10%	9%	11%	11%	15%	9%	10%	20%	10%
CPI (av)		9%	7%	9%	7%	5%	5%	6%	9%	6%	1%	3%	5%	7%	12%	7%	4%	5%	6%	6%
Cumulative percentage change with 1994 as base year																				
Malt Beer		14%	23%	34%	40%	44%	52%	61%	74%	91%	109%	128%	149%	169%	188%	215%	241%	267%	303%	333%
Unfortified wine		24%	47%	83%	110%	122%	134%	158%	178%	209%	304%	385%	445%	491%	534%	583%	638%	700%	762%	831%
Spirits		10%	21%	31%	44%	53%	62%	78%	96%	115%	145%	169%	195%	225%	261%	314%	351%	396%	495%	555%
CPI (cumulative)		9%	16%	25%	31%	36%	42%	48%	57%	63%	64%	67%	72%	79%	91%	98%	102%	107%	113%	119%

Table 2: Specific excise duties by alcohol content (cents per litre of absolute alcohol content) 1994 - 2013

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Malt Beer (5% alc)	1473	1680	1810	1973	2068	2122	2239	2373	2563	2819	3073	3365	3668	3961	4238	4647	5020	5397	5936	6381
Unfortified wine (12%)	242	300	354	443	508	536	566	623	673	747	976	1171	1317	1429	1533	1650	1783	1933	2083	2250
Spirits (43%)	1875	2055	2260	2463	2700	2876	3034	3337	3671	4038	4584	5042	5521	6101	6772	7767	8457	9302	11164	12280
Tax burden by alcohol content on malt beer and unfortified wine relative to spirits																				
Malt Beer/Spirits	0.79	0.82	0.80	0.80	0.77	0.74	0.74	0.71	0.70	0.70	0.67	0.67	0.66	0.65	0.63	0.60	0.59	0.58	0.53	0.52
Unfortified wine/Spirits	0.13	0.15	0.16	0.18	0.19	0.19	0.19	0.19	0.18	0.18	0.21	0.23	0.24	0.23	0.23	0.21	0.21	0.21	0.19	0.18
Spirits	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Tax burden by alcohol content on malt beer and spirits relative to unfortified wine																				
Malt Beer/Wine	6.10	5.60	5.11	4.45	4.07	3.96	3.96	3.81	3.81	3.78	3.15	2.87	2.78	2.77	2.76	2.82	2.81	2.79	2.85	2.84
Unfortified wine	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Spirits/Wine	7.76	6.85	6.38	5.56	5.31	5.36	5.36	5.36	5.46	5.41	4.70	4.31	4.19	4.27	4.42	4.71	4.74	4.81	5.36	5.46
Tax burden by alcohol content on unfortified wine and spirits relative to malt beer																				
Malt Beer	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Unfortified wine/Malt Be	0.16	0.18	0.20	0.22	0.25	0.25	0.25	0.26	0.26	0.26	0.32	0.35	0.36	0.36	0.36	0.36	0.36	0.36	0.35	0.35
Spirits/Malt Beer	1.27	1.22	1.25	1.25	1.31	1.36	1.35	1.41	1.43	1.43	1.49	1.50	1.51	1.54	1.60	1.67	1.68	1.72	1.88	1.92

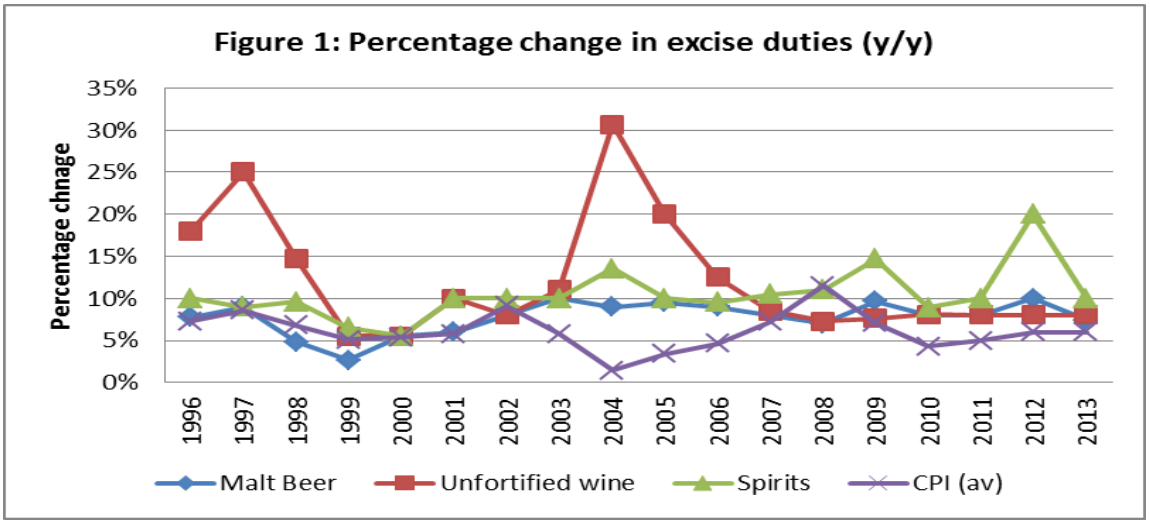


Figure 1: Percentage change in excise duties (y/y)
Percentage chnage
35%
30%
25%
20%
15%
10%
5%
0%
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Malt Beer
Unfortified wine
Spirits
CPI (av)

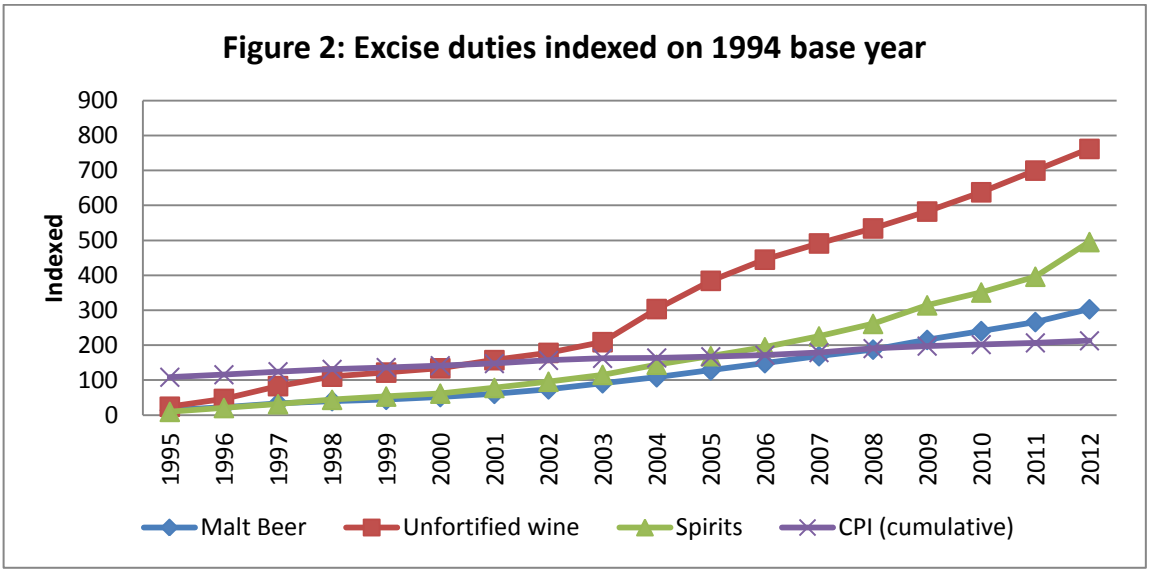


Figure 2: Excise duties indexed on 1994 base year
Indexed
900
800
700
600
500
400
300
200
100
0
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
Malt Beer
Unfortified wine
Spirits
CPI (cumulative)

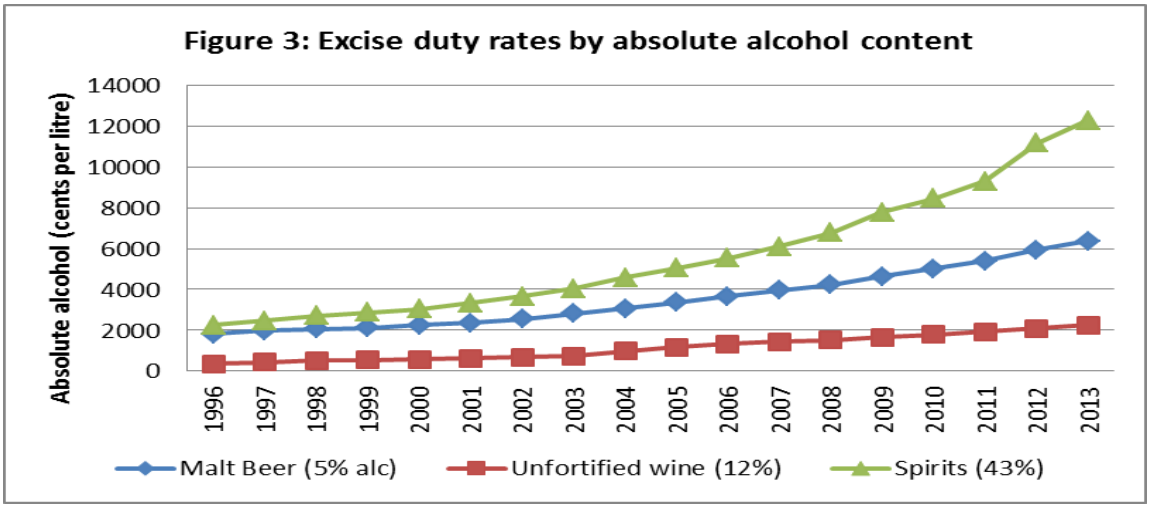


Figure 3: Excise duty rates by absolute alcohol content
Absolute alcohol (cents per litre)
14000
12000
10000
8000
6000
4000
2000
0
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Malt Beer (5% alc)
Unfortified wine (12%)
Spirits (43%)

The differential in the excise tax per litre of absolute alcohol content for beer and spirits has widened by 436 per cent from R11 in 2002/03 to R59 in 2013/14, while the differential between wine and spirits has widened by 233 per cent from R30 to R100 over the same period. The differential between wine and beer has widened at a much slower rate of 115 per cent from R19 in 2002/03 to R41 in 2013/14. There is some concern that the widening tax differentials between the different types of alcoholic beverages may be distorting competition between the alcohol beverage industries, particularly for the spirits industry.[3]

c) Illicit trade and smuggling of alcoholic beverages

Government is mindful of the problem of illicit trade and smuggling of alcoholic beverages and tobacco products, as well as related criminal activities. Internationally, countries with higher excise duties than neighbouring states face similar tax compliance problems and enforcement challenges. The potential inter-relationship between government's excise duties policy, the extent of illicit trade and smuggling as well as related criminal activities, tax compliance problems and enforcement challenges, should be considered.

International experience suggests a link between the affordability of alcoholic beverages and levels of illicit trade. As higher excise taxes make alcoholic beverages less affordable it may have increased incentives for smuggling, illegal production and illicit trade. The problem of illicit trade is addressed in greater detail in Chapter 8.

3 Cooper, 2007.

3. DIFFERENTIAL ALCOHOL EXCISE TAXATION

Economic theory suggests that excise tax rates should be set appropriately taking into account their impact on economic efficiency, equity and potential tax evasion.

a) Relative tax rates between types of alcoholic beverages

Besides revenue raising objectives, the rationale for excise taxes on alcoholic beverages is to reflect their harmful external costs. Since these are primarily related to the volume of alcohol consumed rather than the type of alcohol, one could argue that alcohol taxes should be based on alcohol content. This argument typically favours tax equivalence between different types of alcoholic beverages.

As Baker and McKay state: "Taxes should be based on the characteristic of the good that is related to the marginal external harm caused. In the case of alcoholic drinks, this is usually taken as the quantity of alcohol that they contain. If this is the correct indicator of likely harm, then alcohol duties should be related to the alcohol content and should not differ across different forms of consuming that alcohol."[4]

The application of excise rates based on alcohol content should theoretically relate to the specific percentage alcohol content by volume of all alcoholic beverages. However, in practice the taxation of alcoholic beverages by often differentiate between alcohol bands that correspond with beer, wine and spirits.[5] Various arguments are put forward for the distinction in excise taxes between different types of alcoholic beverages:

Different impact on health

Evidence suggests that the moderate consumption of red wine may have some health benefits, as it contains antioxidants that help delay the onset of cancer and assists with cholesterol problems to reduce the risk of heart disease. Some health benefits seem to be derived from the moderate consumption of beer and spirits as well. These health benefits vary by product depending on its vitamin, mineral, fibre and antioxidant content.

Different price elasticities

The distortions caused by excise taxes are minimised if products that are relatively more price elastic are taxed less heavily than those that are relatively inelastic. Most studies show that the demand for spirits is more sensitive to price changes than beer and wine, which suggests that spirits should be taxed

4 Baker and McKay, 1990, quoted in Cooper, 2007.
5 Bird and Wallace, 2006.

proportionately less, while in practice it is taxed more heavily than other beverages. The cross-price elasticities between product categories also affect the response to tax interventions. South Africa's price (and income) elasticities of demand for the various alcoholic beverages are addressed in greater detail later in the document.

Different concentration of alcohol

A higher tax burden on spirits is often justified due to its substantially higher concentration of absolute alcohol content. However, spirits is most often taken diluted with a mixer, which reduces its alcohol content. Spirits is therefore not necessarily a more concentrated form of alcohol when consumed in this manner.

Distributional considerations

The experience in most countries is that lower income consumers are likely to bear a relatively larger share of the alcohol tax burden.[6] Specific excise taxes may also discriminate against relatively cheaper alcohol products, as the tax constitutes a larger proportion of the retail price. As a result, the overall distributional impact of alcohol taxation is often regressive between and within income groups. In many African countries, the prevalence of traditional or home brews complicate distributional considerations. The lower excise tax rate on sorghum beer / traditional African beer locally, which has not been adjusted for years, is a typical example.

Special dispensation for the wine industry

Most wine-producing countries, including South Africa, tend to tax wine relatively lightly. Typically, by encouraging a buoyant domestic market, a solid foundation is provided for the development of a successful export industry. The wine industry generally receives a more favourable treatment due to its rural economic linkages, employment creation, export and tourism potential. It should be noted that the wine industry also provides feedstock for domestic brandy production that is subject to the relatively higher tax rate on spirits. The wine industry is therefore not favoured in its entirety, as it indirectly bears some of the higher spirits tax burden.

b) South Africa's current differential rates system

South Africa's alcohol tax burden (excise duties plus VAT) is expressed as a share of the weighted average retail selling price and it differentiates between types of alcoholic beverages. Since 2002, this relative tax burden has been set at 23, 33 and 43 per cent for wine, beer and spirits, respectively. Budget 2012 increased the target tax burden for beer and spirits to 35 and 48 per cent respectively. Measured in terms of excise duty per litre of absolute alcohol, the

6 Bird and Wallace, 2006.

differentials are even more marked. Critics point out that the relative differential rates have been widening in South Africa in recent years, especially in terms of absolute alcohol content. Such differentials seem to have narrowed in most benchmark countries.[7]

The differential in the excise tax per litre of absolute alcohol content for beer and spirits has widened by 436 per cent from R11 in 2002/03 to R59 in 2013/14, while the differential between wine and spirits has widened by 233 per cent from R30 to R100 over the same period. The differential between wine and beer has widened at a much slower rate of 115 per cent from R19 in 2002/03 to R41 in 2013/14. Arguably, the widening tax differentials between the different types of alcoholic beverages may contribute to distortions in competition between these industries.

The widening differential between alcohol tax rates for beer and spirits gives rise to anomalies in the alcoholic fruit beverages (AFBs) and ready-to-drink beverages (RTDs) markets. These drinks are mixtures of underlying fruit / beer or spirits derived alcohol with other products like mixers, fruit juices, flavourings, etc. to produce beverages that especially appeal to younger drinkers. RTDs with a spirits base are taxed at the higher spirits excise duty rate, while fruit / beer-based AFBs are taxed at the lower rate for beer. A fruit / beer based AFB with the exact same alcohol content as a competing spirits based RTD would therefore bear a lower alcohol tax burden, despite the two products being potential substitutes.

The alcohol tax rate for cider is based on that of malt beer as close substitutes, which means that the anomalies in the tax treatment of AFBs and RTDs extend to the cider market. The appropriate taxation of RTDs, ciders and AFBs is considered important internationally in view of their appeal to young people. Younger drinkers account for 45, 40 and 32 per cent of the RTD, cider and AFB markets, respectively.[8] The taxation of RTDs, ciders and AFBs according to their alcohol content at a unified tax rate could be a consideration.

Changes in the market structure of alcoholic beverages tend to complicate the application of the current differential rate structure. The beer market has shifted from sales of 750ml to 340ml products that are typically more expensive on a per litre basis. This structural shift pushes up average retail selling prices, which in turn results in larger excise increases to meet the tax burden target. There has also been a shift in the spirits market towards premium products.

c) Classification of alcoholic beverages

Alcoholic beverages can broadly be grouped into the following broad categories: (i) beer (clear - malt), (ii) natural or unfortified wine, (iii) fortified wine, (iv) spirits,

7 Cooper, 2007.
8 South African Breweries Ltd, 2010.

(v) mixed beverages (e.g. alcoholic fruit beverages, ready to drink, aperitifs, cocktails, etc.) and (vi) traditional beer.

The classification of goods in terms of the Harmonized System (HS) Tariff issued by the WCO is done primarily to ensure uniform classification of goods for international trade. However, the classification in terms of the HS also applies to those goods for excise duty purposes. Alignment between the appropriate classification and taxation of alcoholic beverages is therefore necessary in order to avoid anomalies or uncertainty.

In South Africa the domestic production and sale of alcoholic beverages are regulated in terms of the Liquor Products Act No.60 of 1989 (administered by the Department of Agriculture), the National Liquor Act (administered by the Department of Trade and Industry) and various provincial Liquor Acts. The taxation of alcoholic beverages is provided for under the Customs and Excise Act, 1964, that is administered by the South African Revenue Service (SARS).

Distinguishing between fermented and distilled beverages[9]

An alcoholic beverage can have one of the following three characteristics: fermented, distilled and mixtures (including mixtures of fermented, distilled or a combination of the two). The mixtures can also contain other non-alcoholic ingredients. The traditional characteristics of, in particular, fermented products are changed through technological processes that in turn also alter the nature of the fermented product to such an extent that the final product resembles very little or none of the original feedstock's character, flavour, smell or taste.

Fermentation

The fermentation process arises from the interaction between yeast (or a leavening agent) and sugars in the beverage feedstock (e.g. grapes) that causes these sugars to ferment slowly over time, resulting in the formation of alcohol sugars in the beverage. The alcohol content is produced by a biological process, and cannot be raised through natural on-going fermentation beyond about 14 - 16 per cent for grapes or 5 – 8 per cent for other soft fruit without the product becoming unstable and unpredictable in terms of flavour and quality. Hence, beverages with higher alcohol content require fortification through the addition of distilled alcohol.

Distillation

Distillation is the boiling of the components of a beverage feedstock and the condensation of the steam from the process to form a clear distillate with a high alcohol content that contains essences of the original raw materials. During the distillation process, the fundamental nature of the beverage is changed. Some

9 FIVS, 2010.

components (e.g. sugars, amino acids, organic acids etc.) are removed to a greater or lesser extent, while others are concentrated (e.g., ethanol) to produce a spirit or ethyl alcohol product.

Although the distillation process concentrates the alcohol present in the beverage feedstock, limited extracts of the characteristics (colour, taste and smell) may remain in the beverage to varying degrees. Un-denatured alcohol (above 80 per cent absolute alcohol content) of heading 22.07 undergo extended distillation to such an extent that its original characteristics are entirely lost, producing a clear and colourless pure ethyl alcohol.

Mixed beverages

These beverages are often mixtures of a fermented or distilled base with non-alcoholic ingredients added for a distinct character and flavour. Distilled spirits is sometimes added to increase the alcohol level. The classification of wine, fermented beverages and spirituous beverages in the HS Tariff Headings 22.04, 22.05, 22.06 and 22.08 reflect the natural characteristics of these traditional products. The advent of alternative mixtures of alcoholic beverages and new and innovative production processes has led to some uncertainties and disputes in respect of the classification of certain alcoholic beverages.

Fermented alcohol stripped of its essential character

Products with a mixed alcoholic composition (e.g. aperitifs, cocktails, etc.) usually have a fermented alcohol base complemented with the addition of distilled alcohol. However, products with a fermented alcohol base could also be treated through accepted oenological practises that change the fermented character of the beverage. In one such case the Supreme Court of Appeal ruled that the essential character of stripped alcohol no longer resembles that of a fermented feedstock (as the “stripped” product has become nothing more than ethyl alcohol), is classified as such in the HS Tariff and treated accordingly for excise purposes.

Recent developments

The Harmonised Systems Committee (HSC) of the WCO issued a classification opinion in October 2009 that three test products (malt based, fruit based and other than standard orange wine) be classified as spirituous beverages in Tariff Heading 22.08. The products before the HSC were fermented products that underwent purification and filtration processes to the extent that all the characteristics of the beer, wine or other beverage envisaged in the legal text to headings 22.03 – 22.06 were stripped. Furthermore, the spirits of heading 22.08 is not limited to distilled spirits or to beverages. The legal terms of heading 22.08 also includes ethyl alcohol irrespective of whether distilled or fermented and for that reason the alcohol bases considered by the HSC conformed to the legal text

of heading 22.08. It is important to note that what remained after the “purifying” processes was ethyl alcohol and nothing else.

The technological advances in production techniques and product development have impacted on the traditional demarcation and excise taxation of alcoholic beverages.

Alcoholic beverages industries are of the view that the decisions and proposals of the HSC have wider implications. Many of the techniques implicated in the proposed list of defining “spirituous purification techniques” are not only used to clean up alcohol bases, but are practices that are used in the production of many fermented beverages.

Clarification, removal of particulate matter, removal of flavour, smell and colour taints are all legitimate production practices. The technologies in question include activated carbon fining, ultra filtration, reverse osmosis and centrifugation that are all routine processes in the production of wine and other fermented products. As a result, it is difficult to sometimes distinguish fermented products that have been stripped of their fermented character from spirituous beverages.

Competitiveness concerns

The potential uneven enforcement of customs and excise rules based on the use or non-use of a certain set of "purification techniques" could possibly undermine competition between essentially similar alcoholic beverages industries both domestically and internationally. However, the current favourable lower duty rates applicable to un-stripped fermented alcoholic beverages already discriminate against potential spirituous beverage substitutes that may compete in the same market. For example, fermented AFBs face significantly lower alcohol taxes than spirituous RTDs due to anomalies in the treatment of fermented compared to distilled alcoholic beverages and mixtures thereof.

A possible solution to this could include streamlining the alcoholic beverage approval process (both from a Liquor Products and Customs and Excise Act perspective).

Economic implications

The distinction between a fermented beverage and a distilled beverage could become subjective depending on the degree of oenological processes applied. The potential net effect thereof on production, products, trade and investment are unclear but could likely be negative for wine producers, the agricultural interests that supply this industry and other ancillary industries that depend upon it.[10]

10 SALBA, WCSA, VinPro, 2010.

Environmental Implications

Efforts by the alcoholic beverages industries to reduce environmental impacts include new production techniques to minimise solid and liquid waste streams and reduce energy consumption. The classification of wine beverages as distilled products based on listed “purification techniques” could have a potentially negative influence on the attractiveness of environmentally-friendly production techniques that would have reduced environmental impacts, particularly for solid and liquid waste streams.

Amendments to the Customs and Excise Act

In an attempt to address these developments, a special provision for spirituous beverages derived from a fermented alcoholic base and taxed at an excise rate lower than the rate applicable to other distilled spirits was introduced on 23 February 2011. Products in this category with an alcoholic strength by volume exceeding 15 per cent but not exceeding 23 per cent would be classified under 22.08.

The reduced excise duty rate applicable to the special category was at the time (2011) R38.00 per litre of absolute alcohol content, while the rate for distilled spirits was R93.03 per litre of absolute alcohol content. Due to the fermented alcoholic nature of such products (products in the special category), an identical category was also created under tariff heading 22.06 that attracted the exact same excise duty rate.
The most recent amendment proposes that the reduced duty category under 22.08 shall only apply to liqueurs, cordials and other spirituous beverages containing:

(a) (i) distilled spirits,
(ii) the final product of fermentation of fruit stripped of its character to the extent that it is not classifiable within tariff headings 22.04, 22.05 or 22.06 and of which the volume exceeds the volume of the distilled spirits, and
(iii) to which other non-alcoholic ingredients have been added; or
(b) wine spirits to which other non-alcoholic ingredients have been added.

This provision therefore allows for the addition of distilled spirits if the volume of the final product of fermentation of fermented wine or soft fruit that has been stripped of its character exceeds the volume of distilled spirits; or the use of a wine spirits base on its own. This was done to ensure that the end product has a predominantly fermented origin in line with the current practice to apply such reduced excise duty rates to fermented agricultural products.

More work is required with regard to the taxation of “stripped” alcoholic beverages in order to avoid any potential future unintended consequences resulting from the introduction of the reduced duty category. It is also necessary

to evaluate the appropriate level of this reduce rate and how it relates to the effective total indirect tax burden of products that are likely to fall into this category. Such clarification will help to ensure a transparent process for the annual adjustment of this ‘reduced’ excise duty rate.

4. INTERNATIONAL COMPARISONS

Global alcohol excise tax frameworks have developed over many decades and have been influenced by a variety of country-specific political, economic and social policy considerations. It should therefore be noted at the outset that there is a degree of risk to benchmark domestic excise duty rate structures with those found internationally. Alcohol taxation in many countries may not necessarily be optimal and therefore may not provide an appropriate guide for determining alcohol excise tax policy in South Africa.

The European Union is an example where the absence of a clear rationale for both duty levels and relative tax burdens do not present a good example for other countries to follow. In the European Commission political compromises resulted in positive minimum excise tax rates on beer and spirits and a zero minimum excise rate for wine. These rate discrepancies appear illogical, but the European Commission continues to find itself constrained by political pressure from wine-producing member states.[11] While certain countries, for example Sweden and Finland, apply high alcohol tax rates, they do not have particularly low alcohol consumption compared to countries that tax alcohol more moderately.

International benchmarks are also problematic due to unreliable and outdated information on the alcohol tax burden (the share of tax in retail prices) of alcoholic beverages in comparable countries. Comparative tax rates that relate only to take-home (off-premise) sales of alcohol and do not make allowance for sales in bars, clubs and restaurants (on-premise) tends to overstate the tax rates on alcohol.

a) Updated BAC (Brewers Association of Canada) international benchmarks

South Africa's target alcohol tax burdens as a percentage of the weighted average retail selling prices for wine, clear beer and spirits were 23, 33 and 43 per cent respectively from 2002 to 2011. Budget 2012 increased the targeted tax burdens for beer and spirits to 35 and 48 per cent respectively. The target tax burden for wine has been maintained at 23 per cent.

These targeted alcohol tax burdens for beer, wine and spirits were set in the 2002 National Treasury policy paper, *The Taxation of Alcoholic Beverages in South Africa (and its impact on the consumption levels of alcoholic beverages)*. The international benchmarks used at the time were based on 1997 data published by the Brewers Association of Canada (BAC). Average international tax burdens were derived from both the full data sample and for major wine producing countries to determine midpoint international benchmark guidelines for South Africa. The BAC's last updated survey is for 2007. Table 3 below reflects both the 1997 and updated 2007 average international tax burdens and the South African alcohol tax benchmarks.

11 Cooper, 2007.

Table 3: BAC international benchmarks of 1997 and 2007 as percentage of the weighted average RSP

	Wine		Beer		Spirits	
	1997	2007	1997	2007	1997	2007
Total sample country average	30	29	35	34	58	55
Wine producing country average	17	18	28.3	27	51.4	47
Midpoint	23.5	23.5	31.65	30.5	54.7	51
RSA benchmarks (2002 to 2011)	23		33		43	
RSA benchmarks (phased in by 2013)	23		35		48	

Source: Brewers Association of Canada, South African Wine Industry Information and Systems.

The BAC benchmarking shows that the average international tax burden for wine remained stable over the period, while it decreased marginally for beer. A reduction in the excise tax burden on spirits is observed internationally. The current South African benchmark for wine appears low by total international average standards, but relatively high compared to that in the major wine producing countries. The increased benchmark of 35 per cent for beer appears to be in line with the total international average, but relatively high by wine-producing country standards. By contrast, the increased benchmark of 48 per cent for spirits remains below the total international average, but seems in line with that of wine producing countries.

b) OECD country comparison

In the absence of more recent international benchmark data, trends in the tax burden as percentage of the average selling price for beer, wine and spirits in selected major OECD economies are illustrated below. The tax burden estimates produced by the BAC in 1997 and used by the National Treasury in its 2002 analysis are used for purposes of comparison.

Table 4: Changes in tax burden on beer since 2002

	US	UK	Australia	Canada	France	Germany
BAC estimate of tax burden (1997)	19	40	43	52	24	20
% change in duty, 2002-2006	0.7	11.5	12.3	11.6	0.0	0.0
% real change in duty, 2002-2006 (relative to overall prices)	-10.1	4.0	0.4	2.3	-7.3	-6.2
% real change in duty, 2002-2006 (relative to beer prices)	-6.9	1.6	-7.0	2.9	-5.2	-4.9
Implied % change in tax burden, 2002-2006	-1.3	0.6	-3.0	1.5	-1.2	-1.0
Average % change in tax burden	-0.7					

Table 5: Changes in tax burden on wine since 2002

	US	UK	Australia	Canada	France	Germany
BAC estimate of tax burden (1997)	21	45	23	44	19	13
% change in duty, 2002-2006	1.3	11.5	n/a	21.0	0.0	n/a
% real change in duty, 2002-2006 (relative to overall prices)	-9.6	4.0	n/a	11.0	-7.3	n/a
% real change in duty, 2002-2006 (relative to wine prices)	-3.4	3.7	0.0	11.6	-4.6	n/a
Implied % change in tax burden, 2002-2006	-0.7	1.7	0.0	5.1	-0.9	0.0
Average % change in tax burden	0.9					

Table 6: Changes in tax burden on spirits since 2002

	US	UK	Australia	Canada	France	Germany
BAC estimate of tax burden (1997)	45	61	55	76	53	61
% change in duty, 2002-2006	2.6	0.0	12.3	5.7	0.0	0.0
% real change in duty, 2002-2006 (relative to overall prices)	-8.4	-6.8	0.5	-3.1	-7.3	-6.2
% real change in duty, 2002-2006 (relative to spirits prices)	-2.1	-7.0	-0.2	-2.5	-1.6	-1.7
Implied % change in tax burden, 2002-2006	-0.9	-4.3	-0.1	-1.9	-0.8	-1.0
Average % change in tax burden	-1.5					

Source: National governments, European Commission, Haver Analytics, Oxford Economics.

The analysis for these selected OECD countries shows a slight decrease in the average tax burden on beer across most countries. There has also been a decline of 1.5 per cent in the average tax burden on spirits. For many countries, the decreased tax burden on spirits resulted from a freeze in duties. Half the OECD countries covered did not adjust their duties on spirits at all since 2002, partly because of concerns about the link between high tax rates and illegal trade in spirits. By contrast, the average tax burden on wine increased somewhat, which moderated the range of the differential tax burdens across different types of alcoholic beverages.

More detailed comparative analyses of annual changes in excise duties on beer, wine and spirits across a wider range of representative OECD countries are presented in Annexure A. Even in OECD countries where excise duties on

alcohol were increased, the average increase since 2002 has been significantly lower in real terms than for South Africa.[12]

c) South-East Asian country comparison

Australia's system of alcohol taxation "aims to assist public health policy goals through an appropriate tax environment in which responsible drinking decisions are promoted".[13]It applies a specific excise tax rate structure expressed on an absolute alcohol content per litre basis where the amount of tax paid is directly related to the amount of alcohol consumed. Duties are automatically adjusted annually through inflationary indexation. Differential rates apply between beer, spirits and RTDs.

Wine is an exception and is subject to ad valorem excise duties under the value-based Wine Equalisation Tax. While the beneficial tax treatment of wine is typical of most countries with significant domestic wine production, Australia also grants additional rebates that exempt 96 per cent of wineries from alcohol taxation. As a result, the alcohol tax burden on wine is significantly below that of other alcoholic beverages. While beer and spirits consumption levels per capita have flattened out, wine consumption is growing. However, wine tax revenues are declining per capita due to consumers switching to low-priced wines that pay less tax under the ad valorem system.[14]

Cambodia's ad valorem taxation of alcoholic beverages is hampered by tax enforcement and compliance concerns. It has attempted to reduce tax evasion through improved tax administration and increased tax compliance at production facilities. In the longer term, it intends broadening the tax base and moving to either a specific excise tax or a mixed specific / ad valorem excise tax system.[15]
Malaysia has a mixed system of multi-tiered alcohol taxation, applying both specific excise duties by alcohol content and ad valorem excise duties by product value. The excise rate structure also allows for hybrid combinations of specific and ad valorem rates. These differential rates are applied to multiple detailed product categories that conform to WCO classifications.[16]

The Philippines applies a multi-tiered system of alcohol taxation with rate variations according to raw materials, price and alcohol content. Current reforms are aimed at simplifying the tax structure. In the longer term, transitional arrangements will be put in place to ultimately move towards a single rate structure with annual indexation of tax rates.[17]

12 South African Breweries Ltd, 2010.
13Ryan, 2009.
14Ryan, 2009.
15Seiha, 2009.
16 Latif, 2009.
17 Montejo, 2009.

Thailand's current alcohol taxation is based on a combination of alcohol content, price and the type of alcoholic beverage. The complexity of the system creates a lack of clarity and certainty and distorts alcohol tax rates between producers. The tax rate structure lends itself to transfer pricing, substitution for lower priced products, and illicit trade through smuggling and counterfeit. [18]

Longer term reform agendas in these South-East Asian countries indicate a tendency towards specific excise tax structures, often combined with an ad valorem element based on the tax burden expressed as a percentage of the retail price. In order to protect local industries, the objective of rural employment is balanced against the social objective of reducing the consumption of cheap liquor by the poor. Beneficial tax treatment is normally afforded only to small and medium producers, preferably those using local raw materials.

d) Southern African country comparison

Beer is the beverage of choice in most Southern African countries, with spirits consumption prevalent in Mauritius, South Africa and Zimbabwe. Wine consumption is significant only in South Africa, because it is the major wine producer in the region. Changes in alcohol consumption patterns between Southern African countries suggest that the tax base might be considerably less stable over time than expected.[19]

Alcohol tax rates vary widely among Southern African countries and between types of alcoholic beverages, with many countries taxing alcohol very differently depending on the form in which it is consumed. The marked country differences may be attributable to differences in revenue potential (size of tax base, price elasticity and smuggling) and different degrees of concern about the externalities associated with alcohol. Different country patterns of excise taxation often reflect deep-rooted national factors and do not easily lend themselves to cross-country comparisons. Even within particular countries, taxes on alcohol appear to be in constant flux with either or both ad valorem and specific rates applied and the specific rates adjusted frequently to account for inflation. Tanzania applies both ad valorem and specific rates on beer. Mauritius changed many of its ad valorem taxes on alcoholic beverages to specific excise duties, but at differential rates that vary tenfold.[20]

It is therefore not easy to discern a logical trend in the levels and structures of alcohol taxation in Southern African countries that could be used as a benchmark for South Africa. Such anomalies are not unique to Africa, but occur equally in developed countries. Rates of alcohol taxation tend to differ much more widely between countries than any reasonable variance in estimates of social costs of alcohol abuse.

18 ITIC, 2009.
19 Bird and Wallace, 2006.
20 Bird and Wallace, 2006.

5. EXTERNAL COSTS ASSOCIATED WITH ALCOHOL ABUSE

The WHO estimates that South Africa has an average prevalence of heavy drinkers as a percentage of the total population when compared to other countries. Approximately 7 per cent of males and 9 per cent of females are deemed to be heavy drinkers, as they exceed three drinks a day or five drinks on an occasion at least once a week. By contrast, some 70 per cent or approximately 23 million of South Africans over the age of 15 abstain from alcohol, which is defined as not drinking in the past year.[21]

The variation of disease burden attributable to alcohol abuse depends on two key factors – the overall volume consumed over time and the manner in which that alcohol is consumed (i.e. regular heavy drinking or irregular heavy drinking sessions). Regular drinking of high volumes of alcohol has been linked to long term chronic alcohol-related diseases such as cirrhosis of the liver. Binge drinking has been linked to acute alcohol related consequences such as homicide and road traffic accidents.

Risky drinking or binge drinking is more concentrated in the north and north-west of South Africa, with Mpumalanga showing the highest concentration. While an average of 7.5 per cent of the population aged between 25 and 54 indulges in risky drinking during weekdays, this rises to an alarming 31.5 per cent on weekends. The prevalence of risky drinking is greater among middle age drinkers in rural areas who are the least educated and is higher in females than for males. It is also very high among the youth (particularly males) with more than a quarter of youth indulging in it in many communities.[22]

International guidelines for estimating the costs of substance abuse define such economic costs as including the social costs of treatment, prevention, research, law enforcement, lost productivity and quality of life compared to a situation in which there was no abuse. Social costs are those costs incurred by persons other than the person who engages in alcohol abuse. These externalities are borne by society at large due to the failure of liquor markets to internalise the costs of alcohol abuse.

Estimates of the social and economic costs of alcohol abuse are hampered by the lack of consistent and reliable data. Survey samples vary greatly in terms of underlying factors such as gender and age distribution, socioeconomic status, level of physical activity, extent and quality of social support, stress-related illnesses, general health levels, and previous drinking history of respondents. The results of clinical and experimental research into the social harm associated with alcohol abuse are therefore widely divergent. This renders estimates of the socio-economic costs of alcohol abuse often too subjective to fairly inform appropriate government policy responses.

21 WHO, 2004.
22 Department of Social Development, 2007.

The public sector attempts to mitigate the impact of alcohol abuse on society through a range of expenditure programmes. The costs to government and taxpayers, in general, in respect of such mitigation and regulatory measures can therefore serve as a very conservative proxy for the externality costs associated with alcohol abuse. The estimation below quantifies the direct costs that government incurred through provincial and national government budgets to deal with alcohol abuse. Beyond budgetary allocations focused on alcohol abuse, government also incurs additional expenses for those negatively affected by alcohol abuse. The estimates include the amount of time and other resources of specific and general expenditure that are attributable to alcohol abuse.

The figures are based on allocations that aim to deal with the consequences, reduce the extent, and address negative social impact of alcohol abuse. The estimation does not attempt to calculate the full cost to society but focus on costs reflected in government budget allocations primarily on prevention, treatment, and social impact.[23] The estimates expressed below are a conservative representation of the true cost that alcohol abuse imposes on society. In particular it excludes the estimated cost of the premature loss of life.

Both specific allocations and general expenditure attributable to alcohol abuse are included for relevant budget programmes of the following departments:

- Health (national and provincial);
- Social development (national and provincial);
- Safety and security (national and provincial);
- Justice and constitutional development (national);
- Correctional services (national);
- Transport (provincial); and
- Economic development (provincial).

The estimation focuses on national and provincial government budgets and does not include local government budgets. Many municipalities allocate additional budget funding to deal with alcohol abuse, for example through substance abuse treatment centres.[24]Also, the alcohol-related traffic management estimate does not reflect expenditure on local policing to the extent that some larger municipalities have their own metro police forces that are funded from local government budgets. This exclusion of alcohol abuse-related expenditures by local government, and especially the major cities, means that the overall estimate provided is further under-estimated.

23 Budlender, 2009.
24 Budlender, 2009.

a) Sectoral estimates by national / provincial departments

The figures below indicate the proportion of the relevant national and provincial budget allocations for 2009/10 that could be attributable to alcohol abuse within each sector.

i) Health (national and provincial budgets)

The harmful use of alcohol is a major avoidable risk factor for a wide range of non-communicable diseases, such as neuro-psychiatric disorders, cardiovascular diseases, liver cirrhosis and various cancers.[25] It also increases the risk of contracting infectious diseases such as tuberculosis (TB), pneumonia, and can accelerate the progression of TB and HIV/AIDS.[26]Furthermore, it is a causal factor for Ischaemic Heart Disease (IHD), Foetal Alcohol Syndrome (FAS) and unintentional and intentional injuries. The latter include those due to road traffic collisions, interpersonal violence, suicide and crime.[27] In 2000, alcohol-related harm was ranked third as an attributable risk factor to the burden of disease in South Africa, after unsafe sex/STIs and interpersonal violence.[28]

More than 30 codes of the International Classification of Disease (ICD) include alcohol consumption as a necessary cause. More than 200 ICD disease codes relate to diseases for which alcohol is recognised as a component cause.[29] Similarly, there are causal relationships between the volume of alcohol consumed and more than 60 types of disease and injury.[30]

The health sector estimate reflects the general proportion of the overall burden of disease and injury attributable to alcohol across all the selected budget sub-programmes. This estimate is derived from the percentage of all net DALYs attributable to alcohol.[31] (DALY is a disability adjusted life year that measures the overall disease burden). The “net” DALY reflects the positive effect of low to moderate levels of alcohol consumption on conditions such as coronary heart disease, stroke and diabetes mellitus. The estimate is acknowledged by experts to be conservative, in view of infectious diseases worsened by alcohol abuse.[32]

ii) Social development (national and provincial budgets)

Household spending on alcohol tends to worsen poverty, and resources directed to respond to the social and health effects of alcohol can weaken efforts to enhance community development.[33] Displaying symptoms of an alcohol problem

25 WHO, 2009, quoted in Parry, 2010.
26 Parry et al, 2009, quoted in Parry, 2010.
27 Rehm et al, in press, quoted in Parry, 2010.
28 Norman et al, 2007, quoted in Parry, 2010.
29 Rehm et al, 2009, quoted in Budlender, 2009.
30 Doran et al, no date, quoted in Budlender, 2009.
31 Rehm et al, 2009, quoted in Budlender, 2009.
32 Rehm et al, 2009, quoted in Budlender, 2009.
33Rehm et al, 2009, quoted in Parry, 2010.

is strongly correlated with lower socio-economic status in South Africa.[34] In households where alcohol is a problem, 9 per cent of household income is spent on alcohol compared to only 3 per cent in unaffected households.[35] South Africans spend nearly double as much on alcohol as they do on electricity.[36]

The relationship between alcohol consumption and social and economic development is complex. Harmful alcohol use contributes to lowered human capital, which manifests in a variety of ways in the workplace. Productivity is reduced, while absenteeism, sick leave, occupational injuries, accidents and fatalities increase. Between 15 and 25 per cent of the South African workforce are a danger to themselves and / or unable to comply with job requirements due to alcohol misuse during working hours at least once a month. Alcohol consumption is on the rise among blue collar workers and lower status office employees.[37]

Substance abuse, prevention and rehabilitation

The proportion of users of rehabilitation services receiving treatment for alcohol in the different provinces and regions are 28 per cent for Western Cape, 48 per cent for KwaZulu-Natal, 44 per cent for Eastern Cape, 48 per cent for Gauteng, 34 per cent for Northern Region (Limpopo and Mpumalanga) and 67 per cent for Central Region (Free State, Northern Cape and North West). Nationally, 54.9 per cent of patients in treatment in the second half of 2008 had alcohol as a primary or secondary drug of abuse.[38]

Services to persons with disabilities

Epilepsy is one of the more common forms of disability in South Africa and is known to have a significant link with alcohol abuse. Epilepsy accounts for about 3.5 per cent of alcohol-attributable years of life lived with disability (YLDs) in South Africa.[39]Indeed, a range of factors that would tend to increase the levels of disability in the country, including the high prevalence of HIV and AIDS, high incidence of foetal alcohol syndrome, and high levels of violence are related to levels of alcohol abuse.

34 Parry et al, 2005, quoted in Parry, 2010.
35 Flanagan et al, 2002, quoted in Parry, 2010.
36 Schussler, 2008, quoted in Parry, 2010
37 Parry 2010.
38 Plüddemann et al, 2009, quoted in Budlender, 2009.
39 Schneider et al, 2007, quoted in Budlender, 2009.

Victim empowerment

Victims of violence against women and children are known to have a strong link with alcohol abuse. About 20 per cent of offenders arrested for rape reported that they were under the influence of alcohol at the time of the crime, while 44 per cent of victims of interpersonal violence believed their attacker to have been under the influence of alcohol or drugs.[40]About 49 per cent of those arrested on family violence charges claimed to have been under the influence of alcohol at the time of the alleged offence.[41]The Western Cape appears to suffer from higher levels of alcohol-attributable crime than other provinces; with 70 per cent of domestic violence cases found to be alcohol-related.[42]

Care and support to families

This budget intervention is intended to prevent family break-ups and promote healthy families. Violence against women constitutes one of the important reasons for family break-ups and also has an alcohol abuse link. More generally, on-going surveillance of cases seen by district social workers in the Western Cape suggests that 32 per cent of those presenting for marital or relationship problems report that they consume alcohol daily.[43]

Youth development

Adolescents are particularly vulnerable to alcohol-induced brain damage. Underage drinking poses a high risk with a detrimental effect on achievement in school and subsequent earnings, as well as a broader negative impact on society. Foetal alcohol syndrome may cause children to repeat school years or receive special education, which imposes an extra burden on the education system. These additional educational expenditures are excluded from the estimation on the grounds that they are indirect rather than direct costs.[44]The first South African National Youth Risk Behaviour Survey of 2002 found that 23 per cent of learners in grades 8 through 11 had engaged in binge drinking in the previous month.[45]

iii) Safety and security (national and provincial budgets)

A number of South African studies have shown a strong link between alcohol, crime, violence and injury. In a Medical Research Council (MRC) and Institute of Security Studies (ISS) study conducted between 1999 and 2000 in Cape Town, Durban and Johannesburg, arrestees indicated that in 15 per cent of all cases that they were under the influence of alcohol when the alleged crime took place.

40 Parry et al, 2009, quoted in Budlender, 2009.
41 Parry et al, 2004, quoted in Budlender, 2009.
42 Freeman and Parry, 2006, quoted in Budlender, 2009.
43 Budlender, 2009.
44 Casswell and Thamarangsi, 2009, quoted in Parry, 2010.
45 Department of Health and Medical Research Council, 2007, quoted in Budlender, 2009.

This figure was 25 per cent for weapons-related offences, 22 per cent for rapes, 17 per cent for murders, 14 per cent for assault cases, 10 per cent for robberies and as high as 49 per cent in cases related to family violence offences.[46] In research conducted to assess factors related to intimate partner violence in the past ten years, men who were linked to problem alcohol use were twice as likely to have committed violent acts against their partners.[47]

Provincial community safety and social crime prevention

A provincial study of injuries reported to three rural hospitals in the Western Cape found that 70 per cent of injuries sustained through intimate partner violence and 66 per cent of injuries from male-on-female violence more generally were alcohol-related.[48] Male-on-male violence accounts for the overwhelming majority of violence in respect of murder and assault and the link to alcohol abuse follows the patterns outlined above.

iv) Justice and constitutional development (national budget)

Survey data shows that 50 per cent of arrestees reported that they used alcohol. Close on 20 per cent report that they were under the influence of alcohol at the time of the alleged offence. Admittedly, this might be an exaggeration as some accused may use this claim to explain their behaviour and the influence of alcohol was not necessarily the cause of the crime.[49]

v) Correctional services (national budget)

The amount of this budget vote attributed to alcohol abuse is based on the proportion of inmates thought to be incarcerated on account of crimes related to alcohol abuse. This proportion is similarly applied to prisons run by private companies through public-private partnerships. Nevertheless, initiatives to help inmates overcome their addiction are rare.

vi) Transport (provincial budgets)

The assignment of traffic management costs should theoretically be based on the percentage of road accidents that are alcohol-related. However, the following example illustrates how this is complicated by significant variations in available statistics. Independent studies suggest that the total estimated annual cost to South Africa of traffic accidents in 1998 was R76 billion.[50] However, the 2006 Road Safety Strategy claims that the total cost of traffic accidents was R38 billion in 2005.[51]

46 Parry, 2010.
47 Abrahams et al, 2006.quoted in Parry 2010.
48 Donson and Marais, 2004, quoted in Budlender, 2009.
49 Leggett , 2002, quoted in Budlender, 2009.
50 Beukes and Vanderschuren, 2007.
51 Department of Transport, 2006.

These estimates comprise both social and economic costs, differentiated for fatal, serious and slightly injured incidents. These costs include:

- *Resource costs* - damage and consequent repair to vehicles and roadside structures; opportunity cost of ambulance and traffic patrol staff and equipment attending to the scene of accidents; judicial costs incurred in prosecuting and imprisoning offenders; and costs of medical treatment and funeral services brought forward in time.
- *Output costs* - productive work lost from individuals through accident-induced injury and impairment; accident-induced traffic delays; and transitional costs, such as costs incurred in recruiting and training replacement staff.
- *Social costs* - based on the price representative individuals are willing to pay to avert risks to their own or others' safety.

Table 7: Contribution of intoxication to traffic accidents

Traffic accident cost factor	2005	2006	2007	2008	2009
Human cost factors:	90.0%	86.3%	87.2%	84.0%	84.5%
- Intoxicated drivers	2.03%	2.62%	2.05%	1.90%	1.89%
- Intoxicated pedestrians	1.28%	1.55%	1.26%	0.58%	0.69%
Intoxication cost factors:	2.98%	3.60%	2.89%	2.09%	2.18%
- Intoxicated drivers	1.83%	2.26%	1.79%	1.60%	1.60%
- Intoxicated pedestrians	1.15%	1.34%	1.10%	0.49%	0.58%

Of the total accidents from 2005 to 2009, between 84 per cent and 90 per cent were caused by human factors. Intoxicated drivers accounted for between 1.9 per cent and 2.6 per cent and intoxicated pedestrians between 0.6 per cent and 1.6 per cent of these human factors.[52]

The alternative approach of costing the transport externalities associated with alcohol abuse by using alcohol-related government expenditure faces similarly diverse statistics. Transport fatalities account for 30 per cent of non-natural deaths in South Africa, with a strong link to alcohol use.[53]Road traffic injuries are responsible for 14.3 per cent of South African DALYs (disability adjusted life years).[54] About 53 per cent of victims of transport-related deaths test positive for blood alcohol.[55] In a study of trauma patients at state hospitals in Cape Town, Port Elizabeth and Durban conducted in 2001, 40 per cent of those injured in traffic accidents had excessive blood alcohol levels.[56]

52 Road Traffic Management Corporation, personal correspondence with Marissa Moore of the Public Finance division in the National Treasury on 21 May 2010.
53 Freeman and Parry, 2006.
54 Schneider et al, 2007.
55 Matzopoulos, 2005, quoted in Budlender, 2009
56 Plüddemann et al, 2004, quoted in Budlender, 2009.

vii) Economic development (provincial budgets)

The provincial department responsible for economic development performs the function of liquor regulation. The regulation of the liquor industry is unique because of the social and other hazards of alcohol abuse.

Most provinces classify their liquor license revenue as tax revenue, generally under the category 'other tax revenue'. All provinces have a programme for business regulation and governance, in which there is at least one allocation that would include regulation of liquor. Provincial liquor authorities receive funding from the provincial departments responsible for liquor regulation. Where there is no such transfer for a particular province, it is because an authority has not yet been established. Mpumalanga does not record any allocation for liquor regulation, but there is a target performance indicator for this function.[57]

Several provinces provide statistics on liquor licensing, noting the number of licenses applied for, inspections conducted, licenses issued and refused. The Western Cape has had extensive public discussions of its plans in respect of the new Liquor Act and board, with frequent references to the social costs of alcohol abuse. The province notes plans to establish a fund that will promote "continuing public debate about the scourge of liquor abuse. This problem costs the Province billions annually in terms of deaths, injury, disability, loss of productivity, poor academic performance, and the cost of treatment of alcoholism, injuries and foetal alcohol syndrome, of which the highest incidence in the world is registered in the Western Cape."[58]

b) Summary of expenditure on alcohol abuse

The estimates of the overall impact of alcohol abuse on provincial and national government budgets are summarised in the table below, together with the conservative percentage inclusion rates for each expenditure programme.[59]

57 Budlender, 2009.
58 Budlender, 2009.
59 These inclusion rates are based on: Budlender, 2009.

Table 8: National and provincial budgets for alcohol abuse

National and provincial budget programmes (R million)	% Inclusion	2009/10
National expenditure:		
- Health	9.2%	516
- Social development	20.0%	186
- Safety and security	22.5%	5 808
- Justice and constitutional development	10.0%	335
- Correctional services	38.5%	3 355
- Transport	20.0%	15
Total national expenditure		10 215
Provincial expenditure:		
- Health	9.2%	6 085
- Social development	20.0%	346
- Community safety and social crime prevention	35.0%	44
- Traffic control and regulation	20.0%	262
- Liquor regulation	100.0%	243
Total provincial expenditure		6 980
National and provincial revenue:		
- National excise duties on alcoholic bevrages		10 110
- Estimated value-added tax on alcoholic bevrages		6 122
- Provincial liquor license revenue		72
Total national and provincial revenue		16 304
Net impact on national and provincial budgets:		
- Total national and provincial revenue		16 304
- Total national and provincial expenditure		17 195
Net shortfall in alcohol-related revenue		-891
Percentage shortfall in alcohol related revenue		-5.2%

Based on the above relatively conservative estimates, the national government allocated more than R10 billion and provincial governments allocated a total of almost R7 billion towards efforts to deal with alcohol abuse in 2009/10. After the revenue gained through excise duties on alcohol sales of about R10 billion, estimated VAT on alcoholic beverages of about R6 billion and provincial liquor licenses of almost R72 million are accounted for, net expenditure of about R890 million remained to be funded through general tax revenue. This shortfall of approximately 5 per cent is borne by the broader taxpaying public.

These amounts exclude externality costs that are borne by local government and other actors beyond government. The income tax contribution of approximately R3.5 billion by the alcoholic beverages sector and its broader economy-wide fiscal contribution estimated at between R15 billion and R22 billion would

arguably cover these additional costs to broader society.[60] It should be noted that such a "partial" analysis does not take into account the significant opportunity costs of applying economic resources in the alcoholic beverages sector compared to alternative economic opportunities.

Economic and tax policy theory indicates that excise taxes on alcohol are intended to compensate society for the social harm associated with alcohol abuse, whereas the role of VAT and income taxes are that of general sources of tax revenue for government. If alcohol excise taxation is meant to internalise the social externalities of alcohol abuse, without regard to the contribution of VAT and income taxes, the above analysis suggests that excise tax rates need to be increased. However, increasing alcohol excise duties to the extent where it could fully recover the estimated on-budget and external social costs of alcohol abuse may likely give rise to significant unintended social and economic consequences.

Very high excise taxes on alcohol may exacerbate illicit and non-commercial alcohol consumption beyond the reach of government intervention. Moreover, the social problems arising from excessive alcohol consumption might be exacerbated as drinkers turn to unsafe illicit products and potentially harmful home brews. While these unintended consequences do not detract from the important role for alcohol taxes to internalize the social costs arising from alcohol-related harm, it does demonstrate the limitations of tax interventions. It also highlights the need for a set of comprehensive complementary measures (including taxes) to deal with the social costs of alcohol abuse.

c. Internalising the external cost associated with alcohol abuse

The findings above do not suggest that excise tax revenue should be more or less equal to the cost spent by government to deal with the negative consequences of alcohol consumption. Both the tangible and intangible costs go beyond Government expenditure itself and have wider implications for revenue collection as any shortfall has to be cross subsidised by other revenue streams. The proxy used for external cost in this document merely looks at Government expenditure, and therefore does not include tangible and intangible costs which have been estimated to be as high as R38 billion and R243 billion in 2009 respectively.[61]

However the purely economic argument of internalising the external cost of alcohol consumption alone, does not fully account for the more personal costs that are inflicted on individuals.

If alcohol excise taxation is meant to fully internalise the social externalities of alcohol abuse without regard to the contribution of the alcohol industry to VAT

60 Punt, 2010 and Econex, 2010.
61 DNA Economics, 2011.

and income tax revenue, excise tax rates would need to be increased considerably.

Alcohol taxes do not distinguish between moderate and at-risk drinkers and therefore tend to discriminate against moderate drinkers who constitute the vast majority of alcohol consumers. Excessively high excise taxes on alcohol may exacerbate illicit and informal alcohol consumption beyond the reach of government regulatory intervention. Moreover, the social problems arising from excessive alcohol consumption might be exacerbated as drinkers turn to unsafe illicit products and harmful home brews. These unintended consequences do not detract from the important role for alcohol excise taxes. It does however, demonstrate the limitations of tax interventions and highlights the need for a comprehensive approach including effective non-tax measures to address the social problems associated with alcohol abuse.

Estimates of the social and economic costs of alcohol abuse are hampered by the lack of consistent and reliable data. Survey samples vary greatly in terms of underlying factors such as gender and age distribution, socioeconomic status, level of physical activity, extent and quality of social support, stress-related illnesses, general health levels, and previous drinking history of respondents. The results of clinical and experimental research into the social harm associated with alcohol abuse are often widely divergent. This renders estimates of the externality costs of alcohol abuse often too subjective to fairly inform appropriate government policy responses.

In the absence of more concrete evidence, the extent to which government currently addresses alcohol related harm through its expenditure and taxation measures may be used as a proxy of the externality costs of alcohol abuse. It would appear that the contribution of alcohol consumers in terms of excise duties and VAT on alcoholic beverages is below the cost of expenditure programmes by national and provincial governments aimed at addressing the impact of alcohol abuse.

6. NON-TAX INTERVENTIONS

The externalities associated with alcohol abuse are often difficult to quantify. This gives rise to widely varying views on the nature and extent of alcohol-related harm, and appropriate interventions to internalise its social cost. In a similar sense, the exact relationship between alcohol prices and levels of alcohol consumption and abuse are also open to divergent views. Some research suggests that pricing measures (in the form of alcohol taxation or other pricing interventions) is the most effective instrument in reducing alcohol consumption.[62] However, others see pricing measures as a blunt instrument that cannot be targeted at those most vulnerable and at risk for alcohol abuse, and therefore does little to curb alcohol abuse while creating unintended effects throughout the economy.[63]

The WHO notes that effective policy interventions to combat alcohol abuse include price and tax measures, control on availability and controls on advertising.[64] Alcohol taxation is clearly an important intervention, but remains only one instrument in a basket of complementary measures that should ideally be applied in combination to effectively address the problems related to alcohol abuse. In fact, the impact of increased excise taxes on health could potentially be adverse where the resultant higher prices cause consumers to switch to informally and illegally produced alcoholic beverages that may be hazardous. Non-price interventions that focus specifically on changing dangerous drinking patterns of at risk groups, are important complementary interventions in tackling alcohol abuse.

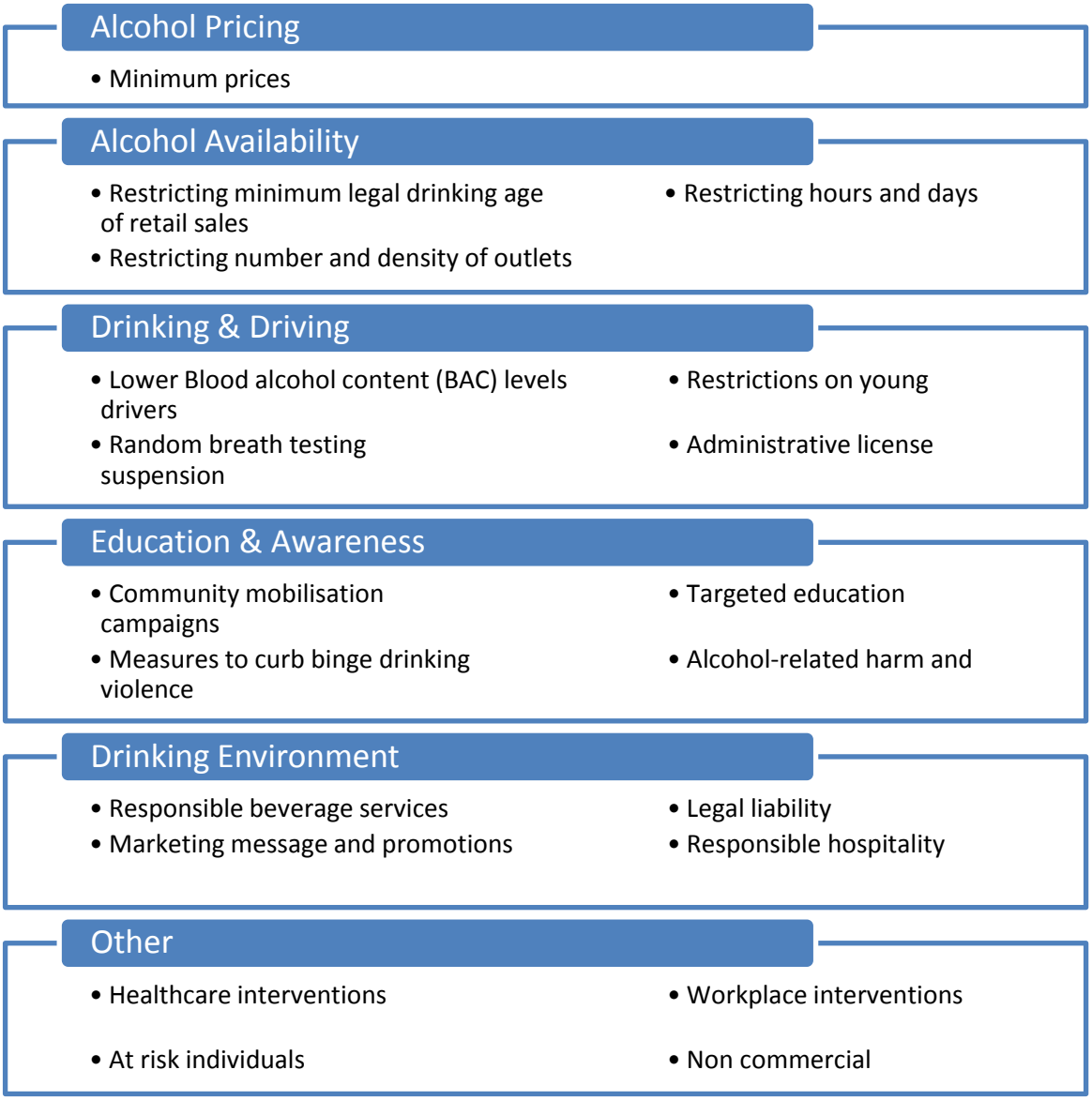
It is also important to note that heavy drinkers and those with problematic drinking patterns are less responsive to tax changes (and thus price increases) when compared to moderate drinking behaviour.[65]

Not all types of alcohol consumption contribute to the same extent to alcohol-related social harm. Alcohol tax measures tend to be blunt interventions aimed at addressing overall levels of alcohol consumption and are by their design generally not targeted to effect changes in specific problem dinking patterns. The role and function of non-tax interventions to complement alcohol taxation by addressing undesirable drinking behaviour, and curbing the socially undesirable consequences of alcohol abuse is therefore important.

Figure 4, is a summary of the various non-tax interventions that could be applied. These non-tax interventions are presented to emphasise the need for a holistic government policy response to alcohol abuse.

62 Babor*et al*, 2010.
63 SAB, 2010.
64 World Health Organisation, 2004.
65 ICAP, 2009.

Figure 4: Non-tax interventions



Source: Constructed from Econex (2010) and ICAP (2008).

a) Alcohol pricing

According to standard economic theory, changes in alcohol price seek to have an impact on the total level of alcohol consumed, or on the type or category of alcohol consumed.[66]

While prices could be used to affect alcohol consumption in general, price interventions are often seen as an ineffective tool in itself to reach problem drinkers and vulnerable high-risk consumers. Tax increases often cause

66 WHO, 2004.

unintended adjustments in relative prices between types of alcoholic beverages, and may encourage substitution for alternative alcoholic beverages that offer the highest alcohol content for the price. Also, tax measures increase the relative attractiveness of cheaper informal and illicit products that often pose greater health hazards.

Minimum prices

Minimum prices aim to increase below average alcohol prices. Appropriate minimum prices should take into account reasonable manufacturing and regulatory costs, as well as a fair mark-up.[67]Minimum pricing aims to place a limitation on access and affordability of alcoholic goods, but also assists with the identification and combating of cheaper illicit alcoholic products that evade the payment of alcohol taxes due.

Minimum pricing is generally introduced via three pricing policies:

- Setting a minimum price per standard drink (all products).
- Altering mark-ups by decreasing the price for low-alcohol content beverages and correspondingly increasing the price of high-alcohol content beverages.
- Linking prices with inflation to ensure that alcohol does not become cheaper relative to other commodities. [68]

Setting a minimum price on each beverage aims to reduce the consumption of alcohol in general, and not just high alcohol-content beverages. This measure has the advantage of neutralising the effects of alcohol discounting (happy hours, bulk purchases, specials etc.) at various premises (pubs, clubs and retail outlets). Chain grocery stores that lure customers by selling discounted alcohol goods are also similarly dealt with. Some research has shown that price changes in the cheapest alcohol products category have the greatest impact on consumption, suggesting that a minimum price could be an effective tool to combat alcohol abuse.[69]

However, under certain conditions the enforcement of minimum prices could potentially transfer money unintentionally from consumers to retailers and manufacturers. Many retailers have traditionally set alcohol prices of certain products at low levels to attract potential customers. The setting of minimum prices increases the retail price for these types of products, thereby increasing the mark-up to the benefit of the retailers. Retailers and manufacturers could also collude to increase profit margins and in this way potentially profit from certain forms of minimum prices.

67 SALBA, 2006.
68 Thomas *et al*, 2009.
69 Thomas *et al*, 2009.

A study by the Institute of Fiscal Studies (IFS) in Scotland found that possible responses to minimum prices could include the following:

- On-premise consumption tends to be substituted for retail alcohol purchases, as pubs and bars are less affected by minimum pricing.
- Retailers reduce the price of alcohol currently sold above the minimum price to attract customers, and are compensated through higher margins on alcohol that previously sold below the minimum price.
- Manufacturers are incentivised to switch alcoholic beverage production into more expensive, higher quality products.[70]

The weighted average retail selling price approach used by National Treasury to determine annual excise rate adjustments, aims to reflect representative price movements in the market. Annual excise tax adjustments also contain anti-avoidance measures to correct for the possibility of lower than inflation price increases due to cheap entry level alcoholic beverages, by setting the annual excise tax adjustments to at least equal to inflation. These measures however still don't prohibit the sale of heavily discounted or illicit alcoholic products.

b) Alcohol availability

Restrictions on the availability of alcohol aim to reduce the harm associated with inappropriate alcohol consumption by applying supply type constraints that target alcohol consumption at retail, production and serving points. These interventions are also useful in targeting underage drinking and excessive alcohol supply in certain areas.

Restrictions on minimum legal drinking age

The legal minimum age for drinking is intended to deter individuals under the age threshold from drinking. Generally studies have shown that lowering the legal drinking age reduces total alcohol sales, as well as alcohol related harm among young people.[71] To enforce the prevention of underage drinking, the following measures should be employed:

- Appropriate verification of identification documents at points of purchase and consumption.
- Penalties for breach of age laws applicable to sellers, purchasers and consumers. Visible and consistent enforcement. [72]

Although the legal age for drinking in South Africa is set at 18 years, underage drinking remains a problem. Restrictions on the availability of alcohol to young people should also render suitable results.

70 Griffith and Leicester, 2010.
71 Econex, 2010.
72 ICAP, 2008.

International experience shows that a drinking age restriction reduces alcohol abuse by young consumers to such an extent that motor vehicle deaths decline.[73]In the US, laws establishing minimum drinking ages and prohibiting driving with open containers of alcoholic beverages were also found to be effective deterrents to drunken driving, and have reduced fatalities resulting from drunk driving.[74]

Such interventions bring forth double dividends whereby underage drinking and alcohol related road traffic accidents are reduced. However, some studies have found that a large percentage of underage drinkers obtain alcohol from non-commercial sources, or via older individuals and others.[75] This again highlights the importance of adequate regulation, monitoring, and enforcement with regard to alcohol purchases and distribution.

Restrictions on hours and days of retail sales

This intervention aims to limit access to alcohol by reducing the allowed timespan available for purchases and sales. It targets the entire population and alcohol consumption in general. Harsh penalties should be implemented to prohibit the breach of these restrictions. It is also necessary to harmonize regional alcohol policies as to prevent substitution between outlets, and from legal sales outlets to unregulated sales outlets.[76] Apart from limiting the easy availability of alcohol, authorities should also monitor alcohol consumption during special events (such as concerts, festivals etc.) and drinking in public places.

Restrictions on number and density of outlets

The aim here is to limit the physical availability of alcoholic beverages. This intervention could focus on areas known for excessive alcohol consumption like areas of entertainment or residential retail outlets. This intervention has the potential to shift alcohol consumption patterns. Just as with the two above mentioned interventions, the effectiveness of these policies depend heavily on the effectiveness of law enforcement agencies.
Restricting the density of outlets (both retail and entertainment) could also be accompanied with interventions to create alcohol free zones (schools, public transport facilities, petrol stations etc.).[77]

73 Grossman *et al*, 1993, as quoted in Bird and Wallace, 2006.
74 Benson *et al*, 1999, quoted in Bird and Wallace, 2006.
75 SAMHSA study as quoted by ARA, 2010.
76 ICAP, 2008b.
77Alcohol & Drug Abuse Research Unit MRC, 2010.

c) Drinking and driving

Alcohol impaired driving is a significant public health problem that contributes to the prevalence of road traffic accidents. The consumption of alcohol influences one's judgement, coordination and other motor functions.[78] The relationship between alcohol consumption and road traffic accidents can be improved by strategies that alter the behaviour of drivers. The aim of these strategies is to discourage drunk driving, and in this way reduce drunk driving related accidents.

Lower blood alcohol concentration levels and random testing

Road traffic accidents are one of the main causes of injury and death worldwide. Many of these accidents involve alcohol-impaired drivers, thus stricter laws and regulations are needed for setting the parameters around drinking and driving.[79]

Possible interventions include lowering the actual blood alcohol concentration (BAC) threshold, or setting lower BAC thresholds for operators of commercial vehicles and the youth. To accompany lower BAC levels, other regulatory measures should also be introduced to combat the prevalence of drunken driving. These include:

- Random breath and blood tests to monitor compliance with BAC limits, and appropriate sanctions for those over the BAC limit.
- Special sanctions and criminal penalties may be applied to repeat offenders, operators of commercial vehicles and the youth.
- Education to raise public awareness around BAC limits, penalties, and responsible drinking and driving may be appropriate and channelled through media campaigns, school programs, and other venues.
- Availability of consistent and visible enforcement as well as implementation of well-defined punitive measures.[80]

Random breath testing might reduce irresponsible drinking and driving as the chances of getting caught are systematically increased. This will also lead to increased awareness and encourage the use of alternative transportation by those over the BAC threshold. In the longer term, authorities could also look at permitting no drinking and driving for all or certain types of drivers, for example operators of commercial vehicles and the youth.[81]

Restrictions on young drivers

Implementing strategies that restrict younger citizens from consuming alcohol and driving is a targeted intervention aimed at younger drivers who generally

78 WHO, 2010.
79 WHO, 2004.
80 ICAP, 2008.
81 Anderson *et al*, 2009.

tend to be more inexperienced and inclined to take greater risks.[82] Interventions should also target the environment in which the youth gather. Promoting alcohol-free entertainment for underage individuals might facilitate a more responsible attitude towards alcohol consumption amongst the youth.

Administrative license suspension

Apart from having possible differentiated BAC levels for different individuals (for example commercial drivers and young drivers); licensing applications could also be used to curb drinking and driving. The most common measure is the suspension of the driver's license. These drivers should then be required to attend drinking and driving education sessions, counselling or treatment.[83] This serves as a good measure to persuade drivers not to drink and drive, and increases the repercussions of getting caught.

d) Education and awareness

An important intervention to reduce alcohol-related socio-economic problems is to educate and persuade communities to alter their alcohol consumption patterns.[84] These strategies aim to inform consumers and communities of the related risks involved in inappropriate alcohol consumption patterns and to reduce the cost associated with it.

Community mobilisation

Community based programmes consist of education or information campaigns, media advocacy, counter advertising and various other health promotional initiatives.[85] These interventions are mostly community specific, and are implemented via community projects or organisations. The main focus of these programs is usually on illicit trade, problem drinking and the impact it might have on the community. To enable these campaigns to be effective in reaching various communities, a sensitive approach is needed in terms of cultural norms, beliefs and value systems.[86]

The major components of these projects are: media mobilisation, responsible beverage service provision, reducing underage drinking, drinking and driving interventions and controlling the availability of alcohol. There is some evidence indicating the effectiveness of these programs in South Africa.[87]

82 Econex, 2010.
83 Econex, 2010.
84 WHO, 2004.
85 Anderson *et al*, 2009.
86 WHO, 2010.
87 Econex, 2010.

Targeted education campaigns

Education is an essential component for any comprehensive approach to alcohol policy, and can help reduce the risk of alcohol abuse. Educational programs take many forms and vary in their effectiveness; while some are successful in raising awareness, others can bring about behaviour change.[88]

Education should not only be limited to the various types of media, but also involve all sectors of society. This includes the development of information through government, professional bodies and research. Educational interventions should also not only be aimed at the population in general, but specific programmes are needed for high-risk groups, such as the youth and pregnant women. Another aspect of education involves learning life skills at schools, universities and colleges. These programmes inform young people about responsible drinking and its role in living a healthy lifestyle. These interventions are seen as long term approaches to entrench a foundation of acceptable social behaviour and responsible drinking in communities and society at large.[89]

Measures to curb binge drinking

Binge drinking (heavy episodic drinking) is characterized by high levels of intoxication, and is most commonly practised by young adults.[90] Binge drinking is associated with a range of negative outcomes for both individuals who engage in it and those around them. Defining binge drinking is in some instances extremely difficult and the terms “extreme drinking” and “heavy episodic drinking” have been proposed as alternatives.[91]

Raising awareness around binge drinking and the harm associated with it is necessary to inform and educate those involved in this practice.

Alcohol-related harm and violence

Alcohol’s close association (not necessarily the causality) with violent events is something that has been well documented.[92] The relationship between alcohol and violence is complex and is usually facilitated by factors broader than the mere presence of alcohol.[93] Not all drinking episodes lead to violence, but alcohol does play an exacerbating role in some cases, or may even be a catalyst leading to violence in other instances.

88 ICAP, 2008.
89 ICAP, 2008b.
90 Gill, 2002.
91 ICAP, 2008.
92 Parry and Dewing, 2006.
93 ICAP, 2010.

e) Drinking environment

Targeted interventions at the source or point of consumption are seen as effective interventions in terms of deterring the negative effects of alcohol consumption. These interventions target alcohol service providers and allocate an important role and responsibility to them in combatting alcohol related harm.

Responsible beverage services

Drinking guidelines could be issued by government and public health entities to advise on levels of alcohol consumption that are considered safe and responsible. These guidelines should be employed in conjunction with other complementary measures such as raising awareness about standard drinks, alcohol units, packaging and general drinking guidelines.[94]

In order to promote responsible drinking, packaging aspects such as size, content and quality should be addressed. Prohibiting the sale of alcoholic beverages in large containers, and inferior quality should receive more importance in the quest to address alcohol related harm.[95] An example of this is the banning of cheap, low quality wine in notorious foil bags (papsakke) in 2007. The aim of this ban was to prevent the sale of wine in cheap substandard containers.

Other means to promote responsible serving of alcoholic beverages include:

- Measures to deal with drink spiking.
- Refusing to serve alcohol to problem drinkers, drunken individuals and also under-age drinkers.
- Serving food and suggesting other low alcohol alternatives.
- Providing or offering to arrange alternative transportation.
- Reporting of alcohol related incidences and problem drinkers.[96]

Legal liability

Increased legal liability on suppliers of alcoholic goods could be an effective means of reducing alcohol related harm. The reasoning behind this is the suppliers' vested interest in retaining the rights to sell alcoholic goods.[97] Holding servers of alcoholic beverages legally liable for the consequences of serving minors or customers who are already intoxicated has shown great benefits in different areas of the world. Studies in the United States found that where servers

94 ICAP, 2010.
95 SALBA, 2011.
96 ARA, 2011.
97 Anderson *et al*. 2009.

were held legally liable, there was a decrease in night-time injury-producing traffic incidents and homicides, compared to states that did not have such liability.[98]

As with other interventions, routine and effective law enforcement programmes should ensure compliance with laws prohibiting the sale of alcohol to minors and intoxicated persons.[99] Dealing with alcohol related incidences and monitoring public nuisances is also an aspect of law enforcement that could potentially help in enforcing the legal liability on alcohol servers.

Marketing messages and promotions

Efforts to decrease consumption by reducing enticement to purchase alcoholic beverages could target both the entire population as well as specific at-risk groups.[100] Reducing the impact of marketing, particularly on young people and adolescents, is an important consideration in reducing the harmful use of alcohol. Although the literature on the relationship between alcohol consumption and marketing is inconclusive, advertisement does have an effect on market share and substitution between brands.[101]

Marketing in the alcohol industry is also extremely creative in its attempt to increase the net of consumers reached. Current marketing mechanisms include the linking of alcohol brands to sports and cultural activities, sponsorships and product placement. New marketing techniques such as e-mails, SMS and podcasting, social media and other communication techniques are also some of the latest avenues used by the alcohol industry to increase its visibility and increase its share of consumer expenditure.[102]

Regulatory frameworks could focus on promoting safe and responsible drinking behavioural patterns. This could be done by concentrating on the content and the volume of marketing as well as indirect marketing instruments (sponsorship) and possibly banning promotions that target young and high risk individuals.

In September 2013, Cabinet approved that the Control of Marketing of Alcohol Beverages Bill be gazetted for public comment. The Bill seeks to contribute to the reduction of alcohol related harm and the protection of public health and community well-being by limiting the exposure of the public to alcohol marketing by –

- Restricting the advertisement of alcoholic beverages,
- Prohibiting any sponsorship associated with alcoholic beverages , and
- Prohibiting any promotion of alcoholic beverages[103]

98 Econex, 2010.
99 Parry and Dewing, 2006.
100 ICAP, 2008b.
101 ARA, 2011.
102 WHO, 2010.
[103] Source: Statement by the Minister of Social Development, Ms Bathabile Dlamini during a media briefing on the Control of Marketing of Alcohol Beverages Bill. Accessed at:

Responsible hospitality

Responsible hospitality goes hand in hand with law enforcement, education, community involvement, retail or service aspects, marketing interventions and others. Where people drink is an important determinant of drinking patterns and is closely related to outcomes, both positive and negative.[104]

Possible success in this area requires a variety of measures such as: responsible management, training of staff, security, keeping to licensed hours, designated driver initiatives, reporting alcohol related incidences and product quality. The screening of at-risk populations should also be considered. Such interventions should be implemented in all hospitality areas such as pubs, clubs and restaurants. To enforce this, owners and management of hospitality or retail outlets should have knowledge of the legal burden that they might face if they transgress the law, or if they promote irresponsible or underage drinking.

f) Other

Government's alcohol policy consists of a range of complimentary tax and non-tax interventions that aim to reduce the harm associated with alcohol consumption. Some of these measures not only aim to reduce the socio-economic cost or externalities associated with alcohol abuse, but also serve as a mechanism to promote a safer society.[105] Additional interventions aimed at fostering a safer society in general and combating alcohol-related harm specifically include targeted healthcare interventions aimed at specific individuals and high risk behaviour as well as mechanisms to deal with non-commercial alcohol production, sales and consumption.

Healthcare interventions

Healthcare interventions include providing prevention and treatment services to individuals and families at risk of and affected by inappropriate alcohol-use disorders. The WHO proposes that the following:

- Preventative treatment and care for alcohol-use and alcohol-induced disorders (such as drug-use disorders, depression, suicides, HIV/AIDS and tuberculosis) as well as support and treatment for affected families.
- Screening and identification of hazardous and harmful drinking (for example pregnant women) at primary health care facilities.
- Interventions for individuals and families living with foetal alcohol syndrome and a spectrum of associated disorders.
- Universal access to health care through enhancing availability, accessibility and affordability of treatment services for groups of low socioeconomic status.

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http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=39918&tid=122603
104 ICAP, 2008.
105 Anderson *et al*, 2009.

- Maintaining a system of registration and monitoring of alcohol attributed morbidity and mortality, with regular reporting mechanisms.[106]

Although these types of measures do not alter alcohol consumption in general, they deal with the outcomes associated with alcohol abuse.

Workplace interventions

Workplace interventions aim to reduce the risk of having alcohol related injuries at the place of work or working environment. To do this, employers could conduct random or even systematic breath testing on all employees. Regulation could also force business to set in place employee alcohol polices that will help in the early detection, identification and treatment of at risk employees.[107] Apart from identifying at risk individuals, workplace interventions could also focus on educating and informing employees about the harm related to alcohol abuse.

At risk individuals

Some individuals are more susceptible to the harmful effects of alcohol due to various factors. This includes pregnant women and those that revert to excessive alcohol consumption. Detailed information and monitoring of these individuals or groups and their drinking patterns should be gathered, while additional softer interventions (motivational interventions with self-help orientation) could be employed to treat them.[108]

As many high risk individuals are often hard to reach, screening is essential in identifying persons at risk to prevent or address harm to them, their children or others. Providing correct information on recommended drinking behaviour might go a long way in reducing alcohol related socio-economic costs of at risk groups, for example education campaigns during pregnancy to reduce the incidence of foetal alcohol syndrome. However, effective channels of information are needed to successfully reach such at risk or high risk individuals.[109]

Informal sector

While heavy drinkers are inclined to spend more on alcohol when alcohol prices increase, problem drinkers also tend to switch to the 'best value for money alcohol'.[110] In many instances alcohol consumption, especially by the poor, takes place in the informal or illicit market where regulatory interventions are non-existent. Estimates of unrecorded alcohol consumption to total alcohol consumption varied between 30 and 65 per cent for various Southern African

106 WHO, 2010.
107 ARA, 2010.
108 Mortimer and Segal, 2005.
109 ICAP, 2008.
110 SAB, 2010.

countries.[111] For South Africa this figure was around 24 per cent, which indicates that a relatively noticeable portion of total consumption takes place in the unregulated market.

Apart from being unregulated, the consumption of illicit or informally produced alcohol could also have additional negative health consequences due to a higher ethanol content and potential contamination with other toxic substances. Possible interventions include:

- Regulating sales of informally produced alcohol and thereby bringing it into the formal system.
- An efficient control and enforcement system, including tax stamps or other tax marker techniques.
- Developing or strengthening tracking and tracing systems for illicit alcohol.
- Ensuring necessary co-operation and exchange of relevant information on combating illicit alcohol among authorities at national and international levels.
- Establishing active partnerships between government, industry and communities to collectively combat illicit trade.
- Issuing relevant public warnings about contaminants and other health threats from informal or illicit alcohol.[112]

Traditional home-made alcoholic beverages are part of local communities and play an integral part in their culture and recreation. For policy interventions to be effective in addressing harm related to the consumption of these alcoholic beverages, a mixture of educational, regulatory and monitoring interventions is needed.

111 GISAH 2010, as quoted in Econex 2010.
112 WHO, 2010.

7. ECONOMIC OVERVIEW OF ALCOHOLIC BEVERAGES SECTOR

The production of alcoholic beverages involves various industries that supply the necessary inputs and complementary goods and services, ranging from grapes, barley, hops, malt, maize, sugar and fertilizer to tin cans, plastic and glass bottles, bottle crowns and corks, as well as energy and transport capacity. In a social accounting matrix framework, these intermediate sectors are added to the goods and services (including capital equipment) purchased directly by the alcohol beverages sector to determine its economy-wide impact. The food and beverage manufacturing industries gain the most from the liquor industries' operations, followed by the wholesale, retail, catering, accommodation and other business services sectors. The agricultural sector derives 19.4 per cent of the benefits of the liquor industry's intermediate economic output.[113]

a) Total alcoholic beverages sector

The liquor industry provides employment and income to thousands of workers and makes a substantial contribution to export earnings and government tax revenue in South Africa. In addition, the process of manufacturing, packaging, marketing, and delivering alcoholic beverages stimulates economic activity throughout the beverage value chain, encompassing a range of upstream and downstream industries.

Domestic market

Beer dominates the South African alcoholic beverage market with a total consumption of 2.9 billion litres or 59 litres per capita in 2009. Beer constitutes 77per cent of alcoholic beverages currently consumed by volume in the country and has increased its market share significantly from around 50 per cent in the 1990s. The share of spirits has been relatively stable in volume terms by comparison, increasing at an annual average of 0.4 per cent to a total market share of about 3 per cent of alcoholic beverages consumed by volume in 2009.

The specific market share of the various alcoholic industries by main alcoholic beverage types are as follows. Total sales volumes of alcoholic beverages in South Africa for the 2008/09 financial year amounted to 3.3 billion litres at an estimated value of R57.5 billion. This sales volume is made up of beer (77.1%), wine (9.3%), spirits (3.4%) and RTDs / AFBs (10.2%) whereas comparative sales values are 51.8, 12.9, 23.5, and 11.8 per cent, respectively.[114]
Based on the absolute alcohol content of the respective alcoholic beverage types, malt beer accounted for roughly 51 per cent, spirits 18 per cent, wine 16 per cent, commercially brewed sorghum beer 8 per cent and RTDs / AFBs 7 per cent of total liquor sales in 2009. These estimated market shares reflect only formal commercial sales and do not account for informal, illicit or home-brewed

113 Econex, 2010.
114 Punt, 2010. (The study only considered RTDs and not AFBs/FABs, as they fall outside the spirits industry)

consumption. More than two thirds of sorghum beer is estimated to be home-brewed and hence unrecorded in formal statistics, as are other informal and illicit sales.

Table 9: Total alcoholic beverage sector contribution 2008/09

	Sales value (%)	Volume (%)	Absolute alcohol (%)
Beer	51.8	77.1	51
Wine	12.9	9.3	16
Spirits	23.5	3.4	18
RTD / AFB	11.8	10.2	7
Traditional African Beer	-	-	8
Total	100	100	100

International trade

South Africa is a net exporter of alcoholic beverages, largely due to wine exports. Total wine, beer, spirits and other fermented beverage exports amounted to R7.068 billion in 2009, while imports were estimated at R3.356 billion. Total liquor exports increased by 71 per cent in monetary terms between 2005 and 2009, compared to an average 58 per cent growth in the value of exports of all commodities. Whereas the value of all South African exports increased by 143 per cent between 2000 and 2009, the value of liquor exports rose by 253 per cent over the same period. Wine exports accounted for 85 per cent of liquor exports in 2009, followed by spirits at 8.6 per cent, other fermented beverages at 3.7 per cent and beer at 2.6 per cent. Liquor imports also rose strongly with a cumulative increase of 166.6 per cent between 2005 and 2009 relative to total import growth of 52.8 per cent. Spirits accounted for 60.5 per cent of bulk liquor imports in 2009, followed by malt beer at 35.3 per cent.[115]

Industry performance

Between 2001 and 2009, liquor sales increased in nominal value terms by 10.6 per cent per year on par with the 10.7 per cent average annual growth in nominal disposable income. The relative performance of the respective alcoholic beverage types over this period was topped by RTDs / AFBs with an average annual growth rate in the value of off-premise sales of 17.7 per cent. This was followed by spirits at 12.9 per cent, malt beer at 9.4 per cent, wine at 9.2 per cent, and commercially brewed sorghum beer at 7.9 per cent. There has been a significant increase in the share of RTDs / AFBs in total consumer spending. The share of spirits in total consumer spending increased slightly, mainly at the expense of wine and sorghum beer consumption.

115 Econex, 2010.

Macro-economic impact

The Social Accounting Matrix for South Africa differentiates between the various backward and forward economic linkages of the respective alcoholic beverages industries. The direct impact is in terms of the capital expenditure, employment, salaries and wages paid, intermediate goods bought, levels of production and tax contributions by the liquor industry itself and its first round of direct suppliers. The indirect impact of the investment occurs when suppliers to the liquor industry in turn purchase goods and services from their suppliers who also remunerate their employees and pay taxes.

Three economic impact studies conducted for the various alcoholic beverage industries include:

- Bureau of Economic Research study of 2008 for South African Breweries Ltd on the beer industry,
- Conningarth Economists study of 2009 for South African Wine Industry Information and Systems on the wine and brandy industries, and
- Punt (University of Stellenbosch) study of 2010 for South African Liquor Brandowners Association on the spirits and RTD industries.

The estimated total economy wide contribution of the alcoholic beverages sector is R73.3 billion in terms of value added, R34.7 billion towards total government tax revenue and 522 553 jobs are supported throughout the economy. The GDP (value added) multiplier for the alcoholic beverage sector is estimated at 1.42 and the employment multiplier at 10.13. This means that for an additional R1 million demand for alcoholic beverages, this sector could add R1.42 million in value to the domestic economy and create 10.13 additional employment opportunities throughout its economy wide value chain.[116]

Employment creation

Roughly 55 per cent of the employees in the liquor manufacturing industry are low skilled. For each job offered by the liquor industry and its direct suppliers, 5.3 additional jobs are supported upstream and downstream from the industry. Econex estimates the total economy-wide contribution of the liquor industry to employment opportunities at 548 000, similar to that of Punt at 522 553.[117] This represents 4.5 per cent of total employment in South Africa, with 37.1 per cent of these jobs in the wholesale, retail, catering and accommodation sectors.

Total labour remuneration directly related to the liquor manufacturing industry amounted to R9.9 billion in 2009.

116 Punt, 2010.
117 Econex, 2010 and Punt, 2010.

Capital investment

The production of beer, wine, spirits and flavoured alcoholic beverages requires investment in various types of capital goods. The liquor industry's own capital stock was valued at roughly R18 billion in 2009, while direct and indirect suppliers have made capital investments of over R60 billion to supply materials and other goods and services to the alcoholic beverages sector. Including its induced impact, the liquor industry sustained capital stock to the value of R173 billion in 2009, or 3.5 per cent of the total value of all capital stock in South Africa. The GDP/capital ratio of 0.54 for the liquor industry is higher than that of the overall economy at 0.43, which suggests that the industry is slightly more efficient in utilizing investment compared to most sectors.[118]

Fiscal contribution

Arguably, the majority of excise duties, value-added tax, as well as corporate and personal income taxes derived from the alcoholic beverages sector essentially fall on consumers of alcoholic beverages and the employees of the various liquor industries. Econex estimates the direct tax contribution by the alcoholic beverages sector to the national fiscus at R19.5 billion, while the Quantec Research estimate is R16 billion or 2.6 per cent of total national tax revenue in 2009. The single largest direct tax contribution is in terms of excise duties at about R10 billion during the 2009/10 fiscal year. This represents roughly 60 per cent of the liquor industry's direct tax contribution and 47 per cent of all specific excise tax revenues collected. Direct tax payments by the liquor industry account for 46 per cent of its total economy-wide fiscal contribution. The total tax revenues supported throughout the economy by the liquor industry is estimated by Econex at R41.8 billion or 6.7 per cent of total government tax revenue, which is considerably higher than the Punt estimate of R34.7 billion.[119]Consumption taxes (VAT plus excise duties) constitute 59 per cent of the total economy-wide tax revenue supported by the liquor industry, followed by corporate taxes at 24 per cent.

b) Wine industry

Globally, the wine industry receives a more favourable treatment in respect of alcohol taxation due to its macro-economic importance, rural economic linkages, employment creation, export and tourism potential. The local wine industry has similarly received beneficial alcohol tax treatment over the years, based on its agricultural backward linkages, tourism potential and export earnings.

South Africa ranks as the seventh largest wine producer and eighth largest wine exporter in the world. 297 million litres of wine was sold locally in 2009, putting South Africa 32nd in the world in terms of wine consumption. Domestic wine

118 Econex, 2010.
119 Econex, 2010 and Punt, 2010.

consumption was 6.3 litres per capita, compared to the highest wine consumption in France at 54 litres per capita and the average consumption in the top 20 countries of 31 litres per capita. Domestic wine consumption was fairly stable in the 1980s and 1990s at just below 10 litres per capita, but has been declining at more than 2 per cent annually over the past decade. Only 11 per cent of adults are currently regular wine drinkers.

The South African Wine Industry Information and Systems (SAWIS) periodically investigate the economic contribution and performance of the domestic wine industry. Its 2009 macro-economic study, with 2008 as the base year, demonstrates the economic contribution of the wine industry as follows:[120]

Domestic market

Total domestic turnover of the wine industry amounted to R12 892 million in 2008, while imports made up R237 million or 2 per cent of domestic sales.

International trade

Exports increased as a percentage of local production from 21 per cent in 1999 to 54 per cent in 2008. The growth in wine exports contributed substantially to the rise of the industry's contribution to national GDP.[121] The wine industry's international competitiveness depends largely on Rand exchange rates with the industry's major export countries. Despite fluctuations in Rand exchange rates over this period, the general trend was downwards, which contributed to export profitability. Total wine exports amounted to R6 272 million in 2008. Europe, particularly the United Kingdom, is South Africa's largest wine export market, accounting for three quarters of all wine exports.

Macro-economic impact

The wine industry contributed R26 223 million or 2.2 per cent to the annual GDP of South Africa in 2008. Primary agricultural output of R3 373 million was beneficiated to add R21 743 million in GDP value downstream, i.e. about 5 times the initial value of raw materials. Another R4 480 million was generated indirectly through wine tourism. The wine industry's total capital asset base is estimated at R49 768 million, while its GDP to capital ratio of 0.53 is higher than the national average of 0.46. Its capital productivity reflects an above average contribution to GDP per unit of capital invested compared to other industries.

120 SAWIS, 2009.
121 SAWIS, 2010.

Employment creation

Wine farms and cellars are directly responsible for 50 000 permanent jobs. Through its economic linkages, the wine industry supports 275 606 employment opportunities or 2.2 per cent of total national employment in the agriculture, trade, manufacturing, tourism, catering, accommodation and transport sectors. Of this, 58 per cent are unskilled, 29 per cent semi-skilled and 13 per cent skilled. Thousands of part-time seasonal workers are also reliant on the wine industry. Its labour to capital ratio is 5.54 compared to the national average of 3.18. The employment creation potential of the industry is the result of the labour intensive production methods applied in primary agriculture. In the Western Cape, the wine industry is responsible for 168 102 employment opportunities or 8.8 per cent of total employment.

Fiscal contribution

Total tax revenue (including alcohol excise duties) of R3.5 billion was generated by the wine industry in 2008. Excise duties from wine and other fermented beverages amounted to R1.48 billion in 2009/10, which represents 14.8 per cent of total excise duty revenue from alcoholic beverages.

Position of wine grape farmers

Of the estimated 3840 wine grape farmers, about 1544 are small producers of less than 100 tons, 1423 are medium producers of between 100 and 500 tons, and 873 are larger producers of above 500 tons of wine grapes per year.[122] Small to medium wine grape farmers make up over 77 per cent of primary producers in the wine industry. It is argued that in order to keep retail prices competitive, wine makers and traders do not fully recover excise duty increases in their retail price adjustments. Instead, increases in alcohol taxes are 'shifted'back to primary producers who are essentially price takers.

In 2009, the average retail shelf price for a 750ml bottle of wine was R24, while the primary producer at farm level received only 44c or 1.8 per cent of the retail price. The average price received by farmers for bulk wine rose marginally from R3.54 per litre in 2004 to R3.89 per litre in 2009, while the average cost of wine production soared from R19 000 per hectare to R26 580 per hectare over the five years. In 2009 alone, production costs of wine grape farmers increased by 13 per cent or more than double South Africa's overall inflation rate. With many major cellars cutting back on production and running well below capacity, the cost per ton of grapes processed continues to rise.[123]

Most wine grape farmers are typically caught between low wine prices, soaring production costs, and a lack of pricing power. Industry consultants estimate that

122 Orpen, 2010.
123 Financial Mail, 2010b.

no more than 3 to 5 per cent of wine grape farmers are still making a profit. As a result many wine grape farmers have been cutting back on capital expenditure, especially in vine replacement, which will impact primary production in the industry in the long term.[124]

In addition to cost push factors, the local wine grape market is also affected by the reduced demand for wine from brandy distillers (wine spirits). This is in part due to the sluggish consumer demand for brandy, and the rise of whiskey consumption.

c) Malt beer industry

South African Breweries Ltd (SAB) is the dominant player in the domestic malt beer market. Following SAB's merger with the Miller Brewing Company in 2002, SABMiller became the world's second largest brewer by volume. Brandhouse, the Heineken-Diageo-Namibian Breweries joint venture, is SAB's main rival and specialises in the premium beer market. A number of smaller domestic breweries also exist that operate mainly at the premium end of the market, for example Bavaria Brau and Mitchells Brewery.

Domestic market

Beer dominates the South African alcoholic beverage market with a total consumption of 2.9 billion litres or 59 litres per capita in 2009. Beer accounts for 77 per cent of all alcohol consumed by volume. Based on absolute alcohol content, malt beer accounted for roughly 51 per cent of total liquor sales, with malt beer sales generating roughly 51 per cent of total liquor sales revenue in 2009.[125]

International trade

Beer exports are typically small in comparison to wine, as most countries generally rely on domestic breweries to supply their local demand for beer. Beer exports constituted 2.6 per cent of the total exports of alcoholic beverages in 2009, compared to wine exports that accounted for 85 per cent. The total value of beer exports for 2009 amounted to R183.8 million. Beer imports constituted 35.3 per cent of total liquor imports at a value of R1 184.7 million in 2009. Recent investments in domestic brewing capacity to produce imported premium brands locally should reduce these imports significantly.

Macro-economic impact

The malt beer industry is the largest contributor to value added of all the alcoholic beverages industries, accounting for an estimated 51 per cent or over R40 billion

124 Financial Mail, 2010b.
125 Econex, 2010.

of the total GDP contribution of the liquor industry in 2009. Roughly 2.3 per cent of South Africa's GDP can be traced to the overall economy-wide impact of the malt beer industry. Given the significant rural economic impact of the beer industry, it accounts for about 2.6 per cent of GDP in rural areas. The beer industry accounted for 51 per cent (R88.5 billion) of the capital stock supported by the liquor industry throughout the economy in 2009. The GDP/capital ratio of 0.55 for the malt beer industry is higher than that of the overall economy at 0.43, which suggests that the industry is slightly more efficient in utilizing investment compared to most sectors.[126]

Employment creation

The malt beer industry provides 6 200 direct jobs. It supports roughly 245 407 employment opportunities throughout the economy, which is 45 per cent of the total number of jobs supported by the alcoholic beverages sector in 2009. The employment multiplier for the malt beer industry in terms of direct jobs is estimated at 6.9, which is slightly higher than the average for the overall liquor industry at 6.3. About half of the economy-wide employment impact of the malt beer industry occurs in rural areas, accounting for some 2.5 per cent of total rural employment.

Fiscal contribution

The direct contribution by the malt beer industry to tax revenue was estimated at R11.2 billion in 2009. The economy-wide tax contribution throughout the malt beer value chain is estimated at R22.8 billion or just over 50 per cent of the total tax revenue generated by the liquor industry.[127] The malt beer industry accounted for excise duties of R5.74 billion in 2009/10, which constituted 57 per cent of the liquor industry's total contribution to excise duties.

d) Spirits and ready-to-drink industries

The main industry players in terms of volume of spirits sold in South Africa include Distell Group Ltd at 40.5 per cent, Brandhouse Beverages (Pty) Ltd at 22 per cent and Edward Snell & Co at 16 per cent. The main role players in the RTD industry in terms of volume sold in South Africa include Distell Group Ltd at 43.1 per cent, South African Breweries Ltd at 27.2 per cent and Brandhouse Beverages (Pty) Ltd at 20.2 per cent.[128]

Domestic market

In 2008/09 brandy accounted for 39 per cent of the total volume of spirits sold domestically, followed by whisky at 28 per cent and vodka at 14 per cent. With

126 Econex, 2010.
127 Econex, 2010.
128 Punt, 2010.

respect to domestic sales value, whisky has the largest value share in the market at 37 per cent compared to brandy at 35 per cent, despite its smaller volume share compared to brandy. By 2012/13 the share of brandy by volume of total domestic spirit sales had declined to 29 per cent and that of whisky increased to 35 per cent.

Table 10: Alcohol (spirits) sales by volume

SPIRITS	*2008/09*	*2009/10*	*2010/11*	*2011/12*	*2012/13*	*2013/14*
VOLUME (%)	*Actual*	*Actual*	*Actual*	*Actual*	*Actual*	*Forecast*
BRANDY	39%	37%	35%	33%	29%	27%
WHITE SPIRITS	21%	22%	21%	21%	22%	22%
WHISKY	28%	28%	31%	32%	35%	37%
SPIRITS - Sub Total	**88%**	**87%**	**87%**	**86%**	**86%**	**86%**

International trade

South Africa is a net importer of spirituous beverage products, with exports amounting to R743 million and imports of R2 456 million in 2008. The main export destination of the domestic spirits industry is Angola that accounts for 28 per cent of exports. The majority of spirits imports originate from the United Kingdom (70% of imports). South Africa is a net exporter of RTDs, with exports amounting to R109.2 million and imports of R5.2 million in 2008.

Macro-economic impact

The spirits and RTD industries directly contributed R2 494 million or 0.12 per cent of the total value added to the domestic economy in 2009. The attribution of net taxes on spirits and RTDs raises the contribution of the industry to GDP to an estimated R6 417 million or 0.28 per cent of the total GDP of the economy. The higher share of spirituous beverages in GDP compared to value added is indicative of the proportionately higher tax incidence on the spirits and RTD industries compared to the manufacturing sector on average. In terms of its direct, indirect and induced contribution throughout the economy, the spirits and RTD industries add R13.1 billion in value to the domestic economy. The value added multiplier for spirits and RTDs is 1.33, which implies that an additional R1 million consumption of spirits and RTDs would increase value added in the economy by R1.33 million.[129]

Employment creation

Many spirits and RTD production and distribution companies are also involved in cross-cutting operations for other alcoholic beverages, which make it difficult to isolate industry linkages throughout the economy. The spirits and RTD industries

129 Punt, 2010.

are directly responsible for 6 270 jobs. Through its economy-wide direct, indirect and induced impacts, the industry supports a total of 54 380 employment opportunities. The GDP employment multiplier for the spirits and RTD industries is 5.56, which implies that an increase of R1 million in the consumption of spirits and RTDs would create 5.56 new jobs.

Fiscal contribution

In the 2009/10 fiscal year, excise duties of R2.79 billion was collected on spirits and R827 million from RTDs. Total excise duties on spirits and RTDs amounted to R3.62 billion, which represents 36 per cent of total excise duty revenue from alcoholic beverages. The direct contribution of the spirits and RTD industries to excise and other taxation was R3.92 billion. The induced effect of the spirits and RTD industries raises R4.1 billion in additional taxation, which brings the industry's total economy-wide contribution to government's overall tax revenue to R7.99 billion.[130]

e) Summary of economic overview by sector

A summary of the economic contribution of the respective alcoholic beverage industries, as well as the total contribution by the overall liquor industry throughout its economic value chain for the year 2009/10 is reflected in Table 11 below. These estimates derive from several complementary studies and have been adjusted to remove possible double-counting from the overlap in product ranges to provide the best approximation of the total economy-wide contribution of the alcoholic beverages sector.[131]

Table 11: Total economic contribution of alcoholic beverages sector in 2009/10[132]

	Spirits		RTD/AFB		Wine		Beer		Total	
	Value	% Share	Value	% Share	Value	% Share	Value	% Share	Value	% Share
R million										
GDP added	7,224	9.86%	5,909	8.06%	20,035	27.33%	40,128	54.75%	73,296	100.00%
Total taxes	5,320	15.32%	2,672	7.69%	4,832	13.91%	21,906	63.08%	34,730	100.00%
Excise taxes	2,790	25.75%	827	7.63%	1,480	13.66%	5,740	52.97%	10,837	100.00%
Other taxes	2,530	10.59%	1,845	7.72%	3,352	14.03%	16,166	67.66%	23,893	100.00%
Number										
Employment	38,012	7.27%	16,368	3.13%	224,387	42.94%	243,785	46.65%	522,553	100.00%
Multipliers										
GDP	1.17		1.64		1.10		1.71		1.42	
Employment	6.15		4.55		12.27		10.37		10.13	

130 Punt, 2010.
131 Punt, 2010.
132 The different interpretations for the abbreviation RTD should be noted. RTDs also known as Alco-pops resemble a broad category of ready to drink bottled beverages. However in this context one could distinguish between spirits based "spirit coolers" (also sometimes referred to as RTDs) and fermented alcoholic fruit beverages AFBs. Thus the data estimates above for this broad category, could inherently contain an element of double counting or exclusion.

8. ILLICIT TRADE

The World Health Organisation estimates that unrecorded alcohol consumption constitutes approximately 27 per cent of the total worldwide alcohol market. Unrecorded alcohol consumption represents both illicit trade as well as home-brewing of alcoholic beverages. The prevalence of unrecorded alcohol consumption is proportionately higher in poor countries and also tends to be higher in countries with strict anti-alcohol policies, including higher alcohol taxes.

Unrecorded alcohol consumption in Africa is estimated at 36 per cent of the total alcohol market and the corresponding percentage for South Africa is estimated at a conservative 20 per cent due to relatively strong domestic enforcement policies.[133] Given the serious health effects of consuming illicit and home-brewed alcohol, unrecorded alcohol consumers contribute significantly to the negative social externalities of alcohol abuse.

The alcoholic beverages industries, in particular wine and spirits, have petitioned government in recent years to address the "massive threat that the illegal liquor industry in South Africa poses to the legitimate liquor industry as well as to public health".[134]The informal and illicit liquor industries also deprive the fiscus of tax revenue forgone. However, it is difficult to calculate the extent to which the illicit trade is prevalent in these industries.[135]

a) Nature of illicit trade

Illicit trade is the illegal supply, distribution and sale of smuggled counterfeit and genuine products. Such goods are sold domestically without being declared appropriately and without the payment of excise duties.

Counterfeit products are illicit at the point of production, as they have been manufactured without the authorization of the legal brand owner. On the other hand, genuine products become illicit when they are supplied or sold without complying with applicable customs and excise regulations.

Illicit trade occurs when products are supplied at a lower price by avoiding taxes payable by legitimate suppliers, or when the demand for a product cannot be fully satisfied by legitimate suppliers due, inter alia, to regulatory restrictions. The perceived economic benefit has to outweigh the risks involved for illicit trade to be considered a viable alternative to legitimate trading. This depends to a large extent on the effectiveness of law enforcement, prosecution and appropriate sentencing.

133 International Center for Alcohol Policies, 2006.
134 Kruger, 2006.
135 Kruger, 2006.

Illicit traders tend to favour products that have a high value to volume ratio. These products are relatively easy to transport, and offer higher profit opportunities, often because taxes represent a significant proportion of the retail price of the legal product.

The assumption is that mostly international and well-known regional brands are traded illicitly. However, a significant portion of illicit trade in certain markets consists of products with little or no brand equity, usually manufactured by small independent manufacturers. Such products are sold at low prices with the intention of undercutting established legitimate brands. The low price structures of illicit products are attained by manufacturers operating outside the regulatory structures applicable to legitimate manufacturers.[136]

There are a number of general factors that commonly facilitate illicit trade and have a significant bearing on the incidence and scale thereof:

- Border controls that do not deter smuggling sufficiently, even where entry and exit points are known.
- Inadequate sanctions for offenders reduce the risk to reward ratio and therefore do little to deter professional smugglers.
- Insufficient enforcement and inadequate controls are often further undermined and exacerbated by corruption.
- Consumer demand for lower-priced illicit products may have become entrenched, despite consumer awareness of illicit trade and smuggling.
- Smuggling may be tolerated by local communities because of its perceived job creation and other benefits for the local population.

Illicit trade and smuggling has a negative impact on government, business, labour and society at large. The following are the main consequences:

- Government is deprived of tax revenue and a decrease in tax morality and taxpayer compliance ensues that undermines the tax system.
- Criminality and corruption is promoted and tolerance thereof is fostered. Domestic organised crime increases, attracting international crime syndicates.
- Consumers are misled to buy dubious products. Legal manufacturers operate in an uneven playing field that prevents open and fair competition.
- Regulatory regimes aimed at governing the legitimate industry are undermined.[137]

136 The Tobacco Institute of Southern Africa, 2008.
137 The Tobacco Institute of Southern Africa, 2008.

b) Illicit trade in wine, spirits and beer

Wine and spirits are being smuggled into South Africa by incorrectly describing the goods in an attempt to avoid paying duties, export round-tripping, and counterfeit. The relatively high alcohol excise duties within SACU compared to those in neighbouring countries might provide an incentive for these illicit activities.

The following are some of the shortcomings exploited by wine and spirits smugglers:

- No identification marks are linked with import documents.
- Retailers are supplied with consignment stock without invoices.
- Retailers are supplied with stock on delivery notes and not invoices.
- Insufficient verification of actual exports.
- Improper inspection of volumes imported.
- Inadequate monitoring of volumes manufactured.
- Lack of control on movements of wine and spirits within South Africa and the SACU (BLNS) region.
- Deficient controls at border posts.
- Difficulties in identifying counterfeit wine and spirits.
- Lack of trained, motivated customs staff.
- Insufficient retention of skilled customs staff.[138]

Illicit wine and spirits are sold in legal as well as illegal outlets (e.g. shebeens). The retail selling price of these illegal products is normally below or at cost and is often an indication of illicit trading. Illicit manufacturers often deal in legal as well as illicit products and they sell legal products at a discounted price to retailers / shebeens on condition that they buy a certain quantity of illicit products.

Wine

The most common form of illicit trade in wine is the adding of up to 25 per cent of water to duty paid bulk wine, after which the product is still sold at full price. In some instances alcohol is added that has been derived through the fermentation of sugar with water and yeast. Wine is also cleared duty free for distilling purposes and then sold as natural wine without any excise duty having been paid.[139]

138 The Tobacco Institute of Southern Africa, 2008.
139 SALBA, 2008.

Spirits

Spirits that are cleared under the customs and excise rebate item for industrial purposes may be diverted to the potable liquor market. Alternatively, spirits may be removed for export purposes, while the product in reality never leaves the country. The biggest source of illicit spirits in the local market appeasr to be illegal spirits smuggled from neighbouring countries. In most instances these spirits are either not declared at all or declared incorrectly as rebated industrial spirits and ends up in the South African liquor market without any excise duties having been paid.[140]

Beer

Consumers that switch from malt beer consumption to cheaper products often shift to non-commercial informal home-brewed sorghum beer or illegal watered down wine that is fortified by hazardous means. While commercial sorghum beer levels have remained static over the past five years, the greater majority of substitution in the beer market occurs in the non-commercial informal sorghum beer market that is estimated at 12.5 billion litres per annum.[141]

c) Trade in sugar fermented beverages / illicit ales

In an international context, ales refer to any beer other than lager, stout, or porter.[142] Although mostly fermented, ales have varying characteristics but remain “heavier” than beer. In the South African context, ales are included in the Liquor Act, No.27 of 1989, definition of beer, which views ales as beer if produced from the fermentation of malt. However, the term ales is also locally loosely associated with mixtures of fermented sugars that constitute illicit or fake “ales”.

Although significant volumes of this type of alcoholic product is found in the formal alcoholic beverage market place, sugar fermented beverages are not defined in the Liquor Products Act (LPA), thus making them illegal. However, from a customs and excise perspective, all alcoholic beverages on the market need to be classified and taxed accordingly. Thus one finds a situation whereby products (e.g. illicit ales / sugar fermented ales) are illegal according to the LPA, but are still taxed under the Customs and Excise Act (CEA). This practise however does not legitimise these products, as they are merely classified in the default “other” tariff categories under the CEA to facilitate the taxation thereof. In the absence of the CEA application, these beverages would be traded tax-free, which would provide an unfair tax advantage to these already illicit beverages.

140 SALBA, 2008.
141 South African Breweries Ltd, 2010.
142 Oxford on-line Dictionary.

Sugar fermented beverages enter the formal market by posing as the following:

- Unfortified wine: sugars and water (and in some instances wine) are mixed with flavourants to produce a product that resembles wine,
- Ciders and AFBs: sugar fermented feedstock is mixed with fruity flavourants to produce a 'fake' cider or AFB, or
- 'Ale': sugar fermented beverage posing as a fruity or light beer.

Apart from the legal and excise tax implications, ales cause concern as it is not defined in the LPA and therefore regulating the production and or sale of ales is deficient. Furthermore, consumers are being tricked into believing that they are consuming authentic wine or cider / AFB products when in actual fact they are consuming sugar fermented beverages. The existence of illicit ales also impacts on government's health objective, as the quality of these products have proven to be substandard in many instances. The production processes for these products are extremely cheap, and has limited backward linkages to employment creation or the agricultural industry.

Sugar fermented ales come in different forms that include bulk packaging (plastic containers similar to "papsakke") and bottled beverages. The production in bulk of watered down wine fortified with sugar fermented illicit ales pose a particularly significant risk to both the legal industry and consumers. These illicit ales that are sold in bulk (5 litre plastic containers) contribute substantially to social harms.

Dis-incentivising sugar fermented beverages

In an attempt to deal with sugar fermented beverages from a classification and excise tax perspective, Budget 2013 introduced changes to the structure of tariff heading 22.06. The structure of tariff heading 22.06 has been amended to align the excise duty provisions for fruit fermented beverages with the requirements of the Liquor Products Act (1989).

As a result, only products that are predominantly fruit fermented will be distinctly classified in this beverage category. Fermented products that are not mainly derived from fruit (e.g. sugar fermented) will either fall in the band for other fermented beverages with an alcoholic strength below 2.5 per cent (and taxed on absolute alcohol content at the beer rate) or in the generic "other" band. The generic "other" band uses the highest excise rate (the full spirits rate) to encourage products to comply with the requirements for fruit fermented beverages.

The requirement that no more than 20 per cent of the fermentable sugars used in any fermented fruit beverage, fortified or unfortified, may be of an origin other than fruit also has rural agricultural and employment creation benefits. Although the changes to tariff heading 22.06 aims to provide a disincentive for the manufacturing and use of sugar fermented feedstock, complimentary regulatory

provisions are needed in the liquor products legislation to regulate and penalise producers of such products.

d) Combating illicit trade

The smuggling of alcoholic beverages is carried out by organized criminal syndicates also involved in the trafficking of drugs, people, arms and tobacco. The magnitude of the organized crime involved requires the co-operation of SARS, SAPS, the Hawks and the legal industry, as well as the necessary legal authority to place identified suspects under surveillance, subpoena banking and other financial information, and confirm the flow of funds on suspicious transactions.

Priority should be given to improve methods for assessing the scale of illicit trade as a means of assessing the effectiveness of measures by Government to counter the illegal trade in alcohol.

Illicit trade and the smuggling of alcoholic beverages is a problem that requires quantification as no adequate estimation currently exists. It is in the interest of both government and the alcohol industry to improve methods for assessing the nature and extent of illicit activities. Trends in formal alcohol consumption figures may be misleading in view of uncertainties around the scale of illicit alcohol markets.

Minimum reasonable pricing could be used as a mechanism to identify illicit trade. The minimum reasonable price (MRP) is the absolute minimum viable price at which retailers can legally sell a product, taking into account reasonable average manufacturing costs, retail margins, excise duties, import duties, and VAT. The MRP could therefore potentially be a useful tool in the battle against illicit trade and smuggling.

e) SADC investigation and initiatives

A Southern African Development Community (SADC) study into the illicit trade in excisable products, with particular reference to alcohol and tobacco products, provides a regional overview of the problem of illicit trade to estimate the size and nature of illicit trade in alcohol and tobacco products. It also analyses the effect of tax increases on revenue and consumption and provides recommendations on good practice and measures to combat illicit trade.[143]

The SADC review found that there is a significant loss of excise and VAT revenue across the SADC region as a result of illicit trade in alcohol and tobacco products. South Africa is both a main destination and major source for illicit excisable products in the SADC region. The SADC study notes that tax increases do not necessarily increase revenue unless accompanied by robust control and

143 SADC, 2012.

enforcement. Nor do increases in taxation automatically result in significant decreases in consumption, as tax increases might encourage a switch to consumption of lower quality or illicit products. The research notes that a sustained reduction in consumption depends on long term awareness campaigns and providing support to those consumers who wish to change their behaviour. Education plays a large part in making harmful consumption patterns less socially and culturally acceptable.

For the illicit trade of alcoholic products in South Africa alone, the SADC report suggests that for 2009, about 160,000 hectolitres of spirits and about 400,000 hectolitres of wine were estimated by industry as illicit (with an estimated revenue loss of US$ 96 million).[144]

The SADC study also highlights examples of good excise taxation practice in survey countries for commendation to other SADC Member States. An analysis of best practice to combat illicit trade is provided and appropriate measures are recommended. These include a high level commitment to fight illicit trade, zero tolerance of corruption and the regional harmonisation of enforcement strategies and anti-illicit action plans. Several principles for the formulation of excise tax policy are advised, e.g. that excise tax rates should be balanced to maximise revenue and achieve health and social objectives without being set so high as to lead to increased consumption of illicit products.

144 SADC, 2012. SADC Review – Study into the illicit trade in excisable products with particular reference to alcohol and tobacco products.

9. ESTIMATES OF THE ELASTICITIES OF DEMAND

The demand for alcoholic beverages is influenced by liquor prices, income levels and consumption patterns within and across liquor product categories. Estimating price and income elasticities for the respective alcoholic beverages is important in understanding the response of liquor demand to changes in liquor prices and consumer income levels. Such an estimation process might also help to uncover the possible linkages and substitution that occur in liquor product sub-categories.

The estimates used in this chapter are based on previous work done by the National Treasury and more recent research completed by the Bureau for Economic Research (BER).[145] The BER research focuses on specific econometric analysis of the income, price and cross-price elasticity of key liquor product categories in South Africa, namely: malt beer, wine, spirits, flavoured alcoholic drinks (FADs, also known as AFBs) and ready to drink beverages (RTDs).

Based on a variety of data sources, the analyses suggest that the most important aggregate drivers of domestic liquor demand are real consumer income and the real price of liquor. The combination of these variables explained between 70 and 90 per cent of variation in total liquor sales.

a) Elasticities of demand for alcoholic beverage products

Although the practise of estimating elasticities for the different liquor product categories follow a similar approach, it must be understood that exogenous factors such as variations in estimation techniques and data frequency play a significant role in influencing the outcomes of the elasticity estimates.

Price elasticity of demand

Price elasticity of demand refers to the estimated change in sales volume of a specific alcoholic beverage when there is a change in the price of that specific product. In general, the price elasticity of demand tends to be negative. Price elasticity of -1.0 implies that for every percentage rise in price there will be an equal percentage fall in consumption.[146]Price elasticities of greater than -1.0 indicate that consumption tends to be very responsive to price changes.

Income elasticity of demand

Income elasticity of demand refers to the change in liquor sales volumes as a result of changes in consumer income. In most cases, the income elasticity of demand tends to be positive, because higher levels of income are associated with higher levels of demand. Negative income elasticities indicate that demand

145 BER, 2010 (a) & (b)
146 Income and price elasticities affect liquor sales volumes that in turn have a similar effect on consumption levels.

for the good decreases as consumer income increases, which is the case for so-called inferior goods.

In order to compare the responsiveness of different alcoholic beverage categories to income and price changes, one could classify them according to the nature of their respective elasticities. The table below distinguishes between inferior and normal goods as well as the extent of their responsiveness to income and price changes. When interpreting the price and income elasticities of demand for alcoholic beverages it is important to note the additive nature of alcohol.

Table 12: Elasticity classification[147]

Income elasticity →		**< 0**	**0 to 1**	**> 1**
Price elasticity ↓				
		Inferior	**Normal**	
			Relatively income inelastic	**Relatively income elastic**
			"Essential good"	**"Luxury good"**
< 0		Sorghum beer "Giffen good"		
-1 to 0 Relatively price inelastic	**"Essential good"**	Standard price wine	Malt beer, Natural wine & Spirits	Spirits?
< -1 Relatively price elastic	**"Luxury good"**		Natural wine?	Ciders, Alcoholic Fruit Beverages & Spirit Coolers (collectively RTDs)

The three broad liquor categories, malt beer, natural wine and spirits exhibit relative income inelastic.

Sorghum beer and standard priced wine appears to be inferior goods. Inferior goods experience a drop in demand when income levels increase, caused by consumers switching to products that they perceive to be of higher quality or standing. "Giffen goods" are goods that display a violation of the general law of demand.[148] Sorghum beer could be classified as a "Giffen" good, exhibiting a negative income elasticity and positive price elasticity.

147 National Treasury, 2002.

148 The Law of demand states that consumers buy more of a good when its price decreases and less when its price increases.

AFBs and RTDs could be labelled as luxury goods with income elasticity greater than one. These products are also very price sensitive.

Cross price elasticity

Cross price elasticity measures the estimated change in sales volume of a specific alcoholic beverage relative to a change in the price of another alcoholic beverage. A positive cross price elasticity indicates that the two products are potential substitutes, which means a higher price for the one product leads to an increase in demand for the other. Negative cross price elasticities suggest that the two products are possible complimentary products, as a rise in the price of one product leads to lower demand for the complimentary product.

It must however be noted that alcohol sales volumes do not only depend on price, cross price and income changes alone. Other variables such as gender, age, cultural norms, consumer preference, household spending patterns, geographical location, and alcohol addiction also influence alcohol sales volumes.

b) Elasticity of demand estimates per liquor product category

BER was commissioned by key players in the alcohol industry to estimate long run elasticity estimates for the various liquor product categories in South Africa. The table below summarises the findings of the BER analyses.

Table 13: Elasticity estimates for alcoholic beverages (BER, 2010).

Category	Income Elasticity	Price Elasticity	Cross-price Elasticity
Malt beer	0.45	-0.70	n/a
Natural wine	0.50	-1.00	0.50 (malt beer price)
Standard priced wine	-0.80	-1.00	2.35 (malt beer price)
Flavoured alcoholic drinks (FADs / AFBs)	2.00	-1.25	n/a
Ready to drink beverages (RTD/ Spirit Coolers)	2.20	-2.50	n/a
Spirits	0.65	-0.90	1.10 (malt beer price) 0.70 (natural wine price)
Total Liquor	**0.65**	**-0.75**	**n/a**

Similar elasticities were estimated by the National Treasury for its 2002 policy paper on the taxation of alcoholic beverages in South Africa.[149]The table below shows the estimated short run elasticities for the main alcoholic beverage categories, namely malt beer, wine, spirits and commercial sorghum beer.

149 National Treasury, 2002. The taxation of alcoholic beverages in South Africa and its impact on the consumption levels of alcoholic beverages.

Table 14: Elasticity estimates for alcoholic beverages (National Treasury, 2002).

Category	Income Elasticity	Price Elasticity
Malt beer	0.46	-0.47
Natural wine	0.76	-1.08
Spirits	0.95	-0.75
Commercial sorghum beer	-1.14	0.67

While the BER 2010 estimates are not directly comparable to the National Treasury 2002 estimates because of varying product classification and estimation techniques, the results compare relatively well. Differences between the estimates are potentially due to the fact that the BER study published of long run elasticities, compared to the short run elasticities of the National Treasury. In general, long run elasticities tend to be greater than short run elasticities because consumers have greater liberty to adjust their overall consumption patterns with time in accordance with their new revised preferences.

The elasticity estimates by both the National Treasury and BER analyses suggest that natural wine tends to be more income elastic than malt beer. Natural wine is also more price sensitive compared to malt beer. AFBs/RTDs show large income and price (negative) elasticities. The income elasticity for sprits is higher than for malt beer and natural wine. Spirits' price elasticity is greater than for malt beer, but relatively lower when compared to natural wine. For total liquor sales, the long run BER price and income elasticity of demand are -0.75 and 0.65 respectively.

Beer

The BER income elasticity for malt beer of 0.45 is the lowest for all the product categories and suggests that if incomes rise by 10 per cent, demand for malt beer increases by 4.5 per cent. The price elasticity for malt beer of -0.70 indicates that malt beer is price sensitive, but to a lesser extent than the other product categories. The price of malt beer also appears to have a statistically significant impact on sales volumes of other liquor products and indicates potential substitution dynamics. No other liquor prices were found to have a statistically significant impact on malt beer sales volumes.

The BER analysis did not estimate elasticities for sorghum beer. The National Treasury's 2001 estimate indicates a commercial sorghum beer income and price elasticity of -1.1 and 0.6 respectively. The negative income elasticity is indicative of an inferior alcoholic beverage that suffers a drop in demand when consumer income increases.

Natural wine

The BER income elasticity of 0.50 for natural (unfortified) wine is marginally higher than that of malt beer, but lower than spirits. The price elasticity of natural wine of -1.00 indicates that this product category is more responsive to price changes when compared to the aggregate liquor market.

The long-run cross price elasticity with real malt beer prices is 0.50 and shows that the real price of malt beer has a statistically significant impact on the demand for natural wine. A 10 per cent increase in malt beer prices could potentially lead to an increase of 5 per cent in the demand for natural wine. However, the authors note that due to significantly larger beer sales volumes, it is easier to detect substitution of natural wine for beer than vice versa.

Standard priced (or lower priced) wine has a negative income elasticity of -0.8 and could be seen as an inferior product where an increase in real consumer income typically leads to a decline in sales. Standard priced wine also has the highest cross price elasticity of 2.35 with malt beer prices, which indicates possible substitution dynamics between the two product categories.

Low sales volumes for fortified wines relative to the other wine categories make it difficult to estimate elasticities for this alcoholic beverage category. The long run income elasticity was estimated at 0.70 and is higher than for malt beer, natural wine and spirits. Estimates for price and cross-price elasticities are in most cases statistically insignificant and this is why fortified wine is absent from the elasticity tables above. The authors of both BER reports none the less suggest that natural wine is a strong competitor for fortified wine.

Flavoured Alcoholic Beverages (AFBs) and Spirit Coolers (RTDs)

AFBs and RTDs have a fruit / beer and spirits alcohol base respectively and are typically mixed with other non-alcoholic ingredients that appeal more to younger and female drinkers. The alcohol tax rates for AFBs and RTDs are based on the tax rates of malt beer and spirits respectively. The lower alcohol tax burden for beer gives rise to a differential rate that favours AFBs above RTDs, although the products have similar alcohol content and could be possible substitutes for each other. This apparent anomaly is due to different tax rates for beer and spirits, and the administrative convenience of taxing all spirit based products at the same rate and similarly all fruit / beer based products at the beer rate.

This beverage category appears to be very responsive to changes in real consumer income with an income elasticity of between 2.00 to 2.20. Products in this category are also price sensitive and their long-run price elasticities are the highest up to -2.50. The difference between the long-run price elasticity for RTD's of -2.50 and FAD's (AFBs) of -1.25 should be noted. This could possibly be explained by the differential tax treatment, consumer preferences and

demographics, continued launch activity or data irregularities and should be interpreted with caution.

Spirits

The income elasticity for spirits of 0.65 is higher than for malt beer and natural wines. The price elasticity of this category is almost unitary at -0.90. Spirits' cross price elasticities with malt beer and natural wine prices are 1.10 and 0.70 respectively. In this case it would appear that an increase in the real prices of beer and natural wine might lead to an increase in the demand for spirits.

The opposite could also hold true where an increase in the real price of spirits might lead to an increase in the demand for malt beer or natural wine. However, estimates for these cross-price elasticities were statistically insignificant and therefore inconclusive. Also, the price of a specific alcoholic beverage seldom increases in isolation. Cost push factors (including excise taxation) influences the entire liquor market, albeit to a different extent for the various liquor product categories, and therefore cross price elasticities should be interpreted with caution.

10. POLICY CONSIDERATIONS AND OPTIONS

Interventions aimed at reducing the harm associated with alcohol abuse are divided into two categories that should be used in combination to complement and strengthen each other. One consists of broad measures aimed at controlling the total volume of drinking across the entire population. The other involves targeted measures that focus on changing the drinking patterns and behaviour of particular high risk groups. Some population-based measures like health warnings and information labels may also be aimed at specific at-risk groups like pregnant women or young drinkers, but generally population-level measures need to be supplemented by specific targeted interventions focused at changing the behaviour of high risk groups.

The effectiveness of government interventions does not depend only on whether alcohol consumption is curtailed across the population, but should also be measured against its impact on those whose drinking is associated with the most harm. The successful design of alcohol policy interventions should therefore balance population-wide and targeted measures. How this balance is created will vary from one country to another, reflecting prevailing social attitudes and economic circumstances. No policy interventions exist in a vacuum and whatever measures are implemented to curtail alcohol abuse can only be effective if supported by proper enforcement, the education of the general public and the involvement of the broader community.[150]

Alcohol abuse is a complex phenomenon driven by a combination of social, economic, psychological and other factors. Any strategy designed to change the harmful behaviour of alcohol consumers that gives rise to social externality costs should try to address the following: (i) who causes these negative impacts, (ii) what the relative contribution of different consumer behaviour is to the total cost to society, (iii) what drives that behaviour, and (iv) what influences can reasonably be expected to modify that behaviour.

In general, the average moderate consumer of alcohol tends to be relatively price-sensitive and increases in the price of alcoholic beverages may therefore reduce total alcohol consumption and general alcohol-related harm across the population.[151] One measure to achieve such a price increase is to raise excise taxes on alcoholic beverages. International experience on the impact of higher excise tax rates on the consumption patterns of heavy drinkers and those (few) consumers who abuse alcohol vary.

It should also be noted that price and income elasticities of demand differ between various types of alcoholic beverages, which may lead to substitution between liquor product categories in response to tax increases that could reduce the effectiveness of such price interventions.

150 ARA, 2010.
151 Anderson *et al*, 2009, quoted in Parry, 2010.

Some experts argue that tax increases tend to encourage consumers to seek lower priced options rather than reduce the overall amount of alcohol they consume in terms of litres of pure alcohol per capita. The alcohol market is complex with multiple options available to consumers at a wide range of prices. As a result, increasing taxes to reduce consumption may be ineffective because consumers tend to trade down or change their consumption patterns with their budget and the behaviour of heavy drinkers tend to be basically price inelastic.[152]

The World Health Organisation (WHO) argues in its *Global Strategy to Reduce the Harmful Use of Alcohol* that alcohol consumers are sensitive to pricing and recognises that taxes are a key element of pricing. However, it qualifies its position by noting that "factors such as consumer preferences and choice, changes in income, alternative sources for alcohol in the country or in neighbouring countries, and the presence or absence of other alcohol policy measures may influence the effectiveness of tax increases as a policy option to reduce overall consumption". The WHO also notes that tax increases may encourage consumers to turn to illicit and informal markets and urges governments to bring those markets under effective control as they present their own public health risks.[153]

The WHO suggests the following pricing options in its global strategy to reduce the harmful use of alcohol:[154]

- Establishing a system for specific alcohol taxation accompanied by an effective enforcement system;
- Taxing alcohol in proportion to the alcoholic content of the beverage or on the basis of the type of beverage;
- Regular reviewing of prices in relation to levels of inflation and income;
- Benchmarking of alcohol prices with basic commodities;
- Banning or restricting the use of price promotions, discounted sales, below cost sales, flat rates for unlimited drinking and other types of volume sales;
- Establishing minimum prices for alcohol;
- Providing price incentives for non-alcoholic alternatives;
- Restricting cross-border trade of alcohol;
- Combating or reducing the sales of illicit alcohol or alcoholic beverages;
- Ensuring that informal alcoholic drinks are covered by relevant regulations, as appropriate;
- Stopping or reducing subsidies to economic operators in the alcohol trade;
- Imposing extra taxes on alcoholic beverages that might have a special appeal to adolescents.

152 ITIC, 2011.
153 WHO, 2010.
154 World Health Organisation, 2009.

South Africa adheres to most of these WHO guidelines. While minimum pricing for alcohol has not been established, changes to alcohol taxes are directly linked to changes in the weighted average retail prices of alcoholic beverages.

Taxes do more than generate revenue; they also affect the allocation and distribution of economic resources in a variety of ways. Equity, efficiency and administrative and compliance burdens must be considered carefully in deciding how best to tax alcohol in South Africa.[155] A critical part of this consideration is the extent to which such taxes may reduce the externalities associated with alcohol abuse and contribute to consumer shifts to informal and illicit markets with additional health impacts. It is also important to consider how the pricing strategies arising from such tax measures may be complemented by the impact of regulatory and other non-price interventions to combat alcohol abuse.

a) Coordination between tax and non-tax measures

The levels of alcohol abuse in South Africa are unacceptably high. Reducing the rate of abuse is an urgent national priority for government. There is widespread agreement that an integrated and comprehensive strategy and action plan is needed. This requires appropriate choices about the most suitable combination of interventions available to government. In addition to appropriate excise taxation policies, there is a need for complementary non-tax measures that can be effectively targeted at specific consumers and high-risk behaviour patterns.

The link between the level of alcohol consumption per capita, health and social problems arising from alcohol abuse is not clear or simple. Some experts argue that patterns of drinking are better indicators of alcohol abuse than absolute levels of alcohol consumption.[156] Educational programmes and regulatory interventions aimed at discouraging risky and hazardous alcohol consumption are necessary to complement the alcohol excise tax regime. These include measures to combat, among others, underage drinking, drinking during pregnancy, drunken driving, and alcohol abuse behaviour such as binge-drinking.

Government has established the Inter-Ministerial Committee on Substance Abuse to develop an appropriate policy response to curb the serious levels of alcohol and drug abuse in South Africa. The Department of Social Development (DSD) and the Central Drug Authority hosted the Second Biennial Anti-Substance Abuse Summit[157] in March 2011. The theme of the summit was *An Integrated Approach towards a Drug Free Society* and the resolutions from the summit have been translated into an integrated programme of action. Suggestions on how tax and non-tax interventions can be better coordinated and

155 Bird and Wallace, 2006.
156 Cooper, 2002.
157 It comprised of the JCPS cluster, UNODC, WHO, Parliament of South Africa, Provincial Executives and Legislatures, Substance Abuse Forums, Local Drug Action Committees, Organised Labour, House of Traditional Leaders, Faith Based Organisations, Civil Society Organisations, Community Based Organisations and Youth Structures.

strengthened to ensure an effective package measures to address alcohol abuse will be welcomed.

b) Coordination and alignment of legislation regulating the alcohol industry

The alcohol industry is regulated by various sections of legislation. These are: (i) the Liquor Products Act, No.60 of 1989 which regulates the type of alcoholic beverages that may be produced and imported to ensure consumer protection, (ii) the National Liquor Act, No.59 of 2003 that regulates who may manufacture and distribute liquor, (iii) Provincial Liquor Acts that regulates the retail sale of liquor and (iv) the Customs and Excise Act, No.91 of 1964, which classifies alcoholic beverages for excise duty purposes. The Customs and Excise Act broadly follows the harmonised system of trade classification as determined by the World Customs Organisation.

About 80 per cent of alcohol consumption occurs in some 35,000 licensed taverns and 180,000 unlicensed shebeens / taverns across South Africa. It is argued that the regulatory framework is sufficiently enforced in the formal sector but that its impact does not reach the vast majority of liquor outlets in the informal liquor trade.

The Liquor Products Act, No.60 of 1989 defines "liquor products" as comprising of seven broad categories. The Customs and Excise Act, No.91 of 1964 classify alcoholic beverages in six broad groupings. Table 15 below compares the groupings and classifications by these two pieces of legislation. The Liquor Products Act is being amended and will in future include an explicit definition of beer.

Table 15: Alcohol classification

LIQUOR PRODUCTS ACT	CUSTOMS AND EXCISE ACT
(a) Wine	(a) Malt beer & traditional African beer (22.03)
(b) Alcoholic fruit beverage	(b) Wine (22.04)
(c) Spirit	(c) Flavoured wine (22.05)
(d) Grape based liquor	(d) Other fermented beverages & mixtures of fermented beverages (22.06).
(e) Spirit based liquor	(e) Un-denatured alcohol (22.07)
(f) Specifically authorised liquor	(f) Distilled spirits (22.08)
(g) Any liquor other than a product mentioned in paragraph (a), (b), (c), (d), (e), or (f) in respect of which an import certificate has been issued.	

Potential discrepancies between these two pieces of legislation results in some uncertainties and leads to anomalies in alcoholic beverage markets. These discrepancies and uncertainties negatively impact effective enforcements and

also lead to disputes about the appropriate tariff classification for excise duty purposes. It is therefore recommended that a harmonisation process be undertaken to improve alignment between these two acts. To this end the 2014 Budget Review included the following announcement with regard to alcoholic beverages classification for excise duty purposes:

"Liquor manufacturers may currently request tariff determinations from SARS to obtain certainty on the appropriate tariff classification and excise duty rate applicable to their products. These voluntary applications for tariff determinations will in future be made compulsory to ensure that all alcoholic beverages are over time accurately and consistently classified. Any new alcoholic product or modification in the production process or alteration in the recipe of an existing liquor product will be subject to a compulsory SARS tariff determination. Proof of compliance with the requirements of the Liquor Products Act will also have to be submitted to promote harmonisation with agricultural legislation. These compulsory tariff determinations will be phased in to ease its administrative burden."

There might be other areas that requirement attention to ensure better alignment of all the legislation aimed at regulating the alcohol beverage market. Inputs and comments in this regard will be welcomed.

c) Is an alignment of alcohol excise taxes across alcohol product types possible?

For excise duty purposes, alcoholic beverages are grouped into 6 broad categories with various subcategories as outlined in the Table below.

Table 16: Current excise policy regime

Classification	Product categories (Alcohol content range vol.)	Tax burden	Tax application	Comment
(1.) 22.03	Beer:			
	- Malt (2.5 – 8)	35	R / li aa.	Existing policy framework
	- TAB (3.5)	?	R / li	Unchanged for a long time
	- TAB powder (-)	?	R / kg	Unchanged for a long time
(2.) 22.04	Wine:			
	- Sparkling (6.5 – 16.5)	23	R / li	Existing policy framework
	- Unfortified (6.5 – 16.5)	23	R / li	Existing policy framework
	- Fortified (15 – 22)	23	R / li	Existing policy framework
(3.) 22.05	Flavoured wine: Vermouth & Cocktails			
	- Sparkling (6.5 – 15)	23	R / li	Based on wine under 22.04
	- Unfortified (6.5 – 15)	23	R / li	Based on wine under 22.04
	- Fortified (15 – 22)	23	R / li	Based on wine under 22.04
(4.) 22.06	Other fermented			
	- AFBs / Cider / Perry (2.5 – 15)	?	R / li	Based on beer excise rate
	- Fortified fermented beverages (15 – 23)	?	R / li aa.	**Attracts the special duty rate**
	- Ales (sugar fermented beverages) (-)	?	R / li aa.	Penalty / default category / spirits rate
	- Grain based FAB's (Flavoured Alcoholic Beverage)	?	?	Not fruit based
(5.) 22.07	Industrial Alcohol (≥ 80)	?	R / li aa.	Based on spirits duty under 22.08
(6.) 22.08	Spirits			
	- Normal spirits (38 – 55)	48	R / li aa.	Existing policy framework
	- RTD's (5 – 8)	?	R / li aa.	Based on distilled spirits excise rate
	- Stripped grape based alcohol (15 – 23)	?	R / li aa.	**Attracts the special duty rate**
	- Stripped fruit / malt based alcohol (≤ 15)	?	?	No provision currently
	- Reduced duty rate for wine spirits	?	?	Agricultural backward linkages

The alcohol beverage market can, at a high level, be grouped into four broad categories; wine, clear beer, spirits and traditional beer. These high level groupings helped to inform the current targeted total consumption tax burdens (excise duty plus VAT) of 23, 35, and 48 per cent for wine, clear beer and spirits respectively. No such target has been set for traditional beer as this market is very informal, appears to be on the decline in South Africa and would require consultation with the other SACU countries as this market might be much bigger in these countries.

The current alcohol duty rate structure is based on the weighted average retail selling prices of the respective alcoholic beverage product categories. The use of weighted average prices results in the tax burden on specific liquor products to vary according to relative prices within particular product categories. Lower priced alcoholic beverages within specific product categories (e.g. cheap wine) bear a higher alcohol tax burden, because premium products increase the weighted average price used to determine the alcohol tax incidence. This means that the alcohol excise tax regime tends to be regressive, as low income consumers contribute disproportionately more to total excise duties in terms of the price of cheap products and their overall alcohol expenditure. In South Africa, the lowest income households with income below R7 249 per annum spend 5.4 per cent of their income on alcohol compared to an average of 1.3 per cent for other income bands.[158]

158 South African Breweries Ltd, 2010.

Traditional beverages, like sorghum beer, are often taxed lower to account for the negative distributional effect of alcohol taxation on the poor. Also, any significant taxation of traditional beer has been shown to lead to increased home brewing with often hazardous health impacts. This has caused government to retain the very low levels of alcohol taxation on traditional sorghum beer for many years. Some in the liquor industry have expressed concern about the impact of the favourable tax differential for commercial sorghum beer on competing low-priced malt beer and wine products. It should be noted that traditional beer, like low-priced wine, has a negative income elasticity and is considered an inferior product in economic terms as consumer demand tends to decrease with rising income levels. A separate review of the taxation of traditional beer should be undertaken in the context of the SACU countries that share a common alcohol excise tax regime.

One of the historical points of departure in determining the level of taxation for the various types of alcoholic beverages was whether the final product had been the result of fermentation, (and in addition sometimes fortification), or distillation. The argument being that distillation is a much quicker process, results in much cheaper production costs and hence the final product should be taxed higher, apart from the fact that the alcohol content of a distilled alcoholic beverage is in most cases higher. It follows that fermentation takes longer, the final product is a bit more expensive (compared to a distilled product) and hence the argument for lower excise taxes (such as the case of unfortified or natural wine).

Technological innovation that results in new product categories (e.g. flavoured alcoholic beverages and various alcoholic mixtures) have created anomalies in the current excise duty structure and might require special or specific targeted tax burdens for these product categories.

Budget 2011 introduced an additional category (special duty category) for mixed fruit fermented (fortified) beverages that contain both a fermented base and spirits fortification.[159] This category also allows for the use of fermented alcohol stripped of its essential character under tariff heading 22.08 for spirituous beverages in accordance with the HS Tariff classification rules. The special duty category addresses the phenomenon of manufacturing processes that strip fermented alcohol into ethyl alcohol to produce spirituous beverages. It is important to understand the potentially unintended consequences of this category, especially with regard to similar products that perhaps fall outside of the reduced duty (special) category. An example of this would be a stripped or partially stripped wine, soft fruit or beer based alcoholic beverages with alcohol content below 15 per cent.[160]

[159] Although this category is open to all fruit based fermented alcohol, only grape based alcohol can in practise be used due to fermentation restrictions as mentioned in chapter 3.

[160] The addition of such a category might be due to technological changes in production or to enable alcohol extraction for lower alcohol content beverages.

Budget 2013 sought to reserve tariff heading 22.06 exclusively for fruit fermented alcoholic beverages in an attempt to align two sets of legislation.[161] As a result, alcoholic beverages other than those with a fruit base were envisaged to carry the higher spirits rate from 2014 onwards. The initial motivation for this development was in order to deal with cheap sugar fermented alcoholic beverages. After consultation it was decided that the composition of 22.06 be reviewed in order to prevent any unintended consequences relating to other flavoured alcoholic (e.g. grain based) beverages. Any discussion on this should also evaluate the different agricultural inputs, their resultant production cost and the appropriate taxation of RTD/AFB and cider beverages.

Some experts argue that since the harmful external costs of alcohol are primarily related to the volume of absolute alcohol consumed rather than the type of alcoholic beverage. Alcohol excise duties should therefore be based on the absolute alcohol content and should not differ by alcohol type (e.g. wine, beer, spirits, etc.). The policy advantage of an alcohol duty rate structure based on alcohol content (although not a uniform rate structure across all alcoholic beverage types at this stage) is that it more clearly promotes government's public health policy objectives.[162] Consumers are subject to alcohol taxation directly in proportion to their levels of alcohol consumption and are thereby encouraged to switch to lower alcohol content beverages and reduced alcohol consumption over time. However, this argument ignores one of the reasons for the historical differences in excise duties by alcoholic beverage type as discussed above (e.g. fermentation vs. distillation). It also ignores the social treatment afforded to wine products (due to inter alia agricultural backward linkages, tourism potential, etc.) in most countries, especially those that are considered wine producing countries.

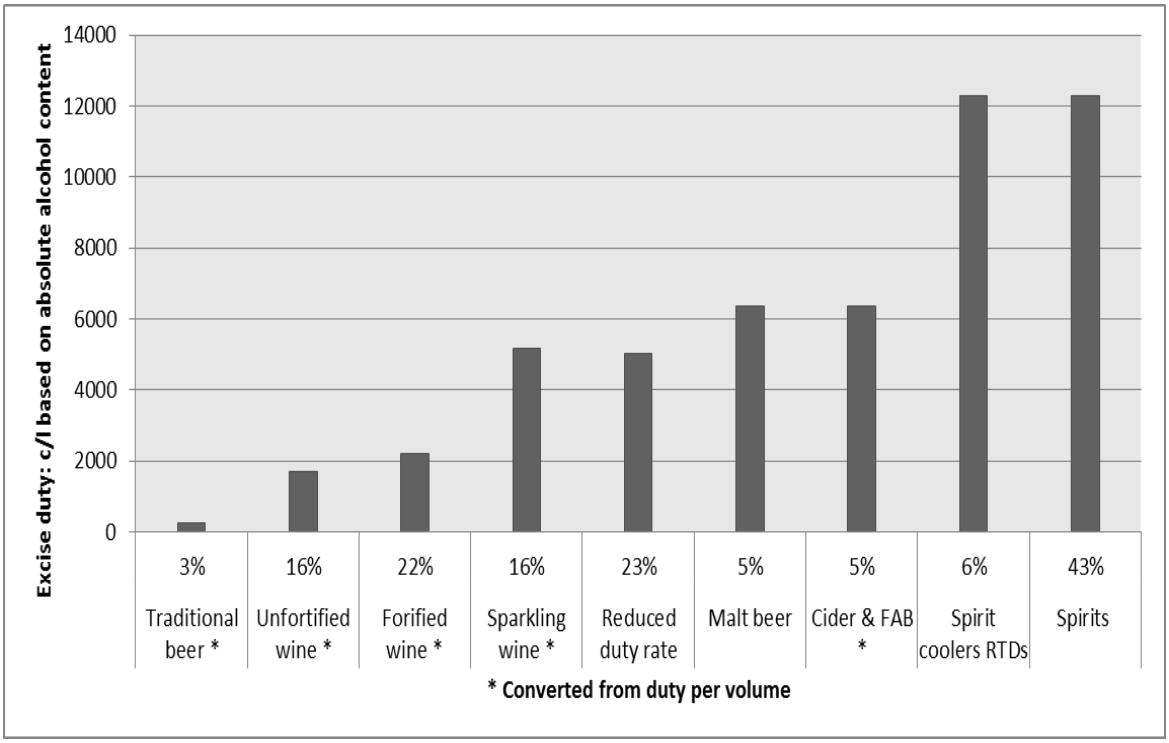
South Africa's current alcohol excise duty rate structure consists of specific excise duty rates expressed in cents per litre (volume) in the case of wine and traditional beer, and cents per litre of absolute alcohol content in the case of beer and spirits. It should be noted that even though the excise duties for both clear beer and spirits are expressed in terms of absolute alcohol content the level of the duties differ substantially. If the argument holds that all alcoholic beverages should be taxed at the same rate based on alcohol content it stands to reason that the beer rate will have to increase substantially to match the spirits rate – as it would be unlikely to argue for a lower excise duty rate for spirits. To bring the excise duty for wine into this debate complicates the issue even further (by multiples), not only does the absolute alcohol content for wine vary quite substantially (from 6.5 to 16.5 for natural wine), such an equalisation of the excise tax rate based on alcohol content will result in a substantial increase in the tax burdens for both wine and clear beer.

All the current alcohol excise duty rates can be converted into absolute alcohol content equivalents (see Figure 5). This graph highlights the significant

[161] Customs and Excise Act (1964) and Liquor Products Act (1989).
162 Ryan, 2009.

differences in the estimated excise duty rates based on absolute alcohol content for the various alcoholic beverages.

Figure 5: Alcohol excise duties based on absolute alcohol content (2013/14).[163]



d) Alcohol excise duties relating to Ciders, Alcoholic Fruit Beverages (AFBs) and Spirit Coolers

The differential alcohol excise tax rates for beer and spirits gives rise to anomalies in the Ciders, AFB and Spirit Coolers market (sometimes collectively referred to as RTDs; ready-to-drink). These drinks are mixtures of underlying fruit, grain or spirits derived alcohol with other products like fruit juices, flavourings, etc. Spirit Coolers with their spirits base are taxed at the higher spirits excise duty rate, while fruit and grain (beer) based AFBs are taxed at the lower rate for beer. With respect to grain-based AFBs the 2014 Budget Review commented as follows: *"Budget 2013 introduced changes to tariff heading 22.06 to align the excise duty rate structure for fruit fermented alcoholic beverages with the requirements of the Liquor Products Act (1989). As a result, fermented alcoholic beverages that are not mainly derived from fruit will be included in the "other" tariff band. The intention was to increase the excise duty rate of this band to the highest excise rate – the full spirits rate – from February 2014 onwards. However, after further consultation it is proposed that this increase be postponed to Budget 2015. The possibility of providing for grain fermented alcoholic beverages will also be explored".*

163 National Treasury, 2013. Also see Annexure B attached.

A fruit or grain (beer) based AFB with the exact same alcohol content as a spirits based spirit cooler bears a lower alcohol tax burden, despite the two products being potential substitutes. The alcohol excise tax rate for cider is also based on that of malt beer and hence the anomalies in the tax treatment of AFBs and spirit coolers extend to the cider market as well. Some industry experts are of the view that ciders should be taxed at even lower rates due to the higher costs of raw material (apples) as required by the Liquor Products Act.

These products appeal more to the younger, especially female, market. Younger drinkers account for 45, 32 and 40 per cent of the Spirit Coolers, AFB and the Cider markets, respectively.[164] Some countries have sought to influence consumption patterns of young people through increased taxes on alcohol products that have a special appeal to adolescents, but these interventions have achieved mixed results. For example, Australia reported a 30 per cent drop in RTDs sales after a 70 per cent increase in taxes on RTDs in 2010, but this was accompanied by a marked rise in consumption of other beverages as consumers shifted to other options. The total volume of alcohol consumed did not appear to change, as the tax intervention only affected consumer choice of beverage with very little effect on overall alcohol consumption.[165]

Some studies suggest that young people are more responsive to changes in alcohol prices and taxation than adults. However, despite high taxation rates, binge drinking among young people in countries of northern Europe are among the highest in the world. Many young people seem to obtain their alcohol from sources that escape the intent of government interventions.[166] Parents and other adults are often the primary source of beverage alcohol for young people and in such cases price is not a significant factor in reducing alcohol consumption among the young.[167]

For some consumers these products, Ciders, AFB and Spirit Coolers, are treated as substitutes, while other consumer demographics view spirit coolers as an alternative to spirits. Suggestions on the most appropriate alcohol excise tax regime for AFBs, Spirits Coolers and Ciders (sometimes collectively referred to as RTDs; ready-to-drink) are sought. Information and analysis to better comprehend the market dynamics and drivers of these products that would inform a review of their current tax treatment should be provided to make an informed policy decision. Table 15 illustrate that the sales volume of AFBs, Ciders and Spirits Coolers have collectively increased at a faster rate compared to that of all the other alcoholic beverages.

164 South African Breweries Ltd, 2010.
165 ITIC, 2011.
166 ARA, 2010.
167 ICAP, 2009.

Table 16: Alcohol sales by volume – thousands of litres – and cumulative annual percentage growth in sales volumes (2013/14 vs. 2008/09)

VOLUME = '000L	*2008/09*	*2009/10*	*2010/11*	*2011/12*	*2012/13*	*2013/14*	*Cum. % Annual increase 2013/14 vs. 200809*
SPIRITS	112 050	110 300	111 320	112 300	114 520	112 600	0.1%
WINE	269 750	263 000	271 400	282 500	286 500	291 150	1.5%
FORTIFIED WINE	29 085	29 175	28 595	28 695	28 175	27 170	-1.4%
AFBs, SPIRIT COOLERS & CIDERS = (RTDs)	347 000	363 000	364 400	385 000	410 000	440 000	4.9%
BEER	2 831 000	2 865 000	2 937 000	2 980 000	3 025 000	3 070 000	1.6%
GRAND TOTAL	**3 588 885**	**3 630 475**	**3 712 715**	**3 788 495**	**3 864 195**	**3 940 920**	**1.9%**

e) Maintenance of targeted benchmarks for alcohol consumption taxes

South Africa's differential alcohol excise duty rate structure was based on target alcohol tax burdens (excise duties plus VAT) as a percentage of the weighted average retail selling prices for wine, clear beer and spirits of 23, 33, and 43 per cent respectively from 2002 to 2011. These target tax burdens were calculated using Brewers Association of Canada (BAC) survey data. The average international tax burdens were derived from both the full data sample and for major wine producing countries, to estimate midpoint tax burden benchmark guidelines.

Budget 2012 increased the targeted tax burdens for beer and spirits to 35 and 48 per cent respectively. The table below shows updated BAC survey results to demonstrate the trend in international tax burden benchmarks when using the same methodology that has informed the National Treasury's targeted tax burdens since 2002.

Table 17: BAC international benchmarks of 1997 updated to 2007

	Wine		Beer		Spirits	
	1997	2007	1997	2007	1997	2007
Total sample country average	30	29	35	34	58	55
Wine producing country average	17	18	28.3	27	51.4	47
Midpoint	23.5	23.5	31.65	30.5	54.7	51
RSA benchmarks (2002 to 2011)	23		33		43	
RSA benchmarks (phased in by 2013)	23		35		48	

Source: Brewers Association of Canada, South African Wine Industry Information and Systems.

The average international tax burden for wine remained stable over the period, while it decreased marginally for beer. A reduction in the excise tax burden on spirits is observed internationally. The current benchmark for wine appears low by total international average standards, but relatively high compared to the major wine producing countries that compete directly with South Africa's wine industry. The increased benchmark of 35 per cent for beer appears in line with the total international average, but relatively high by wine-producing country standards. By contrast, the increased benchmark of 48 per cent for spirits remains relatively low compared to the total international average, but seems in line with that of wine producing countries.

The current tax burden targets are comparable with the average international tax burden benchmarks by alcoholic beverage category. It is recommended that the current alcohol excise duty rate burden be maintained, but be reviewed periodically.

f) Inflation plus adjustments to alcohol excise duty rates

At present, the annual adjustment in alcohol excise duties is calculated based on tax burdens derived from projected prices for the next fiscal year or the expected consumer inflation rate, whichever is higher. Adjustments made at the time of the national budget aim to maintain the current differential tax burdens between wine, beer and spirits and are reliant on annual market information of weighted average retail prices for these beverages. This market information is based on AC Nielsen, Markinor and South African Wine Industry Information and Systems (SAWIS) surveys. However, industry concerns exist around the accuracy of the current market information, the consistency of the respective market surveys utilised, and the fairness of the data required from particular alcoholic beverage industries. It is proposed that the current data sources be reviewed and an updated approach be agreed upon with the respective alcoholic beverages industries on how to access appropriate market information in a consistent, dependable and equitable manner.

Alternatively, a system of annual indexation of alcohol excise rates by inflation plus a 3 percentage points premium (or higher) could be considered – based on the current excise duty regime for alcoholic beverages, this premium was around 2.5, 5.6 and 5.7 percentage points for beer, wine and spirits respectively over the ten year period 2003 to 2013 . However, such inflation-plus linked duty rate adjustments may cause the current differential tax burdens between alcoholic beverage product categories to deviate from the international benchmark targets over time, as some alcohol product prices would not necessarily increase in line with inflation. This alternative is not recommended as it would be subject to discretion, may lead to undue lobbying and may result in major deviations from the targeted total consumption tax burden benchmarks.

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ANNEXURE A: OECD ALCOHOL DUTY TRENDS

OECD excise duties on beer since 2002

Main duty rates

	Units	2002	2003	2004	2005	2006
US states	$/gallon	0.213	0.215	0.215	0.217	
US federal	$/gallon	0.581	0.581	0.581	0.581	0.581
US total	$/gallon	0.794	0.796	0.796	0.798	0.799
UK	£/100 litres/1% strength	11.89	12.22	12.59	12.92	13.26
Australia	$/litre of alcohol	33.75	34.66	35.53	36.43	37.9
Canada	$/100 litres	27.985	27.985	27.985	27.985	31.22
France	EUR/hl/degree alcohol	2.6	2.6	2.6	2.6	2.6
Germany	EUR/hl/degree Plato	0.787	0.787	0.787	0.787	0.787
Italy	EUR/hl/degree Plato	1.4	1.39	1.59	1.59	2.35
Spain	EUR/hl/degree Plato	0.81	0.81	0.81	0.83	0.91
Netherlands	EUR/hl (>15degree Plato)	31.4	31.4	31.4	31.4	31.4
South Africa	R/litre of alcohol	25.63	28.19	30.73	33.65	36.68

Nominal index

		2002	2003	2004	2005	2006
US states	2002=100	100	101.0	101.0	101.9	
US federal	2002=100	100	100.0	100.0	100.0	100.0
US total	2002=100	100	100.3	100.3	100.5	100.7
UK	2002=100	100	102.8	105.9	108.7	111.5
Australia	2002=100	100	102.7	105.3	107.9	112.3
Canada	2002=100	100	100.0	100.0	100.0	111.6
France	2002=100	100	100.0	100.0	100.0	100.0
Germany	2002=100	100	100.0	100.0	100.0	100.0
Italy	2002=100	100	99.3	113.6	113.6	167.9
Spain	2002=100	100	100.0	100.0	102.5	112.3
Netherlands	2002=100	100	100.0	100.0	100.0	100.0
South Africa	2002=100	100	110.0	119.9	131.3	143.1

Real index (compared with overall price level)

		2002	2003	2004	2005	2006
US states	2002=100	100	98.8	96.2	93.9	
US federal	2002=100	100	97.8	95.2	92.1	89.3
US total	2002=100	100	98.0	95.5	92.6	89.9
UK	2002=100	100	101.4	103.1	103.7	104.0
Australia	2002=100	100	99.9	100.1	100.0	100.4
Canada	2002=100	100	97.3	95.6	93.5	102.3
France	2002=100	100	97.9	95.9	94.3	92.7
Germany	2002=100	100	98.9	97.3	95.4	93.8
Italy	2002=100	100	96.7	108.2	106.1	153.6
Spain	2002=100	100	97.4	95.3	95.7	102.8
Netherlands	2002=100	100	97.4	95.3	93.4	91.5
South Africa	2002=100	100	103.9	111.7	118.3	123.3

OECD excise duties on wine since 2002

Main duty rates

	Units	2002	2003	2004	2005	2006
US states	$/gallon	0.63	0.64	0.64	0.65	
US federal	$/gallon	1.07	1.07	1.07	1.07	1.07
US total	$/gallon	1.70	1.71	1.71	1.72	1.73
UK	£/100 litres	154.37	154.37	154.37	167.72	172.17
Australia	% of wholesale price			ad valorem tax		
Canada	$/litre	0.51	0.51	0.51	0.51	0.62
France	EUR/hectolitre (still)	3.40	3.40	3.40	3.40	3.40
Germany	EUR/hectolitre (still)	0.00	0.00	0.00	0.00	0.00
Italy	EUR/hectolitre (still)	0.00	0.00	0.00	0.00	0.00
Spain	EUR/hectolitre (still)	0.00	0.00	0.00	0.00	0.00
Netherlands	EUR/hectolitre (still)	59.02	59.02	59.02	59.02	59.02
South Africa	c/litre	81.2	90.1	117.1	140.52	158.09

Nominal index

		2002	2003	2004	2005	2006
US states	2002=100	100	101.8	101.7	102.6	
US federal	2002=100	100	100.0	100.0	100.0	100.0
US total	2002=100	100	100.7	100.6	101.0	101.3
UK	2002=100	100	100.0	100.0	108.6	111.5
Australia	2002=100			ad valorem tax		
Canada	2002=100	100	100.0	100.0	100.0	121.0
France	2002=100	100	100.0	100.0	100.0	100.0
Germany	2002=100			no tax		
Italy	2002=100			no tax		
Spain	2002=100			no tax		
Netherlands	2002=100	100	100.0	100.0	100.0	100.0
South Africa	2002=100	100	111.0	111.0	111.0	111.0

Real index (compared with overall price level)

		2002	2003	2004	2005	2006
US states	2002=100	100	99.5	96.8	94.5	92.4
US federal	2002=100	100	97.8	95.2	92.1	89.3
US total	2002=100	100	98.4	95.8	93.0	90.4
UK	2002=100	100	98.7	97.3	103.6	104.0
Australia	2002=100	100	100.0	100.0	100.0	100.0
Canada	2002=100	100	97.3	95.6	93.5	111.0
France	2002=100	100	97.9	95.9	94.3	92.7
Germany	2002=100			no tax		
Italy	2002=100			no tax		
Spain	2002=100			no tax		
Netherlands	2002=100	100	97.9	95.9	94.3	92.7
South Africa	2002=100	100	104.8	134.4	155.9	167.7

OECD excise duties on spirits since 2002

Main duty rates

	Units	2002	2003	2004	2005	2006
US states	$/gallon	2.9	3.0	3.0	3.2	
US federal	$/gallon	13.5	13.5	13.5	13.5	13.5
US total	$/gallon	16.4	16.5	16.5	16.7	16.8
UK	£/100 litres/1% strength	19.6	19.6	19.6	19.6	19.6
Australia	$/litre of alcohol	57.2	58.7	60.2	61.7	64.2
Canada	$/litre of alcohol	11.1	11.1	11.1	11.1	11.7
France	EUR/hl of alcohol	1450.0	1450.0	1450.0	1450.0	1450.0
Germany	EUR/hl of alcohol	1303.0	1303.0	1303.0	1303.0	1303.0
Italy	EUR/hl of alcohol	645.4	645.4	730.9	730.9	800.0
Spain	EUR/hl of alcohol	740.0	740.0	740.0	754.8	830.3
Netherlands	EUR/hl of alcohol	1504.3	1775.0	1775.0	1775.0	1504.0
South Africa	R/litre of alcohol	36.71	40.38	45.84	50.42	55.21

Nominal index

		2002	2003	2004	2005	2006
US states	2002=100	100	102.4	102.6	110.9	
US federal	2002=100	100	100.0	100.0	100.0	100.0
US total	2002=100	100	100.4	100.5	101.9	102.6
UK	2002=100	100	100.0	100.0	100.0	100.0
Australia	2002=100	100	102.7	105.3	107.9	112.3
Canada	2002=100	100	100.0	100.0	100.0	105.7
France	2002=100	100	100.0	100.0	100.0	100.0
Germany	2002=100	100	100.0	100.0	100.0	100.0
Italy	2002=100	100	100.0	113.2	113.2	124.0
Spain	2002=100	100	100.0	100.0	102.0	112.2
Netherlands	2002=100	100	118.0	118.0	118.0	100.0
South Africa	2002=100	100	110.0	124.9	137.3	150.4

Real index (compared with overall price level)

		2002	2003	2004	2005	2006
US states	2002=100	100	100.1	97.7	102.2	102.5
US federal	2002=100	100	97.8	95.2	92.1	89.3
US total	2002=100	100	98.2	95.7	93.9	91.6
UK	2002=100	100	98.7	97.3	95.4	93.2
Australia	2002=100	100	99.9	100.1	100.0	100.5
Canada	2002=100	100	97.3	95.6	93.5	96.9
France	2002=100	100	97.9	95.9	94.3	92.7
Germany	2002=100	100	98.9	97.3	95.4	93.8
Italy	2002=100	100	97.4	107.9	105.8	113.5
Spain	2002=100	100	97.1	94.2	92.9	98.8
Netherlands	2002=100	100	115.6	114.1	112.3	94.0
South Africa	2002=100	100	103.9	116.3	123.8	129.5

ANNEXURE B: VOLUME AND ABSOLUTE ALCOHOL CONTENT

Duty per volume / absolute alcohol content conversion[168]

	Absolute alcohol content:	Duty per volume: (2013/14)	Duty per alcohol content: (2013/14)
	Average percentage	Cents / litre	Cents /litre of alcohol
Traditional beer	3%	7.82	260.67
Unfortified wine	16%	270.00	1687.50
Forified wine	22%	485.00	2204.55
Sparkling wine	16%	828.00	5175.00
Reduced duty rate	23%	1153.68	5016.00
Malt beer	5%	319.05	6381.00
Cider & FAB	5%	319.05	6381.00
Spirit coolers	6%	736.80	12280.00
Spirits	43%	5280.40	12280.00

Total and absolute alcohol content volume[169]

Volume Estimates 2012/13	Average percentage	Volume (%)	Total volume (000 L)	Volume absolute alcohol (%)	Volume absolute alcohol (000 L)
Sparkling wine	16%	0.23	8 400	0.50	1 344
Liqueurs	23%	0.25	9 400	0.81	2 162
Forified wine	22%	0.78	28 805	2.37	6 337
Spirit coolers	6%	2.26	84 000	1.88	5 040
Cider & FAB	5%	8.35	310 000	5.79	15 500
Spirits	43%	2.65	98 400	17.31	46 354
Unfortified wine	16%	7.61	282 600	17.36	46 496
Malt beer	5%	77.88	2 892 098	53.99	144 605
Sub Total		100.00	3 713 703	100.00	267 838

Alcohol beverage sales volumes percentage share

VOLUME (%)	*2008/09*	*2009/10*	*2010/11*	*2011/12*	*2012/13*	*2013/14*
SPIRITS	3.1%	3.0%	3.0%	3.0%	3.0%	2.9%
WINE	7.5%	7.2%	7.3%	7.5%	7.4%	7.4%
FORTIFIED WINE	0.8%	0.8%	0.8%	0.8%	0.7%	0.7%
AFBs and SPIRIT COOLERS	9.7%	10.0%	9.8%	10.2%	10.6%	11.2%
BEER	78.9%	78.9%	79.1%	78.7%	78.3%	77.9%
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

[168] Please note that average and permissible alcohol percentages were used for the purpose of this calculation. These may vary within alcoholic product categories.

[169] The reduced duty category applies to certain Liqueurs and cordials as well as fortified fermented fruit beverages.