



DNA Economics

Baseline study of the liquor industry
Including the impact of the National Liquor Act 59
of 2003

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AUTHORS

Sarah Truen

Yash Ramkolowan

Joanne Corrigan (UCT)

Richard Matzopoulos (UCT)



DNA Economics

4th Floor, South Office Tower, Hatfield Plaza, 1122 Burnett Street, Hatfield, Pretoria, 0083, South Africa
PO Box 95838, Waterkloof, 0145, South Africa

Tel +27 (0)12 362 0025 | Fax +27 (0)12 362 0210 | Email contact@dnaeconomics.com | www.dnaeconomics.com

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TERMINOLOGY AND ABBREVIATIONS

aa	Absolute alcohol
AAF	Alcohol attributable fraction - the proportion of a disease or health outcome caused by alcohol that would disappear if there was no alcohol consumption
ARND	Alcohol related neurological deficits
BAC	Blood alcohol concentration
BEE	Black economic empowerment
BoD	Burden of disease
Concoction	An alcoholic beverage brewed using ingredients and methods not consistent with indigenous traditional beer, in informal conditions
DALY	Disability adjusted life year
FAB	Flavoured alcoholic beverage
FAS	Foetal alcohol syndrome
FASD	Foetal Alcohol Spectrum Disorder includes alcohol harm from FAS, PFAS and ARND
GDP	Gross domestic product
ha	Hectare
Hectolitre	100 litres
LBW	Low birthweight
mhl	Million hectolitre
PAFs	Population attributable fractions – the proportion of a disease or health outcome caused by a risk factor that would disappear if there was an alternative ideal exposure to that risk factor
Papsak	A plastic bag containing wine
PFAS	Partial foetal alcohol syndrome
PPP	Purchasing power parity
PTSD	Post traumatic stress disorder
RR	Relative risk
RTDs	Ready to drinks
Shebeen	Traditionally used to refer to unlicensed on-consumption retail outlets. In the report, shebeen may be used to refer to a business model of on-consumption retail outlets based in areas that, prior to 1989, would have been by definition illegal, typically operated from a home in a residential area. In other words, the term shebeen will be taken to include taverns unless otherwise specified
Skokiaan	A type of concoction

SMMEs	Small, medium and micro enterprises
Tavern	A licensed shebeen
Umqombothi	Beer made according to methods traditional to the indigenous peoples of South Africa (which is also referred to by a number of other names)
VA	Value added
VSL	Value of statistical life
WHO	World Health Organization
YLD	Year lived with a disability
YLL	Years of life lost

EXECUTIVE SUMMARY

South Africa has a well-established national liquor industry, which has played a not inconsiderable role in the development of the local economy and culture. However, the history of the liquor industry has been troubled at times, reflecting wider issues in South Africa as a whole. Specifically, there has been a history of racial inequities in access to liquor, and in the regulation of the conditions in which liquor is consumed, that has had a negative impact on the fabric of many communities that is still felt today. In addition, the economic isolation of the apartheid years discouraged the introduction of competition in many sectors of the liquor market, as indeed it did across the economy as a whole.

A number of changes have been introduced into the legislation and regulation of liquor in South Africa, aimed at addressing these historical legacies. The most significant such change came with the introduction of the National Liquor Act 59 of 2003, which governs the structure of sector regulation today. In order to enforce wide-ranging legislation such as this Act, it is necessary both to ensure that the regulator is continuously equipped with detailed and up-to-date information on the status of the regulated industry; and it is important to conduct baseline measurements of industry performance so that the impact of legislation can be tracked over time.

These objectives underlie the commissioning of this research. As such, the report aims to provide a wide overview of the structure, regulation and economic health of the sector. Specific attention has been paid to legislative obligations imposed by the Act to consider the impact of new registrations on the state of competition in the industry, and on the impact of licensing requirements to contribute to anti-abuse initiatives.

Regulation on most kinds of consumer products is much lighter than the regulatory burden on the liquor industry. This reflects the special nature of liquor, which is one of the few addictive psychoactive drugs which is freely available to the public. In addition to the private pleasure drinkers derive from the consumption of alcohol, statistics show that they also inflict a number of external costs on themselves and those around them – globally, the consumption of alcohol is estimated to cause 3.2% of all deaths (1.8 million in total) and 4.0% of all years lost to disability.¹ These negative externalities have the potential to counterbalance the good that the industry can provide, both in terms of the pleasure it gives to those who consume it wisely, and in terms of its contribution to economic growth.

Good regulation helps to strike the balance between these competing goals, by curbing the behaviours that cause social harm, while causing as little economic damage as possible. South Africa has adopted a regulatory model for the liquor industry which is quite comprehensive, and provides regulators with a range of powers, but has not been tailored to meet the needs of the local market. The actual influence of the regulatory regime on market outcomes is to some extent tempered by this mismatch between the regulatory framework and the facts on the ground, as seen in this analysis.

¹ Disability-adjusted life years (DALYs) used to measure years lost to disability. WHO 2004(a), 1

Value chain analysis – key themes

The analysis provides substantial detail on the various components of the liquor industry value chain. In the process of collecting this detail, a number of theme areas became evident to the research team, which may warrant either regulatory attention, or further research. The first such theme area is the general **competitive environment** of the industry.

The market analysis used fairly wide definitions of the boundaries of markets, which tends to reduce the market shares of participants in any given segment. However, even on these wide market definitions, a presumption of dominance must be made for SAB in beer (with around 85% market share), and Distell in wine, spirits, and ciders and ready-to-drinks (market shares of around 39%, 36% and 40% respectively, with the Competition Act presuming dominance at over 35% market share). In the sorghum beer market, UNB's dominance may be threatened by high degrees of substitutability with the concoctions market, and more analysis into this relationship is needed before concluding that UNB does in fact have market power.

When liquor markets are more narrowly defined, market shares in some sectors increase sharply. In many areas of the liquor market, therefore, competitive forces are unlikely to have much influence on market participant behaviour. However, high market shares are not the only reason why price competition is unlikely to be strong in much of the liquor industry. In much of the liquor market, competitive success is a result of consumer brand perception, and brand perception is affected by the price point chosen. Reputable brands are reputable in part because they are expensive, and lowering the price could in some instances reduce demand for the product. These factors are of particular importance in the upper end of the market, in other words the super premium brands. Price becomes more and more significant to the purchase decision as the consumer gets poorer, and is probably a very important consideration in the sub-proprietary market. This means that competition takes place on a very different basis at different ends of the liquor market.

High market shares are probably of less concern from a competition point of view when the market concerned is premium/super premium, as long as new entrants do not experience barriers to distribution of their product. A new entrant at the premium/super premium end of the market needs luck, good marketing skills, and the ability to physically place their product in bars, restaurants and liquor stores. Any restrictions on distribution of the product (for example, if the incumbent has tried to tie liquor outlets so they cannot stock the products of new entrants) is however of particular concern.

At the bottom end of the value spectrum, competition in sub-proprietary markets may be skewed by cheap, illegal products. A consumer who is very poor and very price sensitive is more willing to take the risk of consuming illicit products, and thus concoctions and illicit spirits and wine, which are cheaper than licit products by virtue of lower safety standards in production and failure to pay excises, have a strong competitive advantage. Even with large market shares, a licit producer in this market is unlikely to have any market power, given evidence of levels of illicit activity.

Where high market shares may therefore be of most concern is in the proprietary market. Proprietary goods consumers are likely to have some leeway to tolerate higher prices, and thus a producer with a large market share in proprietary may have some ability to increase prices above their competitive

level. Large market share in important proprietary brands may also increase the ability of a firm to foreclose markets to competitors, for example by tying in retail outlets.

This highlights the importance of easy access to the retail sector (both on and off license) in order to facilitate competition in the liquor market.² Because of this importance, many liquor regulators specifically prohibit firms from tying in retailers. Although a prohibition on tying was included in earlier forms of South African legislation (and specifically section 158 of the Liquor Act of 1989), it is not present in the current Act. Tying is still outlawed by the Competition Act, but in practice, it is often easier for a sector regulator to intervene to prevent this kind of behaviour, because of the power they hold to issue and retract licenses, than to successfully pursue a complaint to the competition authorities. It would therefore be desirable to consider re-instituting a specific ban on tying in the current Act. This could usefully be extended to include all Chapter 2 Competition Act prohibitions.

The second key theme area relates to the **formalisation of informal markets**. A significant proportion of liquor sold in the retail sector in South Africa is sold by unlicensed outlets, particularly shebeens. This has a number of negative consequences, as the regulatory controls on socially detrimental consumption patterns possible in licensed outlets cannot be implemented in unlicensed venues. In addition, unlicensed shebeens may be more likely to sell illicitly brewed concoctions, of dubious safety. However, the process of licensing shebeens may also have pitfalls in terms of the development of competitive market conditions.

Section 4 of the Liquor Act 2003 prohibits liquor manufacturers from selling liquor to unlicensed parties. Market participants suggest that this prohibition is observed, and as a result, manufacturers whose end product is popular in the informal market must rely on retailers to sell their product into the informal market. However, integration of manufacturing and distribution can offer commercial advantages, in some cases possibly because of the potential integration offers for anti-competitive practices (i.e. tying). As shebeens become licensed, manufacturers can distribute their product offering directly to them, instead of relying on the shebeener to make a plan to purchase their product at a store, where different brands are likely to be displayed in a competitive manner.

At the time of writing, SAB Miller was the subject of a complaint for its competitive practices in distribution, which was rejected on essentially technical grounds. This complaint dealt with behaviour in the licensed market, and if it had been found to have merit, would have suggested that there is potential for anti-competitive behaviour to affect newly licensed shebeens. There is substantial anecdotal evidence that such abuses are in fact occurring in this market.

A number of methods can be used to tie in retailers to a specific product offering, including the placement of promotional material, supplying fridges to display goods in, providing management courses to bar owners, and supporting unlicensed operators during the licensing process (although it should be noted that these behaviours only become problematic when they have the effect of excluding competitors unfairly from the market). Regardless of the merits of the failed complaint

² It should be noted that the restriction on the sale of beer and spirits at supermarkets may also be construed as reducing competitive forces in this market – no clear policy intent for this restriction could be identified.

against SAB, there is potential for such abuses to occur in future, and that potential increases as more of the market becomes licensed. Again, a prohibition on tying in liquor legislation would be of use in guarding against this possibility.

The third theme area relates to **excise avoidance in the ethanol market**. Analysis of the spirits market in South Africa suggests that fairly high levels of excise avoidance are taking place, although exact data on illicit volumes has not been forthcoming. Market participants repeatedly suggested that the crucial factor in controlling this illicit activity was controlling the movement of ethanol, particularly across borders. Otherwise, with access to smuggled ethanol, it is relatively easy to set up an illicit spirits operation.

One way of preventing this kind of illicit activity is closer coordination between excise and licensing authorities, which will be discussed below. Another method would perhaps be to investigate licensing of ethanol producers, who are currently not required to be licensed. Although market participants suggest that local ethanol producers are not contributing to the problem, including ethanol in the regulatory framework could help to police the importing process more thoroughly. Finally, given that much of the smuggling activity seems to be conducted in the SACU region, the matter might usefully be referred to the SACU Secretariat for investigation.

Fourthly, **successful inter-governmental cooperation** is of concern, as the control and monitoring of the liquor industry is by its nature an inter-governmental exercise. Liquor affects health outcomes, impacts on levels of illegal activity, affects municipal zoning regulations, has a different and more onerous tax burden, and needs to be made safely and hygienically to protect those who drink it. Each of these areas requires the intervention of a different area of government, and many of them ideally require several areas of government to cooperate in enforcement.

The excise evasion issue illustrates the problem. In the spirits market, smuggled ethanol is reported to be being used to manufacture illicit spirits. Reputedly, many of the operators in this market are in fact licensed by the relevant liquor authority. Others are reportedly involved in organised crime. A number of coordination issues can be highlighted. Firstly, section 19 of the Liquor Act allows the Minister to impose additional conditions on a liquor registrant which does not comply with the Customs and Excise Act 1964, and ultimately to cancel a registration if such conditions are not complied with. However, it is alleged that many illicit (i.e. non-excise-compliant) operators have been able to maintain their registration with the National Liquor Authority. This is as a result of insufficient coordination between the NLA and SARS in this regard, associated with difficulties in maintaining necessary data confidentiality.

Secondly, some problems arise due to the fact that the principal concern of the tax authorities is always to maximise tax collections. When someone is found to be in contravention of tax laws, they are therefore often simply offered the opportunity to pay a fine in settlement of their tax debt, and then allowed to return to work, rather than prosecuted for tax evasion. When SARS investigates excise evasion in liquor, it is unlikely to ensure that the chain of custody for evidence is observed, or that information is gathered in a way that would support criminal prosecution, because the intent is often just to level a fine. As a result, if SARS initiates the investigation, by the time other regulators and/or

the police seek to make a case against the illicit liquor operator, evidence may be so degraded that it no longer meets legal standards for prosecution.

Coordination between various arms of government, and particularly the ability to effectively include the police in investigations, is of particular importance due to the involvement of organised crime in the illicit trade. Allegations of witness murder in some cases are of great concern. Even where illicit operators do not use violent means to achieving their objectives, they are still likely to engage in other forms of criminal behaviour, such as money laundering and/or contamination of the food chain with poisonous materials.

Market participants suggest that some attempts have already been made to facilitate interdepartmental cooperation in this regard. This area should be focused on going forward.

Finally, the adequacy of **regulatory record-keeping** is of concern. In a regulatory scheme such as that for liquor registrants in South Africa, it is vital that regulators be able to access data on precisely who is licensed, and how they operate. The record of registration provides the operator with their right to operate, and accurate records allow the regulator to assess whether registration conditions are being adhered to, whether prohibited persons are being restricted from gaining licenses, whether outlet density seems too high or too low, and so forth.

However, on a provincial level in particular, the research team found a paucity of licensee data. A number of provinces indicated that their IT systems were of such age and poor quality that it would take months to provide a full list of licensees. One province indicated that the regulatory records were degraded and in the process of being repaired, and thus that they could not be supplied to the research team at this point in time. Ultimately, four provinces provided data only in summary form, four provided no data at all, and only one supplied a list of licensees. Attention must urgently be paid to ensuring the adequacy of database systems, so that the level of data available to regulators can be improved.

Regulatory findings

South African regulation was detailed and contrasted with regulatory regimes in Argentina, California, Chile and Norway, and compared to regulatory regimes in bordering SADC countries. The alcohol policy and regulation analysis was organised into five basic categories, as follows:

Retail distribution regulation: the manner in which retail distribution of liquor is regulated varies widely internationally, from the laissez faire approach adopted by Argentina, for example, to the state monopoly on spirits sales in Norway. Within South Africa, the variation between different provincial legislations is not per se problematic, particularly if it is driven by a desire to find new solutions to existing problems and/or tailor regulation to the specific needs of different communities. However, much of the variation between provincial legislations seems arbitrary, such as the many slight differences in the definition of an alcoholic beverage employed. These random variations increase the complexity of enforcing legislation, and should be discouraged as much as possible.

Production and wholesale: South African legislation prohibits producers and wholesalers from selling to parties who are unlicensed, and appear to be engaged in the commercial on-sale of liquor. Given the large proportion of liquor which is sold to the ultimate consumer in unlicensed shebeens, compliance with this requirement appears to be very limited – and it is unlikely that compliance can be improved until such a time as more consumers have access to licensed retail outlets. Two components of South African production legislation appear to be slightly unusual, namely the fact that ethanol producers are not required to obtain a license, and the requirement on producers to contribute to anti-abuse programs.

Taxation: all countries examined subjected liquor to specific excise taxes, with spirits taxed at a higher rate than beverages with a lower alcohol content. The level of excise taxes however varied quite sharply, from only a small increment over non-alcoholic beverages in Chile, to punitive levels in the Norwegian market. However, the ability to increase excises is dependent on the ability to stop excise evasion activity and control the physical movement of the product. In this regard, the ethanol market in South Africa is of particular concern, as excise duties in this market are extremely high compared to the market value of the product, creating extremely high incentives for excise evasion. A review of the effectiveness of excise enforcement may be appropriate at this time, particularly if further increases in excise levels are being considered.

Advertising and sponsorship: South African alcohol advertising restrictions are relatively light when compared to the chosen comparators, which is reinforced by the use of a self-regulating system.

Public domain drinking, and drinking and driving: all countries surveyed restrict driving at certain levels of blood alcohol concentration, although in Argentina this restriction is of fairly recent provenance. South African penalties on public drunkenness are the most punitive of the group, by a substantial margin, and vary considerably across provinces.

A number of additional lessons can be derived from the international and regional experience of alcohol regulation. The first is that where countries do choose to impose a comprehensive regulatory structure on the liquor industry, an issue of immediate concern is the ability of the regulator to control the movement of the physical liquor product³ – including policing restrictions on who is allowed to produce it, distribute it, retail it and purchase it. Without such an ability to monitor and control the physical product, many of the economic and social goals of comprehensive liquor regulation cannot be achieved. The immediate impact of a loss of such physical control may include an increase in excise evasion, an increase in the amount of concoctions and illicit products sold, and an increase in socially harmful retailing practices (such as sales to minors, and from unlicensed venues).

The widespread pattern of requiring the licensing of ethanol producers is probably driven by this need to control the physical liquor product. Although industrial ethanol should probably be viewed as a liquor input rather than as an actual liquor product, it is extremely easy to transform ethanol into something drinkable, essentially simply by diluting it with water. South Africa does not currently require such

³ See for example Bird & Wallace 2010, 13

licensing of ethanol producers or importers, and there is substantial albeit anecdotal evidence of ethanol illicitly entering the liquor value chain from imports in particular. The advisability of some form of licensing requirement in this regard should therefore be investigated by the South African authorities.

Another important component of control over the physical value chain is control over unlicensed brewing activities. In countries which have strong cultural traditions of home brewing, it is socially undesirable to stamp out such traditional practices. However, when home brewing takes place on a commercial basis in the concoctions market, it is highly undesirable, as the contents of such homebrews are highly variable, often highly alcoholic, and may be dangerous for human consumption.

One of the reasons consumers turn to homebrews is in order to evade excise duties on legitimate liquor, and international evidence suggests that changes in excise rates may drive the volume of concoctions sold.⁴ In South Africa, this has influenced the low levels of excise maintained on traditional beer as compared to other kinds of liquor (as traditional beer is often seen as a substitute for concoctions). A policy initiative that needs further investigation is the possibility of deliberately lowering duties on some clear beer products, in order to make them more competitive and drive out concoctions producers. In Kenya, this approach has been implemented by introducing excise-free Senator Beer in large containers suitable only for communal consumption (which is prevalent in the low income end of the market where concoctions are mostly consumed).⁵ The suitability of such an initiative for the South African market should be closely examined.

Because the comprehensive regulation of liquor requires the ability to control the physical movement of liquor products, it is important that liquor regulators be adequately resourced to undertake this task. The larger and more complex the industry, the more funding the regulator will need to effectively police it. The issuing of licenses is only one component of a complex regulatory scheme that should include inspections, product sampling and testing, and feedback from public interest considerations. The differing structures of liquor regulation in the countries examined, which include national, provincial and municipal structures in differing combinations, means a cross-examination of the adequacy of South African regulator funding levels has not been possible. However, market participants repeatedly suggested in interviews that both the national and provincial regulators seemed to be under-resourced.

One of the ways in which regulatory capacity issues can be addressed is to increase the simplicity of regulatory enforcement. In other words, one of the reasons why regulators may be overstretched can be that regulations are unnecessarily difficult to enforce. The complexity of differences in provincial legislation in South Africa certainly drives the complexity of enforcement processes, and it may be useful to devote some attention to addressing unnecessary provincial differences, for example as regards the definition of alcohol. However, the central thrust of a drive for greater regulatory simplicity should be focused on shebeen licensing conditions.

⁴ Rajaraman 2007, 198; Kavahematui, J. & Ramokopelwa, K. 04-12-2010. Cost of alcohol goes up. *Botswana Guardian*, available at <http://www.botswanaguardian.co.bw/newsdetails.php?nid=1002&cat=BG%20News>

⁵ Barclay, E. March 26, 2008. In Kenya, Obama (Beer) Wins Big. *Bloomberg Businessweek*.

Shebeen licenses are a form of special license, and do not have much in the form of behavioural conditions attached to them (for example, in all but one province there is no requirement that shebeens should serve food along with alcohol). The majority of shebeeners operate in areas which were viewed by apartheid legislators as labour dormitories, and where historically little attention has been paid to the provision of services or appropriate commercial zoning restrictions. In addition, many shebeens have low turnover and are run more or less as survival businesses. Despite these facts, shebeen license requirements are very similar to those imposed on the rest of the market. This not only increases the complexity of rolling out licenses to shebeens, but has ensured that much of the market has remained unlicensed. A careful investigation of the functionality of current license requirements, and possible reductions in shebeen license requirements, would therefore be of use.

Costs and benefits of the liquor industry

A detailed understanding of the sources of both the costs and benefits associated with the liquor industry is needed in order to design interventions that effectively maximise benefits while minimising costs. The analysis of costs and benefits is split into two components, as follows:

- An assessment of the **total economic contribution** of the liquor industry, split down as much as possible by sector and type of activity
- An analysis of the **costs associated with the abuse of alcohol**, again providing detail on the origins of those costs

Because the cost and benefit assessments are conducted on a different basis and incorporate some very different variables, they cannot be netted off against each other to derive a point estimate of the contribution or cost of the industry to South Africa Inc. Specifically, a number of positive effects of moderate alcohol consumption on certain outcomes (some of which are material and some not) are not netted out of the cost analysis.⁶ This approach has been chosen in order to allow appropriate inclusion of the non-economic costs of alcohol; to ensure that detail is not lost by netting out the positive and negative effects of alcohol consumption; and because an examination of international literature suggests that it is extremely unusual to conduct a joint cost-benefit analysis of the impact of the liquor industry, with the goal of producing a single net economic impact figure.

A summary of the total formal liquor industry contribution (manufacturing and retail) to the economy is provided in Table 1 below. The manufacturing sector is the biggest contributor to the economy, followed by the off-consumption of retail. Total VAT and excise contributions across the liquor industry are estimated to be R19.3 billion, which implies that 40% of the direct value added by the industry accrues to the state. In total, the manufacturing and retail of liquor is estimated to have contributed R93.2 billion to the economy in 2009/10, or 3.9% of 2009 GDP.⁷

⁶ For example, evidence that moderate consumption of alcohol may improve the health of some diabetics is excluded from the costs analysis, as only the impacts of alcohol abuse are discussed.

⁷ We have not included a multiplier effect for the retail of liquor. The backward linkages in the retail sale of liquor would have been largely captured by the manufacturing multiplier (though some effects would not have been included). More significantly, induced effects through higher incomes from the retail sector have not been included.

Table 1: Total contribution of liquor industry (R billion)

Contribution	Direct employees	Direct	Indirect and induced	Total
Value added				
Manufacturing	29 166	23.4	45.0	68.5
– Excise:		10.0		
Off-consumption retail	30 600	8.3		8.3
On-consumption retail	456 238	7.1		7.1
VAT		9.3		9.3
Total contribution of liquor industry	516 004	48.1	45.0	93.2

Source: DNA Economics

In addition, the liquor sector makes a large contribution to total domestic employment levels. Total direct employment in liquor is in the region of over half a million individuals, the bulk of whom are informally employed in the shebeen sector.

However, the costs of alcohol abuse are also substantial. As shown in Table 2 below, the total tangible and intangible costs are enormous, and represent around 10-12% of 2009 GDP. However, if only tangible, financial costs are included, alcohol abuse is still found to cost R37.9bn, or 1.6% of 2009 GDP.

While this is likely to be slightly offset due to double counting between on- and off-consumption of liquor, it is nevertheless probable that the total contribution by the retail sector is slightly underestimated.

Table 2: Summary of alcohol attributable costs in South Africa

Cost category	R millions	
	Low	High
<i>Tangible costs</i>		
Healthcare	9 330	
Other healthcare costs	2 333	
Treatment research and prevention	18	
Social and welfare costs	397	
Crime response	9 680	
Crime consequence – transfers	4 500	
Crime anticipation	3 750	
Road traffic accidents - damage to motor vehicles	7 912	
Total tangible costs	37 920	
<i>Intangible costs</i>		
Premature mortality and morbidity - reduction in earnings	8 245	9 769
Premature mortality and morbidity - VSL	183 527	216 450
Absenteeism	141	448
Non-financial welfare costs	16 100	
Total intangible costs	208 013	242 767
<i>Insufficient data to estimate cost</i>		
Hangovers and drunkenness at work	Uncertain	
Unemployment and early retirement	Uncertain	
Other labour costs	Uncertain	
Miscellaneous other social and welfare costs	Uncertain	

Source: Various, own calculations

When contrasted to the value added by industry, it can be seen that the tangible costs of alcohol abuse are equivalent to almost four-fifths of the direct value added of R48.1bn. Because the basis on which the economic contribution analysis was conducted is different to the basis on which the cost of abuse analysis was conducted, it would be inappropriate to net these figures off against one another. However, it is appropriate to conclude that much more can be done to mitigate the costs of alcohol abuse, and that such action would have a direct impact on economic growth. In other words, no matter how much value alcohol currently adds to the domestic economy, much could be done to improve its contribution simply by mitigating the effect of alcohol abuse.

The estimates in Table 2 go even further by including the intangible, non-financial costs of the trauma associated with alcohol-related illness, injury and violence. By doing so, they go some way towards indicating how much value South Africans place on any intervention that would help to mitigate this trauma. VSL estimates in particular suggest that South Africans would be willing to pay R183.5bn to R216.5bn, or 8-9% of GDP, to avoid the deaths, illnesses and disabilities caused by alcohol – and this does not include the many other sources of psychological trauma detailed in the costing exercise.

These numbers are particularly striking when contrasted to recurrent reports that national and provincial alcohol regulators appear to be under-resourced. Effective regulation has the potential to substantially curtail the costs of alcohol abuse, and in doing so make a direct contribution to both the well-being of the average South African, and to the economy itself.

Industry anti-abuse programs

Liquor manufacturers are required to undertake anti-abuse programs to help alleviate the burden associated with the abuse of alcohol. An assessment of the scope and efficacy of these programs was conducted. Despite the many gaps in the data supplied by industry it has been possible to draw a number of conclusions as to the likely effectiveness of industry anti-abuse programs. It is encouraging to see evidence that the liquor industry appears to be broadening its scope of interventions (with many of such programs appearing to have been initiated during the research process, late in 2010). Several new initiatives are targeted at previously ignored areas, such as violence and HIV, which is encouraging. However, although the major manufacturers of alcohol have invested in a wide range of anti-abuse programs, a number of issues have significantly reduced the effectiveness of their spending, including the following:

- **Industry spending priorities are out of keeping with local evidence on alcohol-related harm:** anti-abuse programs are currently heavily focused on FAS, drink-driving and underage drinking, which is out of keeping with local evidence on the burden of alcohol-related harms. FAS is a relatively minor harm (6% of total BoD), there are more drunk pedestrian deaths than drunken driver/passenger deaths, and the population experiencing most alcohol-related harms are aged 18- 35 years, not adolescents.⁸ Major alcohol-related harms such as violence, HIV/AIDS, tuberculosis, mental illness and drunken pedestrians receive disproportionately little attention from the liquor industry. In some instances there are no programs addressing these major burdens, and where they do exist, they tend to be inappropriately targeted, not evidence-based and too small to have any population level effect.
- **The majority of programs are not evidence-based and are not evaluated:** a large body of research is available on what anti-abuse interventions work and which do not. Unfortunately, the majority of programs currently implemented by the liquor industry are not based on this evidence. At worst, money is being spent on interventions which have been shown to be ineffective. At best, non-evidence based interventions should be regarded as experimental (in which case more attention must be paid to assessing effectiveness). For example, the largest and most expensive programs undertaken by industry are mass media educational campaigns, which, with the exception of mass campaigns around drunk driving, have been shown by global researchers to be ineffective. Where ineffectiveness has not been proven, there is no indication that additional

⁸ We acknowledge that adolescents are at high risk for binge-drinking, and thus that addressing binge-drinking in this group could possibly be beneficial in the short-term. However, it has not been established that such measures will have any long-term effect, particularly where binge-drinking remains the norm amongst adult groups that adolescents emulate, and will certainly not have any immediate effect on alcohol-related harm at a population level.

effort is being made to evaluating experimental interventions. Indeed, of all 36 programs reviewed, only 4 programs were found to have been evaluated.

- **The majority of industry abuse programs do not target the groups most at risk for the harm they are seeking to reduce:** for an intervention to be effective, efficient and equitable it should target those most at risk for the harm in question. Improper targeting always reduces the effectiveness of spending, and if issues with targeting the wrong population are severe enough, the effectiveness of a program can be almost entirely wiped out. Poor targeting of programmes can be considered a major opportunity cost as this money could be spent more usefully on those at highest risk.

Lastly, perhaps one of the most significant findings of this study has been the difficulty faced by the regulator when gathering evidence on industry anti-abuse initiatives. Many members of the liquor industry have been unwilling to provide detailed data on the amounts spent on projects, methodology employed, number of beneficiaries reached and whether or not their projects are evaluated.

As commercial entities, liquor producers are incentivised to cut costs and maximise profits. Although ethical companies may voluntarily spend appropriately on anti-abuse programs, even where such programs may reduce sales and thus lower profits,⁹ an inherent conflict of interest exists. In order to ensure that spending levels are appropriate and appropriately focused, it is essential that the state be able to access detailed program information, in order to monitor compliance. The ability of the industry to deny program data to the regulator (as evidenced by this research process, undertaken on behalf of the NLA), indicates a lack of accountability, which raises serious doubts about the concept of industry-led anti-abuse programs.

It is not enough for industry to simply invest in anti-abuse programs, regardless of their effectiveness. In the context of the enormous costs incurred by alcohol abuse, as demonstrated in this report, it is clear that there is a massive opportunity cost associated with investing in programs that do not reduce the BoD because they target the wrong harm, the wrong target group or make use of ineffective interventions. Similarly, to have several large programs targeting the same problem (e.g. drink-driving) while there are major gaps in other areas (e.g. drunken pedestrians or violence) will minimize the ability of industry to contribute to reducing the harm from its products.

More fundamentally, consideration needs to be given to whether or not it is appropriate for the liquor industry to select and administer anti-abuse and harm reduction programs. The liquor industry may currently lack the knowledge or skill to effectively design, implement and evaluate anti-abuse programs, although this problem could be overcome with time. What is much more difficult to overcome is the inherent conflict of interest between the commercial objectives of profit maximisation (which will often include maximising volumes sold), and the obligation placed on industry to invest in measures intended to decrease how much people drink.

⁹ The global evidence base indicates that the most cost-effective approach to rapidly reducing alcohol-related harm is by reducing access to alcohol, through, for example, raising prices, reducing trading hours or reducing the density of liquor outlets. (Anderson P, Chisholm D, Fuhr DC. 2009. Effectiveness and cost-effectiveness of policies and programmes to reduce the harm caused by alcohol. *Lancet*. 373: 2234-46.)

At a minimum, more clarity is needed on industry anti-abuse obligations. At present, s13 of the Liquor Act 2003 states that one of the criteria on which applications for registration will be evaluated is “the applicant's proposed contribution to combating alcohol abuse, including whether the applicant has subscribed to any industry code of conduct approved by the Minister.” No further guidance is provided as to the required level of spending, whether anti-abuse programs should be targeted on specific aspects of the burden of disease, what types of interventions are needed, who should be targeted, what the scope of such projects should be, and whether evaluations of effectiveness are necessary. Such requirements could be formalised in the Liquor Act regulations, but would require high-level monitoring, surveillance and enforcement.

However, more stringent regulation of anti-abuse programs will not deal with the inherent conflict of interest between the profit-maximising goals of industry, and the need to reduce the volume of harmful drinking. Policing such regulations may also be onerous for the regulator. Consideration should thus also be given to taking away responsibility for managing and conceptualising anti-abuse programs from industry.

One way in which this could take place would be to earmark funds from excise collections for a government or independently managed anti-abuse fund (if responsibility for financing anti-abuse initiatives was removed from the liquor industry, an increase in excise rates to finance such earmarked funds would arguably be appropriate).¹⁰ An independent Alcohol Research, Intervention and Evaluation Unit, populated by both government representatives and experts in the field, would not face a conflict of interest in dealing with alcohol abuse, and would be better placed to address the national pattern of the burden of disease.

Additional research on this area is needed, in order to evaluate whether more stringent regulation of industry or an independent anti-abuse body is more likely to have the required effects (although it seems likely on a prima facie basis that the best regulatory outcome would be the establishment of an independent body). What is clear though is that some form of intervention is needed, as the current status quo is ineffective. The size of the effects of alcohol abuse on some of South Africa's most vulnerable communities make this a policy priority.

Conclusions and recommendations

Alcohol has an unusual position in modern society. As a psychoactive substance, it is addictive, and has been shown to be associated with a number of negative health and social outcomes. At the same time, however, the use of alcohol is firmly entrenched in most modern societies, provides a great deal of pleasure to those who consume it, and when consumed in a responsible manner, has a positive impact on health outcomes. Because of these factors, and to some extent because of the long history of alcohol consumption in many cultures, alcohol remains one of the very few psychoactive substances which is more-or-less freely available to the general population.

¹⁰ Parry, C.D.H., Morojele, N.K., Jernigan, D. 2008. *Action for a Sober South Africa* [News & Notes] *Addiction*, 103, 2071

In practise, these characteristics of alcohol mean that, in order to maximise the value added by its production and minimise the harms associated with its consumption, much more active regulation of this product is needed than of much of the rest of the economy. The liquor industry can and should be a positive influence on both the economy of South Africa and its culture, but more needs to be done to ensure that this is the case.

This report has covered a very wide range of topics, and numerous recommendations have been made during the course of the text. In this concluding section we begin by focusing on five areas of particular concern, where policy and regulatory interventions are needed most urgently. A summary of other potential interventions is then provided.

1: Shebeen licensing

Far too high a proportion of South African on-consumption and off-consumption retail activity takes place at unlicensed outlets or shebeens. Because so much of the market is unlicensed, the legitimacy of the regulatory regime is compromised, and it becomes extremely difficult to control outlet numbers or enforce responsible business practices. This has placed limits on the scope of what South African alcohol policy can achieve, and has been associated with high costs of alcohol abuse in the impoverished communities in which shebeens are most often found.

Increasing the proportion of licensed shebeens is a complex issue that intersects with a number of other regulatory problems, not least the backlog in commercial zoning in townships. An initiative which might help to accelerate change would be to investigate whether current license requirements are part of the impediment to rolling out licenses, and specifically whether there are license requirements that can be removed or reduced without substantively affecting the safety of patrons. This kind of intervention should only be undertaken if careful research on its likely impact on social, economic and health outcomes has first been conducted.

2: Tying and foreclosure

The ability to physically place product in reach of the consumer is crucial to liquor producers from a competitive standpoint. In other words, the ability to restrict one's competitors from getting shelf space at on- and off-licenses has the potential to cause great harm to competitive forces. A specific restriction on tying (which is typical of this kind of anti-competitive strategy), which was contained in the 1989 Liquor Act, is no longer present in the Liquor Act 2003. Its re-inclusion in the legislation should be considered.

Prohibitions on tying are of particular relevance given the importance of licensing shebeens. An unlicensed outlet cannot be directly supplied by producers, and thus cannot be tied in. Once a license is issued, the producer can sell directly to the outlet, and the potential for anti-competitive tying is created. The greater the impetus to license the informal sector, the greater the potential for anti-competitive tying.

Tying is only one of a range of anticompetitive actions which dominant firms may take. A prohibition on tying could be usefully supplemented by including all the prohibited practices listed in Chapter 2 of the Competition Act 1998 in liquor licensing conditions.

3: Illicit alcohol

The ability to control the physical product is a critical part of alcohol regulation, in order to ensure the orderly collection of excises, to guarantee the safety of the product for human consumption, and to guard against retail practices which may increase the likelihood of alcohol abuse. This research process uncovered substantial albeit often anecdotal evidence of large volumes of illicit product in the South African liquor market.

More efforts need to be made to control such illicit activity. No single recommendation is likely to resolve the problem, as action appears to be needed in several areas. Initiatives that should be considered include encouraging larger retail chains to self-regulate to ensure that they do not stock pirate brands (and publicising any failure to do so); improving cooperation between the various agencies involved in regulating this market, both domestically and on a cross-border basis; and (possibly) licensing ethanol manufacturers.

4: Anti-abuse programs

Far too many of the industry anti-abuse programs currently in place are failing to address the principle harms associated with alcohol abuse, as they are targeting the wrong harm, the wrong target group or making use of ineffective interventions. An effective intervention would be to remove the responsibility for conducting anti-abuse programs from industry and place it in the hands of an independent or state-run body. This would have the advantage of removing the inherent conflict of interest between the goals of anti-abuse programs and the commercial incentives faced by alcohol producers to try to promote sales growth. If an independent body is not possible, at the very least more needs to be done to set formal requirements on liquor companies as to their obligations in this area, and to monitor that those obligations are met.

5: Regulatory capacity

Effective regulation starts with adequately resourced regulators – in other words, regulators which have enough staff, with the right skills and experience, and adequate funding of operations, to undertake the regulatory task set out in legislation. The size of the economic and social costs associated with alcohol abuse are substantial, and suggest that investment in regulatory capacity in this sector would be likely to have direct economic benefits. However, anecdotal evidence suggests that national and provincial regulators may be under-capacitated. This is of particular concern given that research suggests that many of the possible interventions into the industry are only effective at reducing harm if they are properly enforced and monitored.

International good practice shows that most regulators assess their resourcing requirement by undertaking an analysis of their regulatory tasks and the associated level of effort. This can be done by mapping all regulatory tasks and determining the gaps between the current status-quo and their legislative objectives, and by ensuring that regulatory tasks are configured so as to mitigate industry risks (for example, a rise in the availability of illicit alcohol). This extensive analysis is generally reviewed on a regular basis (e.g. every five years) to ensure that regulatory capacity remains adequate to the needs of the sector. It would be appropriate to undertake such analysis on the NLA at this time.

6: Other possible interventions

Other areas of concern include the following:

- **Better regulatory record-keeping:** data on liquor licensees is currently extremely difficult to collate, both at a national and provincial level. Data is typically either stored in paper files, or in unwieldy and outdated electronic format. As a result, it is extremely difficult to use the data inherent in these records to assist the task of regulating. Initiatives to improve the quality of regulatory record-keeping, ideally by transforming it into electronic formats, need to be prioritised.
- **The quality of regulatory data:** a related issue concerns the quality of regulatory data. Although substantial data is currently collected on licensee activities, the way in which it is formatted reduces its usefulness substantially. For example, at national level there is no consistency in the way volumes sold are reported – some licensees do so by revenue, some by volume of physical product, and others by another measure. Attention is needed in this area.
- **Legislative complexity:** although differences between provincial legislation can be a useful way of trialling regulatory initiatives, arbitrary differences between provincial legislation for no good reason simply make enforcement more complex without yielding any benefits. A reduction in such arbitrary differences would be useful.
- **Alcohol advertising regulation:** the manner in which alcohol advertising is regulated seems fairly permissive from an international perspective. It may be worthwhile to conduct research as to whether a more rigorous regime is advisable.
- **Excise exemptions for communal drinking:** the consumption of informally produced concoctions poses health risks for the very poor. It may be possible to crowd out concoctions by reducing excise rates on formally produced beverages, while protecting excise collections levels by only doing so on liquor packaged for communal consumption in the informal market. The pros and cons of such an initiative should be carefully evaluated to ensure that the risk of encouraging binge drinking does not outweigh the potential benefits.

1 INTRODUCTION

South Africa has a well-established national liquor industry, which has played a not inconsiderable role in the development of the local economy and culture. The brewing of beer is widely practiced in indigenous cultures, and the first South African vineyards were planted in 1655.¹¹ Today the industry makes a significant contribution to growth and employment, particularly in the Western Cape, and has a vibrant export market.

However, the history of the liquor industry has been troubled at times, reflecting wider issues in South Africa as a whole. Specifically, there has been a history of racial inequities in access to liquor, and in the regulation of the conditions in which liquor is consumed, that has had a negative impact on the fabric of many communities that is still felt today. In addition, the economic isolation of the apartheid years discouraged the introduction of competition in many sectors of the liquor market, as indeed it did across the economy as a whole.

A number of changes have been introduced into the legislation and regulation of liquor in South Africa, aimed at addressing these historical legacies. The most significant such change came with the introduction of the National Liquor Act 59 of 2003, which governs the structure of sector regulation today. In order to enforce wide-ranging legislation such as this Act, it is necessary both to ensure that the regulator is continuously equipped with detailed and up-to-date information on the status of the regulated industry; and it is important to conduct baseline measurements of industry performance so that the impact of legislation can be tracked over time.

These objectives underlie the commissioning of this research. As such, the report aims to provide a wide overview of the structure, regulation and economic health of the sector. Specific attention has been paid to legislative obligations imposed by the Act to consider the impact of new registrations on the state of competition in the industry, and on the impact of licensing requirements to contribute to anti-abuse initiatives.

Regulation on most kinds of consumer products is much lighter than the regulatory burden on the liquor industry. This reflects the special nature of liquor, which is one of the few addictive psychoactive drugs which is freely available to the public. In addition to the private pleasure drinkers derive from the consumption of alcohol, statistics show that they also inflict a number of external costs on those around them – globally, the consumption of alcohol is estimated to cause 3.2% of all deaths (1.8 million in total) and 4.0% of years lost to disability.¹² These negative externalities have the potential to counterbalance the good that the industry can provide, both in terms of the pleasure it gives to those who consume it wisely, and in terms of its contribution to economic growth.

Good regulation helps to strike the balance between these competing goals, by curbing the behaviours that cause social harm, while causing as little economic damage as possible. South Africa has adopted a regulatory model for the liquor industry which is quite comprehensive, and provides

¹¹ www.wine.co.za

¹² Disability-adjusted life years (DALYs) used to measure years lost to disability. WHO 2004(a), 1

regulators with a range of powers, but has not been tailored to meet the needs of the local market. The actual influence of the regulatory regime on market outcomes is to some extent tempered by this mismatch between the regulatory framework and the facts on the ground, as will be seen in this analysis.

In Section 2, we provide an introduction to the sector value chain, with attention paid to the basis on which competition occurs and existing market shares. Both licit and illicit liquor sales are addressed. Section 3 provides analysis of the South African liquor regulation framework, in contrast to regulation in the region and internationally, while the demographic pattern of alcohol demand is detailed in Section 4.

Section 5 provides a rough assessment of the social and economic costs and benefits associated with the liquor industry, and in Section 6, the scope of current alcohol anti-abuse initiatives run by industry is detailed, and assessed in light of international best practice. Section 7 concludes.

2 VALUE CHAIN ANALYSIS

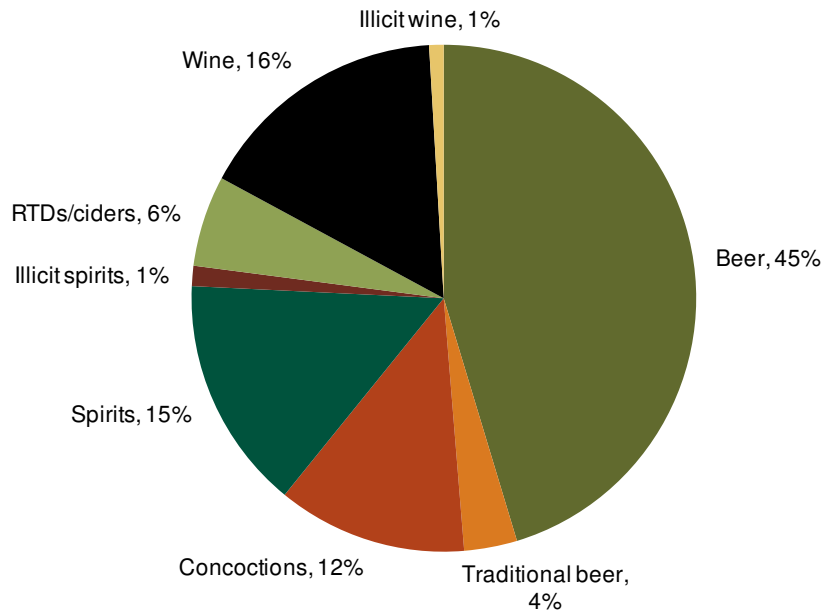
The landscape of the South African liquor market has been heavily influenced by the accidents of history. Perhaps the most significant factor for the development of market competition was the 1979 agreement which subdivided the liquor market into beer, under SAB, and wine and spirits, under KWV/Rembrandt.¹³ The isolation of the apartheid years further increased trends towards consolidation and the reduction of competitive forces in this period. The entry of new international market participants in recent years, and most notably of Brandhouse in the beer and spirits markets, has the potential to substantially alter competitive dynamics.

In the value chain analysis, we identify the major players in each relevant liquor market, estimate market shares where possible, and provide some discussion of the basis on which competition takes place in each product market. The section concludes with a discussion of some key themes discovered during the research process, including some specific competition concerns, and issues surrounding the control of illicit alcohol. As much as possible the discussion has been fragmented by liquor type and by the type of economic activity concerned (i.e. production, retail on-consumption and retail off-consumption). The role of the illicit market, both as it affects competition in the licit market and as it impacts on the regulatory task, is also examined.

South Africa is disproportionately a beer drinking country, as illustrated in Figure 1 below. Clear and traditional/sorghum beer together account for 49% of all absolute alcohol consumed in the domestic market. The remainder of the market is divided between alcohol consumed in wine (17% of consumption), alcohol consumed in spirits (16%), backyard concoctions (12%) and the ready-to-drink/cider market, with 6% of consumption. It should be noted that fully 14% of alcohol consumed in South Africa is estimated to be illicit in some or another form, typically either by evading excise duties, or by being produced for sale by an unlicensed brewer.

¹³ Mager 2010, 40

Figure 1: South African alcoholic beverage market by absolute alcohol, 2009/10



Source: UNB correspondence, ENS, SAWIS/BMI, SALBA, SABMiller 2010, 23; DNA calculations

The patterns of consumption of alcohol in South Africa are driven by consumer demand and income patterns, and by the regulatory and competitive characteristics of the liquor value chain. These dynamics are explored in depth in the following value chain analysis.

2.1 Relevant economic concepts

During the course of the value chain analysis, specific attention will be paid to mapping out the competitive characteristics of the markets concerned, as well as identifying market shares. In order to identify market shares, it is first necessary to define the boundaries of markets – in other words, which companies are in fact competing with each other. Understanding where the boundaries of liquor markets lie requires an understanding of both product characteristics and how customers view the market.

If customers view one beverage as a good substitute for another, then the makers of those two beverages are probably in competition with each other, and are operating in the same market. Conversely, if consumers would not happily substitute one beverage for another, then those two beverages are not in the same market. Consumer perceptions of substitutability will be influenced by relevant product characteristics, such as price, alcohol content by volume, branding and flavour characteristics.

The framework for understanding competitive markets used in the Competition Act 1998 will be the reference point for this report. The following terminology is of relevance:

- **horizontal relationship** means a relationship between competitors
- **vertical relationship** means the relationship between a firm and its suppliers, its customers or both
- **market power** means the power of a firm to control prices, to exclude competition or to behave to an appreciable extent independently of its competitors, customers or suppliers

Note should also be taken of the Competition Act's definition of the market share boundaries for the assumption of market power:

7. A firm is dominant in a market if —

(a) it has at least 45% of that market;

(b) it has at least 35%, but less than 45%, of that market, unless it can show that it does not have market power, or

(c) it has less than 35% of that market, but has market power.

2.2 Inputs into alcoholic beverages

2.2.1 Agricultural products

The key agricultural inputs to the liquor industry in South Africa include grapes, barley, hops, maize and sorghum. These input industries are touched upon briefly below.

2.2.1.1 Barley, maize and hops

Barley, maize and hops are key ingredients in the production of beer. In South Africa barley is predominantly produced for human consumption, with parts of the crop that are less suitable for malting purposes also used as animal feed. While production of the grain in South Africa is small in comparison to other crops (barley production in 2009 was 225 000 tons, versus 11.7m tons of commercial maize and 1.99m tons of wheat),¹⁴ barley is seen as an important crop for rotation purposes. Malting barley is mainly produced in the northern and southern Cape areas of South Africa by roughly 800 – 900 farmers.¹⁵ Approximately 150 emerging farmers have been assisted in the production of barley (through financing and other agricultural support) by SAB Maltings (a wholly owned subsidiary of SAB Ltd), through the Taung Barley Farmers initiative.¹⁶

Almost all barley produced in South Africa which is suitable for human consumption is procured by SAB Maltings, which owns the two malting plants in South Africa, situated at Caledon and Alrode. These two malting plants had respective annual malt production capacities of approximately 180 000

¹⁴ Department of Agriculture, Forestry and Fisheries (2010)

¹⁵ Cape Overberg

¹⁶ Engineering News (2010)

tons and 42 000 tons in 2005.¹⁷ Barley producers receive a written commitment to source locally and fixed-price forward contracts¹⁸ from SAB Maltings. SAB Maltings supplies approximately 80% of SAB's malt requirements, with the remainder imported due to various factors, including stipulated requirements for brands brewed under license by SAB.¹⁹

SAB Maltings position as more or less the sole customer in the barley market is likely to be broken over the coming years, as rivals Diageo and Heineken (through the local joint venture, Brandhouse) have agreed to take malt supplies from the malting plant to be built by Fabcos. This plant is to be built at an estimated cost of R500 – R550 million, and will have an estimated production capacity of 100 000 tons a year.²⁰ The Diageo-Heineken brewery at Sedibeng currently imports about 40 000 tons of malted barley from the Netherlands a year for use in the beer manufacturing process.²¹ The planned construction of a new malting plant, not controlled by SAB Ltd, is likely to have positive upstream effects for barley farmers, who will then have an alternative customer to SAB Maltings.

In addition to barley, SAB procures hops and maize for the production of beer and other alcoholic products. The three commercial hops farms owned by SAB Hops Farms (an SAB subsidiary) account for 28% of the 450 hectares of hops grown in South Africa. This land area produces roughly 850 tons of hops of which about 720 tons are procured by SAB and the remainder is exported to SAB-Miller breweries in the rest of Southern Africa.²²

Approximately 195 000 tons of maize is procured by SAB Miller for the production of beer,²³ which accounts for just over 1.6% of annual South African maize production. It is not clear whether other beer producers require maize for the production of their products, however given the relatively small amount of maize used by the dominant beer producer in South Africa, consumption of maize by additional beer producers in South Africa is likely to be negligible.

2.2.1.2 Sorghum

Sorghum is indigenous to Africa and, in the liquor industry, is used for the production of traditional sorghum beer. After maize and wheat, sorghum is the most important grain crop produced in South Africa, though its contribution to domestic production of grain crops is small (production in 2008/9 was only 271 250 tons), and less than 1% of arable land in South Africa is used for the cultivation of sorghum.²⁴

Total domestic consumption of sorghum has seen a decline of around 22% between 1997/8 and 2009/10, as reflected in Table 3. Sorghum processing for human consumption has declined steadily

¹⁷ Engineering News (2005)

¹⁸ Department of Agriculture, Forestry and Fisheries (2010)

¹⁹ BER (2008)

²⁰ Reuters (2010)

²¹ Business Report (2010)

²² BER (2008)

²³ BER (2008)

²⁴ Department of Agriculture, Forestry and Fisheries (2010)

during this period, but has increased as a share of total domestic consumption, from 74% to 96%. However, processing of sorghum for malt (both indoor and floor), which is then typically used for the brewing and manufacturing of sorghum beer, has declined from 69% of processing for human consumption in 1997/8, to 46% in 2009/10. Of the categories of sorghum for domestic consumption, only sorghum meal has seen an increase in processing production, with sorghum processed for meal roughly 45 000 tons higher in 2009/10 compared to 1997/8.

Table 3: South African sorghum consumption market (tons)

	Human consumption				Animal feed	Total domestic	Exports
	Indoor malt	Floor malt	Meal	Rice, grits, other			
1997/98	36,270	87,286	53,373	2,410	63,727	243,066	57,104
1998/99	38,900	81,500	52,800	3,300	58,200	234,700	58,100
1999/00	28,300	85,900	56,700	3,000	36,400	210,300	23,500
2000/01	32,800	90,400	61,200	1,800	23,300	209,500	39,900
2001/02	28,700	84,300	75,800	1,100	16,200	206,100	48,200
2002/03	20,500	74,900	77,900	1,100	21,900	196,300	66,200
2003/04	21,100	73,900	73,700	200	10,100	179,000	48,800
2004/05	25,600	76,400	76,800	200	10,000	189,000	37,600
2005/06	24,600	78,300	87,900	100	12,000	202,900	38,200
2006/07	25,400	70,100	86,000	100	8,000	189,600	27,800
2007/08	24,900	65,200	95,100	-	10,800	196,000	27,300
2008/09	22,200	64,100	91,100	-	9,700	187,100	37,100
2009/10	20,100	63,300	98,600	-	7,900	189,900	52,000

Source: SAGIS

The malting process involves allowing the whole grain to germinate, and then drying it, with floor and indoor drying being two different malting methods (the floor method is older and produces malt of more variable quality, which is typically used in home brewing, whereas indoor malt is suitable for industrial brewing).²⁵ The brewing process typically includes both malted and unmalted cereals (including maize meal, for example), in various proportions depending on the recipe used by the brewer. Therefore it is not possible to accurately extrapolate from the volume of malted sorghum sold to the volume of traditional beer made with it. However, it is likely that the recent large decline in sales of malted sorghum (33% from 1997/98 to 2009/10) reflects some decline in the production of home brewed beer.

The overall declining consumption of sorghum is considered to be due to a number of factors, including the ease with which consumers can switch to other grain products (such as maize and malt

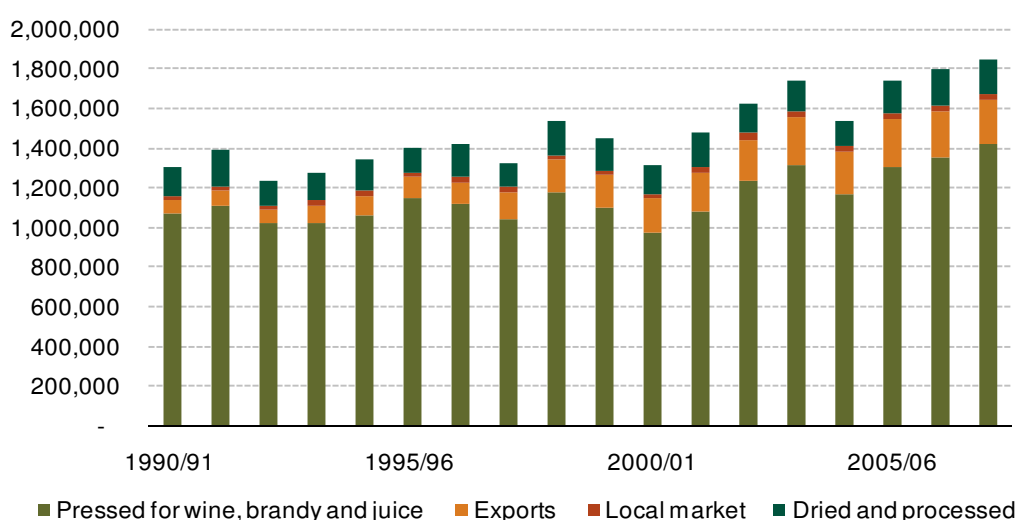
²⁵ <http://www.sorghumsa.co.za/malts.htm>. It is not clear whether significant amounts of sorghum are malted at home for the production of beer, which would further complicate the analysis.

beer) and the inferior good nature of sorghum and sorghum based products (consumers switch away from sorghum products as incomes rise).²⁶

2.2.1.3 Grape producers

Grapes are an essential input for the production of both wine and brandy in South Africa. Unlike other agricultural inputs such as maize, where a significant proportion of production is for non-alcoholic purposes, the majority of grapes produced are used in the production of wine, brandy and juice (pressed grapes). Given that the grapes used for direct consumption (table and dried grapes) are of a different variety, account for less than 25% of total grapes produced (see Figure 2) and have different production and cost structures, the analysis will focus on grapes produced for the liquor industry.

Figure 2: South African grape consumption (tons)



Source: Department of Agriculture (2010)

The South African wine grape industry is highly fragmented at vineyard level, as shown in Table 4. In 2009 there were over 3 500 wine grape producers in South Africa, which together produced 1.35 million tons of grapes used for wine, brandy and juice. Industry structure is pyramidal, with smaller numbers of large producers. However, despite the fragmented nature of grape production at farm level, some coordination is achieved by the fact that much of the wine grape industry uses agricultural co-operative structures. Grape producers which are members of a co-operative pool their grapes for wine production at a co-operative winery.

The use of cooperatives in wine production dates back to the early 1900s. From the farmer's point of view they offer a number of advantages, including (potentially) the ability to stabilise income flows, the achievement of economies of scale in procurement of goods and services, more efficient use of

²⁶ NAMC (2007)

capital and the ability to undertake collective bargaining and marketing. The co-op structure is very popular in South Africa, with as much as 80% of wine grapes produced flowing into a co-operative (or ex-co-operative) structure. The remainder of grape producers fall under wine estates and independent wine producers, which produce wine for both bulk sale and consumer consumption. This structure (and its competitive implications) will be looked at in more detail in the wine section.

Table 4: Primary grape producers (2009)

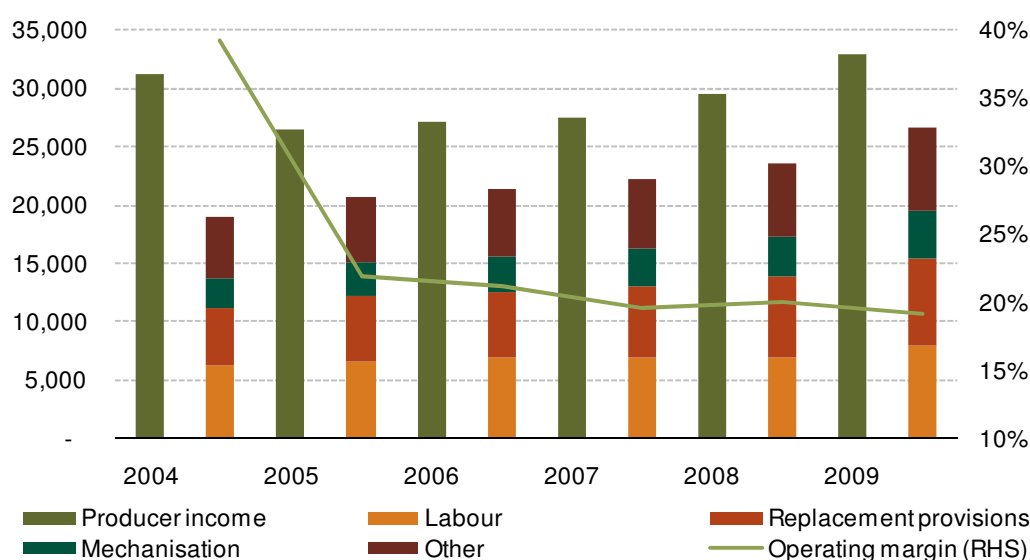
Tons (annual production)	Number of grape producers
1 - 100	1,536
100 - 500	1,314
500 – 1,000	462
1,000 – 5,000	348
5,000 – 10,000	7

Source: SAWIS (2010)

The average operating income and cost structure²⁷ of grape producers is shown in Figure 3. Labour costs make up the largest expenditure item, and accounted for 30% of operating expenses in 2009, followed by replacement provisions (depreciation) and mechanisation costs. Operating income has increased following a dramatic fall in 2005, as a result of the rand price of grapes falling by 20% between 2004 and 2005. Though income subsequently increased, the operating margin for farms has fallen to below 19% since 2005, as costs have increased significantly. The most significant of these is replacement provisions and mechanisation costs which have increased at an annual average of 9.6% and 8.6% respectively.

²⁷ The 2009 Vinpro cost monitor survey is based on a sample representing roughly 20% of the total surface planted to wine grapes in 2008, with a weighted average farm size of 79 ha.

Figure 3: Grape producers operating income and expenditure (R / ha)



Source: DNA Economics calculations, Vinpro (2010)

2.2.2 Packaging

Packaging is a significant cost for producers, accounting for up to 52% of production costs (before excise taxes) for spirits, 45% for beer and 46% for wine.²⁸ The spirits sector uses predominantly glass packaging, while beer products are packaged in both glass bottles and aluminium beverage cans. The wine industry utilises a more diverse range of packaging for consumers, including bottles, cans, plastic/polyethylene terephthalate (PET) containers, bag-in-box and foil. The packaging industry is highly concentrated in South Africa, with two companies largely responsible for the manufacturing of the main alcoholic beverage containers, namely glass and beverage cans. The plastics/PET and foil markets have a higher number of producers but levels of concentration remain high.

The South African glass packaging market is in the range of 1.1 million tons per annum.²⁹ Consol Glass,³⁰ the largest glass manufacturer in Africa, accounts for roughly 80% of the glass market in South Africa. Consol Glass had an annual capacity of 870 000 tons in 2009, equivalent to about 4.3

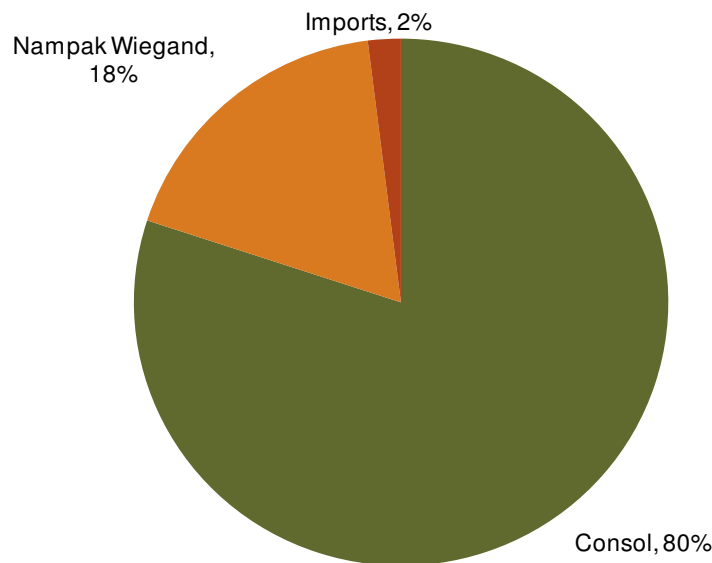
²⁸ Figures for spirits based on average for brandy, cane and vodka using data from Powell (2010) presentation. Production costs for wine based on DNA calculations with data from PricewaterhouseCoopers (2010) for producer cellars (packaged wine). Beer production costs based on international figure from McCaig (2010). All data is presented as cost per litre.

²⁹ Nampak (2010)

³⁰ Consol Glass was delisted in 2007 following a takeover by private equity firm Brait. In addition to Brait shareholders include Old Mutual, Sanlam, the PIC, HarbourVest private equity fund, Capital International private equity and a BEE investor consortium.

billion 350ml bottles or 2.6 billion 750ml wine bottles,³¹ with four production facilities around South Africa. A fifth facility is under construction, and will increase annual production capacity by 220 000 tons (25%). Consol Glass serves a wide range of markets, producing glass products and packaging for the food, beverage, tableware, pharmaceutical and cosmetics industries. Within the beverage industry the company's main focus is around alcoholic beverages but includes the carbonated soft drinks, fruit juice and mineral water industries.

Figure 4: South African glass market share



Source: Nampak (2010)

The second major producer of glass packaging in South Africa is Nampak Wiegand Glass, a joint venture between Nampak and Wiegand Glas, with a market share of 18% in South Africa. Imports comprise the remaining 2% of the glass market in South Africa.

Nampak has a monopoly on the domestic production of aluminium beverage cans in South Africa, and is the only beverage can manufacturer in Sub-Saharan Africa for both the alcoholic and non-alcoholic markets. The company has four production facilities in South Africa and one in Angola, with production capacity in South Africa of roughly 3.4 billion cans per year. Nampak's total beverage can sales were roughly 2.7 billion cans in 2009, with 58% of this volume sold within South Africa.³²

³¹ Fastmoving.co.za (2009)

³² Nampak (2010)

Although Nampak previously faced competition from other domestic beverage can manufacturers, they have exited the market in recent years.³³

The high concentration of the glass and can packaging market is a result of a combined number of factors:

- The **barriers to entry** are high. Nampak estimates that setting up a single production line for beverage cans can cost close to R1 billion (Nampak had seven lines in South Africa in 2009), while setting up a glass furnace would cost approximately R800 million.³⁴ Consol spent R410 million to increase capacity by between 40 000 and 60 000 tons (4% - 6% of current South African glass market size)³⁵ in 2008.
- The size of the South African market is relatively small, which may **affect the number of producers who are able to achieve economies of scale** and compete efficiently.³⁶ Supporting evidence for this hypothesis can be found in the fact that despite Nampak being the sole producer of beverage cans in South Africa, just over half of the cans it produces are destined for the domestic market, with the remainder exported to other regions. Further analysis would be required to determine if this is in fact the case.
- High levels of **customer concentration**. Downstream customers of the beverage packaging industry are highly concentrated in a number of areas. Highly concentrated customers can exert substantial pressure on suppliers, which may encourage concentration at the supplier level, to generate some traction to push back. It is asserted that Coca Cola and SAB Ltd controlled 85% of the purchase of cans in South Africa in 1998,³⁷ and while this is likely to have changed somewhat over the last decade, the high level of concentration downstream suggests significant market and pricing power on the customer's side.

During this research process, liquor industry producers frequently commented on the high level of concentration within the glass and can beverage packaging industry. However, complaints often focused on quality of service issues rather than price, with issues such as shortages and delays in production and inflexibility in design considerations for packaging being cited. If it is in fact the case that the South African market is not large enough to sustain competition in the beverage packaging industry, then it may not be technically possible to generate sufficient competition to address these service quality issues. Additional research would be needed to clarify this issue.

In addition to the concentration in the glass and can packaging industry, the manufacture of bottle crowns (closures used mainly for beer bottles in the alcohol industry and carbonated beverages in the non-alcohol beverage industry) is dominated by a single manufacturer in South Africa. Coleus

³³ The main competitors in the beverage can production market were Rheem, which disposed of its beverage can manufacturing plant, and Crown Cork, which exited the market in the early 2000s. Nampak has been the sole producer of beverage cans since 2001.

³⁴ Nampak (2010)

³⁵ Fastmoving.co.za (2009)

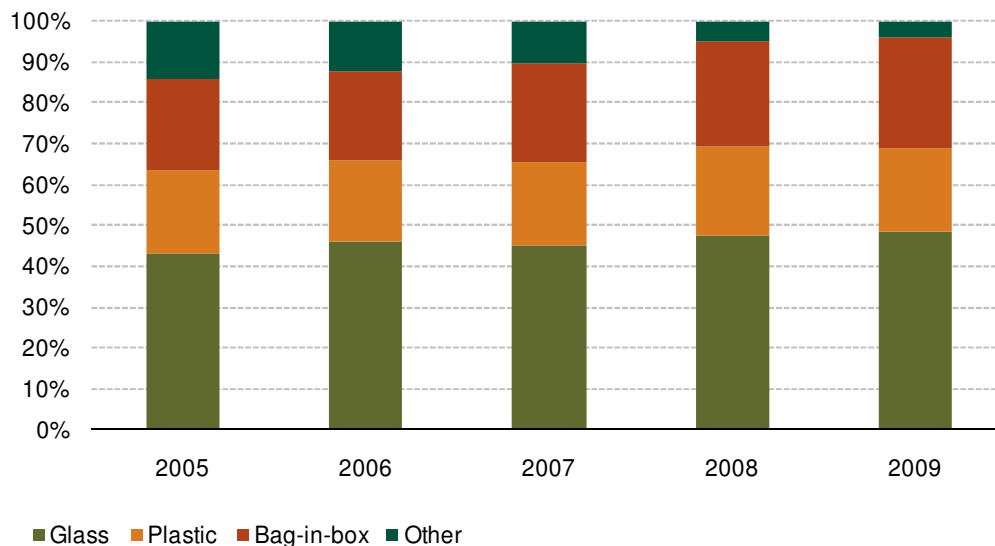
³⁶ Nampak (2010)

³⁷ Competition Tribunal (2003)

Packaging, the sole manufacturer of bottle crowns in South Africa, is 60% owned by SAB Ltd, with the remaining 40% held by a BEE consortium. Coleus Packaging supplies both SAB Ltd and its competitors in South Africa.

While glass remains the package of choice in the wine industry (increasing from 42.9% in 2005 to 48.2% of wine packaging in 2009), packaging in plastic/PET and bag-in-box is significant. As Figure 5 shows, bag-in-box packaging for wine has shown a considerable increase, from 22.2% of domestic wine in 2005 to 26.9% in 2009. Plastic/PET packaging has remained fairly stagnant over this period, with this product used for 20.7% of wine in 2009. The increasing use of bag-in-box packaging is a result of the banning of foil bags (popularly known as “papsakke”) for off-consumption in 2007, and the increasing consumer acceptance of this type of packaging for more premium wine products. Foil and tetrapak cartons made up the remaining 4.2% of wine packaging in 2009.³⁸

Figure 5: Domestic packaging of wine (percentage of total litres)



Source: DNA Economics, SAWIS

The market for the production of plastic/PET bottles for the beverage industry is relatively less concentrated than the glass and beverage can industries, but a few major players, including Nampak, Mondipak, Astrapak and the unlisted Boxmore, account for a major proportion of this market. Packaging for bag-in-box is similarly concentrated, with Nampak the number one producer of wine bags for this type of packaging,³⁹ with just over 30% of the flexible packaging market.⁴⁰

³⁸ While foil packaging is banned for off-consumption purposes, these packages are still permitted for on-consumption on retail premises, subject to certain requirements.

³⁹ Nampak website

⁴⁰ Nampak (2010)

2.2.3 Ethanol

Many liquor consumers hold the perception that each kind of liquor is made from a specific kind of agricultural product. For example, it may be assumed that malted barley is all that is used to make whisky, and vodka is always brewed from potatoes. In practice, the production process is more complex. Premium brands are more likely to have traditional recipes, but cheaper brands may use less conventional ingredients in order to save cost.

One of the simplest and often most cost-effective ways of producing an alcoholic beverage is to use beverage-grade industrial ethanol (also known as ethyl alcohol) as an input, in combination with flavourings, water and other ingredients. In some product markets, producers are prohibited from using ethanol as an input – for example, brandy can only be made from wine spirits, made using grapes. However, in principle, ethyl alcohol can be brewed from any starchy or sugary material,⁴¹ as well as refined from petrochemical feedstocks (although ethanol produced by this methodology is prohibited from entering the foodchain).

It is probably simplest to use ethanol as a liquor input when the end product is a white spirit with little or no taste profile, such as cane spirits or vodka. In fact, the process of producing cane spirits is not much more complex than simply blending 96% ethanol with water until the alcohol content reduces to around 40%. Much of the demand for beverage grade ethanol therefore comes from white spirits producers. However, ethanol can also be used to make a variety of other products, such as ersatz whisky, tequila and brandy, as an input into ready-to-drinks, and so forth. Echoing this, the largest customers for South African beverage ethanol producers are in fact the companies which have the largest market shares in the spirits market.

2.2.3.1 Ethanol markets as a whole

The end uses of industrial ethanol are highly varied, and worldwide, beverage ethanol probably comprises less than 10% of total ethanol demand. Beverage ethanol has to be made to slightly tighter quality standards than ethanol intended for industrial uses (like fuel markets for example), and customer demand characteristics are a little different, as stability and security of supply are valued. Beverage-grade ethanol therefore tends to trade at somewhat of a premium to other forms of ethanol, and its price fluctuates less. Apart from the price premium, however, there is no technical reason why beverage ethanol cannot be used in industrial processes.

Typically, non-beverage ethanol must be denatured before being sold, or it will be subject to alcohol excise taxes. Denaturing renders the ethanol unsuitable for human consumption, by adding one of a variety of possible toxins to the product (which are ideally extremely difficult to remove from the ethanol). Denatured ethanol is often called methylated spirits.

⁴¹ Alcohol is produced by fermenting sugars with yeast. If the fermentation process begins with a starchy material containing carbohydrates, the carbohydrates must first be converted into sugars before alcohol can be produced.

2.2.3.2 Ethanol in South Africa

South Africa is an active producer and exporter of beverage grade ethanol, and in the region, Swaziland is also active in the beverage ethanol market. In both cases, the feedstock used for the production of ethanol is liquid molasses from sugar cane, which is a by-product of the sugar refining process.⁴² The industry is thus exposed to the agricultural cycle, and in years when crops are bad, will tend to import either feedstock or beverage grade ethanol to meet local demand. The price of raw material is a key driver of the price of beverage-grade ethanol, which in the South African market currently is in the range of R7.50 to R8.00 per litre, before tax.

Market participants are as follows:

- NCP Alcohols (South Africa): makes about 55m litres of ethanol annually for the beverage, cosmetic and pharmaceutical industries. NCP is 100% foreign owned.
- Illovo Sugar (South Africa): makes about 55m litres of ethanol annually at its Glendale distillery and Merebank plant for the beverage, pharmaceutical and industrial chemical industries. Illovo is a listed company, and 51% of its shares are held by a subsidiary of British Sugar. The BEE status of ownership of the remaining 49% of shares may be assumed to mirror the BEE status of JSE shareholders in general
- Royal Swaziland Sugar Corporation and USA Distillers (Swaziland): together these Swazi companies produce approximately 50-60m⁴³ litres of ethanol annually. RSSC produces just over 50% of Swazi ethanol.⁴⁴ The geographic boundaries of the ethanol market probably should be regarded as including these Swazi competitors.

Although NCP and Illovo produce similar quantities of ethyl alcohol annually, both sell this product into markets other than the beverage industry as well. Their market share of ethanol for beverages thus may not mirror their market share of ethanol as a whole. Indeed, Clare et al. (2004, 30) describe NCP as having the “lion’s share” of the beverage ethanol market. Based solely on total ethanol production volumes, market shares are probably more-or-less as follows:

- NCP: 33%
- Illovo Sugar: 33%
- Swazi producers: 33%

However, if the market is considered to be beverage ethanol only, NCP’s market share may be more substantial.

Of the approximately 110m litres of ethanol produced domestically per year, approximately 22m litres are consumed by the domestic market, while the remainder is exported. Around 300m litres of ethanol

⁴² Matsebula 2008, 2

⁴³ Upper end of estimate from Matsebula 2008, 6

⁴⁴ Matsebula 2008, 6

are also produced per year by Sasol from non-agricultural feedstock, and are thus not suitable for the beverage market. The NLA does not require ethanol producers to be licensed.

2.3 Liquor production and distribution

2.3.1 Beer

Roughly half of the value of the South African liquor market comprises sales of beer, which is the single most popular beverage among South African drinkers. South Africa ranks as both a major producer and consumer of beer globally, ranking 12th in 2008 in terms of consumption⁴⁵ and 13th in terms of production⁴⁶. Per capita consumption of beer averaged around 51 litres in 2008.⁴⁷ This report distinguishes between clear beer, which has a shelf life of several months, and traditional sorghum beer, which is opaque, contains live yeast and has a shelf life of around five days. All references to beer should be considered references to the clear beer market, unless otherwise specified.

2.3.1.1 Demand characteristics

The process of marketing beer in South Africa typically distinguishes between two customer categories, namely mainstream and premium, with premium beer generally selling at a 10% to 12% premium to mainstream beer.⁴⁸ Within the premium market, the dominant beer producer in South Africa, SAB, often further distinguishes between local and international premium brands (with international brands sometimes trading at higher price points than domestic premiums).⁴⁹ The premium market is estimated to account for just over 20%⁵⁰ of the beer market in South Africa. However, the local market has followed the global trend towards premiumisation, with premium volumes growing at 22% per annum between 2002 and 2008, far higher than the volume growth in the overall market.⁵¹ SAB has virtually no competition in the mainstream market, which is captured by the company's flagship brands, Carling Black Label, Hansa and Castle.

While there may be some production differences between mainstream and premium beers (e.g. in terms of the specific ingredients used), these differences typically do not materially influence the production cost of the beer. The price differential between premium and mainstream beers is therefore used by producers as a way to signal product quality or desirability, rather than being driven by cost considerations. Given this market characteristic, the premium market derives higher margins and is more lucrative for the producer, though some of this margin is often offset by higher marketing costs.

In South Africa the categorisation of beer brands depends strongly on consumer perception, thus marketing strategies (from the type of packaging through to the way in which the product is advertised)

⁴⁵ Kirin Institute of Food and Lifestyle (2009)

⁴⁶ Kirin Institute of Food and Lifestyle (2010)

⁴⁷ DNA estimation based on Kirin Institute of Food and Lifestyle (2009)

⁴⁸ Shevel (2010)

⁴⁹ SAB (2009)

⁵⁰ DNA calculations based on AC Nielsen data from public sources.

⁵¹ Brandhouse (2009)

and product price are crucial in determining how a beer is categorised. In fact, the distinction between premium and mainstream brands within the beer market is mostly based on consumer perceptions, price points and producer marketing strategies. The extent to which marketing plays a role in the way a beer brand is perceived is reflected in Brandhouse's strongest South African premium beer, Amstel. Under SAB, the brand was historically marketed and priced as a premium brand, and given this, is still seen in South Africa as a premium beer. Yet globally the Amstel brand is perceived to be, and sold as, a mainstream beer.⁵²

The manner in which the product is packaged is an important factor in the overall marketing of a given beer brand. The bottling of beer in 750ml "quart" bottles, which are returnable, has been seen as an important factor in increasing consumption of beer brands in the informal market, where consumption often takes place between friends sharing. Conversely, packaging in 340ml bottles or cans can be used as a signal of the premium nature of a brand. Brandhouse has recently introduced a 660ml returnable bottle among a number of its brands, which it believes will increase sales in the informal market. SAB estimates that over 80% of beer in South Africa is sold in returnable bottles (which are generally sold in 330ml, 660ml and 750ml bottles), of which 750ml "quarts" make up the majority.⁵³ Historically, SAB also used the colour of the bottle to identify it to consumers as either premium or mainstream. Premium beer brands were packaged in green bottles, while mainstream brands were packaged in brown bottles.⁵⁴

As competition between Brandhouse and SAB has increased, it appears that these companies have followed different tactics to increase market share. Brandhouse's marketing of Amstel as an increasingly mainstream brand (with new bottling and lower price points) is at odds with the way in which SAB has historically marketed the brand, while SAB's flagship mainstream beer, Carling Black Label, is increasingly being marketed in the upper end of the mainstream market,⁵⁵ in order to shift perceptions of the brand.

2.3.1.2 Production landscape

SAB owns and operates seven breweries which produce local and imported brands (which are either owned by SAB Miller or manufactured under license) for the South African and regional market, with a total annual brewing capacity of 3.1 billion litres.⁵⁶ Prior to Heineken's cancellation of SAB's contract to produce Amstel in 2007, SAB held an approximate market share of around 95% - 98%, with the Amstel brand accounting for around 8% - 9% of this market share.⁵⁷

At the time that Heineken took back the Amstel brand, it did not have a local brewery, and was therefore forced to import Amstel beer to sustain local demand for the product (Amstel is the most

⁵² Bleby (2010)

⁵³ SAB (2008)

⁵⁴ Shevel (2010)

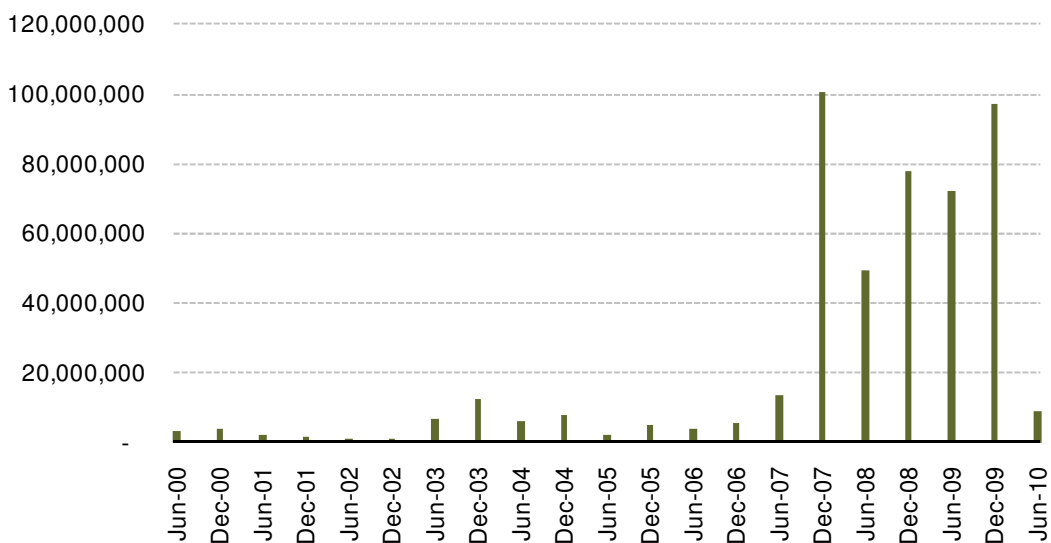
⁵⁵ Bleby (201)

⁵⁶ SAB (2010)

⁵⁷ Mail and Gaurdian (2007)

important beer brand for the Brandhouse joint venture in terms of market share). The impact of this on international trade is shown in Figure 6. Beer imports averaged 8.2 million litres annually between 2005 and 2006, which increased more than tenfold to 137 million litres annually between 2007 and 2009, as Brandhouse ramped up its importation of Amstel. The cancellation of the SAB contract resulted in market share for the Amstel brand declining immediately thereafter, before recovering again as Brandhouse's importation and distribution of the brand improved.

Figure 6: South African beer imports - 6 month total (litres)



Source: DNA Economics, DTI trade database

Heineken and Diageo have since deepened their partnership in South Africa by investing in a new brewery located at Sedibeng, which began operation in March 2010. Heineken has a 75% stake in the brewery and Diageo the remaining 25%, and the brewery was built at total cost of R3.5 billion. The brewery had an initial capacity of 300 million litres, and is being expanded to 450 million litres.⁵⁸ The impact of the new joint venture brewery is highlighted by the dramatic fall in beer imports in the six months to June 2010, illustrated in Figure 6.

The brewery brews and bottles Brandhouse beer brands (including Heineken, Amstel and Windhoek brands) as well as RTDs for the South African market. This is likely to result in a consistent increase in market share for the Brandhouse joint venture as local bottling takes place (making distribution easier), and the company is able to make use of popular returnable bottles.

⁵⁸ Heineken (2010)

Beer sales in South Africa amounted to 2.7 billion litres in 2009,⁵⁹ with estimated market shares for leading brands shown in Table 5. SAB is estimated to hold over 85% of the beer market, Brandhouse about 13% and the remaining 2% is held by independent brewers and other brands. Despite SAB's dominance of the beer market, the lucrative premium market within beer is dominated by Brandhouse, which currently only operates in this segment of the market.

Table 5: South African beer market (market shares by value)

Brand owner	Brand	Overall	Premium
Heineken (Brandhouse)	Amstel	5% - 7%	30% - 32%
SAB	Carling Black Label	34% - 36%	
SAB	Castle	15% - 17%	
SAB	Castle Lite	5% - 7%	30% - 32%
SAB	Hansa	23% - 25%	
Heineken (Brandhouse)	Heineken	2% - 4%	13% - 15%
Namibian Breweries (Brandhouse)	Windhoek	2% - 4%	14% - 16%
Various	Other brands	5% - 7%	9% - 11%

Source: DNA Economics, calculations based on AC Nielsen Off Trade data from news sources

BEE characteristics

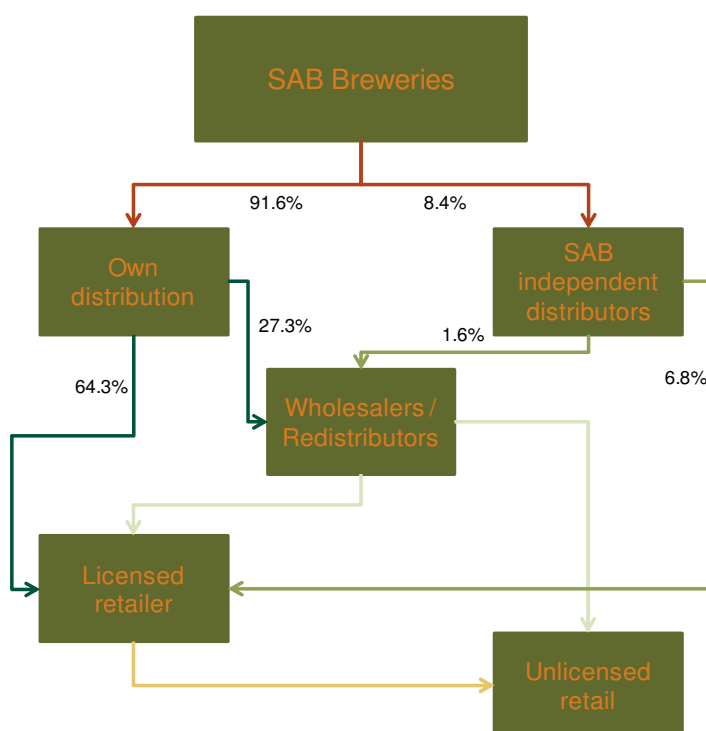
SAB has undertaken a BEE scheme known as the Zenzele initiative. Under Zenzele, 8.45% of the shares of the South African subsidiary of SABMiller (i.e. the South African Breweries Ltd) have been allocated to SAB employees, qualifying retailers and to a charitable institution. No other BEE initiative has been identified in the sector, as Brandhouse is wholly foreign owned.

2.3.1.3 Distribution network

The business of beer distribution is closely vertically integrated with the manufacturing process, primarily because of the integrated distribution model chosen by the market leader, SAB. SAB has an extensive first-line distribution network, which distributes beer produced from its seven breweries to 40 SAB depots in South Africa. Beer which is not shipped through these 40 depots, is handled by 14 independent distributors (also called appointed distributors), which distribute beer from SAB breweries to their own depots and onwards to wholesalers and retailers. SAB's distribution system is shown diagrammatically in Figure 7. It is estimated that in 2008 SAB distributed over 91% of its beer products through its own depots, with the remainder distributed through the independent distributors with which it has established relationships.

⁵⁹ SAB (2010)

Figure 7: SAB South African distribution network (% of total production)



Source: DNA Economics reproduction, Competition Tribunal (2008)

SAB indicates that over 71% (64.3% through its own distribution network and 6.8% through the independent distributors) of its beer volumes are distributed directly to licensed off- and on-trade retailers. This translates to direct distribution to roughly 34 000 of the estimated 55 000 licensed outlets.⁶⁰ The remaining 29% of SAB's beer volume is distributed to wholesalers or redistributors who distribute onwards to both licensed and unlicensed retailers. While customers are free to purchase from SAB and appointed distributors' depots on a "call and collect basis", SAB encourages the use of its distribution service by customers (for efficiency purposes) and the majority of SAB's products are delivered by SAB or its appointed distributors.⁶¹

SAB's distribution network is a source of competitive advantage for the company. Its principle competitor, Brandhouse, outsources its core distribution and warehousing functions to Imperial Logistics (part of the listed Imperial group), while also using various local distributors and wholesalers to distribute down the retail chain, but does not distribute direct to market. Given the small but growing share of the beer market held by Brandhouse, coupled with the establishment of a brewery in South

⁶⁰ Planting (2010)

⁶¹ Competition Tribunal (2008)

Africa and its push into the informal and mainstream markets, it is likely that Brandhouse will enhance its distribution network in future. This is reflected by SAB's acknowledgement that the Brandhouse joint venture "is constantly expanding and servicing a range of smaller customers...whether on consumption or off consumption."⁶²

A closer look at key elements in SAB's distribution network is outlined below.

The SAB owner-driver initiative

The owner-driver system was initiated in 1987, with employees encouraged to "roll over their normal tasks into sustainable small businesses,"⁶³ by acting as distribution subcontractors to SAB. Owner-drivers are assisted with financing, training and business support, and SAB has invested over R3 billion in the project since its inception. As an owner-driver business matures, successful operators are allowed to expand operations by acquiring more delivery vehicles.

In 2009 there were 287 independent owner-drivers, responsible for distributing 74%⁶⁴ of beer from the 40 SAB depots to wholesalers and retailers (i.e. 74% of the 91.6% of SAB's total beer volume). From SAB's perspective this initiative has reaped benefits in terms of both increasing productivity (benchmarking studies suggest owner-drivers are 30% more productive) and better distribution capabilities,⁶⁵ with owner-drivers extending the reach of SAB's distribution system. However, a significant restriction on the owner-driver system is the prohibition of delivery of non-SAB products by owner-drivers, which can result in contract termination. Owner-drivers sign a ten-year contract with SAB on acquisition of a truck and are therefore effectively locked-in to service SAB only, even once the vehicle has been fully paid for.⁶⁶

The role of appointed independent distributors

SAB's exclusive use of appointed distributors (which have some exclusivity in distribution from brewery to wholesaler/retailer) has been a source of controversy, as it has been suggested that the appointment of these distributors is anticompetitive in nature, and excludes other distributors from effectively competing in distributing SAB products (the matter was recently under investigation by the Competition Commission, although it has unfortunately been dismissed by the Competition Tribunal on a technical issue). Key features of the appointed distributor arrangement include:⁶⁷

- The appointed distributors buy and sell stock at the same price. They earn a living from delivery and handling fees paid by SAB on stock sold, and incentives on volumes sold. The maximum selling price is effectively set by SAB, and the distributors are therefore essentially not involved in setting the mark-up on the goods sold.

⁶² Competition Tribunal (2008)

⁶³ SABMiller (2008)

⁶⁴ SAB (2010)

⁶⁵ SABMiller (2008)

⁶⁶ Webster et al (2008)

⁶⁷ Competition Tribunal (2008)

- Appointed distributors are appointed to an exclusive territory, but are arguably not technically subject to any product exclusivity. However, in practice none of them in fact distribute products for SAB competitors.
- SAB employs marketing and sales representatives which operate from leased office space at the appointed distributors' location. Customers in the distributors' territories are able to either directly contact the appointed distributors or are able to request stock through a SAB sales representative, who then transmits these details to the relevant distributor.
- The appointed distributors take on the stock and credit risk from the distribution of SAB stock but these risks are jointly managed by SAB and the distributor. SAB also assists distributors in stock-levels, where slow moving stock may be bought back by SAB or used by SAB in promotions, with the distributor recovering the value of that stock.
- Appointed distributors act within strict quality and operational controls administered by SAB.

Given the dynamic and characteristics of the relationship between SAB and the appointed distributors, this distribution channel is in many important respects essentially the same as SAB's own distribution, though it is not formally owned by SAB. However, some indications of operational independence can still be identified, including the fact that the distributors do take risk on inventory and debtors.

Distribution to the unlicensed retail market

While SAB indicates that over 70% of its beer volume is distributed to the licensed retail market, it is estimated that as much as 70-80% of SAB products are actually consumed in the informal and unlicensed market.⁶⁸ The movement of product from licensed wholesalers and retailers to the unlicensed retailers takes place through both licensed and unlicensed redistributors. Given the demand for SAB products from the unlicensed sector, SAB has invested in several initiatives to aid and encourage unlicensed retailers to follow the licensing process.

Among these is SAB's BEE initiative, SAB Zenzele, which encouraged unlicensed retail operators to apply for a liquor license in order to become eligible for the BEE share scheme. On closure of the offer, just over 19 million SAB Zenzele shares were allocated to 29,542 black-owned licensed liquor retailers and registered black-owned customers of SAB's soft drinks division. An additional 500,000 share were set aside for between 240 and 1,600 liquor retailers, who have applied for liquor licences, with a three-year window in which to formally receive their licences before they are allocated these shares.⁶⁹ Other initiatives include the Mahlasedi Taverner Training program, which provided management training to unlicensed retailers, with eligibility for the training program conditional on the retailer obtaining or having applied for a license.⁷⁰ From SAB's perspective, encouraging the formalisation of the unlicensed retail market is beneficial in a number of ways:

⁶⁸ Webster et al (2008), Competition Commission 2007

⁶⁹ SAB corporate communications

⁷⁰ BOP Southern Africa (2008)

- Moving from an unlicensed to a licensed retailer means that the outlet can then be formally included in SAB's distribution network, rather than indirectly serviced by independent redistributors. The increasing formalisation of the unlicensed market will therefore have implications for these redistributors.
- Pilot studies have shown that the provision of training coupled with the licensing of retailers increases sales⁷¹ and in this way is mutually beneficial for both the retailer and SAB.
- It is likely that SAB will earn some goodwill in its provision of assistance in the licensing and business training process and, given the increasing competition (albeit from a low base) from Brandhouse, this goodwill will become increasingly important from a competitive standpoint.

2.3.1.4 SMME activity in the sector

The beer market is heavily dominated by incumbent firms, and in particular by SAB, with limited SMME activity in manufacturing activities in particular. Although the craft or microbrewing sector in South Africa is particularly small, international evidence suggests that it is rare for such firms to hold a substantial portion of market share. For example, various sources suggest that microbreweries supply 2% of the United Kingdom's beer demand, 0.5% of the Czech Republic; less than 1% in Mexico; 4% in Japan; and about 3% in the United States.⁷² Beers produced by craft or microbreweries are typically aimed at more discerning customers, for whom the quality of the beverage concerned is of greater importance, and are thus typically priced at a premium to mass-produced brands.

A critical success factor for SMME beer producers in South Africa is the ability to place product in front of the customer, either at on-license or off-license outlets. It is thus critical to avoid anti-competitive abuses such as tying and other forms of foreclosure in the beer market, and it is of concern that allegations have been made that such practices are in fact being used (see discussion in section 2.5.1).

In the beer distribution market, SAB currently chooses to conduct most of its distribution activity in house, a matter which has been the subject of a competition complaint (albeit dismissed on technical grounds). Effectively, external parties are not able to mimic the cost conditions of SAB internal or appointed distributors, and thus cannot compete in the formal distribution market for SAB products. As SAB has the largest share of the beer market, this limits the development of SMME beer distributors.

Some SMME development has been encouraged by SAB, including the owner-driver initiative and the appointed distributor system. However, neither owner-drivers nor appointed distributors handle the products of SAB competitors, which affects their ability to grow their businesses and achieve operational independence.

⁷¹ Ibid

⁷² <http://www.uk-pub-sales.net/uk-microbreweries/>; <http://www.independent.co.uk/life-style/food-and-drink/czechs-discover-a-new-taste-for-speciality-beers-1960267.html>;
<http://www.foodmanufacturing.com/scripts/ShowPR~RID~20622.asp>;
<http://factsanddetails.com/japan.php?itemid=661&catid=19&subcatid=124>;
<http://www.brewfestoregon.com/Micro Brew History.html>

2.3.2 Sorghum beer

The sorghum beer market encompasses both homebrewed sorghum beer and commercially made and distributed sorghum beer, which in the local market is made principally by United National Breweries (“UNB”).⁷³ This discussion explicitly excludes fermented products made with non-traditional ingredients, such as bread or sugar, which are addressed in section 2.3.6 (although it is likely that many consumers view such products as good substitutes for sorghum beer). In this report, the term sorghum beer is used to refer to opaque, live yeast products only. One of the most common traditional names for this product is umqombothi.

2.3.2.1 Demand characteristics

Sorghum beer as a consumption product differs quite markedly from clear beers. It is an opaque, thick, frothy liquid which can be messy to drink, and is more likely to make the drinker feel full. It also has a very different history in the South African market. From 1928 to 1962, the state prohibited the sale of “European liquor” to Africans, leaving sorghum beer as the only legal alcoholic beverage for this market.⁷⁴ When this prohibition was lifted in the 1960s, the government then granted itself a monopoly on the production of sorghum beer.⁷⁵ In order to stamp out shebeens, liquor licenses in townships were only granted to municipal beer halls, and the profits from such beer halls were then earmarked to fund the building of township amenities and finance the homelands.⁷⁶ By 1976, municipal beerhalls were being targeted by protestors as symbols of oppression.⁷⁷ In short, therefore, the production and sale of sorghum beer has historically been strongly associated with the architecture of the apartheid state.

The sorghum beer market has yet to overcome this historical legacy, which has contributed to a steady decline in volumes in recent years. As shown in Figure 8 below, the sorghum beer market has stagnated when compared to the clear beer market. In the early 1970s, absolute alcohol in sorghum beer comprised almost half of total consumption of absolute alcohol, whereas by 2009, only 17.2% of absolute alcohol was consumed via sorghum beer.⁷⁸

⁷³ A smaller competitor to UNB, Awethu Breweries, has been in operation in recent years, however, in its latest financial statement (released 4 October 2010), Awethu Breweries’ auditors expressed concern over Awethu’s status as a going concern. It has thus not been included in the analysis.

⁷⁴ Mager 2010, 12

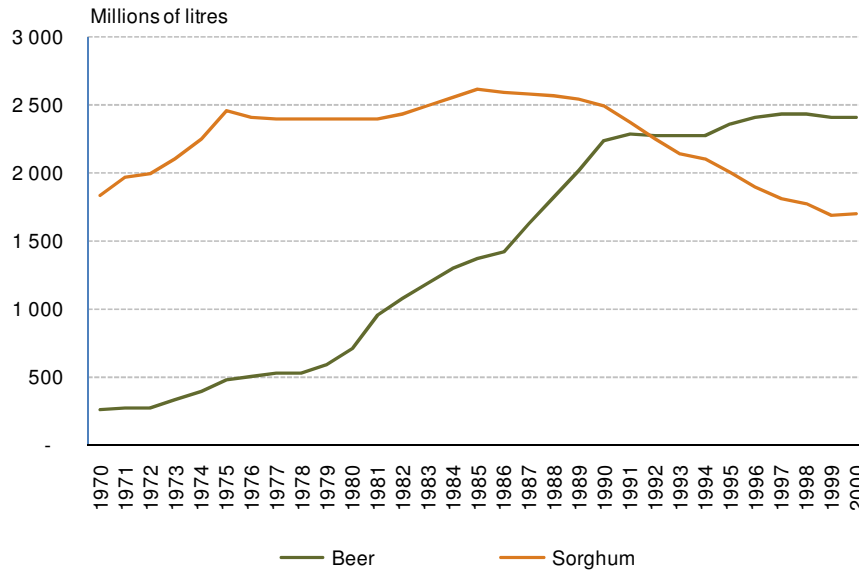
⁷⁵ Mager 2010, 18

⁷⁶ Mager 2010, 19

⁷⁷ Dti 1997, 9

⁷⁸ SAWIS 2010 Handbook

Figure 8: Volumes in sorghum versus clear beer over time



Source: Distell presentation to Nedcor, 24 February 2003, slide 10

The typical sorghum beer consumer is more likely to be poor, rural and elderly, and is more likely to consume this beer in a communal setting from a shared container, in a facility with minimal furnishings. For this consumer, a large part of the appeal of sorghum beer is its price, which given the low excise rates on sorghum beer, is very competitive as compared to clear beer. However, the price sensitivity of the sorghum beer consumer also implies that he or she is likely to switch between sorghum beer and the concoctions market, depending on which is cheaper, which will be discussed further in section 2.3.6.

There is relatively little regional variation in the level of demand for sorghum beer, with the exception of the Western Cape, where UNB currently does not have a distribution network, and the Northern Cape, where volumes sold are low. In both these regions demand patterns are skewed in favour of wine rather than sorghum beer. The various brands of sorghum beer produced by UNB have different geographic footprints, as follows:

- Ijuba: made according to Zulu traditions, the main market for Ijuba is KwaZulu Natal, but it is also distributed in portions of the Eastern Cape, Free State and Mpumalanga
- Chibuku: a brand distributed in the rest of Africa, distributed by UNB in South Africa in the Western and Eastern Cape, and parts of the Free State and Northern Cape
- Leopard Special: Limpopo, Gauteng, North West, Mpumalanga, Free State

- Joburg Beer and Tlokwe: Johannesburg and the North West province⁷⁹

2.3.2.2 Production landscape

At present, the principle commercial producer of sorghum beer in South Africa is UNB, which produces 337m litres per year.⁸⁰ A certain quantity of sorghum beer is made using traditional methods by private individuals, typically for use in traditional ceremonies, but the volumes produced are minimal. In the year ending 31 March 2010, SARS reported excise collections on sorghum beer equivalent to 348m litres of beer. Therefore, if the market is defined as including only commercially produced, excisable sorghum beer, then UNB probably has a market share in the region of 95-100% (allowing for possible variations in the time periods of measurement used by UNB and SARS).

However, it is likely that many sorghum consumers are happy to substitute between commercially made sorghum beer, traditionally made sorghum beer and concoctions, which would imply that all three products are in the same market. Data suggests that the volume of dry sorghum sold in 2010 is consistent with home production of approximately 728m litres of homebrew.⁸¹ Given the variations possible in the ingredients of homebrew, such as the inclusion of bread or sugar in the recipe, it is likely that the number of 728m litres represents the minimum size of the homebrew market. On these numbers, UNB's market share is at most 32%.

UNB has decreased the number of production outlets it has, and at present has only six breweries (as compared to nine previously). These breweries are located in Potchefstroom, Dundee, Durban, Butterworth and Langlaagte. UNB also has a malt plant in Durban.

Once brewed, the shelf life of sorghum beer is around 5 days (or maybe a little longer if the weather is cold). For the first two days after leaving the brewery, the product is not ready to drink, but can be packaged and transported. The fermentation process continues during this time, and thus sorghum beer containers must have a vent in the lid to allow gaseous by-products of fermentation to escape. UNB currently sells beer in one, two and twenty litre containers (the large volumes are suitable for the typically communal consumption of the beverage). Depending on when the beer is drunk and other production variables, its alcohol content will vary. Typically sorghum beer has an alcohol content of 3% or less.

UNB has also tried to introduce a pasteurised, long-lasting version of sorghum beer into the South African market, which had a shelf life of 6 months rather than 5 days. Ultimately, the product proved unsuccessful. Although marketed as a form of sorghum beer to the price conscious sorghum beer market, it was treated like a clear beer by the tax authorities, and the extra excise duty made it non-competitive.

⁷⁹ <http://www.unbreweries.co.za/view/unb/en/page60.html>. Four other smaller, regional brands are also produced, namely Zebra Beer, Jikeleza, Country Brew and Kalahari Sorghum.

⁸⁰ See footnote 73 for an explanation of the exclusion of Awethu

⁸¹ BMI Foodpack data

BEE characteristics

At present, UNB has no BEE shareholders. The majority shareholder is the UB Group of India which invested in the company in 1996, and as at 2004, Marriott Bank had a 25% stake in the company as well.⁸²

2.3.2.3 Distribution network

UNB has a national distribution network consisting of 64 depots and 600 distribution vehicles. They also use a distribution network of driver-salespersons, who deliver mainly to distributors, in addition to some independent distributors. This investment in a substantial distribution network is necessary because the short shelf life of the product makes it a poor match for the distribution networks deployed by other liquor products.

2.3.2.4 SMME activity in the sector

The UNB driver-salesperson network constitutes a group of SMME firms in the traditional beer sector. It is not known whether these driver-salespersons are able to distribute the products of other liquor companies as well, which would be desirable from the point of view of promoting SMME development, but might have commercial repercussions for UNB in terms of the efficiency of distribution.

In terms of the SMME production of traditional beer, such activity that does exist appears to be taking place in the informal market, among “concoction” producers, which will be discussed in section 2.3.6. The proliferation of such concoctions producers is likely to crowd out legitimate SMME traditional beer production activity, as untaxed informal producers will always have a cost advantage over formal producers, and the traditional beer customer remains very cost sensitive.

2.3.3 Wine and brandy

Brandy is produced using wine grapes, and thus the production of brandy is strongly linked to the production of wine. Therefore the discussion of the production characteristics of brandy and wine is undertaken together, in this section. However, from a consumption perspective brandy is part of the spirits market, and its demand characteristics will therefore be discussed in the spirits section of this report.

2.3.3.1 Demand characteristics – wine

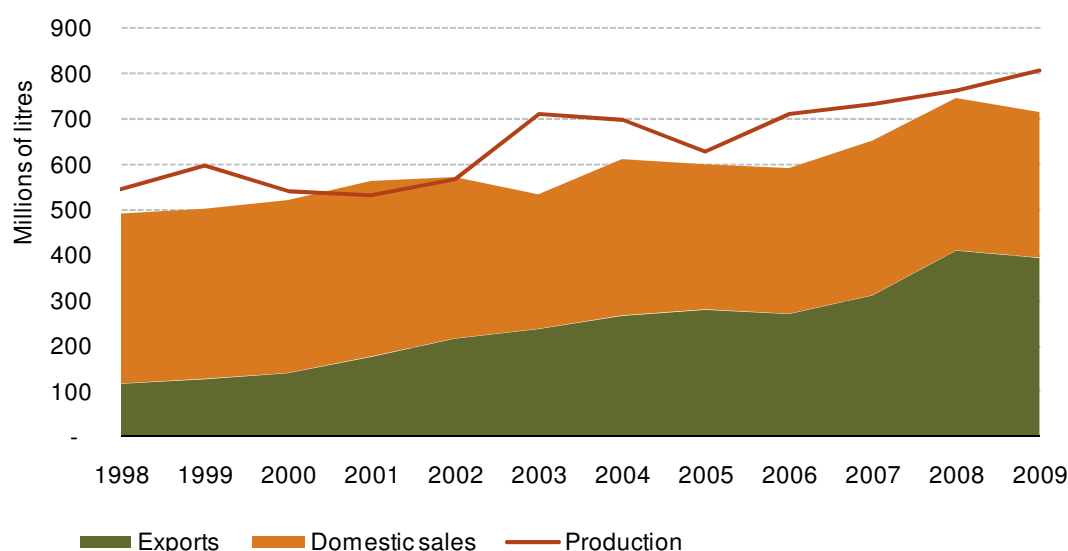
Unlike beer and spirits produced in South Africa (which are mainly produced for domestic consumption), wine produced in South Africa is both consumed locally and exported. South Africa is ranked as the world’s seventh largest producer and eighth largest exporter⁸³ of wine. In recent years, the demand and supply characteristics of wine have undergone structural changes both globally and within South Africa, which are discussed below.

⁸² Clare et al 2004, 41

⁸³ Thomas (2010)

South Africa has seen a significant shift in consumption of wine, which has moved from domestic consumption towards export orientation over the last decade, as shown in Figure 9. In 1998, domestic consumption of domestically produced wine accounted for 76% of total consumption, which has since fallen to only 45% of total consumption by 2009. This change was driven by a number of factors, including falling domestic consumption, deregulation of the wine industry, an improvement in the quality of South African wines and the shifting of wine production from white to red wines (which are more attractive to the export market). Despite increasing exports, South Africa has seen a trend of surplus wine production over the last decade, which has also been experienced by other global exporters (as will be highlighted in the following sections), and which has had a negative impact on wine and grape prices worldwide.

Figure 9: South African wine production and consumption (natural, fortified & sparkling wine)



Source: DNA Economics, SAWIS (2010)

Note: Domestic sales excludes imports

Over the course of the last 2-3 decades, global demand and supply of wine has increasingly shifted from traditional European countries (such as France, Italy and Spain) towards Southern Hemisphere countries and the USA. Traditional/European wine producing countries have also experienced falling wine consumption levels due to a variety of factors, including changing demographics and a decline in per capita consumption from unsustainably high levels.⁸⁴ In contrast, new world⁸⁵ countries are seeing

⁸⁴ Sumner (2010)

⁸⁵ The traditional wine growing areas in Europe (mainly France, Italy and Spain) are commonly referred to as old world producers. New world wine producers refer to countries outside of continental Europe, with Argentina, Australia, Canada, Chile, Mexico, New Zealand, South Africa and the United States often grouped together as new world producers.

an increase in both consumption and production. In 2008, wine consumption in the USA surpassed that of Italy,⁸⁶ while wine consumption in countries such as China is also seeing significant increases.

Figure 10: Global wine production (period average, mhl)

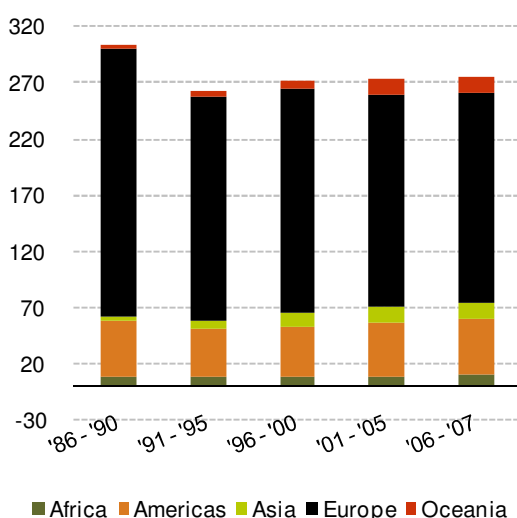
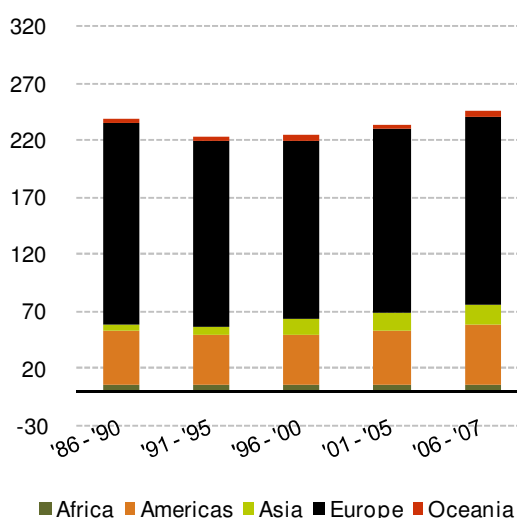


Figure 11: Global wine consumption (period average, mhl)



Source: DNA Economics, OIV

The structural changes in the global wine industry have resulted in a surplus supply of wine over the last decade. Figure 10 and Figure 11 show global wine production and consumption over the last twenty years. It is clear that though both consumption and production have declined (largely due to declines in Europe), surpluses have remained consistently high. This is a result of a spurt in vineyard plantings in the new world from the mid-1990s, resulting in wine production growing much faster than consumption in the Southern Hemisphere, adding to the surpluses the European countries had been experiencing. The Southern Hemisphere's share of global wine exports has increased from 1% to 27%,⁸⁷ resulting in downward pressure on wine and wine inputs (specifically grapes) worldwide. The recent global recession is likely to have a paradoxical effect, reducing demand for wine but also reducing the investment made in new vine plantings across the globe (but particularly in new world countries) and may therefore actually result in the surplus of wine narrowing.

A key feature of the domestic wine market in South Africa has been both the absolute and per capita volume decline in consumption. Domestic consumption⁸⁸ of wine has fallen from about 375 million litres in 1998 to 321 million litres in 2009 (though it is up from its decade-low consumption of 296

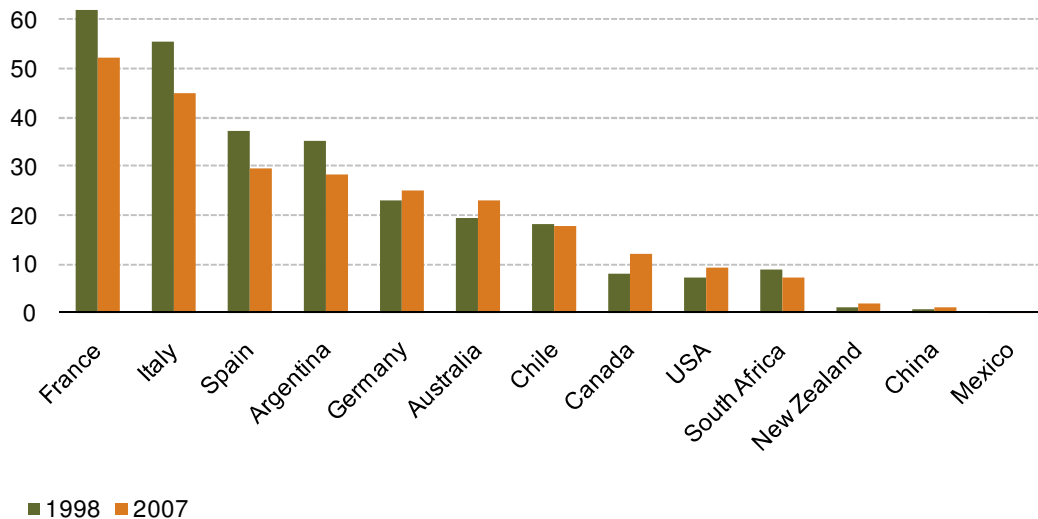
⁸⁶ SAWIS (2009)

⁸⁷ Anderson (2010)

⁸⁸ Domestic consumption here excludes consumption of imported wine which accounted for about 5% of total domestic consumption between 1998 and 2009.

million litres in 2003). Despite being a significant producer of wine, South Africa has a far lower per capita consumption rate of wine when compared to both old world and new world wine producers, as shown in Figure 12.

Figure 12: Domestic per capita wine consumption (annual litres per capita)



Source: OIV

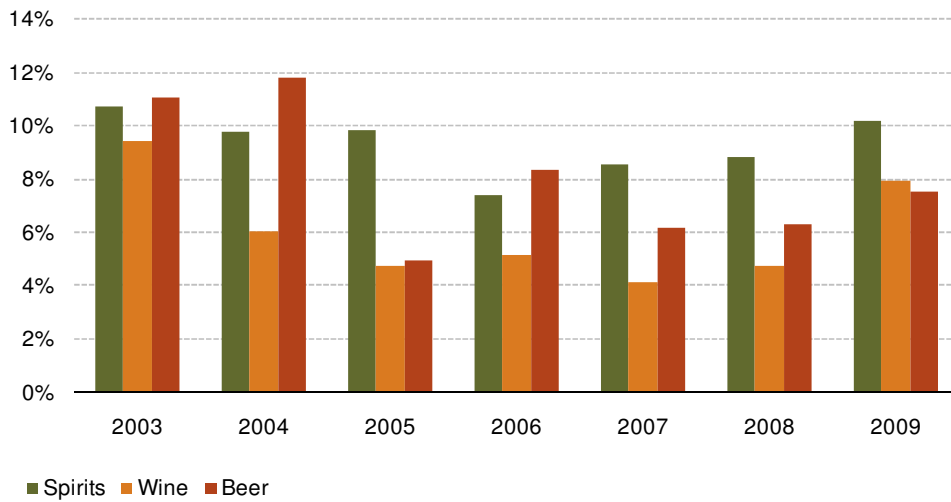
South Africa is one of the few new world producers that has seen per capita consumption of wine decline, with the exception of Argentina (which still consumed in excess of 28 litres per capita in 2007) and Chile. South Africa's per capita wine consumption in 1998 was 8.7 litres per annum, declining to 7.2 litres per annum in 2007. By 2009 South Africa's per capita wine consumption had fallen further to 6.9 litres per capita.⁸⁹

It has been suggested that one of the key reasons for South Africa's declining wine consumption is the aggressive pricing of other liquor products, especially by South Africa's major beer⁹⁰ producer, resulting in price sensitive consumers switching away from wine. However, a look at consumer inflation for alcoholic beverages (in Figure 13) shows that annual wine inflation has consistently fallen below both beer and spirits inflation levels since 2003.

⁸⁹ SAWIS (2010)

⁹⁰ Thomas (2010)

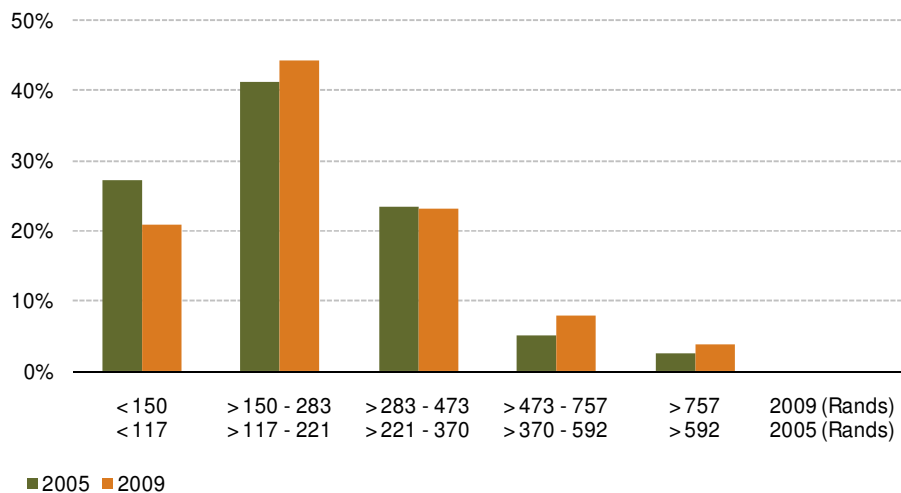
Figure 13: Alcohol beverages consumer inflation (annual average)



Source: DNA Economics, Statistics SA

Though wine inflation has been lower than other categories of liquor, within the wine category trends have been divergent for white (Figure 14) and red wines (Figure 15).

Figure 14: Domestic sales of packaged white wine by price category (R/carton including VAT)

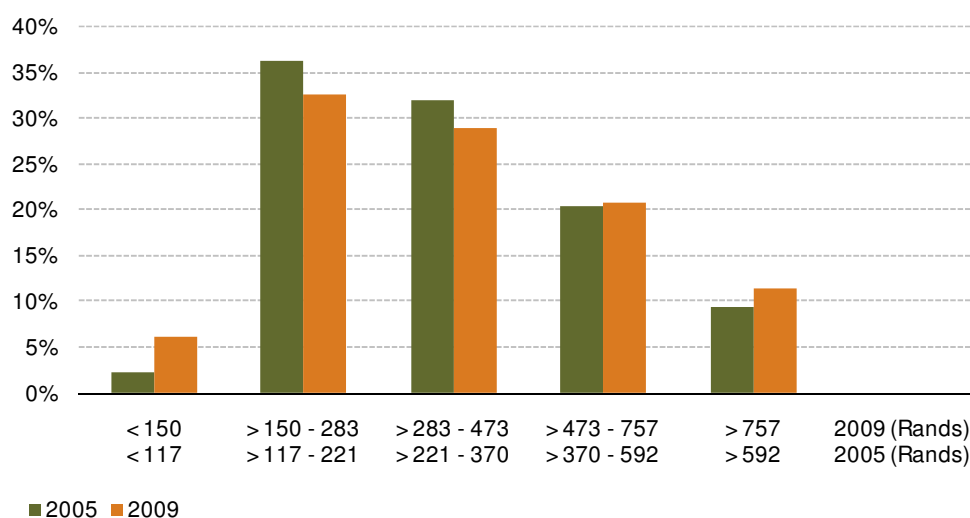


Source: DNA Economics, SAWIS

Graph shows sales on domestic market by producer cellars, cellars and wholesalers. A carton consists of 12 X 750ml containers of wine. SAWIS adjusts pricing categories for inflation to ensure they are comparable across years.

Sales of wine by price category show a premiumisation trend for white wines (Figure 14), while red wines have seen sales increase at either end of the pricing range (Figure 15). This is likely due to both the changing production structure of South African wines (moving away from the production of cheaper white wines) and the changing demographics of South Africa's wine consumers, who are showing an increasing preference for red wines.

Figure 15: Domestic sales of packaged red wine by price category (R/carton including VAT)



Source: DNA Economics, SAWIS

Graph shows sales on domestic market by producer cellars, cellars and wholesalers. A carton consists of 12 X 750ml containers of wine. SAWIS adjusts pricing categories for inflation to ensure they are comparable across years.

Pricing categories for wine are generally given in three categories, High Price (HP), Medium Price (MP) and Standard Price (SP). In 2007, 59% of domestic consumption was in the SP wine category, 26% in the MP category and 15% in the HP category.⁹¹ Using Figure 14 and Figure 15 as a guide, one can estimate wholesale price ranges for these three categories of wine for a 750ml bottle:

- SP: maximum price of R24
- MP: price range of R24 – R40
- HP: price range of R40 and upwards per bottle

Classification of wines in South Africa has increasingly moved away from a format based solely on the price of the wine⁹² towards the commonly used classification referred to as the Rabobank

⁹¹ Based on SAWIS data.

⁹² The pricing classification was usually indicated by acronyms such as BP (Basic Price), SP (Standard Price), MP (Medium Price) and HP (High Price), with the pricing of these wines historically synonymous with the type of

classification, which combines elements of price with other demand characteristics. This classification is summarised in Table 6, with prices increasing as one goes from basic to iconic wines.

Table 6: Rabobank categories of wine

Category	Description
Basic	Anonymous, with little or no linkage to vineyards or even countries.
Premium	Usually of better quality; often retail through the supermarkets in the “value for money” market; usually linked to distinct brand (rather than vineyard or cellar) identities
Super Premium	Sell on the basis of quality, style and perceptions about their unique identity in the market, for the experimental consumer.
Ultra Premium	Highly distinctive and individual quality; not marketed on a mass basis, aimed at the wine lover.
Icon	Wines whose value is mainly linked to the act of purchasing them, highly exclusive, targets the wine connoisseur.

Source: Adapted from Ewert et al. (2005)

A more convincing reason for the falling consumption of wine in South Africa is the changing demographics of the country in general and of the wine consumer specifically. South Africa's wine culture has historically been restricted to the more affluent white market, as reflected in Figure 16 through Figure 19. Figure 16 shows the proportion of regular bottle wine consumers across racial and income demographics,⁹³ with Figure 17 showing the same categorisation for box wine. Wine in both box and bottle formats appears to be a luxury good among the white population, with the proportion of regular consumers increasing as living standards improve. For black consumers this trend is similar for bottle wine, but not for box wine, where consumption appears to decline at higher measures of living standards.

What is clear is that wine consumption is far more prevalent among white consumers, with up to 18% of white adults regularly consuming bottle wine and 12% regularly consuming box wine. This contrasts with only 5% of black adults consuming bottle wine and 7% consuming box wine.

packaging. Thus BP or SP wines were generally found in foil packaging, while MP wines were often boxed and HP wines packaged in glass (Ewert et al (2005)).

⁹³ The South African Advertising Research Foundation (SAARF) developed the Living Standards Measure (LSM) grouping, which segments the consumer market across ten categories of living standards using criteria such as the degree of urbanisation and ownership of various machinery and appliances. LSM 1 is the lowest grouping and LSM 10 the highest.

Figure 16: Regular consumption of bottle wine (last seven days) – 2008

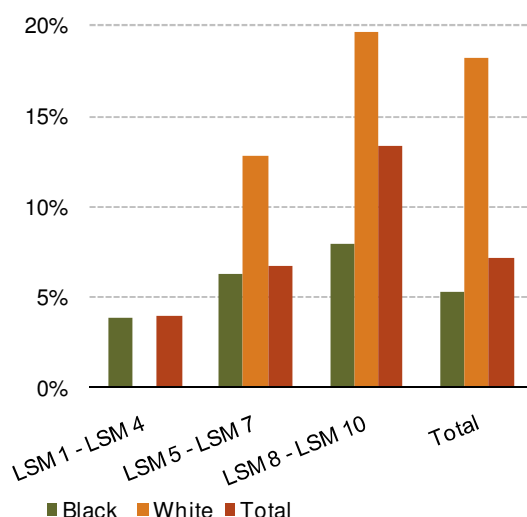
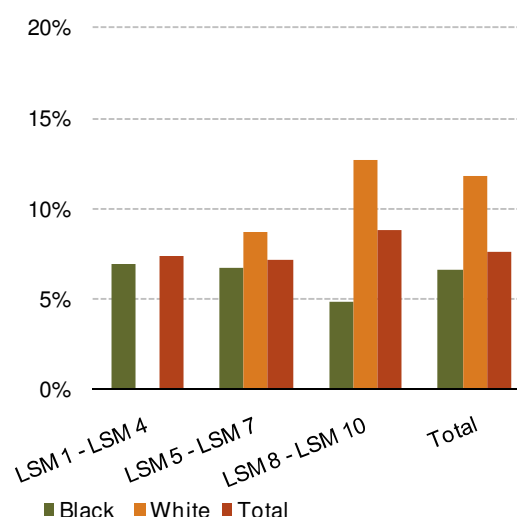


Figure 17: Regular consumption of box wine (last seven days) - 2008



Source: DNA Economics, SAARF (2008)

Note: no white respondents were recorded for the sample in LSM 1 – 4.

The suggestion that the emigration of up to 1 million whites⁹⁴ in recent years is a significant contributor to the declining wine consumption in South Africa⁹⁵ appears to be reasonable, if one considers that whites account for up to 33% of the bottle wine market and 20% of the box wine market (Figure 18 and Figure 19). In addition white consumers are concentrated at the higher end of the market (LSM 7 – 10) and constitute the biggest proportion of the premium wine market. Partly because of this trend, it is important for wine producers to shift marketing focus towards the increasing black middle and upper class as a means of increasing local consumption,⁹⁶ though the industry still appears to be unclear on its marketing strategies, given that wine consumption is often not part of the drinking culture of the average black consumer.⁹⁷

⁹⁴ Based on study by the South African Institute of Race Relations in 2006, revealing that up to 1 million white South Africans emigrated between 1995 and 2005 (van Aardt, 2006).

⁹⁵ Thomas (2010)

⁹⁶ Ndanga et al (2008)

⁹⁷ See Foxcroft (2009), Ndanga (2009).

Figure 18: Regular bottle wine consumer market

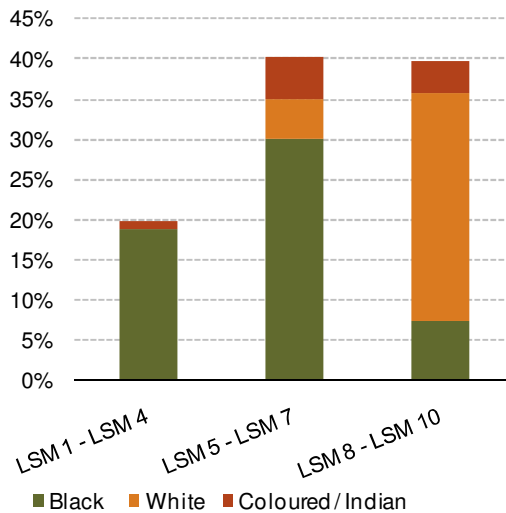
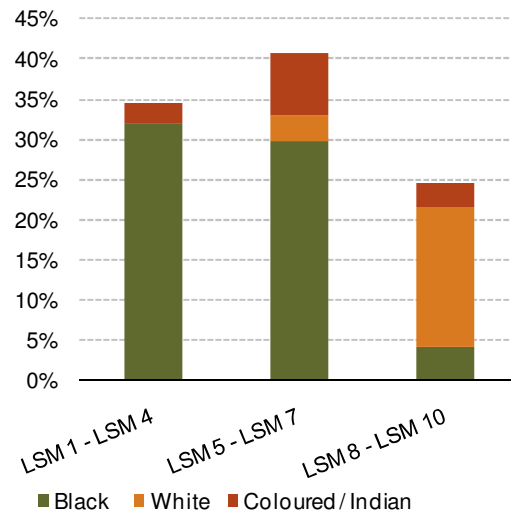


Figure 19: Regular box wine consumer market



Source: DNA Economics, SAARF (2008)

Note: no white respondents were recorded for the sample in LSM 1 – 4.

2.3.3.2 Production landscape

Wine

The production landscape in wine can be roughly divided into private cellars, producer cellars and wholesalers, as follows:

- **Private wine cellars:** these tend to be smaller operations, with over half of these cellars crushing less than 100 tonnes annually in 2009, and can generally be considered boutique winemakers. The number of private wine cellars has more than doubled from 218 in 1996 to 524 in 2009
- **Producer cellars:** Producer cellars consist of co-operatives and ex-co-operatives (co-operatives that have formalised their structure e.g. forming a shareholding company), and as can be seen in Table 7, these producers are generally large operators, with 39 of the 57 producer cellars consisting of operations with an ability to crush over 10,000 grapes annually.
- **Wholesalers:** Wholesalers can be sub-divided into export-only, general wholesalers and producing wholesalers. In general, wholesalers will buy wine in bulk from producer and private wine cellars and market, distribute or export the wine either in packaged or bulk form. A key distinction for producer wholesalers is that this type of wholesaler will both produce their own wine and buy wine in from either producer cellars or private wine cellars. Producing wholesalers may also have a small number of their own vineyards. The number of producer wholesalers has also increased, likely a result of the significant increase in wine exports from South Africa in

recent years. In 2009, export-only wholesalers accounted for 41 of the 102 bulk wine buyers, with producing wholesalers and general wholesalers making up the rest.

Table 7: Wine production by category of producer

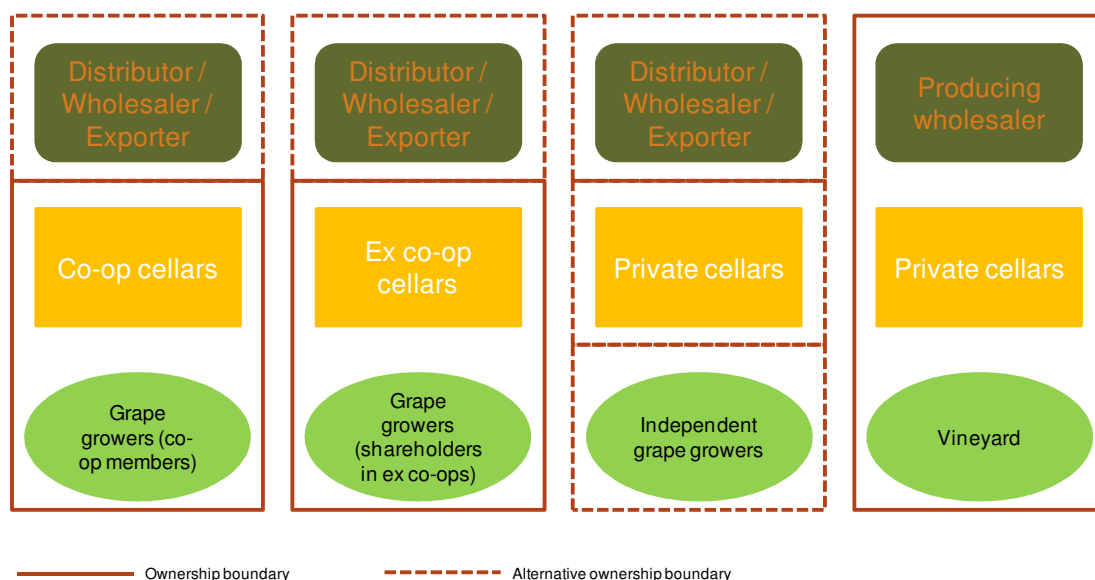
Annual tons of grapes crushed	2009				1996			
	Total	Private cellars	Producer cellars	Producing wholesalers	Total	Private cellars	Producer cellars	Producing wholesalers
1 - 100	281	273	0	8	77	76	0	1
> 100 - 500	149	143	0	6	76	74	1	1
> 500 - 1,000	55	53	1	1	32	30	1	1
> 1,000 - 5,000	64	51	10	3	52	38	13	1
> 5,000 - 10,000	13	3	7	3	19	0	19	0
> 10,000	42	1	39	2	39	0	35	4
Total	604	524	57	23	295	218	69	8

Source: SAWIS, Ponte and Ewert (2007)

For the 2009 year, producer cellars crushed 76.7% of the wine grape harvest, private wine cellars 16% and producing wholesalers 7.3%. The varying ownership structures found in the wine industry are shown in Figure 20. Co-operatives and ex-co-operatives will generally have an ownership structure where grape growers have a share of ownership in the cellars and wine producing operations, and may also own distribution and wholesale structures further downstream. One of the key differences between a co-operative and an ex-co-operative cellar is that ex-co-operative members (the grape producers) are freely able to sell their produce in the open market, to cellars outside of the ex-co-operative.

Private cellars may operate independently of grape growers and wholesalers, or ownership may have some aspects of vertical integration, both upstream into farming and downstream into marketing and retail. Producer wholesalers generally own the input, production and distribution operations, though they are likely to source a large proportion of bulk wine from non-owned vineyards. While Figure 20 below depicts the typical ownership structures in the wine industry, the distribution and flow of wine is more complex and will be discussed in more detail in the distribution section.

Figure 20: Typical ownership structures in the wine industry



Source: DNA Economics, adapted from Ponte et al. (2007)

Distell, a producer wholesaler, is South Africa's leading wine producer and holds many of South Africa's most prolific consumer wine brands. As Table 8 shows, Distell holds six of the top ten brands in basic, premium and super premium wine categories, all of the top ten fortified wine brands and four of the top ten sparkling wine brands.

Table 8: Distell wine brand ownership

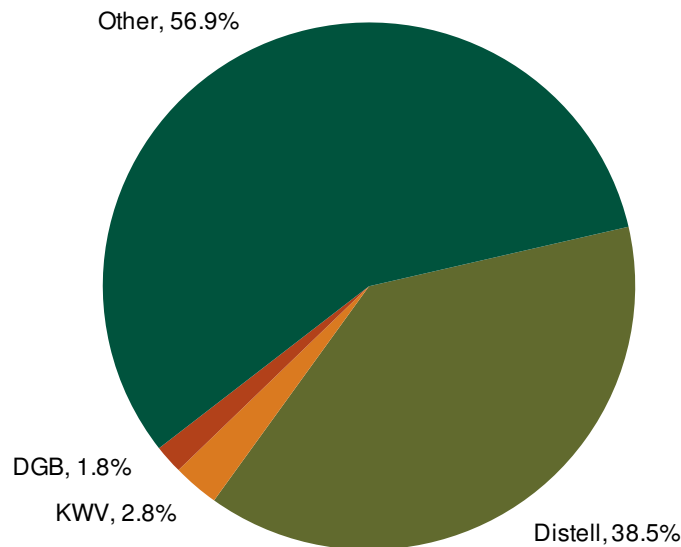
Wine category	Ownership of top ten domestic wine brands				
	Distell (rank of highest brand)	DGB	Other wholesaler/importer	Other co-op/Ex-co-op	Other private cellar/winery
Basic	6 (2nd)		1	2	
Premium	6 (1st)	1		1	2
Super premium	6 (1st)	1	1		2
Fortified wine	10				
Sparkling wine	4 (1st)		2		4

Source: DNA Economics, based on Distell (2009)

DGB and KWV are the other producer wholesalers of significant size in the wine market, though these companies operate mainly in the "high price" wine market and exports comprise a substantial share of their production. DGB sells over 25 million litres of wine annually, of which over 75% is destined for

overseas markets,⁹⁸ implying a domestic market share of around 1.5% - 1.8%. KWV sold 20 million litres of wine in 2009/10,⁹⁹ with the company's South African sales (including brandy) making up just under 50% of total sales,¹⁰⁰ contributing to a domestic market share of about 2.4% - 2.8%.¹⁰¹

Figure 21: SA domestic wine market shares



Source: DNA Economics estimations, based on company and SAWIS data

Given Distell's strong brand ownership across the various categories of wine, it is estimated to hold around 35% and 40% of the total South African wine market¹⁰² (i.e. inclusive of natural, sparkling and fortified wine), selling 137.3 million litres of wine on the South African market in 2009/10. This reflects the overall low level of concentration of the wine industry in South Africa, with a multitude of firms and wineries making up the remaining 65% - 70% of the domestic wine market. Some industry players estimate that there are over 3 500 wine labels for consumers to choose from in the South African market.

South Africa's landscape is middle of the road when compared to old world and other new world producers. In new world wine countries, it is not uncommon to see the largest wine producer account for one quarter of domestic sales, but the share of the next two or three firms is also typically of significant size. By contrast, in the traditional producing countries of Europe, the shares of the four largest wineries only account for between 4% and 20% of total sales.¹⁰³ South Africa has a

⁹⁸ Based on industry interviews

⁹⁹ KWV (2010A)

¹⁰⁰ KWV (2010B). The company does not segment sales by liquor segment across countries.

¹⁰¹ Based on AC Nielsen data for 2010 and own calculations, provided by industry sources.

¹⁰² Based on own calculations using Distell and SAWIS data.

¹⁰³ Anderson 2010

combination of both structures, with a single large producer and many smaller wine producers in the domestic market.

The export market appears to have even lower levels of concentration. Distell was ranked as the 10th largest exporter of wine worldwide in 2006,¹⁰⁴ and exports approximately 9% - 10% of South Africa's total wine exports.¹⁰⁵ South Africa's top ten exporters are estimated to account for between 50% and 55% of total exports,¹⁰⁶ with industry stakeholders suggesting that consolidation in the wine industry is required if South Africa is to make further inroads in the export market (a proliferation of small brands, it is suggested, makes it difficult to achieve a strong brand in export markets, and to reap the benefits of marketing expenditure). By comparison, it is estimated that four companies make up 85% of Australia's wine exports.¹⁰⁷

Brandy

Sales of brandy in the South African market were estimated at 44.6 million litres in 2009,¹⁰⁸ and have seen a declining trend since 2007 as competition from other alcohol categories has increased. Roughly 7% of the total wine crop (grapes crushed) was used directly for brandy distillation in 2007, with the proportionate share of the crop used for brandy trending sales. As opposed to other spirits categories, much of brandy consumed in South Africa is produced locally and not imported, though premier imported brands (such as the brand imported by Pernod Ricard, Martell) and cognacs have a presence in South Africa.

¹⁰⁴ Ponte (2007)

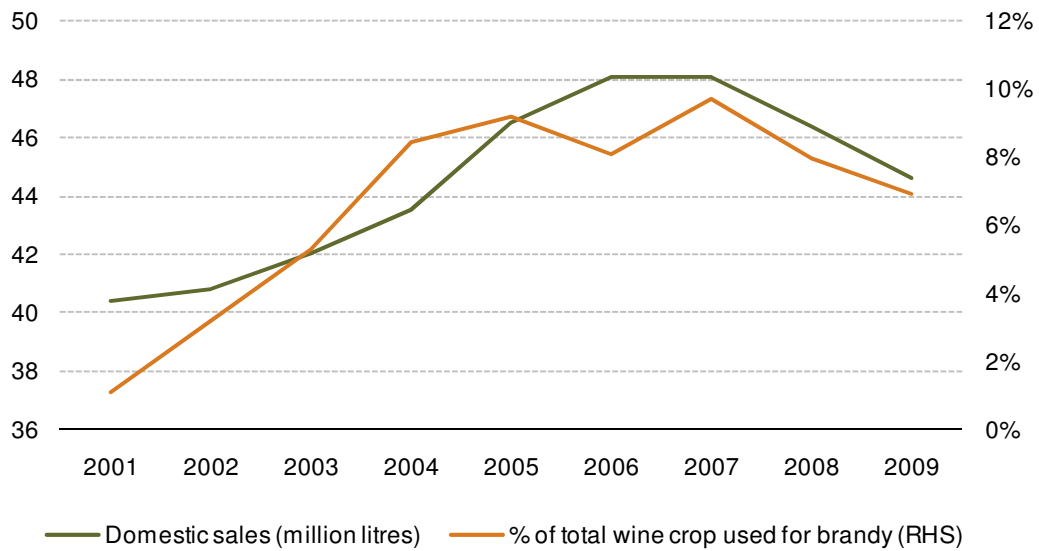
¹⁰⁵ Based on own calculations using Distell and SAWIS data.

¹⁰⁶ WOSA (2007) and industry interviews.

¹⁰⁷ Based on industry interviews

¹⁰⁸ Based on Euromonitor (2010) and SAWIS (2009)

Figure 22: Brandy sales and production

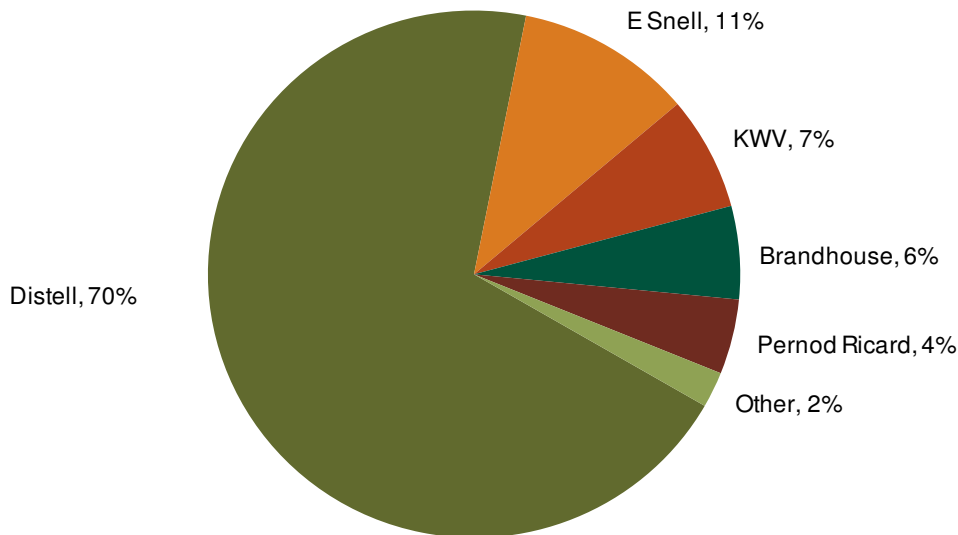


Source: DNA Economics, SAWIS

The production of brandy is dominated by Distell, as shown in Figure 23. Distell operates across all the brandy segments (from sub-proprietary to super premium) and is ranked as the fourth largest brandy producer worldwide.¹⁰⁹ 98% of the brandy market is accounted for by five companies, with E Snell the next biggest competitor to Distell.

¹⁰⁹ Distell (2010)

Figure 23: 2010 Brandy market shares



Source: DNA Economics, based on AC Nielsen off-consumption data

Distell leads the market in terms of both volume and the number of products sold, and has in excess of 14 brands. This is compared to competitors such as Brandhouse and Pernod Ricard, which have established significant market share with single brands. Proprietary brandies account for the largest proportion of the market¹¹⁰ and are monopolised by Distell brands. The premium and super premium segments of the market are more competitive, and is where Distell faces the highest degree of competition. In this sense the market for brandy is very similar to that for beer, with the historically largest local producer (i.e. Distell) facing the biggest competition only in sectors of the market where margins are higher and price becomes a less significant factor in the consumer's purchase decision.

BEE characteristics

As one of the major agricultural sectors in South Africa, transformation of the wine industry has been prioritised by government. The industry adopted a BEE transformation charter in 2007, one of the key principles of which is a focus on creating new BEE opportunities in addition to the ownership redistribution of existing firms.¹¹¹ Assessing progress in meeting these objectives to date is complicated by the complex structure of the wine industry. At the grape production level, it is estimated that less than 3% of vineyards are black-owned.¹¹² This is not surprising, given the high entry barriers for new farmers (such as the cost of the farm and necessary equipment), and the fact that roughly

¹¹⁰ Based on DNA calculations using AC Nielsen data.

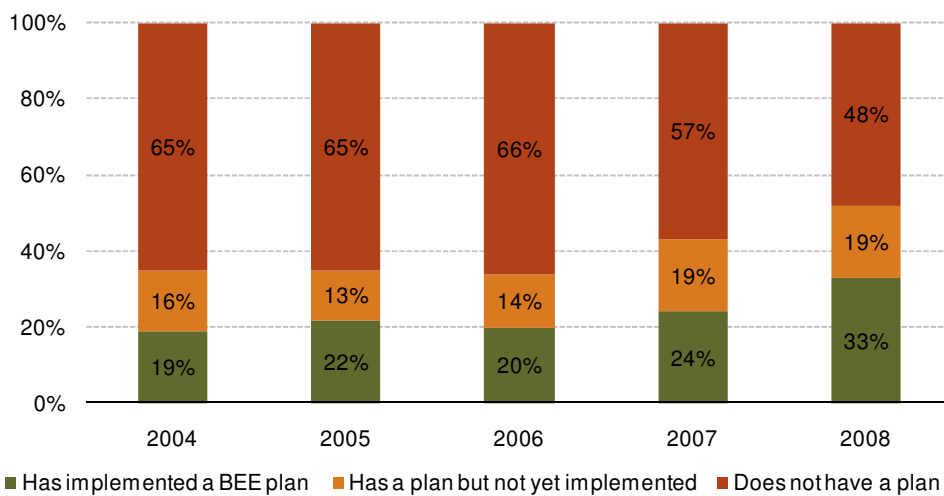
¹¹¹ WOSA (2009)

¹¹² Planting (2010 B)

80% of wine grape farms are exempted from BEE compliance requirements¹¹³ since they fall below the R5 million turnover threshold set out by the DTI's codes of good practice.¹¹⁴

At the wine production level, levels of BEE ownership are considered low, though there has been a significant increase in the number of producer cellars that have implemented a BEE plan, or are in the process of implementing one, as shown in Figure 24. Since 2004, the number of producer cellars with a BEE plan has risen from 35% to 52%.

Figure 24: BEE plans at producer cellars



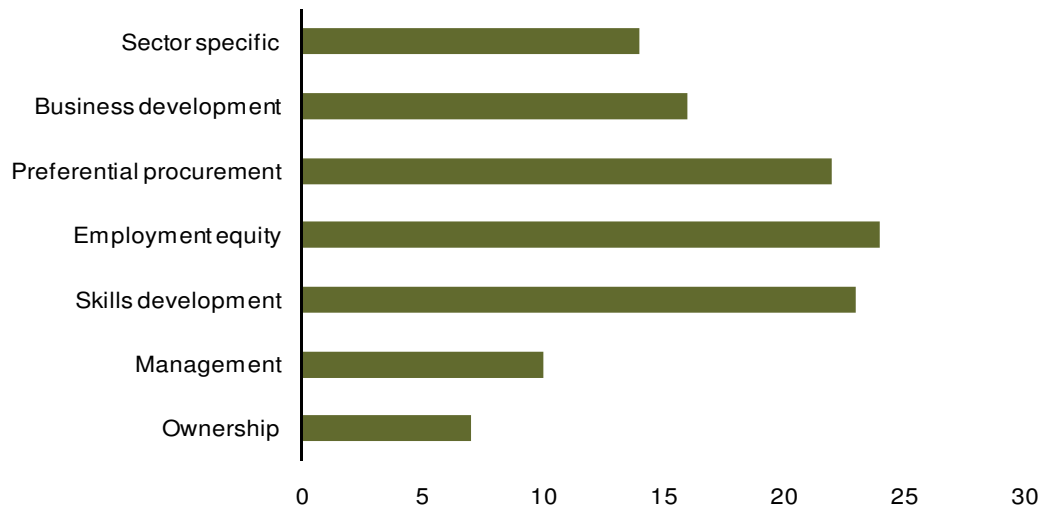
Source: PWC (2009)

However, ownership appears to be the least favoured element of BEE plans for producer cellars (as shown in Figure 25), who are the major producers of wine in South Africa. This may reflect the co-operative structure of many of these producer cellars, and is thus driven by low levels of transformation at farm level.

¹¹³ SA Wine Council (2007)

¹¹⁴ While these farms may be formally exempted from BEE compliance, the Wine Industry Transformation Charter, places voluntary BEE compliance on exempted micro-enterprises (EMEs). EMEs that comply with a select number of scorecard elements will be deemed to have achieved BEE status.

Figure 25: Popularity of scorecard elements of BEE plans (number of cellars, 2008)



Source: Adapted from PWC (2009)

The larger producer wholesalers, such as Distell, KWV and DGB, have achieved varying levels of BEE ownership. KWV is the first major player in the spirits and wine sectors to achieve level 4 BEE compliance,¹¹⁵ with the Phetogo consortium owning 25.1% of equity (of which, Phetogo Investments (now Withmore 1) holds 18.3% and the KWV Employee Empowerment Trust holds 6.8% of ordinary shares). 15% of Distell's ordinary shares are owned by BEE shareholders, via a deal which includes a consortium of Distell employees, a corporate social investment trust and Wiphold Beverages. As at 2010, Distell reported level 6 BBBEE compliance. DGB has a 10% BEE shareholding.¹¹⁶

Overall it is estimated that 4.4% of entities in the wine industry have some degree of black ownership,¹¹⁷ though this may not accurately reflect the true degree of ownership for non-exempt entities, as it is skewed by the large number of grape producers exempt from BEE compliance.

2.3.3.3 Distribution network

Wine

Figure 26 below provides a rough summary of the distribution chain in wine in South Africa. While producer cellars are responsible for the bulk of wine production, producer wholesalers are generally responsible for the marketing and distribution of wine, buying bulk wine in from both private and producer cellars to sell downstream. A recent trend amongst producer cellars is to increasingly

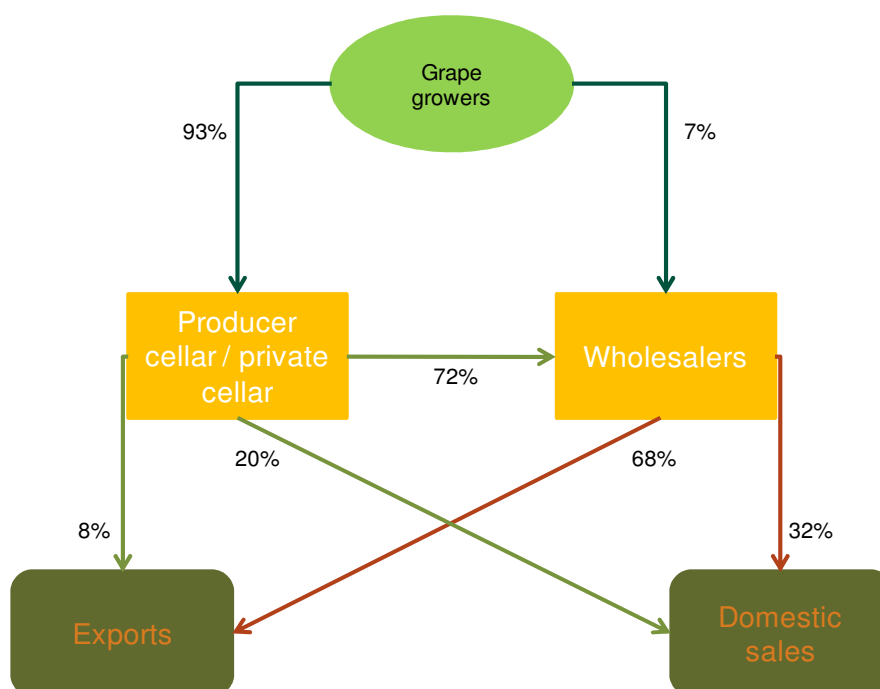
¹¹⁵ KWV Holdings Ltd (2010 C)

¹¹⁶ DGB website

¹¹⁷ Planting (2010)

combine activities and engage in their own marketing, distribution and export activities.¹¹⁸ It is estimated that in 2009, producer and private cellars sold roughly 70% of wine produced to wholesalers (including producing wholesalers), with approximately 20% sold directly on the domestic market and 8% exported. Producer cellars and private cellars made up just under half of domestic wine sales (direct sales), accounting for 34% and 13% of domestic sales in 2009 respectively.

Figure 26: South African wine flow (2009)



Source: DNA Economics estimates based on SAWIS data

Wholesalers comprise export-only wholesalers, domestic wholesalers and producer wholesalers (who produce a portion of their own wine), and are responsible for the bulk of both exports and domestic wine sales, accounting for 53% of natural wine sold on the domestic market¹¹⁹ in 2009. Wholesalers consist of producer wholesaler companies such as Distell, DGB and KWV, and wholesale only companies such as Vinimark.¹²⁰ The largest proportion of wholesalers' wine is exported (about 68% in 2009). Bulk sales account for a significant proportion of all exports. Of total wine exported in 2009, 38% was in bulk, with bulk shares rising in recent years in order to reduce costs.¹²¹

¹¹⁸ Ponte et al (2007)

¹¹⁹ Based on SAWIS data

¹²⁰ According to the Vinimark website it is the largest independent specialist wine wholesaling company in South Africa.

¹²¹ Ponte et al (2007)

The final level of the wine distribution chain is the distributing/marketing agents and retail outlets from which consumers make purchases. Supermarkets handle between 35% and 39% of all off-trade wine consumption (by value) in South Africa, while discounters (such as Massmart and Metcash, which can also be referred to as “big box” stores) handle about 41%.¹²² The remainder is done through bottle stores, specialists and direct sales (including cellar door sales). Off-consumption by supermarket retailers is dominated by the listed retailers, who have different wine purchasing strategies. For example, the bulk of Woolworths’ wine business is based on its own private label, with the retailer having control over blend creation, labelling and specifications to cellars for wine production. Other listed supermarket retailers sell mainly branded wine, with wine bottled and supplied directly by the producers and wholesalers.¹²³

The rest of the retail sector (both off-consumption and on-consumption) is serviced through a combination of distributors and agents (often subsidiaries of producing wholesalers), as well as through larger discounters and bottle stores, who will redistribute wine products purchased from the wine wholesalers. Some wholesalers also distribute directly to informal (but licensed) liquor outlets in township areas, though much of the informal outlets are serviced by redistribution through retail wholesalers and bottle stores.¹²⁴

Brandy

Brandy is distributed in much the same way as other spirits products and will not be dealt with in more detail, with the exception to note that Distell is responsible for a major share of distribution, given its share of the market. In addition to direct distribution to major retailers, Distell operates a number of subsidiaries, such as Henry Taylor Ries,¹²⁵ which are responsible for the wholesale of particular Distell brands.

2.3.3.4 SMME activity in the wine sector

Given that large firms do not dominate the wine industry to the extent apparent in other sectors of the liquor industry, it would appear that there is more scope for SMME activity in the wine sector. As has been previously shown, the ownership structure of wine and grape producers is highly intertwined, with grape producers often having a shareholding in cellars (either formally or through a co-operative structure) and with private estates often owning their own vineyards, or vice versa. It is therefore useful to view the wine and wine grape industry in totality.

As previously indicated, the majority of firms involved in the wine production chain can be considered small firms, with roughly 80% of grape producers earning less than R5 million annually. This is also reflected in the size of grape producers, with roughly 78% of the over 3 600 producers producing less than 500 tons of grapes annually. At the wine production level there also appears to be a large

¹²² Ponte et al (2007) and Blok (2007)

¹²³ Ibid

¹²⁴ Foxcroft (2009)

¹²⁵ Henry, Taylor, Ries is a wholesaler and subsidiary of Distell (based on Distell’s promotion of access to information manual), and distributes both Distell products and imports under license by Distell.

number of small players, with 430 of the 604 wine producers crushing less than 100 tons of grapes in 2009. However, although these figures may give the appearance of easy entry into the wine industry, this is not always so, for a number of reasons.

First, the wine industry is fairly capital intensive, with substantial land, machinery and human resource investment costs. It is estimated that the average total production cost for wine grapes was close to R27 000 per hectare in 2009, resulting in an estimated average total production cost of roughly R1 900 per ton. For smaller operations that do not have the benefit of economies of scale, this cost can rise substantially. The addition of a wine cellar for the production of wine from grapes can further substantially raise the production cost and investment required. The often prohibitive cost of establishing both a new vineyard and cellar is reflected by the fact that most new cellars have been built on existing wine farms. The sharp increase in private cellars over the last five years can, in part, be attributed to the use of wine farms and cellars as a “lifestyle choice” for wealthier individuals, confirmed by a survey of close to 100 wine farms, where 25% responded that the running or establishment of the wine farm was in order to achieve a lifestyle objective rather than a profit objective. Further, 47% responded that farming was not their principal occupation.

Secondly, Nakana (2009) shows that experience and a combination of business and sector specific skills are key contributing factors to the successful establishment of a wine farm. The longevity of the farm and cellar are key issues in determining the success of the establishment, with a significant proportion of the small farms and cellars having been in operation for long periods. Finally, the production of wine is dominated by producer cellars (which produce close to 80% of South Africa’s wine) which operate on a co-operative system with grape producers. This can serve as an impediment to prospective new entrants at the grape production level, which would require access to producer cellars, an unlikely scenario in a market with excess wine supply. Private wine cellars accounted for only 13% of domestic sales in 2009, reflecting the dominance of the larger wine producers.

2.3.4 Spirits

Please note that although the production characteristics of brandy are dealt with in the wine section above, for the purposes of demand analysis it will be treated as a spirit and reviewed in this section.

2.3.4.1 Demand characteristics

Demand characteristics in the spirits market vary according to the type of spirit and the price category into which it falls. Broadly speaking, spirits market participants think in terms of the following four categories of brands in spirits:

- **Sub-proprietary brands:** budget brands for the very price conscious consumer, who is often relatively indifferent to branding, and which tend to be sold with relatively thin profit margins. The bulk of sub-prop brands are likely to be manufactured locally, and the category experiences substantial competition from the illicit market, which will be discussed further in section 2.3.6.
- **Proprietary brands:** producers tend to sell high volumes of proprietary brands, but have to spend a lot on advertising to maintain the broad market appeal of the brand.

- **Premium:** although there are some domestic premium brands, many are international. Advertising campaigns can be more targeted and are thus often less expensive than advertising campaigns for proprietary brands.
- **Super premium:** although there are again South African super premium brands, the bulk of this category is international brands which are imported pre-packaged

The price range for each of these categories differs depending on the spirit in question. One way of measuring the price range per category is suggested by Euromonitor, as follows: the comparison should start by identifying the benchmark brand, which is typically the brand which achieves the highest volume sold in the market, and is often a proprietary (or standard) brand. Price ranges are then determined in reference to the benchmark brand.

- “Super-Premium: 30% or higher than price of the benchmark brand
- Premium: 10-29.99% higher price than benchmark brand
- Standard: Between 9.99% lower or 9.99% higher than benchmark brand
- Economy: At least 10% lower than the price of benchmark brand”¹²⁶

So for example, if the benchmark brand retails at around R75.00 per 750ml, economy (ie sub-proprietary) brands would be those that retail for less than R67.50, premium brands would be in the price range from R82.50 to R97.50, and super-premium would retail for above R97.50. In practice, South African spirits categories may be slightly wider, with for example discussions with some market participants suggesting that the price range for proprietary brands could be as wide as R70-200, and R200-800 for premium brands.

High priced liquors are more likely to be fully imported, to be manufactured at a single location/facility, and have higher quality inputs. However, these kinds of quality differentials do not fully explain the price differential between different types of spirit, which is instead typically driven by the underlying value of the brand the spirit is marketed under. Creating a high value brand is a product both of the amount of skill, time and money invested in promoting the brand, and “luck” or brand fashionableness, and often higher value brands have much higher profit margins.

The value of strong brands is of particular importance in the whisky market. Compared to other international markets, South Africa displays disproportionately high consumption of premium and super premium whiskey,¹²⁷ with 87% of whiskey sold in South Africa in 2009 falling into the premium and super-premium categories.¹²⁸ The customer segment which drives this demand is what is known colloquially as “black diamonds” – the emerging black middle class. This customer segment is highly

¹²⁶ Euromonitor 2010, 3

¹²⁷ For example, the Scotch Whisky Association identifies South Africa as the world’s 5th largest importer of Scotch whiskies in 2009 (quoted in The Economist, “Doubles all round”, Jun 17th 2010, available at <http://www.economist.com/node/16381365>).

¹²⁸ Measured by volume. In comparison, only 17% of gin and 6% of vodka sold fell into these categories in 2009 (Euromonitor 2010, 7-8).

aspirational and very brand conscious, and may be happy to drink proprietary brands at home, but prefer to conspicuously consume premium brands in public. International brands are seen as more aspirational, which has negatively affected the profile of the mainly indigenous brandy market.

While producers in the sub-prop market compete strongly on price, the relationship between price and quantity demanded breaks down or even reverses at the top end of the spirits market. For super premium brands, high price may be seen as an indication of quality, and may in fact increase demand. Producers may restrict the volume of output in order to create an impression of exclusivity and quality, and are careful to ensure that the mystique of the brand is supported by its production processes. For example, ensuring that rum is made in Cuba or vodka in Nordic countries may have more to do with maintaining the brand image than with ensuring the quality of the final product. Conversely, producers will be loathe to disclose that the product is made with a blend of imported flavourants and local ethanol at a local production plant, if this contrasts with the image of the product brand.

Although discerning customers remain able to distinguish the quality of different types of spirits based on taste only, they probably constitute a very small percentage of the total customer base. For example, on-license customers who order super-premium spirits with mixers that more-or-less completely disguise their taste are basing their buying decisions much more on image than on product quality. The marketing expenditure that builds a brand is thus integral to the cost of producing and selling spirits, and may be sufficient to increase barriers to entry for small firms, particularly in proprietary brands where marketing expenditures are often high.

As a broad generalisation, customers switch from brown spirits to white spirits to cane as their income decreases. Cane has a brand problem, as it is seen as non-aspirational. On a regional basis, demand for vodkas and other white spirits is particularly marked in KwaZulu Natal, while the Western Cape sees higher brandy sales. As a whole, brandy consumption forms a larger part of the spirits market than is typical internationally.

In the sub-proprietary market, competition is likely to have been somewhat distorted by excise issues around the taxation of wine aperitifs (which are a relatively extremely cheap and widely available liquor class in South Africa). These issues will be discussed in more depth in section 2.3.6.2.

Brandy

Brandy has not been able to keep up with the growth in demand for whiskey both globally or locally, though it remains South Africa's number one spirits drink. The lagging growth in brandy is a result of a number of factors which affect the consumer's perception of brandy. As a spirit segment there has not been a concerted effort to promote brandy either locally or internationally, while whiskey has seen significant marketing, with brand leaders within the segment leading this push. It is estimated by brandy industry players that a material investment in marketing strategies would be required to change consumers' perceptions of brandy.

Production requirements in order to label a spirit a brandy are considered far more stringent in South Africa compared to elsewhere in the world. For example, brandy in South Africa is required to be matured for a minimum of three years in oak barrels with a maximum capacity of 340 litres.¹²⁹ The EU is less stringent, requiring a maturation period of one year in oak receptacles or six months in oak casks with a capacity of less than 1 000 litres.¹³⁰ Globally and within South Africa, brandies produced under these rigorous standards are however grouped with lower quality brandies (and lower quality spirits in general) by consumers, though quality levels are often higher and more consistent with premium brandies produced in other countries. This also results in the perception that brandy is of a lower quality than whiskey, despite the fact that the maturation requirements for South African brandy more closely match the EU's requirements for whiskey.

South African premium brandies often compete with international premium spirits and appellation brandies such as Cognac (a brandy appellation reserved exclusively for brandy produced in the Cognac region of France). Given the average consumer's low perceptions of South African premium brandy (both locally and internationally), South African premium brands struggle to compete effectively with international premium products. Similarly to wine, marketing of brandy to black consumers in South Africa is considered essential to ensure growth in the brandy industry.

2.3.4.2 Production landscape

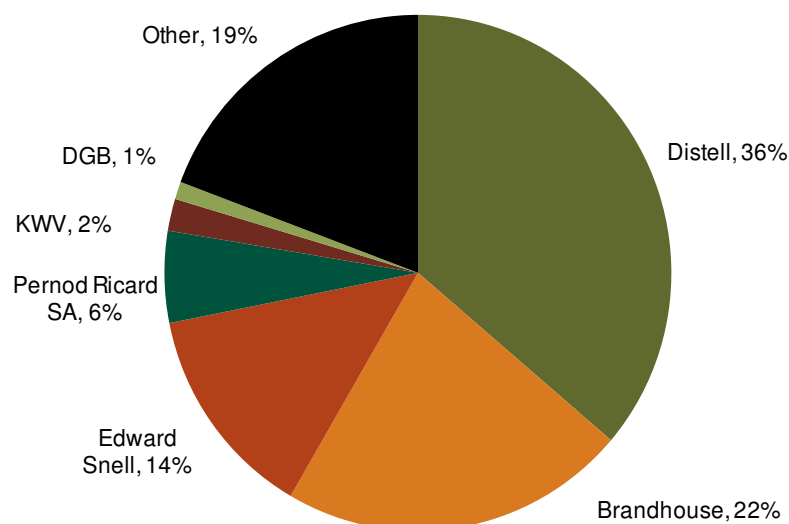
Figure 27 below illustrates market share in the spirits sector, measured by the volume of spirits sold. Distell is the largest participant in the market, although it has lost some market share in recent years (Euromonitor data suggests Distell's market share has decreased from 38% in 2005 to 36% in 2009). Some of this ground has been lost to the second largest competitor in the market, Brandhouse,¹³¹ which has risen from 19.6% of the market in 2005 to 22.2% in 2009. The two largest firms internationally in the spirits market, namely Diageo and Pernod Ricard, have a substantial local presence, although Diageo's Brandhouse footprint is considerably larger than Pernod Ricard's.

¹²⁹ SA Brandy Foundation website

¹³⁰ European Union (2008)

¹³¹ Brandhouse was formed in 2003 as a joint venture between Diageo, Heineken International and Namibia Breweries Limited (<http://www.brandhouse.co.za/BrandhouseStory.aspx>).

Figure 27: Brand share of spirits, 2009 (% of total volume)



Source: Euromonitor 2010, 11

Distell reputedly sells roughly three quarters of all brandy in the local market, with Brandhouse and Pernod Ricard both having large whisky offerings. The single largest brand in the South African market by volume in 2009 was Smirnoff, which is owned by Diageo and distributed locally by Brandhouse. Smirnoff is also coincidentally the only white spirit in the top ten brands by volume, and Amarula is the only liqueur – the balance is made up of brandies and whiskeys.

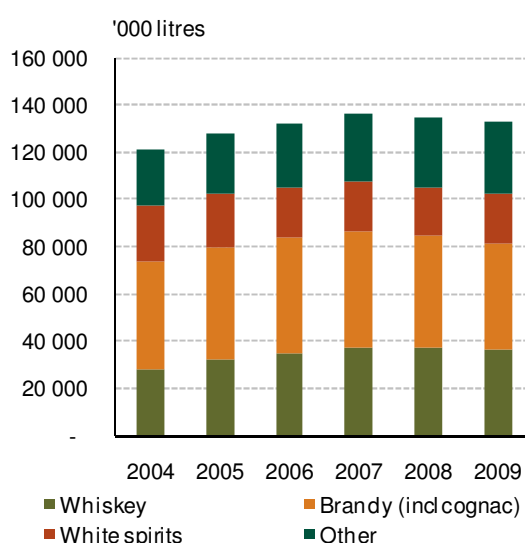
Table 9: Spirit brand market share by volume

Brand	Type	Local owner (global owner)	2006	2007	2008	2009
Smirnoff	Vodka	Brandhouse (Diageo Plc)	6.4%	6.4%	6.9%	7.5%
Klipdrift	Brandy	Distell	6.2%	6.2%	6.3%	6.2%
Richelieu	Brandy	Distell	5.1%	5.2%	5.5%	5.1%
Wellington VO	Brandy	Edward Snell	4%	3.9%	3.7%	3.7%
Viceroy	Brandy	Distell	3.6%	3.4%	3.3%	3.1%
Bell's	Whisky	Brandhouse (Diageo Plc)	2.7%	2.8%	3%	3%
First Watch	Whisky	Edward Snell	2.7%	2.6%	2.7%	2.8%
J&B	Whisky	Brandhouse (Diageo Plc)	2.3%	2.4%	2.6%	2.5%
Bertrams VO	Brandy	Brandhouse (Diageo Plc)	2.9%	2.8%	2.6%	2.5%
Amarula	Liqueur	Distell	2.5%	2.7%	2.4%	2.4%
Others	Various	Various	61.7%	61.6%	61.1%	61.1%

Source: Euromonitor 2010

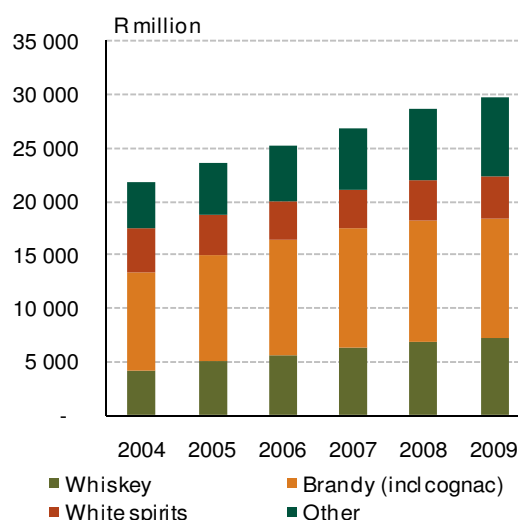
The spirits market as a whole has experienced relatively flat growth in recent years. From 2004 to 2009, the average compound annual growth rate (CAGR) for all spirits, by volume, has been only 2.0%. By spirit type, whisky and other types of spirits have performed fairly well, at a CAGR of 5.6% and 6.1% respectively. The volume of brandy sold has declined marginally, by an annual average of -0.4%, while white spirits have seen a more rapid decline, at -3.1% a year.

Figure 28: South Africa, spirits sales by product type and volume



Source: Euromonitor 2010

Figure 29: South Africa, spirits sales retail value



Source: Euromonitor 2010

One of the key forces driving change in the international spirits market is the trend towards premiumisation. Pernod Ricard describes the characteristics of markets in which premiumisation is of importance as follows:

*"In developed countries, more and more consumers want quality and luxury, for which they are willing to pay a higher price. In emerging countries such as India or China, improvements in the standard of living are leading consumers to seek better quality products than those traditionally offered locally."*¹³²

Companies can appeal to the premiumisation trends in a number of ways. One of the simpler ways to is to emphasize the appellation of the product, such as single malt Scotch whiskey, or Jamaican rum. Another is to invest very heavily in the global marketing of key brands. Companies may also introduce higher quality versions of established brands, in order to migrate the brand up the value chain.

In developing markets such as South Africa, the premiumisation trend means that types of spirits which are viewed as traditional to the drinking culture (and this includes brandy and cane spirits, for

¹³² <http://www.pernod-ricard.com/en/pages/116/pernod/Group/Strategy/Premiumisation.html>

example), are less likely to be perceived as aspirational. In certain areas of the spirits market, therefore, international brands provide a competitive advantage. International brands are in some cases sold locally by the owner of the brand, but may also be sold by a local company which has been licensed to distribute the brand. Where goods are sold under license, the international brand owner may contribute towards local promotion costs.

For brands which emphasize appellation, goods are by their nature imported. However, in many brands appellation is less important, and goods can be either imported in bulk and bottled locally; blended from partially imported and partially local ingredients and bottled locally, or produced entirely locally. In 2007, South Africa imported R1.4bn of spirits, on a net basis.¹³³ This represents only 5.2% of the size of the end market for spirits, which stood at R26.9bn in 2007.¹³⁴ However, transfer pricing practices at multinational groups may distort this picture,¹³⁵ and SARS excise collections patterns suggest that the proportion of spirits imported, measured by absolute alcohol content, is closer to 37%.

Table 10: Proportion of spirits imported, by category

	Total excise and customs duty paid, Rm	Excise paid, Rm	Implied proportion imported
Liqueurs and other spirituous beverages	305.8	270.2	11.6%
Cane spirits	1 088.1	990.9	8.9%
Grain spirits	1 024.7	297.3	71.0%
Other spirits	49.5	0.7	98.5%
Total	2 468.1	1 559.2	36.8%

Source: SARS, DNA calculations

The majority of imported spirits are imported in a packaged rather than bulk form. As shown in Table 11 below, the only spirit imported disproportionately in bulk in South Africa is cane spirits. Importing premium liquors in a highly processed, pre-packaged state is part of the process of protecting brand image and geographical appellation.

¹³³ Trade Map data, oanda.com historical exchange rates

¹³⁴ Euromonitor data

¹³⁵ Clare et al 2004, 52

Table 11: Bulk versus pre-bottled spirits imports

	Excise collections on imports, R		% bulk
	Packaged as 2 litre or less	Bulk	
Wine spirits	8 917 540.6	26.4	0.00%
Whiskies	707 747 759.8	19 575 753.9	2.69%
Rum and other spirits - sugarcane	15 097 685.4	82 127 215.5	84.47%
Gin and geneva	3 782 471.0	119.8	0.00%
Vodka	10 409 455.1	52.5	0.00%
Liqueurs and cordials	33 752 882.9	1 790 888.8	5.04%
Other spirits	33 276 485.8	153 746.8	0.46%
Total	812 984 280.6	103 647 803.7	11.31%

Source: SARS, DNA calculations

Despite the marketing success of international brands in South Africa, there has also been some development of South African brands in the international market. Amarula is at present the best example of a local developed brand which has achieved international success. Developed by Distell in 1989, the brand is now the second largest premium cream liqueur in global markets,¹³⁶ and continues to grow strongly.

BEE characteristics

Unlike many other segments of the liquor industry, a large proportion of brands in the spirits market are of international origin. This is reflected in the high share of imports in many spirits categories. The international nature of this market segment therefore limits the extent to which BEE can take place, as BEE stakeholding is by definition excluded in cases where both ownership and production facilities are located offshore.

The only significant BEE transaction identified in the spirits market has been undertaken by Distell. 15% of Distell's ordinary shares are owned by BEE shareholders, via a deal which includes a consortium of Distell employees, a corporate social investment trust and Wiphold Beverages. As at 2009, Distell reported level 6 BBBEE compliance.

2.3.4.3 Distribution network

When distributing spirits to on and off-license retailers, it is helpful to be able to offer the client a basket of products. It is easiest for the spirits producer/distributor to establish a relationship with a retailer if their offering includes a popular proprietary or premium brand. Once the commercial relationship has been established, it is then relatively easy to cross-sell the rest of the brand basket, across the quality

¹³⁶ Distell analyst presentation, 28 August 2009.

and price spectrum. Sub-prop brands are however disproportionately sold via off-licenses, although they may ultimately be sold to the end customer in an unlicensed on-consumption outlet/shebeen.

Analysis by Euromonitor suggests that approximately 36% of spirits by volume were sold in on-licenses and 64% in off-licenses in 2009,¹³⁷ although these numbers may again be affected by the extent of unlicensed retailing activity. However, when measured by value rather than volume, 68% of the value of spirits is sold in an on-license environment. This reflects both higher mark-ups in the on-license environment, and the prevalence of higher value brands in on-license sales.

In recent years spirits producers have been affected by consolidation in the off-license retail environment, driven by the entry of supermarket chains into this sector. Prior to this consolidation, a large proportion of off-licenses were sole proprietorships, each of which did relatively small volumes and was thus relatively unimportant to the spirits producer. In the current environment, however, business is much more concentrated into a smaller number of key customers, some of which are big enough to be important to the producer's bottom line.

Large or key customers of this sort are more likely to be able to negotiate aggressively on price, but are still likely to be very attractive customers. Because they do large volumes, the producer can realise economies of scale when selling to them, and they are less likely to pose a credit risk. However, large customers are also more likely to be very demanding on service levels and price stability, which has driven increasing sophistication in the spirits distribution value chain and sales force.

2.3.4.4 SMME activity in the sector

As discussed in preceding sections, the spirits market is increasingly dominated by a focus on international brands and aspirational brands (the "premiumisation" trend). Both trends tend to mitigate against the development of a vibrant SMME sector in spirits, as international deals and the often substantial marketing expenditure associated with building brands are both out of reach for many SMMEs. SMME spirits production may therefore be limited to niche markets for indigenous specialities such as witblits and mampoer.

There may be greater scope for SMME development in the distribution of spirits. However, as discussed, the ability of the distributor to offer a basket of liquor products is advantageous from a competitive point-of-view, which may tend to crowd out very small SMMEs, which have less ability to finance the necessary inventory.

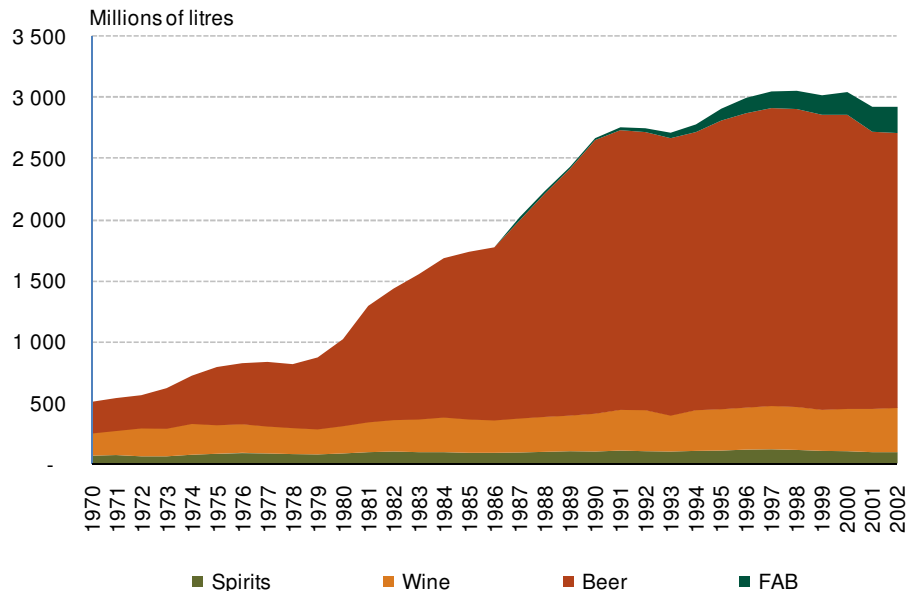
2.3.5 Ciders and Ready-to-Drinks (RTDs)

Ready-to-drink products (also sometimes referred to as flavoured alcoholic beverages, or FABs) are a relatively recent innovation in the South African liquor market. As shown in Figure 30 below, their market debut occurred in very small volumes in the late 1980s, and by 2002 RTDs comprised approximately 4% of liquor by volume sold (or around 3% by volume of absolute alcohol sold). The

¹³⁷ 2010, 6

market has however grown rapidly in recent years, and by 2009, FABs were estimated to comprise 6.1% of the liquor market, by volume of absolute alcohol.

Figure 30: Late arrival of RTDs in the South African market



Source: Distell presentation to Nedcor, 24 February 2003, slide 10

2.3.5.1 Demand characteristics

RTDs and ciders are typically regarded as being in the same market. This can be seen by industry practice, with firms often reporting on RTDs and ciders as part of the same division, but is also confirmed by pricing practices. For example, an examination of liquor prices displayed on the website of a major South African retailer suggests that ciders and RTDs are on average around 24% more expensive than beer, but the average price of ciders and apple ales versus the average price of RTDs displays a difference of only 0.3%.¹³⁸ In addition, anecdotal evidence suggests that a recent increase in excise taxes on RTDs in Australia resulted in consumers switching to ciders,¹³⁹ which suggests that in that market at least, the products are seen as close substitutes.

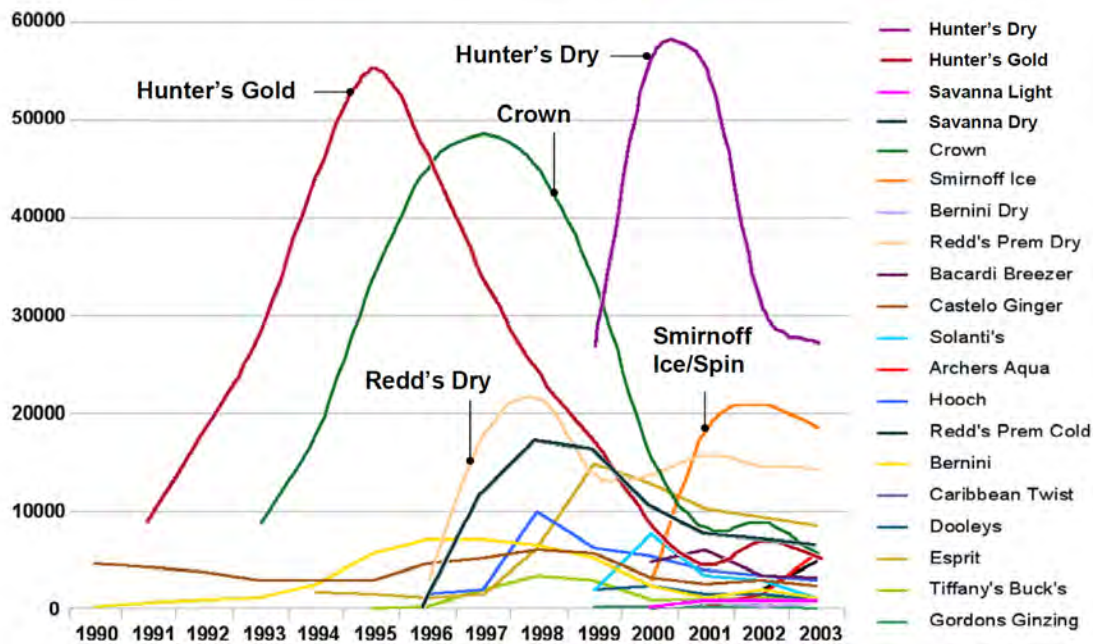
RTDs and ciders are an easily palatable form of alcoholic beverage, which is sold to a youth-focused market. As a consequence of the younger average customer age, customers are less likely to display brand loyalty than in other kinds of liquor markets, and fluctuations in the fashionableness of a brand translate into substantial fluctuations in volumes sold. As illustrated in Figure 31 below, a market leading brand such as Hunter's Dry reached the height of its popularity only 18 months after its

¹³⁸ Data downloaded from <http://www.makro.co.za> on 13 October 2010. Prices of cases of 24 bottles or cans in the volume range 275ml to 350ml were compared.

¹³⁹ <http://www.theshout.com.au/2010/09/24/article/RTD-Demand-feeds-Cider-Growth---/WFHRSZGWIB.html>

release, but then lost roughly half its volume over the following 18 months. As a result of this demand characteristic, it is important for companies to keep innovating in RTD in order to maintain market share. A strong parent brand (for example, the brand of the spirit used in the mixer) may help to both launch the product and stabilise customer demand.

Figure 31: Volume fluctuations in RTD/FAB



Source: Nielsen's, quoted in Distell 2003 AGM presentation, slide 11

The consumer is also highly sensitive to pricing and convenience. Much of the appeal of an RTD is that it removes the need to mix a drink from scratch, which has convenience and pricing advantages, ensures that the product is available at a consistent quality level, and improves the portability of the product.

Compared to international markets for ciders and RTDs, South Africa has a larger than average demand for cider products. As a result, Distell is reportedly the third largest producer of ciders internationally, and its Hunter's and Savanna cider brands are the second and third largest cider brands in the world, respectively.¹⁴⁰

2.3.5.2 Production landscape

The production process for ciders differs from that for FABs. Whereas FABs are produced by blending alcoholic inputs with mixers, a true cider is the result of a brewing process much like that used for beer. Entry barriers into the production market for ciders are therefore likely to be higher than for FABs, as

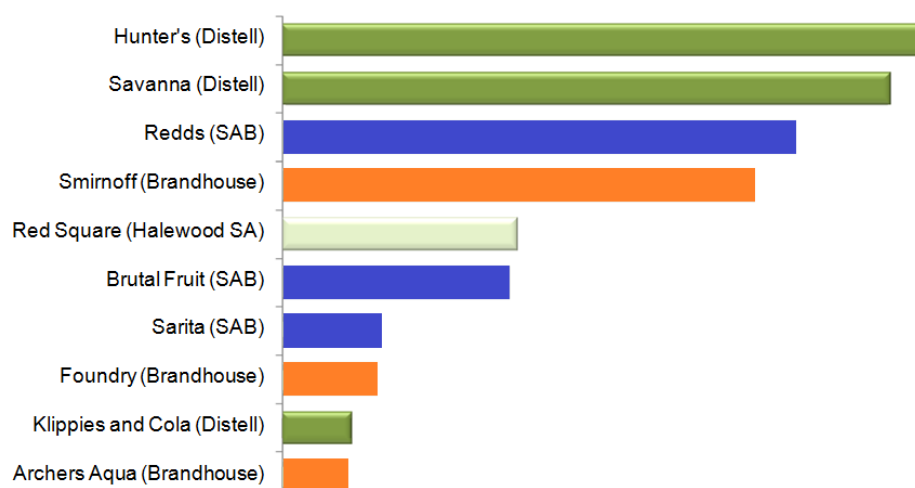
¹⁴⁰ BizCommunity.com, "Cider shows year-on-year growth," 11 August 2010. Available at <http://www.bizcommunity.com/Article/196/466/50919.html>

more plant and equipment is required. However, many cider-like products are available on the market, which the consumer may not always be able to distinguish from real cider, and which may not require as much brewing to produce.

Because the fashionability of cider and FAB brands fluctuates rapidly, the market share of firms in this segment may also fluctuate more rapidly than in other segments of the liquor market. Distell is however likely the market leader in ciders and FABs at present. Figure 32 below shows the top ten brands in ciders and RTDs in South Africa in 2008. The figure suggests that, for the top four participants in ciders and FABs in 2009, market shares were in following ranges:¹⁴¹

- Distell: 35% - 44%
- SAB: 22% - 28%
- Brandhouse: 17% - 21%
- Halewood: 6% - 8%

Figure 32: Top ten brands in ciders and RTDs



Source: AC Nielsen May 2009, quoted in Distell 2009 Analyst Presentation

Despite the proliferation of brands in the market, market share is dominated by a small group of very large brands.¹⁴² It is perhaps not surprising that Distell dominates this market, given its dominance of the spirits category which often provides the parent brand for FABs (although in practice Distell's

¹⁴¹ The range is determined by the assumption made about the market share of other brands. The low end of the market share range is consistent with other brands comprising 20% of market share, and not contributing to the market share of the top four producers.

¹⁴² In 2003, market reports suggested that the top 5 brands had 80% of the market, with approximately 40 brands making up the remaining 20%. Food & Beverage Reporter, "FABs Musical Chairs," July 2004. Available at http://www.developetechnology.co.za/index.php?option=com_content&task=view&id=17784&Itemid=31

market lead is based on ciders rather than spirit mixers). SAB holds a 29% equity stake in Distell, and thus around 57-71% of the cider and FAB market is held by related parties.

BEE characteristics

Black economic empowerment in the cider/FAB market is concentrated in Distell and SAB, both of which have a substantial history of South African production processes.

- Distell: 15% of Distell's ordinary shares are owned by BEE shareholders, via a deal which includes a consortium of Distell employees, a corporate social investment trust and Wiphold Beverages. As at 2009, Distell reported level 6 BBBEE compliance.
- SAB: SAB has undertaken a BEE scheme known as the Zenzele initiative. Under Zenzele, 8.45% of the shares of the South African subsidiary of SABMiller (i.e. the South African Breweries Ltd) have been allocated to SAB employees, qualifying retailers and to a charitable institution.

2.3.5.3 Distribution network

The distribution network for ciders and RTDs is essentially a combination of that used for beer and spirits, and is thus not discussed further at this time.

2.3.5.4 SMME activity in the sector

SMME activity in ciders and RTDs is essentially a combination of the market characteristics observed in beer and spirits, and is thus not discussed further at this time.

2.3.6 Concoctions, illicit goods and excise issues

In this report, the term "concoction" is used to refer to the products of unlicensed brewing, produced with the intention of selling to the public, and using non-traditional brewing techniques and ingredients (ie producing a beverage which cannot be described as a traditional beer). Concoctions are known by a number of colloquial terms, including mbamba and skokiaan, which helps to distinguish them from traditional umqombothi. Illicit goods on the other hand may be made by licensed producers, and are marketed in such a way that the un-informed consumer would not be able to distinguish between a licit and illicit product. Illicit goods evade excise duties, contravene intellectual property laws, or are in some other way not legally compliant. In this report, illicit goods and concoctions are used as mutually exclusive terms.

2.3.6.1 Demand characteristics

The principal competitive advantage that concoctions and illicit goods have on licit goods is on price. Particularly where excise evasion has taken place, these goods are likely to be significantly cheaper than licit goods. Unregulated goods are more likely to be made close to where they are sold, using informal labour and/or inadequate hygiene standards – all of these factors may also contribute to cost savings as compared to licit goods.

The key market for concoctions and illicit goods is thus the very price sensitive consumer. These goods are disproportionately sold not just to the poor, but to the very poor. Thus the concoctions

market is more likely to thrive in squatter camps than in formal townships, for example. As licit alcohol becomes less affordable, the demand for concoctions and illicit goods is likely to increase, as consumers find their ability to afford safer, more consistent genuine products decreases.

There are some exceptions to this rule of thumb – for example, grey branded¹⁴³ goods may sell at relatively high price points (although they are still likely to be sold at a material discount to legitimate goods). Illicit spirits are also likely to be somewhat more pricey than concoctions and illicit wine, and are more likely to look legitimate (ie be sold through formal retail chains, with formal packaging). In these markets, the customer may be either an opportunistic bargain hunter, or impoverished.

2.3.6.2 Production and distribution landscape

Research suggests that the concoctions and illicit goods market can be roughly divided into the following three production channels:

- Cottage industry concoctions producers
- Industrial processing of smuggled ethanol
- Other methods

These three channels are described in more detail below, with attention paid to both the production and distribution characteristics of the products.

There is also a fourth type of product considered in this section, which is currently the subject of a court case as regards its excise treatment, and is included in this discussion primarily because it is priced competitively to illicit spirits – namely wine aperitifs. Should legal processes find that this product is in fact perfectly legal, it may still pose enough concern from a policy point of view to justify changes to excise regulations in order to increase its price.

Cottage industry concoctions producers

As has already been discussed in the section on sorghum beer production, a small amount of sorghum beer is made by private individuals according to traditional methods, usually for use in traditional ceremonies. The right to make beer for these purposes is arguably an important cultural prerogative, which should be defended. However, much of private brewing activities involve beverages with distinctly non-traditional ingredients, made for commercial purposes.

It is relatively easy to produce a potable alcoholic beverage at home, using simple equipment and cheap ingredients (like sorghum beer, the resulting product contains live yeast and thus has a short shelf life). The mbamba recipe on a yeast packet shown in Figure 33 illustrates the simplicity of the process. Anecdotal evidence suggests that spaza shops sometimes make the process even easier for the amateur brewer, by selling the ingredients needed for brewing as a pre-assembled kit.

¹⁴³ In other words, legal branded goods sold outside of legitimate distribution channels.

Figure 33: Yeast packet with mbamba recipe



Source: Photocopy, UNB Breweries

Home brewing is relatively unproblematic if conducted in a sanitary manner for own consumption, using potable ingredients. However, the conditions under which home brewing occurs in practice are likely to vary substantially, and home brewers may be tempted to adulterate the basic recipe to increase the “kick” (for example by adding more sugar to increase the alcohol content, or more dangerous items such as methanol, car battery acid and formalin¹⁴⁴). The net result can be a beverage which is unsafe for human consumption. For example, analysis of thirteen samples of homemade but commercially available brewed alcoholic beverages in Tanzania found the following:

- Ethanol concentrations ranged from 2.2% to 8.5%
- Evidence of contaminated fruit or grain ingredients (aflatoxin B1) was found in nine of the beverage samples
- Four samples had levels of zinc which were double the World Health Organisation guidelines for drinking water

¹⁴⁴ WHO 2004(b), 18

- One contained toxic levels of manganese¹⁴⁵

In South Africa, a substantial amount of home brewing of concoctions is done on a commercial basis, by a cottage industry of informal brewers. In the concoctions market, the maker of the brew usually also has a shop/shebeen that they sell it at. An informal survey conducted by UNB in the Ulundi area provides some indication of the kinds of volumes that may be produced. The 30 retailer/manufacturers of concoctions surveyed in the area were found to be producing approximately 182 000 litres of concoctions for sale a month. The majority of retailer/manufacture operations are based in townships, squatter camps and informal settlements.

Analysis of the volume of dry sorghum sold suggests that the quantity of pure sorghum beer which is being homebrewed is approximately 728m litres annually (more than double the volume that is produced commercially).¹⁴⁶ However, in practice sorghum is only one of the ingredients which can be used to ferment alcohol in the concoctions market. 728m litres annually should be considered the low end of the possible size of this market.

The Liquor Act 27 of 1989 specifically prohibits the manufacturing, possession, sale and consumption of concoctions “manufactured by the fermentation of treacle, sugar or other substances and known as isityimiyana, hopana, qediviki, skokiaan, uhali or Barberton” and other similar beverages. A number of provincial legislations likewise have restrictions on the production and sale of concoctions.

Industrial processing of smuggled ethanol

In the sub-proprietary section of the spirits market, the bulk of the cost of producing liquor is in the payment of excise duties. As shown in Table 12 below, around 70% of the cost to the manufacturer and 60% of the cost to the customer (before including a wholesaling margin) of a low-end bottle of brandy, cane or vodka is represented by paying excise duties.

¹⁴⁵ Nikander et al. 1991, quoted in WHO 2004(b), 21

¹⁴⁶ BMI Foodpack data

Table 12: Price build-up on legal spirits production, 2010

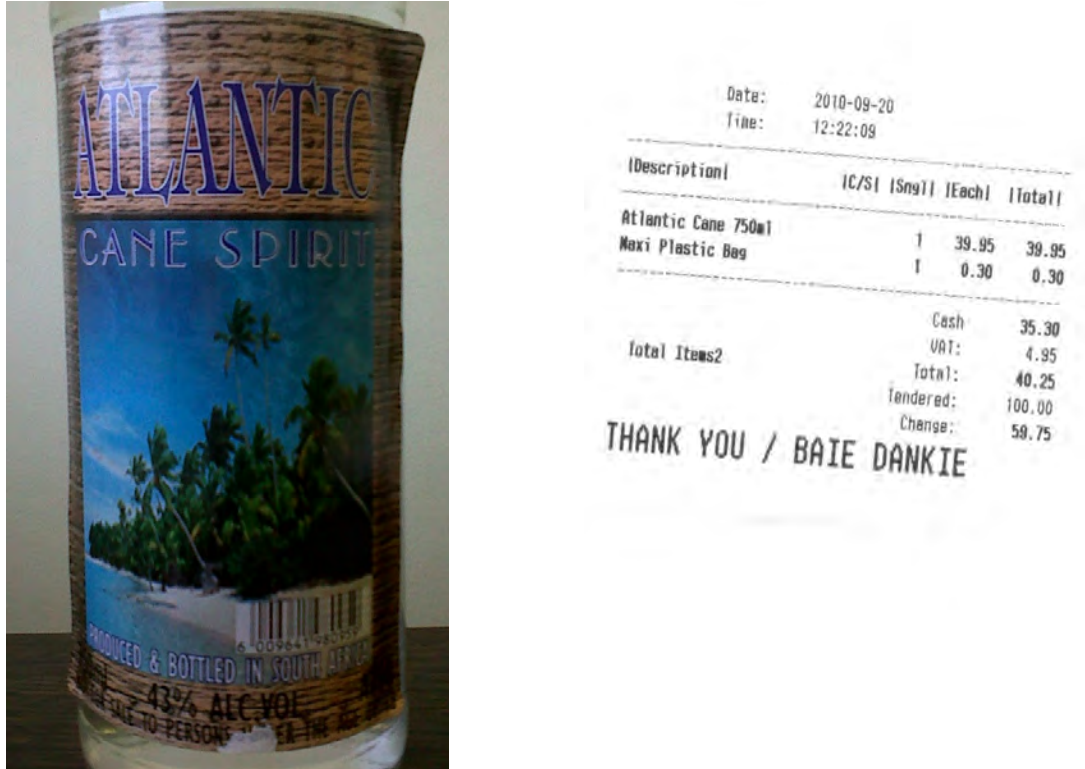
	Brandy		Cane		Vodka	
	R/L	R/750ml	R/L	R/750ml	R/L	R/750ml
Packing material	6.42	4.82	7.63	5.73	8.78	6.58
Bulk product	8.12	6.09	3.08	2.31	3.08	2.31
Other costs	1.90	1.43	2.71	2.04	2.56	1.92
<i>Total input cost</i>	<i>16.44</i>	<i>12.34</i>	<i>13.42</i>	<i>10.08</i>	<i>12.34</i>	<i>10.81</i>
Excise duty (43% aa)	36.37	27.27	36.37	27.27	36.37	27.27
<i>Subtotal (cost to manufacturer)</i>	<i>52.81</i>	<i>39.61</i>	<i>49.79</i>	<i>37.35</i>	<i>48.71</i>	<i>38.08</i>
VAT	7.39	5.55	6.97	5.23	6.82	5.33
Total minimum cost to customer	60.20	45.16	56.76	42.58	55.52	43.42

Source: ENS presentation to the South African Liquor Brandowners Association – 21 September 2010, slide 7 (adapted)

These numbers imply that excise evasion on ethanol can be very lucrative, particularly given that the process of blending ethanol to produce white spirits for retailing purposes is fairly simple. As the absolute alcohol content of spirits is the highest of any type of liquor, and thus excise duties are proportionally higher for spirits, the incentive to evade excise is also highest in spirits. In South Africa, excise only falls due on ethanol which is used for the production of alcoholic beverages for the domestic market. Exported ethanol and industrial ethanol which has been denatured do not incur excise duty.

These cost estimates also provide a useful rule of thumb guideline for determining whether a given bottle of liquor is compliant with excise duties. As shown, the minimum retail price of a 750ml bottle of 43% alcohol cane spirits should be around R42.58, and this is without any allowance being made for retailer and distributor profit margins. Nevertheless, with relatively little effort, the research team was able to purchase a bottle of 43% aa cane spirits for only R39.95 at an off-license in central Pretoria, as illustrated in Figure 34.

Figure 34: Extremely cheap white spirits – example, central Pretoria off-license



Source: Author research (S. Truen collection)

At present, industry guesstimates that around 9m litres of spirits evade excise duties per year, at a cost in lost excise duties of R342.7m.¹⁴⁷ This is equivalent to approximately 8.6% of the volume of legitimate spirits sales. Industry representatives suggest that a key source of such illicit spirits is smuggled Swazi ethanol, shipped into South Africa and blended into sub-prop white spirits.

A number of channels may be being used to smuggle in such ethanol. Rumoured techniques include shipping in full tankers and claiming they are half empty, to reduce the excise payment; round-tripping ethanol out of the customs union (to achieve excise rebates) while in fact transporting it into South Africa (which may require collusion from corrupt border officials); and imported ethanol declared incorrectly as being denatured to evade excises.

Once in South Africa, the product must be blended, bottled, and integrated into the retail distribution channel for sale. Industry representatives suggest that some of the parties undertaking this processing are in fact holders of manufacturing and distribution licenses from the NLA, but are not excise-compliant. Four illegal syndicates are currently believed to be operating in the liquor industry.¹⁴⁸ As

¹⁴⁷ ENS presentation to the South African Liquor Brandowners Association – 21 September 2010, slide 5

¹⁴⁸ Correspondence with SARS, 10 May 2011

found by the research team, alcohol with curiously low price points can fairly easily be found in formal off-licenses. Industry representatives suggest that illicit producers may sell some of their goods to off-licenses at a more normal price, and then throw in a free case of illicit goods as a sweetener, with no paper trail.

Other methods

A number of other channels for the production of illicit alcohol in South Africa are reported to be in operation. They include the following:¹⁴⁹

- Watering down of bulk wine: the largest source of illicit trade in wine is reported to be the watering down of bulk wine. The product is then resold at full price, sometimes after additional illegal ethanol has been blended with it.
- Adulterated traditional African beer products: traditional African beer is subject to much lower excise taxes than other forms of fermented beverages, but is limited to a maximum of 3.5% alcohol by volume. Fermented beverages which contain non-traditional ingredients like grapes and sugar, and thus achieve much higher alcohol concentrations, may be registered as traditional beer, but then on-sold as a wine substitute
- Diversion of distillation wine: wine intended for distillation into wine spirits is cleared duty-free, and may be diverted from distillation purposes and on-sold.
- Grey label imports: branded liquor products such as spirits are occasionally imported by parties which do not have a license to distribute the brand in South Africa.
- Counterfeiting: South Africa has to date experienced relatively little importing of counterfeit branded liquor

In total, the industry guesstimates that around 20m litres of wine is sold illicitly annually.¹⁵⁰ SARS is aware of four illegal syndicates currently operating in the liquor industry.¹⁵¹

Excise issues

South African excise rates on wine have been set at a lower rate than those on spirits, in order to encourage domestic economic activity. However, the positive impact of these lower excise rates on economic activity create some issues for policymakers, in terms of the availability of extremely cheap forms of alcohol for consumers. Liquor is a normal good, in that consumers respond to a decrease in its price by increasing the quantity of the product demanded (see discussion in section 4.3). Where alcohol consumption is abusive and imposes social and private costs, it is reasonable for policymakers to want to have some control over the price of the product in order to reduce consumption, and thus place some limits on the costs of alcohol abuse.

¹⁴⁹ Kruger 2010, 4-5

¹⁵⁰ Kruger 2010, 2

¹⁵¹ Email correspondence

A specific area of concern is wine aperitifs, such as those shown in Figure 35 below. The brands in the photo almost all have an absolute alcohol content of 23%, and the 750ml bottles are for sale at a price of either R26.99 or R25.99. As per the calculations in Table 12, a spirit sold at this alcohol percentage should cost roughly R29.00 per 750ml, before the wholesaling margin is included. The excise duty due on these products is currently the subject of litigation as to whether they should be classified as spirits or as wine – SARS has ruled that they are spirits, and this is being contested.¹⁵² The result of this litigation will affect the price of wine aperitifs going forward.

Figure 35: Wine aperitifs display, off-license



Source: Author research, S. Truen collection

2.4 Retail

The retail component of the value chain in the liquor industry includes outlets serving both the on-consumption and off-consumption market. In the off-consumption market, activities can be further segmented by examining licit and illicit market segments separately. Meaningful segmentation of the on-consumption market, in contrast, is more complex, and must be undertaken with regard to the historical factors that drove the development of this sector.

¹⁵² Correspondence with SARS, 10 May 2011

Prior to 1989, the ability of any private individual to obtain an on-consumption license in an area designated for black, coloured or Asian occupation was extremely limited. Section 23 of the Liquor Act No. 87 of 1977 allowed special licenses to be granted in such areas, but only upon notification of the urban local authority designated in terms of section 39 of the Bantu (Urban Areas) Consolidation Act of 1945. In effect, this meant that in many areas the only legal on-licenses were municipal beer halls, which pushed much of the on-consumption activity in this area into the unlicensed market (i.e. shebeens). This historical legacy continues to influence the landscaping of liquor retailing in South Africa today. Therefore, although many shebeens¹⁵³ have since gained legal recognition, there are still bigger operational differences between a legal shebeen¹⁵⁴ and a legal pub in a previously white area than there are between legal and illegal shebeens. The discussion of the on-license market is therefore segmented into shebeen and non-shebeen segments.

The retail licensing environment is governed by provincial legislation. Various provinces displayed different abilities to provide licensing data for this research process, and licensing categories differed in some of the provinces which did supply data, which complicated the analytical process. Table 13 below provides a comparison of licensing patterns in provinces which both supplied data, and which still employ the licensing categories as defined by the Liquor Act 1989.¹⁵⁵

Table 13: Provincial licensing analysis

	Western Cape (2005)	North West	KwaZulu Natal	Limpopo	Total	% of total
Micro-manufacturing	345	28	42	12	427	1.4%
Off-licenses	1 861	1 272	3 200	1 345	7 678	25.7%
Special license - taverns	129	3 049	2 543	1 751	7 472	25.0%
Other special on-consumption licenses	1 048	73	2 027	2 538	5 686	19.0%
Sorghum beer on-consumption	-	56	12	77	145	0.5%
Other on-licenses	2 238	1 144	3 299	1 819	8 500	28.4%
Total	5 621	5 622	11 123	7 542	29 908	
Residents per license	929.3	569.3	957.1	721.3	819.5	
Residents per on-license	1 529.7	740.6	1 350.8	879.5	1 124.1	

Source: Provincial liquor authorities, Statistics SA September 2010 bulletin

¹⁵³ The term "shebeen" is typically used to refer to unlicensed on-consumption retail outlets, whereas Schedule 2 of the Liquor Act 1989 Regulations refers to a licensed shebeen as a tavern. In this report, we may on occasion use the term shebeen to refer to a business model of on-consumption retail outlets based in areas that, prior to 1989, would have been largely illegal, typically operated from a home in a residential area. In other words, the term shebeen will be taken to include taverns unless otherwise specified.

¹⁵⁴ Also referred to as taverns.

¹⁵⁵ This excludes the Eastern Cape, which has only four license categories under its current legislation, namely micro-manufacturing, off-licenses, on-licenses, and on and off licenses. Gauteng was unable to supply data as it is currently in the process of addressing data corruption issues on its licensing database.

As can be seen, there are substantial differences in licensing patterns by province. Whereas the total number of tavern licenses in the Western Cape comprises only 2% of licenses issued, in the North West taverns are fully 54% of issued licenses. The density of issued licenses also differs substantially. Where there is only one on-license for every 1 530 residents of the Western Cape, in the North West there are 741 residents per on-license (a pattern which may be correlated to the much larger proportion of licensed taverns in the North West than in the Western Cape).¹⁵⁶

Although wealthy individuals will on average spend more per household on liquor, poorer households comprise an important part of the overall retail market for liquor, as illustrated in Table 14 below. The poorest 60% of households in South Africa earn on average only R16 386 per year, but together their expenditure on liquor is a third of the total market (or 42.5% of the total market for beer). Much of this expenditure by poorer households is likely to take place through unlicensed shebeens.

Table 14: Liquor expenditure by income group

	Liquor expenditure	Spirits expenditure	Wine expenditure	Beer expenditure	Average household income
Top 10% of households by income	29.9%	41.8%	51.7%	15.9%	405 617
Middle 30% of households	36.5%	29.9%	31.5%	41.6%	80 635
Poorest 60% of households	33.6%	28.3%	16.8%	42.5%	16 387

Source: Stats SA 2008

2.4.1 Off-consumption

2.4.1.1 Licit

The licit off-consumption liquor market in South Africa is large and well-established, but unfortunately a relatively limited amount of data is available on the market shares of major players. Table 15 below sets out what data is publicly available on the relative size of the major off-license chains, distinguishing as much as possible between “big-box” stores, where store formats are large and the focus is on wholesale activities, and pure retail stores selling to the general public. This data should be treated as a preliminary scan and may exclude a number of firms, particularly smaller chains.

In the pure retail sector, there is fairly strong evidence that Spar is the market leader, with 459 dedicated liquor outlets, and 846 grocery stores which also retail wine. As at the 2010 financial year, Spar described its liquor chain, Tops, as making retail sales of R3.5bn, which works out at around R7.6m per store. In 2009, liquor sold via the chain’s grocery outlets more than doubled total liquor wholesale revenue, from R1.7bn to an estimated R4.3bn. Based on store numbers alone, it is likely that Shoprite/Checkers and Pick ‘n Pay are the next largest competitors in this sector, and have similar market shares. In the big box sector, where firms like Makro have an average annual per store revenue of R26m, it is less clear which firm is the market leader.

¹⁵⁶ In the Eastern Cape, there are 1 251 residents per issued license, and 1 567 residents per issued on-license.

Table 15: Major off-license chains

	Number of dedicated liquor outlets	Grocery/general outlets	Listed?	Total firm revenue (Rm)	Liquor revenue	Big box or retail?
Big box competitors						
Massmart (Makro, CBW, Jumbo)		81	Yes	R11 102.4	R2.1bn	Mixed, mainly big box
Picardi Rebel	88		No			Mixed, mainly big box
Robinson Liquors	49		No			Big box
Metro (Liquor World/Warehouse)	49		No			Big box
Diamond Discount Liquors	39		No			Big box
Big Daddy's, including Prestons	35		No			Mixed
Midmar Liquors	34		No			Big box
Rhino Cash and Carry	10	18	No			Big box
Distri Liq	4		No			Big box
Liberty Liquors	3		No			Big box
Model	3		No			Mixed, mainly big box
Johnny's Liquor Hypermarket	2		No			Big box
Pangivans	2		No			Big box
Waltloo Big Save	1		No			Big box
North Coast Group *	Unknown		No			Big box
Retail competitors						
Spar (Tops)	549	846	Yes	R 32 256.2	R3.5bn (Tops only, 2010), R4.3bn as a whole (2009)	Retail
Pick 'n Pay	105	694	Yes	R 49 320.4		Mixed, mainly retail
Shoprite/Checkers	91	728	Yes	R 53 367.2		Retail
Woolworths	2	417	Yes	R 23 393		Retail
Spot On Liquors *	92		No			Retail
Liquor City	85		No			Retail
R&H (Aroma)	30		No			Retail
Western Province Cellars	26		No			Retail
Loco Liq	11		No			Retail
Blue Bottle Liquors	5		No			Retail
Crazy J's	5		No			Retail
Norman Goodfellows	3		No			Retail

Source: Company annual financial statements (2009 or 2010); company websites; press reports, discussions with market participants

* association of independent retailers

In addition to the chain liquor stores, this market also includes many independent proprietor-owned stores. The owner-proprietor model, although still common, is less prevalent than it was in the relatively recent past. Prior to 2002, none of the supermarket chains were active in the market for hard liquor, which changed when Spar began to open its Tops outlets.¹⁵⁷ Regulatory restrictions on the sale of anything other than wine in grocery stores still remain in place, and thus the opening of separate liquor stores has been necessary in order to allow supermarket chains to enter this sector. Spar/Tops is now the largest competitor in the off-license market, and has been joined by other supermarket chains, the net effect of which is likely to have been the crowding out of many independent owner-proprietors.

However, despite increasing concentration in the market, examination of the database of liquor licensees in the Eastern Cape suggests that the majority of licenses are still owned by independent operators. As at 2010, the Eastern Cape had 1 084 recorded off-license holders, of which 288 or 26.6% could be identified by their names as belonging to a chain of stores. Of these 288 identified chain stores, 167 (or 15.4% of the total) were members of the Spar, Pick 'n Pay or Shoprite Checkers groups. It is not clear whether this pattern is representative of the country as a whole, as retail license data has not been forthcoming from other provinces.¹⁵⁸

Large off-license chains are more likely to be able to realise economies of scale in procurement and distribution, and to be able to negotiate good prices with suppliers. Prima facie, therefore, it is likely that the entry of the large chains into this market exerted downward pressure on prices by increasing competitive pressure, and was good for consumers. Going forward, the competitiveness of the pure retail sector of this market (ie excluding off license wholesalers) is likely to be influenced by the competitiveness of the retail sector in general. Rumours that large chains are using their status as key tenants to exclude independent liquor stores from shopping centres are thus of concern.

In the big box sector, the competitive picture is more complex. The larger chains are more likely to achieve economies of scale and thus competitive prices, but are probably also more exposed to regulatory scrutiny. This is of particular importance because the big box stores are where shebeeners shop. A small, independent big box store may find it easier to sell to this unlicensed on-consumption clientele, providing a competitive advantage over larger chain stores in areas where the shebeen trade is of importance. This matches the pattern of distribution of big box stores, where a number of small chains do good business, but in limited geographic areas.

BEE characteristics

The off-consumption retail sector is highly fragmented, and there is little publicly available information about many of its participants. A few of the smaller chains are reported to be owned by individuals and families who may qualify for BEE status (although the possibility remains that some of these parties

¹⁵⁷ "Something Stronger for Spar Supermarkets." Shareen Singh, Financial Mail 07 June 2002.
<http://secure.financialmail.co.za/02/0607/business/dbus.htm>

¹⁵⁸ The ability of other provinces to supply the research team with a database of licensees was limited. Some provincial regulators attributed this to the age of the software used in communal database systems.

are immigrants to South Africa). It is certainly likely that the barriers to entry in this market for emerging businesspeople are low, and thus that a good representation of BEE entrepreneurs is present in the off-license retail sector.

It is easier to provide concrete detail on BEE initiatives in the listed and previously listed firms in this market, as follows:

- Massmart: as at 2009, Massmart reported a BBBEE score of 55.7%. 9.1% of shares have been issued to qualifying staff members.
- Metro: previously listed, Metro was acquired by directors and a BEE consortium in 2005. The current BEE shareholding of the group is not known.
- Spar: 10% of equity has been transferred to trusts for the benefit of company employees, and the group has been rated as a level 5 BBBEE contributor.
- Pick 'n Pay: the company has implemented an employee share option scheme. As at the 2009 annual report, the Employee Share Purchase Trust held shares equivalent to 2.0% of total equity to meet obligations of options granted. The total value of options issued under the scheme may be higher.
- Shoprite/Checkers: qualified as a level 6 BEE contributor in 2010.
- Woolworths: qualified as a level 5 BEE contributor in 2010. Woolworths also has a BEE scheme for employees, which owned unlisted preference shares equivalent to 9% of issued share capital in 2010.

2.4.1.2 Illicit

At least three forms of illicit off-license activity can be identified, as follows:

- Firms which are licensed to perform off-consumption liquor sales, but specialise in selling illicitly to unlicensed on and off-consumption outlets
- Unlicensed off-consumption outlets or services
- Off-licenses which, either deliberately or by accident, choose to retail illicit liquor

A large proportion of liquor consumed in South Africa is consumed at un-licensed on-consumption outlets, but is produced by fully licensed manufacturers. The link between the formal and informal market typically occurs when formal off-licenses sell liquor to individuals who are unlicensed, and intend to on-sell it (which is prohibited by the Liquor Act 2003). Producers are quite careful to only sell to licensed parties, and thus to some extent rely on the retail sector to “launder” products into the unlicensed, informal market. In practise, it may be difficult for an off-license to tell whether a given customer intends to on-sell their goods. However, often the volume of sales and the regularity of sales

will provide a clear hint that goods are being purchased for commercial use,¹⁵⁹ in which case there is an onus on the off-license to take action.

In reality however, many off-licenses directly target the unlicensed retail market. Industry participants suggest that a small number of off-licenses have in fact adapted their entire business model so as to better serve the unlicensed retail market, and run their shops as large warehouses designed to quickly and conveniently sell large volumes regularly to unlicensed customers with no questions asked. Shops which make strong attempts to exclude unlicensed customers are likely to lose large volumes to competitors – one market participant describes an overnight loss of 20% of volume at a particular store, when regulatory pressure forced more careful policing of the customer base.

The second kind of unlicensed off-consumption activity is undertaken by individuals who are not themselves licensed. In particular, while some unlicensed retailers buy directly from licensed distributors, many rely on un-licensed runners as intermediaries. The runner purchases from the licensed off-consumption outlet and then transports goods to his or her list of unlicensed clientele, operating from the back of a bakkie. In some cases, the runner has an established commercial relationship with the off-license from which he or she purchases stock. Finally, large shebeens and spaza shops may also offer un-licensed off-consumption sales, either to private individuals or to small shebeens.

The number of licensed off-sales which service the un-licensed market, either knowingly or by mistake, is not known at this point, but is likely to be a substantial proportion of all licensed off-sales. In the unlicensed off-sale market, the difference between an unlicensed off-sale and on-sale may not be clear, as some shebeens run spaza activities and vice versa. The number of unlicensed off-sales can thus also not be determined at this point. However, it is clear that the volume of activity involved must be substantial, as this forms the primary link between the formal and informal retail markets, and informal retail comprises an estimated 70-80% of liquor sales in certain product categories.¹⁶⁰

For certain liquor types and brands, these unlicensed outlets move a significant proportion of volume sold, and are thus important to the sustainability of the brand. In order to improve communications with

¹⁵⁹ The Liquor Act 2003 places an obligation on retailers to monitor the pattern of sales to customers in order to determine whether they are likely to be re-selling, as follows:

- 4(8) A sale of liquor by a retail seller to any person, whether registered or unregistered, constitutes distribution for the purposes of this Act if the retail seller-
- (a) knew that the purchaser intended to re-sell that liquor; or
 - (b) reasonably ought to have concluded that the purchaser intended to resell that liquor, having regard to the circumstances of the sale, including but not limited to the factors listed in section 1 (2) and-
 - (i) whether the retail seller knew the purchaser was a registered person, if applicable;
 - (ii) the nature of any delivery instructions given by the purchaser;
 - (iii) any request by the purchaser to establish a discounted pricing arrangement, or a standing arrangement for ordering, billing, credit or payment; and
 - (iv) any request or instructions by the purchaser to receive liquor and tranship that liquor to the purchaser or a third party.

¹⁶⁰ Webster et al (2008), Competition Commission 2007

the market, therefore, representatives known as barkers may market directly to unlicensed retailers. As compared to ordinary representatives, these barkers do not directly organise sales, but merely market. However, even with the use of barkers, many licensed producers and distributors do not have a very good understanding of the unlicensed market, despite its importance to their business model.

The third kind of illicit off-license activity is the retailing of illicit liquor through legitimate off-licenses, either with the knowledge and complicity of the off-licensee, or by accident. Industry participants suggest that off-license owners are sometimes offered sweeteners on shipments of illicit alcohol – for example, two cases will be sold to them at a price consistent with excise compliance, with a third case given for free, so the per unit price is clearly lower than would be consistent with excise compliance.

2.4.2 On-consumption

Table 16 below provides some detail on the breakdown of licenses issued by provincial authorities in the on-consumption market. The single biggest on-license category is taverns, which comprise 34% of licenses issued, and restaurants, with 32% of licenses. Other special licenses (ie excluding tavern special licenses) comprise another 26% of the total, with all other license categories contributing only 8% of licensees.

Table 16: Distribution of on-consumption license types

	Western Cape (2005)	North West	KwaZulu Natal	Limpopo	Total	% of total
Hotel	235	51	279	55	620	2.8%
Restaurant	1 655	1 025	2 626	1 691	6 997	32.1%
Wine-house	10			1	11	0.1%
Club	326	68	361	71	826	3.8%
Sorghum beer (on consumption)		56	12	77	145	0.7%
Special license (Employers)	12	4	15	8	39	0.2%
Special license (Liquor Tavern)	129	3 049	2 543	1 751	7 472	34.3%
Special license (Accommodation)	235	35	416	503	1 189	5.5%
Special license (Eating House)	56	34	654	1 857	2 601	11.9%
Special license (Other)	745		942	170	1 857	8.5%
Sportsground	3		5		8	0.0%
Theatre	9		12		21	0.1%
Section 4 (on)			16	1	17	0.1%
Total	3 415	4 322	7 881	6 185	21 803	

Source: Provincial liquor authorities

It is not entirely straightforward to extrapolate from the license categories to the types of businesses conducted by licensees. In some categories, the license conditions are fairly prescriptive. For example, to qualify for a theatre license, s62(1) of the 1989 Liquor Act requires the licensee to “maintain on the licensed premises a bona fide theatre at which dramatic performances, plays, concerts or films are regularly presented or shown to the public.” For special licenses, however, little guidance is given as to the distinction between different kinds of licensees.

Table 17 below shows the distinction between the types of *special* licenses as laid out in the regulations on the Liquor Act 1989. As can be seen, descriptions are short and not detailed. In the case of taverns, the description uses the term shebeen to define a tavern, although this term is itself then not defined in either the Act or its regulations.

Table 17: Schedule 2, Liquor Act 1989 regulations

License	Fees payable in respect of a new license	Fees for transfer or removal of a license	Annual license fees
Special license			
– If granted in respect of premises upon which facilities are provided by employers for employees	R2 000	R500	R1 000
– If granted in respect of premises upon which a shebeen was conducted (liquor tavern)	R200	R50	R100
– If granted in respect of premises upon which accommodation and related facilities are provided	R1 000	R250	R500
– If granted in respect of premises where emphasis is placed on the provision of food	R200	R50	R100
– If granted in respect of premises where a business other than the above is conducted	R2 000	R500	R1 000

Source: Regulations

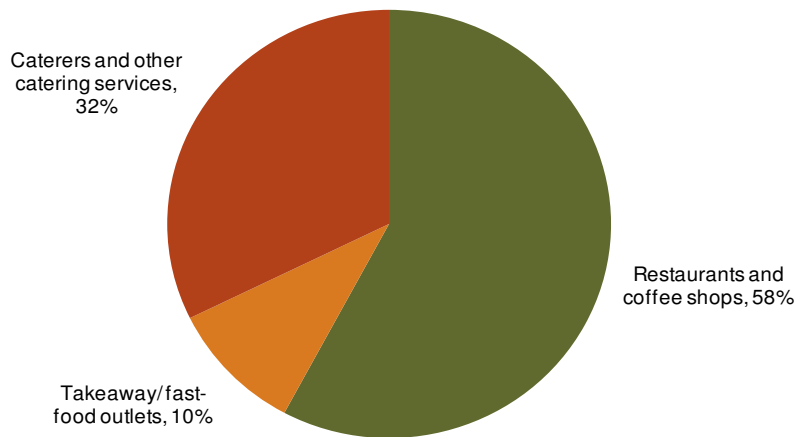
Some further guidance as to the nature of special licenses is suggested by the conversion of licenses provided for in the 1989 Liquor Act. In terms of Schedule 1 of the 1989, on-consumption licenses granted via section 23 of the Liquor Act, 1977 (Act 87 of 1977), are to be converted into on-consumption special licenses in the 1989 Act. Section 23 of the 1977 Act addresses “Special authorities for the sale of liquor to Bantu, Coloureds or Asians.” To some extent, therefore it may be fair to characterise special licenses as (still) being disproportionately issued in areas which, under apartheid, were zoned for occupation by black, coloured and Asian population groups.

2.4.2.1 On-consumption, excluding shebeens and taverns

The bulk of liquor sold in the licensed on-consumption market, in conjunction with the sale of food, is channelled through restaurants and coffee shops as shown in Figure 36 below. Many outlets which are formally classified as restaurants are more likely to be thought of by their clientele as bars, given

that there is no “bar” category for liquor licenses (the license categories which comes closest to the layman’s understanding of a bar is probably the special license for shebeens and the sorghum beer on-consumption license, which do not require the sale of food with liquor).

Figure 36: Distribution of on-consumption liquor sold with food (by sales value)



Source: Statistics South Africa (Food and beverages industry, 2007; Report No. 64-20-01)

The on-consumption market in South Africa is highly fragmented, and contains a large number of small operators. Although there are restaurant chains of significant size in South Africa, no single chain approaches a size that would be consistent with market dominance. The food and beverage industry itself experiences quite low profit margins, consistent with conditions of robust competition.¹⁶¹

BEE characteristics

The on-consumption market in South Africa is highly fragmented, and thus information about its level of BEE achievement is scarce. However, it should be noted that Statistics South Africa estimates that 63 % of employees are female.¹⁶²

2.4.2.2 Shebeens and taverns on-consumption

The shebeen business model comprises on-consumption retail outlets based in areas that, prior to 1989, would have been largely illegal for on-consumption outlets under apartheid legislation,¹⁶³ and which are often operated from a home in a residential area. While regulated shebeens are usually referred to as taverns, in this report the term shebeen should be taken to include taverns unless otherwise specified.

¹⁶¹ In 2007, Statistics South Africa estimated that the average profit margin of a business in the food and beverage industry was 3.9% (with profit margins for various components of the market being 4.6% for caterers and other catering services, 7.8% for takeaway/fast-food outlets, and only 1.1% for restaurants and coffee shops). (Food and beverages industry, 2007; Report No. 64-20-01)

¹⁶² Statistics South Africa (Food and beverages industry, 2007; Report No. 64-20-01)

¹⁶³ I.e. areas zoned for occupation by black, coloured and Indian South Africans.

The shebeen sector is a vibrant part of township life and culture. Shebeeners run the gamut from “survival” businesses, where very low volumes and margins are achieved and businesses open and close rapidly, to fully fledged retail outlets well integrated into formal market structures. Market participants suggest that some shebeeners have expanded into owning more than one outlet, but ultimately are often constrained in the amount of growth they can achieve by lack of business skills, and by the number of trustworthy family members they have available to deploy in the business (non-family management in an informal environment is considered extremely risky in terms of the potential for fraud). The majority of shebeeners are women.

Despite the social and economic importance of shebeens, relatively little is known about how many of them are in operation and how much they contribute economically. The last national survey of the sector that seems to have been conducted is an Eskom OMNI Panel survey in the 1990s, which sampled 5 000 households, and included a question about in-home businesses. Of the 718 000 such businesses estimated to exist at the time, 109 600 shebeens and 8 600 brewers were identified. A survey conducted for SAB in the Gauteng region in 1995 estimated that there were 35 889 shebeens in Gauteng, which was then extrapolated on the basis of national population to an estimated 190 000 shebeens nationwide.¹⁶⁴ These numbers seem to be the source for the widely quoted estimate of 200 000 shebeens in South Africa.

As at 2005, SAB Miller estimated that 74% of these outlets remained unlicensed.¹⁶⁵ As a rule of thumb, when figures for the number of shebeens/taverns are quoted, it is typically not particularly clear whether a distinction has been made between licensed and unlicensed operators. There is also little data available on whether there have been improvements in the proportion of shebeens which are licensed, or have at least applied for licenses.

As has been shown in Table 14, roughly one third of liquor expenditure takes place in the poorest 60% of households (which have an average household income of R16 387 per year). Poorer households are more likely to live in informal or township settlements, which are more likely to be serviced principally by unlicensed on-consumption venues. In certain sectors of the liquor market, shebeen consumption is particularly important, with various sources estimating that 70%¹⁶⁶ to 82% of beer¹⁶⁷ is sold in shebeens, and 76% of brandy.¹⁶⁸

There is wide variation in the size and volumes sold by shebeens, as shown in Table 18 below. The numbers shown provide an indication of volumes typical in a Gauteng-based shebeen in 2010. As can be seen, significant volumes of cider and spirits are sold in shebeens, with sales predominantly being in 750ml bottles of beer and 200ml bottles of spirits. Smaller and less sophisticated shebeens are likely to experience more communal drinking, associated with a higher proportion of purchases of quarts rather than 340 bottles or cans. Drinking patterns in shebeens in other provinces display

¹⁶⁴ dti 1997, 17

¹⁶⁵ SAB Miller 2008, 3

¹⁶⁶ Competition Commission 2007, 25

¹⁶⁷ Tsoeu 2009, 66

¹⁶⁸ Euromonitor 2010, 1

regional differences, such as a focus on wine and brandy in the Western Cape, and marula based products in Limpopo.

Table 18: Typical weekly volumes in shebeen/tavern market, Gauteng area

	Small shebeen	Large shebeen	Large unlicensed off-consumption
750ml beer	10-15 cases	100 cases	500 cases
340ml beer	-	50 cases	-
340ml cider	10-15 cases	50 cases	500 cases
200ml spirits	1 case	4-8 cases	10 pallets
375ml spirits	-	4 cases	7 pallets
750ml spirits	-	10 bottles	5 pallets

Source: Discussion with market participant

Note: working assumption that in spirits, one pallet has 50 cases of 12 bottles each, while in beer, one pallet has 60 cases of 24 bottles each

Tavern licensing requirements typically do not include a requirement to sell food, which is often included in other types of on-license requirements as a way of changing the drinking environment in order to discourage bingeing. However, informal food vendors (braai stands) are established in the vicinity of many shebeens.¹⁶⁹

Shebeens are typically run from a residential house, in a residential area. This characteristic greatly increases the potential negative social consequences of shebeens. For neighbours, the potential of a badly managed shebeen opening next door can pose a significant risk in terms of quality of life – the noise, increase in foot traffic, rowdy behaviour by intoxicated patrons, and increase in the amount of rubbish generated in the area can all be very distressing. For this reason, in most cities the location of on-consumption outlets is limited to certain zones of the municipality. However, under apartheid legislation, “discriminatory planning principles [in township areas] only made provision for residential uses and no proper planning is in place to allow for house taverns,”¹⁷⁰ and in many South African townships, little has yet been done to segregate commercial and residential zones.

Responsibility for zoning regulations rests at municipal level, and thus differs between municipalities. For example, the George municipality states that tavern liquor license applications have to date been facilitated by making ad-hoc exceptions, on a temporary basis, from existing zoning schemes, and “there are limited controls in place to guide officials in consideration of the tavern applications.”¹⁷¹ In the Thembalethu Zoning Scheme, commercial activities such as shebeens are allowed in residential areas if the following conditions are met:

- “the overall use of the property must remain residential in nature (at least 60% of the property);

¹⁶⁹ Charman et al 2009, 38

¹⁷⁰ George Municipality 2010, 2

¹⁷¹ George Municipality 2010, 1

- the above use shall not cause a disturbance or nuisance to a neighbour;
- the above use shall not have an adverse impact on the character of the immediate environment¹⁷²

In townships where more formal retail activity has been introduced (and in particular, where mall developments have been implemented, such as the Maponya Mall in Soweto), market participants suggest that shebeeners have lost business to more formal venues. Initiatives are currently underway in the Western Cape to address the deficit in zoning restrictions, which will if successful go some way towards formalising the shebeen market.

BEE characteristics

As discussed above, by their nature shebeens and taverns are typically located in areas of South Africa which were previously zoned for occupation by black, coloured and Indian South Africans. As such, this is a sector of the liquor industry which has very strong BEE characteristics, both in terms of ownership and employment patterns.

2.5 Key themes

A number of themes can be discerned from the value chain analysis, which may warrant either regulatory attention, or further research. The Liquor Act requires the NLA to pay attention to competitive conditions in the liquor industry, and thus the status of competition in these markets is addressed first.

2.5.1 Competitive conditions

The starting point of competitive market analysis is the definition of the boundaries of markets. In this report, market analysis of liquor production has segmented the licit market into beer, sorghum beer, wine, spirits, and ciders and ready-to-drinks segments. However, it should be noted that, depending on the circumstances, it may be appropriate to define markets more narrowly, for example by differentiating between types of spirits,¹⁷³ or between ciders and other RTDs.

Typically, the more narrowly defined a market is, the higher the market shares of market participants, and the stronger the presumption of market power. However, even on the wide market definition used in the value chain analysis, a presumption of dominance must be made for SAB in beer (with around 85% market share), and Distell in wine, spirits, and ciders and ready-to-drinks (market shares of around 39%, 36% and 40% respectively, with the Competition Act presuming dominance at over 35% share). In the sorghum beer market, UNB's dominance may be threatened by high degrees of substitutability with the concoctions market, and more analysis into this relationship is needed.

¹⁷² George Municipality 2010, 14

¹⁷³ See for example the discussion of market definition in the Competition Tribunal decision on the Distell/SFW merger in 2003, where analysis hinged on market definition (Case No: 08/LM/Feb02, available from <http://www.saflii.info/za/cases/ZACT/2003/36.rtf>).

When liquor markets are more narrowly defined, market shares in some sectors increase sharply. For example, Clare et al. (2004, 52) have the following to say about narrow liquor product markets in South Africa:

“Guinness UDV [now Brandhouse] for example has between 5% and 10% of the total liquor market and around 20% of the spirits market, but it controls 90% of the prop whisky market and a significant percentage of the premium whisky market. It also controls 70% of the vodka market including the most lucrative white spirit brand. Since it is overseas owned, and so are the brands that it handles, it is able to transfer price to optimise income. Distell has over 70% of the brandy market but almost all of the high margin brands. While companies like E Snell have plus / minus 9% of the brandy business, 29% of the whisky business, and 15% of the white spirits business, they perform almost exclusively in the discount segment of the market. The result is that they cannot compete in terms of shelf space, influence or net revenue.”

In many areas of the liquor market, therefore, competitive forces are unlikely to have much influence on market participant behaviour. However, high market shares are not the only reason why price competition is unlikely to be strong in much of the liquor industry. In much of the liquor market, competitive success is a result of consumer brand perception, and brand perception is affected by the price point chosen. Reputable brands are reputable in part because they are expensive, and lowering the price could in some instances reduce demand for the product. Where two high-end products compete with each other, the perceived image of each brand may have more impact on the purchase decision than the relative price. This perceived image is sometimes created by clever marketing expenditures, is sometimes the result of the actual underlying quality of the liquor product, and may also be the result of a combination of luck and consumer whims.

These factors are of particular importance in the upper end of the market, in other words the super premium brands. Price becomes more and more significant to the purchase decision as the consumer gets poorer, and is probably a very important consideration in the sub-proprietary market. This means that competition takes place on a very different basis at different ends of the liquor market.

High market shares are probably of less concern from a competition point of view when the market concerned is premium/super premium, as long as new entrants do not experience barriers to distribution of their product. A new entrant at the premium/super premium end of the market needs luck, good marketing skills, and the ability to physically place their product in bars, restaurants and liquor stores. Any restrictions on distribution of the product (for example, if the incumbent has tried to tie liquor outlets so they cannot stock the products of new entrants) is however of particular concern.

At the bottom end of the value spectrum, competition in sub-proprietary markets is likely to be skewed by cheap, illegal products. A consumer who is very poor and very price sensitive is more willing to take the risk of consuming illicit products, and thus concoctions and illicit spirits and wine, which are cheaper than licit products by virtue of lower safety standards in production and failure to pay excises, have a strong competitive advantage. Even with large market shares, a licit producer in this market is unlikely to have any market power, given evidence of levels of illicit activity.

Where high market shares may therefore be of most concern is in the proprietary market. Proprietary goods consumers are likely to have some leeway to tolerate higher prices, and thus a producer with a large market share in proprietary may have some ability to increase prices above their competitive level. Large market share in important proprietary brands may also increase the ability of a firm to foreclose markets to competitors, for example by tying in retail outlets.

This highlights the importance of easy access to the retail sector (both on and off license) in order to facilitate competition in the liquor market¹⁷⁴. Because of this importance, many liquor regulators specifically prohibit firms from tying in retailers. Although the prohibition on tying was carried in earlier forms of South African legislation (and specifically section 158 of the Liquor Act of 1989), it is not present in the current Act. Tying is still outlawed by the Competition Act, but in practice, it is often easier for a sector regulator to intervene to prevent this kind of behaviour, because of the power they hold to issue and retract licenses, than to successfully pursue a complaint to the competition authorities. It would therefore be desirable to consider re-instituting a specific ban on tying in the current Act.

When the Liquor Act 2003 was drafted, policymakers had ambitious goals of using this legislation to facilitate competition in the sector, as will be discussed in more detail in section 3.1.1. However, from the above discussion it is clear that many sectors of the liquor market remain dominated by the same companies which have historically held the largest market share.

A more competitive liquor marketplace is desirable, not because of its (potentially undesirable) effect on making liquor more affordable, but because it helps to open the door for smaller commercial concerns to enter the industry. The promotion of small, medium and micro enterprises is central to current economic policy, both as a means of supporting economic growth, and as a mechanism for reducing historical inequalities. It may therefore be asked whether it would be appropriate to again consider making interventions in the liquor market to facilitate competition, possibly via legislative means.

South Africa already has an active competition regulation environment, as per the Competition Act 1998. To date this Act has proved an effective means of ensuring that proposed mergers and acquisitions do not worsen competitive outcomes. Where the Act has less of a track record so far is as regards its ability to identify, prohibit and punish anticompetitive practices by incumbent operators. It has also not to date imposed a structural remedy on a company accused of prohibitive practices (a structural solution would typically require a company to divest itself of part of its operations – in effect, separate itself out into two new competing companies). It would therefore be useful to supplement the Competition Act's Chapter 2 prohibitions on anticompetitive practices (which include a prohibition on tying) by mirroring them in the Liquor Act. Specifically, compliance with these prohibitions could be made part of liquor license conditions, with failure to comply possibly leading to loss of license.

¹⁷⁴ It should be noted that the restriction on the sale of beer and spirits at supermarkets may also be construed as reducing competitive forces in this market – no clear policy intent for this restriction could be identified.

Structural interventions are typically a last resort measure, used to promote competition when all other interventions have failed. Forcing companies to sell assets can be an effective means of encouraging competition between incumbents and their divested assets, but also is associated with a number of serious risks, including the following:

- The new firm created by the divestiture may still have strong ties to the old parent firm, which may discourage it from aggressively competing, rendering the whole exercise useless
- The incumbent may take the opportunity to sell its weakest assets, thereby creating a new but failing firm that cannot effectively compete with the incumbent
- In some cases, the new firm may not be able to achieve economies of scale, or may struggle to achieve process efficiencies that would enable it to effectively compete – for example, if upstream or downstream integration is prohibited, despite being associated with strong process efficiencies
- Divestiture can be politically costly to achieve, particularly if international investors regard it as an attack on private property rights

As discussed, the focus of competition policy in the liquor sector should arguably be on facilitating SMME development, rather than lowering liquor prices. Probably the most important barrier to entry currently faced by SMMEs in production and distribution is tying of retail outlets, and/or foreclosure from distribution markets. The first step in dealing with these problems should be to strengthen Liquor Act prohibitions on them, within the existing liquor licensing regime. Structural alternatives should only be considered once these avenues have been exhausted.

2.5.2 Implications of formalising the retail market

A significant proportion of liquor sold in the retail sector in South Africa is sold by unlicensed outlets, particularly shebeens. This has a number of negative consequences, as the regulatory controls on socially detrimental consumption patterns possible in licensed outlets cannot be implemented in unlicensed venues. In addition, unlicensed shebeens may be more likely to sell illicitly brewed concoctions, of dubious safety. However, the process of licensing shebeens may also have pitfalls in terms of the development of competitive market conditions.

Section 4 of the Liquor Act 2003 prohibits liquor manufacturers from selling liquor to unlicensed parties. Market participants suggest that this prohibition is observed, and as a result, manufacturers whose end product is popular in the informal market must rely on retailers to sell their product into the informal market. However, integration of manufacturing and distribution can offer commercial advantages, in some cases possibly because of the potential integration offers for anti-competitive practices (i.e. tying). As shebeens become licensed, manufacturers can distribute their product offering directly to them, instead of relying on the shebeener to make a plan to purchase their product at a store, where different brands are likely to be displayed in a competitive manner.

At the time of writing, SAB Miller is the subject of a complaint for its competitive practices in distribution, which has been referred by the Competition Commission. This complaint deals with

behaviour in the licensed market, and if it is found to have merit, would suggest that there is potential for anti-competitive behaviour to affect newly licensed shebeens.

There is anecdotal evidence that such abuses are in fact occurring in this market. One academic observer noted the following incident (which is arguably anti-competitive in intent) at a tavern in Soweto, during the visit of the SAB representative to the tavern:

"One morning, he came in as we were completing the inventory book that Bab'Nkonyana has to complete every week before he orders beer from SAB, so that he knows how much beer he has and how much he has to order to last the whole week. . . .

Bab'Nkonyana told Saki his order for the week and Saki immediately called the SAB Soweto Depot at accounts to place the orders. . . . After the call, Saki notices that Bab'Nkonyana had two Amstel advertisement posters in front of his counter and no SAB advertisement. He quickly asked: Why don't you have one of our adverts here instead of marketing Amstel alone? Bab'Nkonyana laughed and said: My other posters are old and torn. I cannot use them anymore.

Saki quickly went to his van and fetched a Peroni poster. He removed one Amstel ad and replaced it with the Peroni advert. Saki told Bab'Nkonyana that he should ask for any adverts and he will provide them.

I found Saki's behaviour awkward as SAB's beer advertisements were all over the shebeen. Outside the shebeen was a big Castle Lager sign with the shebeen's name on it. The other two SAB workers had painted a section of the wall next to the entrance of the shebeen. They branded the wall with Carling Black Label. The big (1m x 1m) price board also outside the entrance of the shebeen exclusively showed SAB beer prices."¹⁷⁵

A number of methods can be used to tie in retailers to a specific product offering, including the above-mentioned use of promotional material, supplying fridges to display goods in, providing management courses to bar owners, and supporting unlicensed operators during the licensing process (although it should be noted that these behaviours only become problematic when they have the effect of excluding competitors unfairly from the market). Regardless of the merit of recent complaints against SAB, there is potential for such abuses to occur in future, and that potential increases as more of the market becomes licensed. Again, a prohibition on tying in liquor legislation would be of use in guarding against this possibility.

2.5.3 Ethanol

Analysis of the spirits market in South Africa suggests that fairly high levels of excise avoidance are taking place. Market participants repeatedly suggested that the crucial factor in controlling this illicit

¹⁷⁵ The researcher worked at three different shebeens in Soweto (in the suburbs of Dlamini, Silvertown and Dobsonville) for ten to fourteen days each (Tsoeu 2009, 93-94).

activity was controlling the movement of ethanol, particularly across borders. Otherwise, with access to smuggled ethanol, it is relatively easy to set up an illicit spirits operation.

One way of preventing this kind of illicit activity is closer coordination between excise and licensing authorities, which will be discussed below. Another method would perhaps be to investigate licensing of ethanol producers, who are currently not required to be licensed. Although market participants suggest that local ethanol producers are not contributing to the problem, including ethanol in the regulatory framework could help to police the importing process more thoroughly. As will be discussed in section 3, internationally it is not uncommon for ethanol producers to be required to have licenses. Finally, given that much of the smuggling activity seems to be conducted in the SACU region, the matter might usefully be referred to the SACU Secretariat for investigation.

2.5.4 Inter-governmental cooperation

The control and monitoring of the liquor industry is by its nature an inter-governmental exercise. Liquor affects health outcomes, impacts on levels of illegal activity, affects municipal zoning regulations, has a different and more onerous tax burden, and needs to be made safely and hygienically to protect those who drink it. Each of these areas requires the intervention of a different area of government, and many of them ideally require several areas of government to cooperate in enforcement.

The excise evasion issue illustrates the problem. In the spirits market, smuggled ethanol is reported to be being used to manufacture illicit spirits. Reputedly, many of the operators in this market are in fact licensed by the relevant liquor authority. Others are reportedly involved in organised crime. A number of coordination issues can be highlighted. Firstly, section 19 of the Liquor Act allows the Minister to impose additional conditions on a liquor registrant which does not comply with the Customs and Excise Act 1964, and ultimately to cancel a registration if such conditions are not complied with. However, it is alleged that many illicit (i.e. non-excise-compliant) operators have been able to maintain their registration with the National Liquor Authority. This is as a result of insufficient coordination between the NLA and SARS in this regard.

Secondly, some problems arise due to the fact that the principal concern of the tax authorities is always to maximise tax collections. When someone is found to be in contravention of tax laws, they are therefore often simply offered the opportunity to pay a fine in settlement of their tax debt, and then allowed to return to work, rather than prosecuted for tax evasion. When SARS investigates excise evasion in liquor, it is unlikely to ensure that the chain of custody for evidence is observed, or that information is gathered in a way that would support criminal prosecution, because the intent is often just to level a fine. As a result, if SARS initiates the investigation, by the time other regulators and/or the police seek to make a case against the illicit liquor operator, evidence may be so degraded that it no longer meets legal standards for prosecution.

Coordination between various arms of government, and particularly the ability to effectively include the police in investigations, is of particular importance due to the involvement of organised crime in the illicit trade. Allegations of witness murder in some cases are of great concern. Even where illicit operators do not use violent means to achieving their objectives, they are still likely to engage in other

forms of criminal behaviour, such as money laundering and/or contamination of the food chain with poisonous materials.

Market participants suggest that some attempts have already been made to facilitate interdepartmental cooperation in this regard. However, a number of issues remain, particularly as regards how to deal with issues of data confidentiality, and the quality of data sharing (for example, without access to a live database of registrant details, it is quite difficult for police officers to monitor whether new outlets are appropriately licensed or not). The area of cooperation should be focused on going forward.

2.5.5 Regulatory record-keeping

In a regulatory scheme such as that for liquor registrants in South Africa, it is vital that regulators be able to access data on precisely who is licensed, and how they operate. The record of registration provides the operator with their right to operate, and accurate records allow the regulator to assess whether registration conditions are being adhered to, whether prohibited persons are being restricted from gaining licenses, whether outlet density seems too high or too low, and so forth. Licensee conditions may also be an invaluable source of data for market research such as the current report.

However, on a provincial level in particular, this research team found a paucity of licensee data. A number of provinces indicated that their IT systems were of such age and poor quality that it would take months to provide a full list of licensees. One province indicated that the regulatory records were degraded and in the process of being repaired, and thus that they could not be supplied to the research team at this point in time. Ultimately, four provinces provided data only in summary form, four provided no data at all, and only one supplied a list of licensees. Attention must urgently be paid to ensuring the adequacy of database systems, so that the level of data available to regulators can be improved.

At the national level, manufacturers and distributors are required to submit detailed annual operational information to the NLA, which should in principle provide an invaluable primary source of data for market research. However, a number of factors mitigate against this in practise, as follows:

- The data is currently only available in hard copy, not in electronic format
- Key items are inconsistently reported, and thus national totals cannot be derived: for example, the quantity of liquor sold is reported by licensees variously in litres sold, litres of absolute alcohol sold, and sales revenue
- A number of data items are reported on a forward looking basis – for example, annual revenue should be reported as an estimate for the year ahead. This reduces the accuracy of data for analytical purposes, and makes it more difficult to determine when licensees are deliberately mis-reporting data

- Some questions are too vague to provide valuable information. For example, licensees are required to report on how “their business activities will discourage dominance in the two tiers of the liquor industry,”¹⁷⁶ and although they are encouraged to contribute 1% of EBITDA to combating alcohol abuse, no proof of the actual financial level of contribution is required.

It may also be worthwhile to consider migrating the licensee system onto an internet-based system, where licensees could renew their registrations remotely. This would likely yield a number of benefits, including the provision of an electronic database of records, the ability to run exception reports to identify errors, inconsistencies or omissions, and possibly a reduction in the need for licensees to hire professional consultants to manage the licensing process. An internet-based license interface could also improve the consistency of reporting, for example by specifying the unit in which specific line items are to be reported, and by refusing to allow license application submission if key data points are not completed.

¹⁷⁶ NLA Application Guide



3 REGULATORY BENCHMARKING

As will be discussed in more depth in following sections, the consumption of alcohol has many negative effects on both those who consume it, and those around them. In order to mitigate against these harms, many countries have implemented some form of alcohol policy. The types of policies and regulatory frameworks implemented differ markedly by country, and are heavily influenced by the history and culture of the people concerned. Although much can be learned by examining the regulatory successes and failures of other countries, the World Health Organisation cautions that there is “no one model or policy mix that can be recommended which would fit all countries, just as no model can simply be taken from one country and imposed on another.”¹⁷⁷

The South African liquor policy framework is complex and covers many aspects of control of the consumption of liquor. In this respect, it more closely resembles the regulatory regimes in place in the developed world. However, the South African market faces many of the challenges of the developing world, such as the presence of a large home-brew sector, and shortages of regulatory skills and capacity. As will be illustrated in this chapter, this mismatch has been associated with a number of problems that are in need of attention.

The regulatory environment governing alcohol is a complex one, as the product affects so many aspects of social and economic life. Our analysis will focus on five key areas of the regulatory environment in each comparator country, as follows:

- Retail distribution regulation: many of the social ills associated with alcohol abuse can be targeted via the regulation of retail distribution chains. For example, closing hours and zoning restrictions can limit the social disruptions occurring in the areas around on-premise facilities, and a key mechanism for reducing under-age drinking is the enforcement of age restrictions in the retail environment.
- Production and wholesale: controls over the ability to produce and wholesale alcohol products provide the regulator with a means to affect competitive conditions in the alcohol industry, as well as providing a potential means of monitoring product compliance with health standards.
- Taxation: alcohol is often treated differently to other taxable items. Higher taxes on alcohol can be used either to attempt to decrease alcohol demand, or simply as a means of raising tax revenues. Differing treatment of the taxation of alcohol between countries is likely to prompt black market activities, including smuggling and home production. Taxation systems are thus an important part of the alcohol enforcement regime.
- Advertising and sponsorship: restrictions on advertising and sponsorship by liquor companies are increasingly prevalent
- Public domain drinking, and drinking and driving: restrictions on where alcohol can be consumed, and alcohol use while driving, are a means of behavioural control, which can be used to reduce the social costs of alcohol abuse

¹⁷⁷ WHO 2004(a), 76

Of these five factors, the three which are of most direct relevance to this study are retail distribution regulation; production and wholesale regulation, and taxation systems. In each area, cognisance will be taken of the extent to which regulation is implemented at a national or regional level, and attention will be paid to enforcement mechanisms.

3.1 South Africa

3.1.1 Policy framework

Before analysing the current regulatory framework in the South African liquor sector, it is useful to place it in context by examining the intent of the liquor policy which informed the current legislation. In 1997, the dti issued a policy document on liquor which aimed to address a historical legacy in which liquor was “an integral part of the history of segregation and apartheid . . . (and) was alternately made available, and prohibited, as a means of economic and social control.”¹⁷⁸

This policy framework envisaged a major simplification of the licensing framework, into only four types of license, namely manufacturing, wholesaling, retailing, and special events. Within this licensing framework, any person would be able to hold only one type of license at a time – in other words, vertical separation was to be imposed between the various levels of the liquor industry. It was hoped that this would counter the “high degree of monopolisation” in the industry. Although provincial liquor authorities were to be appointed, it was planned that they would implement national legislation.

Ultimately, this policy framework and the bill which resulted from it were found to be inconsistent with the provisions of the constitution on the jurisdiction of national and provincial government. The Constitutional Court found that the regulation of retail and micro-manufacture of liquor were exclusive provincial jurisdictions,¹⁷⁹ and thus should be removed from national legislation. In practice, this revision of the legislation had a number of effects, including the following:

- The proposed levy on manufacturing and importing of liquor, to be used for anti-abuse initiatives, was replaced by a license requirement for producers and distributors to contribute an unspecified amount to anti-abuse programs
- Each province was able to set its own licensing regime via the issuing of provincial legislation, which has led to increased complexity in the number of licensing categories
- The ban on vertical integration between different types of licensees was abandoned
- A national policy commitment to simplify retail licensing procedures was left to the discretion of individual provinces

The net effect of the various revisions was to substantially dilute initial liquor policy intentions. What was finally enacted in 2003 represented a compromise, developed under pressure in conditions that were not ideal. The resulting regulatory framework is now described below.

¹⁷⁸ Dti 1997, 7

¹⁷⁹ Erwin 2003

3.1.2 Retail regulation

The Liquor Act no.59 of 2003, which repeals the Liquor Act no. 27 of 1989, sets aside the regulation of the micro-manufacturing, retail sale or consumption of liquor to applicable provincial legislation. However, as per section 2 of Schedule 1 of the 2003 Act, the provisions of the 1989 Act as regards “the micro-manufacture, retail sale or consumption of liquor or methylated spirits remains in force within that province” until such a time as provincial legislation has been enacted. At present, only Gauteng, the Eastern Cape and the Western Cape have put into operation such legislation, although the Northern Cape, Free State and Mpumalanga have published legislation, and the North West, KwaZulu Natal and Limpopo have circulated a Liquor Bill. In six of the nine provinces therefore, the 1989 Liquor Act is still in force.

In each province, a provincial liquor board has been instituted which is responsible for the issuing of retail and micro-manufacturing¹⁸⁰ licenses, and conducting inspections of adherence to license conditions. However, the details of the legislation governing the actions of this board differ materially from province to province. To some extent it is desirable to allow for such provincial differences, partly because experimentation with regulatory change at provincial level is less risky than changes to national legislation, so regulatory innovation can be enhanced by provincial differences. Provincial legislation can also take into account more fully the different preferences of different communities as regards liquor regulation. However, the trade-off for these advantages is a big increase in the complexity of the enforcement and compliance environment, and ideally differences between provincial legislations should be justifiably by clear policy objectives, in order to mitigate against the increased complexity they generate.

In practice, it seems that some of the differences between provincial legislations do not contribute to clear policy goals, and therefore probably contribute unnecessarily to the complexity of the environment. This can be illustrated by examining the differences between the way liquor is defined in national and provincial legislation, as shown in Table 19 below. Seven of the nine provinces use more-or-less the same definition of liquor as is contained in the 2003 Liquor Act, but nevertheless a number include material differences. Of particular note is the difference between the Western Cape and Northern Cape definition, which in both cases includes a percentage alcohol requirement, but which use different thresholds (1% and 2% respectively).

¹⁸⁰ Micro-manufacturers may not produce more than the following quantity annually: 100 million litres of beer; 50 million litres of Traditional African beer; 4 million litres of wine, or 2 million litres of spirits and/or any other liquor.

Table 19: Definition of liquor by various national and provincial acts

	Definition of liquor
2003 Liquor Act	"liquor" means - (a) a liquor product, as defined in section 1 of the Liquor Products Act, 1989 (Act 60 of 1989); (b) beer or traditional African beer; or (c) any other substance or drink declared to be liquor under section 42(2)(a) <i>[ie by subsidiary regulation]</i>
1989 Liquor Products Act	"liquor product" means - (a) wine; (b) an alcoholic fruit beverage; (c) a spirit; (d) a grape-based liquor; (e) a spirit-based liquor; (f) a specially authorized liquor; and (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
Gauteng Liquor Act 2003	"Liquor" means a product of fermentation or distillation of grains, fruits or other agricultural products and includes synthetic ethyl alcohol and includes beer or sorghum beer, but does not include methylated spirit or medicine which is subject to registration by virtue of a resolution published in terms of section 14(2) of the Medicines and Related Substances Control Act, 1965
Eastern Cape Liquor Act 2003	"liquor" means- (a) any liquor product as defined in section 1 of the Liquor Products Act, 1989; (b) any beer or sorghum beer; and (c) any other substance or drink declared to be liquor under subsection (2)(b)
Western Cape Liquor Act 2008	"liquor" means any liquid or substance containing more than 1% of alcohol by volume or mass, but excluding— (a) methylated spirits; (b) medicine which is subject to registration in terms of the Medicines and Related Substances Act, 1965 (Act 101 of 1965); and (c) products which are not intended for human consumption
Northern Cape Liquor Act 2008	"liquor" means – (a) "liquor product" as defined in section 1 of the Liquor Products Act, 1989; (b) beer or sorghum beer; (c) any other substance or drink declared to be "liquor" under section 42(2)(a) of the National Liquor Act, 2003; or (d) any other beverage containing more than 2% alcohol by volume or weight
Free State Liquor Act 2007	"liquor" means – (a) a liquor product, as defined in section 1 of the Liquor Products Act, 1989 (Act No. 60 of 1989); (b) beer or traditional African beer; or (c) any other substance or drink declared to be liquor under section 42(2)(a) of the National Liquor Act
Mpumalanga Liquor Licensing Act 2006	"liquor" means – (a) any liquor product as defined in section 1 of the Liquor Products Act, 1989; (b) beer or traditional African beer; or (c) any other substance or drink declared to be liquor in terms of section 42(2)(a)(i) of the National Act
KwaZulu Natal Liquor Licensing Bill 2009	"liquor" means – (a) a liquor product, as defined in section 1 of the Liquor Products Act, 1989 (Act No. 60 of 1989); (b) beer or traditional African beer; or (c) any other substance or drink declared to be liquor under the Liquor Act, 2003 Act No. 59 of 2003), but does not include methylated spirits
Limpopo Liquor Bill 2007	"liquor" means any (a) liquor product as defined in section 1 of the Liquor Products Act, 1989; (b) beer or (c) other substance or drink declared as liquor in terms of section 42(2) of the Liquor Act, 2003
North West Liquor Bill 2008	"liquor" means - (a) liquor product as defined in section 1 of the Liquor Products Act, 1989; (b) beer or traditional African beer; or (c) other substance or drink declared to be liquor under the Liquor Act, 2003, but does not include methylated spirit

Source: Provincial and national legislation

Box 1: Defining alcoholic beverages

A workable definition of alcoholic beverages is a fundamental component of the liquor regulation environment. Ideally, the definition should be sufficiently clear to minimise difficulty in determining what should and should not be regulated, both in order to make the regulatory task as simple as possible, and in order to provide clarity and transparency to industry. Ideally, the definition should provide a simple way of determining whether borderline products, such as food and medicine which contain alcohol, and industrial ethanol, fall inside and outside the range of regulated products.

In terms of the definition of liquor under the 2003 Liquor Act and 1989 Liquor Products Act, only products which are listed fall under the definition of liquor. The definition does not provide a rationale for making judgements in borderline cases, and may result in products which do meet a common-sense definition of liquor not falling under the legal definition. The Gauteng Liquor Act definition uses the chemical processes which produce alcohol to define liquor, and excludes only methylated spirits and medicines from the definition – this is a much wider definition, which may include more products in the regulatory net than is needed.

The definition used in the Western Cape is possibly the most desirable, as it includes reference to the ultimate purpose of the product. Liquor regulation aims to mitigate the social costs of the abusive consumption of alcohol, and thus alcohol which is not intended for human consumption is not relevant to the purposes of liquor regulation. By excluding products which are not intended for human consumption, the Western Cape definition most closely approaches the ultimate purpose of legislation. The deliberate exclusion of methylated spirits and medicines, and the inclusion of an alcohol percentage limit, both further aid the clarity of the definition.

The penalties environment between provinces is similarly complicated, as shown in Table 20 below. Despite the fact that supplying alcohol to a minor is subject to penalties in terms of national legislation (the 2003 Liquor Act), all but one provincial legislation also includes a penalty for supplying a minor, and a number of those penalties differ markedly from the penalty specified in the 2003 Liquor Act. This raises the potential for jurisdiction shopping by individuals accused of offences.

Penalties for the manufacture or distribution of concoctions are also highly varied. A number of provinces do not specifically address the concoctions market at all in their legislation, while in others, manufacture or distribution of concoctions is technically liable to a penalty of up to ten years imprisonment.

Provincial legislation displays a limited amount of attention to the process of incorporating the informal sector of the liquor market (which includes retail distribution through unlicensed shebeens and micro-manufacture of forms of beer) into the formal regulated sector. Some detail on the varying regulatory provisions for shebeens and traditional beer is provided in Table 21. Not all provinces provide a distinct category of licenses tailored specifically for this section of the market, and even when such a specialised license category is provided, limited concessions are made in terms of reducing the administrative requirements for gaining such a license. In fact, only the Limpopo Liquor Bill currently specifies that the administrative requirements and fees for these license categories should be reduced.

In the informal sector as it currently stands, potential licensees are typically poorer, less educated and have fewer resources available to them than licensees already within the formal framework. Some of these individuals will therefore be avoiding the license application process simply because it is too difficult or too expensive for their limited means. One of the regulatory strategies that can be used to increase inclusion of the informal sector is to reduce the requirements placed on very small operators. For example, in the banking sector work on financial inclusion has recognised that the poor often do not have as many forms of formal identification, and thus the launch of the Mzansi account was made possible by reducing the “know-your-customer” requirement for very small accounts. More detail on the practical considerations of designing a regulatory intervention such as this are provided in Box 2.

Obviously the reduction of regulatory standards on some licenses potentially has significant costs, as the level of protection afforded to the customers of reduced standard licensees will be lower (although care should be taken to only lower license standards which are likely to have a very small or immaterial impact on consumer safety). However, given the very high level of completely unregulated informal retail activity in South Africa at present, the net impact of a widening of the regulatory net will probably be to afford more consumers protection. It would be encouraging to see signs of such regulatory experimentation at provincial level, to test whether progress can be made in increasing licensee numbers by reducing licensing requirements.

Table 20: Penalties for contravention of selected offences across provinces

	Trading without licence	Drinking at off-consumption licensed operator	Sale to under 18	Permit drunkenness	Produce or sell concoctions
2003 Liquor Act			Fine not exceeding R1m, or imprisonment for up to 5 years		
1989 Liquor Act & Liquor Products Act	Fine or imprisonment of up to 5 years	Fine or imprisonment of up to 6 months	Fine or imprisonment of up to 5 years	Fine or imprisonment of up to 6 months	Fine or imprisonment of up to 6 months
Gauteng Liquor Act 2003	Fine not exceeding R100 000, or imprisonment for up to 10 years or both	Fine not exceeding R100 000, or imprisonment for up to 10 years or both	Fine not exceeding R100 000, or imprisonment for up to 10 years or both	Fine not exceeding R100 000, or imprisonment for up to 10 years or both	Fine not exceeding R100 000, or imprisonment for up to 10 years or both
Eastern Cape Liquor Act 2003	Fine or imprisonment of up to 3 years or both	Fine or imprisonment of up to 3 years or both	Fine or imprisonment of up to 3 years or both	Fine or imprisonment of up to 1 year or both	
Western Cape Liquor Act 2008	Fine not exceeding R1m, or imprisonment for up to 5 years or both	Fine not exceeding R500 000, or imprisonment for up to 2.5 years or both	Fine not exceeding R1m, or imprisonment for up to 5 years or both	Fine not exceeding R100 000, or imprisonment for up to 6 months or both	
Northern Cape Liquor Act 2008	A fine or imprisonment for up to 10 years or both	A fine or imprisonment for up to 10 years or both	A fine or imprisonment for up to 10 years or both	A fine or imprisonment for up to 10 years or both	A fine or imprisonment for up to 10 years or both
Free State Liquor Act 2007	A fine or imprisonment for up to 5 years or both	A fine or imprisonment for up to 5 years or both	A fine or imprisonment for up to 5 years or both	A fine or imprisonment for up to 5 years or both	A fine or imprisonment for up to 5 years or both
Mpumalanga Liquor Licensing Act 2006	A fine or imprisonment for up to two years or both	A fine or imprisonment for up to two years or both	A fine or imprisonment for up to two years or both	A fine or imprisonment for up to two years or both	A fine or imprisonment for up to two years or both
KwaZulu Natal Liquor Licensing Bill 2009	A fine or imprisonment for up to 5 years or both	A fine or imprisonment for up to 5 years or both	A fine or imprisonment for up to 5 years or both	A fine or imprisonment for up to 5 years or both	
Limpopo Liquor Bill 2007	Fine or imprisonment or both	Not specified in bill	Not specified in bill	Not specified in bill	Not specified in bill
North West Liquor Bill 2008	Intention seems to be a fine not exceeding R1m, or imprisonment for up to 5 years or both: not clear in bill	Fine not exceeding R500 000, or imprisonment for up to 2.5 years or both	Fine not exceeding R1m, or imprisonment for up to 5 years or both	Fine not exceeding R100 000, or imprisonment for up to 6 months or both	Not specified in bill

Source: Provincial and national legislation, DNA interpretation

Table 21: Treatment of shebeens/traditional beer licensees

	Definition of on-license for shebeen/traditional beer market	Reduced licensing requirements?
1989 Liquor Act & Liquor Products Act	The holder of a sorghum beer licence referred to in section 20 (a) (vi) may only sell sorghum beer procured from the holder of a licence	No
Gauteng Liquor Act 2003	Tavern: 61. (1) The holder of a tavern licence shall at all times ensure that the licensed premises is separate from any other dwelling, especially a residential dwelling or if attached to any dwelling, it shall be separated by means of walls and securable doors. (2) The licensee shall at all times provide food and various forms of entertainment, of acceptable standards, on the licensed premises. Sorghum beer license: 73. (1) The holder of a sorghum beer license referred to in this Act shall sell only sorghum beer for consumption on the licensed premises or off the licensed premises. (2) The holder of a sorghum beer licence who supplies sorghum beer for consumption on the licensed premises shall provide ordinary meals	No
Eastern Cape Liquor Act 2003	Does not distinguish between types of on-licenses	No
Western Cape Liquor Act 2008	Does not distinguish between types of on-licenses	No
Northern Cape Liquor Act 2008	Sorghum beer drinking house: the holder of a sorghum beer drinking house liquor license may only sell sorghum beer procured from the holder of a license, issued under any law, for sorghum beer brewing and may . . . sell the sorghum beer on the licensed premises. Tavern: the holder of a tavern liquor license may . . . sell liquor and may sell food or serve meals on the licensed premises.	No
Free State Liquor Act 2007	Tavern: 49. (1) The holder of a tavern registration certificate must at all times ensure that the registered premises are separated from any other dwelling by means of solid walls. (2) The registrant may provide various other forms of light musical entertainment not exceeding decibels as regulated by applicable municipal bylaws on the registered premises. Sorghum beer on-consumption: 52. The holder of a sorghum beer registration certificate must sell only sorghum beer for consumption on the registered premises	No
Mpumalanga Liquor Licensing Act 2006	Licensing categories distinguish between retail on-premise consumption; and "the micro-manufacture and retail sale of traditional African beer for consumption on and off the premises where such traditional African beer is sold."	No
KwaZulu Natal Liquor Licensing Bill 2009	Tavern license: "The holder of a tavern liquor licence must ensure that the licensed premises are separate from any other dwelling, especially a residential dwelling, and if attached to a dwelling, it must be separated by means of walls and securable doors." Definitions: "tavern" means any residentially zoned premises where liquor is sold for consumption on the premises, and where food, other than food prepared on the premises, may be provided incidentally thereto;	No
Limpopo Liquor Bill 2007	24. Traditional African beer (1) Only a Local Liquor Authority may issue a permit for the manufacturing and sale of traditional African beer. (2) The MEC must prescribe the application procedure for traditional African beer permits which must provide for a simplified application process and a nominal application fee.	Yes
North West Liquor Bill 2008	Licensing categories distinguish between retail on-premise consumption; micro-manufacture and sale; and "the micro-manufacture and sale of traditional African beer for consumption both on and off the premises where such traditional African beer is sold."	No

Source: Provincial and national legislation, DNA interpretation

Box 2: Lowering regulatory requirements to widen the net – the Mzansi account example

Current financial legislation requires banks to collect enough information about their clients in order to ensure that they are who they say they are, so as to minimise potential for money laundering. One of the “know your customer” requirements of the Financial Intelligence Centre Act (FICA) 2002 was proof of residential address, for example by presenting an example of a utility bill or a signed lease agreement. However, this had the unfortunate side-effect of locking many poorer South Africans out of the banking market, as formal legal title to property and access to utilities are both reduced in townships in informal settlements.

Improving the access of the poor to financial services was considered to be a policy priority. Therefore, in 2004 FICA Exemption 17 was introduced. The exemption allowed banks to accept customers without proof of formal address, on presentation of South African ID only. However, clients accepted under this exemption were only permitted to have bank accounts which were subject to strict size limits, to prevent the exemption from being misused by the wealthy and/or money launderers. These accounts, which were called Mzansi accounts by South Africa’s banks, could not have a balance exceeding R25 000.¹⁸¹

Upon the commercial launch of the Mzansi account in 2004, take-up by the consumer was rapid. As at June 2010, 4.2 million Mzansi accounts had been opened, of which 3.0 million were currently active, and total balances held in these accounts had a value of R929m. Moreover, the number of active accounts has continued to increase over time, with 317 912 accounts opened in the first six months of 2010.¹⁸² In other words, by lowering regulatory barriers in a highly strategic manner, an increase in the access to finance of the poor was in fact achieved.

Lessons from this experience can be applied to the liquor licensing environment. It would be highly desirable to see higher levels of licensed operators in the shebeen sector, but market participants suggest that current license requirements are overly onerous for small operators. In order to address this issue, a three stage approach would be of use:

- First, assess which components of the liquor licensing process are most difficult, and thus are creating the greatest hindrance to licensing
- Second, assess how important these components are to the objectives of liquor licensing: for example, if the requirement to have an indoor toilet leads to a material reduction in the amount of stabbings in back alley urinals, then it is would not be appropriate to lift that requirement
- Third, see if there are license requirements which are both onerous and have little impact on the safety of the drinking environment, and target them for adaptation or removal

It should be noted that any reduction of licensing requirements should ideally be done in such a way that there is a little or no incentive for current licensees to apply for the less onerous type of license. In the Mzansi account example, this was done by placing size limits on the account, and size limits might be a useful methodology for ring-fencing an adapted liquor license as well. Finally, the objective should not be to lower license requirements so far that everyone who wants to run a shebeen can now do so legally. The objective should only be to legitimise businesses which have good potential to behave responsibly, so as to increase the legitimacy of the regulatory regime, and make it politically easier to clamp down on irresponsible operators.

¹⁸¹ Truen et al , 79

¹⁸² Mzansi Account Summary June 2010, available from <http://www.banking.org.za/getdoc/getdoc.aspx?docid=1131>

3.1.3 Production and wholesale

The issuing of licenses for the manufacturing and distribution of liquor is under the jurisdiction of the national Liquor Act 2003, and thus of the National Liquor Authority. Applications are made to the NLA, and approved by the Minister of Trade and Industry. Commitments to investing in anti-abuse programs and adherence to industry codes are considered when evaluating applications for licenses, although the level of investment required is not specified.

The Act permits the Minister to impose conditions on licenses in a number of circumstances, including in cases of contravention of the Competition Act 1998 and/or the Customs and Excise Act 1964, or where industry codes of conduct have been breached. Inspectors designated by the Minister have the powers of a peace officer as per the Criminal Procedure Act 1977, which includes the ability to search, seize and arrest without warrant.¹⁸³ They are authorised both to investigate complaints and conduct inspections to ensure compliance, but may typically only enter premises on owner's consent, during periodic inspections, or on issuing of a warrant to do so.

Prior to the enactment of the 2003 Liquor Act, the 1989 Liquor Act allowed police officers fairly wide powers to search and inspect liquor licensees. Since 2003, police officers have not had these inspection rights at nationally licensed producers and distributors. However, no NLA inspectors have yet to be appointed. As a result, licensed producers and distributors have not been subject to inspections for the last eight years. This is a substantial regulatory gap, which should be addressed as quickly as possible – and the quickest solution might be to reinstate the rights of the police to conduct inspections at distributors and producers. In a number of cases, facilities with both a retail and distribution license are already being inspected by police officers, as part of their retail license conditions.

In terms of the definitions of the Act, a distributor may only sell to registered persons. This is the principle operating feature distinguishing distributors from retailers, who may sell to the general public. Furthermore, in terms of section 4(8) of the Act, the sale of liquor by a retail seller constitutes distribution if the seller knows that, or reasonably can be expected to have concluded that, the product is intended for resale.¹⁸⁴ These provisions are designed to prevent the retailing of liquor from happening outside of the licensed framework, as they place an obligation on distributors and retailers to “police” their customer base. The prevalence of informal retailing arrangements (ie the shebeen market) suggests that this regulatory safeguard is currently not particularly effective.

¹⁸³ In fact, s40(h) of the Criminal Procedure Act specifically permits a peace officer to arrest without warrant any person “who is reasonably suspected of committing or of having committed an offence under any law governing the making, supply, possession or conveyance of intoxicating liquor.”

¹⁸⁴ The retailer is required to pay attention to behavioural indicators that the customer may be intending to re-sell the product, such as:

- S4(8)(b)(ii) “the nature of any delivery instructions given by the purchaser;
- (iii) any request by the purchaser to establish a discounted pricing arrangement, or a standing arrangement for ordering, billing, credit or payment; and
- (iv) any request or instructions by the purchaser to receive liquor and tranship that liquor to the purchaser or a third party.”

Licensing fees in the manufacturing and distribution framework vary according to the revenue of the regulated entity, with bigger producers and distributors being subject to higher fees. However, the fee escalation is fairly small, and tops out at a very modest R15 000 annual license renewal fee for entities with regulated revenue of over R1bn.¹⁸⁵ This is probably not consistent with a cost-recovery framework for regulatory activities, as the costs of regulating a given company should rise in line with revenue growth. It may be equitable to consider a revision to industry license fees, which would have the effect of shifting the costs of regulation on to those parties who benefit commercially from the regulated activities.

3.1.4 Taxation

Liquor products in South Africa are subject both to value added tax (at the same rate as other VAT-able goods), and to excise duties, as shown in Table 22 below. Excise rates on liquor products are in all cases at the same rate as customs duties, with exported goods receiving a full excise rebate. The excise tax is subject to VAT, which introduces an element of double taxation.

¹⁸⁵ Fee schedules are available at <http://www.dti.gov.za/nla/applicationprocedures.htm>



Table 22: South African liquor excise rates

Tariff item	Tariff heading	Item description	Excise *
104.00		PREPARED FOODSTUFFS; BEVERAGES, SPIRITS AND VINEGAR; TOBACCO	
0.10		Traditional African beer powder as defined in Additional Note 1 to Chapter 19	34,7c/kg
104.10	22.03	Beer made from malt	
0.10		Traditional African beer as defined in Additional Note 1 to Chapter 22	7,82c/li
0.20		Other	R50.20/li aa
0.02		Sparkling wine	R6.67/li
0.04		Unfortified wine	R2.14/li
0.06		Fortified wine	R4.03/li
104.17	22.06	Other fermented beverages (for example, cider, perry, mead); mixtures of fermented beverages and mixtures of fermented beverages and non-alcoholic beverages, not elsewhere specified or included:	
0.05		Traditional African beer as defined in Additional Note 1 to Chapter 22	7,82c/li
0.15		Other fermented beverages, unfortified	R2.52/li
0.17		Other fermented beverages, fortified	R5.15/li
0.22		Mixtures of fermented beverages and mixtures of fermented beverages and non-alcoholic beverages	R2.52/li
0.90		Other	R5.15/li
104.20	22.07	Undenatured ethyl alcohol of an alcoholic strength by volume of 80 per cent volume or higher; ethyl alcohol and other spirits, denatured, of any strength:	
	22.08	Undenatured ethyl alcohol of an alcoholic strength by volume of less than 80 per cent volume; spirits, liqueurs and other spirituous beverages:	
0.10		Wine spirits, manufactured by the distillation of wine	R84.57/li aa
0.15		Spirits, manufactured by the distillation of any sugar cane product	R84.57/li aa
0.25		Spirits, manufactured by the distillation of any grain product	R84.57/li aa
0.29		Other spirits	R84.57/li aa

Source: SARS

* Note: Excise and customs rates on all products shown are equal

Although tax rates are set as absolute amounts rather than relative to the cost of the product concerned, the intent of National Treasury is to impose excise rates which are consistent with a total consumption tax burden relative (that is, excise duties plus VAT) to the average retail price of 23%, 33% and 43% for wine, malt beer and spirits respectively.¹⁸⁶ Treasury decided on these excise benchmarks in 2002, and the adjustment process required to achieve them has resulted in above inflationary increases in excise rates in the years since then. While consumer price inflation increased

¹⁸⁶ Budget 2010/2011 Tax Proposals, pg 10

by 58% in the period 2002/03 to 2010/11, the nominal level of excise rates on beer, wine and spirits has increased by 96%, 165% and 130% over the same period.¹⁸⁷

Table 23: Tax burden as a % of retail sales price, 2001/02

	Total tax burden (% of retail price)	International average
Malt beer	30.7	36.8
Sorghum beer (commercial)	16	-
Sorghum powder (commercial)	20.7	-
Natural wine	20.2	32.9
Spirits	38.6	54.2

Source: Parry et al. 2003, 272

The level of excise duty on traditional African beer is particularly low. Assuming a maximum absolute alcohol content of 3%, the total excise duty on a litre of absolute alcohol in traditional beer is R2.61, compared to R50.20 in malt beer and R84.57 in ethanol. Compared to the value of the underlying product, excise duties are particularly high in ethanol. A litre of ethanol, which is typically more than 95% absolute alcohol, will currently retail for a before tax price of between R7 and R8. The excise duty is therefore over 1000% of the retail price of the underlying good. The strongest incentive to evade excise duties is thus in the wholesale ethanol market, whereas traditional beer market participants have the lowest financial incentive to evade taxes.

Excise duty only falls due on ethanol if it is used as an input into the domestic beverage industry, and thus denatured/methylated ethanol and exported ethanol are not subject to duty. In terms of section 19(1)(a)(v) of the Act, the Minister is able to review or impose additional conditions upon registrants who do not meet their customs and excise obligations.

3.1.5 Advertising and sponsorship

In terms of section 9(1) of the Liquor Act 2003, sellers of alcohol and methylated spirits are prohibited from advertising in a false or misleading manner, or in a manner targeted at minors. This prohibition is repeated in the Free State Liquor Act 2007, but otherwise advertising is not addressed in provincial legislation.

The compliance mechanism used to ensure that this requirement of the Act is followed is largely a self-regulatory model. The Industry Association for Responsible Alcohol Use ("ARA") publishes guidelines for the inclusion of drink/driving and underage drinking statements in print, radio and TV advertising.¹⁸⁸ Contraventions of these advertising standards can be reported to the ARA's Code of Commercial Communication Complaints Line (complaints referred to the Advertising Standards Association of South Africa are typically referred to this body).

¹⁸⁷ National Treasury 2010, 7

¹⁸⁸ <http://www.ara.co.za/industry-tips/advertising-guideline>

Some municipalities also address alcohol advertising in their municipal bylaws. For example, the Tshwane municipality makes provision for the municipality to develop written directives on the outdoor advertising of liquor. The prevalence of such municipal restrictions is unknown at this time.

3.1.6 Public domain drinking, and drinking and driving

The penalty for public drinking varies by province, as shown in Table 24 below. In most cases, the institution of provincial legislation has resulted in more severe penalties for public drinking than were experienced under the 1989 Liquor Act. Some municipalities also impose restrictions on public drinking in their by-laws.

Table 24: Penalty for public drinking

	Penalty for public drunkenness
1989 Liquor Act	Fine or imprisonment of up to 6 months
Gauteng Liquor Act 2003	Fine not exceeding R100 000, or imprisonment for up to ten years or both
Eastern Cape Liquor Act 2003	n/a
Western Cape Liquor Act 2008	Fine not exceeding R50 000, or imprisonment for up to 3 months or both
Northern Cape Liquor Act 2008	A fine or imprisonment for up to ten years or both
Free State Liquor Act 2007	A fine or imprisonment for up to five years or both
Mpumalanga Liquor Licensing Act 2006	A fine or imprisonment for up to two years or both
KwaZulu Natal Liquor Licensing Bill 2009	A fine or imprisonment for up to five years or both
Limpopo Liquor Bill 2007	Fine or imprisonment or both

Source: Provincial and national legislation, DNA interpretation

Drinking and driving is governed by the National Road Traffic Act No. 93 of 1996. In terms of section 65 of that Act, the blood-alcohol limit for drivers is 0.05 grams per 100 millilitres (reducing to 0.02 grams for professional drivers), while the breath-alcohol limit is 0.24 milligrams per 1 000 millilitres (or 0.10 milligrams for professional drivers). The penalty for contraventions of these limits is a fine or imprisonment for a period not exceeding six years.

3.1.7 Relevant legislation

The complexity of the regulatory environment in which the liquor industry operates can be revealed by examining the various pieces of legislation which impact on the industry, as shown in Table 25 below. Legislation which is applicable on an economy-wide basis (such as, for example, the Competition Act no. 89 of 1998) is excluded from this legislative audit in order to provide greater clarity on legislation of specific importance for the liquor industry. For simplicity, outstanding bills and acts of amendment have also been excluded from the listing, and the sample of applicable municipal bylaws shown should not be regarded as complete.

Table 25: Legislative audit

Legislative title	Relevance
National legislation	
Liquor Act no. 27 of 1989:	Legislates provincial liquor retail environment in provinces where provincial legislation has yet to be implemented
Liquor Products Act no. 60 of 1989	Provides definitions of liquor products and sets out production quality requirements and labelling norms. Includes restrictions on availability of papsakke and maximum container size of 5 litres.
Liquor Act no. 59 of 2003	Regulates national production and distribution liquor environment
Customs and Excise Act no. 91 of 1964	Provides for the levying of excise duties on liquor
Foodstuffs, Cosmetics and Disinfectants Act no. 54 of 1972	Regulates all foodstuffs intended to be eaten or drunk by humans. Prohibits certain substances from entering the foodchain and sets food standards in general. Subsidiary regulations require warning labels on alcohol containers.
National Road Traffic Act No. 93 of 1996	Sets blood alcohol concentration levels and penalties for driving under the influence
Hazardous Substances Act No. 15 of 1973	Alcohol is defined as a Group II hazardous substance in terms of the schedules to the Hazardous Substances Act. The Act allows inspections by Ministry of Health inspectors, and by customs and excise, police or municipal representatives
Standards Act, No. 29 of 2008	Establishes the South African Bureau of Standards, which sets SANS 10228, which classifies alcohol as a Group II hazardous substance in terms of the Hazardous Substance Act, and sets standards for the transportation of alcohol
Prevention of and Treatment for Substance Abuse Act, No. 70 of 2008	Aimed at reducing the harms associated with substance abuse, which is defined to include alcohol, through demand reduction, harm reduction and supply reduction (in the case of illicit drugs).
Provincial legislation	
Mpumalanga Liquor Licensing Act (5/2006):	Legislates provincial liquor retail environment
Northern Cape Liquor Act (2/2008)	Legislates provincial liquor retail environment
Western Cape Liquor Act (4/2008)	Legislates provincial liquor retail environment
Gauteng Liquor Act (2/2003)	Legislates provincial liquor retail environment
Free State Liquor Act (3/2007)	Legislates provincial liquor retail environment
Municipal by-laws (sample)	
City of Tshwane By-Laws pertaining to Municipal Functions Relating to Substance Abuse in Tshwane, 2008	Provides for the municipality to set directives on outdoor liquor advertising
Nelson Mandela Bay Metropolitan Municipality By-Law Relating to Prevention of Public Nuisances and Public Nuisances Arising from the Keeping of Animals, 2010	Prohibits public drunkenness
Ekurhuleni Metropolitan Municipality Police Services By-Laws, 2004	Regulates parking attendant behaviour, and specifies that they may not consume or be under the influence of alcohol
Nelson Mandela Bay Metropolitan Municipality Liquor Selling Hours By-Law, 2005	Sets selling hours for different categories of registrations
West Rand District Municipality Street and Miscellaneous By-Laws, 2008	Prohibits the consumption of alcohol in streets and public places
City of Johannesburg Metropolitan Municipality Public Open Spaces By-Laws, 2004	Prohibits any consumption, brewing, storage or selling of any alcoholic beverage in a public open space

Source: DNA research

Areas where different pieces of legislation have overlapping jurisdiction on the same areas of the liquor market are shown in Table 26 below. In some cases, the existence of overlaps is not problematic – for example, if provincial legislation is enacted, the 1989 Liquor Act no longer has jurisdiction on on- and off-license conditions, and thus no jurisdictional overlap is experienced. However, in many areas of the liquor market jurisdictional overlap issues are profound, and require either substantial investment in interdepartmental coordination mechanisms, or some revision to existing legislation.

Table 26: Legislative overlaps

Regulatory area	Relevant legislation
On-consumption conditions	Liquor Act no. 27 of 1989: licensing requirements Provincial legislation: licensing requirements Liquor Act no. 59 of 2003: restriction of sales to minors Municipal by-laws: various conditions on trading hours, etc
Off-consumption conditions	Liquor Act no. 27 of 1989: licensing requirements Provincial legislation: licensing requirements Liquor Act no. 59 of 2003: restriction of sales to unlicensed parties, for on-selling purposes; and sale to minors Municipal by-laws: various conditions on trading hours, etc
Distribution	Liquor Act no. 59 of 2003: licensing and inspections
Production	Liquor Act no. 59 of 2003: licensing and inspections Provincial legislation: micro manufacturers licensing Customs and Excise Act no. 91 of 1964: certain conditions on production
Road safety	National Road Traffic Act No. 93 of 1996: blood alcohol limits Hazardous Substances Act No. 15 of 1973: defines alcohol as hazardous substance Standards Act, No. 29 of 2008: sets standards of transportation of alcohol
Public health & safety	Liquor Act no. 59 of 2003: licensees required to implement anti-abuse programs; restrictions on sales to minors, public health notice requirement Liquor Products Act no. 60 of 1989: production quality requirements Foodstuffs, Cosmetics and Disinfectants Act no. 54 of 1972: product quality requirements Prevention of and Treatment for Substance Abuse Act, No. 70 of 2008: tasks the Minister for Social Development with developing intersectoral strategies for reducing demand for and the harm associated with substance abuse Provincial legislation: restrictions on adulterating liquor, public drunkenness, etc Municipal by-laws: various conditions on public drunkenness, etc
Advertising	Liquor Act no. 59 of 2003: bans misleading advertising and advertising to minors Municipal by-laws: various conditions
Taxation	Customs and Excise Act no. 91 of 1964: tax levels on different classes of product Liquor Act no. 59 of 2003: regulation of non-taxed/methylated spirits
Market structure	Liquor Act no. 59 of 2003: licensing process required to consider competitive conditions Competition Act no. 89 of 1998

Source: DNA Economics

The area of public health and safety is probably subjected to the most areas of jurisdictional overlap. The extent of this overlap is partially recognised by the Prevention of and Treatment for Substance Abuse Act, which specifically tasks the Minister for Social Development with coordinating intersectoral

strategies for reducing substance demand and harm – however, the Department of Trade and Industry, despite regulating the liquor sector, is not included in list of departments designated for inclusion in the development of such intersectoral strategies.¹⁸⁹ During the research process, interviewees repeatedly indicated that the level of intersectoral communication actually achieved seemed to be inadequate for the needs of the sector.

Substantial jurisdictional overlaps are also seen in the area of on- and off-license regulation. The delegation of liquor license regulation to the provinces was undertaken in accordance with the provisions of the Constitution on the rights of the provinces, and it is thus not clear that there is scope for rescinding the rights of provinces to regulate liquor themselves.

3.2 International regulatory comparators

A brief outline of regulatory environments in liquor in four comparator countries/regions is now provided, in order to bring into context the South African regulatory framework. The four comparators chosen are Argentina, California (as an example of the extremely complex United States regulatory environment), Chile and Norway. Three of these regions are important producers and exporters of liquor, and were chosen deliberately in order to facilitate comparison with South Africa's liquor producer status.

Table 27 provides a brief comparison of the liquor operating environment in the four countries, as compared to South Africa. As can be seen, South Africa has the lowest per capita GDP, but the size of the South African economy is comparable to those of Chile and Norway (and to a lesser extent, Argentina). Norway is the only country in the group which does not have significant export activity, and South Africa has the highest proportion of alcohol abstainers in the group.

Table 27: Liquor operating environment, comparator countries

	South Africa	Argentina	United States	Chile	Norway
GDP, constant 2000 US\$bn	183.25	394.59	11 513.87	104.38	202.31
GDP per capita, constant 2000 US\$	3 763.82	9 893.81	37 867.11	6 211.70	42 429.93
Liquor industry exports 2009, US\$m	838.93	672.61	2 406.67	1 399.22	31.10
Abstainers as % of population	69%	16%	34%	25%	6%
Alcohol dependence	19%	16%	8%	25%	

Source: ITC Trade Map statistics, World Bank Databank, WHO Global Status Report on Alcohol 2004

Please note that the detailed methodology underlying the choice of international regulatory comparison countries is outlined in Appendix 1.

¹⁸⁹ Departments included are as follows: the National Youth Commission, Finance, Education, Health, Justice and Constitutional Development, Arts and Culture, Sports and Recreation, Local and Provincial Government, Correctional Services and Safety and Security.

3.2.1 Argentina

Argentina has three principle pieces of legislation governing the liquor environment, namely the National Alcohol Law No. 24566 of 1995, the National Law on the Fight Against Alcoholism, No. 24788 of 1997, and the General Law for Wine, No. 14878 of 1959. The General Law for Wines creates the National Wine Institute,¹⁹⁰ which is a key regulatory body in the sector, and is financed by a 7% surcharge on the sale of wine. The Institute is housed at the Secretariat of Agriculture, Livestock, Fisheries and Food at the Ministry of Economy and Production.

The National Wine Institute is empowered to regulate wine, beer and cider producers and sellers, and is also the regulatory body responsible for the National Alcohol Law, which covers the spirits market. Its role is thus partly analogous to that of South Africa's NLA. However, it is also tasked with promoting the interests of the Argentine wine industry, including provision of technical training and export promotion. The Institute is therefore to some extent torn between the roles of industry regulator and industry association.

3.2.1.1 Retail distribution regulation

Argentina's regulatory framework for liquor concentrates on the production and distribution of alcohol, rather than the retail component of the value chain. Although registration is required for those involved in the handling and marketing of alcohol, which may conceivably involve some retailers, retailing of liquor is not in and of itself an activity which requires a license.¹⁹¹ As a result, many activities involving license contravention, which are illegal and carry a penalty in other jurisdictions, are not applicable in Argentina. Penalties for selected offences are shown in Table 28 below.

Table 28: Penalties for contravention of selected offences, Argentina

Offence	Penalty
Trading without licence	N/A
Drinking at off-consumption licensed operator	N/A
Adulterating liquor	Fine of P10 000 (R19 000) or P30 (R57) per litre
Sale to minors	Sale to under 18s: P500-10 000 (R950-19 000) or the closure of the premises for ten days, on first offence
Licensee permits drunkenness	N/A
Produce or sell concoctions	N/A

Source: National regulations; exchange rate of 1.9 pesos to the rand assumed

In the absence of a liquor licensing framework, Argentina can be characterised as having a fairly permissive and/or under-developed regulatory framework for the liquor industry. Important legislative prohibitions on the sale of alcohol to minors, for example, were only enacted in 1997.

¹⁹⁰ Instituto Nacional de Vitivinicultura

¹⁹¹ The WHO identifies Argentina as a country which does require a license for the retail sale of beer, wine and spirits – examination of the underlying legislation suggests that this may be an error. (WHO 2004, 106)

3.2.1.2 Production and wholesale

The National Alcohol Law requires “any person whose business is the distillation, manufacture, handling, bottling and marketing of alcohol” to register with the National Wine Institute. This includes producers of ethyl alcohol, and the regulation of ethyl alcohol is in fact one of the primary aims of the National Alcohol Law. Once registered, records on the movement of alcohol must be submitted to the National Wine Institute.

The Institute is authorised to conduct inspections of documentation and take samples of material of parties involved in the “production, circulation, fractionation and marketing of alcohol.” To this end, the regulatory aim of the Institute is primarily to guarantee the quality and safety for consumption of the end product. Quality issues in the production of wine in particular receive a great deal of attention in legislation, while little attention is paid to the competitive conditions of the industry, or to considerations of preventing alcohol abuse (for example, the manufacture of concoctions is not addressed by legislation). No evidence was found of an obligation on producers to contribute to anti-abuse programs.

3.2.1.3 Taxation

Excise rates in Argentina are expressed as a percentage of the value of the good (at the point of sale by a manufacturer or importer, not the final retail price), rather than as a fixed amount. Excise rates are as shown in Table 29. Standard VAT rates are 21%, and VAT is not paid on excise duties. At manufacturing level, therefore, the total consumption tax burden relative to the average retail price is quite similar to the tax burden targets set in South Africa, of 23%, 33% and 43% for wine, malt beer and spirits respectively. At retail level the total tax burden may be markedly lower.

Table 29: Argentina liquor excise rates

	Excise rate	Excise plus VAT
a) Whisky	20%	41%
b) Cognac, brandy, gin, pisco, tequila, vodka or rum	20%	41%
c) According to their alcoholic level, excluding products indicated in a) and b):		
Class 1, from 10% to 29%	20%	41%
Class 2, 30% and above	30%	51%
Champagne	12%	33%
Beer	8%	29%
Soft drinks, syrups and liquors	8%	29%

Source: <http://www.afip.gov.ar/english/about.asp#duties>

3.2.1.4 Advertising and sponsorship

The National Law on the Fight Against Alcoholism prohibits liquor advertising aimed at those under the age of 18, or advertising that suggests that alcohol improves physical or intellectual performance, or the content of which is associated with sexuality or violence. Infringement of this prohibition will result

in fines for the advertiser and the advertising company of between 5 000 and 100 000 pesos (R9 500 – R190 000).

3.2.1.5 Public domain drinking, and drinking and driving

Legislation against drunk driving and public drunkenness is of fairly recent provenance in Argentina, and was implemented with the 1997 National Law on the Fight Against Alcoholism. The existence of a legal minimum blood alcohol level was also established at this time.

Table 30: Public drinking and drunk driving penalties, Argentina

Offense	Penalty
Penalty for public drunkenness	Sale to under 18s: P500-10 000 (R950-19 000) or the closure of the premises for ten days, on first offence
Blood-alcohol limit	500 milligrams per litre blood alcohol concentration (200 milligrams for drivers of motorcycles, and zero tolerance for cargo or passenger drivers)
Penalty for driving over the limit	First offence: seizure of vehicle, 6 month suspension of license, fine of P200-2000 (R380-3800)

Source: National regulations, TIRF 2008; exchange rate of 1.9 pesos to the rand assumed

3.2.2 California

The central regulatory body for liquor in California is the California Department of Alcoholic Beverage Control (“ABC”), which is governed by the Alcoholic Beverage Control Act of 2009. The ABC is responsible for licensing and compliance of manufacturing and sale of liquor products in the state. For administrative purposes, the operations of the ABC have been organised into northern and southern divisions, further sub-divided into 24 field offices. The ABC’s investigative staff are designated as peace officers in terms of the California Penal Code, which gives them the ability to make arrests and conduct investigations.¹⁹²

3.2.2.1 Retail distribution regulation

The ABC distinguishes between approximately 40 retail license categories, several of which are further sub-divided according to the size of the license applicant. Penalties for contravention of selected offences are shown in Table 31 below. It should be noted that in all cases, the penalty for the first offence only is shown, and may escalate for further infringements. In addition, if a licensee accrues three misdemeanour convictions in a period of one year, this is sufficient to trigger the suspension or revocation of the license.

¹⁹² <http://www.abc.ca.gov/mission.html>

Table 31: Penalties for contravention of selected offences, California

Offence	Penalty
Trading without a licence	Misdemeanour: a fine of not more than \$1,000 (R7,500) and/or 6 months imprisonment
Drinking at off-consumption licensed operator	Misdemeanour: a fine of not more than \$1,000 (R7,500) and/or 6 months imprisonment, and/or 15 days license suspension
Adulterating liquor	Misdemeanour: a fine of not more than \$1,000 (R7,500) and/or 6 months imprisonment
Sale to minors	Sale to under 21: fine of \$1,000 (R7,500), at least 24 hours of community service, and 15 day license suspension
Licensee permits drunkenness	Misdemeanour: a fine of not more than \$1,000 (R7,500) and/or 6 months imprisonment, and 15 day license suspension

Source: Relevant legislation; \$1/R7.50 exchange rate estimate used

Article 2 of the ABC Act places a limitation on the number of retail licenses that may be issued, on the basis that “the public welfare and morals require that there be a limitation on the number of premises licensed for the sale of distilled spirits.” License number restrictions are as follows:

- A maximum of one general on-license and one general off-license per 2 000 residents of a given county
- A maximum of one wine and beer on-license and one wine and beer off-license per 2 500 residents of a given county

In addition, on and off-sale retail license applications may be refused if the area in which the store would be placed is a high crime area (defined as a 20% greater incidence of reported crimes than is the average in the jurisdiction).

3.2.2.2 Production and wholesale

In the production and wholesale environment in California, the ABC requires manufacturers, agents, wholesalers, warehouses, importers, rectifiers¹⁹³ and brokers to obtain licenses. The ABC distinguishes between the licensing requirements of in-state manufacturers and out-of-state manufacturers, who are required to obtain an out-of-state manufacturer’s certificate in order to ship liquor into the state of California.

In contrast to the South African regulatory requirements, industrial alcohol dealers (ie trading ethanol for non-beverage purposes) are also required to be licensed. Furthermore, such industrial alcohol dealers may only sell to non-licensees if they have a permit issued by the Alcohol and Tobacco Tax

¹⁹³ A rectifying licensee is authorized to cut, blend, rectify, mix, flavour and colour distilled spirits and wine. Downloaded from <http://www.abc.ca.gov/forms/abc616nr.pdf>

and Trade Bureau.¹⁹⁴ No obligation appears to be placed on liquor producers to contribute to alcohol anti-abuse initiatives in the state of California.

The environment for on-selling of beer is subject to some restrictions. Specifically, manufacturers, importers and wholesalers have to submit to the regulator a price list, and prices for different customers within a county on that list are only allowed to vary according to geographic differences (presumably mostly transportation costs), which provides some consumer protection against excessive pricing. However, beer manufacturers are also required to designate territorial limits for their wholesalers. The designation of territorial limits is regarded with caution by competition economics, as it is typically expected to result in anti-competitive outcomes. It is thus unclear why California has chosen to enshrine this requirement in state law.

Vertical ties between on-sales and off-sales licensees and upstream parties are prohibited by chapter 15 of the ABC Act, with a few limited exceptions. Specifically, “no manufacturer, winegrower, manufacturer’s agent, rectifier, California winegrower’s agent, distiller, bottler, importer, or wholesaler, or any officer, director, or agent of any such person” is permitted to either have an ownership stake in an on-license, or lend money or any other thing of value to an on-license or an off-license. Similar restrictions also apply to the brewing industry. Producers are also not allowed to sell on consignment to on or off licenses: in other words, goods may not be delivered on the basis that the receiving party retains the right to return them to the original seller.

This prohibition on vertical relationships is more likely to be pro-competitive in effect. Case law in the United Kingdom, for example, has focused on the potential anti-competitive impact of ties between on-license holders and manufacturers.¹⁹⁵ It is thus not clear whether the net effect of anti-competitive territorial limits and pro-competitive bans on vertical relationships will ultimately help or hinder competition in the manufacturing and wholesale market in California.

3.2.2.3 Taxation

Excise rates in California are levelled at both a state and federal level, with the bulk of the excise burden being due to federal taxes. Table 32 provides an indication of how excise rates translate into rands.

¹⁹⁴ <http://www.abc.ca.gov/forms/abc616nr.pdf>

¹⁹⁵ See for example Case IV/35.992/F3 - Scottish and Newcastle; Cases IV/36.456/F3 - Intrepreneur and IV/36.492/F3 – Spring; and Case IV/35.449/F3 - Allied Domecq

Table 32: California and federal liquor excise rates

	Per gallon, California excises	Per gallon, federal excises	Total excise per litre (R7.50/\$1)
Distilled spirits (43% aa)	\$3.30	\$11.61	R29.54
Beer	\$0.20	\$0.58	R1.55
Still wines containing not more than 14% alcohol	\$0.20	\$1.07	R2.52
Sparkling hard cider	\$0.20	\$0.23	R0.84
Champagne and sparkling wine	\$0.30	\$3.40	R7.33

Source: California State Board of Equalisation, US tax code (Title 26 - Internal Revenue Code), DNA calculations

Excise taxes on distilled spirits are lower than experienced in South Africa, where the equivalent excise rate on a litre of 43% spirits would be R36.37, whereas wine excise rates are slightly higher than seen in South Africa.

3.2.2.4 Advertising and sponsorship

The ABC Act carries a wide range of conditions and restrictions on advertising of liquor, including the following:

- Restrictions on advertising at petrol stations (variously, on fuel islands and on buildings)
- Restrictions on false advertising of wines of appellation, such as Napa Valley origin wines
- Producers and wholesalers are not allowed to pay retailers for advertising distilled spirits, although they may provide them with or sell to them advertising material, within the limits established by the ABC (currently \$50 per brand per year per premises). Receipt of advertising material may also not be made conditional upon purchase of the relevant brand by the licensee, and the content and format of in-store on-license advertising is regulated
- When conducting liquor promotions at trade fairs, conventions and the like, all liquor sponsors are to be charged equally for the advertising opportunity
- Advertisements for certain kinds of promotional activities, such as “meet the winemakers dinners”, may not contain the retail price of the liquor involved
- Beer tastings may be advertised only by signs visible within the interior of the concerned retailer’s premises
- When advertising space is purchased at entertainment venues, such as sports arenas, zoos or theatres, the on-license retailer located in the arena must carry competing brands to the advertised brand
- Liquor advertising may not target minors, and this includes distribution of marketing items aimed at minors
- Signs and advertising of liquor “shall not be of any obnoxious, gaudy, blatant, or offensive nature”

- Cost limits apply to the value of promotional items distributed to consumers
- Cooperative advertising is not permitted: in other words, liquor suppliers may not co-pay for advertising with retailers, and liquor adverts may not feature the names of retailers

The liquor advertising regime in California may therefore be characterised as complex, and is presumably also complex and expensive to monitor and police. However, its complexity does give the state government the ability to target specific policy goals, many of which revolve around restricting the anti-competitive potential of ties between advertising parties and retail outlets.

3.2.2.5 Public domain drinking, and drinking and driving

The penalties for a first time offense for public drunkenness and drunk driving are shown in Table 33 below. Penalties escalate for subsequent offenses. Younger, less experienced drivers are viewed as a greater source of drunk driving risk, and thus less tolerance to alcohol consumption is shown to those under the age of 21.

Table 33: Public drinking and drunk driving penalties, California

	Penalty/definition
Blood-alcohol limit	Over 21: blood alcohol of 0.08 percent or more, by weight. Under 21: blood alcohol of 0.01 percent or more, by weight
Penalty for public drunkenness	Misdemeanour: a fine of not more than \$1,000 (R7,500) and/or 6 months imprisonment
Penalty for driving over the limit	First offence: a fine of \$390-\$1000 (R2,925 – R7,500), 96 hours to 6 months imprisonment, completion of a driver training course, and/or 6 months license suspension

Source: Relevant legislation; \$1/R7.50 exchange rate estimate used

3.2.3 Chile

Chilean liquor regulation is governed by a national law, which is then implemented at municipal level. However, the production of alcohol is regulated at a national level by a division of the Ministry of Agriculture. Chilean law pays close attention to limiting the social costs of alcohol abuse, and has a number of strict prohibitions on activities and individuals associated with alcohol abuse.

3.2.3.1 Retail distribution regulation

Retail distribution of liquor in Chile governed by the Law for Dispensing Alcoholic Beverages (Law 19,925 of 2003), which falls under the Ministry of the Interior. In terms of this legislation, all establishments which “sell, provide, distribute or keep alcoholic beverages” can be monitored and or inspected by the police, municipal inspectors and prosecutors.

Licenses are issued by, and license fees are paid, to municipalities. The municipality must determine which areas nightclubs, pubs and cabarets can operate in, but before issuing a license, must obtain the approval of the police. Legislation limits the establishment of licensees within a hundred yards of some kinds of facilities, including educational establishments, hospitals, prisons and police checkpoints.

For some kinds of on and off licenses, Law 19,925 states that there shall not be more than one establishment per 600 inhabitants in each administrative area (comuna), which is presumably intended to act as a measure against alcohol abuse. Where licenses come up for sale in areas where license numbers are limited, the license may be auctioned off by the municipality concerned, for a consideration which appears to be above and beyond the bi-annual license fee payment.

Table 34 below highlights a number of penalties for selected offenses in the Chilean retail liquor sector. Fines are measured in tax units, which are an inflation-indexed unit published monthly by the Chilean Reserve Bank, and thus fine values do not depreciate with inflation. What is also notable about Chilean legislation is that penalties are often imposed on both parties to an illegal transaction. For example, Law 19,925 imposes fines on mayors and/or municipal officers who issue licenses in contravention of its provisions.

Table 34: Penalties for contravention of selected offences, Chile

	Chile
Trading without licence	5-20 monthly tax units on first offense: P187 085 – 748 340 (R2 806 – 11 225). Distributors who sell to unlicensed premises are subject to a fine of 15-20 monthly tax units.
Drinking at off-consumption licensed operator	5-20 monthly tax units on first offense: P187 085 – 748 340 (R2 806 – 11 225)
Adulterating liquor	1-100 monthly tax units: P37 417 - 3 741 700 (R561 - 56 125)
Sale to minors	Sale or permitting entry to under 18/16 (depending on license type): 3-10 monthly tax units on first offense; P112 251 - 370 417 (R1 684 - 5 613); imprisonment
Licensee permits drunkenness	3-10 monthly tax units: P112 251 - 370 417 (R1 684 - 5 613)

Source: National legislation, TIRF 2008; exchange rate of 0.015 pesos to the rand assumed. Monthly tax unit for October 2010 as per Banco Central de Chile

3.2.3.2 Production and wholesale

The upstream liquor market in Chile is governed mainly by Law 18,455 the law on Production, Processing and Marketing of Ethyl Alcohol, Beverages Alcohol and Vinegars, which covers “production, processing, marketing, export and import of ethyl alcohol, alcoholic beverages, spirits and vinegar products.” Importers and wholesalers are required to be licensed in terms of Law 19,925. Law 18,455 falls under the Ministry of Agriculture, and the companies and individuals it regulates are required to register with the Ministry’s Agriculture and Livestock Service, which administers the Law. Furthermore, vineyard owners are required to report the varieties and quantities of vines planted on an annual basis.

Much of the content of Law 18,455 is concerned with ensuring the quality of alcohol introduced into the food chain, for example by granting the Agriculture and Livestock Service rights to sample and test products. There are however also provisions in the legislation which contribute to compliance at the retail level of liquor regulation, including a requirement that only denatured ethyl alcohol can be sold to companies and individuals who are not registered with the Agriculture and Livestock Service. Law 18,455 does not place a requirement on producers to contribute to anti-abuse programs.

3.2.3.3 Taxation

Excise rates on wine, beer and cider in Chile are extremely low, when compared to the excise rate on non-alcoholic beverages which they exceed by only 2%, as shown in Table 35. Spirits taxes are more substantial. Historically, Chile distinguished between the taxes on pisco and other kinds of spirits, with pisco, a local variety of brandy, being favoured with lower tax rates. However, this tax regime was the subject of a complaint to the World Trade Organisation, who found in favour of the complainant, the European Communities, and ruled that the differential tax was a form of protectionism for the local liquor industry.¹⁹⁶

Table 35: Chilean excise rates, liquor

	Excise rate
Liquor, pisco brandy, whiskey, brandy and spirits, including wine or flavored liqueur similar to vermouth	27%
Wine, beer, cider and other alcoholic beverages	15%
Non-alcoholic beverages	13%

Source: http://www.sii.cl/aprenda_sobre_impuestos/impuestos/impuestos_indirectos.htm#o1p3

3.2.3.4 Advertising and sponsorship

As it currently stands, Law 19,925 places very few limits on liquor advertising. However, a number of amendments to Law 19,925 aimed specifically at the advertising of liquor, are currently under consideration in the Chilean legislature. The key features of this amendment bill are as follows:¹⁹⁷

- Both liquor labels and liquor advertising (including newspapers, magazines and other forms of social communication) are required to carry one of the designated health warnings.¹⁹⁸ In adverts, the warning must cover at least 15% of the surface area of the advert, while in TV and radio spots, it must be at least 3 seconds long
- Liquor may not be advertised on streets and highways
- TV adverts can only be made between 11pm and 6am, and radio ads may not be made between 4pm and 6pm
- Sports activities may not be used to advertise liquor, either on a commercial or non-commercial basis, and neither directly nor indirectly
- Minors may not be targeted by liquor advertising

Compliance with these prohibitions is to be overseen by the health authority. The legal status of these amendments at this time is not clear.

¹⁹⁶ WTO 1999

¹⁹⁷ New 2nd report of the Commission, 10 October 2007, Camara de Diputados de Chile, http://camara.cl/pley/pley_detalle.aspx?prmID=4585&prmBL=4192-11

¹⁹⁸ The three warnings proposed at present are "Pregnant women should not drink alcohol"; "Alcohol reduces driving ability, and "The consumption of alcohol in children affects their physical and intellectual development."

3.2.3.5 Public domain drinking, and drinking and driving

Penalties for infringements of public drunkenness and drunk driving are as shown in Table 36 below. These penalties form only one component of Chile's approach to reducing alcohol abuse. As a whole, Chilean legislation has a number of provisions which are specifically targeted at reducing the incidence and social costs of alcoholism and alcohol abuse.

Table 36: Public drinking and drunk driving penalties, Chile

Offense	Penalty
Penalty for public drunkenness	One monthly tax unit: P37 417 (R561). Repeat offenders may be interned in an alcohol treatment facility.
Blood-alcohol limit	500 milligrams per liter blood alcohol concentration
Penalty for driving over the limit	BAC of 0.05-0.09%: 61 days in prison plus 30 day licence suspension. BAC over 0.10%: 61-560 days in prison plus 1-year suspension.

Source: National legislation, TIRF 2008; exchange rate of 0.015 pesos to the rand assumed. Monthly tax unit for October 2010 as per Banco Central de Chile

Examples of these provisions, as contained in Law 19925, include the following:

- Persons caught in public drunk more than three times a year may be referred to anti-abuse programs and/or interned in anti-abuse facilities. If they have minor children, the mother of those children may request that as much as 50% of their salary be delivered to her
- The husband, wife, parent, child, guardian or employer of an excessive drinker may apply to the courts to notify licensees not to sell to that person for three months, and is entitled to damages if licensees do not adhere to this prohibition
- All primary healthcare facilities are required to have outpatient anti-abuse facilities
- Any older family member may request the court to send a relative to an alcohol abuse treatment and rehabilitation facility, including involuntary hospitalisation

3.2.4 Norway

The Nordic countries are commonly held to have a long tradition of unusually prohibitive alcohol regulation. Some commentators have summarised the goal of Nordic alcohol control policy as:

*"to maintain a lower overall consumption of alcoholic beverages and lower levels of associated alcohol-related problems by reducing private profits and promotion of all aspects of alcohol, restricting retail access to alcohol, limiting personal imports of lower-cost alcohol from other countries, and maintaining high retail prices."*¹⁹⁹

¹⁹⁹ Holder et al 1998, 1; as quoted in Hellebø 2003, 10

The prohibitive nature of Nordic alcohol regulation can be attributed largely to a history of substantial alcohol abuse. At its peak in the period 1830-1840, alcohol consumption per adult per year in Norway topped out at 13 litres of absolute alcohol,²⁰⁰ as opposed to only 5.81 litres per adult in 2004.²⁰¹

The Norwegian liquor regulatory regime applies to beverages with alcohol content of more than 2.5% (although only beverages with an alcohol content of below 0.7% are considered non-alcoholic), and drinks with an alcohol content greater than 22% are classified as spirits. The serving, retailing, wholesaling and importation of liquor with an alcohol content of greater than 60% is banned.

3.2.4.1 Retail distribution regulation

In terms of the Act on the Sale of Alcoholic Beverages, a license is needed in order to sell, manufacture or serve liquor in Norway. Municipal off-sales licenses to sell beverages with an alcohol content of more than 4.7% are granted on a four year basis, by the municipality concerned. Before the municipality can grant a license, it must obtain approval from social services and the police, and responsibility for ensuring compliance with license requirements rests with the municipality.

For spirits with an alcohol content of greater than 4.7%, Norwegian legislation permits off-sales to occur only through the Vinmonopolet retail monopoly, which has been wholly state-owned since 1939. Vinmonopolet stores must have a municipal license in order to operate, as must retailers (such as supermarkets), who sell beer and other beverages with an alcohol content of 0.7% to 4.7%. Both the Ministry and the municipality may set limits on the number of licenses which can be issued. Vinmonopolet is prohibited from entering both the wholesale and production market, and from selling beverages with alcohol content of less than 4.7%.

The Norwegian retail market is thus highly stratified by legislation. Some competition is allowed in weaker alcoholic beverages, but the monopoly in stronger spirits is vigorously enforced. Prohibiting Vinmonopolet from entering adjacent liquor markets may be a way of protecting competition in those markets, as it prevents Vinmonopolet from using its established market position as a source of competitive advantage when entering new areas. It should also be noted that Vinmonopolet's tax payments are earmarked by the state for spending on "preventive measures in the health and social sector."²⁰²

Penalties for a selection of offenses are shown in Table 37. There does not seem to be a prohibition on adulterating liquor in Norway, possibly because the extremely tight regulatory framework surrounding the production, importation and retailing of liquor would make such a penalty largely redundant. It should be noted that age limits on the sale of alcohol distinguish between spirits (ie alcohol content greater than 22%) and non-spirits. The age limit for beverages with an alcohol content of 0.7% to 22% is 18, while for spirits it is raised to 20.

²⁰⁰ http://www.vinmonopolet.no/is-bin/INTERSHOP.enfinity/WFS/store-vmp-Site/no_NO/-/NOK/viewCMS-Start?id=cms&key=222

²⁰¹ WHO 2004, 11

²⁰² Section 7-2, Act on the Sale of Alcoholic Beverages

Table 37: Penalties for contravention of selected offenses, Norway

Offense	Penalty
Trading without license	Fine or imprisonment for up to 6 months, or two years if the offense is considered serious
Drinking at off-licensed operator	Fine or imprisonment for up to 6 months, or two years if the offense is considered serious
Adulterating liquor	N/A
Sale to minors	Sale to under 18s of beverages with alcohol content of 0.7% to 22% (or under 20s if alcohol content exceeds 22%): fine or imprisonment for up to 6 months, or two years if the offense is considered serious
Licensee permits drunkenness	Fine or imprisonment for up to 6 months, or two years if the offense is considered serious

Source: National legislation and regulation

3.2.4.2 Production and wholesale

Licenses in the liquor production and wholesale markets are issued at national level by the Ministry of Health and Care Services, rather than at municipal level. Liquor wholesalers may only be licensed in terms of the Act on the Sale of Alcoholic Beverages, once registered for taxation purposes with Customs and Excise, and one of the conditions for obtaining a manufacturing license is that security should be adequate to ensure the collection of relevant alcohol taxes. Once licensed, they may only sell liquor to other licensed parties, or as exports. Importers (with the exception of Vinmonopolet) and exporters must also be licensed.

Restrictions on the ability to make liquor are tight. Without a manufacturing license, it is illegal to even own equipment suitable for the manufacturing or distillation of liquor. Before manufacturing license applications can be decided, a statement must be obtained from the police, tax authorities, customs authorities and the Norwegian Food Safety Authority.

Prior to 1996, Vinmonopolet held not only the retail off-sales monopoly in Norway, but also incorporated a production, importing and wholesaling monopoly. However, this arrangement was found to be in contravention of Norway's commitments in terms of the European Economic Area agreement, and thus in 1996, Vinmonopolet's production, importing, wholesaling and bottling assets were spun off into the Arcus subsidiary. Arcus has since been fully privatised.²⁰³ In terms of the new arrangement, competition to Arcus has been introduced into the importing and wholesaling markets. However, Arcus still holds the Norwegian monopoly on bottling and production activities.

It is interesting to note that the offenses which accrue the greatest penalties in term of the Act on the Sale of Alcoholic Beverages, in terms of the length of prison time possible, relate to infractions of manufacturing and wholesale license conditions. These severe penalties are probably made necessary by the extremely high excise rates on liquor in Norway, as discussed in the next section. Without effective control over the means of production and importing of liquor, which includes a heavy

²⁰³ <http://www.arcus.no/Arcus+AS.9UFRfK3M.ips>

penalty regime, the large incentives to undertake illegal activity caused by high excise rates would likely threaten the stability of the regulatory regime.

3.2.4.3 Taxation

Taxes on alcohol in Norway are based on the percent per litre of alcohol in the product concerned. So as per the data shown in Table 38, a spirits-based liquor with 43% alcohol by volume would be subject to tax of Kr265.74 per litre (R332.39), and a 3% beer would be subject to tax of Kr31.23 per litre (R39.03). The liquor taxation regime in Norway is thus extremely heavy – in terms of the tax burden per litre of 100% alcohol, Norway's taxes are the heaviest of all EU, EEA/EFTA and EU accession candidate countries.²⁰⁴

Table 38: Liquor excise rates, Norway

Beverage type	Percentage absolute alcohol	Excise rate per percentage point alcohol by volume and litre
	Less than 0.7%	Taxed as a non-alcoholic beverage
Spirits based	Over 0.7%	Kr6.18 (R7.73)
Other	0.7% - 2.7%	Kr2.76 (R3.45)
	2.7% - 3.7%	Kr10.41 (R13.01)
	3.7% - 4.7%	Kr18.04 (R22.55)
	4.7% - 22%	Kr4.03 (R5.04)
Ethanol	Over 0.7%	Taxed as an alcoholic beverage

Source: <http://www.toll.no/upload/aarsrundskriv/2010Alkohol.pdf>, exchange range of R1.25 to the krone assumed

The high level of liquor taxation in Norway prompts high levels of traveller's imports of alcohol into Norway. Estimates suggest that the majority of unrecorded alcohol consumption in Norway is derived from traveller's imports, and this unrecorded consumption is estimated at 20% to 35% of total alcohol consumption.²⁰⁵

3.2.4.4 Advertising and sponsorship

Restrictions on advertising alcohol in Norway are comprehensive. Simply put, all advertising of alcoholic beverages is prohibited, and the ban extends to products which carry the same brand as an alcoholic beverage. Such products may also not be shown in advertising for other goods and services. Compliance with this ban is supervised by the Directorate for Health and Social Affairs, which has the ability to impose fines for non-compliance.

Furthermore, liquor products may not be distributed to consumers for marketing purposes, and it is prohibited to advertise equipment that may be used to manufacture or distil liquor, or otherwise encourage illegal manufacturing or distilling.

²⁰⁴ Karlsson & Österberg 2009, 18

²⁰⁵ Karlsson & Österberg 2009, 19

3.2.4.5 Public domain drinking, and drinking and driving

There does not appear to be a penalty for public drunkenness in Norway, possibly because drinking in public is itself prohibited (and is subject to a penalty of a fine or imprisonment for up to 6 months). Blood alcohol limits are the most restrictive of the group of international comparators, and some form of imprisonment is required as part of the penalty for offenders with higher levels of blood alcohol concentration.

Table 39: Public drinking and drunk driving penalties, Norway

Offense	Penalty
Penalty for public drunkenness	N/A
Blood-alcohol limit - driving	200 milligrams per liter blood alcohol concentration
Penalty for driving over the limit	BAC of 0.02-0.05%: fine. BAC of 0.05-0.10%: fine, license suspension, and a suspended sentence. BAC of 0.10-0.15%: fine, license suspension, and a suspended or unconditional sentence. BAC over 0.15%: fine, license suspension, and an unconditional sentence.

Source: National legislation, TIRF 2008

3.3 SADC liquor regulation

The regulatory framework surrounding the liquor industry in the countries which border South Africa is of particular interest to the domestic regulator, not least because the enforcement regime in neighbouring countries is likely to directly impact on cross-border trading (both legal and illegal). This regulatory review provides an outline of the liquor regulation regimes in the SADC countries which border South Africa, namely Botswana, Lesotho, Mozambique, Namibia, Swaziland and Zimbabwe.

The structure of regulation of the liquor industry varies across the selected SADC countries. Countries such as Botswana and Namibia have decentralised, regional liquor boards or authorities that are responsible for issuing and monitoring retail and wholesale liquor licences, while others, such as Lesotho, have a single liquor licensing board responsible for these functions. A brief description of the regulatory authorities and legislation is provided below.

Botswana's liquor industry was, until recently, governed by the Trade and Liquor Act. In 2008 this Act was separated into the Trade Act and Liquor Act respectively. Under the Liquor Act, provision is made for a liquor control authority in each district, sub-district, town and city. These authorities are responsible for issuing retail (including bar, bottle store, nightclub or club liquor licences), wholesale and distribution (including liquor depot and wholesale) licences and for the monitoring of licensed operators. No licensing provisions are made for shebeens under the Liquor Act.

The Liquor Licensing Act of 1997 is the main piece of legislation regulating the sale of liquor in Lesotho. A single liquor licensing board is responsible for the issuing of 13 different types of retail licences, including shebeen licences.

Mozambique has no legislation pertaining specifically to liquor, other than restrictions on drinking and driving which fall under the country's road legislation. In this sense, Mozambique can be considered to have the weakest regulation of all SADC countries analysed, with no specific liquor legislation pertaining to the sale or production of alcohol currently in place or enforced.

In Namibia, relatively recent legislation, the Liquor Act of 1998, was introduced to regulate the retail liquor industry. The licensing system is decentralised to Namibia's thirteen regions, with a regional licensing committee in each region. These committees are responsible for issuing retail and wholesale licences and for monitoring and inspecting licensed operations. Namibia's legislation (and subsequent amendments) makes provision for the licensing of shebeens, with specific requirements on the location and structure of the premises.

The Liquor Licences Act regulates the licensing of retail and wholesale liquor outlets in Swaziland. The Act provides for the establishment of liquor boards for each region, with these boards responsible for determining whether liquor licences may be granted to or renewed for retail and wholesale operators. In addition the Act provides for the issuing of an African (Traditional) beer manufacturer's and wholesale licence and also provides for a retail licence for the on- or off-consumption of African beer.

In Zimbabwe the Liquor Act provides for regulations relating to the retail and wholesale distribution of liquor. There is a single Liquor Licensing Board that grants authority for the issue, renewal and transfer of retail and wholesale licences. Local authorities (which may be the provincial or district administrator) can receive submissions for renewals and issuing of licences and can also grant temporary licences for non-permanent functions. In addition the Traditional Beer Act controls the brewing, selling and supply of traditional beer, where the minister may issue a commercial brewers permit, allowing the permit holder to brew, sell and export traditional beer. Traditional beer may be legally brewed for domestic purposes by persons older than eighteen years.

3.3.1 Retail distribution

The various pieces of legislation identified in section 3.3 above not only establish the sectoral regulators, but also govern the retail and wholesale distribution of liquor, prescribing the types of licences that may be issued, the operating times and persons to whom liquor may be sold.

Botswana's legislation is most clear in terms of identifying where liquor premises may not be set up, indicating that licences may not be issued within 500m of a school, highway, major road or church. Zimbabwe's regulations lay out the restrictions on the location of premises for each of the liquor licence types, with additional responsibility falling to the board in determining the suitability of the location of premises.

For Namibia and Swaziland, the relevant liquor authority is responsible for determining whether the premises are in an appropriate location, with local residents able to petition against and object to the issuing of a licence during the submissions process. In Lesotho, selected on-consumption licences (such as tavern, shebeen or nightclub licences) and off-sale liquor licences may not be issued within 500m of a hospital, school or place of worship while the liquor board has overall discretion in determining the suitability of location in issuing licences.

All five countries deem it illegal to employ or sell alcohol to persons under the age of 18, and all countries also impose restrictions on adulterating alcohol for sale (with the exception of Lesotho); selling of liquor to intoxicated persons; and allowing drunken behaviour on the premises.

Lesotho, Namibia, Swaziland and Zimbabwe also have restrictions on credit sales of liquor for the various licence types, particularly those relating to on-consumption licences. In terms of prescribed trading hours, all five countries restrict the trading hours for licensed operators, with Botswana and Swaziland having explicit provisions in terms of the trading hours applicable to the different licences. However, trading hours in Swaziland can be extended subject to additional payment and approval by the authority.

Legislation in Namibia restricts manufacturers or producers from owning (either partly or wholly) certain types of retail or wholesale distribution operations and vice versa. In other words, legislation limits vertical integration of the value chain. Namibian regulations also prevent the tying of liquor outlets, i.e. the required purchase or stocking of certain products at the exclusion of other products.

Table 40 shows the penalties for contravention of certain regulations in order to illustrate the severity of penalties for each of the countries. Botswana's penalties appear to be comparatively severe, with extensive prison terms for certain offences and significant financial penalties while Swaziland's penalties appear to be comparatively lenient.

Table 40: Penalties for contravention of selected offences

	Botswana	Lesotho	Mozambique*	Namibia	Swaziland	Zimbabwe
Trading without a licence	R10,931 or up to five years prison or both	R5,000 or prison for five years	N/A	R4,000 or up to one year prison or both	R200 or prison of up to twelve months	Fine not exceeding R2,222 or up to one year prison or both
Drinking at off-licensed operator	R5,465 or up to six months prison or both	R1,000 or prison for one year or both	N/A	R4,000 or up to one year prison or both	R100 or prison of up to six months	Fine not exceeding R1,481 or up to six months prison or both
Adulterating liquor	R2,186 or six months prison or both	N/A	N/A	R4,000 or up to one year prison or both	R100 or prison of up to six months	Fine not exceeding R1,481 or up to six months prison or both
Sales to under 18s	R5,465 or one year prison or both	R1,000 or prison for one year or both	N/A	R4,000 or up to one year prison or both	R50 or prison of up to three months	Fine not exceeding R1,481 or up to six months prison or both
Permitting customer drunkenness	R5,465 or six months prison or both	R1,000 or prison for one year or both	N/A	R4,000 or up to one year prison or both	R50 or prison of up to three months	Fine not exceeding R1,481 or up to six months prison or both

Source: Country legislation

Penalties for Botswana are converted to Rand at BP0.915 / Rand. Zimbabwean penalties are calculated using a standard scale, with penalties for each level given in Zimbabwe and US dollar, and have been converted to Rand at US\$0.135 / Rand. Lesotho, Namibia and Swaziland are part of the Common Monetary Area (CMA) with South Africa.

*Mozambique does not have liquor specific legislation. It is therefore not clear whether some of the above-mentioned offences are punishable under a wider range of different pieces of legislation.

Some of the countries have also provided exemptions for or regulated the selling and private production of traditional or “African” beer. In Botswana sellers of traditional beer are exempt from holding a licence under the Liquor Act. Legislation does not specify whether the public may produce or brew traditional beer for private consumption. In Namibia a person may manufacture or have in his possession traditional beer without the need for a licence, although including traditional beer in the definition of liquor implies that a liquor licence is required to sell the product. Swaziland makes provision for the licensing of brewers wishing to sell “African” beer, also providing for a separate wholesale licence. In Zimbabwe separate legislation provides for the issuing of permits to brew, sell and supply traditional beer, while private consumption and production is exempt from the regulations.

Table 41: Regulation of traditional beer

	Botswana	Lesotho	Mozambique	Namibia	Swaziland	Zimbabwe
Legal provisions for traditional beer?	Yes	No	No	Yes	Yes	Yes, separate legislation
Licence required to sell	No			Yes	Yes	Yes
Licence required for manufacture	Not clear			No	Yes	Yes
Private brewing / consumption allowed	Not clear			Yes	Yes	Yes

Source: Country legislation

Only Lesotho and Namibia make provision for the operation of shebeens. In Lesotho a shebeen liquor licence is provided as an on-consumption licence, with a shebeen defined as premises that are part of a dwelling house. A licence may not be issued to a shebeen within 500m of a school, hospital or place of worship.

Namibia also allows for shebeens to be licensed for on-consumption only, though the definition of a shebeen is stricter. A shebeen is defined as a premises mainly used for the sale and consumption of light liquor (light liquor being liquor with an alcohol content of 16% or less) and refreshments on the premises. A licence will not be issued to shebeens operating on the premises of a petrol or diesel station or to holders of a bottle store licence. Licence application and annual fees for shebeens in Namibia are lower than those of other licences, with the application fees roughly one-third (ZAR60) and annual fees one-fifth (ZAR400) the fees for a bottle store licence. The fees for a shebeen licence are the second lowest of possible liquor licences, with only a licence for vineyard liquor sales being lower.

Following discontent with what was considered to be overly strenuous requirements for shebeens, the Namibian Liquor Act was amended in 2006. The amendments watered down the requirements in a number of ways, including: giving the regional licensing committee the power to determine the appropriate location of shebeens (originally the location had to conform to town planning regulations in addition to the regional licensing committee) and removing clauses requiring the premises to be approved by health inspectors. The requirements include the need for the premises serving as a shebeen to be separated from the dwelling area and for toilet facilities (separate from those in the dwelling area) to be provided to customers.

A peculiarity with regards to liquor regulation in Lesotho is the requirement that licensed operators may not buy beer from outside the country, effectively restricting them to supply from the single producer in the country, Maluti Mountain Brew. This may be a major concern in terms of the illicit alcohol trade as it creates a significant incentive for the smuggling in of beer products from South Africa.

3.3.2 Production and wholesale

For the most part the primary liquor laws in the selected SADC countries regulate the retail and wholesale/distribution aspects of the liquor industries in these countries. Licenses for wholesale and distribution operators explicitly require that these licensees sell only to other licensed operators in Namibia, Swaziland and Zimbabwe. In Botswana, the regulations do not explicitly restrict wholesalers from the selling to the public, while in Lesotho there is no clear licence for wholesalers, with a single category for off-premise liquor licences, which are allowed to sell to the public.

In terms of production and manufacturing, none of the liquor authorities or boards are responsible for licensing producers and manufacturers of liquor in the selected countries. For these countries the licensing of producers and manufacturers falls primarily under the customs and excise authority, or under other legislation relating to manufacturing regulations. In addition to customs and excise regulations, the Brewers and Distillers Licences Duty Proclamation in Namibia requires brewers and distillers to apply for licences to the relevant authority. In Swaziland, the Liquor Licenses Act provides for the issuing of a spirits manufacturing licence by the relevant minister. The fact that the main licensing requirement for producers falls under customs and excise regulations may be an indication that licensing requirements are viewed as being mainly for revenue purposes, with a secondary focus on health or public welfare concerns.

3.3.3 Taxation and levies

Under the South African Customs Union (SACU), Botswana, Lesotho, Namibia and Swaziland have uniform customs and excise duties to that of South Africa. In addition, products traded between SACU region countries are not subject to customs duties. Value-added tax (VAT) or sales tax and specific levies can however vary across the members of SACU. For Mozambique and Zimbabwe, excise rates are likely to vary (when compared to South Africa), and as members of the Southern African Development Community (SADC), the customs duties for South African goods are likely to be phased out in the medium term.

Table 42: Taxes on alcohol (2010)

	Excise					Customs (for SA)	VAT / Sales tax	Levy
	Traditional beer	Malt beer	Unfortified wine	Spirits	FABs			
SACU	R0.0782/li	R50.20/li aa **	R4.03/li	R84.57/li aa **	R2.52/li	0%		
Botswana							12%	30%
Lesotho							15%	
Mozambique*		40%	55% R10/li	65% R20/li – R24/li		15% on beer	17%	
Namibia							15%	
Swaziland							20%	
Zimbabwe***	0%	40%	R3.70/li aa **	R14.8/li aa *		85% on Beer, 15% on wine and 26 cents / li on spirits	15%	

Source: SARS, SADC, AllAfrica.com (2009), Zimbabwe 2010 Mid-year Fiscal Policy Review

Customs rates reflect the tariffs for goods imported from South Africa

*For Mozambique, the specific excise tax is levied on imports only, while the ad valorem tax is levied on both imports and locally manufactured goods. Mozambique's excise tax has been converted to Rand at M4.96 / Rand

** Absolute alcohol

Zimbabwe's excise rates have been converted from US\$ at US\$0.135 / Rand, while the customs duties for spirits have been converted from Z\$ at Z\$52.6 / Rand.

***Zimbabwe's customs duties for South African exports reflect the 2007 rates, based on Zimbabwe's agreed phase-down schedule for SADC countries. We assume that Zimbabwe's scheduled phase-down has not continued since then.

Mozambique has been in the process of drafting new regulations relating to the specific consumption tax (ICE) it charges for certain goods, in addition to VAT. ICE is mainly levied on luxury items, motor vehicles, alcohol and tobacco.²⁰⁶ ICE has historically been levied at ad valorem rates on all products at an ex-VAT rate, but since the passing of legislation in 2009, a specific ICE tax is levied on all alcohol imported into Mozambique in addition to the revised ICE ad valorem taxes.²⁰⁷

In conjunction with the separation of the Trade and Liquor Acts in 2008, the Botswanan government introduced a 30% levy on all alcohol beverages (including traditional beer), paid by manufacturers or importers of alcoholic beverages. The levy is based on the ex-VAT price of the products, and in the case of importers is calculated based on the tariff-inclusive price of the alcoholic beverages. This levy

²⁰⁶ Greenbaum and Pokhrel (2009)

²⁰⁷ AllAfrica.com (2009)

is collected by the revenue authority and paid into the Levy on Alcoholic Beverages Fund, the purpose of the fund being to combat alcohol abuse and minimise the effects of alcohol abuse. Recent studies suggest that the primary impact of the levy has been to shift demand from “more expensive local alcohol beverages to cheaper imports and illicit brews,” while achieving no real change in drinking patterns.²⁰⁸ Despite this, in 2010 Botswana decided to increase the levy to 40%. Swaziland has a nominal sales tax of 15%, though for liquor products this increases to 20%.

While excise rates may provide the government with a tool to both generate revenue and decrease the demand for liquor, they also increase the incentive to illicitly trade in the products, especially when cross-border rates vary. From the table it is clear that, even within SACU, the cross-border price can vary significantly given the different VAT rates and the levy imposed by Botswana on liquor products, while the ICE tax in Mozambique creates a big incentive to smuggle liquor products into the country.

The potential price difference between South Africa’s local price of liquor and the domestic price of imported liquor in selected SADC countries, based on differences in domestic tax levels and duties, is reflected in the table below. The price is indexed to 100, which reflects the production cost (exclusive of taxes) of liquor in South Africa. In South Africa, taxes account for approximately 15%,²⁰⁹ 16% and 35% of the wholesale (production price plus taxes) price of beer, wine and spirits respectively. The cost of liquor imported from South Africa to the selected SADC countries (ignoring transport and other costs) is highest for Botswana and Mozambique.

The cost of imported beer in Botswana and Mozambique is 25% and 54% higher than South Africa, solely due to the different tax rates and customs and levies. Such large differentials are a significant incentive to encourage smuggling of alcohol across borders. While the price differentials for countries such as Namibia and Lesotho are far smaller, legislation barring imports of certain types of liquor (such as Lesotho’s ban on beer imports) creates another incentive for smuggling, especially when this results in an effective monopoly in the importing country. Of the SADC countries analysed, Zimbabwe is the only one where excise duties on spirits are lower than in South Africa, which may thus result in cheaper spirits in Zimbabwe than South Africa.²¹⁰

²⁰⁸ Kavahematui, J. & Ramokopelwa, K. 04-12-2010. Cost of alcohol goes up. *Botswana Guardian*, available at <http://www.botswanaguardian.co.bw/newsdetails.php?nid=1002&cat=BG%20News>

²⁰⁹ 15% is calculated as 17/117

²¹⁰ The low price of spirits in Zimbabwe also reflects the fact that customs duties for spirits in Zimbabwe are based on a specific, rather than an ad valorem rate. The severe depreciation of Zimbabwe’s currency has effectively eroded the protective impact of the tariff.

Table 43: Price difference in imported alcohol attributable to taxes (100 = production cost in South Africa)

	Beer	Wine	Spirits
South Africa	117	119	153
Botswana	146	148	190
Lesotho	118	120	154
Mozambique	181	193	221
Namibia	118	120	154
Swaziland	123	125	161
Zimbabwe*	259	133	122

Source: DNA Economics

Based on 5% alcohol content for beer and 40% alcohol content for Spirits. Mozambique's specific tax is converted at M4.96 / Rand.

Zimbabwe's prices are calculated based on a converted rate of US\$0.135 / Rand. Zimbabwe's rate of currency conversion may differ substantially from official rates.

*Based on Zimbabwe's 2010 rates, which were changed from ad valorem to specific taxes for spirits and wines.

3.3.4 Advertising and sponsorship

The main pieces of legislation relating to liquor regulations in the selected countries do not stipulate advertising and sponsorship rules for the liquor industry, and it is not clear if there are other pieces of legislation relating to prohibition and standards in the liquor industry for any of the selected countries, though national alcohol policies are likely to frame advertising regulations in the liquor industry.²¹¹ The WHO database on liquor policy serves as a guide on the status of advertising for these countries, with Table 44 providing detail on advertising regulations.

²¹¹ According to the WHO database (data to 2008), only Lesotho and Swaziland have adopted national alcohol policies. Botswana has recently tabled a national alcohol policy in parliament (Mmegi online, 2010).

Table 44: Advertising restrictions for various media

	Cinema	Print media	Billboards	TV	Radio	Point-of-sale	Internet	Product placement on TV
Botswana	Total ban	Total ban	Voluntary	Total ban	Total ban	Voluntary	Total legal ban	Total legal ban
Lesotho	None	None	None	None	None	None	None	None
Mozambique	None	None	None	None	None	None	None	None
Namibia	None	None	None	None	None	None	None	None
Swaziland	None	None	None	None	None	None	None	None
Zimbabwe	None	None	None	None	None	None	None	None

Source: WHO Global Information System on Alcohol and Health (GISAH) database, 2008

From the table it is clear that of the six countries, only Botswana has implemented any sort of regulation on liquor advertising, with a ban on advertising through most media, including the internet. This reflects the stringent regulations that Botswana has recently enforced on the liquor industry.

3.3.5 Public domain drinking

Public drinking and drunken behaviour is generally illegal in the five selected countries, with the exception of Lesotho which does not seem to have any restrictions on drinking in public. The extent to which “public” is defined varies according to each country, with Swaziland’s liquor legislation, for example, mainly prohibiting drinking on streets in urban areas. The World Health Organisation (WHO) database on alcohol policy provides a summary of restrictions in public drinking.

Table 45: Restrictions on public drinking

	Educational buildings	Health-care premises	Parks, streets	Work place	Sporting events	Government buildings	Public transport	Leisure events	Religious places
Botswana	Total ban	Total ban	Total ban	Total ban	Total ban	Total ban	Total ban	None	Total ban
Lesotho	None	None	None	None	None	None	None	None	None
Mozambique	Total ban	Total ban	None	Total ban	None	Total ban	Total ban	None	Total ban
Namibia	Partial	Partial	Total ban	Partial	None	Partial	Total ban	Total ban	Voluntary
Swaziland	Total ban	Total ban	Total ban	Total ban	Partial	Total ban	Total ban	None	Partial
Zimbabwe	Total ban	Total ban	Total ban	Total ban	Partial	Total ban	Total ban	Voluntary	Total ban

Source: WHO GISAH database, 2008

The severity of penalties for drinking in public varies according to country, with fines and prison terms in Botswana, Namibia and Zimbabwe being particularly onerous, while in contrast no penalty is imposed by Lesotho.

Table 46: Penalties for public drinking

Country	Penalty
Botswana	R5,465 or six months imprisonment or both
Lesotho	N/A
Mozambique	N/A
Namibia	R4,000 or up to one year imprisonment or both
Swaziland	R50 or three months imprisonment
Zimbabwe	Fine not exceeding R2,222 or up to one year imprisonment or both

Source: Country legislation

Penalties for Botswana are converted to Rand at BP0.915 / Rand. Zimbabwean penalties are calculated using a standard scale, with penalties for each level given in Zimbabwe and US dollar, and have been converted to Rand at US\$0.135 / Rand. Lesotho, Namibia and Swaziland are part of the Common Monetary Area (CMA) with South Africa.

All six countries also have regulations regarding drinking and driving limits, with specific blood-alcohol and breath-alcohol limits.²¹² The limits are generally in line with global limits on blood alcohol levels (80mg / 100ml)²¹³, with Swaziland's the lowest (strictest) among the six countries at 50mg / 100ml. Zimbabwe does not specify a breath-alcohol limit, though breath tests can be used as supporting evidence to determine if a driver is drunk. The penalty for drunk driving varies from a maximum of R20,000 in Namibia to a maximum of R1,000 in Lesotho, with maximum prison terms varying from one year (Lesotho) to five years (Botswana, Namibia, Zimbabwe).

²¹² Mozambique published new draft road traffic code regulations in 2010, which are not yet in force.

²¹³ Global Road Safety Partnership (2007)

Table 47: Drunk driving limits and penalties

	Blood-alcohol limit (mg / 100ml blood)	Breath-alcohol limit (mg / 1000ml breath)	Penalty
Botswana	80	0.35	Fine between R1,093 - R5,465 or imprisonment between 1 year - 5 years or both
Lesotho	80	100 / 100ml blood*	R1,000 and 1 year imprisonment
Mozambique**	60	Not specified	Not yet specified
Namibia	79	0.37	Fine not exceeding R20,000 or imprisonment not exceeding five years or both
Swaziland	50	0.38	Fine not exceeding R500
Zimbabwe	80	None	Fine not exceeding R1,481 or imprisonment not exceeding five years or both

Source: Country legislation, WHO

*Lesotho legislation indicates that for a breath test, a person is deemed drunk if the measurement shows an indication that the amount of alcohol exceeds 100mg for 100ml of blood

Penalties for Botswana are converted to Rand at BP0.915 / Rand. Zimbabwean penalties are calculated using a standard scale, with penalties for each level given in Zimbabwe and US dollar, and have been converted to Rand at US\$0.135 / Rand. Lesotho, Namibia and Swaziland are part of the Common Monetary Area (CMA) with South Africa.

**Mozambique's new draft traffic code regulations (issued 2010) does not yet specify the penalty for drunk driving.

3.4 Discussion of regulatory findings

The alcohol policy and regulation analysis was organised into five basic categories, and we begin the discussion of findings by contrasting the South African experience against those in our comparator countries in each of the five categories.

Retail distribution regulation: the manner in which retail distribution of liquor is regulated varies widely internationally, from the laissez faire approach adopted by Argentina, for example, to the state monopoly on spirits sales in Norway. Within South Africa, the variation between different provincial legislations is not per se problematic, particularly if it is driven by a desire to find new solutions to existing problems and/or tailor regulation to the specific needs of different communities. However, much of the variation between provincial legislations seems arbitrary, such as the many slight differences in the definition of an alcoholic beverage employed.

Production and wholesale: South African legislation prohibits producers and wholesalers from selling to parties who are unlicensed, and appear to be engaged in the commercial on-sale of liquor. Given the large proportion of liquor which is sold to the ultimate consumer in unlicensed shebeens, compliance with this requirement appears to be very limited. Two components of South African production legislation appear to be slightly unusual, namely the fact that ethanol producers are not required to obtain a license, and the requirement on producers to contribute to anti-abuse programs. A failure to appoint NLA inspectors has resulted in no inspections for producers and distributors since

2003 – an issue which urgently needs to be addressed, possibly by reinstating the right of the police to conduct inspections.

Taxation: all countries examined subjected liquor to specific excise taxes, with spirits taxed at a higher rate than beverages with a lower alcohol content. The size of excise taxes however varied quite sharply, from only a small increment over non-alcoholic beverages in Chile, to punitive levels in the Norwegian market. However, the ability to increase excises is dependent on the ability to stop excise evasion activity and control the physical movement of the product. In this regard, the ethanol market in South Africa is of particular concern, as excise duties in this market are extremely high compared to the market value of the product, creating extremely high incentives for excise evasion.

Advertising and sponsorship: South African alcohol advertising restrictions are relatively light when compared to the chosen comparators, which is reinforced by the use of a self-regulating system.

Public domain drinking, and drinking and driving: all countries surveyed restrict driving at certain levels of blood alcohol concentration, although in Argentina this restriction is of fairly recent provenance. South African penalties on public drunkenness are the most punitive of the group, by a substantial margin, and vary considerably across provinces.

A number of additional lessons can be derived from the international and regional experience of alcohol regulation. The first is that where countries do choose to impose a comprehensive regulatory structure on the liquor industry, an issue of immediate concern is the ability of the regulator to control the movement of the physical liquor product²¹⁴ – including policing restrictions on who is allowed to produce it, distribute it, retail it and purchase it. Without such an ability to monitor and control the physical product, many of the economic and social goals of comprehensive liquor regulation cannot be achieved. The immediate impact of a loss of such physical control may include an increase in excise evasion, an increase in the amount of concoctions and illicit products sold, and an increase in socially harmful retailing practices (such as sales to minors, and from unlicensed venues).

The widespread pattern of requiring the licensing of ethanol producers is probably driven by this need to control the physical liquor product. Although industrial ethanol should probably be viewed as a liquor input rather than as an actual liquor product, it is extremely easy to transform ethanol into something drinkable, essentially simply by diluting it with water. South Africa does not currently require such licensing of ethanol producers or importers, and there is substantial evidence of ethanol illicitly entering the liquor value chain from imports in particular. Some form of licensing requirement in this regard should therefore be investigated by the South African authorities.

Another important component of control over the physical value chain is control over unlicensed brewing activities. In countries which have strong cultural traditions of home brewing, it is socially undesirable to stamp out such traditional practices. However, when home brewing takes place on a

²¹⁴ See for example Bird & Wallace 2010, 13

commercial basis in the concoctions market, it is highly undesirable, as the contents of such homebrews are highly variable and may be dangerous for human consumption.

One of the reasons consumers turn to homebrews is in order to evade excise duties on legitimate liquor, and international evidence suggests that changes in excise rates may drive the volume of concoctions sold.²¹⁵ In South Africa, this has influenced the low levels of excise maintained on traditional beer as compared to other kinds of liquor (as traditional beer is often seen as a substitute for concoctions). A policy initiative that needs further investigation is the possibility of deliberately lowering duties on some clear beer products, in order to make them more competitive and drive out concoctions producers. In Kenya, this approach has been implemented by introducing excise-free Senator Beer in large containers suitable only for communal consumption (which is prevalent in the low income end of the market where concoctions are mostly consumed).²¹⁶ The suitability of such an initiative for the South African market should be closely examined.

Because the comprehensive regulation of liquor requires the ability to control the physical movements of the liquor product, it is important that liquor regulators be adequately resourced to undertake this task. The larger and more complex the industry, the more funding the regulator will need to effectively police it. The issuing of licenses is only one component of a complex regulatory scheme that should include inspections, product sampling and testing, and feedback from public interest considerations. The differing structures of liquor regulation in the countries examined, which include national, provincial and municipal structures in differing combinations, means a cross-examination of the adequacy of South African regulator funding levels has not been possible. However, market participants repeatedly suggested in interviews that both the national and provincial regulators seemed to be under-resourced.

One of the ways in which regulatory capacity issues can be addressed is to increase the simplicity of regulatory enforcement. In other words, one of the reasons why regulators may be overstretched can be that regulations are unnecessarily difficult to enforce. The complexity of differences in provincial legislation in South Africa certainly drives the complexity of enforcement processes, and it may be useful to devote some attention to addressing unnecessary provincial differences, for example as regards the definition of alcohol. However, the central thrust of a drive for greater regulatory simplicity should be focused on shebeen licensing conditions.

Shebeen licenses are a form of special license, and do not have much in the form of behavioural conditions attached to them (for example, there is no requirement that shebeens should serve food along with alcohol). The majority of shebeeners operate in areas which were viewed by apartheid legislators as labour dormitories, and where historically little attention has been paid to the provisions of services or appropriate commercial zoning restrictions. In addition, many shebeens have low turnover and are run more or less as survival businesses. Despite these facts, shebeen license requirements are very similar to those imposed on the rest of the market. This not only increases the

²¹⁵ Rajaraman 2007, 198; Kavahematui, J. & Ramokopelwa, K. 04-12-2010. Cost of alcohol goes up. *Botswana Guardian*, available at <http://www.botswanaguardian.co.bw/newsdetails.php?nid=1002&cat=BG%20News>

²¹⁶ Barclay, E. March 26, 2008. In Kenya, Obama (Beer) Wins Big. *Bloomberg Businessweek*.

complexity of rolling out licenses to shebeens, but has ensured that much of the market has remained unlicensed. A careful investigation of the functionality of current license requirements, and possible reductions in shebeen license requirements, would therefore be of use.

Finally, it should be noted that the South African requirement for producers and distributors to finance anti-abuse initiatives seems to be fairly unusual from an international regulatory perspective. The net impact of this requirement will be discussed further in following sections detailing the impact of such industry initiatives.

4 ALCOHOL DEMAND PATTERNS

One of the reasons that no one regulatory system is suited to all countries is because the pattern of alcohol consumption varies so widely by country. Before good interventions to reduce the harms associated with alcohol can be designed, it is first necessary to understand the pattern of those harms. To that end, we therefore analyse the pattern of alcohol demand in South Africa.

At present, South African adults consume approximately six litres of absolute alcohol per annum – in more concrete terms, this is equivalent to about seven 340ml beers a week, or a 750ml bottle of wine a week, or one and a half bottles of spirits a month. Viewed as a whole, per capita demand for liquor in South Africa has been shrinking over at least the last decade. This trend is consistent with decreases in per capita consumption of alcohol experienced since the 1980s in Europe, the Americas and Africa as a whole.²¹⁷ Although some subcategories such as whiskey and fortified wine have experienced limited growth, the picture of declining demand is consistent across all major categories.

Table 48: Litres of absolute alcohol consumption per capita, South Africa

	Total spirits	Wine	Beer	Traditional beer *	Total
2000	0.91	1.26	3.36	1.89	7.42
2001	0.92	1.26	3.32	1.93	7.43
2002	0.88	1.25	3.29	1.81	7.22
2003	0.88	1.11	3.32	1.71	7.02
2004	0.87	1.07	3.08	1.64	6.66
2005	0.88	1.03	3.10	1.60	6.60
2006	0.89	1.00	3.04	1.52	6.45
2007	0.9	1.04	3.20	1.42	6.56
2008	0.88	1.03	3.22	1.27	6.40
2009	0.83	0.97	3.06	1.11	5.96
CAGR	-1.02%	-2.91%	-1.03%	-5.79%	-2.40%

Source: SAWIS 2010, 31; own calculations

Note: CAGR = compound annual growth rate, 2000 to 2009

* estimate likely to include traditional beer and concoctions, may be flawed

Examination of the pattern of alcohol pattern by various demographic indicators provides useful insight into consumer behaviour, which can also be used to inform the targeting of anti-abuse initiatives. A brief review of liquor demand patterns, as per the *2005/06 Income & expenditure of households* conducted by Statistics South Africa (Stats SA), is therefore provided below.

It should be noted that the Stats SA data is not without problems. In particular, it seems to underestimate spending on liquor in South Africa, with the total annual household expenditure on beer, wine and spirits in 2005/06 estimated at around R3.4bn, whereas other surveys by the same institution

²¹⁷ WHO 2004(b), 9

place the value of sales from off-consumption outlets at around R21bn in 2003.²¹⁸ This effect is apparently often seen in self-reporting of levels of alcohol consumption, although the level of under-estimation is usually less severe.²¹⁹

Little weight should therefore be placed on estimates of average annual spend per household per year. Hopefully however the relative spending patterns reflected by the Stats SA work are nevertheless fairly accurate, and thus more weight is placed on this analysis (which coincidentally is consistent with some of the anecdotal evidence heard in the study).

The data is also reported on a household basis, and therefore only the gender and race of the household head is taken into account when interpreting data. In addition, liquor is reported by only three categories, namely beer, wine and spirits. This limits the level of detail of the analysis which can be conducted with the dataset.

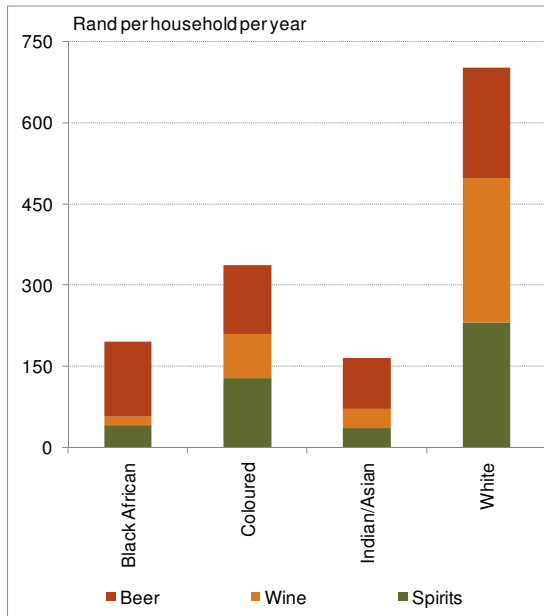
4.1 Demographic patterns of liquor demand, 2005/06 Stats SA

The figures below illustrate how average household spending on liquor varies by race. On an actual basis, white households are by far the largest alcohol consumers, although this is likely to be largely driven by higher household incomes in white households. Within each group, black households consume a higher proportion of beer than other households do, while coloured households consume the highest proportion of wine, and whites the highest proportion of spirits.

²¹⁸ A & T Consulting & Naumann 2005, 7

²¹⁹ Under-reporting of 40-60% is more typical. Cook & Moore 2002, 124.

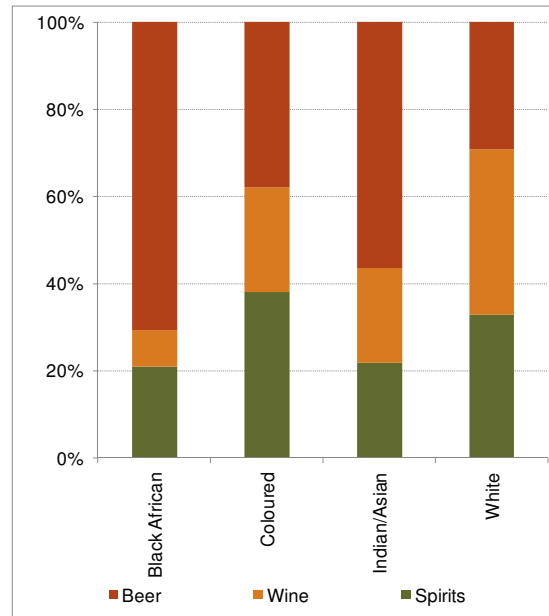
Figure 37: Average household expenditure on liquor by race, actual



Source: Stats SA 2008

Note: data is likely to substantially under-estimate absolute spending levels

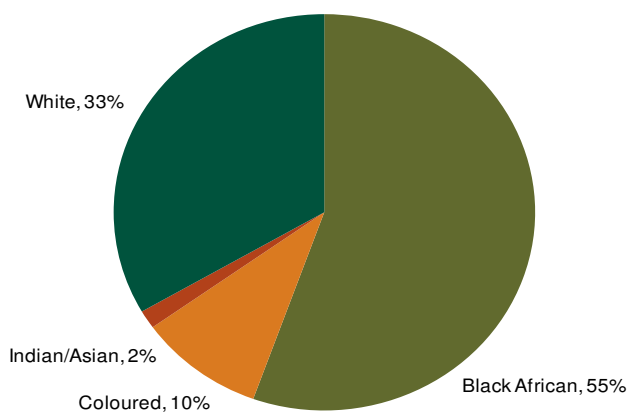
Figure 38: Average household expenditure on liquor by race, proportions



Source: Stats SA 2008

Although the average black household spends relatively little on alcohol, there are a much higher number of black households than there are of any other racial group. The bulk of liquor industry revenue therefore is derived from consumption by black households, as is shown in Figure 39 below.

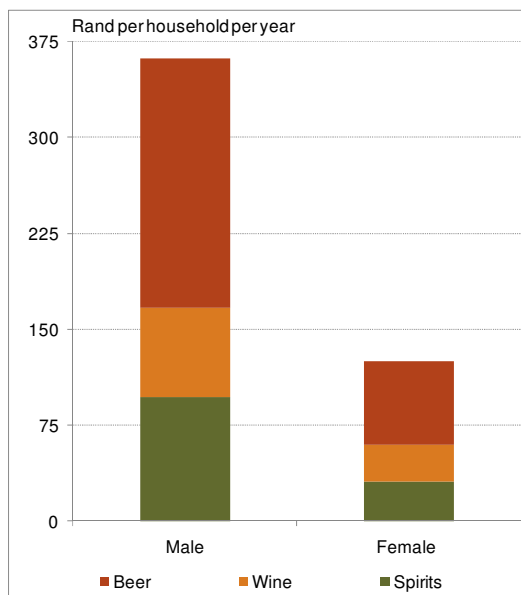
Figure 39: Total household liquor expenditure by race



Source: Stats SA 2008

Although the dataset only reports the gender of the household head, not of the other members of the household, there are nevertheless strong differences in patterns of liquor consumption in households headed by men as opposed to women. Specifically, male-headed households appear to spend almost three times as much as female-headed households on liquor. Very little difference is however apparent in the proportion of wine, beer and spirits consumed in male and female headed households.

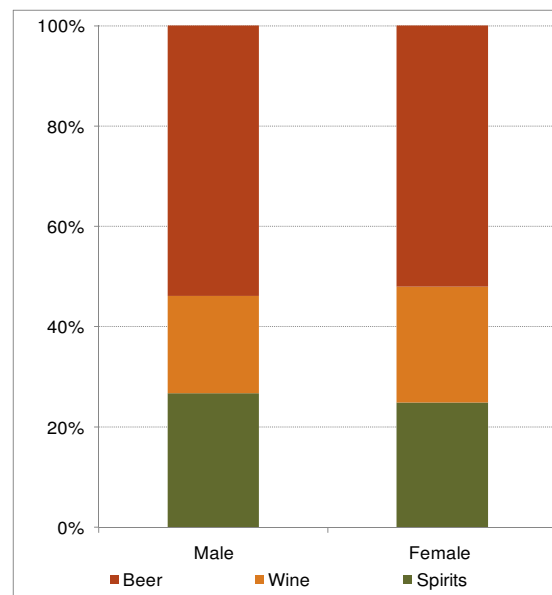
Figure 40: Average household expenditure on liquor by gender, actual



Source: Stats SA 2008

Note: data is likely to substantially under-estimate absolute spending levels

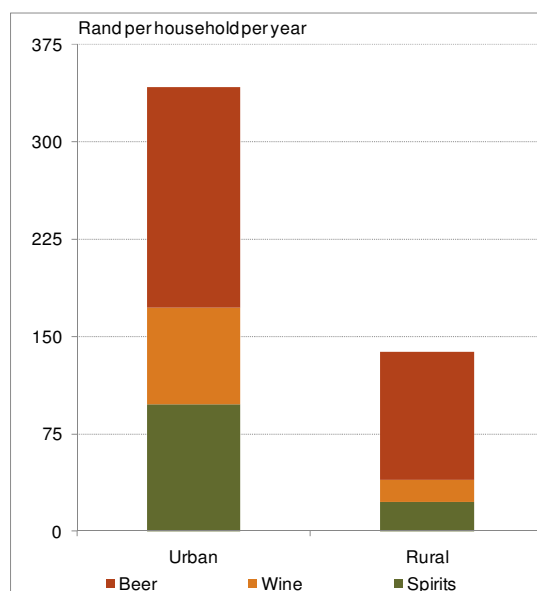
Figure 41: Average household expenditure on liquor by gender, proportions



Source: Stats SA 2008

The difference between the level of consumption in rural and urban households is similar to that between female and male headed households, with urban households buying about 2.5 times as much liquor as poorer rural households. However, the pattern of urban consumption is also substantively different, with urban household consuming much more spirits and wine, and much less beer, than rural households.

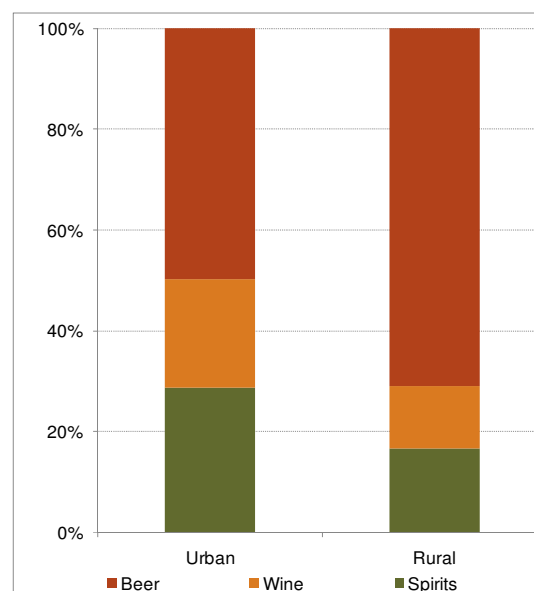
Figure 42: Average household expenditure on liquor by settlement area, actual



Source: Stats SA 2008

Note: data is likely to substantially under-estimate absolute spending levels

Figure 43: Average household expenditure on liquor by settlement area, proportions

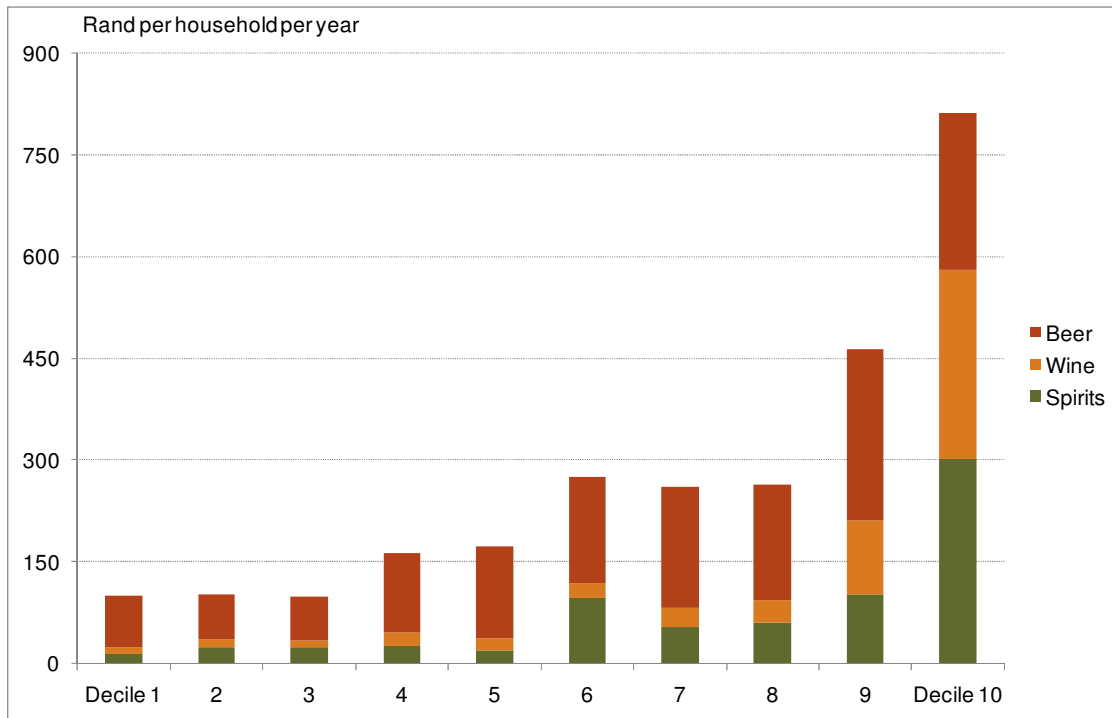


Source: Stats SA 2008

Income plays a very strong role in driving the quantity of liquor purchased. Figure 44 below shows average expenditure per household per year by income decile.²²⁰ The wealthiest households in decile 10 spend more than eight times as much on liquor per year as the poorest households. However, when measured as a proportion of total household expenditure, liquor makes up a much larger proportion of the shopping bag for poor households than for wealthy households (almost three times larger as a percentage of household expenditure for decile 1 than for decile 2).

²²⁰ In order to calculate income deciles, Households are ranked by income. The poorest 10% of households are placed in decile 1, the next 10% in decile 2, and so forth. The number of households in each decile is thus roughly equal.

Figure 44: Average household expenditure on liquor by income decile, actual

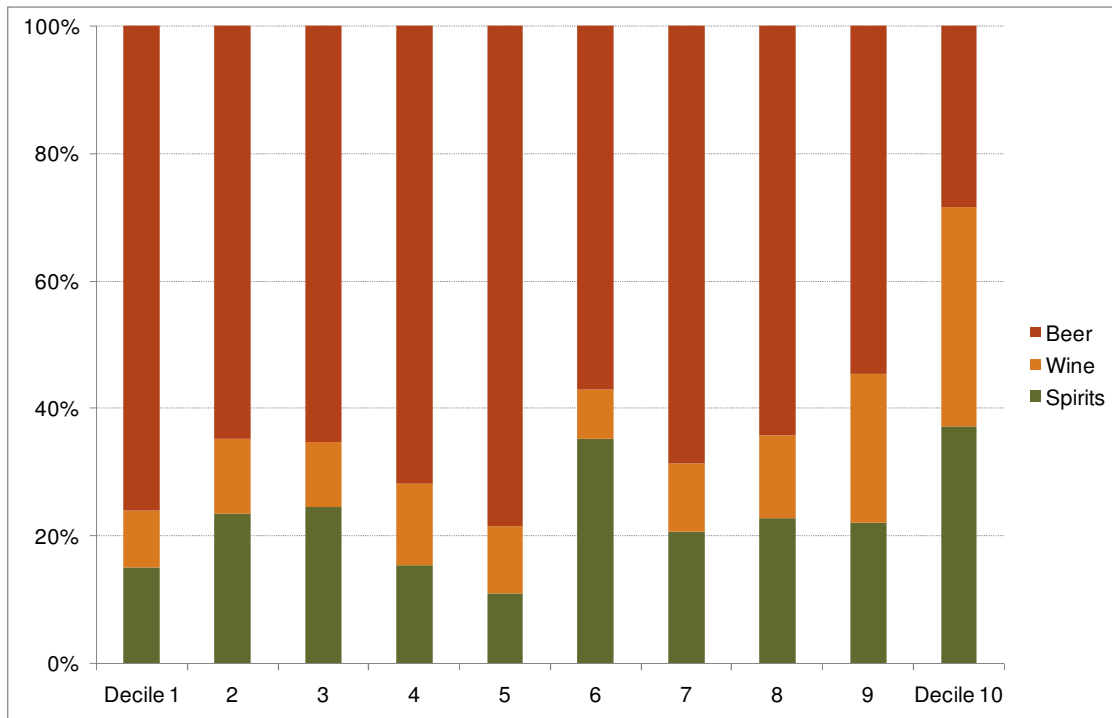


Source: Stats SA 2008

Note: data is likely to substantially under-estimate absolute spending levels

The type of basket of liquor goods that poor and wealthy households purchase is very different. For the first five deciles, beer is two-thirds to three-quarters of the liquor consumption basket. The wealthiest consumers, however, spend more or less equally on wine, beer and spirits.

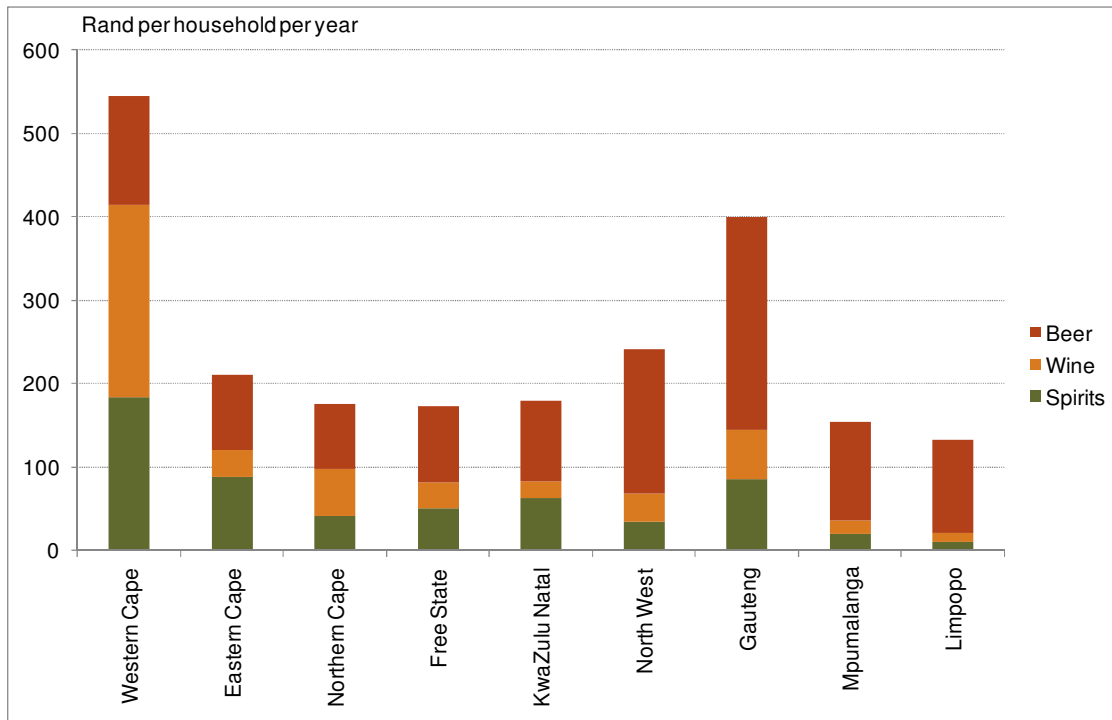
Figure 45: Average household expenditure on liquor by income decile, proportions



Source: Stats SA 2008

On a provincial basis, the households which spend the most on liquor on average are in the Western Cape, which partially reflects the higher average level of household income in the Western Cape, but may also be driven by other factors.

Figure 46: Average household expenditure on liquor by province, actual

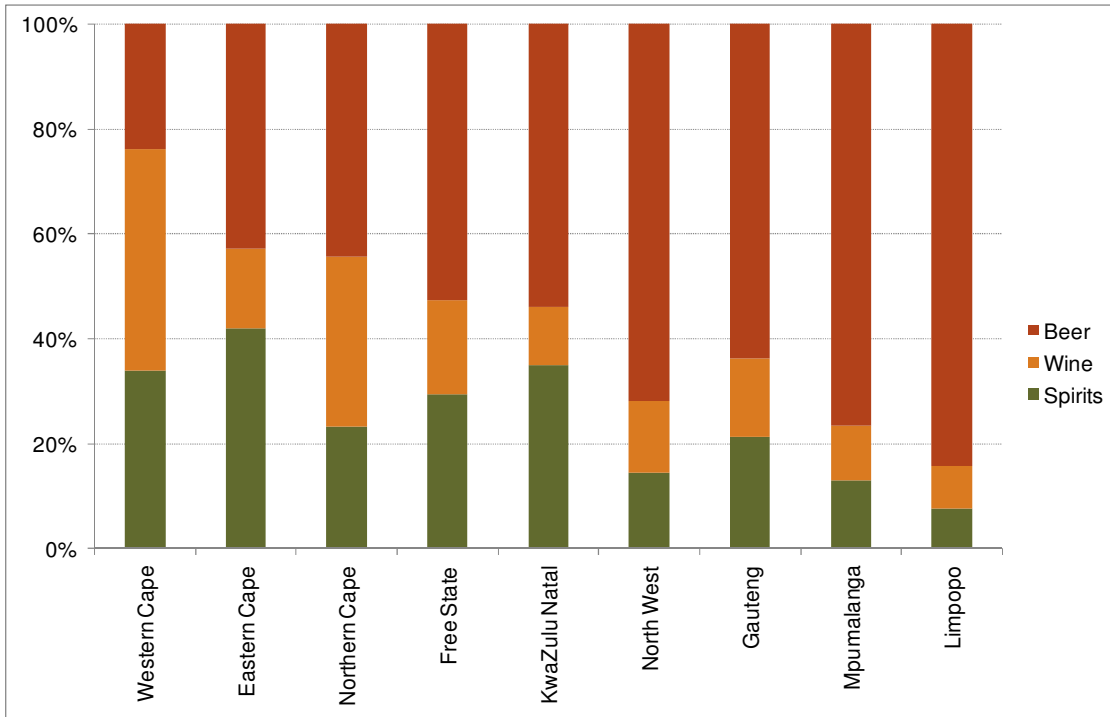


Source: Stats SA 2008

Note: data is likely to substantially under-estimate absolute spending levels

There are also differences in the pattern of liquor spending per province. The province which spends the most, proportionally, on beer is also the poorest province, namely Limpopo. Proportionally, the Eastern Cape spends the most on spirits, followed closely by KwaZulu Natal and the Western Cape, while the Western Cape, unsurprisingly, consumes the largest proportion of wine.

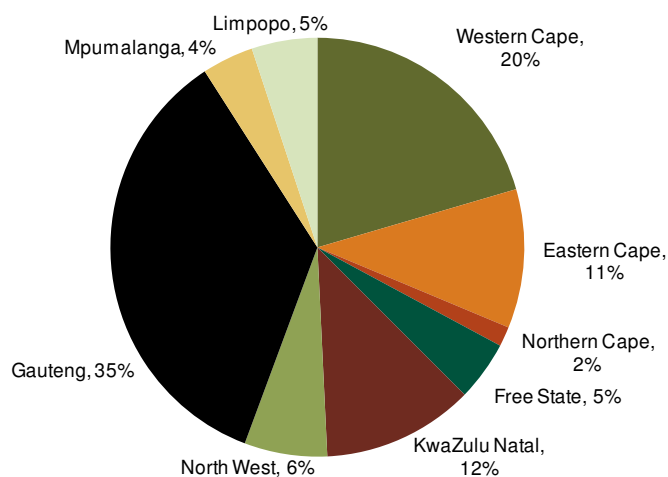
Figure 47: Average household expenditure on liquor by province, proportions



Source: Stats SA 2008

From the point of view of the liquor industry, however, the most important province in terms of total spending by all households is Gauteng, which comprises more than a third of the domestic liquor market, or more than the smallest six provinces combined.

Figure 48: Total household liquor expenditure by province

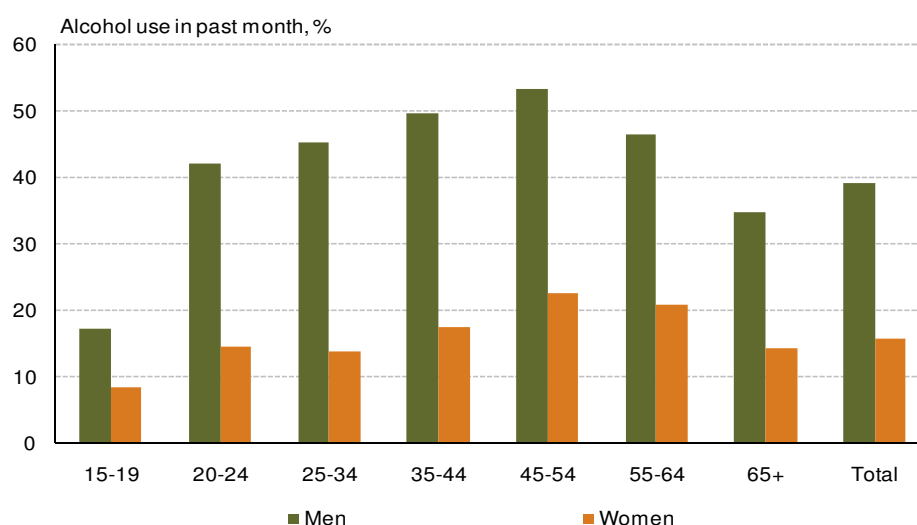


Source: Stats SA 2008

4.2 Age based drinking patterns

A dataset which reports on household consumption patterns can, by definition, provide little information on intra-household consumption patterns. Of specific interest is the pattern of youth drinking, which is the age of onset of alcohol consumption, and thus is likely to impact on lifetime liquor consumption patterns. Figure 49 below illustrates alcohol use patterns by age group in a recent survey (which unfortunately, as seen in the Stats SA data, is likely to systematically under-report actual drinking levels²²¹). As shown, current use of alcohol is much higher among men than women, and this pattern holds for teenage boys.

Figure 49: Current alcohol use by age



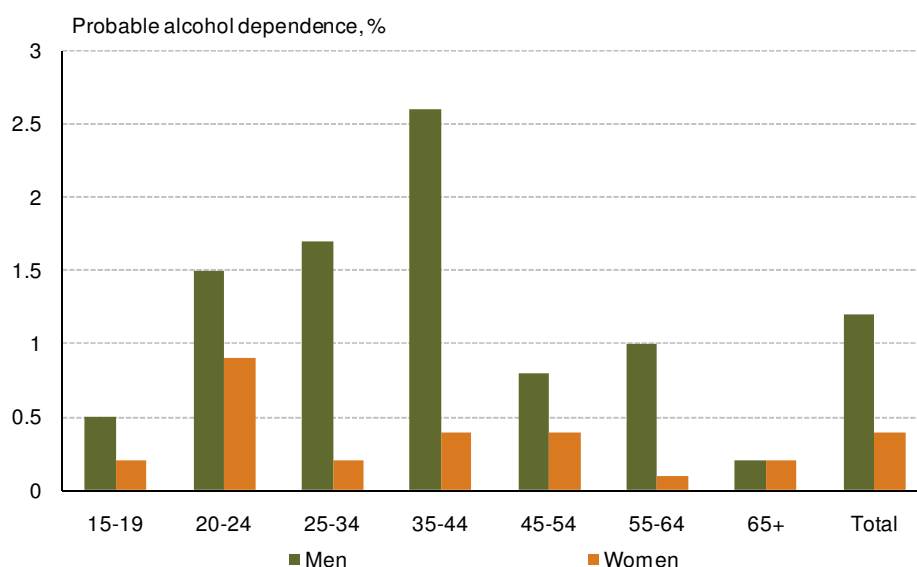
Source: Shisana et al. 2005, South African national HIV Prevalence, Behaviour and Communication Survey, quoted in Peltzer & Ramlogan 2009, 3

Note: data is likely to substantially under-estimate actual drinking levels

Patterns of problematic alcohol use largely follow overall patterns of alcohol use, as shown in Figure 50 below. However, as a proportion of those who are current drinkers, the highest levels of probable alcohol dependence are in women age 20 to 24 (6.2% prevalence), and men age 35 to 44 (5.2% prevalence). At all ages, however, the probability of alcohol dependence is higher in men than in women.

²²¹ Correspondence with Charles Parry

Figure 50: Probable alcohol dependence



Source: Shisana et al. 2005, *South African national HIV Prevalence, Behaviour and Communication Survey*, quoted in Peltzer & Ramlogan 2009, 4

Note: Probable alcohol dependence defined as a score of 20 or higher on the AUDIT (Alcohol Use Disorder Identification Test) scale

It is important to note that alcohol dependence in itself accounts for a relatively small amount of harm at the population level as it affects relatively few people. By far the biggest impact comes from binge-drinking, which affects a much bigger demographic. For example, a recent review of drinking practices in 20 African countries reported that whereas 23% of South Africans had drunk alcohol in the previous week, nearly half of these drinkers (48%) had binged (that is, drinking five or more units on one or more occasions) and 29% could be categorized as heavy drinkers (that is, drinking 15 or more units of alcohol during the previous week).²²² It is also notable that in South Africa rates of heavy drinking are up to five times higher on weekends than on weekdays.²²³

More in-depth analysis of youth drinking behaviour is available from the 2008 Youth Risk Behaviour Survey conducted by the Medical Research Council, which surveyed Grade 8,9,10 and 11 learners.²²⁴ Because analysis of risky behaviours like drinking was the focus of this analysis, the research is less likely to systematically understate actual drinking levels. The extent of the difference between response levels in this survey and Stats SA numbers, for example, can be quickly illustrated by looking at a single data point, namely response levels on the question of whether any alcohol has

²²² Clausen, Rossow, Naidoo, & Kowal (2009)

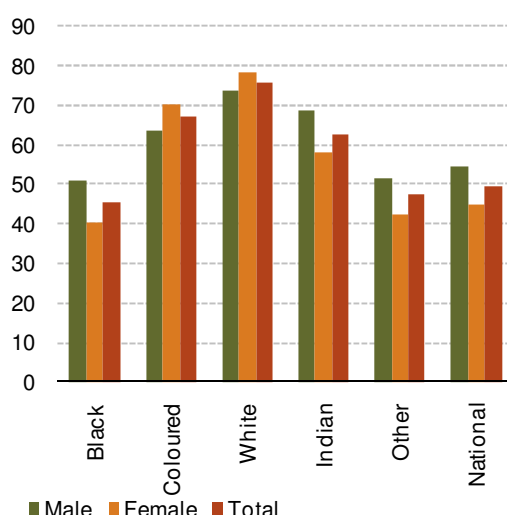
²²³ Parry et al. (2005)

²²⁴ Reddy et al. 2010

been consumed in the previous month. On a national level, 40.5% of male learners and 29.5% of female learners surveyed in the 2008 YRBS admitted to having consumed alcohol in the previous month, compared to 17.2% of men and 8.4 % of women in the 15-19 age group in the Shisana et al. numbers in Figure 49 above.

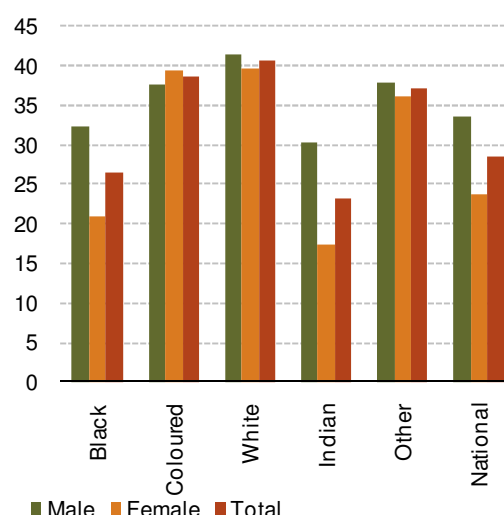
By race, white youth are most likely to report having consumed alcohol in their lifetimes, and black youth are least likely to do so. On a national basis, young males are more likely to have drunk alcohol than young females (although interestingly this trend is reversed in white and coloured population groups). Levels of binge drinking are lowest in Indian and black girls, and highest in whites, and again, on a national level boys are more likely to binge drink than girls.

Figure 51: Youth who have ever consumed an alcoholic beverage, by race & gender



Source: Reddy et al. 2010

Figure 52: Youth who binge-drink, by race and gender

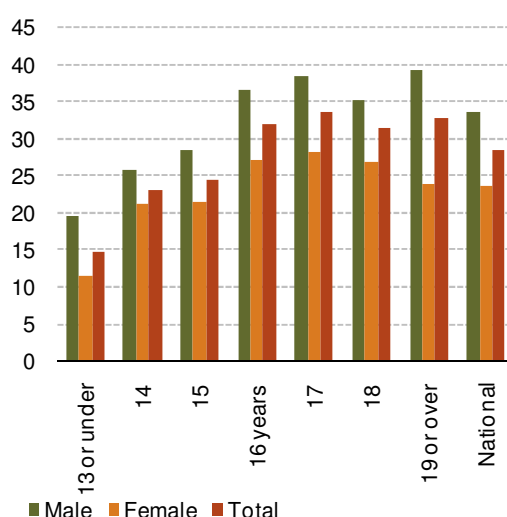


Source: Reddy et al. 2010

Note: Binge drinking defined as having five or more drinks of alcohol within a few hours on one or more days in the month preceding the survey

Problematic drinking behaviours increase with age, but seem to stabilise in the mid to late teens. At all ages, and in all provinces, boys binge more than girls. The highest levels of problematic youth drinking are experienced in the Western Cape, followed by Gauteng and the Northern Cape. Nationally, more than a quarter of teens surveyed are indulging in alcoholic binges – this is particularly problematic if it is considered that lifetime drinking patterns may be established in this age group.

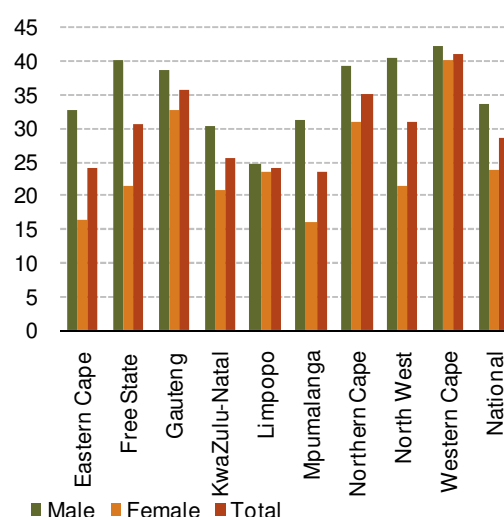
Figure 53: Binge drinking by age & gender



Source: Reddy et al. 2010

Note: Binge drinking defined as having five or more drinks of alcohol within a few hours on one or more days in the month preceding the survey

Figure 54: Binge drinking by province & gender



Source: Reddy et al. 2010

Note: Binge drinking defined as having five or more drinks of alcohol within a few hours on one or more days in the month preceding the survey

4.3 Alcohol demand and alcohol cost

The relationship between the price of alcohol and the amount of alcohol consumed has been recognised by the academic community since the mid-1970s.²²⁵ Although the relationship between price and quantity varies by culture and geographic area, and over time,²²⁶ at any given point in time a decrease in the price of alcohol should be expected to increase the quantity demanded, and vice versa. A number of studies suggest that this relationship between price and quantity holds true even when consumers are addicted to alcohol. For example, there are indications that the rates of liver cirrhosis, which can be used as a rough indicator of chronic heavy drinking levels, are sensitive to alcohol price.²²⁷

²²⁵ Karlsson & Österberg 2009, 6

²²⁶ Karlsson & Österberg 2009, 7

²²⁷ Cook & Moore 2002, 126

Typically the change in the quantity of alcohol demanded is less than the change in the price of alcohol: in other words, alcohol can be classified as a price-inelastic²²⁸ good. Examples of the range of price elasticity on different kinds of liquor are shown in Table 49 below – for example, Fogarty’s study suggests that a 1% increase in price would decrease quantity of spirits demanded by 0.7%, but only decrease the quantity of beer demanded by 0.38%. From an economic efficiency perspective, it is considered desirable to tax inelastic goods more than elastic goods, and this is one of the reasons why liquor is often subjected to higher tax rates than other goods. However, regardless of the economic efficiency implications of high alcohol taxes, they can also be used as a form of social control, by increasing alcohol prices sufficiently to reduce consumption levels.

Table 49: Own-price elasticities for alcoholic beverages in three recent international meta-analyses

Source	Distilled spirits	Wine	Beer	Total alcohol consumption
Fogarty 2006	-0.7	-0.77	-0.38	..
Gallet 2007	-0.68	-0.7	-0.36	-0.5
Wagenaar et al. 2008	-0.8	-0.69	-0.46	-0.51

Source: Karlsson & Österberg 2009, 10

Changes in the relative prices of different kinds of liquor may affect consumption patterns in less predictable ways. For example, substantial differences between excise rates in neighbouring countries can provide an impetus for high levels of duty-free traveller’s imports of alcohol,²²⁹ and high taxes on legal alcohol may increase the demand for untaxed homebrews. If customers use liquor mainly as an intoxicant, an increase in the price of one kind of liquor will probably result in higher consumption of other types of liquor instead, in order to keep absolute alcohol consumption levels constant. Alternatively, if liquor is regarded as a refreshment rather than an intoxicant (for example, when wine is drunk with a meal), higher prices could cause the consumer to substitute away to non-alcoholic beverages.²³⁰

Price drives quantity in the South African market in much the same way as it does in international markets. Figure 55 below illustrates a recent estimate of price elasticity in liquor in South Africa. This calculation suggests that price elasticity of alcoholic beverages in South Africa is perhaps somewhat higher than seen internationally, with total liquor demand elasticity sitting at -0.8 instead of -0.5, and elasticities in some categories of liquor are in fact in the price elastic range (less than -1). This implies that South African consumers are more likely to change their demand for alcohol in response to price

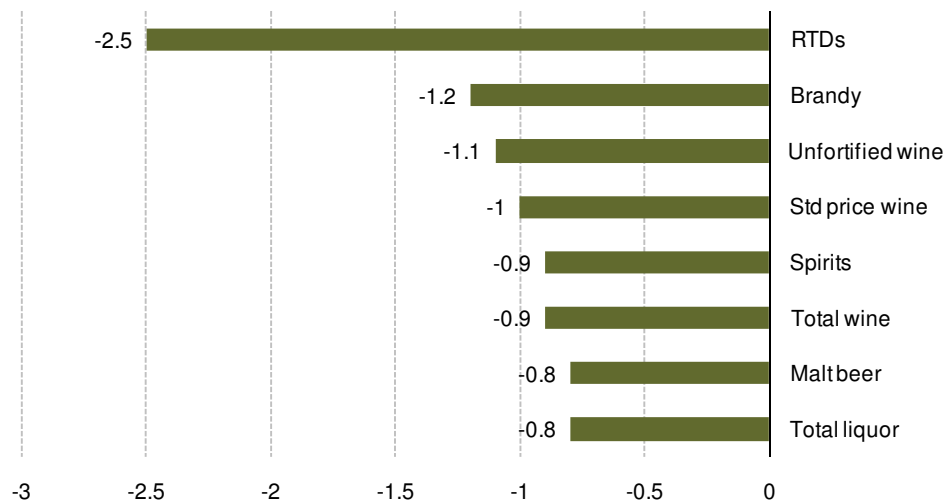
²²⁸ The economic concept of price elasticity refers to how responsive changes in quantity demanded are to changes in price. Mathematically, it is measured as the percentage change in quantity demanded divided by the percentage change in price. It is therefore typically a negative number. If price elasticity is between 0 and -1, the good is inelastic, as quantity changes less than proportionally when price changes. Elastic goods have a price elasticity of less than -1.

²²⁹ Karlsson & Österberg 2009, 17

²³⁰ Karlsson & Österberg 2009, 7

changes than is typical internationally, and would tend to increase the importance of price to consumption levels.

Figure 55: South African liquor elasticities



Source: BER 2010, quoted in SALBA 2010, slide 11

5 COSTS AND BENEFITS OF LIQUOR

From the perspective of policy makers, the South African liquor industry poses a number of complex problems. On the one hand, the industry makes a large contribution to employment, domestic output and export earnings, and should be regarded as an important component of the domestic economy. However, on the other hand, those who consume alcohol can cause terrible harms to both themselves and those around them, some of which are economic in nature, but which typically also have enormous social and emotional costs, and there is a strong moral and political imperative to try and reduce these harms.

In this section of the report we attempt to address both sides of the cost and benefit equation and consider whether and what form of government intervention may be needed. Ideally, interventions should be designed so as to minimise the social and economic costs of alcohol abuse, while having the smallest possible impact on the industry's ability to generate economic benefits. In order to design such optimal interventions, it is important to have a detailed understanding of the sources of those costs and benefits. The analysis is split into two components, as follows:

- An assessment of the **total economic contribution** of the liquor industry, split down as much as possible by sector and type of activity
- An analysis of the **costs associated with the abuse of alcohol**, again providing detail on the origins of those costs

Because the cost and benefit assessments are conducted on different basis and incorporate some very different variables, they cannot be netted off against each other to derive a point estimate of the contribution or cost of the industry to South Africa Inc. Specifically, a number of positive effects of moderate alcohol consumption on certain outcomes (some of which are material and some not) are not netted out of the cost analysis.²³¹ This approach has been chosen for the following reasons:

- Many of the costs of alcohol are not purely economic in nature. Restricting the analysis to purely economic costs that can be netted out against economic benefits would reduce its ability to discuss such intangible costs.
- If the sometimes positive effects of moderate alcohol consumption are netted out against the negative effects of alcohol abuse, detail on the sources of the costs of alcohol abuse is lost. A more in-depth analysis can therefore be provided by focusing only on the impact of alcohol abuse. In any event, beneficial health effects are likely to be substantially outweighed by detrimental effects. For example, with regard to cardiovascular disease the detrimental effects are a factor of 2.4 greater for deaths and 3.5 greater for DALYs than the beneficial effects. Furthermore, benefits typically only accrue for low to moderate alcohol consumption (less than 20g per day), which is not the norm in South Africa, and then only for selected cardiovascular

²³¹ For example, evidence that moderate consumption of alcohol may improve the health of some diabetics is excluded from the costs analysis, as only the impacts of alcohol abuse are discussed.

outcomes (e.g. ischaemic heart disease and strokes).²³² The age structure of the South African population, with a relatively small elderly population would also reduce the likely beneficial effects from alcohol use at a population level.

- An examination of international literature suggests that it is extremely unusual to conduct a joint cost-benefit analysis of the impact of the liquor industry, with the goal of producing a single net economic impact figure. There is thus little guidance in the literature on how to conduct such a study, and it would be difficult to meaningfully compare the results of such a study to international results (although care should still be taken in comparing such studies – see the discussion in Appendix 3).

5.1 Liquor's economic contribution

Before beginning the analysis of the economic contribution of the liquor industry, a few methodological points should be noted:

- **No double-counting:** in order to avoid double-counting of economic benefits, only the value added or lost at each stage of the production/consumption process should be included in the calculation.
- **Academic rigour versus socially important indicators.** From an economic welfare perspective, the number of jobs created and/or the exports generated by an industry are immaterial, and may even have a negative impact on overall economic efficiency. In practice, however, these kinds of indicators are often very important from a social and/or political perspective, and thus are worth noting in economic contribution analysis.
- **Consistent basis for measurement:** it is important to ensure consistency in the measurement of economic contributions. Specifically, measurements are undertaken on an annual basis, and include only tangible economic contributions – a discussion of the intangible benefits of the pleasure of alcohol consumption is provided, but should not be added to the total economic contribution.
- **Conservative estimation techniques:** the first round effects of any economic activity are the easiest to measure accurately, and thus are likely to give less subjective results. In other words, more emphasis should be given to first round estimates, and where possible limited use should be made of multiplier and other indirect effects in the estimation process.

As much as possible the analysis will be segmented by liquor type. However, financial reporting by firms such as Distell and SAB does not provide detail on the breakdown of sectoral income between spirits and RTDs (Distell) or RTDs and beer (SAB). It has therefore not been possible to separately estimate the size of the cider and RTD market. The estimate should be regarded as conservative, for the following reasons:

²³² Rehm et al 2009a

- The concoctions and illicit goods manufacturing market is excluded from the analysis due to lack of data
- A number of areas of the retail market have also not been estimated, again for lack of data
- The impact on input markets has not been explicitly included – although arguably the use of multipliers will provide a conservative estimate of the size of these backward linkages, albeit while still excluding employment effects
- The induced and indirect value added by the retail sector has not been included, though some backward linkages may have been captured through the manufacturing multiplier.

Box 3: Estimating the economic contribution of an industry - methodology

The methodology used to estimate the net economic contribution of the liquor industry to South Africa is based on national accounts measurement of GDP. As described in the 1993 System of National Accounts (SNA)

"...the underlying rationale behind the concept of gross domestic product (GDP) for the economy as a whole is that it should measure the total gross values added produced by all institutional units resident in the economy."²³³

Value added can be defined as the value of output or final sales less the value of intermediate consumption of goods and services used to produce final output. This concept can be further extended to identify the contributors to value added, or where value added accrues. Hence, value added has a number of components, as follows:²³⁴

Compensation of employees or labour remuneration: all wages and other forms of remuneration earned by employees, after payment of taxes on labour production (i.e. payroll taxes).

- Operating surplus: this is the surplus or deficit accruing from production (after compensation of employees and other costs of production but before non-production income or expenses such as interest). The operating surplus can effectively be seen as the direct returns to capital (either shareholders or other capital providers) from production before income taxes (such as company tax).
- Consumption of fixed capital: the reduction in fixed assets from use in production. This essentially is the depreciation of an asset through the production process. Where operating surplus is reported in gross terms, consumption of fixed capital is not separated from operating surplus, otherwise operating surplus is shown in net terms.
- Taxes less subsidies on products and production: these have traditionally been referred to as indirect taxes i.e. taxes that can be passed on. Taxes on products include excise and value added taxes, while taxes on production refer primarily to taxes on the use of land and labour, including payroll taxes.

In practice, when estimating the value added contribution for an industry, there is usually a degree of overlap between these components. For example, when using a company's financial statements to determine value added, compensation of employees often reflects wages before payroll tax deductions (which in theory should be deducted and added to taxes on production). Similarly, value added tax (VAT) is often excluded from both turnover and cost of sales (and therefore not included in the reporting of the income statement) given that most reporting companies are registered VAT vendors, receiving VAT credits (from the revenue authority) and holding VAT received for direct payment to the revenue authority. It is therefore important to understand clearly how each component of value added is derived to minimise double counting.

²³³ United Nations (2001), paragraph 6.233

²³⁴ Access Economics (2009), Ballingall et al (2009), WIPO (2003), United Nations (2001)

Box 4: The use of multipliers

The use of economic multipliers is a common practice when attempting to estimate the total contribution of an industry or sector to the economy. GDP or value-added multipliers²³⁵ are most appropriate when attempting to estimate the contribution of a sector to the economy. These multipliers are generally expressed in relation to an initial increase in demand for a sector's output.²³⁶ For example, if sector X's output (or sales) increases by R1 million and the total GDP multiplier is 1.3, it implies that the R1 million injection into sector X will ultimately contribute R1.3 million to GDP in total.

There are three types of multipliers that are generally calculated:²³⁷

- **Type I** multipliers estimate the direct and indirect impact of an initial increase in output. The direct impact is the initial impact required to supply the extra output. At firm level, this would be the firm's expenditure on employment, capital goods and purchases required to increase output. The indirect impact measures the subsequent impact of a firm's purchases on suppliers i.e. the supplying firms' expenditure on goods and labour required in order to provide the downstream firm with goods. In this sense Type I multipliers estimate the backward linkages a firm or industry has with other firms and industries i.e. the additional upstream demand created by the increase output of an upstream firm or sector.
- **Type II** and **Type III** multipliers estimate the direct, indirect and induced impact of an initial increase in output. In addition to the backward linkages or production (direct and indirect) effect of an increase in output, there is an additional induced effect resulting from higher incomes, often referred to as the consumption effect. This describes the increase in consumption as a result of increases in household incomes, due for example to increased wage payments. The distinction between Type II and Type III multipliers is that Type II multipliers reflect induced consumption from labour income (or wages) only, while Type III multipliers reflect induced consumption from both labour and capital income (e.g. dividends, interest and rent).

Multipliers are often calculated using Input-Output Models (IOM) or Social Accounting Matrix (SAM) frameworks. The two modelling frameworks are similar, with the SAM considered an extension of the traditional IOM by integrating a country's national accounts with the input-output accounts, thereby accounting for taxes, savings and the distribution of income flows.²³⁸ As a result of this SAM multipliers are often larger than IOM multipliers.²³⁹

Multipliers should be used carefully in sector specific analysis, for a number of reasons:

- IOM and SAM multipliers employ a number of assumptions, most notably that there is excess production capacity in all sectors of the economy (perfect elastic supply) and that relative prices are fixed.²⁴⁰ If these assumptions do not hold, multiplier analysis will tend to over-estimate economic impact
- Given the way in which multipliers are calculated, they are often highly specific to regions and economies. Thus one should attempt to "fit" multipliers calculated in other regions and times to local data with caution, and where possible, using economies that are comparable.
- Many studies estimate output multipliers rather than GDP or value-added multipliers. The population of multipliers applicable to identifying the full contribution of a specific sector is therefore likely to be small.

²³⁵ This is in contrast to output multipliers which are more commonly reported but estimate the total output contribution of an industry rather than the value-added component, which aggregates to GDP.

²³⁶ This is sometimes referred to as the "pseudo" value-added multiplier, with the multiplier traditionally defined as the total value added divided by the direct value added from an increase in demand, see van Kooten (1993).

²³⁷ Based on Taaljaard et al (2008), Elbushra et al (2010), Tregenna (2007), Miller et al (1999) and Hanson (2010).

²³⁸ Elbushra et al (2010), Hanson (2010).

²³⁹ Tregenna (2007)

²⁴⁰ Taaljaard et al (2008)

5.1.1 Manufacturing

A number of companies with significant market shares in the liquor sector are listed, and thus provide good quality financial data which can be used to estimate industry value added. Employment, tax and return on capital data is then extrapolated for the rest of the market, based on what is known about the market shares of listed firms. For this analysis Table 50 provides a breakdown of how each component of value added is measured.

Table 50: Measuring value added for manufacturing

Component of value added	Measurement
Compensation of employees	Based on companies' financial statements and shown in gross terms, i.e. including payroll taxes
Operating surplus	Based on companies' earnings before interest, tax (corporate taxes), depreciation and amortization (EBITDA). Consumption of fixed capital is not shown separately and is proxied by depreciation. This therefore approximates gross operating surplus, excluding value added tax (VAT). ²⁴¹
Taxes on products and production	Based on South African Revenue Services (SARS) data for excise payments by the industry. All other taxes on production and products are reflected either in the operating surplus or compensation of employees components. As companies in South Africa deduct excise taxes as a cost of production, whether or not it is passed on, double counting is avoided.

Source: DNA Economics

Table 51 provides the estimated results for the direct value added by the (formal) manufacturing sector for 2009/10.²⁴² Manufacturing of liquor products is estimated to directly contribute just over R23 billion in value added terms, or approximately 0.9% of GDP.²⁴³ Not surprisingly, the beer sector is the biggest contributor to the liquor industry's direct value added, accounting for 58% of direct value added.

²⁴¹ Given that much of the analysis is based on information from listed companies, which receive VAT credits and do not explicitly include VAT payments in their financial statements, the industry's estimated VAT contribution (at consumer prices) will be shown in total in the final analysis. Excise, also a product tax, is charged at source (due by the producer), and is often included in both the income and expense components of the producer's financial statements. Given that manufacturers are responsible for the excise duty, it is included here.

²⁴² In estimating value added for manufacturing of liquor we have attempted to estimate value added from domestic production for domestic consumption only i.e. ignoring both imports and exports of manufactured liquor. This is likely to result in overestimating the value added for liquor sectors that are net importers of liquor and underestimate the value added for sectors that are net exporters. The netting of these two effects is estimated to make a small difference in the overall result.

²⁴³ Based on the average of 2009 and 2010 Q3 (annualised) GDP at current prices.

Table 51: Direct value added by manufacturing sector

Direct value added (R million)	Beer	Sorghum**	Wine	Spirits	Ciders / RTDs	Total liquor
Turnover	25,710	847	6,663	9,889	5,934	49,042
Employee costs	1,778	261	654	933	513	4,140
Operating surplus (EBITDA)	6,143		882	1,315	923	9,263
Taxes on production (Excise)	5,721	27	780	2,838	675	10,041
Direct value added	13,643	288	2,316	5,086	2,111	23,444
Number of employees	6,358	612	16,197*	3,873	2,127	29,166

Source: DNA calculations based on company Annual Reports, SABMiller (2010), Industry interviews, SARS, SAWIS (2009 (b)).

*This estimate is based on SAWIS (2009 (b)) reflecting direct employment in the cellar and manufacturing sectors of the wine industry.

**Based on data provided in interviews, the data is not broken down between employee costs and profit. Based on the formal sorghum industry only. Turnover is estimated using margins from the beer industry.

The manufacture of liquor is also estimated to employ almost 30,000 employees directly, over half of which is through the production of wine.

In order to estimate the total impact of the industry on the domestic economy, (notwithstanding the caution noted in Box 4), multiplier analysis is employed. A small number of appropriate multipliers have been identified in the literature, relating to the various sectors within the liquor industry. These are shown in Table 52. As there is some divergence in the range of multipliers across all liquor sectors, the average of the range for each sector was used to estimate the total contribution of liquor manufacturing to the economy.

Table 52: VA multipliers for manufacturing

Direct value added (R million)	Beer	Sorghum*	Wine	Spirits	Ciders / RTDs *
Multiplier range	1 - 2	1 – 2	0.4 - 3.3	0.3 - 1.2	1 - 2
Average multiplier	1.5	1.5	1.85	0.75	1.5

Source: Estimates based on SABMiller (2010), Triple Value Strategy Consulting (2008), Brewers Association of Canada (2009), Ballingall et al. (2009) and SALBA (2010).

The multipliers are "pseudo" multipliers, reflecting the value added based on output (or sales) and indicates estimates of both Type II and Type III multipliers.

*Given similar production methods and inputs and in the absence of any other reference for multipliers, the sorghum beer and RTD sector have used the same multipliers as the beer sector.

Using the multiplier estimates, Table 53 provides the total estimated contribution of liquor manufacturing to the economy. Given the beer sector's high share of production and consumption in South Africa, it is again not surprising that this sector is estimated to account for 56% of liquor manufacturing's total contribution to the economy. On average, the industry is estimated to have contributed R68.5 billion in total to the economy in 2009/10, or 2.7% of GDP.²⁴⁴

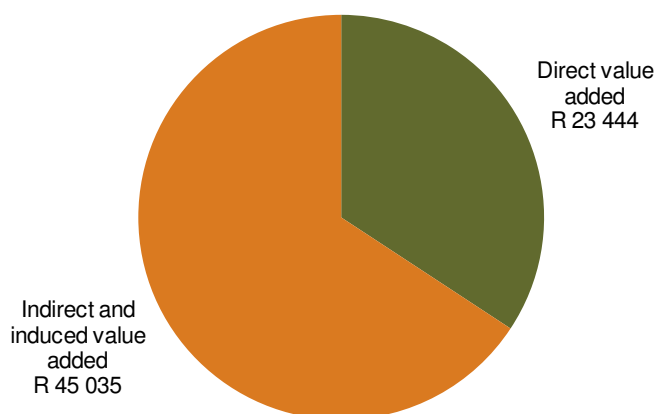
Table 53: Total value added by the manufacturing of liquor

Direct value added (R million)	Beer	Sorghum	Wine	Spirits	Ciders / RTDs	Total liquor
Lower estimate	25,710	847	2,665	2,967	5,934	38,123
Upper estimate	51,420	1,695	21,986	11,866	11,868	98,835
Estimated total value added	38,565	1,271	12,326	7,416	8,901	68,479

Source: DNA calculations

Figure 56 shows the direct and indirect and induced contribution that liquor manufacturing has made to the economy. Because of the significant backward linkages, as well as the multiplier effects of higher incomes, the indirect value added is estimated to be just under two times higher than the direct value added to the economy.²⁴⁵

Figure 56: Total value added from liquor manufacturing (R million)



Source: DNA Economics

²⁴⁴ Based on the average of 2009 and 2010 Q3 (annualised) GDP at current prices

²⁴⁵ In other words, the actual value-added multiplier for the industry is estimated to be roughly two.

5.1.2 Retail (on- and off-consumption)

5.1.2.1 Off-consumption

Given the large number of players within the retail sector (both on- and off-consumption) the derivation of value added from liquor sales has been based largely on available information for the major listed retailers in South Africa, all of which have dedicated liquor stores and sell wine in their retail chains. Financial information from these retailers has been used as a proxy in attempting to identify the value added (through employee compensation and operating surplus) by the retail sector when selling liquor.

Most of the listed retailers do not provide segmental reporting on liquor, while for some companies financial reporting for South Africa-only operations is limited. Information from an interview with one of the listed retailers, however, suggests that margins on an aggregate basis for liquor are not too different from the group's overall retail margins.²⁴⁶ While smaller liquor outlets are likely to be less efficient than listed retailers, it is believed that the wide variance in the margins in Table 54 adequately reflects the range of margins that may be found in the formal off-consumption market. Given that excise taxes are paid at source (by producers) total value added can be considered the sum of (gross) operating surplus, calculated as EBITDA, and employee compensation.²⁴⁷

Table 54: Value added margin range for liquor retailers

	Lower margin	Upper margin	Average
Operating surplus margin	4%	7%	5%
Employee compensation margin	3%	13%	8%
Total value added margin	7%	20%	13%

Source: DNA Economics, based on listed retail companies' information from 2010 annual reports.

Using the average margins shown in Table 54, an overall estimate of the value added from liquor sales in the off-consumption retail sector are shown in Table 55. On average, the (formal) off-consumption of liquor is estimated to have contributed R8.3 billion to the economy in 2009/10.

²⁴⁶ The interviewee suggested that for beer and spirits, the gross margin was roughly 3% - 4% lower than the company's overall gross margin, while the gross margin on wine was higher than the company's overall gross margin. Given that the margin range in **Error! Reference source not found.** includes a retail distributor (with lower margins), it is believed that the margin range adequately reflects retail margins for liquor.

²⁴⁷ Note that as in the previous section, the impact of VAT is excluded from retailers value added contribution, as the estimated aggregate VAT at consumer prices will be included in the final analysis for the industry as a whole.

Table 55: Value added from liquor off-consumption

Value added (R billion)	Lower end	Upper end	Average
Off-consumption sales	62.5		
Operating surplus	2.5	4.1	3.3
Employee compensation	1.7	8.2	4.9
Total value added	4.2	12.3	8.3

Source: DNA economics, off-consumption sales based on SABMiller (2010)

A rough estimate of total employment in the off-consumption sector can be derived by examining labour intensity data in relevant listed retailers. As shown, the revenue per employee at Massmart, Pick 'n Pay and Shoprite/Checkers averages out at just over R2m (Spar employment numbers are distorted by their voluntary trading model, and are thus excluded). Given the estimate of total sector sales of R62.5bn, this implies that total employment in the formal off license environment is approximately 30 600 individuals. However, it should be noted that this number is very rough, and may be distorted by the inclusion of non-liquor retail activities in company data, and/or systematic differences between employment intensity at listed and unlisted off licensees.

Table 56: Labour intensity at major retailers

Sample	Total employees	Revenue (Rm)	Revenue per employee (R'000)
Massmart - Makro stores	2 805	R 11 102.40	R 3 958.07
Pick 'n Pay	37 876	R 55 314.30	R 1 460.41
Shoprite/Checkers	76 222	R 53 367.20	R 700.15
Average			R 2 039.54

Source: Company financials, DNA calculations

5.1.2.2 On-consumption

The value added through liquor sales from on-consumption retailers (excluding shebeens) has been estimated by deriving approximate gross operating surplus and employee compensation margins using information from the Statistics SA Food and Beverages 2009 statistical release, together with data from Statistics SA's monthly Food and Beverages survey. This survey provides information on restaurants, take-aways and other caterers, which includes bars.²⁴⁸ Table 57 provides a summary of the value added from formal on-consumption retailing of liquor.

²⁴⁸ The survey covers tax registered enterprises and therefore provides estimates for the formal industry only.

Table 57: Value added through on-consumption of liquor (excluding shebeens)

Value added	R million
On-consumption liquor turnover*	3,723
EBITDA	109
Employee compensation	705
Total direct value added	815
Total permanent employees (number)	9,635

Source: DNA estimates based on Stats SA (2010) Food and Beverages, 2009 and Stats SA monthly Food and Beverages survey.

*Liquor turnover for November 2009 – October 2010

It is estimated that the formal on-consumption sale of liquor results in a contribution of R815 million to the economy in 2009/10. Different techniques and data sources are required to estimate the size of the informal sector (i.e. shebeens). Due to limited research and data on this sector to date, estimates are preliminary and should be treated with caution.

The most widely quoted estimate of the number of shebeens in South Africa is 200 000. Research has been undertaken in the Western Cape as to the business characteristics of these informal market operators.²⁴⁹ If these Western Cape numbers are taken to be representative of the national shebeen market, estimates can be provided of the value added by this sector, as shown in Table 58 below. The study distinguishes between three levels of shebeens, with level 1 being the largest and level 3 the smallest.

Table 58: Estimated revenue and employees, shebeen sector

	Weekly turnover:	% of all shebeens (Western Cape)	Average number of employees *	Number of shebeens (SA total)	Implied annual turnover (Rm)	Implied total employees
Level 1	R7 500	7%	5.2	14 634	R32 430	431 220
Level 2		34%		68 293		
Level 3	R900	59%	2.8	117 073	R5 494	15 383
Total				200 000	R37 924	446 603

Source: Charman et al. 2009, DNA calculations

* includes casual workers

Shebeens are typically owner-operated, and so it is not useful to think in terms of differentiating between earnings from capital and the earnings of employees. Furthermore, many shebeen employees are also family members, who may not receive regular wages.²⁵⁰ Very small (i.e. level 3)

²⁴⁹ Charman et al 2009

²⁵⁰ Tsoeu 2009, 150

shebeens are run as survivalist businesses, and may open on an ad hoc basis only.²⁵¹ Using this data and poverty line estimates as a guideline,²⁵² it was then possible to derive very rough initial estimates of value added by shebeens. These are shown in Table 59 below.

Table 59: Shebeens value added

	Annual turnover (Rm)	Employees (SA total)	Value added: employee earnings (Rm)
Level 1 & 2	R32 430	431 220	R6 219
Level 3	R5 494	15 383	R92
Total	R37 924	446 603	R6 311

Source: DNA calculations

Note: Level 3 shebeen employee estimated to earn only 50% of poverty line; Level 1 and 2 shebeen employees estimated to earn 20% more than poverty line

5.1.3 The economic contribution of manufacturing and retail of liquor

A summary of the total formal liquor industry contribution (manufacturing and retail) to the economy is provided in Table 60. The manufacturing sector is the biggest contributor to the economy, followed by the off-consumption of retail. Total VAT and excise contributions across the liquor industry are estimated to be R19.3 billion, which implies that 40% of the direct value added by the industry accrues to the state. In total, the manufacturing and retail of liquor is estimated to have contributed R93.2 billion to the economy in 2009/10, or 3.9% of 2009 GDP.²⁵³

Table 60: Total contribution of liquor industry (R billion)

Contribution	Direct employees	Direct	Indirect and induced	Total
Value added				
Manufacturing	29 166	23.4	45.0	68.5
– Excise:		10.0		
Off-consumption retail	30 600	8.3		8.3
On-consumption retail	456 238	7.1		7.1
VAT		9.3		9.3
Total contribution of liquor industry	516 004	48.1	45.0	93.2

Source: DNA Economics

²⁵¹ Charman et al 2009, 35

²⁵² We used Oosthuizen (2008, 6) estimates of a lower and upper bound of the poverty line of R442 and R1 561 per month respectively. The average of these two bounds was employed.

²⁵³ We have not included a multiplier effect for the retail of liquor. The backward linkages in the retail sale of liquor would have been largely captured by the manufacturing multiplier (though some effects would not have been included). More significantly, induced effects through higher incomes from the retail sector have not been included. While this is likely to be slightly offset due to double counting between on- an off-consumption of liquor, it is nevertheless probable that the total contribution by the retail sector is slightly underestimated.

In addition, the liquor sector makes a large contribution to total domestic employment levels. Total direct employment in liquor is over half a million individuals, the bulk of whom are informally employed in the shebeen sector.

Box 5: Alcohol and pleasure

One of the impacts that the liquor industry has on society is the pleasure derived by individuals from the consumption of liquor products. In terms of economic theory, it is possible to measure the value that consumers place on a product by examining how much more they would have been prepared to pay for it²⁵⁴ (the technical term for which is consumer surplus).

However, measuring consumer surplus for a psychoactive and addictive substance such as alcohol is complicated by the fact that the nature of the good makes consumers value it more highly than they rationally should.²⁵⁵ Consumer surplus should thus arguably be adjusted down to compensate for the tendency of consumers to over-estimate the value they should rationally place on it. Estimates from the nicotine market suggest that consumer surplus should be adjusted down by 25% before being included in cost benefit analysis.²⁵⁶

A study conducted in London estimated that consumer surplus in alcohol is approximately half again the cost of the product: in other words, "people are willing to pay up to 50% more than what they actually spend on alcohol."²⁵⁷ This provides a very rough indication of the type of value of consumer surplus in the South African market. If this estimate is then discounted to compensate for consumer irrationality in demand for psychoactive substances, the implicit consumer surplus is then in the region of 38% of the retail purchase price. Given the estimate of the total direct value added by the liquor sector of R48.1bn, as shown in Table 60, this would imply that consumers value the pleasure derived from alcohol at R18bn. However, this is an intangible value, which should not be added to the tangible economic contribution of liquor.

It should also be noted that for each "alcohol pleasure" there may be corresponding non-monetary-quantifiable costs or "displeasures" that are imposed on others. These can be relatively trivial, such as having to experience the noise and inappropriate behaviour of intoxicated individuals, to considerably more severe suffering experienced as a result of alcohol-related psychological trauma, and the effect of alcohol on marriages and relationships. We expound on some of the non-financial welfare costs pertaining to alcohol in section 5.2.6.

5.2 The cost of harmful alcohol use

A review of the social and economic costs of the liquor industry will now be conducted, focussing on the following key aspects:

- (a) A literature review of South African and international research on the social and health costs of harmful alcohol use; and

²⁵⁴ Anderson & Baumberg 2010, 8

²⁵⁵ Anderson & Baumberg 2010, 10-11

²⁵⁶ Vining & Weimer 2010, quoted in Anderson & Baumberg 2010, 11

²⁵⁷ Aslam et al 2003, 35

(b) Estimates of the direct, quantifiable impacts of harmful alcohol use, including:

- Health impacts;
- Social impacts;
- Damage to infrastructure and investment; and
- Other economic costs.

It should be noted that each aspect of (a) above is limited to the review and presentation of available secondary research. Although it is unlikely that the current study will provide a definitive answer to the cost and impact of alcohol misuse on South African society, there is a need to describe and categorise the main costs arising from alcohol misuse and the most suitable sources of data for South Africa as well as some of the major information gaps and areas required for additional research.

The study will use a prevalence-based approach, which estimates the current costs of all past harmful alcohol use, as opposed to an incidence-based approach, which includes the future costs of all current alcohol consumption. This is in line with international practice in cost estimation.²⁵⁸ Estimates of mortality and injuries levels are however based on annual averages.

This analysis builds on previous estimates of the social and economic cost of liquor in South Africa. Two estimates in particular are frequently utilised to describe the social and health costs of alcohol misuse in South Africa. Based on the work of Single et al. (1998), which showed that the annual economic costs associated with alcohol misuse could be in the region of 0.5 per cent to 1.9 per cent of gross domestic product,²⁵⁹ Parry, Myers and Thiede (2003) suggested that a conservative estimate of 1% of GDP equated to R8.7 billion in 2003.²⁶⁰ More recently, the Soul City Development Institute commissioned a primary research study of local costing data in which Budlender (2010) estimated that a total of R17 billion per year was allocated by national and provincial government for alcohol attributable expenditures, which considering that alcohol sales accounted for R16-billion in tax and excise revenue, represented an annual loss to the fiscus of R1 billion per year.²⁶¹

However, both studies recognise their own limitations. Parry et al. (2003) questioned whether findings from high-income countries can be applied to South Africa, but provide the estimates in the absence of any other suitable cost-to-economy studies. Budlender (2010) cautions that many of the listed government expenditures occur within general allocations, and that the proportions targeted at alcohol specifically have been based on assumptions with potentially wide margins of error. Budlender also omits several costs and line items, for example, the tuberculosis sub-program from the social development costs and also the cost of harmful use of alcohol on local government. Budlender also tends to err on the side of lower rather than higher costs, so that the study is likely to underestimate the true cost of alcohol to government. Over and above that, government spending accounts for only a fraction of the costs incurred for harmful alcohol use. It should also be recognised that spending on

²⁵⁸ Møller & Matic 2010, 2

²⁵⁹ Single, Robson, Xie, & Rehm 1998

²⁶⁰ Parry, Myers, & Thiede 2003

²⁶¹ Budlender 2010

alcohol often is associated with an opportunity cost of foregone spending or investment in more socially desirable avenues. In 2006 it was estimated that R41 billion was spent on alcohol, amounting to R16 out of every R100 spent.²⁶²

There are three important recent texts that describe best practice methods to estimate the social costs of alcohol abuse, which serve as a basis for this exercise.²⁶³ Of the three, Single et al. (2003) focussed inter alia on the attributable costs of alcohol use, whereas Collins et al. (2006) explored the concept of avoidable costs of alcohol use. The most recent report by Møller and Matic (2010) reviewed the strengths and limitations of the various studies and costing methodologies that have been employed to date. The introductory section of this last report is particularly instructive in defining the various notions and definitional issues underpinning various costing exercises. The authors distinguish three different cost dimensions that can be theoretically combined into a single full economic welfare cost of alcohol:

- Health and crime expenditures, in which resources are allocated to address alcohol related harms;
- Labour and productivity costs, in which the effect of alcohol on economic output and production is quantified; and
- Non-financial welfare costs, such as pain, suffering and loss of life or “quality” of life, which do not have a monetary value.²⁶⁴

In practice however policy makers tend to focus on the total financial cost of alcohol, which excludes the non-financial welfare costs. Møller and Matic (2010) recommend that the full economic welfare cost and the total financial cost of alcohol should be presented separately and the differences between the two should be made clear.

Another important distinction is made between costs borne by drinkers themselves (internal costs) versus those borne by government or society-at-large (external costs) – see Table 61. Although Møller and Matic (2010) describe several difficulties in measuring external costs, the fact that they account for most of the costs related to alcohol and because they are considered by policy-makers to be the source of much of the “unfair and inefficient” consequences of harmful alcohol use, means that they cannot simply be omitted from costing studies. Their recommendation is that alcohol cost studies should apply internal and external costs consistently and explain any deviations from the classification used in Table 61. Furthermore, as cost studies should ideally estimate external costs and total social costs simultaneously, care should be taken to exclude internal costs from the external cost estimates and transfer costs from total social costs.

²⁶² Cited by B. Holtman of CSIR in Action for a Safe South Africa plenary August 2008 – Nielsen market research.

²⁶³ Collins et al. 2006; Møller & Matic 2010; Single et al. 2003

²⁶⁴ Møller & Matic (2010)

Table 61: The internal and external costs of harmful alcohol use to the drinker

Costs	Primarily external or internal?	Comments
Health and crime costs		
Health care	External	Internal when health care is paid for by the individual
Treatment for alcohol use disorders	External	
Research and prevention	External	
Social security	[External]	A transfer cost, so not included in the total social cost
Drink-driving damage	External	
Labour costs		
Productivity at work	?	Contentious among economists
Absenteeism	?	Contentious among economists
Premature mortality	?	
Unemployment/retirement	External	Depends on the cost being estimated: internal if estimating lost earnings to the drinker
Crime: imprisonment	Internal	
Congestion from accidents	External	
Education	Internal	
Non-financial welfare costs		
Health	Internal	
Non-health impacts on drinkers	Internal	
Drinker's relatives: quality of life	External	Considered by some economists to be an internal cost, but seems better to treat as external
Drinker's relatives: informal care	External	Considered by some economists to be an internal cost, but seems better to treat as external
Drinker's relatives: children	External	Considered by some economists to be an internal cost, but seems better to treat as external

Source: Møller 2010, 6; adapted

Note: The costs caused by harms to others are all external, including costs for crime, health care, social services, research, prevention, social security, unemployment and retirement benefits, labour lost by the victims of accidents and crime, and nonfinancial welfare costs (including fear of crime).

It is these recommendations that have been applied in the sections that follow. Møller and Matic (2010) also provide several other important recommendations that we have tried to take into account in compiling this document, such as in the event that no data are available cost studies should import data from other comparable countries. In other words, although imported cost estimates are not ideal, which should be acknowledged, using such estimates is preferable to omitting cost components for lack of data, as this would bias results downward. At this time, recommendations about measuring avoidable costs, attributing causality, applying new methodologies, conducting sensitivity analyses, developing scenarios and estimating future health and resource costs were deemed beyond the scope of this study.

5.2.1 *Health and welfare spending impact of harmful alcohol use*

According to Møller and Matic (2010) health and welfare spending on alcohol has four components, namely 1) health care costs; 2) social and welfare costs; 3) costs relating to crime; and 4) miscellaneous other costs. First we present the various impacts of alcohol on health, after which each cost component is summarised in the sub-sections that follow.

5.2.1.1 **Impact of alcohol on health**

Alcohol and other drugs impact on health and the burden of disease in many different ways. As alcohol is the most widespread drug of abuse in South Africa, it is also the most harmful, and is the third largest contributor to death and disability after unsafe sex/sexually transmitted infections and interpersonal violence.²⁶⁵ This was demonstrated in an ancillary study to the National Burden of Disease Study for 2000, which had measured the disease burden according to premature mortality in terms of estimated years of life lost and morbidity in terms of years lived with a disability (combined as DALYs, i.e. disability-adjusted life years).²⁶⁶ The ancillary study looked at the impact of major risk factors and used the Global Burden of Diseases' Comparative Risk Assessment methodology to determine the effect of each risk factor.²⁶⁷

In deriving the estimate for the contribution of alcohol to the disease burden in 2000, Schneider et al. (2007) listed eighteen health outcomes from the International Classification of Diseases (ICD-10) that were related to alcohol (see Table 62). These were broadly categorized according to three groups of conditions, as follows:

- Chronic conditions and low birthweight where alcohol is usually a detrimental contributing factor, (e.g. cancer, depression and cirrhosis) but occasionally has beneficial effects (e.g. possibly in the case of type 2 diabetes);
- Acute conditions, such as intentional and unintentional injuries, where alcohol is a detrimental contributing cause; and
- Those conditions that by definition are entirely alcohol-attributable, such as alcohol dependence and foetal alcohol spectrum disorder (FASD).

²⁶⁵ Norman et al. (2007)

²⁶⁶ Bradshaw et al. (2003)

²⁶⁷ Norman et al. (2007)

Table 62: Alcohol-related health outcomes

Health outcomes	ICD-10 codes
Cancers (neoplasms)	
Mouth/oropharynx	C06, C10
Oesophagus	C15
Liver	C22
Larynx	C32
Breast	D05
Cardiovascular diseases	
Hypertensive disease	I10-I13
Ischaemic heart disease	I20-I25
Ischaemic stroke (cerebral infarction)	I63
Haemorrhagic stroke (intracerebral haemorrhage)	I61
Other chronic diseases	
Diabetes (non-insulin dependent)	E11
Cirrhosis of liver	K70, K71, K74, K76
Effects of prenatal alcohol exposure	
Fetal alcohol syndrome	Q86.0
Low birth weight	P07
Neuropsychiatric conditions	
Depression (unipolar major depression)	F32
Epilepsy	G40
Alcohol dependence	Z72
Acute adverse effects	
Intentional injuries	X60-X84, Y87
Unintentional injuries	V01-V99

Source: Schneider et al. 2007, 666

The study estimated the alcohol attributable contribution to the disease burden for 22 separate health outcomes, as shown in Table 63. This comprises an expanded list of health outcomes by separating out intentional and unintentional injury outcomes such as homicide/violence and suicide, road traffic injuries, poisonings, falls, fires, drownings and other unintentional injuries. It should be noted that this is by no means an exhaustive listing. For example, whereas Schneider cites two conditions that are 100% attributable to alcohol, the recent definitive work by Rehm et al. (2010), which estimates the

burden for 2004, lists more than thirty.²⁶⁸ However, we attempt to summarise the most important health outcomes associated with alcohol use.

The analysis by Schneider et al. (2007) enabled the quantification of the impact of alcohol on the disease burden in terms of deaths, premature mortality and disability.²⁶⁹ The counterfactual in this analysis was no consumption. By using a standard methodology across risk factors, it was possible not only to measure the impact of alcohol on individual health outcomes but also on the national disease burden as a whole. For example, a total of 345 deaths due to cancer of the mouth or pharynx could have been prevented in the absence of alcohol consumption as well as 252 drownings. Drowning would however account for more years of life lost (6 615 YLLs versus 4 108 YLLs), as the average age for drowning is considerably lower than for cancer. However, as drowning is by definition fatal there is no corresponding disability measure (YLD or years lived with a disability).

²⁶⁸ Rehm et al. (2010)

²⁶⁹ Schneider, Norman, Parry, Bradshaw, & Plüddemann (2007b)



Table 63: Burden attributable to alcohol in males, females and persons, South Africa 2000

	Males					Females					Persons				
	PAFs (%)	Deaths	YLLs	YLDs	DALYs	PAFs (%)	Deaths	YLLs	YLDs	DALYs	PAFs (%)	Deaths	YLLs	YLDs	DALYs
Cancer mouth/pharynx	28.5	283	3 353	166	3 519	16.4	63	755	30	785	25.2	345	4 108	197	4 304
Cancer oesophagus	37.2	1 289	14 743	228	14 971	23	437	5 194	70	5 264	32.1	1 726	19 937	298	20 235
Cancer liver	30.3	519	6 474	72	6 546	17	161	1 829	24	1 852	25.8	680	8 303	95	8 398
Cancer larynx	42.9	271	2 888	0	2 888	28	30	375	0	375	40.4	301	3 263	0	3 263
Female breast cancer	0	0	0	0	0	5.6	165	2 160	165	2 326	5.6	165	2 160	165	2 326
Epilepsy	53.7	968	21 591	7 688	29 279	22.2	208	3 446	4 492	7 938	41.2	1 176	25 037	12 180	37 217
Hypertensive disease	26	1 340	13 219	377	13 596	12.4	1 302	11 231	255	11 486	17.3	2 642	24 450	631	25 081
Ischaemic heart disease	7.6	1 292	11 958	768	12 726	0	0	0	0	0	4.4	1 292	11 958	768	12 726
Stroke – harmful	12.3	1 635	17 422	1 331	18 753	3.8	631	7 234	343	7 577	7.5	2 266	24 656	1 674	26 330
Cirrhosis liver	54.6	1 932	28 209	4 836	33 046	31.3	651	9 358	1 433	10 791	46.1	2 582	37 567	6 269	43 836
Alcohol use disorders/dependence	100	550	9 489	106 973	116 462	100	210	3 563	46 536	50 099	100	760	13 052	153 509	166 561
Depression	3.6	0	0	3 591	3 591	0.4	0	0	678	678	1.5	0	0	4 269	4 269
Low birth weight	0.3	19	637	47	685	0.3	16	543	41	584	0.3	36	1 181	88	1 269
Fetal alcohol syndrome	100	0	0	31 181	31 181	100	0	0	31 285	31 285	100	0	0	62 466	62 466
Road traffic injuries	49.9	4 935	123 834	6 779	130 613	29.2	1 231	30 485	1 252	31 737	43.9	6 166	154 319	8 031	162 350
Poisonings	31.3	67	1 814	0	1 814	24.4	47	1 034	0	1 034	28.4	114	2 848	0	2 848
Falls	21.3	185	3 576	1 287	4 863	7.7	19	282	1 375	1 657	14.7	204	3 858	2 662	6 520
Fires	51	980	24 391	4 076	28 468	46.9	668	14 534	2 073	16 606	49.4	1 648	38 925	6 149	45 074
Drownings	56.8	231	6 149	0	6 149	21.3	21	467	0	467	50.8	252	6 615	0	6 615
Other unintentional injuries	5.9	70	1 857	4 895	6 752	0	0	0	0	0	4.8	70	1 857	4 895	6 752
Suicides	36.3	1 430	36 790	7	36 797	18.5	244	5 429	9	5 438	32.3	1 674	42 218	16	42 235
Homicide and violence	47.3	11 253	322 492	53 113	375 604	31.1	1 488	38 946	26 855	65 800	43.9	12 741	361 437	79 967	441 405
Total		29 248	650 885	227 416	878 301		7 592	136 864	116 914	253 778		36 840	787 749	344 331	1 132 079
95% uncertainty interval															
Lower		26 923	591 943	219 142	811 511		6 968	127 107	111 027	239 277		34 499	728 402	333 509	1 062 852
Upper		31 134	707 043	235 376	942 384		8 516	149 041	120 236	268 131		38 925	846 395	352 766	1 197 765
% of total burden		10.70%	11.30%	8.40%	10.40%		3.10%	2.80%	4.20%	3.30%		7.10%	7.40%	6.20%	7.00%
95% uncertainty interval															
Lower		9.80%	10.30%	8.10%	9.60%		2.80%	2.60%	4.00%	3.10%		6.60%	6.80%	6.00%	6.60%
Upper		11.40%	12.30%	8.70%	11.10%		3.40%	3.00%	4.30%	3.50%		7.50%	7.90%	6.40%	7.40%

Source: Schneider et al. 2007, 669, adapted

In summary, using a combination of local and international data, Schneider et al. showed that the contribution of alcohol was detrimental for all but two of the health outcomes that were examined, i.e. stroke and diabetes²⁷⁰. Injuries and cardiovascular disease ranked first and second in terms of causes of attributable deaths. However the young age of violence and injury victims and the substantial morbidity associated with neuropsychiatric conditions affected the causes of the overall attributable burden, which was mainly attributable to interpersonal violence (39.0%), neuropsychiatric conditions (18.4%) and road traffic injuries (14.3%). The net effect was that a total of 36 840 deaths (6.1% of total mortality), 787 749 YLLs (representing 7.4% of premature mortality) and 344 331 YLD (representing 6.2% of total disability) were attributable to alcohol, which combined accounted for more than 1.1 million DALYS (or 7.0% of the total national disease burden).

There is however a notable omission from Schneider et al.'s analysis. Alcohol is of course also a contributory cause to numerous risk factors that give rise to communicable diseases, especially sexually transmitted diseases. In the South African context, the association with HIV/AIDS and tuberculosis (TB) are the two most important to consider. The spread of both diseases is associated with alcohol use - in the case of HIV through risk-taking behaviour and unsafe sexual practices on the one hand, but also in compromising adherence to antiretroviral therapy as well as the course of the disease.

More recently, an international collaboration reviewed evidence of the causal link between alcohol and infectious diseases, as summarised by Parry et al. (2009), and prepared initial burden of disease estimates that accounted for the role of alcohol in relation to infectious diseases including country level estimates for South Africa.²⁷¹ The methodology was subsequently expanded to the entire WHO Africa Region,²⁷² along with revised country estimates for each member state.²⁷³ It is these later estimates that will be presented alongside Schneider et al.'s earlier work, which inform the sequence of sub-sections that follow. There is also considerable congruity between these two sets of estimates derived independently from one-another. Rehm et al (2009b) estimated total alcohol-attributable DALYs for South Africa at more than 1.3 million with injury-related causes accounting for nearly half (41%) and the largest single contribution being from intentional injuries – i.e. interpersonal violence and suicide – at 25%. Infectious diseases accounted for a third (33%) of DALYs, with tuberculosis (18%) and HIV/AIDS (13%) being the largest contributors. Non- communicable diseases accounted for the

²⁷⁰ The impact of these “beneficial effects” falls outside the scope of this costing exercise. Although causality is still being established, some health impact studies do attribute beneficial effects to moderate levels of drinking. For example, beneficial effects of alcohol in relation to stroke and diabetes are included in Schneider et al's analysis, although their overall contribution was shown to have been negligible.

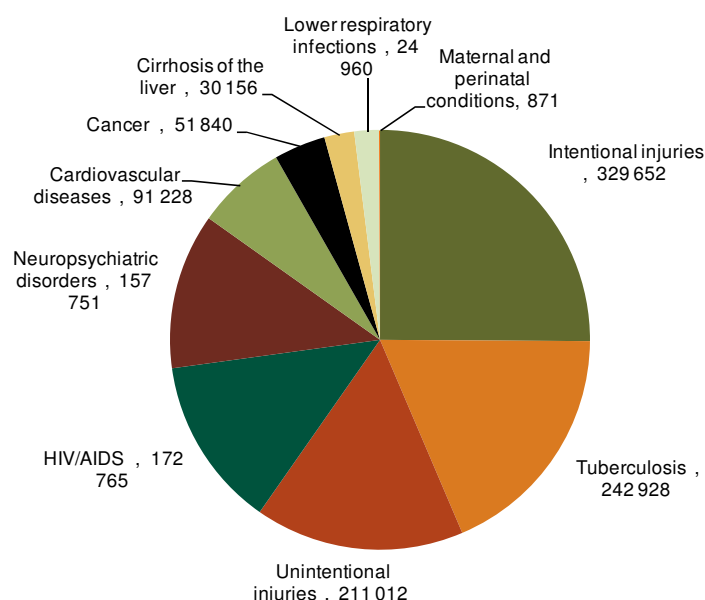
²⁷¹ Rehm, Kehoe, Rehm, & Patra (2009b)

²⁷² The WHO identifies 6 distinctive geopolitical health regions. All but a handful of African countries fall under the auspices of the African Regional Office (AFRO). The remaining few, which are all Arabic-speaking countries in North and North-East Africa, are aligned with the East Mediterranean Regional Office (EMRO).

²⁷³ Rehm et al. (2009b)

remaining alcohol attributable DALYs, with neuropsychiatric disorders being the single largest component (12%).²⁷⁴

Figure 57: Estimated alcohol-attributable DALYs for persons, South Africa, 2004



Source: Rehm, Kehoe et al., 2009b

In the sub-sections that follow we review the association between alcohol and each specific health outcome as well as the source of the estimated alcohol attributable fraction (AAF) – in other words, the proportion of the disease burden which is caused by alcohol consumption. It is important to note that these AAFs are a function not only of the relative risk of alcohol on the specific health outcome, but also of the type and extent of drinking in the host society, disaggregated by age and sex. So, in the case of South Africa, where there is a high degree of problem drinking, AAFs can be expected to be higher relative to other countries.

5.2.1.2 Alcohol and injuries

The association between alcohol use and all types of trauma is well-documented. Below we differentiate between intentional and unintentional injuries.

Intentional injuries

With regards to violence, alcohol is an important situational risk factor that can precipitate violence and is associated with all forms of interpersonal violence, as well as suicide.²⁷⁵ Three meta-analyses of the association between alcohol use and interpersonal violence described by Parry and Dewing (2006)

²⁷⁴ Rehm et al. (2009b)

²⁷⁵ Krug, Dahlberg, Mercy, Zwi, & Wilson (2002)

attribute between 27% and 47% of intentional injuries directly to the use of alcohol.²⁷⁶ In South Africa, where per capita consumption among the drinking population is high and binge-drinking is rife, particularly among the victims and perpetrators of violence, the contribution of alcohol may be even greater. The local rate of homicide is among the highest in the world, five and eight times higher than the global average for females and males respectively.²⁷⁷

The South African Demographic and Health Survey data suggest that alcohol use significantly increases the risk of being exposed to violence.²⁷⁸ A study of patients presenting to trauma units in Cape Town, Durban and Port Elizabeth found that on average, more than half of patients presenting for injuries due to violence tested positive for alcohol usage.²⁷⁹ More than half of the victims of fatal violence were alcohol positive, with the highest percentage of alcohol-positive cases among deaths resulting from sharp force injuries (72%).²⁸⁰

As well as increasing vulnerability, alcohol has been shown to precipitate aggressive behaviour.²⁸¹ Several studies have found a link between alcohol dependence and child abuse,²⁸² and excessive drinking by men is significantly associated with partner violence across different settings.²⁸³ Women who live with heavy drinkers have a far greater risk of physical abuse from their partners.²⁸⁴ Although there continues to be some debate about whether there is direct causality between alcohol consumption and violence, evidence regarding this association is repeatedly found after taking into account other associated factors.²⁸⁵ Some of the confusion may arise from the fact that alcohol has vastly different effects on individuals with different character traits. For example, people with high levels of trait aggression are exponentially more prone to violent behaviour after consuming alcohol than those with low trait aggression.²⁸⁶

In South Africa, a study of three provinces found that conflict over the male partner's drinking was a risk factor for intimate partner violence, and more important than his drinking.²⁸⁷ The study by Abrahams and Jewkes (2006) also found that men who use violence against an intimate partner were more likely to report problematic alcohol use.²⁸⁸ However the reasons why men beat their partners when drunk are complex, and it has been suggested that some men use alcohol to gain the courage

²⁷⁶ English, Holman, Milne, & et al (1995); Shultz et al. (1991); Single et al. (1998)

²⁷⁷ Norman, Matzopoulos, Groenewald, & Bradshaw (2007)

²⁷⁸ Doolan (2006)

²⁷⁹ Plüddemann, Parry, Donson, & Sukhai (2004)

²⁸⁰ Matzopoulos (2005)

²⁸¹ Gallagher, Hudepohl, & Parrott (2010); Parrott & Giancola (2004); Parrott, Gallagher, Vincent, & Bakeman (2010)

²⁸² Golding (1996); Strauss & Gelles (1986)

²⁸³ Black, Schumacher, Smith Slep, & Heyman (1999)

²⁸⁴ Johnson (1996); Rodgers (1994)

²⁸⁵ Grisso et al. (1999); Kyriacou et al. (1999); Lipsky, Caetano, Field, & Larkin (2005)

²⁸⁶ Giancola (2002); Giancola, Saucier, & Gussler-Burkhardt (2003)

²⁸⁷ Jewkes, Levin, & Penn-Kekana (2002)

²⁸⁸ Abrahams, Jewkes, Laubscher, & Hoffman (2006)

to beat their partners when inebriated as this is socially expected of them.²⁸⁹ Alcohol is also implicated in the precipitation of and participation in violence and crime by youth.²⁹⁰ The youth in South Africa are already an at risk population, and finding effective ways to prevent young people from becoming involved in crime and violence is imperative as they are not only the primary perpetrators of violence but also its primary victims.²⁹¹

With regard to the misuse of alcohol and aggressive driving, Sukhai et al. (2005) found that more than half of the drivers who admitted to driving while drunk also reported becoming more aggressive when they drove under the influence of alcohol. The study also showed that drinking and driving was a strong predictor of two types of aggressive behaviour on the road, i.e. verbal or gestural expressions of anger and direct confrontations with other motorists.²⁹²

Rehm et al. (2003) conclude that there is evidence of a causal link between alcohol consumption and both interpersonal violence and suicide.²⁹³ With regard to self-harm and suicide, alcohol is a commonly cited indirect cause of suicide and suicide ideation.²⁹⁴ The effect of alcohol on mental health and well-being is described in more detail in section 5.2.1.4.

Unintentional injuries

In South Africa, 57% of road-traffic accident deaths are associated with harmful alcohol use.²⁹⁵ Alcohol consumption increases the likelihood of a crash occurring, as well as the likelihood that death or serious injury will result. The risk of a crash begins to increase significantly at a blood alcohol concentration (BAC) level of 0.04 g/dl and rises exponentially thereafter²⁹⁶. In South Africa the legal limit of BAC is 0.05g/dl for all drivers and 0.02g/dl for drivers with professional permits. Data from the National Injury Mortality Surveillance System (NIMSS) indicate the high alcohol-relatedness of deaths in Cape Town among both drivers (> 50% of deaths) and pedestrians (>60%).²⁹⁷

However, alcohol does not only increase the risk of unintentional injuries from road traffic collisions: as alcohol depresses the central nervous system, users can experience disordered thought patterns, impaired judgment and perception, and a decrease in generalised motor control, and thus it increases the risk for a wide range of injuries when not driving as well. The association between alcohol consumption and burn injuries is already well-documented, with a review of 32 studies concluding that there is substantial, although not definitive, evidence that alcohol plays a role in the etiology of fire and burn injuries and deaths.²⁹⁸ A South African study showed that alcohol dramatically increases the risk

²⁸⁹ Jewkes et al. (2002)

²⁹⁰ Mercy, Butchart, Farrington, & Cerda 2002

²⁹¹ Dissel 1998

²⁹² Sukhai, Seedat, Jordaan, & Jackson 2005

²⁹³ Rehm et al. 2003

²⁹⁴ DeLeo, Bertolote, & Lester 2002

²⁹⁵ Matzopoulos 2005

²⁹⁶ Borkenstein, Crowther, Shumate, Ziel, & Zylman 1964; Compton et al. 2002

²⁹⁷ Prinsloo 2004

²⁹⁸ Howland & Hingson 1987



of injury for railway passengers,²⁹⁹ and the association between alcohol consumption and drowning is also well-known, with more than 40% of the incidents of drowning recorded by the NIMSS having positive blood alcohol concentrations (BACs).³⁰⁰

Schneider et al. calculated the alcohol attributable fractions (AAFs) for injury mortality and morbidity from local data. The AAFs for mortality data were calculated based on the percentage of fatal injuries which tested positive for blood alcohol concentration (BAC) of 0.05 g/100 ml or higher, according to injury mortality surveillance data for 2000.³⁰¹ Morbidity to mortality ratios of 0.61 for interpersonal violence and 0.42 for road traffic injuries were observed in a study of trauma units in three cities for the period 1999 to 2001.³⁰² These ratios were applied to the mortality AAFs to derive national morbidity AAFs.³⁰³

In Rehm et al. (2009b) neither the values of the AAFs for specific health outcomes nor the relative risks from which they were derived were presented. However, approximations can be imputed from the deaths and DALYs reported by Rehm et al. as a proportion of injury totals presented in the South African National Burden of Disease study (although again, the values of the actual disease burden data utilized by Rehm et al. remains unclear). The approximate AAFs for intentional injuries ranged from 29 % for DALYs to 39.5% for deaths (lower than Schneider et al.'s estimate of 42.6 %) and for unintentional injuries from 31.5 % for DALYs to 35.6% for deaths (spanning Schneider et al.'s estimate of 34.4 %) – see Table 65.

5.2.1.3 Alcohol and infectious diseases

The association between alcohol use and infectious disease is a relatively new area of research, although evidence of indirect as well as direct causation is quickly emerging. The three major impacts included by Rehm et al. (2009b) in the alcohol burden estimates for the WHO Africa Region are described below, namely tuberculosis, HIV/AIDS and lower respiratory tract infections.

Tuberculosis

A recent systematic review on the association and possible causal link between alcohol consumption and tuberculosis found a strong association between heavy alcohol use/alcohol use disorders (AUD) and tuberculosis, yielding a pooled relative risk of 2.94.³⁰⁴ The review identified numerous studies that showed the pathogenic impact of alcohol on the immune system that could cause susceptibility to tuberculosis among heavy drinkers (thus providing a direct cause of higher TB incidence among drinkers), altered pharmacokinetics of medicines used in treatment of tuberculosis (again a direct cause of compromising treatment), as well as potential social pathways that would increase the

²⁹⁹ Matzopoulos, Peden, Bradshaw, & Jordaan 2006

³⁰⁰ Matzopoulos 2005

³⁰¹ A profile of fatal injuries in South Africa, 2001: Third annual report of the National Injury Mortality Surveillance System, 2002

³⁰² Plüddemann et al. 2004

³⁰³ Schneider, Norman, Parry, Bradshaw, & Plüddemann 2007(a)

³⁰⁴ Rehm et al. 2009c. With a 95% confidence interval of 1.89-4.59, this means that heavy users of alcohol or persons with an alcohol use disorder are almost 3 times more likely to have TB as compared to non-drinkers.

susceptibility of heavy drinkers to tuberculosis (an indirect cause of incidence) and compromise their chances of adhering to treatment regimens (another indirect cause of compromising treatment).³⁰⁵

The AAF of approximately 29% for tuberculosis mortality in South Africa applied by Rehm et al. (2009b) reflects these strong causal linkages.

HIV/AIDS

Reducing the incidence and burden of HIV/AIDS is a national and indeed global priority, and there has thus been considerable interest in research on the links between various disease risk factors and patient outcomes. The most recent scientific publication on the subject reviews the evidence for causal linkages between heavy drinking patterns and/or alcohol use disorders and the worsening of the disease course for HIV/AIDS.³⁰⁶

As regards disease incidence, Parry et al. (2010) discuss how researchers' understanding of the link between the disease and alcohol consumption has improved, from initial descriptive studies that reported significant associations between the frequency and quantity of alcohol consumed and the number of sexual partners and engagement in regretted sex³⁰⁷ and acts of unprotected sex,³⁰⁸ to a systematic review and meta-analysis that describes higher HIV incidence among problem drinkers.³⁰⁹ Thereafter two meta-analyses found strong temporal effects and a dose response relationship between alcohol consumption and HIV (that is to say that drinking alcohol preceded the HIV infection and that risk of infection increased with heavier drinking),³¹⁰ as well as an increased risk of engaging in unprotected sex.³¹¹ Despite these strong associations, Parry et al. (2010) did not rule out the possibility that both harmful alcohol use and HIV/AIDS susceptibility were caused by separate confounding variables, such as personality factors or psychiatric disorders, and thus that problematic drinking may not be the cause of HIV/AIDS risk. However, a recent systematic review has nevertheless described alcohol to be the predominant factor in the progression and remission from the disease.³¹²

As regards alcohol and the progression of HIV / AIDS, Parry et al. (2010) conclude that evidence to infer direct causality is clear cut, with Shuper et al.'s (2010) systematic review clearly supporting the impact of alcohol in weakening the immune system and lowering adherence to treatment regimens.³¹³

³⁰⁵ Rehm et al. 2009c

³⁰⁶ Parry, Rehm, & Morojele 2010

³⁰⁷ Morojele et al. 2004

³⁰⁸ Kiene et al. 2008

³⁰⁹ Fisher, Bang, & Kapiga 2007

³¹⁰ Baliunas, Rehm, Irving, & Shuper 2010

³¹¹ Shuper, Joharchi, Irving, & Rehm 2009

³¹² Shuper et al. 2010

³¹³ Hendershot, Stoner, Pantalone, & Simoni 2009

Rehm et al. (2009b) applied an AAF of approximately 4.5% for HIV/AIDS mortality and 3.4% for DALYs in their study of alcohol-attributable infectious diseases in South Africa in 2004,³¹⁴ but this would certainly increase considerably if research was able to conclusively account for the role of alcohol over and above the affect of potential confounders with regards to HIV incidence. It is also worth noting that Rehm et al. (2009b) estimate that among women more DALYS are lost to alcohol-related HIV/AIDS (27.8%) than to any other health outcome.

Lower respiratory tract infections

According to Rehm et al. (2009d) the link between alcohol and pneumonia is well established, having first been posited in the 18th century. Rehm et al. suggest that similar pathways exist for the acquisition of pneumonia within communities as for TB, but also show that there is strong evidence of biological pathways through the effects of alcohol on the respiratory and immune systems, which predispose heavy drinkers to pulmonary bacterial infections.³¹⁵ In addition Rehm et al. note a range of detrimental immunological effects, including combined deterioration of innate and acquired immunity, and concluded that there are multiple detrimental effects of heavy drinking that cause profound suppression of defensive mechanisms and increase susceptibility to pneumonia. Consequently Rehm et al. (2009b) applied an AAF of approximately 4.8% for alcohol-attributable mortality due to lower respiratory tract infections in South Africa in 2004.

5.2.1.4 Alcohol and non-communicable diseases

Neuropsychiatric conditions

Alcohol and other drug use affects mental health via the biological association between drug use and mental health outcomes, through the following two mechanisms:

- the use of addictive substances may lead to dependence, and this in itself is a mental health outcome³¹⁶
- through the direct action of the drug on the body – for instance, alcohol is a central nervous system depressant and dependence may contribute to the development of depression³¹⁷

The misuse of alcohol and other drugs has a range of costly health, legal and social outcomes, including contributions to interpersonal violence, death and injury in road traffic accidents, increased levels of risky sexual behaviour, and relationship problems that may affect mental health.³¹⁸ In

³¹⁴ Rehm, Kehoe et al. 2009b

³¹⁵ Specifically, alcohol diminishes oropharyngeal tone increasing the risk of aspiration and decreasing bronchoalveolar lavage due to suppression of coughing and decreased cilia motility (Nelson & Kolls 2002; Szabo & Mandrekar 2010).

³¹⁶ Obot 2006

³¹⁷ Petrakis, Gonzalez, Rosenheck, & Krystal, 2002

³¹⁸ Obot 2006

addition, that misuse may worsen the prognosis for existing mental health disorders.³¹⁹ It should be noted that misuse is not limited to dependence or addiction to alcohol and other drugs.

Large studies in the United States population indicate that, with regard to alcohol abuse (not dependence, which is a more severe problem), 12.3% of those who met criteria for alcohol abuse also met criteria for a mood disorder, and 29.1% for an anxiety disorder (of which posttraumatic stress disorder was the most common).³²⁰ Percentages were much higher with regard to alcohol dependence: of those diagnosed with alcohol dependence in the past year, 29.2% had a comorbid³²¹ mood disorder and 36.9% a comorbid anxiety disorder.³²² Alcohol use disorders also often precede the onset of a depressive disorder, particularly in men.³²³ Substance use during pregnancy and during infancy is another risk factor for increasing the burden of disease, as prenatal substance exposure can lead to a range of mental health problems in the infant.³²⁴ In their meta-analysis, Rehm et al. (2010) found a consistent relationship between alcohol consumption and increased risk of epilepsy.

Similar relationships between alcohol and mental disease hold in the local context. In a local study of 12-month and lifetime prevalence of mental health disorders alcohol abuse was found to be the most prevalent individual lifetime disorder, affecting 11.4% of adult South Africans, with alcohol dependence affecting 2.6%. The comparative figures for other substances of abuse were 3.9% and 0.6% respectively.³²⁵ The prominent contribution of alcohol to mental illness in South Africa is reflected in the disease burden, with estimated AAFs for neuropsychiatric disorders ranging from about 25%³²⁶ to 44%.³²⁷

Cardiovascular diseases

Alcohol use is associated with detrimental health effects for three major heart conditions: hypertensive heart disease, ischaemic heart disease, and stroke. For hypertensive heart disease Rehm describes the relationship as complex, with an overall consistently detrimental dose–response effect,³²⁸ although this is predominantly among men, which Rehm surmises could be ascribed to higher rates of male binge drinking. Among women some studies have shown a moderate protective effect.³²⁹ For ischaemic heart disease the association is similarly ambiguous, with studies showing detrimental

³¹⁹ Strakowski, Del Bello, Fleck, & Arndt 2000, Swofford, Kasckow, Scheller-Gilkey, & Inderbitzin, 1996

³²⁰ Petrakis et al., 2002

³²¹ In other words, a mood disorder as well as the pre-existing alcohol dependence condition.

³²² Petrakis et al., 2002

³²³ Petrakis et al., 2002

³²⁴ Fischer, Bitschnau, Peterzell, Eder, & Topitz 1999; Höök, Cederblad, & Berg 2006; National Institute on Alcoholism and Alcohol Abuse 2000

³²⁵ Herman AA, Stein DJ, Seedat S, Heeringa SG, Moomal H, Williams DR. 2009. The South African Stress and Health (SASH) study: 12-month and lifetime prevalence of common mental disorders. *South African Medical Journal*. 99 (5): 339-344.

³²⁶ Rehm, Kehoe et al. 2009b

³²⁷ Schneider, Norman, Parry, Bradshaw, & Plüddemann 2007(b)

³²⁸ Corrao, Rubbiati, BCorrao, Rubbiati, Bagnardi, Zamboni, & Poikolainen 2000

³²⁹ Rehm et al. 2010

effects from heavy drinking, but beneficial effects from light to moderate drinking. Despite methodological limitations suggesting that these beneficial effects might have been overstated, Rehm et al. conclude that whereas heavy drinking is associated with physiological mechanisms that increase the risk of sudden adverse cardiac events, beneficial physiological mechanisms are triggered by steady low to moderate consumption.

The relationship between alcohol and stroke is also bi-directional. Rehm cites two recent meta-analyses showing an exponential relationship between alcohol consumption and the relative risk of haemorrhagic stroke and a protective effect on ischaemic stroke at low to moderate consumption.³³⁰ In addition, Rehm (2010) reviews the effect of alcohol on cardiac rhythm disorders (dysrhythmias) and concludes that there is an increased risk related to heavy alcohol consumption, but the effects of light to moderate alcohol consumption are inconclusive.

The alcohol attributable fractions for cardiovascular harm as estimated by Schneider et al. are summarised in Table 64. For hypertensive disease Schneider et al. derived the AAFs from relative risks from a meta-analysis of alcohol and coronary heart disease,³³¹ whereas the AAFs for ischaemic heart disease were based on a multi-level analysis of the AFRO-E region.³³² The AAFs for stroke were based on Australian estimates.³³³

Table 64: Alcohol attributable harm for cardiovascular health outcomes

	Alcohol attributable fraction	Total attributable to alcohol			
		Deaths	YLLs	YLDs	DALYs
Hypertensive disease	17.3	2 642	24 450	631	25 081
Ischaemic heart disease	4.4	1 292	11 958	768	12 726
Stroke (harmful)	7.5	2 266	24 656	1 674	26 330

Source: Corrao 2000, Rehm 2004, English 1995

Cancers

A causal link and dose response relationship (i.e. more risk with heavier drinking) has been established between alcohol and the following categories of cancer: oral cavity, pharynx, larynx, oesophagus, liver, colorectal and female breast cancer. This was confirmed by the Monograph Working Group of the International Agency for Research on Cancer (IARC). The group also suggested that a causal link between alcohol and stomach and lung cancer was possible, but there was insufficient evidence to establish the link conclusively.³³⁴ Rehm et al. (2010) conclude that the molecular and biochemical mechanisms by which chronic alcohol consumption cause cancer are not

³³⁰ Corrao et al. 2000; Reynolds et al. 2003

³³¹ Corrao et al. 2000

³³² Rehm et al. 2004

³³³ English et al. 1995

³³⁴ Baan et al 2007

fully understood as yet, but are likely to become better understood with imminent advances into human genetics research.³³⁵

Schneider used the Australian AAF estimates for cancers (as shown in Table 60),³³⁶ whereas Rehm et al. (2010) advocated the use of the more recent estimates of Corrao et al. (2004) which tended to be slightly lower.

Cirrhosis

The causal link between alcohol and liver cirrhosis is well established. Heavy drinking worsens existing liver disease and causes liver damage by blocking the normal metabolism of protein, fats, and carbohydrates. Cirrhosis affects between 10% and 20% of heavy drinkers

Schneider et al. calculated AAFs from Gutjahr et al. (2001) (as shown in Table 60), which were originally derived from English et al. (1995), whereas Rehm et al. (2010) favoured the results of their own meta-analysis.

Diabetes

Rehm et al. note that moderate alcohol consumption is associated with a reduced risk of type 2 diabetes. A number of possible biological mechanisms have been suggested.³³⁷ However, the evidence is still not conclusive as to whether moderate consumption is *causally* linked as a protective factor for diabetes or whether it is a proxy for other health life-style choices,³³⁸ and Rehm et al. (2010) considered the evidence as “borderline between sufficient and limited”.

Nevertheless, both Rehm et al. (2009b)³³⁹ and Schneider et al. (2007)³⁴⁰ included diabetes into their attributable risk studies. Schneider et al. (2007)³⁴¹ calculated AAFs from Gutjahr et al. (2001),³⁴² which

³³⁵ Mechanisms seem to differ by target organ and may be related to the polymorphisms in genes that encode enzymes responsible for metabolizing alcohol.

³³⁶ English et al 1995

³³⁷ Suggested mechanisms include the effect of moderate alcohol consumption in increasing insulin sensitivity (Davies et al 2002), as insulin resistance is a key factor in pathogenesis. Oxidation of alcohol may also produce metabolites such as acetaldehyde and acetate (Sarkola, Iles, Kohlenberg-Mueller, & Eriksson 2002) and the anti-inflammatory effect of alcohol may also reduce risk (Imhof et al. 2001). Alternatively, moderate consumption might also increase high-density lipoprotein cholesterol concentrations (Rimm, Williams, Fosher, Criqui, & Stampfer 1999).

³³⁸ Rehm et al. 2010

³³⁹ Rehm, Kehoe et al. 2009b

³⁴⁰ Schneider, Norman, Parry, Bradshaw, & Plüddemann 2007(b)

³⁴¹ Schneider, Norman, Parry, Bradshaw, & Plüddemann 2007(b)

³⁴² Gutjahr, Gmel, & Rehm 2001

were originally derived from English et al. (1995)³⁴³, whereas Rehm et al. (2010)³⁴⁴ favour the use of more recent estimates by Baliunas et al. (2009)³⁴⁵

Maternal and perinatal conditions

Rehm et al. (2010) surmise that heavy ingestion of alcohol is associated with increased risk of preterm delivery and low birth weight.³⁴⁶ The biological mechanism for preterm delivery relates to the effect of alcohol intake on progesterone levels,³⁴⁷ whereas for fetal growth it is acetaldehyde, an alcohol metabolite that affects the human placenta causing fetal hypoxia, impaired cell proliferation and delayed placental development.³⁴⁸ In South Africa FASD is particularly problematic. A study among women of child-bearing age in an urban and rural location revealed high levels of risk of an alcohol-exposed pregnancy especially amongst the rural women, and the urgent need for a national prevention strategy.³⁴⁹ In poorer communities of the Western Cape FAS rates have been observed at 18 to 141 times greater than in the USA.³⁵⁰

5.2.2 Health costs of alcohol

Health costs comprise several different elements, which are not limited to treatment and care for the various health outcomes arising from alcohol use. In addition, treatment, primary prevention and research relating to alcohol misuse in itself are also included among the health costs, although some are more easily quantified and costed than others.

5.2.2.1 Costs of healthcare

According to Møller and Matic (2010) health care costs are central to the costing of illness studies even though they are not the largest cost category. In terms of deriving these health care costs, a common method as used by Single et al. (2003) is to calculate the alcohol attributable fraction (AAF) for each health condition that is caused by alcohol and then to apply the AAFs to the costs of treatment for cases presenting to the health system for each diagnosis.

It would seem that estimation of the AAFs for each health condition is made easy in the South African context by the availability of estimated AAFs through the work of Schneider et al. and Rehm et al. (2009b)³⁵¹. Notwithstanding the complex methodological issues that underpin the derivation of the AAFs, most notably the fact that the assumptions about categorising the population according to drinking categories and relative risks for different health conditions are often derived from international

³⁴³ English et al. 1995

³⁴⁴ Rehm et al. 2010

³⁴⁵ Baliunas et al. 2009

³⁴⁶ Lundsberg, Bracken, & Saftlas 1997; Parazzini et al. 2003

³⁴⁷ Cook & Randall 1998

³⁴⁸ Abel 1982

³⁴⁹ Morojele et al. 2010

³⁵⁰ May et al. 2000

³⁵¹ Rehm, Kehoe et al. 2009

research, that may or may not be applicable in a local setting, it is suggested that the AAFs from these studies be regarded as current best estimates.

However the uncertainty of the estimates is underscored by a comparison of the alcohol attributable mortality and DALYs calculated by Schneider et al. and Rehm. The corresponding values are shown in Table 62. Whereas Schneider provides detailed information about methods and provides more information about specific AAFs that were derived, the health outcomes that were analysed are incomplete. Rehm et al.'s analysis provides less information, but alludes to more complex modelling techniques. This is evident from the varying AAF estimates for alcohol attributable deaths and DALYs for each health outcome. Unfortunately the different AAFs are not listed specifically in Rehm's analysis, nor the mortality estimates from which the alcohol attributable burden was derived. These would need to be specifically set out in any subsequent costing analysis that utilises the approach mentioned above.

Table 65: Comparison of Rehm et al. and Schneider et al. (& approximation of missing values)

	Burden attributable to alcohol in South Africa							Total from specific health outcomes (% of total disease burden)	
	Deaths		DALYs		AAFs			Deaths	DALYs
	Schneider	Rehm	Schneider	Rehm	Schneider	**Rehm	***Rehm		
	et al.	et al.	et al.	et al.	et al.	et al.	et al.		
Cancers	3 217	2 219	38 526	51 840	23.7	17	31.9	13 073 (2.5)	162 280 (1.0)
Low birth weight	36	34	1 269	871	0.3	0.3	0.2	12 000 (2.3)	423 000 (2.6)
Neuropsychiatric disorders	1 936	927	270 513	157 751	44.8	25.6	26.1	3 614 (0.7)	603 960 (3.7)
Cirrhosis liver	2 582	1 162	43 836	30 156	46.1	20.7	31.7	5 601 (1.1)	95 089 (0.6)
Cardiovascular diseases	6 200	*****	64 137	*****	8.2	*****	*****	74 848 (14.4)	785 271 (4.9)
Unintentional injuries	8 454	7 512	230 159	211 012	34.4	35.6	31.5	21 125 (4.1)	669 131 (4.1)
Intentional injuries	14 415	13 514	483 640	329 652	42.6	39.5	29	34 205 (6.6)	1 136 237 (7.0)
Tuberculosis ****	*	8 557	*	242 928	*	29	*	29 553 (5.7)	*
HIV/AIDS ****	*	7 441	*	172 765	*	4.5	3.4	165 859 (32)	5 067 490 (31.4)
Lower respiratory tract infections	*	1 069	*	24 960	*	4.8	*	22 097 (4.3)	*

Source: Rehm, Kehoe et al., 2009b; Schneider, Norman, Parry, Bradshaw, & Plüddemann, 2007b

Notes: * not available

** approximated from proportion of all deaths

*** approximated from proportion of all DALYs

**** based on SANBD 2000

***** Rehm only provides "net impact," including beneficial impact on cardiovascular disease

Two additional problems relate to the calculation of treatment costs for each diagnosis. Firstly, there is currently no reliable source of national healthcare cost data for South Africa, i.e. corresponding data that match health outcomes to health care expenditure are not available as yet. Although these data may exist for the private healthcare system, to the best of the authors' knowledge, such data are not available publicly. What is available are hospital based cost studies, such as the one by Marszalek (2006), but these are not likely to be nationally representative of hospital admissions or of health seeking patterns. A second challenge in calculating the cost of healthcare relates to the costing of treatments. There is considerable cost variation across diagnoses and also between cases with the same diagnosis but treated in different level state facilities or in the private health care system. Furthermore, Møller and Matic (2010) suggest that where such data do exist costing studies tend to focus on the cost of inpatient care.

In order to overcome these issues, Budlender (2009) estimated the cost of alcohol-related treatment to public healthcare by applying an estimate of 9.2% to the public sector health costs for each province. This figure was based on Rehm et al.'s (2009b) estimate for the percentage of all net DALYs attributable to alcohol (14.5% for men, 3.9% for women, average 9.2%), which Budlender suggests may be an underestimate, but preferable to others in that it includes the burden of infectious disease attributable to alcohol. It should be noted that Rehm et al.'s revised estimates for 2009 were considerably lower (10% for men, 2.4% for women, average 6.3%), but the addition of the infectious disease component to Schneider's earlier analysis is similar to the estimates that Budlender uses in her analysis, which suggests that this is a workable range from which to undertake the costing, as shown in the table below.

Table 66: Estimates of alcohol attributable DALYs in South Africa

Source	Males	Females	Average
Rehm et al. 2009b	10.00%	2.40%	6.30%
Budlender (2009), citing Rehm (2009)	14.50%	3.90%	9.20%
Schneider et al. (2007) with addition of infectious disease component from Rehm et al. (2009b)	13.60%	3.90%	8.80%

Source: as shown

As well as the impact of alcohol on HIV/AIDS costs, Budlender identifies several health sub-programs where alcohol may have a more pronounced effect on cost, namely coroner services, emergency transport, TB hospitals, and forensic services.³⁵² Thus, given South Africa's high prevalence of binge-drinking, and the presence of many of the key health outcomes associated with alcohol misuse, use of the higher estimate would not be wholly inappropriate. Budlender estimates the cost of alcohol to the national and provincial health departments at R6 billion per annum.

However it should also be noted that the public health service, which treats 70-80% of the population, accounts for slightly less than half of all health expenditure (42%), with per capita spending on health

³⁵² Budlender 2009

care in the private sector being 3.5 to 5.5 higher.³⁵³ Of course the profile of patients attending private versus public facilities differs markedly, and so in order to cost the disease burden it may be necessary to 1) quantify the role of alcohol on broad disease categories, 2) assess the magnitude of the total contribution of each category to the overall burden of disease and then 3) make some assumptions about whether these diseases present primarily in the public or private sector. For example, whereas the higher estimate might be applied in the public sector, which has a higher proportion of very poor patients where levels of harmful alcohol use are higher, a lower estimate might be more appropriate in the wealthier private sector.

Table 64 summarises the magnitude of the various health outcomes affected by alcohol, their relative impact on different diseases and an assessment as to whether they are treated more frequently in private or public facilities. Together those health conditions that are more likely to be treated in private facilities only account for approximately 11% of the alcohol attributable burden.

Table 67: Likely place of treatment for various health outcomes

Health outcome	Disproportionately private sector?	% of alcohol burden (DALYs)
Cancers	Yes	4.00%
Low birth weight	No	0.10%
Neuropsychiatric disorders	No	12.00%
Cirrhosis liver	No	2.30%
Cardiovascular diseases	Yes	7.00%
Unintentional injuries	No	16.10%
Intentional injuries	No	25.10%
Tuberculosis	No	18.50%
HIV/AIDS	No	13.20%
Lower respiratory tract infections	No	1.90%

Source: *Rehm et al. 2009b, own analysis*

As the private sector is roughly equivalent in size to the public health sector in terms of total spending,³⁵⁴ and in the absence of sufficiently detailed healthcare costs to carry out a bottom-up estimate, a starting point for analysis might be to assume a similar level of spending on alcohol attributed causes. But in order to adjust the estimate for the different disease profile that is likely to be presented in the private sector, we have halved the level of private-sector spending for those health outcomes that are treated primarily in the public sector. This equates to private sector spending on alcohol attributed causes at approximately R3.33 billion, which together with public sector spending brings the total healthcare costs of alcohol to R9.33 billion.

³⁵³ <http://www.who.int/whosis/en>

³⁵⁴ <http://www.who.int/whosis/en>

5.2.2.2 Costs of outpatient and primary care

Studies that have estimated outpatient and primary care costs related to alcohol suggest they impose substantial additional costs, estimated in a Swedish study at 35% of the total health costs of inpatient care,³⁵⁵ and at 25 to 65% of total health costs according to a European review.³⁵⁶ In this review we apply the lowest estimate at 25% of the total health care costs of R9.33 billion in the section above, which results in an estimate of other health care costs of R2.33 billion.

5.2.2.3 Cost of treatment, research and prevention

The health costs for alcohol extend to the treatment of people with alcohol abuse disorders, social costs for the dependents of those affected, as well as costs of related research and prevention programs. Within government, treatment costs for alcohol disorders are borne by the Department of Social Development. As alcohol accounts for more than half of all patients in treatment,³⁵⁷ Budlender (2009) accordingly attributes these costs to the national and provincial government treatment programs. However, additional costs for private treatment centres, partially subsidised centres and those maintained by local government agencies need to be included to derive an overall estimate for treatment, but such data are not available. Data from the Western Cape Provincial government suggests that the total cost of treatment per client with an alcohol abuse disorder is likely to range from R4 000 for out-patient treatment to R25 000 for in-patient treatment, whereas SANCA suggests that a cost range of R3 000 to R4 000 for out-patient and R17 000 to R20 000 for in-patient care is experienced nationally.³⁵⁸

Møller and Matic (2009) point to the difficulty in calculating government-funded alcohol research and prevention spending, which tends to underestimate its true costs. Budlender also excludes alcohol-related research spending by government from the 2009 costing study, but maintains that the amount is minimal, citing personal communication from the MRC's Professor Charles Parry, who estimated a total spend of approximately R6 million per annum across all science councils dedicated only to alcohol issues. This of course excludes direct ad hoc research spending by other provincial and national government departments such as, for example, the current study and various other projects undertaken by local government agencies, as well as research on alcohol treatment and prevention undertaken by universities and various foundations and NGOs, such as Soul City and the Open Society Foundation.

We should also note the broader impacts of alcohol on the burden of disease as well as its role in reinforcing poverty and inequality: several studies have shown that within countries the alcohol attributable disease burden is higher among people of lower socioeconomic status.³⁵⁹ Just as we include a broad ambit of programs among the social costs, it would also be appropriate to apportion a

³⁵⁵ Johansson et al. 2006

³⁵⁶ Anderson & Baumberg 2006

³⁵⁷ Plüddemann et al. 2009

³⁵⁸ Telephonic discussion, Shamim Garda, SANCA National Directorate

³⁵⁹ Andrade, Walters, Gentil, & Laurenti 2002; Harrison & Gardiner 1999; Herttua et al 2008; Mackenbach et al. 2008

percentage of all social welfare and health research spending as being alcohol attributable. However, in the absence of such data, we apply an estimate of R18 million in total research costs to take into account social welfare and private spending on research (ie a tripling of the R6m estimate for science council research alone dedicated to alcohol issues and funded by the government).

5.2.2.4 Social care and welfare costs

As an estimate of the social care and welfare costs of alcohol to the state, Budlender (2009) included 20% of budget for the care and support of families, and conservative estimates of 1% of the youth development budget, 2% of the cost of services and 1% of grants for persons with disabilities, and an undisclosed percentage of HIV/AIDS costs among the social costs that are borne by the Department of Social Development for the dependents of alcohol abusers. Unfortunately it was not possible to ascertain these costs from Budlender's technical report directly, as the summary totals include victim empowerment and crime prevention and support, which will be discussed in following sections. Nor was it possible to impute the missing allocation for HIV spending as the totals did not tally with the information provided. Therefore a recalculation for the relevant line items using the AAF for HIV/AIDS of 4% is provided in Table 68.

Table 68: Relevant allocations in budgets of provincial and national departments of social development (R millions)

Sub-program	Total allocated		Alcohol-attributable	
	Provincial	National	(%)	Amount (R million)
Substance abuse, prevention & rehabilitation	271.6	13.3	55	156.695
Disability grant*	n/a	17 218	1	172.18
Services to persons with disabilities	303.1	4.9	2	6.16
HIV and AIDS	599.2	61.5	4**	26.428
Care & support services to families	160.9	6.5	20	33.48
Youth development	167.7	5.4	1	1.731
Total incl. disability grant*				396.674
Total excl. disability grant*				224.494

Source: Own calculations

* Møller and Matic (2009) note that social security payments constitute transfer costs, which should not be included from a societal perspective, but are relevant to external cost studies.

5.2.2.5 Costs of premature mortality and morbidity

As shown in preceding sections, the consumption of liquor has a substantial impact on the incidence of premature mortality and disability in South Africa. This is an issue which has very high costs on the individuals involved and their near and dear, particularly in terms of emotional distress. However, the death of economically active individuals in particular also has an impact on the income of families, and indeed on the productive capacity of the economy as a whole.

The question of how to include the costs of mortality in cost analysis is quite controversial in the literature. One of the methods that has been used is to calculate the net present value of the earnings

stream that an individual would have earned, if not for their premature mortality and/or disability. A key problem with this approach, however, is that it would come up with very different estimates of the value of different kinds of deaths. For example, the death of a 21 year old would probably be valued more highly than the death of a 50 year old, because the 21 year old has more years of earning potential ahead of them. Even worse, in some circumstances a death might have a positive value: for example, someone with a profound disability, or of very advanced age, will incur health costs but has no earning potential, and thus has a negative net present value of earnings.³⁶⁰

In addition to the concerns associated with valuing the lives of people differently, this approach also has a number of methodological difficulties. For example, in countries such as South Africa where unemployment levels are high, it can be argued that workers who die can be easily replaced, and the only cost to the economy is the friction associated with finding a new employee.³⁶¹ The choice of a discount rate for net present value calculations may also be controversial.

Another method which is used to value premature mortality is to estimate how much the average human being would be willing to pay to prevent death. For example, if someone faces a 0.1% chance of dying in a house fire, and is prepared to spend R1 000 on fire prevention measures that would halve that risk, that would imply that this person places a value of R200m on not dying in a house fire (i.e. if a 0.05% risk reduction is worth R1 000, then a 100% risk reduction is worth R200m).³⁶² By surveying the values that a large group of individuals place on these kinds of choices between risk reduction and reward, it is possible to derive an estimate of the average value of statistical life ("VSL").

VSL estimates must also be treated with some caution. For example, the level of VSL will be affected by the income level of the country in which the survey is conducted (with the perhaps distasteful conclusion that lives in poorer countries are less valuable than those in wealthy countries).³⁶³ The value that individuals place on avoiding death will also vary depending on the perceived level of emotional suffering associated with different types of death, so depending on survey purpose and design, results can vary significantly. In addition, it should be remembered that VSL estimates do not correlate to tangible costs and benefits – no money actually changes hands.

However, VSL estimates do provide guidance as to the value that society would place on averting the premature mortality associated with alcohol, in a way that takes into account the emotional costs of such mortality. VSL estimates are thus a valuable tool for assessing the total economic and non-economic costs of premature mortality, and by inference, how much value voters place on reducing such costs.

In order to provide an estimate of the purely economic value of premature mortality, while avoiding what Gow (2009) describes as the "philosophical objections and methodological difficulties in valuing

³⁶⁰ Gow 2009, 7

³⁶¹ Møller & Matic 2010, 32-33

³⁶² Gow 2009, 7

³⁶³ Miller 2000

life and life years,” an earnings per capita approach will be used.³⁶⁴ Economic benefit lost due to premature mortality in the year under consideration is equivalent to average employee compensation per capita in that year. This equates to R21 632 lost per premature death.³⁶⁵

The total economic cost of the mortality and morbidity associated with the consumption of alcohol is shown in Table 69 below, which uses the contrasting estimates of mortality and morbidity of Schneider et al. and Rehm et al. as shown in Table 65. As shown in Table 69, the cost of premature mortality and morbidity in purely economic terms is between R8.2bn and R9.8bn, or 0.3-0.4% of GDP.

Table 69: Economic cost of premature mortality and morbidity

	Schneider et al.	Rehm et al.
Deaths	36 840	46 153 ‡
Years lost to disability	344 331	405 467 * ‡
Number of productive person-years lost in given year	381 171	451 620
Cost - employee compensation per capita basis	R8 245m	R9 769m

Source: As shown, own calculations

* Rehm does not provide disaggregated YLD estimates. The working assumption is therefore made that YLDs comprise the same proportion of DALYs for Rehm as for Schneider

‡ includes beneficial effects

When emotional costs are included, the total impact on South African society is found to be substantially higher. Recent meta-analysis of available VSL estimates have not uncovered South Africa-specific VSL analysis.³⁶⁶ However, it is possible to extrapolate from international results to reach an estimate of South African VSL. Miller (2000) extrapolated from international VSL estimates to reach the conclusion that the best estimate of VSL in South Africa was 143 times per capita GDP. More conservatively, Lindhjem et al. (2010) provides examples of mean VSL in a number of countries with similar PPP-adjusted DGP per capita to South Africa's, and finds an average VSL of 73.8 times GDP per capita.

Table 70: Health VSL as multiple of GDP per capita, PPP-adjusted

USD '000, PPP adjusted	GDP per capita	Mean health VSL	VSL as multiple of GDP per capita
China	6.2	535.0	86.3
Thailand	7.3	605.0	83.3
Chile	13.1	1 024.0	78.4
Poland	16.7	785.0	47.0
Average	10.8	737.3	73.8

³⁶⁴ Gow 2009, 7

³⁶⁵ 2009 GDP data, using Reserve Bank data points 6006J and 6240J; and Statistics South Africa estimates of population size as at mid-2010.

³⁶⁶ Lindhjem et al 2010

Source: Lindhjem et al. 2010, 53; World Bank World Development Indicators

At 2009 GDP per capita levels, the more conservative Lindhjem et al. (2010) numbers suggests that the average individual is willing to pay R3.5m to prevent their death. The total cost of the 36 840 to 46 153 deaths shown in Table 69 above is therefore R130.2bn to R163.2bn, or 5.4-6.8% of GDP. It is furthermore possible to extrapolate to include the costs of non-fatal injury and illness caused by alcohol. As per the years of life lost estimate shown in Table 63, the number of YLLs per alcohol-attributable death is around 22.5. The 339 263 years lost to disability therefore is equivalent to 15 075 premature deaths, or a VSL of R53.3bn (equivalent to an additional 2.2% of GDP).

5.2.3 Costs of crime

Møller and Matic (2009) suggest that the most difficult aspect in estimating alcohol-attributable crime costs is estimating the role of alcohol. There are numerous techniques available, such as obtaining the opinion of victims and perpetrators, breath or urine or blood alcohol analysis of arrestees, etc, but none of these is definitive. Møller and Matic (2009) refer to the WHO guidelines on estimating the cost of substance abuse, which simply suggest the use of “reasoned judgement” supported by “a chain of logic”. In order to curtail this discussion, we defer to Budlender’s reasoning in apportioning an alcohol attributable fraction of 22.5% for police and public security, 38.5% for correctional services and 2% of justice costs.³⁶⁷

As justification Budlender cites numerous studies showing an association between alcohol intoxication and the risk of becoming a victim of violent crime, but the association with offenders is also important. A study conducted among arrestees in eight police stations in Cape Town, Durban and Johannesburg found that between 8% of arrestees in Johannesburg and 21% of arrestees in Cape Town indicated that they were in need of alcohol at the time the alleged crime took place, and between 6% and 23% reported being under the influence of alcohol at the time the alleged offense. Furthermore in both Durban and Cape Town about 10% of arrestees indicated that they used alcohol and/or drugs to commit the alleged offense. It was also apparent that alcohol was most commonly associated with violent offences, with up to 49% of cases involving family violence reporting positive for alcohol.³⁶⁸

Møller and Matic (2009) suggest that alcohol-attributable crime imposes a significant cost burden. Their statement is based on research in high income countries. For example, a US study showed that crimes attributable to alcohol cost more than two times as much as those attributable to drugs, and alcohol-related violent crimes accounted for more than 85% of total costs for alcohol and drug-related crimes.³⁶⁹ However, neither violent crimes nor alcohol-related harms are as pronounced in the US as in South Africa. The non-fatal injury and injury mortality data summarised earlier already illustrate the strong association between drinking and becoming the victim of violence, as well as the role of alcohol in precipitating aggression. These links, coupled with the high incidence of crime and violent crime in

³⁶⁷ Budlender 2009

³⁶⁸ Parry, Plüddemann, Louw, & Leggett 2004

³⁶⁹ Miller, Levy, Cohen, & Cox 2006

particular in South Africa, suggests that the alcohol-related costs of crime in South Africa are likely to be relatively higher than the international norm.

A recent study by Alda and Cuesta (2010), which used accounting methodology to provide a comprehensive estimate of the cost of crime, showed that the aggregated cost of crime in South Africa amounted to US\$22.1 billion or 7.8% of GDP in 2007 (R155 billion at an exchange rate of R7:\$1). Although health costs account for just a quarter of the total costs, the study's rather superficial burden of disease analysis has the effect of significantly underestimating the true extent of homicide. Therefore it is possible that the total cost of crime estimate is conservative as well. Estimates of crime costs in other low to middle income countries in Latin American with similar crime levels, such as Colombia, Brazil or Venezuela, range from 5% to 15% of GDP, so a higher total cost is certainly possible.

However, in order to avoid double counting it is important to apportion costs to the various categories utilised in the rest of the current costing exercise. Møller and Matic (2009) distinguish between three categories of costs related to crime: 1) costs in response to crime; 2) costs as a consequence of crime and 3) costs in anticipation of crime. Using this framework, a share of these costs can then be apportioned to alcohol.

It should also be noted that not all categories of crime costs would have an alcohol-related component. For example, Alda and Cuesta identify institutional costs for crime and violence prevention and control within correctional services, justice and police and public security sectors amounting to R50 billion, whereas Budlender's analysis identifies specific sub-programs within those departments that deal specifically with alcohol-related crime to arrive at a figure of R37.3 billion (i.e. 75% of Alda and Cuesta's total). It is recommended that this adjustment is applied throughout before the alcohol related component is taken into account – i.e. cost item 1 x 0.75 x AAF (e.g. AAF = 22.5% for policing).

Costs in response to crime

Alda and Cuesta (2010) estimate the institutional costs incurred by South African government agencies in responding to crime, including correctional services, justice and police and public security, at \$7.169 billion in 2007 (R50 billion at an exchange rate of R7:\$1), which was equivalent to 2.55% of GDP.

However, Budlender's costing takes into account whether or not these costs were alcohol related, to arrive at a total cost of R9.54 billion. In addition Budlender estimates the cost of crime prevention and support as part of the social development costs described in section 6.2.2.4, of which 25% were estimated to be alcohol related (R144 million), which brings the total cost to R9.68 billion.

Costs as a consequence of crime

Alda and Cuesta (2010) describe health costs relating to crime at \$7.37 billion in 2007 (R52 billion), equivalent to 2.6% of GDP, of which two thirds derived from crime's contribution to the disease burden

and productivity losses, and the rest primarily in emotional costs. Medical costs accounted for less than 1% of the total.³⁷⁰ These costs are ignored in this section as they are dealt with elsewhere in the discussion. However, economic costs of foregone foreign direct investment of \$1.287 billion (R9 billion)³⁷¹ and transfer costs of \$3.426 billion (R24 billion) from theft of residential property, vehicles, weapons, livestock, etc are relevant. Reducing these amounts to 75% of total for “alcohol relevant” costs (as described in 3.3.1) before applying Budlender’s AAF of 25% provides estimates of R1.7 billion lost in foreign direct investment and R4.5 billion in transfer costs. In addition Budlender considers the cost of victim empowerment among the social development costs described in section 3.2.4, which she estimated at R109 million across national and provincial departments in 2009.

Costs in anticipation of crime

Much of the economic costs of crime are incurred in anticipation of criminal activity, via expenditures on security measures such as anti-theft devices and guards. According to Møller and Matic (2009) costs in anticipation of crime have only been comprehensively included in one study, which found that they were almost as great as costs in response to crime. Alda and Cuesta (2010) do provide an estimate of private security costs for firms and households estimated at \$2.83 billion in 2007 (R20 billion). Applying a fraction of 75% alcohol relevant costs and an AAF of 25% provides an estimate of R3.7 billion for costs attributable to alcohol in anticipation of crime.

To summarise, the total cost contribution of crime is thus estimated at around R17.9bn (comprising crime response costs of R9.68bn, transfer costs of R4.5bn, and costs of anticipation of crime of R3.7bn).

5.2.4 Road traffic accidents

The only costing study for traffic accidents in South Africa was conducted by the CSIR in 2002, and estimated the cost of traffic crashes to the national economy at R42.5bn at that time. Adjusted for inflation,³⁷² this equates to some R67.6 billion in 2009.³⁷³ The total cost comprises an estimate for vehicle damage and incident costs (44%) and human casualty costs (56%). Human casualty costs associated with traffic injuries have already been covered in previous discussions of unintentional injuries and the costs of premature mortality and morbidity, and thus are not dealt with again here.

Unfortunately, available estimates do not include the cost of damage to road infrastructure, and the cost of congestion associated with traffic accidents. It is worth noting that an in-depth study from California showed that monetary costs accounted for just under half (47%) of the comprehensive costs of alcohol-attributable crashes with the rest lost from “quality of life,” including medical expenses, property damage, employer costs, costs to public services and travel delays.³⁷⁴ Therefore our

³⁷⁰ Alda & Cuesta 2010

³⁷¹ It is not clear from the analysis whether this investment estimate is intended to be a stock or flow figure (ie the total amount of investment foregone by South Africa, or the amount foregone on an annual basis).

³⁷² GDP deflator for the period (Reserve Bank data series KBP6006Y and KBP6006J).

³⁷³ De Beer & Van Niekerk 2004

³⁷⁴ Miller et al.1998

estimate of R29.7bn in traffic accident costs (R67.6 bn x 0.44) will tend to understate the true economic cost of trouble on the road.

Schneider et al. applied alcohol attributable fractions of 44% for road traffic injuries, which we consider to be exaggerated. In a recent unpublished study a registrar at UCT Public Health applied relative crash risks for alcohol-related driving among fatal driver deaths in South Africa,³⁷⁵ in which it was estimated that some 24% of all driver deaths could have been prevented had the drivers not been driving under the influence of alcohol (DUI) and that non-fatal injuries among drivers would be reduced by the same extent (24%). As drunk drivers are also likely to be over-represented among those involved in collisions with pedestrians and cyclists and in which motor-vehicle passengers are killed, we proposed that all other collisions would be reduced by a similar extent if DUI was prevented. The figure is congruent with Miller et al.'s study, which estimated alcohol attributable costs to crash victims at 27%. The discrepancy may in part be explained by Miller et al.'s observation that alcohol-involved crash survivors were more severely injured.³⁷⁶

Consequently we apply Miller et al.'s AAF of 26.6% to the R29.7 billion total crash cost to estimate the total annual vehicular damage cost of alcohol-involved crashes in South Africa at R7.9 billion.

5.2.5 Labour supply and productivity

Alcohol misuse is a causal factor in work-related accidents, increased absenteeism, and high employee turnover. Of great concern too is the finding that a significant proportion of school-age adolescents are also misusing alcohol which leads to absenteeism, academic failure, increased likelihood of drug abuse and risky sexual behaviour, which reduces human capital formation processes and reduces the ability of citizens to participate in and contribute to society. Møller & Matic (2010) suggest that harmful use of alcohol has an impact on the supply of labour and labour productivity, over and above the impact of premature mortality, through the following four channels: lower productivity due to hangovers or drunkenness at work; absenteeism due to hangovers; unemployment and retirement effects; and other labour costs. Each of these channels is discussed below.

Hangovers and drunkenness at work

Common sense suggests that a drunken individual, or one suffering from a hangover, is likely to be less productive during the course of the working day than a sober individual. However, in practice it has proved extremely difficult to prove the existence of this productivity effect. On a day to day basis in most jobs productivity is very hard to measure. Economists have therefore resorted to using wage levels as a proxy for productivity, on the basis that employers are best placed to evaluate overall productivity. This approach has however not yielded the expected results.

³⁷⁵ Peer, Matzopoulos, & Myers 2009

³⁷⁶ Miller et al. 1998

Specifically, a number of studies of the relationship between wage levels and alcohol consumption³⁷⁷ have found an inverse U-shaped relationship between the two. In other words, abstainers earn less than light or moderate drinkers, and light or moderate drinkers earn more than heavy drinkers. The inflection point seems to be in the region of one or two drinks a day. Studies of the relationship between problem drinking and wages seem to suggest that the expected reduction in productivity occurs, but the evidence is mixed.³⁷⁸ Limited progress has been made on measuring the impact of hangovers and drunkenness more directly (ie by not using wages as a proxy).³⁷⁹ In short, in the absence of primary research on this relationship in South Africa, it is not possible to include an estimate on the impact of hangovers and drunkenness on work productivity in this study.

Absenteeism

One of the ways that harmful alcohol use affects worker productivity is via its effect on levels of absenteeism. Logic suggests that binge and heavy drinkers are likely to occasionally need a day to “sleep it off.” Unfortunately, little international research has been done on the actual proportion of sick days attributable to harmful alcohol use, and in order to include some impact from this effect, a working assumption is typically made that 4-6% of absenteeism is caused by harmful alcohol use.³⁸⁰

The impact of such absenteeism on workplace productivity is limited by the strategies workplaces develop to cope with worker absence. For example, it may be possible to defer work until the individual returns, or have colleagues cover for those who are missing. Studies suggest that actual productivity losses may only be equivalent to 25-30% of the costs of missed work.³⁸¹

No economy-wide estimates of absentee levels in South Africa appear to have been conducted. However, one study conducted by a commercial firm providing absentee management software, which covers 7000 employees in 60 firms, found that absentee rates average 2.3% in workers earning R5 000 or less per month, and 1.33% in workers earning R10 000 to R15 000 per month. This suggests that total absenteeism rates fall somewhere in this range.

With these numbers, it is possible to calculate the cost of absenteeism by multiplying employee compensation by absenteeism rates, then again by the rate attributable to alcohol, and finally by the productivity loss factor. Given total employee compensation costs of R1 081.4bn in 2009, this suggests that the cost of alcohol-attributable absenteeism is between R140.6m and R447.7m annually.³⁸²

³⁷⁷ French & Zarkin 1995; MacDonald & Shields 2001 (quoted in United Kingdom Cabinet Office 2003, 36); Berger and Leigh 1988; Zarkin et al. 1998 (quoted in Tekin 2002, 4-5); Tekin 2002; Ziebarth & Grabka 2008, Lye & Hirschberg 2010.

³⁷⁸ Lye & Hirschberg 2010, 326; Møller & Matic 2010, 28

³⁷⁹ Møller & Matic 2010, 28-29

³⁸⁰ Møller & Matic 2010, 29

³⁸¹ Møller & Matic 2010, 31

³⁸² The calculation is as follows:

Unemployment and early retirement

Estimating the link between harmful alcohol use, unemployment and early retirement is a complex exercise, because there are a number of ways in which the harmful use of alcohol can impact on the probability that someone will find employment.³⁸³ The extent to which problem drinking is associated with unemployment may depend on social norms around whether intoxication is felt to be socially acceptable, and absolute poverty levels (in other words, if the poor cannot afford alcohol, problem drinking may be exclusively the preserve of the employed). Datasets which only measure the link between current alcohol consumption and likelihood of employment will also, for example, miss the following types of unemployment associated with harmful alcohol use:

- Individuals who currently do not misuse alcohol, but were previously addicts or abusers, and whose ability to find a job now is affected by previous addictive behaviour (for example by a failure to gain needed qualifications because of alcohol misuse, or because of health effects of sustained alcohol misuse)
- Individuals with alcohol-related morbidity (such as fetal alcohol syndrome or injuries from alcohol-related traffic accidents), who do not themselves misuse alcohol, but struggle to find employment because of its effects

Moreover, it should be noted that some studies have found that abstainers are more likely to be unemployed than moderate drinkers, which further complicates the analysis – this may be due to the presence of reformed alcoholics among the teetotal population, but evidence is still needed.³⁸⁴ In short, further analysis would be needed to draw firm conclusions about the effects of harmful alcohol use on unemployment rates in South Africa. It seems likely that such analysis would find evidence that harmful alcohol use affects employment outcomes, particularly in communities where the misuse of alcohol is endemic and has probably affected educational and employment outcomes for a number of generations.

Other labour costs

A number of other sources of alcohol-related decreases in labour productivity can be identified, most of which have to do with a reduction in the amount of time available to work. Examples of these types of effects include the following:

- Delays in getting to work due to traffic congestion caused by alcohol-attributable accidents
- Time spent incarcerated due to crimes committed under the influence of alcohol

Cost of absenteeism = employee compensation X absenteeism rate X absenteeism rate attributable to alcohol X productivity loss factor

= R1 081.4bn X (1.3% or 2.3%) X (4% or 6%) X (25% or 30%)

= R140.6m or R447.7m

³⁸³ Møller & Matic 2010, 35

³⁸⁴ Møller & Matic 2010, 35

- Time spent caring for those disabled by alcohol attributable health problems³⁸⁵

Calculating the size of such impacts on labour productivity in South Africa would require data which is not available to the current research team. No formal estimates of the size of these effects are thus included.

5.2.6 Non-financial welfare costs

As shown in section 5.2.2.5, those who suffer from premature mortality or morbidity associated with alcohol would be prepared to pay substantial amounts to prevent this, which provides an estimate of the emotional cost placed on such premature mortality and morbidity. Additional non-financial welfare costs are experienced by people affected by the actions of those who misuse alcohol, but do not misuse alcohol themselves. The sources of displeasure can be as innocuous as having a drink spilled on you at a bar, or being kept awake by the raucous drinking at a party at a neighbour's house; but can also extend to the pain associated with the death of a loved one in a traffic incident caused by drinking, or being the victim of a violent crime where the perpetrator was intoxicated.

Non-financial welfare costs are intangible costs, which are therefore included in the analysis for illustrative purposes. Studies suggest the following estimates of the emotional costs of just two sources of alcohol-related displeasure, namely traffic accidents and crime, as follows:

- Miller (1998) suggests that the costs of the emotional pain associated with traffic accidents are approximately as much again as economic costs (a point which is echoed in Rosen et al. (2008, 1926) with respect to the victims of violent crime). This would equate to R12.9 billion in emotional costs associated with traffic accidents in South Africa.
- Costs associated with crime: Alda and Cuesta (2010) estimate that one third of health costs relating to crime can be attributed to emotional costs. Using Alda and Cuesta's total crime healthcare cost estimate of \$7.37 billion in 2007 (R52 billion), and adjusting for 75% of total for "alcohol relevant" costs and an AAF of 25%, this would suggest that the emotional costs of alcohol-related crime are around R3.2bn in South Africa.

It has not been possible to estimate the value of the non-financial welfare costs associated with all alcohol consumption activities. However, in the South African context, and as illustrated by the examples above, it is likely that these costs are substantial. In particular, it is likely that substantial displeasure will be generated by the prevalence of unlicensed liquor outlets (shebeens) in high-density urban areas, and the associated pollution, congestion and non-financial welfare effects of crime.

5.2.7 Miscellaneous other social and welfare costs

Møller and Matic (2009) identify several other costs that tend to be ignored in alcohol costing studies, such as the cost of organised crime in evading alcohol taxes, the cost of alcohol attributable litter, the cost of damages in workplaces and the cost of alcohol attributable fire. The latter in particular may be

³⁸⁵ Møller & Matic 2010, 36-37

an important consideration in South Africa, where shack fires and veld fires may often be alcohol-related, but we were unable to locate a suitable costing study.

5.3 Discussion and conclusions

Before proceeding to a discussion of results, it should be noted that the costing studies of Single et al. (2003) and Collins et al. (2006) are the culmination of extensive and dedicated research efforts and are based on substantive formative research, whereas the current exercise has been based on an analysis of available secondary research. There are of course numerous gaps in locally relevant data and in a few cases estimates have had to be imputed based on the relative importance of the category according to international benchmarks and available cross-sectional data, and taking into account the various limitations and conceptual issues highlighted in the three costing papers. The rationale and basis for these estimates are described in the text and should assist in identifying key gaps that might be addressed in further studies, as well as the derivation of more accurate future cost estimates.

A summary of the costs attributable to harmful alcohol use, based on these data, is shown in Table 71 below. As shown, the total tangible and intangible costs are enormous, and represent around 10-12% of 2009 GDP. However, if only tangible, financial costs are included, harmful alcohol use is still found to cost R37.9bn, or 1.6% of 2009 GDP.

Table 71: Summary of alcohol attributable costs in South Africa

Cost category	R millions	
	Low	High
Tangible costs		
Healthcare	9 330	
Other healthcare costs	2 333	
Treatment research and prevention	18	
Social and welfare costs	397	
Crime response	9 680	
Crime consequence – transfers	4 500	
Crime anticipation	3 750	
Road traffic accidents - damage to motor vehicles	7 912	
Total tangible costs	37 920	
Intangible costs		
Premature mortality and morbidity - reduction in earnings	8 245	9 769
Premature mortality and morbidity - VSL	183 527	216 450
Absenteeism	141	448
Non-financial welfare costs	16 100	
Total intangible costs	208 013	242 767
Insufficient data to estimate cost		
Hangovers and drunkenness at work	Uncertain	
Unemployment and early retirement	Uncertain	
Other labour costs	Uncertain	
Miscellaneous other social and welfare costs	Uncertain	

Source: Various, own calculations

When contrasted to the value added by industry, it can be seen that the tangible costs of harmful alcohol use are equivalent to almost four-fifths of the direct value added of R48.1bn. Because the basis on which the economic contribution analysis was conducted is different to the basis on which the cost of alcohol misuse analysis was conducted, it would be inappropriate to net these figures off against one another. However, it is appropriate to conclude that much more can be done to mitigate the costs of harmful alcohol use, and that such action would have a direct impact on economic growth. In other words, no matter how much value alcohol currently adds to the domestic economy, much could be done to improve its contribution simply by mitigating the effect of harmful alcohol use.

The estimates in Table 71 go even further by including the intangible, non-financial costs of the trauma associated with alcohol-related illness, injury and violence. By doing so, they go some way towards indicating how much value South Africans place on any intervention that would help to mitigate this trauma. VSL estimates in particular suggest that South Africans would be willing to pay R183.5bn to

R216.5bn, or 8-9% of GDP, to avoid the deaths, illnesses and disabilities caused by alcohol – and this does not include the many other sources of psychological trauma detailed in the costing exercise.

These numbers are particularly striking when contrasted to recurrent reports that national and provincial alcohol regulators appear to be under-resourced. Effective regulation has the potential to substantially curtail the costs of harmful alcohol use, and in doing so make a direct contribution to both the well-being of the average South African, and to the economy itself.



6 IMPACT OF INDUSTRY INITIATIVES

Alcohol is the third leading cause of premature death and disability in South Africa,³⁸⁶ and as shown in the preceding section, the tangible financial costs of harmful alcohol use alone are equivalent to 1.6% of GDP. Sizeable economic costs can be expected, given that South African drinkers rank in the top 5 riskiest drinkers in the world, with approximately 33%³⁸⁷ to 40%³⁸⁸ of drinkers drinking at risky levels. Unfortunately, alcohol affects both the consumer and the non-consumer and as such, South Africa is also a global leader in terms of alcohol related harms, with 10 times the global average for male homicides and twice the global average for road injury deaths.³⁸⁹

Substantial data is available on the mechanisms through which harmful alcohol use affects drinkers and non drinkers. The Medical Research Council's recent analysis on the burden of alcohol-related harm found that the greatest contributor to alcohol-related harm is violence, which accounts for 39% of all such harms. 18% is due to mental health problems resulting from harmful alcohol use (including harmful alcohol use and dependence disorders, epilepsy, depression and anxiety disorders) and 14% of harm is due to road deaths, as illustrated in Figure 58 below. More recent calculations have also indicated a massive burden of harm from tuberculosis and HIV and AIDS. Indeed, for women, HIV/AIDS constitutes the greatest burden of alcohol-related harm in South Africa.³⁹⁰ To significantly reduce harmful alcohol use and its harms it is critical for interventions to target the major harms caused by alcohol in South Africa, with prevention of violence, HIV/AIDS, mental illness (including harmful alcohol use itself) and road injuries taking priority.

³⁸⁶ Schneider et al 2007

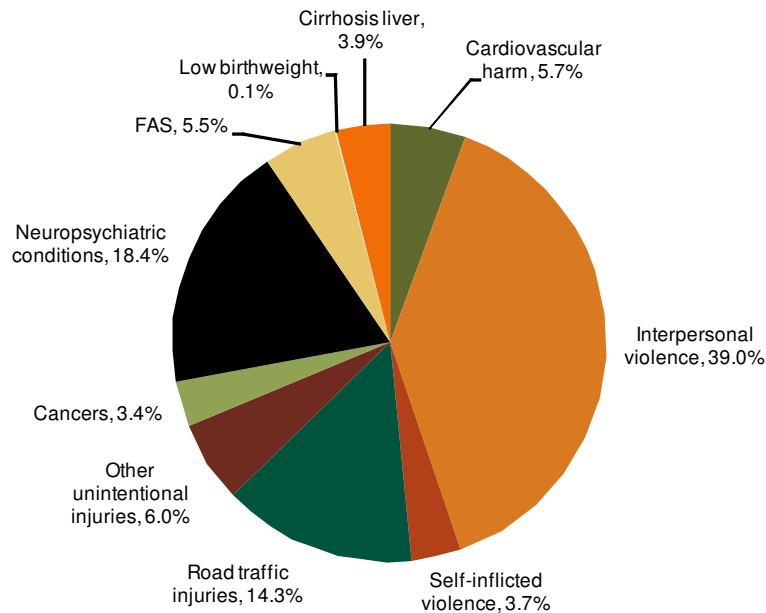
³⁸⁷ Department of Health, Medical Research Council, Macro International. South African Demographic and Health Survey 1998. Full report. Pretoria: DOH, 2001.

³⁸⁸ World Health Organization. 2011.

³⁸⁹ Norman et al 2007

³⁹⁰ Rehm et al. 2004

Figure 58: Burden of alcohol-related harm in South Africa



Source: Schneider et al. 2007

Anti-abuse programs provided by liquor industry participants are an important component of spending on reducing the social costs of alcohol. As such, it is vital to know whether this money is being expended in ways that will effectively reduce the harms caused by alcohol. In other words, is this source of funding being used in an efficient and effective manner?

The analysis seeks to provide a summary of liquor industry alcohol harm reduction initiatives funded by the major manufacturers of liquor in South Africa, and assesses the following features of industry initiatives:

- **Alignment of the programs with the burden of disease caused by alcohol in South Africa:** are the programs addressing the major harms caused by alcohol and are they reaching those most negatively affected by alcohol?
- **Alignment of the programs to globally accepted alcohol-abuse priorities and evidence-based intervention recommendations**
- **Whether or not the programs are equitable** (are programs and sites selected based on relative need for such programs e.g. are programs targeted at those most at risk for alcohol-related harm?)
- **Evidence of effectiveness to date in achieving the program's stated goals**
- **Strengths and limitations**

Detailed questionnaires were sent to all major liquor manufacturers operating in South Africa (the questionnaire is attached as Appendix 6). Follow-up questions were also sent to all respondents.

For projects to be included in the analysis, the following inclusion criteria were used:

- The project/program must include reducing harmful alcohol use and/or the alcohol-related burden of disease as one its primary aims (as such, the analysis has excluded general Corporate Social Responsibility programs such as those aimed at general socio-economic development)
- The project should be active in 2010 (projects no longer active in 2010 are excluded)³⁹¹
- The project should aim to reach the general public or groups outside of the company (projects aimed at company employees are excluded).³⁹²

By assessing data gathered in this manner, it was hoped that the research team would be able to evaluate whether current anti-abuse programs are appropriately targeted and designed to effectively combat the effects of harmful alcohol use. Despite limited data response from industry, it has been possible to reach a number of conclusions on the current state of industry anti-abuse programs, which are now discussed. Detailed discussions of the programs run by each respondent are provided after this analysis.

6.1 General findings

6.1.1 Response to the study questionnaire

The questionnaire was mailed to all the major manufacturers of liquor in South Africa, including organisations set up by the liquor industry to conduct programs that mitigate alcohol abuse and its harms, such as the Liquor Industry Association for Responsible Alcohol Use (ARA). Responses were received from 5 of the 12 companies/organizations (41.7% response rate), as shown in Table 72 below. The text of these responses is attached as Appendix 7.

³⁹¹ Only active projects were considered as the purpose of the current study is to evaluate whether current projects and spending are in line with the burden of disease priorities and global evidence. Outside of the need to minimise data requests, including older projects would also have biased the results in a number of ways e.g. older companies would appear to be investing more heavily in anti-abuse initiatives than younger companies and previous spending priorities would skew the profile of *current* spending priorities. Also, it would not be fair to evaluate programmes from a decade ago against evidence of burden of disease, effectiveness and global intervention priorities that were only made available in the last few years.

³⁹² These projects are excluded as reductions in drinking amongst employees will clearly not result in a population-level impact on alcohol-related harm. Several of these projects were also described as a means of enhancing productivity of the labour force, forming part of broader wellness programmes aimed at maintaining competitiveness in the global market. As such, the primary aim of the programme is not clearly centred on reducing alcohol abuse.

Table 72: Response rates to study questions

Company or Organisation	Response received	Questionnaire completed	Follow-up questions answered
South African Breweries	Yes	No	No
Brandhouse	Yes	No	No
Distell	Yes	No	No
ARA	Yes	No	Partially
SALBA	Yes (WineCellars SA and VinPro)	No	No
KWV	No	No	Partially
UNB	No	No	No
E Snell & co	No	No	No
Pernod Ricard	No	No	No
DGB	No	No	No
RGBC	No	No	No
Halewood	No	No	No
Total	Yes (41.7%)	No (100%)	No (83.3%)

Source: Company survey responses

Under normal circumstances, such a low response rate might introduce significant selection bias, limiting the ability of the research team to conduct a meaningful analysis. However, given that all of the major liquor manufacturers in South Africa provided at least some response, the study remains largely representative of the South African liquor industry.

In order to obtain some of the information not provided by the respondents, alternative sources of information were sought by accessing company websites as well as the websites of the organizations implementing the programs in question. In many instances, the information sought was not found and there are therefore many instances of insufficient information recorded, particularly for smaller companies where sources of secondary information are less available. The limited ability of the research team to gather data on behalf of the sector regulator is in itself a significant research finding, which will be discussed in more depth in following sections.

6.1.2 Spending patterns

Information on the amount of funding provided for a specific program was found for only 24.3% of programs/projects. All the respondents were asked for this information but it was not forthcoming, which raises questions about the reasons underlying this response. Information about the amount spent on projects was only found for projects listed by the ARA and SAB, and it should be noted that much of this information was found by the research team in newsletters and press releases, which were less readily available for the other companies assessed.

Due to the lack of availability of this data, it is not possible to do a comprehensive analysis of the spending priorities of the entire liquor industry in relation to the prevention of alcohol abuse. However, given that SAB and the ARA are likely to be the largest spenders amongst the group, it is worthwhile looking at the findings nonetheless.

Table 73: Liquor Industry spending priorities, 2010

Target of program	Funder	Estimate of spend in 2010* (ZAR)
Drink driving & fetal alcohol syndrome (FAS)	SAB, ARA	R37.03 m
Alcohol abuse	ARA	R20.25 m
Expansion of licensed liquor sector in poor areas	SAB	R20.00 m
Pedestrian road injuries	SAB	R1.00 m
Violence	ARA	R0.25 m

Source: Company responses

* Estimate calculated by dividing the total amount spent on the programs by the years across which it was spent

Table 73 illustrates a clear focus on FAS and drunk driving, with a R37 million spend. Approximately R20 million is spent each on alcohol abuse and then a more complex Responsible Trader Program from SAB, which seeks to expand both the safety of drinking venues as well as their turnover, while promoting greater access to liquor licenses in poor areas. As noted in prior discussions, this licensing program is desirable from the perspective of SAB's commercial interests and as will be discussed below, there is no evidence that this program reduces alcohol abuse or its harms. Detailed discussions of the programs can be found below.

6.1.3 The nature of liquor industry alcohol abuse programs, 2010

Table 74 below illustrates that by far the largest number of programs (19%) address road injuries, which comprises 14% of the Burden of Disease (BoD) from alcohol. Within this group, pedestrian injuries receive little attention, despite making up the majority of alcohol-related road deaths. Other common choices include programs focusing on underage drinking and child-oriented interventions (14%), programs that address violence (14%) and FAS (12%). Areas receiving little attention are HIV and mental illness (outside of alcohol abuse itself) with only two programs directly addressing these major components of the alcohol-related burden of disease. Interestingly, while FAS is a popular intervention choice, other harms with similarly small contributions to the alcohol-related BoD, such as cardiovascular disorders, other injuries and cancer, receive no attention.

Table 74: Nature of liquor industry anti-abuse programs (2010)

Target of program	Number of projects	Proportion of all programs
Road Injuries (total)	8	19%
<i>General</i>	1	2%
<i>Drunk driving</i>	6	14%
<i>Pedestrians</i>	1	2%
Under-age drinking & child-oriented interventions	6	14%
Alcohol Abuse	4	10%
Violence	6	14%
FAS	5	12%
Advertising	4	10%
Responsible trader/server components	3	7%
HIV	1	2%
Mental illness	1	2%
Insufficient information provided	4	10%
Total	42	100%

Source: Company data, own analysis

Note: where a program addresses two targets, the program has been counted in both categories)

However, one should not draw conclusions about liquor industry prevention priorities based on the number of programs alone, as there is wide variation in the size and amount invested into each of these programs. As data on how much is spent on each of these programs was not provided for more than 75% of programs, the next best option is to assess the size of these projects in terms of the estimated number of beneficiaries of each project. For approximately 57% of programs, no data were available on the size of the project. Of the remainder, 12% of programs could be classified as large (more than 8 000 people reached), 9.5% as medium (more than 3 000 people reached), and 21.4% as small (less than 3 000 people reached).

Table 75 below illustrates that the programs with the largest population reach focus on drink-driving, FAS and alcohol abuse, which is similar to the finding on spending, except that violence and under-age drinking are no longer appearing as priorities.

Table 75: Profile of large liquor industry anti-abuse programs, 2010 (>20 000 people reached)

Program name	Funding amount	Aim	Target area	Number of people reached?	Funder
One more campaign	>R20 million	Show parents the impact of their drinking on their children	Alcohol Abuse	Mass media therefore likely to be large	ARA
Drive Dry Initiative	No data provided	To reduce drink driving	Drink-driving	Mass media therefore likely to be large	Brandhouse
Reality Check Advertising campaign	R50 million (since 2009)	To reduce drunk driving and FAS	FAS & Drink driving	Mass media therefore likely to be large	SAB

Source: Company data, own analysis

Table 76: Profile of medium-sized liquor industry anti-abuse programs, 2010 (>3 000 people reached)

Program name	Funding amount	Aim	Target area	Number of people reached?	Funder
Pedestrian Safety	R1 million	To reduce pedestrian deaths	Pedestrian injuries	10 000 school children (over one year)	SAB
Responsible traders program	R100 million over 5 years	Small business development & normalisation of the liquor industry	Safe drinking environment, Responsible Serving of Alcohol	19 000 taverners since 2002	SAB
Alcohol Evidence Centres	R10million	To reduce road deaths	Drunk driving	9 000 people processed through AECs	SAB
Gravel Road Theatre production	R250 000	Violence prevention	Violence	12 000 school children	ARA

Source: Company data, own analysis. Details of programs can be found under company profiles.

Looking at medium sized projects, defined in this study as reaching more than 3 000 people, Table 76 illustrates a slightly broader spread of programs.

6.1.4 Are liquor industry abuse initiatives evidence-based?

An important consideration when assessing the effectiveness of anti-abuse programs is whether or not the project is evidence-based, in terms of alignment with two types of evidence; i) local evidence on the burden of alcohol-related harms in South Africa and ii) global and local evidence on what interventions are most effective to reduce the harm in question. Where programs have been based on local and international evidence of need and/or efficacy, there is a good prima facie case that they have been effective. If programs have not been evidence-based, there is a greater risk that funds have been wasted (unless the program concerned can provide data in support of its impact). The alignment

of programs with the South African BoD and international evidence of effectiveness is thus considered below.

6.1.4.1 Do the projects target the most at-risk populations as identified by local evidence?

Even the best anti-abuse program will not be effective if it does not reach people and communities that are at risk for alcohol abuse. Therefore, an important consideration is whether or not the project targets the most vulnerable population group for the harm/risk in question. For example, FAS education projects are most effective when they target women of reproductive age in communities where FAS prevalence is high, and least effective when they target men in low-risk communities.

From Table 77 below, it is apparent that only 19% of all projects (or 37% of projects for which data was available) are targeted at the most vulnerable groups for the risk/harm in question.

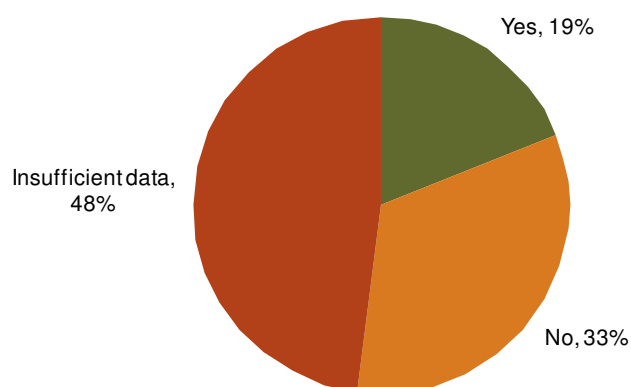
Table 77: % of liquor industry programs targeting those most at risk for the harm in question, 2010

Target of program	Number of projects	Proportion of projects targeting most at risk population		
		Yes	No	Insufficient data
Road Injuries (total)	8	0%	38%	63%
<i>General</i>	1	0%	0%	100%
<i>Drunk driving</i>	6	33%	0%	67%
<i>Pedestrians</i>	1	0%	100%	0%
Under-age drinking & child-oriented interventions	6	17%	67%	17%
Alcohol Abuse	4	25%	50%	25%
Violence	6	0%	50%	50%
FAS	5	60%	0%	40%
Advertising	4	50%	0%	50%
Responsible trader/server components	3	33%	33%	33%
HIV	1	0%	100%	0%
Mental illness	1	0%	0%	100%
Total	42	19%	33%	48%

Source: Company data, own analysis

Note: where a program addresses two targets, the program has been counted in both categories

Figure 59: % of 2010 liquor industry programs that target those most at risk for alcohol-related harm



Source: Company data, own analysis

Note: where a program addresses two targets, the program has been counted in both categories

Of the programs for which data was available, approximately two-thirds (63%) are targeting populations that are not shown to be most at risk by local burden of disease data. Substantial improvements in the efficacy of these programs could be achieved simply by improving the populations targeted (details are provided in the description of the individual programs following). In just under half of programs, conclusions could not be drawn as insufficient information was provided.

6.1.4.2 Are the interventions used in the programs based on local and global evidence of what is effective?

The design of the intervention used by the program is an integral component of whether or not it is likely to be effective. Decades of research on how to mitigate alcohol abuse and its harms has resulted in a substantial academic literature which has culminated in strongly evidence-based recommendations on what does and does not work to reduce alcohol abuse and alcohol-related harm (a summary of this evidence can be found in Appendix 10³⁹³). As such, there is a prima facie case that interventions based on this evidence will be effective. Conversely, the onus is on the program itself to prove that it is effective, if its intervention is not based on available evidence.

Worryingly, Table 78 below demonstrates that only 24% of liquor industry alcohol abuse initiatives are in keeping with local and global evidence.

³⁹³ For a more detailed review of the evidence readers are directed to Babor, T., Caetano, R., Casswell, S., Edwards, G., Giesbrecht, N., Graham, K., et al. 2003. *Alcohol: No Ordinary Commodity*. Research and Public Policy. Oxford: Oxford University Press.

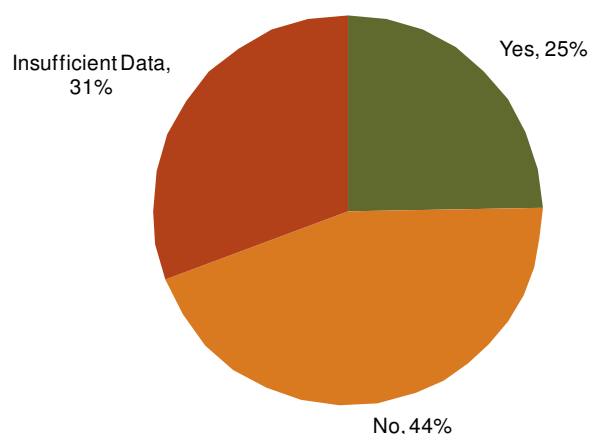
Table 78: % of 2010 liquor industry programs that are based on global evidence of effectiveness

Target of program	Number of projects	Proportion of programs based on global recommendations
Road Injuries (total)	8	63% (13% insufficient data)
<i>General</i>	1	0% (100% insufficient data)
<i>Drunk driving</i>	6	83% (17% No)
<i>Pedestrians</i>	1	0% (100% No)
Under-age drinking & child-oriented interventions	6	33% (67% No)
Alcohol Abuse	4	25% (No 50%; insufficient data 25%)
Violence	6	0% (No 50%; insufficient data 50%)
FAS	5	20% (No 20%; 60% insufficient data)
Advertising	4	0% (No 100%)
Insufficient information provided	4	N/A
Responsible trader/server components	3	0% (No 100%)
HIV	1	0% (No 100%)
Mental illness	1	100%
Total	42	24% (No 45%; insufficient data 31%)

Source: Company data, own analysis

Note: where a program addresses two targets, the program has been counted in both categories

Figure 60: % of 2010 liquor industry programs that are based on global evidence of effectiveness



Source: Company data, own analysis

Note: where a program addresses two targets, the program has been counted in both categories

The best performance is in interventions addressing drink driving, mental illness and FAS, of which 50% or more are evidence-based. However, less than half of the projects addressing other alcohol-

related harms are in keeping with the evidence on effective preventive interventions. In particular, while underage drinking projects receive a large proportion of the funding (Table 73), less than a third are evidence-based. Also of concern, are that major alcohol-related risk and harm factors are not being addressed with appropriate interventions (e.g. 0% of all violence prevention programs and only 25% of alcohol abuse programs are evidence-based).

6.1.5 Have the interventions reviewed been evaluated and found to be effective?

Ideally, the effectiveness of all interventions should be monitored in order to confirm that they are being effective. It is less crucial to do so when interventions are in line with local and international evidence of need and effectiveness, but as discussed, relatively few South African anti-abuse programs do appear to be evidence-based. This increases the urgency of tracking the impact had, in order to ensure that funds are not being wasted.

Unfortunately, evidence of an evaluation of effectiveness of the programs in reducing alcohol abuse was provided for only 4 out of the 36 projects reviewed (11% of all projects). Of these 4, evidence of a reduction in alcohol abuse or its related harms was found in two of the projects, as shown in Table 79 below.

Table 79: 2010 projects where effectiveness has been evaluated

Program name	Funding amount	Aim	Target area	Evidence-based?	Number of people reached?	Evaluated?	Effective?	Funder
Ignite	250000 (2010)	Decrease alcohol abuse	Alcohol Abuse	Yes	Small- aim was to reach 360 people but sufficient funding not available	Yes	50% participants showed reduction in drinking (AUDIT scores)	ARA
Foundation for Alcohol Related Research (FARR)	R10million since 1997	Reduce incidence of FAS	FAS	Insufficient data provided	Insufficient information provided	Yes- however evaluation study not provided	30% reduction in FAS reported but unclear if this is due to the intervention (study not provided)	ARA
Pebbles project	No Data Provided	To enrich the lives of children from disadvantaged backgrounds with special educational needs	Underage Drinking	Yes	More than 500 children	Yes- but study not provided	Insufficient information provided	Distell
FAS pilot project	No Data Provided	To improve the intellectual ability of children with FAS	FAS (tertiary prevention)	Insufficient information provided	Insufficient information provided	Yes- but study not provided	Intervention still being implemented	Distell

Source: Company data, own analysis

6.2 Company profiles

6.2.1 *Profile of 2010 projects funded by the Industry Association for Alcohol Use (ARA)*

In 1989, the major liquor companies in South Africa (including SABMiller, Distell, Brandhouse, KWV, and DGB, the members of VinPro and Cellars SA, E Snell & Co and others) established the Industry Association for Responsible Alcohol Use (ARA), a non-profit organisation. The ARA aims to “reduce alcohol-related harm through combating the misuse and abuse of alcohol beverages and promoting only their responsible use”.³⁹⁴ According to the ARA, there are currently more than 150 associate members of the ARA which now include not just liquor manufacturers, but also several distributors and retail chains (e.g. Tops, Makro and Diamond Liquors).

The ARA declined to indicate what funding and resources are allocated to it on an annual basis. However, in terms of staffing, the head of the ARA Mr. Adrian Botha indicated in an interview in 2008 that the ARA staff complement at that time consisted of himself and one other person.³⁹⁵

2010 ARA projects meeting the inclusion criteria for the study are as follows:

1. Code of Commercial Communication
2. Code of Conduct (retailers, distributors and consumers)
3. FARR
4. Brief Intervention program (Ignite)
5. Educational programs

6.2.1.1 Code of Commercial Communication

The Code of Commercial Communication is a code, drawn up by liquor industry representatives, for the responsible marketing and advertising of alcoholic beverages (the text of which is attached as Appendix 8). Some excerpts from the code can be seen in Box 6 below.

³⁹⁴ Industry Association for Responsible Alcohol Use (ARA), November (2010). Addressing the misuse and abuse of alcohol beverages (Report submitted for this study), page 10.

³⁹⁵ Personal communication with Mr. Adrian Botha, Head of the ARA. 2008

Box 6: Excerpt from ARA Code of Commercial Communication (2010)

"6. Commercial communication may not imply that alcohol beverage consumption is essential to business and/or social success or acceptance or that refusal to consume is a sign of weakness.

7. Commercial communication may not be suggestive of sexual indulgence or permissiveness, portray nudity or present an improper portrayal of near nudity, present any situation derogatory to the virtue of either sex or claim or suggest that alcohol beverages can contribute directly to sexual success or seduction.

8. Commercial communication may not induce people in an improper manner to prefer a drink because of its higher alcohol content or intoxicating effect. Factual information on alcohol strength may be included for the guidance of consumers.

9. Commercial communication may not claim the alcohol beverages have curative qualities, or offer it as a performance enhancer, stimulant, sedative or tranquilliser."³⁹⁶

It is a self-regulatory code in that it is up to the companies themselves to ensure that they comply with the code. Commercial communications (advertising and marketing campaigns) are only assessed for compliance with the code by the ARA if complaints are received after the advert or campaign is already in the public domain. The ARA officially launched its "Advertising Complaints Hotline" in March 2007, so that members of the public can lodge complaints.³⁹⁷ The Code and the Hotline number are available to the public on the ARA website. When asked about the use of other media to inform the public about the contents of the code and the hotline number, Mr. Botha indicated that he has mentioned the code and the hotline number during interviews he has had on radio and television.³⁹⁸ Therefore, it appears that, aside from the website, the ARA does not fund media campaigns to educate the public about the contents of the code or how to make complaints. The paucity of public education and information tends to place the onus on liquor manufacturers themselves and the advertisers they employ to evaluate whether or not their marketing is appropriate.

In terms of educating advertising agencies about the Code, the ARA last conducted two training sessions with 150 participants in 2008 and has indicated that they intend to conduct further training sessions in 2011. Regarding education of marketing staff within liquor companies themselves, it seems as if this is not done uniformly; the report of complaints submitted to the ARA in 2010 states that in several instances the ARA needed to inform liquor industry marketers about the contents of the Code (report of complaints attached in Appendix 9).

³⁹⁶ Industry Association for Responsible Alcohol Use (ARA). 2010. ARA Code of Commercial Communication, page 3

³⁹⁷ Industry Association for Responsible Alcohol Use (ARA), November (2010). Addressing the misuse and abuse of alcohol beverages (Report submitted for this study).

³⁹⁸ Personal communication with Mr. Adrian Botha, Head of the ARA. December 2010.

The ARA indicates that it receives very few complaints (5-10 complaints on average per year) and that most are from competitors within the industry. Should a complaint be made, it is forwarded to the liquor company in question which then either withdraws the advertisement or contests the complaint. Contested complaints are sent to an arbitrator employed by the ARA, who makes the final decision on whether or not an advertisement/campaign is in violation of the code. If an advertisement is found to be in violation of the code, the company in question is asked to withdraw the offending material from the public domain.

There are no penalties given for code violations, however, should a company refuse to withdraw an advertisement judged to be in violation of the code, they will be expelled from the ARA, which according to the ARA can lead to a loss of license to operate. It is unclear on what legal basis the license to operate would be withdrawn, given that it is not a legal requirement to be an ARA member. There also appears to be no defined time limit in which the withdrawal of a particular advert or campaign needs to occur. The system is therefore open to abuse as companies can agree to withdraw advertisements in violation of the code but only remove the material at the natural end of their campaign.

While there is strong evidentiary support that exposure to advertising is associated with an increase in teen drinking and binge drinking,³⁹⁹ global evidence indicates that industry self-regulation of advertising is ineffective.⁴⁰⁰ Indeed, given the inherent conflict of interest between the industry's commercial objectives (to increase growth in liquor sales), and the social objective of reducing the abusive over-consumption of alcohol, it would be reasonable to question the appropriateness of liquor industry representatives deciding what constitutes responsible advertising of alcohol and assessing their own performance in this regard. An independent adjudicator, ideally with experience in or access to public health or substance abuse specialists conversant with the global evidence on alcohol advertising, would be best placed in this role.

6.2.1.2 Code of Conduct

The ARA Code of Conduct⁴⁰¹ covers 4 main areas as follows:

1. Code of commercial communication
2. Code of conduct relating to the purchase, distribution or sale of alcohol beverages
3. Code of conduct relating to retail traders
4. Code of conduct relating to consumers

³⁹⁹ Anderson et al 2009

⁴⁰⁰ Jones et al 2008

⁴⁰¹ Industry Association for Responsible Alcohol Use (ARA). 2008. Code Of Conduct For The Purchase, Distribution Or Sale Of Alcohol Beverages By Members Of The Industry Association For Responsible Alcohol Use

The Code of Commercial Communication has been discussed above under the Industry Association for Responsible Alcohol Use (ARA). The three remaining areas of the ARA Code, relating to the purchase, sale and distribution of alcohol, indicate that members will NOT:

- Supply/sell alcohol to anyone in lieu of wages or anyone committed of such an offence
- Sell alcohol to unlicensed outlets
- Sell illicit alcohol
- Employ a minor to sell/serve alcohol
- Sell alcohol to someone convicted of employing minors to sell/serve alcohol
- Sell alcohol to someone convicted of selling alcohol to a minor or an intoxicated person

The codes of conduct for retailers are similar to the above and include the need for members to encourage traders to undergo licensee and responsible server training. Regarding consumers, the code's stipulations include the need to serve non-alcoholic beverages and food and state that promotions encouraging excessive or rapid drinking are not permitted. These measures are commonly referred to as responsible server interventions.⁴⁰²

In the compliance section of the Code of Conduct it is stated that the ARA is not in a position to monitor its members' compliance with the Code and that members need to monitor their own activities. Commitment to self-monitoring is expressed by signing an annual Certificate of Compliance with the Code which companies then submit to the ARA. No evidence was provided by the ARA on the details of the implementation of this code (funding allocation, implementation methods, how legal records are checked, number of distributors affected by the adoption of this code since its inception and so forth). No evidence of an evaluation of the effectiveness of the code was provided.

The Code of Conduct contains many interventions that could reduce alcohol abuse. For example, the global evidence on alcohol harm reduction indicates that not selling alcohol to minors and responsible server interventions are effective, but only where these measures are enforced.⁴⁰³ Given the potential for harm reduction of the measures stated in the code, it is a pity that the liquor industry has not allocated funds to implementing and monitoring compliance with the code. The ARA has stated that it is not in a position to implement the Code,⁴⁰⁴ which is left up to the liquor companies or outlets themselves, and it is therefore unlikely that effective implementation of the Code is occurring.

As profit-maximising entities, private companies are incentivised to maximise the volume of their sales. Because many of the measures suggested in the Code would tend to reduce alcohol sales, these companies face a conflict of interest in enforcing the Code. It is therefore recommended that government assume the responsibility of devising and implementing an appropriate code of conduct

⁴⁰² Ker & Chinnock 2006

⁴⁰³ Wagenaar & Toomey 2000; Ker & Chinnock 2006

⁴⁰⁴ Industry Association for Responsible Alcohol Use (ARA). 2008. Code Of Conduct For The Purchase, Distribution Or Sale Of Alcohol Beverages By Members Of The Industry Association For Responsible Alcohol Use

that receives sufficient funding to ensure adequate monitoring and enforcement. Indeed, some aspects of the code are already part of legislation (e.g. not selling alcohol to minors and giving liquor in lieu of wages) but remain poorly implemented.

6.2.1.3 Co-funder of the Foundation for Alcohol Related Research

Since 1997, the ARA has been an annual funder of the Foundation for Alcohol Related Research (FARR) which is a collaboration between a number of organizations/institutions, including the Department of Health, the Centres for Disease Control and Prevention (CDC) and the National Institute on Alcoholism and Alcohol Abuse (NIAAA) in the USA and the Medical Research Council (MRC) of South Africa.⁴⁰⁵ According to the ARA website,⁴⁰⁶ the ARA has donated more than R10 million since 1997 to FARR. The ARA contributions have been given to fund the organisation's administrative expenses, FAS research and FAS prevention projects in high-risk areas, the opening of safe houses in De Aar, Upington and Ashton, a FAS training facility for NGOs and government (on identification and prevention of FAS) and a post-graduate fellowship for medical specialists (four specialists have completed training to date).

According to the ARA, a recent study in De Aar demonstrated a 30% reduction in FAS prevalence as a result of FARR's interventions there.⁴⁰⁷ Both FARR and the ARA were requested to provide details of this study but none were forthcoming. It is therefore not possible to comment on whether or not evidence based interventions are being used or if the 30% reduction in FAS observed is due to the intervention program, confounding factors, or issues with study design. However, it is clear that interventions are targeting high-risk areas and that an evaluation of effectiveness was undertaken, both of which should be applauded. Notwithstanding these positive attributes of the initiative, the selection of FAS as a key focus area is questionable given that FAS constitutes only 5.5% of alcohol-related harm in South Africa⁴⁰⁸ and given that so few initiatives target the major harms related to alcohol (see discussion above).

6.2.1.4 Ignite: brief intervention

The ARA is a funder of the Ignite Foundation, a non-profit organisation that targets farmworkers and adolescents living on farms in the Stellenbosch (Western Cape) area. The stated aim of the intervention is to reduce alcohol abuse amongst farmworkers. Participants in the program are screened for alcohol abuse and those screening positive are given a one-on-one four-hour intervention session, based on accepted brief intervention methodology for substance abuse. The program employs at least one qualified social worker.⁴⁰⁹ The program aims to reach 360 farmworkers

⁴⁰⁵ Industry Association for Responsible Alcohol Use (ARA), November (2010). Addressing the misuse and abuse of alcohol beverages (Report submitted for this study).

⁴⁰⁶ ARA website: <http://www.ara.co.za/news/23/15/Turning-The-Tide-Against-FAS-in-Northern-Cape>. Sept 7 2010. Accessed 5 December 2010

⁴⁰⁷ Industry Association for Responsible Alcohol Use (ARA), November (2010). Addressing the misuse and abuse of alcohol beverages (Report submitted for this study).

⁴⁰⁸ Schneider et al 2007

⁴⁰⁹ ARA website: <http://www.ara.co.za/news/2/72/Igniting-Hope-For-A-Better-Future>. Press release March 2010; accessed 21 Dec 2010

on 24 farms, however after receiving R250 000 from the ARA in March 2010, Ignite reported that they would need an additional R949 200 to achieve this target.⁴¹⁰ The evaluation study provided by the ARA evaluates the effectiveness of the intervention. According to this study 19 participants took part and approximately 50% showed a reduction in drinking (according to AUDIT scores) after one month. The researcher indicates that a six-month or year follow up would be ideal to assess the long-term effectiveness of the intervention.⁴¹¹

This intervention is evidence based in that it addresses a major burden of harm (alcohol abuse itself) using an evidence-led approach (brief interventions).⁴¹² While one could criticise aspects of the evaluation study methodology (sampling bias, no control group etc), there has at least been a good attempt to measure effectiveness using internationally recognised tools.

Such a program should be fully funded and expanded to include urban areas with a focus on high-risk groups, which currently carry the largest burden of alcohol-related harms. It would also be helpful for the content of the program to include a focus on violence and mental health in particular, as the largest harms resulting from alcohol in South Africa.

6.2.1.5 Educational interventions

Northern Cape Gravel Road Theatre Group

The ARA funds an educational intervention run by Business Against Crime, Northern Cape. The intervention consists of a theatre piece (Nugter Keuse which means sober choices) as well as video material on alcohol abuse and its harms. The group reports that from April to August 2010, 27 performances were done in schools, reaching approximately 12 000 learners, and that they also do performances for the police, prisons, schools and churches. According to the group, the ARA is the sole funder of this initiative and contributed R250 000 to the project in 2010 (in addition to providing R200 000 in 2009).⁴¹³

The aim of the initiative is stated variously by the ARA as being to reduce violence and crime, and by Business Against Crime as being to “communicate the devastating effects of alcohol abuse on families and communities.”⁴¹⁴ The core messages of the show are not detailed in the two reports received from the organisation, but Fetal Alcohol Syndrome and violence are mentioned. There does not appear to have been an evaluation of the intervention’s effectiveness.

While it is positive to see the liquor industry investing in programs that address one the major alcohol-related harms (violence), the program could be better targeted at those most at risk for perpetrating and/or experiencing injury due to alcohol-related violence, namely young adults aged 20-29 (see the figure below) rather than school children.

⁴¹⁰ De Waal J. Ignite Progress Report March 2010. Provided by the ARA.

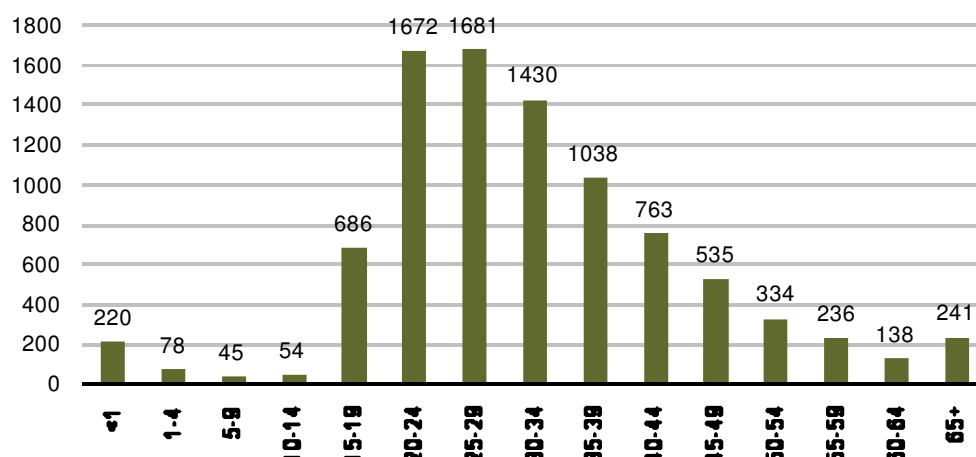
⁴¹¹ De Waal J. Ignite Progress Report March 2010. Provided by the ARA.

⁴¹² Kaner et al. 2007

⁴¹³ Business Against Crime Northern Cape. Feedback Report: Live Shows “Nugter Keuse”. August 2010.

⁴¹⁴ Business Against Crime Northern Cape. Feedback Report: Live Shows “Nugter Keuse”. August 2010.

Figure 61: Violent deaths by age-group for South Africa 2008



Source: Medical Research Council of South Africa. 2009

Regarding alignment to global evidence of effectiveness, while there is some evidence that the involvement of adolescents in staging music and dance productions may reduce their propensity to binge-drink, the effectiveness of such programs is attributed to the learners' *participation* in the shows, rather than being mere audience members.⁴¹⁵ As this intervention is experimental (there is no evidence that education is an effective intervention),⁴¹⁶ it is important to evaluate its effectiveness if one is to assess whether or not this is a project that should receive regular funding.

SANCA

According to their submission for this report the "ARA has also assisted the youth development arm of SANCA (South African National Council on Alcohol and Drug Dependencies) to run their youth programs involving prevention and awareness of alcohol abuse in Uptington."⁴¹⁷ No further details were provided. Due to the lack of data this intervention is excluded from the main analysis.

Life Talk intervention

Life Talk is a non-profit organisation that provides education on a wide range of adolescent and parenting issues, including alcohol abuse. According to the Life Talk Newsletter,⁴¹⁸

⁴¹⁵ Grunstein, R., & Nutbeam, D. 2007. *The impact of participation in the Rock Eisteddfod Challenge on adolescent resiliency and health behaviours*. Health Education, 107(3), 261-275

⁴¹⁶ Jones et al 2007

⁴¹⁷ Industry Association for Responsible Alcohol Use (ARA), November (2010). Addressing the misuse and abuse of alcohol beverages (Report submitted for this study).

⁴¹⁸ www.lifetalk.co.za/.../Life%20Talk%20Forum%20News12.pdf. Accessed 23 December 2010

“The Life Talk Forum aims to: create awareness, highlight areas that can make a positive difference to the lives of adolescents and parents, help to facilitate communication, and create happy and fulfilled youth guided by sound values”.

The tools consist of books available for purchase, free newsletters, talks at schools and to parents and a website. The ARA did not provide any information on the nature of work done by the organization; from the website, it appears that, aside from the free electronic newsletters and website, the majority of the assistance is done on a commercial basis (although the organization will assist in obtaining sponsorship where needed). The free newsletters are only available for download in English. The books for purchase are available in English and Afrikaans but no other African languages.

The majority of South Africans are likely to find this initiative difficult to access given limited access to the internet⁴¹⁹ as well as the language of the materials. However, the main concern with this initiative would be the lack of an evidence-based approach. Firstly, in terms of addressing underage drinking the only supporting evidence is for more intensive parenting programs, rather than newsletter distribution, and even in this instance, the evidence was mixed (some interventions were effective while others actually increased underage drinking).⁴²⁰ Secondly, Burden of Disease data indicates that adolescents are not the major risk group for alcohol-related harm in South Africa, so it is unclear why this group should be specifically targeted (see above).

Other educational initiatives

- **Teenagers and alcohol guide:**⁴²¹ the ARA funded the production and publication of a Teenagers and Alcohol guide which aims to stimulate “open and honest conversations within families about alcohol use and thereby reduce the harmful consequences of underage drinking”. According to the ARA, it is used by a number of NGOs and the South African Police Services. The guide appears well researched and is informative and adolescent friendly. It would be useful if evidence on the effects of alcohol on school performance could be added. The main critique would be that the publication is only available in English and Afrikaans and should be translated into the main South African languages to make it more widely accessible. Lastly, as mentioned above, adolescents are not the main risk group for alcohol-related harm so the focus on this group is unclear.⁴²²

⁴¹⁹ <http://www.internetworldstats.com/af/za.htm>. Accessed January 2011.

⁴²⁰ Petrie et al 2007

⁴²¹ Industry Association for Responsible Alcohol Use (ARA), November (2010). Addressing the misuse and abuse of alcohol beverages (Report submitted for this study).

⁴²² We acknowledge that adolescents are at high risk for binge-drinking, and thus that addressing binge-drinking in this group could possibly be beneficial in the short-term. However, it has not been established that such measures will have any long-term effect, particularly where binge-drinking remains the norm amongst adult groups that adolescents emulate, and will certainly not have any immediate effect on alcohol-related harm at a population level.

- **One more campaign:**⁴²³ in 2009, the ARA spent over R20 million on a television advertising campaign that aimed to educate parents about the impact of their drinking on their children. The campaign won two Vuka awards and was nominated for a Loerie award. The campaign has now been expanded to include 3 radio advertisements. While it is encouraging to see adult alcohol abuse being addressed in a novel manner, it is a pity that the adverts were not produced in multiple languages (all appear to be in English) and do not target the poorer communities, who carry the main burden of alcohol related harm. Lastly, it should be noted that the global evidence indicates that educational campaigns are generally ineffective.⁴²⁴
- **University Buddy campaign:**⁴²⁵ over the past three decades, the ARA has funded “Buddy Campaigns” at various universities around the country, which primarily aim to discourage drunk driving either by providing free transport to drunk students or by promoting the concept of a designated driver. This initiative is highly inequitable, as people in disadvantaged areas are a far higher risk group for alcohol-related road injury than university students.⁴²⁶ Secondly, reviews of evidence on these type of interventions show that designated driver programs are not effective.⁴²⁷ Lastly, some might argue that in the context of the simultaneous promotion of drinking during the same period (orientation week) the Buddy program could be seen to promote binge drinking (as one now has free transport if too drunk to drive). That the campaign only addresses drunk driving and not the other major alcohol-related harms (HIV, violence, sexual risk behaviour and so forth) is also problematic.

6.2.1.6 Summary of ARA interventions

Table 80 below summarises the data available on the ARA interventions considered in this analysis.

⁴²³ Industry Association for Responsible Alcohol Use (ARA), November (2010). Addressing the misuse and abuse of alcohol beverages (Report submitted for this study).

⁴²⁴ Babor et al 2003.

⁴²⁵ Industry Association for Responsible Alcohol Use (ARA), November (2010).

⁴²⁶ Groenewald et al 2005

⁴²⁷ Ditter et al 2005

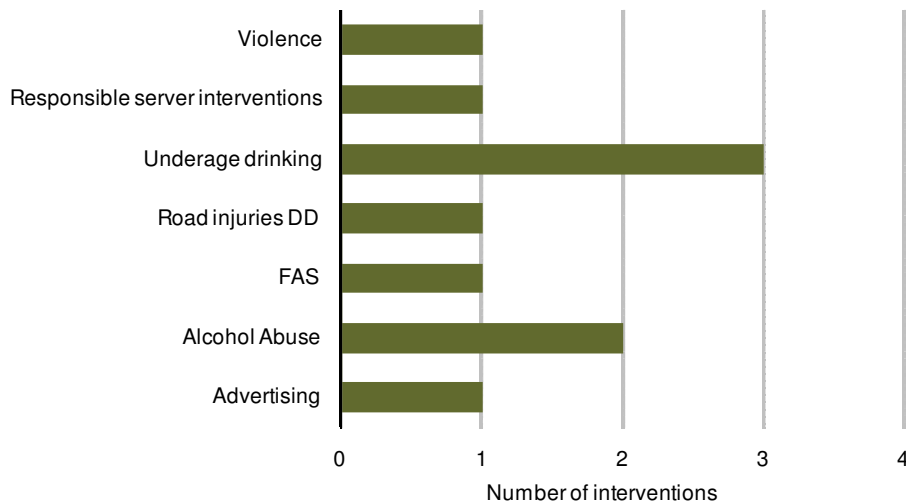
Table 80: 2010 ARA anti-abuse interventions

Program name	Funding amount	Aim	Target area	Does it address the main contributors to alcohol-related BoD?	Does it target/reach those most at risk for the harm in question?	Evidence-based?	Number of people reached?	Evaluated?	Effective?
One more campaign	>R20million	Show parents the impact of their drinking on their children	Alcohol Abuse	Yes	No	No	Large: Information not provided but presumably a mass audience was reached	No	No evidence of effectiveness provided
Foundation for Alcohol Related Research (FARR)	R10million since 1997	Reduce incidence of FAS	FAS	No	Yes (For FAS)	Insufficient data provided	Insufficient information provided	Yes- however evaluation study not provided	30% reduction in FAS reported but unclear if this is due to the intervention (study not provided)
Buddy campaigns	R200 000 (2010)	Reduce drunk driving amongst university students, particularly during orientation week or big student events	Road injuries (drunk driving)	Yes- drunk driving, but ignores drunk pedestrians	No	No	Information not provided	No	No evidence of effectiveness provided
Gravel Road Theatre production	R250 000 (2010)	Violence prevention	Violence	Yes	No	No	Medium: 12000 school children	No evidence of an evaluation provided	No evidence of effectiveness provided
Life Talk	No information provided	Education for parents and teens on issues affecting teenagers	Underage drinking	No	No	No	Not measurable- access through internet	No	No evidence of effectiveness provided
Teenagers and Alcohol Guide	No information provided	Encourage conversations about alcohol between teenagers and parents	Underage drinking	No	No	No	Information not provided	No	No evidence of effectiveness provided
Code of Conduct- broader than above	No information provided	Responsible consumption of alcohol	Underage drinking; responsible server interventions	Yes	No	No	Insufficient information provided	No evidence of an evaluation provided	No evidence of effectiveness provided
Code of Commercial Communication	No information provided	<i>To ensure that all alcohol beverage advertising and marketing is done responsibly (does not violate the ARA Code)</i>	Advertising	N/A	Yes	No	Small- no mass media education about the ARA given	No evidence of an evaluation provided	No evidence of effectiveness provided
Ignite	R250 000 (2010)	Decrease alcohol abuse	Alcohol Abuse	Yes	Yes	Yes	Small- aim was to reach 360 people but sufficient funding not available	Yes	Yes- 50% participants showed reduction in drinking (AUDIT scores)

Source: ARA, author analysis

Figure 62 below summarises the data on the types of interventions undertaken by the ARA, and shows that interventions targeting underage drinking and alcohol abuse were the most common intervention types. However, the amount spent on the various programs should also be considered, and as Table 73 indicates, the ARA also spends a substantial amount of its funding on FAS. As indicated above, the choice of focus on underage drinking and FAS is questionable.

Figure 62: Target areas of interventions by the ARA, 2010 projects

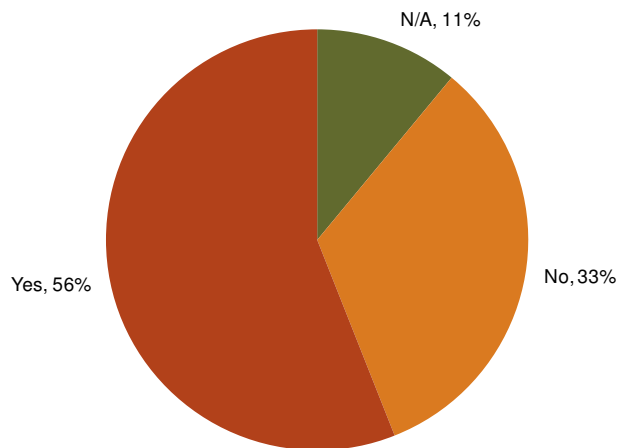


Source: ARA data

Figure 63 below illustrates that just over half (56%) of ARA interventions are targeted to the main contributors to the alcohol-related burden of disease in South Africa. However, only 11% of these interventions are evidence-based (in other words, use intervention models that have been proven to be effective), as shown in Figure 64, and the majority of the interventions (67%, see

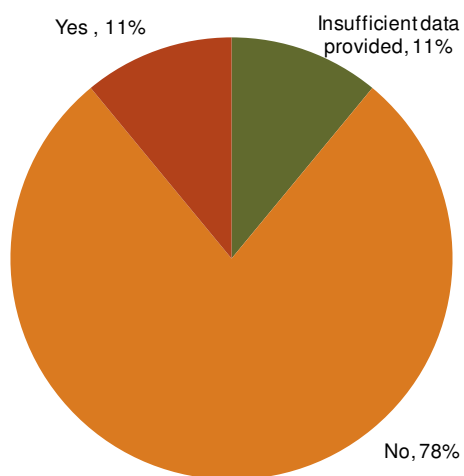
Figure 65), do not target those most at risk for the harm in question.

Figure 63: % of 2010 ARA interventions that address main contributors to the alcohol-related BoD



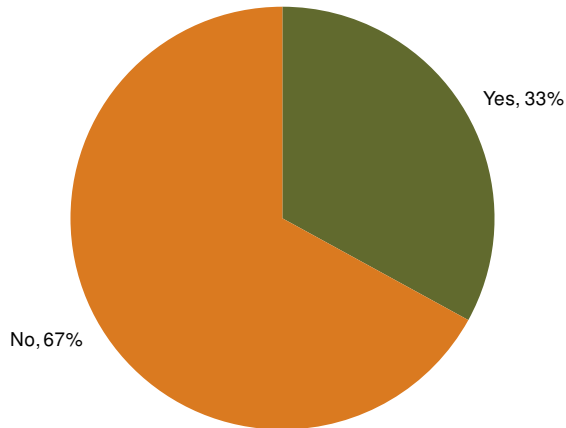
Source: ARA data, own analysis

Figure 64: % of 2010 ARA interventions that are evidence-based



Source: ARA data, own analysis

Figure 65: % of 2010 ARA interventions targeting those most at risk for harm in question



Source: ARA data, own analysis

As can be seen in Table 80, only 22% (2 out of 9) of the programs have been evaluated. Both of the programs that have been evaluated were reportedly effective in achieving the program's stated aims. These claims were verifiable in one instance (Ignite) but no evaluation study was provided in the other instance (FARR).

6.2.2 Profile of 2010 projects funded by South African Breweries Ltd (SAB)

The following nine projects meet the inclusion criteria, and are listed by SAB Ltd as initiatives to combat alcohol abuse. They are discussed in detail below:

1. Responsible marketing: Code of Commercial Communication
2. Removal of billboards from "High FAS and high poverty" areas
3. Responsible trading program (for liquor traders)
4. Tavern Intervention Program
5. Alcohol Evidence Centres
6. Pedestrian safety (school children)
7. Fetal alcohol syndrome (FAS) (Fasfacts and the Department of Social Development partnership)
8. Sports Diversion Program
9. Reality Check advertising campaign

6.2.2.1 Code of Commercial Communication

According to the SAB report submitted for this study, SAB is fully compliant with the regulations around alcohol advertising and “also maintains its own stringent internal codes of compliance to regulate its advertising...based on an industry-agreed code of commercial communication.”⁴²⁸ The industry-agreed code is the ARA Code for Commercial communication, which has been discussed above (see section 6.2.1.1 for details).

6.2.2.2 Removal of billboards from high-risk areas

SAB states that it has “removed all brand billboard advertising in high FAS areas and ha(ve) significantly reduced the number of brand billboards in areas of high poverty.”⁴²⁹ More specific information about on this initiative was requested from SAB (for example, on which specific areas have been targeted, and what the percentage decrease in billboards in high poverty areas has been), but was not forthcoming, and it is therefore difficult to comment on the extent of reduction in outdoor advertising and whether or not the highest risk areas were indeed targeted. SAB billboards are still visible in many high poverty areas in the Western Cape,⁴³⁰ so evidence for the removal of billboards should be provided before any conclusions about the program can be drawn.

While removing billboards is an important first step towards reducing alcohol advertising to minors, it is questionable whether the removal of outdoor advertising alone would be an effective means of counteracting the increase in drinking that advertising incites,⁴³¹ as people living in these high risk communities will in any case be exposed to advertising through branding of premises (SAB branded fridges, table cloths and sign boards) and advertising on television, print and radio which have a large audience reach. It is also important to note that in their submission, SAB states that they do not consider advertising a risk factor for alcohol abuse and only removed billboards to placate community concerns.⁴³²

6.2.2.3 Responsible Trading Program

Previously referred to as the Mahlashedi program, the Responsible Trading program was initiated by SAB in 2002 with the primary aim of ‘normalising’ the retail liquor sector, through assisting and motivating owners of unlicensed liquor outlets (primarily shebeens) to become part of the regulated

⁴²⁸ South African Breweries (2010). The South African Breweries: Alcohol Strategy (Report submitted for this study).

⁴²⁹ South African Breweries (2010). The South African Breweries: Alcohol Strategy (Report submitted for this study).

⁴³⁰ Author’s own observation

⁴³¹ Anderson et al 2009

⁴³² South African Breweries (2010).

sector.^{433, 434} A SAB 2010 press release indicates that the program is a response to “the increased complexity of the regulatory environment.”⁴³⁵

According to Moru's (2008) analysis, SAB has put in place four strategies to address the normalisation of the industry, as follows:

- Provision of assistance with licensing (SAB provides free consultancy and lodgement services to applicants) and provision of licensing workshops
- Lobbying for provincial legislation
- Business skills training for taverners
- Securing funding for taverners

SAB has developed a loan package with ABSA bank that provides access to funding for liquor outlet owners to expand their businesses or to upgrade to the infrastructural requirements of the liquor legislation. According to Moru, this “initiative has stimulated the growth of new and existing tavern owners via the use of financial products, services and mentoring administered by SAB.”⁴³⁶

The training program for taverners consists of a 5 day course that aims to enhance their business skills, assist in sourcing funding for loans (for expansion or to meet the infrastructural requirements of the law), ensure socially responsible trading and create awareness of the benefits of obtaining a liquor license.⁴³⁷ According to Dr Vincent Maphai of SAB, bringing unlicensed outlets into the regulated sector will allow SAB to legitimately work with liquor outlet owners to ensure responsible trading.⁴³⁸ No details on the program were provided by SAB, however according to the same press release, approximately 19 000 taverners have been trained to date. Moru⁴³⁹ reports that in 2008, SAB had pledged R100 million to expanding the program over a five year period.

No data on the evaluation of the Mahlashedi program was provided by SAB, however Moru's (2008) report indicates that the following outcomes were reported by SAB:

- Average turnover increased by 30%
- Debtors decreased by 28.8%
- Stock levels increased by 37.7%

⁴³³ Moru 2008

⁴³⁴ <http://www.sablimited.co.za/sablimited/content/en/sab-press-releases?oid=2471&sn=Detail&pid=1>. Accessed 21 January 2011.

⁴³⁵ <http://www.sablimited.co.za/sablimited/content/en/sab-press-releases?oid=2471&sn=Detail&pid=1>. Accessed 21 January 2011.

⁴³⁶ Moru 2008.

⁴³⁷ Moru 2008

⁴³⁸ <http://www.sablimited.co.za/sablimited/content/en/sab-press-releases?oid=2471&sn=Detail&pid=1>. Accessed 21 January 2011

⁴³⁹ Moru 2008

- Savings and investments increased by 40.5% “which allowed taverns to buy more stock, increase turnover and increase profit”⁴⁴⁰

No reports were found of the impact of the program on alcohol abuse or alcohol-related harms.

Moru’s (2008) analysis also notes that this program is likely to be beneficial to SAB in securing a competitive advantage in that it is adding value to the downstream sector of its value chain – an improvement in the retail sector is likely to generate greater sales, as evidenced by the outcomes of the project (above). The impact of the initiative on the competitive structure of the market is discussed in more detail in section 2.5.2.

More recently, the Gauteng Department of Economic Development has partnered with SAB on this program.⁴⁴¹ This is in line with a key component of SAB’s alcohol strategy, namely increasing resources to build partnerships with government. In this particular partnership SAB indicate that they play a role in supporting “regulators in building capacity and capability”.

This initiative is a positive step in that it encourages compliance with the law. Support provided for responsible serving of alcohol and encouragement of traders to upgrade their facilities to become safer drinking environments, have both been shown to decrease alcohol abuse and alcohol related harm, but only where there is enforcement of these practices.⁴⁴² Nothing in the documentation found indicates that such a monitoring and enforcement⁴⁴³ activity is undertaken by SAB or government (in the absence of responsible server legislation) and SAB did not respond to follow up questions about such measures.

From an anti-abuse perspective, it is troubling that this initiative is reported to be associated with growth in new outlets, expansion of existing liquor outlets and overall growth in liquor turnover. If this is in fact occurring (i.e. if instead of simply moving existing informal alcohol sales into the licensed arena, the initiative is actually increasing total sales), this suggests an increase in access to and consumption of alcohol, which is well established to increase alcohol abuse and alcohol-related harm.⁴⁴⁴ Licensed outlets are likely to have access to SAB products at cheaper prices than unlicensed outlets (see the discussion of the SAB distribution chain in sections 2.3.1.3 and 2.5.2), which in itself is likely to increase sales. As such, unless evidence to the contrary is forthcoming, it seems likely that this program may well *increase* rather than decrease alcohol abuse and related harms. Unfortunately, the evaluation of the program only assesses changes in sales and turnover and excludes alcohol abuse outcomes.

⁴⁴⁰ Moru 2008

⁴⁴¹ SAB Press Release December 2010, <http://www.sablimited.co.za/sablimited/content/en/sab-press-releases?oid=2471&sn=Detail&pid=1>. Accessed 21 January 2011

⁴⁴² Wells & Graham 2003; Ker & Chinnock 2006

⁴⁴³ Note: SAB is clearly not in a position to give fines but enforcement could take the form of establishments having to meet certain safety criteria to warrant delivery and sale of SAB products.

⁴⁴⁴ Chikritzhs et al 2007

Another concern here would be the inherent conflict of interest in this program, as it is within SAB's interests to use the program and its lobbying efforts to grow its distribution chain and increase sales (see discussion in section 2.5.2). As such, it is at the very least questionable whether or not it is appropriate for SAB to be training taverners on responsible sales methods, and secondly whether or not it is appropriate for SAB to be training and capacitating government agencies on how to apply liquor legislation.

6.2.2.4 Tavern Intervention Program

The Tavern Intervention Program (TIP) was launched by SAB in October 2010 in partnership with Men for Development in South Africa (Medsa), and aims to reduce HIV as well as violence against women and children.⁴⁴⁵ Male perpetrators of violence are identified through law enforcement, non-governmental organisations and community members, and participate in a six-session workshop held in a local tavern during which they are encouraged to discuss social issues affecting them.

Details of the contents of the program were not provided by SAB. The only information provided was that the program consists of four modules as follows:

- "Responsible Alcohol Usage: changing behaviours towards and relationships with alcohol
- HIV/Aids: create awareness
- Gender-based violence: change perceptions of traditional role of women in society and behaviour towards women
- Children's Rights and Abuse: change perceptions of children's roles in society and behaviour towards children"⁴⁴⁶

According to a SAB press release in December 2010,⁴⁴⁷ approximately 200 men have completed the six-week project to date. SAB indicates that the program aims to reach 800 men per year over a five-year period (4 000 men in total over 5 years). The program was initiated in Gauteng Province but apparently aims to expand to all nine provinces. Information about the amount of funding invested in this intervention was not provided.

The press release states that "a post-intervention assessment of the pilot"⁴⁴⁸ indicated the intervention could be effective, however this study was not provided when requested so it is not possible to comment on the effectiveness of the project.

⁴⁴⁵ South African Breweries (2010). The South African Breweries: Alcohol Strategy (Report submitted for this study).

⁴⁴⁶ South African Breweries (2010). The South African Breweries: Alcohol Strategy (Report submitted for this study).

⁴⁴⁷ <http://www.sablimited.co.za/sablimited/content/en/sab-press-releases?oid=2469&sn=Detail&pid=62>. Accessed 20 January 2011

⁴⁴⁸ <http://www.sablimited.co.za/sablimited/content/en/sab-press-releases?oid=2469&sn=Detail&pid=62>. Accessed 20 January 2011

While it is encouraging to see SAB starting to tackle two major burdens of alcohol-related harm (violence and HIV) in areas at high risk for these harms, the focus of the intervention is out of keeping with available evidence. While HIV is a major alcohol-related harm, women are most at risk for HIV⁴⁴⁹ so it is not clear why women have been excluded. In terms of violence, male injury makes up the lion's share of alcohol-related injury in South Africa with violence mortality amongst men 5 times that of women (113.4 homicide deaths per 100 000 men compared to 21 deaths per 100 000 women⁴⁵⁰) so focusing exclusively on gender violence is not advisable. Therefore, this program would be far more effective if it included women in its HIV program, and if it targeted male-on-male rather than gender violence.

As to the appropriateness of the interventions themselves, it is not possible to comment as to whether the intervention utilises evidence-based interventions to meet its aims, as a detailed description of the content and evidence of the effectiveness of the intervention were not provided. Lastly, given the large number of consumers of alcohol (approximately 25 million people), it is doubtful that targeting 800 men a year will have a significant impact on the alcohol-related burden of disease (presuming approximately one third of drinkers abuse alcohol, 800 men would constitute 0.01% of those at risk). In conclusion, for this project to have a major impact on the alcohol-related Burden of Disease, it would need to be targeted at the highest risk groups and the most prevalent harms, and expanded to a more sizeable proportion of the at-risk population.

6.2.2.5 Alcohol Evidence Centres

SAB have partnered with local and provincial government to address drunk driving by opening ten Alcohol Evidence Centres (AECs) around South Africa, with plans to open another five by March 2011. The centres are equipped with accurate breathalysers and closed-circuit television to monitor the testing process.

According to a December 2010 SAB press release, over 9 000 people have been processed through AECs across the country to date.⁴⁵¹ The amount spent on this program was not declared, but 10 AECs are likely to cost approximately R10 million if, as stated in an SAB press release,⁴⁵² each AEC costs R1 million. However, it is not clear what proportion of the R1 million is paid by SAB and what proportion is paid by government.

SAB claims that as a result of these centres, the prosecution rate of suspected drunk-drivers has increased.⁴⁵³ No evidence of this was provided, and according to the Head of Department of Transport and Public Works in the Western Cape (where two thirds of drivers processed by the AECs

⁴⁴⁹ http://www.who.int/gender/hiv_aids/en/. Accessed January 16 2011.

⁴⁵⁰ Norman et al 2007

⁴⁵¹ <http://www.sablimited.co.za/sablimited/content/en/sab-press-releases?oid=2472&sn=Detail&pid=1>. Accessed 15 January 2011

⁴⁵² <http://www.sablimited.co.za/sablimited/content/en/sab-press-releases?oid=2472&sn=Detail&pid=1>. Accessed 15 January 2011

⁴⁵³ South African Breweries (2010). The South African Breweries: Alcohol Strategy (Report submitted for this study).

reside), there have been no prosecutions where the breathalyser result was used as the primary evidence in the year of operation of the AECs.⁴⁵⁴ A press release from MEC Carlisle's office in the Western Cape⁴⁵⁵ indicates that the use of the breathalyser machine is currently being challenged in the Cape High Court, which may be limiting the ability of the court to prosecute drunk drivers tested using this technology. However, the Western Cape also reports an 11.8% decrease in road fatalities over the same period, but indicates that this is attributable to the combined effect of the entire Safely Home program, of which the AECs form one element.⁴⁵⁶ It is certainly conceivable that despite the lack of prosecution, the fear of being prosecuted or tested may act as a deterrent to drinkers, at least in the short-term.

This intervention is very positive, as international evidence strongly indicates that random sobriety testing is an effective method to reduce road injuries.⁴⁵⁷ However, given that the use of these highly technological (and probably very costly) breathalysers have not increased prosecution rates, it may be more cost-efficient to redirect this component of the investment to increasing the number of testing centres, so as to ensure higher screening rates of drivers and to ensure that roadblock sites are truly random and not predictable (an important predictor of the effectiveness of this type of intervention). As little information was provided about the methodology employed by the AECs (e.g. how sites of roadblocks are selected, how random the testing is, etc), it is not possible to comment further on how this intervention might be improved to achieve maximum effectiveness.

The major omission of this road injury prevention program is that it would clearly have limited impact on drunk-pedestrian deaths, which constitute the majority of alcohol-related road deaths in South Africa⁴⁵⁸ as shown in the figure below.

Table 81: Profile of alcohol-related road deaths (2009)

Transport user	Total number of deaths	% BAC positive	Total BAC positive	% all alcohol- road deaths
Drivers	1 667	57.0%	950	21.0%
Passengers	2 107	21.3%	449	10.0%
Pedestrians	3 044	62.6%	1 906	42.0%
Other	2 302	54.0%	1 243	27.0%
Total	9 120		4 548	100.0%

Source: Medical Research Council of South Africa. 2009, own calculations

⁴⁵⁴ Personal communication with Mr. Hector Elliot, Head of Department, Transport and Public Works, Western Cape Provincial Government. January 2011.

⁴⁵⁵ <http://safelyhome.co.za/blog/?p=19>

⁴⁵⁶ Personal communication with Mr. Hector Elliot, Head of Department, Transport and Public Works, Western Cape Provincial Government. January 2011.

⁴⁵⁷ Shults et al 2001

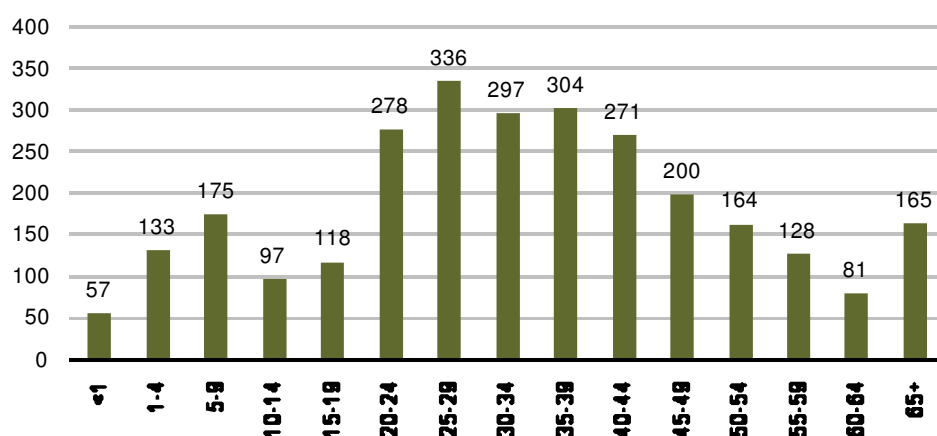
⁴⁵⁸ Medical Research Council of South Africa. 2009.

6.2.2.6 Pedestrian safety

In October 2010, SAB announced a partnership with the Bobs for Good Foundation that aims to promote pedestrian safety through the provision of school shoes with reflective strips to scholars. For selection into the program, schools need to have “a real and genuine need for school shoes” and be established in areas where scholars need to walk long distances to/from schools.⁴⁵⁹ The project aims to provide 10 000 school children with shoes for a year, at a cost of R1 million.⁴⁶⁰

This intervention is completely out of keeping with the evidence on alcohol-related pedestrian deaths in South Africa. As shown in the figures below, the majority of pedestrian deaths occur in adults,⁴⁶¹ not school children, so it is unclear why this group would be specifically targeted. The data on child road injuries also indicates that the majority of these deaths occur from Friday to Sunday, therefore it would make better sense to provide scholars with casual (non-school) shoes that they could wear over weekends rather than during the week. Furthermore, as the project specifically targets areas where scholars walk long distances to school, it is likely that many of these will be rural areas, where the rates of pedestrian deaths are lower than in urban areas.⁴⁶² As such, this intervention cannot be regarded as equitable as it does not target the groups most at risk for alcohol-related pedestrian injuries. This program should perhaps be more accurately regarded as a corporate social responsibility initiative rather than as an alcohol harm prevention program.

Figure 66: Pedestrian deaths by age for South Africa, 2008



Source: Medical Research Council of South Africa. 2009

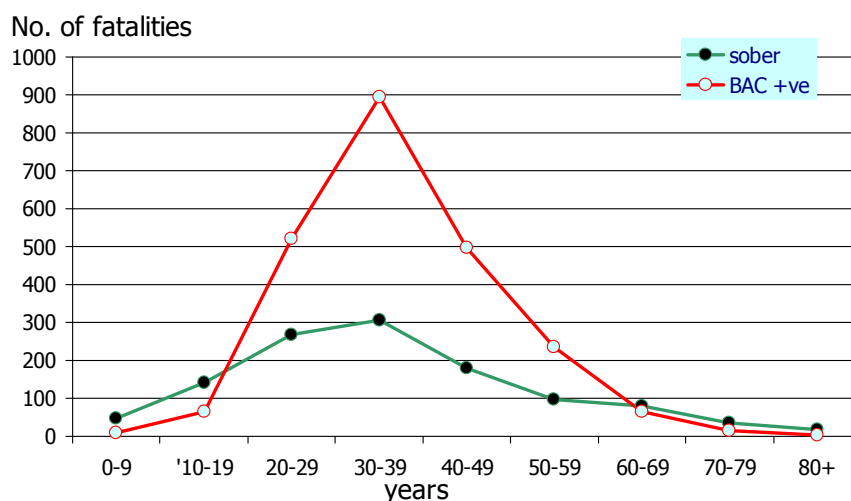
⁴⁵⁹ South African Breweries (2010). The South African Breweries: Alcohol Strategy (Report submitted for this study).

⁴⁶⁰ <http://www.sablimited.co.za/sablimited/content/en/sab-press-releases?oid=2439&sn=Detail&pid=62>. Accessed January 12 2011.

⁴⁶¹ Medical Research Council of South Africa. 2009.

⁴⁶² Matzopoulos et al 2010.

Figure 67: Alcohol-related pedestrian fatalities by age (Cape Town 1994-2003)



Source: Matzopoulos & Wade 2006

6.2.2.7 Fetal Alcohol Syndrome

According to SAB's Alcohol Policy,⁴⁶³ addressing Fetal Alcohol Syndrome (FAS) is a core focus area of SAB's social responsibility programs. Their submission indicates two projects/partnerships which aim to i) reduce the incidence of FAS and ii) reduce the burden on those already affected by FAS, which are described in more detail below.

FASFacts partnership

In 2010 SAB donated R1 million to FASFacts, a non-profit organisation which aims to reduce the incidence of FAS by providing education about the harmful effects of drinking during pregnancy. According to information provided by SAB, the project reached 1 050 children, 525 adults and 95 shebeen owners in 2010. The main areas in which FASFacts operate are the Western and Northern Cape, which is appropriate given that these provinces have been found to have high incidences of FAS.⁴⁶⁴

The global evidence on the prevention of alcohol-related harms has demonstrated that there is little evidence support for educational programs.⁴⁶⁵ As an experimental project, it would therefore be important to evaluate the effectiveness of the program, which does not appear to have been done. It is also unclear why a small-scale educational approach is used while the promotion of alcohol

⁴⁶³ South African Breweries (2010). The South African Breweries: Alcohol Strategy (Report submitted for this study).

⁴⁶⁴ South African Breweries (2010). The South African Breweries: Alcohol Strategy (Report submitted for this study).

⁴⁶⁵ Babor et al 2003.

products is done using the mass media approach. As stated previously, FAS is also a relatively minor contributor to the alcohol-related BoD and the disproportionate focus on this condition is therefore problematic due to the opportunity costs of money spent here not being spent on major problem areas.

Department of Social Development partnership

2010 also saw SAB enter into partnership with the National Department of Social Development (DSD) with the aim of reducing FAS and helping those affected by FAS. Detailed information on this partnership was not provided (such as funding amount or project proposals). Under this partnership, a FAS Indaba was jointly held in November 2010 which aimed to create a shared vision and action plan to prevent FAS. SAB indicates that FAS NGOs will be selected to implement the action plan.⁴⁶⁶

Outside of the opportunity costs of focusing on FAS (discussed above), a major concern here would be the inherent conflict of interest in this partnership. Simply put, should effective interventions be identified that are likely to significantly reduce alcohol sales (e.g. programs that target not just pregnant women but all sexually active women not on contraception, who are arguably the main group at risk), would SAB, who are part of the selection team, be inclined to select those projects for funding? Given this inherent conflict of interest, many experts in the field declined to attend the FAS Indaba,⁴⁶⁷ thereby limiting the inputs made. As such, the presence of SAB in this government project may compromise the project as a whole.

6.2.2.8 Sports Diversion Program

SAB has indicated that underage drinking is a key focus area for their prevention efforts.⁴⁶⁸ In September 2010, SAB partnered with the KwaZulu-Natal Department of Arts, Culture, Sports and Recreation to establish two sports fields in Tobi and Ngome, which were apparently identified as hotspots of underage drinking and crime. The aim of the project is to reduce underage drinking and youth violence in these areas.⁴⁶⁹ No further details on the nature of the project were provided.

Focusing on underage drinking is not the most effective way to reduce alcohol-related violence: as is evident from the mortality data below, violent deaths peak in the 20-29 age group.⁴⁷⁰ As such the program is not based on BoD evidence as it does not target the group most at risk for violent death.

⁴⁶⁶ South African Breweries (2010).

⁴⁶⁷ Personal communication with Prof Leslie London, Prof Charles Parry, Dr Kirstie Rendall- Nkosi. November 2011.

⁴⁶⁸ South African Breweries (2010).

⁴⁶⁹ South African Breweries (2010). The South African Breweries: Alcohol Strategy (Report submitted for this study).

⁴⁷⁰ We acknowledge that adolescents are at high risk for binge-drinking, and thus that addressing binge-drinking in this group could possibly be beneficial in the short-term. However, it has not been established that such measures will have any long-term effect (beyond adolescence) , particularly where binge-drinking remains the norm amongst adult groups that adolescents emulate, and will certainly not have any immediate effect on alcohol-related harm at a population level.

In terms of addressing underage drinking, the evidence indicates that there is not strong research support for the effectiveness of sports programs in reducing adolescent alcohol use.⁴⁷¹ The review of evidence on underage drinking prevention programs indicates that for sports programs to be effective, they need to be part of a comprehensive prevention plan which should include addressing the environmental factors influencing adolescent alcohol use (e.g. access to alcohol and exposure to advertising), and should incorporate skills-building components into the program (such as social and life skills, including skills to directly deal with substance use). For maximum effectiveness, the program should target high-risk youth and involve many hours of activities.⁴⁷² Very little data was provided on the nature of the SAB Sports Diversion program, but if it is indeed a stand-alone sports project, the available evidence suggests that it is unlikely to be effective.

6.2.2.9 Reality Check campaign

SAB has invested R50 million to date in its Reality Check advertising campaign, launched in October 2009, which aims to reduce drunk driving and drinking during pregnancy. The advertisements have been presented in mass media as well as other high-traffic areas (washrooms, campuses and buses).⁴⁷³

There is evidence indicating that media campaigns for drunk driving are an effective add-on to Random Sobriety Checks, so this intervention can be regarded as evidence-based.⁴⁷⁴ However, given the data on road deaths, which indicates that the majority of road deaths related to alcohol are pedestrians,⁴⁷⁵ it is not appropriate that drunk drivers are the main target of the campaign, rather than drunken pedestrians. Furthermore, given how much of SAB's spending is consumed by this program, the exclusion from the campaign of the major contributors to the alcohol-related burden of disease in South Africa, namely HIV, violence and mental illness, is a significant concern, which again brings the intervention out of line with available evidence.

6.2.2.10 Summary of SAB alcohol-abuse initiatives

Table 82 below summarises the data and analysis of all the SAB anti-abuse initiatives meeting the inclusion criteria of the study.

⁴⁷¹ Carmona & Stewart 1996.

⁴⁷² Carmona & Stewart 1996; Komro & Toomey 2002

⁴⁷³ South African Breweries (2010). The South African Breweries: Alcohol Strategy (Report submitted for this study).

⁴⁷⁴ Global Road Safety Partnership 2007

⁴⁷⁵ Medical Research Council of South Africa. 2009.

Table 82: SAB anti-abuse initiatives, 2010

Program name	Funding amount	Aim	Target Area	Does it address the main contributors to alcohol-related BoD?	Does it target/reach those most at risk for the harm in question?	Evidence-based?	Number of people reached?	Evaluated?	Effective?
Reality Check Advertising campaign	R50 million (since 2009)	To reduce drunk driving and FAS	FAS and drunk driving	Yes	Insufficient information provided	Yes	Likely to be large given the use of mass media	No evidence of an evaluation provided	No evidence of effectiveness provided
Responsible traders program	R100 million over 5 years	Small business development & normalisation of the liquor industry	Safe drinking environment, Responsible Serving of Alcohol	N/A	Yes	No*	19 000 taverners since 2002	No evidence of an evaluation of alcohol abuse	No data on reduction in alcohol abuse or harms provided
Alcohol Evidence Centres	R10 million	To reduce road deaths	Road deaths: drunk driving	Yes	Insufficient data provided	Yes	9 000 people processed through AECs	No evidence of an evaluation provided	No evidence of effectiveness provided
Pedestrian Safety	R1 million	To reduce pedestrian deaths	Road deaths: pedestrians	No	No	No	10 000 children (over one year)	No evidence of an evaluation provided	No evidence of effectiveness provided
FAS - FasFacts partnership	R1 million	To reduce the incidence of FAS	FAS	No	Yes	No	1 050 children, 525 adults and 95 shebeen owners	No evidence of an evaluation provided	No evidence of effectiveness provided
Reduction in billboards in high-risk communities	No information provided	Address community concerns about billboards	Advertising	N/A	Insufficient data provided	No	Insufficient data provided	No evidence of an evaluation provided	No evidence of effectiveness provided
Tavern Intervention Program	No information provided	Reduce HIV and gender violence	HIV and Gender Violence	Yes	No	No	200 men to date (plan for 800 per year)	No evidence of an evaluation provided	No evidence of effectiveness provided
Sports Diversion Program	No information provided	To reduce underage drinking and violence	Underage drinking & Violence	Yes	No	No	No data provided	No evidence of an evaluation provided	No evidence of effectiveness provided

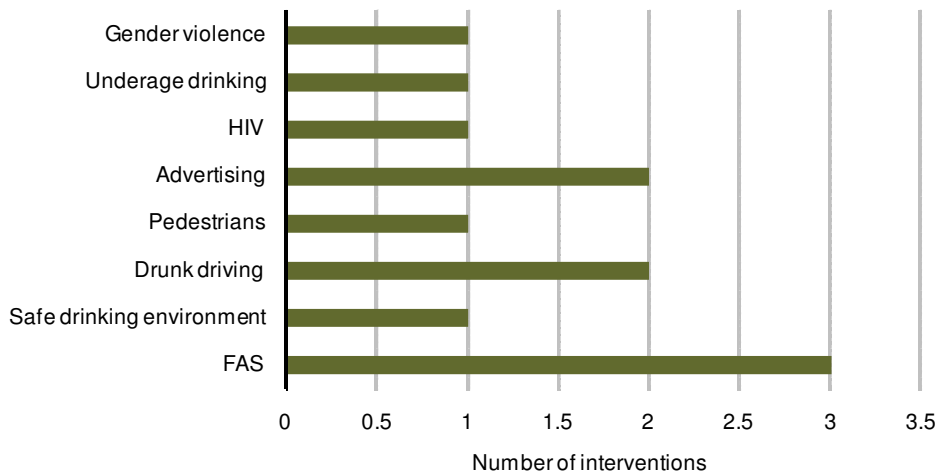
Program name	Funding amount	Aim	Target Area	Does it address the main contributors to alcohol-related BoD?	Does it target/reach those most at risk for the harm in question?	Evidence-based?	Number of people reached?	Evaluated?	Effective?
Code of Commercial Communication	No information provided	To ensure that all alcohol beverage advertising and marketing is done responsibly (does not violate the ARA Code)	Advertising	N/A	Yes	No	Small- no mass media education about the ARA given	No evidence of an evaluation provided	No evidence of effectiveness provided
FAS- DSD partnership	No information provided	To reduce the incidence of FAS and to assist those already affected by FAS	FAS	No	Too early to tell: Programs not yet selected	Too early to tell: Programs not yet selected	N/A	Programs not yet implemented	Programs not yet implemented

Source: SAB data, own analysis

** Evidence base supports safer drinking environments and responsible server interventions but only in the context of enforcement and not in the context of increased access to alcohol

The spending priorities are clearly drunk-driving and FAS, which is also evident in the analysis of the target areas of the SAB programs shown in Figure 68 below. Interestingly, there also appears to be a focus on advertising, despite SAB's position that they do not acknowledge a link between advertising of alcohol and alcohol abuse.

Figure 68: Number of SAB interventions in each target area, 2010

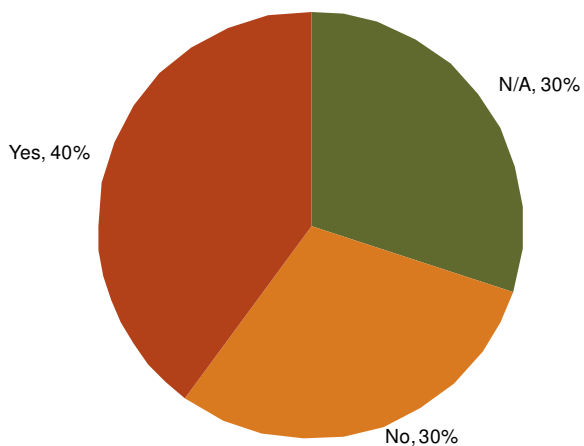


Source: SAB data, own analysis

Note: where one program addresses two target areas it is counted in both of the relevant categories

Relating the type of interventions to the burden of disease (BoD), approximately 40% of the projects target the main contributors to the alcohol-related BoD in South Africa (injuries, HIV, and mental illness) (see Figure 69 below).

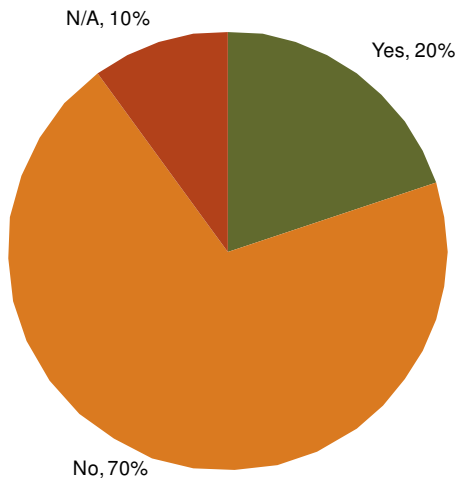
Figure 69: % of SAB initiatives that target the main contributors to the alcohol-related BoD, 2010



Source: SAB data, own analysis

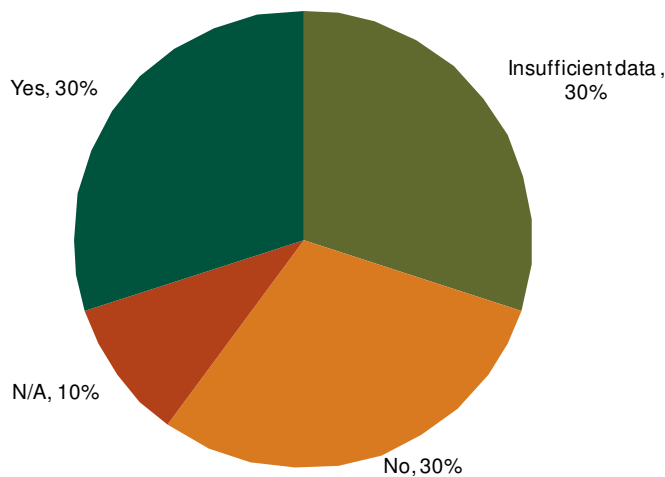
Approximately 20% of the initiatives are based on global evidence of what is effective in reducing alcohol-related harms and few programs (30%) target the highest risk groups for the harm the intervention seeks to reduce (Figure 70 and Figure 71 below).

Figure 70: % of SAB initiatives that are evidence-based, 2010



Source: SAB data, own analysis

Figure 71: % of SAB initiatives that target the highest risk groups (for the harm the program is intended to reduce), 2010



Source: SAB data, own analysis

No evaluation studies or evidence of effectiveness were provided for any of the SAB programs. Data was found indicating that the Responsible Traders program had been evaluated, but it does not appear to have been evaluated for alcohol abuse outcomes (findings only speak to growth in turnover).

6.2.3 Profile of alcohol abuse prevention initiatives by Distell, 2010

Distell reports the following eleven anti-abuse programs in 2010 that meet the study criteria for inclusion, of which more detail is provided below.

1. FAS pilot project
2. Trauma centre
3. Association for the Physically Disabled
4. Other tertiary prevention programs
7. Anna Foundation for young children
8. Farm worker life skills training
9. Path out of Poverty program
10. Pebbles project
11. Arts and Culture projects
11. Drinking and Driving campaigns

6.2.3.1 Fetal Alcohol Syndrome (FAS) pilot project

Distell reports that it is funding two pilot programs at primary schools in Wellington that aim to improve the intellectual capability of children with FAS spectrum disorder. An educational psychologist conducts the intervention. They indicate that the intervention appears not to be effective so far, but that the pilot is not yet complete.⁴⁷⁶ No further details about the methodology, nature of the intervention or how it is being evaluated are provided.

Due to the lack of information provided, it is not possible to comment on whether or not this intervention is evidence-based, however it is encouraging that the outcomes of the program are being evaluated, which is consistent with an evidence-based approach. The main points of concern with this project would be the appropriateness of focusing on FAS (as discussed above) and the fact that the intervention does not try and prevent FAS, rather it seeks to reduce the negative consequences of the condition once acquired (tertiary prevention). On the one hand, this could be viewed as too little too late but on the other hand, in terms of equity, this does appear to be an area of need, as most of the other industry FAS interventions tend to focus on prevention.

⁴⁷⁶ Distell (2010). Distell Foundation initiatives to prevent alcohol abuse or to minimise or mitigate the impact of alcohol abuse. (Report submitted for this study).

6.2.3.2 Trauma centre

Distell provides funding to the Trauma Centre, a non-governmental organization, based in Cape Town. According to the organisation's website, the aim of the centre is

"to create a non-violent environment, through providing and advocating for professional mental health services that:

- *Relieve the traumatic stress of those affected by violence.*
- *Develop and implement preventative interventions that impact on cycles of violence, based on respect for human rights.*
- *Identify and analyse the origins and dynamics of violence and trauma to inform our intervention strategy.*⁴⁷⁷

Historically, the organization has focused primarily on tertiary prevention (counselling of trauma survivors), but is now seeking to do more preventive work with a flagship preventive project in Gugulethu currently being implemented.⁴⁷⁸

No data was provided on the extent of funding provided by Distell, the nature of projects funded, the number of beneficiaries or effectiveness of the programs. It is also not clear if or how alcohol is addressed in counselling and prevention programs. As such, the likely impact of this set of programs on reducing alcohol abuse or alcohol-related violence is not possible to evaluate. However, it should be noted that there is strong evidence that mental illness and substance abuse are highly comorbid conditions such that untreated mental illness is a major risk factor for substance abuse.⁴⁷⁹ Therefore, it is reasonable to assert that by preventing or treating mental illness, the programs are likely to reduce alcohol abuse and its related harms amongst its participants. Similarly, if the preventive programs are effective in reducing violence, a major risk factor for mental illness,⁴⁸⁰ this is likely to reduce alcohol abuse. Unfortunately, as no evidence of effectiveness was provided it is only possible to conclude that these programs have the potential to be both equitable and effective and that if alcohol abuse is not addressed directly in the programs, it should be added to enhance effectiveness.

6.2.3.3 Association for the Physically Disabled

Distell reports that it is a funder of the Association for the Physically Disabled, which it says provides assistance to the physically disabled as a result of violence or road injury.⁴⁸¹ No further details were provided, therefore it is not possible to comment about this intervention. However, this intervention would clearly have little impact on preventing alcohol-related injuries.

⁴⁷⁷ http://www.trauma.org.za/html/mission_and_strategy.html. Accessed January 2011.

⁴⁷⁸ http://www.trauma.org.za/html/mission_and_strategy.html. Accessed January 2011.

⁴⁷⁹ Petrakis et al 2002

⁴⁸⁰ Krug et al 2002

⁴⁸¹ Distell (2010). Distell Foundation initiatives to prevent alcohol abuse or to minimise or mitigate the impact of alcohol abuse. (Report submitted for this study).

6.2.3.4 Other tertiary prevention programs

Distell reports donating to several other tertiary prevention programs (Turfhall Cheshire Home for quadriplegics, Groote Schuur's neonatal unit and the funding of two safe houses for victims of domestic violence). These programs are excluded from this analysis as they do not appear to aim at reducing alcohol abuse or its harms as a central focus area, and the report submitted suggests they are also not currently funded by Distell.

6.2.3.5 Anna Foundation for young children

The Anna Foundation runs programs for children aged 6-16 years on several winefarms, which focus on literacy development, physical development and encouraging healthy choices and behaviours.⁴⁸² Distell indicates that it co-funds the project at two wine farms in the Western Cape.⁴⁸³ As no further details about the program are provided, it is not clear whether it is appropriate to regard this as an anti-abuse program, and no meaningful comment on effectiveness or targeting can be made.

6.2.3.6 Farm worker life skills training

Durbanville Hills Winery, one of Distell's wine farms, works with the Stigting vir die Bemagting van Afrikaans to provide life skills training to farm workers. The only details provided are that the teaching focuses on self-respect and money management and that this has lowered alcohol abuse amongst some farm workers.⁴⁸⁴ No comment can be made due to the paucity and vagueness of information supplied.

6.2.3.7 Path Out of Poverty (POP) Program

The Nederburg Charity Auction provides support to the Goedgedacht Trust, which provides a range of programs to adolescents and adults focusing on parenting.⁴⁸⁵ According to information on the Goedgedacht website,⁴⁸⁶ the Path Out of Poverty (POP) Program centres on rural poverty alleviation and aims to "give children of farm workers a better future". The POP includes several component projects, which include the following:

- Parenting skills training
- Pre-school education
- Life skills for children aged 6-16 years
- School support (school fees, clothes, stationary, books, food etc)

⁴⁸² <http://www.annafoundation.com/projects>. Accessed January 10 2011.

⁴⁸³ Distell (2010). Distell Foundation initiatives to prevent alcohol abuse or to minimise or mitigate the impact of alcohol abuse. (Report submitted for this study).

⁴⁸⁴ Distell (2010). Distell Foundation initiatives to prevent alcohol abuse or to minimise or mitigate the impact of alcohol abuse. (Report submitted for this study).

⁴⁸⁵ Distell (2010). Distell Foundation initiatives to prevent alcohol abuse or to minimise or mitigate the impact of alcohol abuse. (Report submitted for this study).

⁴⁸⁶ http://www.goedgedacht.org.za/index.php?option=com_content&task=view&id=33&Itemid=123. Accessed 7 January 2011.

- After school educational support
- Sports program
- Food distribution to pre-schoolers
- Education on FAS
- HIV/AIDS peer training

With the exception of education on FAS and the provision of safe houses for children fleeing from drinking parents, alcohol abuse and its related harms are not specifically mentioned. It is clear from the name and objectives of the program that reducing alcohol abuse and its harms are not the central aim of the program. However, this project has been included in the analysis as there is evidence indicating that early childhood programs⁴⁸⁷ and educational attainment⁴⁸⁸ can reduce alcohol abuse in later life.

It should be noted though, that in the absence of information on the content and methodology of these programs, it is not possible to say that these programs would achieve the results found in the evidence as the effectiveness of these types of programs is heavily reliant on the quality of the intervention.⁴⁸⁹

The major gap in the program would be the absence of interventions addressing adult drinking and the major alcohol-related harms in South Africa, specifically violence, infectious diseases like HIV and TB, mental illness and road injuries. While HIV/AIDS is addressed, it is not clear that this is discussed in the context of alcohol abuse as a major risk factor for HIV/AIDS. As adults carry the greatest burden of harm from alcohol, and because adolescent drinking behaviour is likely to be influenced by adult drinking norms, it would be important to incorporate programs that address adult drinking into the POP. Additionally, to effectively reduce underage drinking, a broader range of interventions that directly address the drinking environment would need to be adopted (see above).

6.2.3.8 Pebbles project

Also through the Nederburg Charity Auction, support is provided to the Pebbles Project, which provides support and training to wine farm and township crèches as well as providing after-school programs for older children on wine farms in the winelands. The aim of the project “is to enrich the lives of children from disadvantaged backgrounds with special educational needs, especially those whose lives are affected by alcohol.”⁴⁹⁰ More than 500 children are currently beneficiaries of the project.

According to the Pebbles Project website, the programs are provided to children with any learning difficulties, whether related to alcohol or not. They report having established and supported 13 crèches, 8 after school clubs, a mobile toy library, as well as workshops involving parents and the wider communities. No formal evaluation study was found on the program website, however the

⁴⁸⁷ Schweinhart & Weikart 1998

⁴⁸⁸ Patel et al 1999

⁴⁸⁹ Engle et al 2007

⁴⁹⁰ Distell (2010). Distell Foundation initiatives to prevent alcohol abuse or to minimise or mitigate the impact of alcohol abuse. (Report submitted for this study).

December 2010 newsletter reports that in 2009, 87% of the After School Club children across all the farms passed their grade.⁴⁹¹ No indication of effectiveness in terms of underage drinking was found so it is unclear if this aspect is evaluated as an outcome.

As noted above, there is evidence to support the effectiveness of early childhood development (ECD) programs in reducing alcohol abuse and underage drinking in the long run. However, as no details of the program are given, it is not possible to verify that the programs provided meet the criteria for quality ECD. Therefore, as with the POP project it is only possible to conclude that this intervention has the potential to be effective. It is also positive to see that this project includes a component that addresses adult drinking.

6.2.3.9 Drinking and driving campaigns

Distell indicates that it discourages drink driving through its own media campaigns as well as signage highlighting the dangers of drink-driving in its brand homes.

As discussed elsewhere in this report, there is evidence that supports the use of media to reduce drink driving, however it remains problematic that this harm is the sole focus of the media campaign (to the exclusion of other major alcohol-related harms).

6.2.3.10 Arts and Culture projects

Over 25 Arts and Culture projects are assisted by Distell.⁴⁹² As no further information is given about what these entail, their purpose and whether or not they directly address alcohol abuse, they are excluded from the analysis.

6.2.3.11 Summary of Distell alcohol abuse initiatives

A summary of the data on Distell alcohol abuse initiatives is shown in Table 83 below.

⁴⁹¹ http://www.pebblesproject.co.za/news_dec10.php. Accessed January 28 2011.

⁴⁹² Distell (2010). Distell Foundation initiatives to prevent alcohol abuse or to minimise or mitigate the impact of alcohol abuse. (Report submitted for this study).

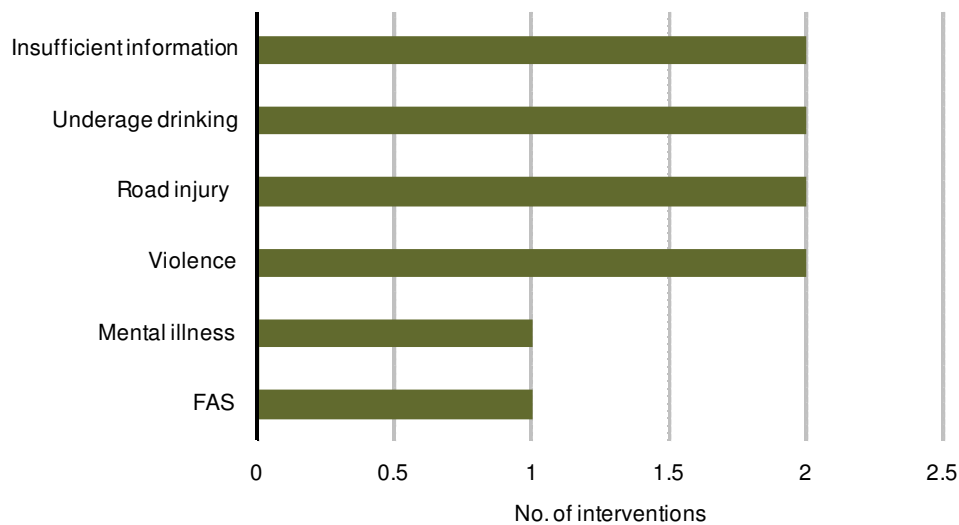
Table 83: Distell anti-abuse initiatives, 2010

Program name	Funding amount	Aim	Target area	Does it address the main contributors to alcohol-related BoD?	Does it target/reach those most at risk for the harm in question?	Evidence-based?	Number of people reached?	Evaluated?	Effective?
FAS pilot project	No Data Provided	To improve the intellectual ability of children with FAS	FAS (tertiary prevention)	Yes	Yes	Insufficient information provided	Insufficient information provided	Yes- but study not provided	Intervention still being implemented
Trauma centre	No Data Provided	To provide counselling to trauma survivors and violence prevention	Mental Illness & Violence	Yes	Insufficient information provided	Insufficient information provided	Insufficient information provided	Insufficient information provided	Insufficient information provided
Association for the Physically Disabled	No Data Provided	To re-enable physically disabled people	Violence and road injury (tertiary prevention)	Yes	Insufficient information provided	Insufficient information provided	Insufficient information provided	Insufficient information provided	Insufficient information provided
Anna Foundation for young children	No Data Provided	To promote child development	Insufficient information provided	Insufficient information provided	Insufficient information provided	Insufficient information provided	Insufficient information provided	Insufficient information provided	Insufficient information provided
Farm worker life skills training	No Data Provided	Insufficient information provided	Insufficient information provided	Insufficient information provided	Insufficient information provided	Insufficient information provided	Insufficient information provided	Insufficient information provided	Insufficient information provided
Path out of Poverty Program	No Data Provided	To improve the future of rural children	Underage Drinking	No	Insufficient information provided	Yes	Insufficient information provided	Insufficient information provided	Insufficient information provided
Pebbles project	No Data Provided	To enrich the lives of children from disadvantaged backgrounds with special educational needs	Underage Drinking	No	Yes	Yes	More than 500 children	Yes- but study not provided	Insufficient information provided
Drinking and Driving campaigns	No Data Provided	To reduce drink-driving	Drink driving	Yes	Insufficient information provided	Yes	Mass media therefore likely to be large	No evaluation provided	No evidence of effectiveness provided

Source: Distell data, own analysis

Unfortunately very little data was provided by Distell on many of the initiatives. As shown in Figure 72 below, where data was given it indicates that underage drinking, road injuries and violence appear to be the current priority areas of Distell. It is very encouraging to see violence being addressed (although preventing violence is by far preferable to ameliorating its effects after it has occurred) and it is also very positive to see programs addressing mental illness, which is largely overlooked by the other liquor industry manufacturers, despite being a large component of the BoD.

Figure 72: Number of Distell interventions in each target area, 2010

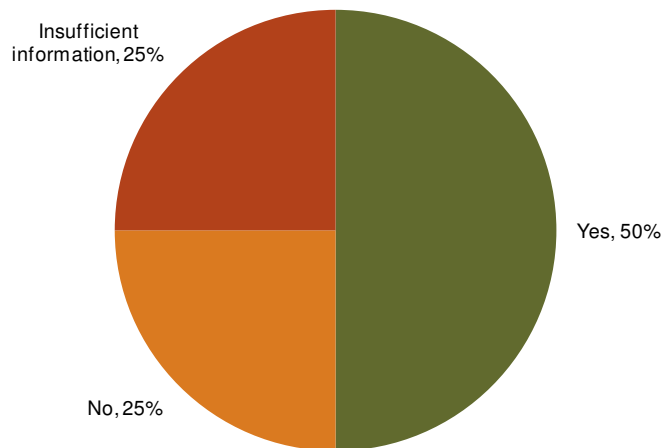


Source: Distell data, own analysis

Note: where one program addresses two target areas it is counted in both of the relevant categories

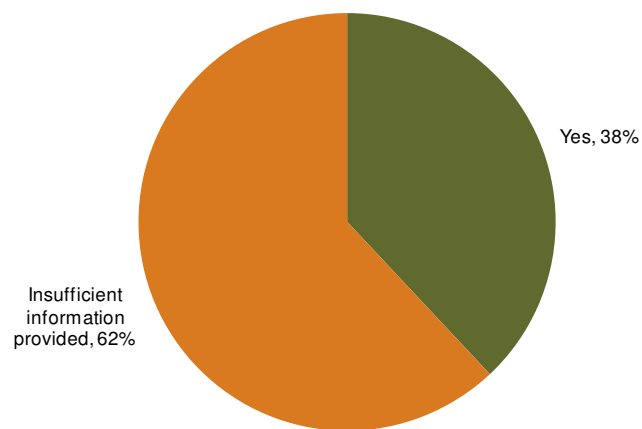
The analysis shows that approximately 50% of interventions by Distell address the major BoD from alcohol in South Africa (Figure 73 below), 38% of these are evidence-based (Figure 74 below) and 25% of programs target those most at risk for the harm in question (100% of interventions on which sufficient information was provided for assessment).

Figure 73: % of Distell initiatives that address the major alcohol harms in South Africa, 2010



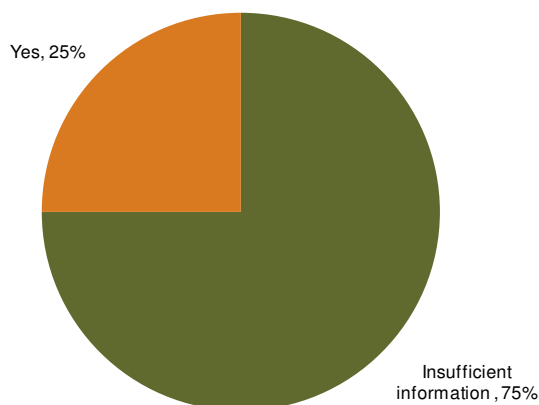
Source: Distell data, own analysis

Figure 74: % of Distell initiatives that are evidence-based, 2010



Source: Distell data, own analysis

Figure 75: % of Distell initiatives that target the highest risk groups for the harm in question, 2010



Source: Distell data, own analysis

Evaluation of programs was reported for 25% (2) of the programs and no evidence of effectiveness was provided for either of these.

6.2.4 Profile of Brandhouse's initiatives to combat alcohol-related harm, 2010

Brandhouse reported the following five anti-abuse programs in 2010, which meet the study's inclusion criteria.

1. Drive Dry Advertising campaign
2. No 1 Taxi Driver Competition
3. Jonny Walker Red Label "Join the Pact" program
4. Underage Drinking program
5. Drink IQ

6.2.4.1 Drive Dry Advertising campaign

Brandhouse states that, following research commissioned by them into why South Africans drink drive, the company launched their Drive Dry media campaign which seeks to raise awareness about drink driving, with the aim of reducing drink driving.⁴⁹³ Requests for further information on the details of the interventions designed and its subsequent impact were not successful.

⁴⁹³ Brandhouse. 2010. Brandhouse Corporate Social Responsibility (Report submitted for this study)

In terms of reducing drunk driving, the evidence does support the effectiveness of using media campaigns to enhance law enforcement efforts,⁴⁹⁴ so in terms of the project's stated aims, the intervention can be viewed as evidence-based. However, as discussed above, targeting drunk driving to the exclusion of other more significant contributors to the alcohol-related burden of disease, including pedestrian deaths, violence and infectious diseases like HIV and TB, is out of keeping with evidence on the BoD. No detail was provided on how much of Brandhouse's anti-abuse spending was absorbed by this project, and thus it is not clear whether its focus on this area is out of proportion with the BoD.

6.2.4.2 No 1 Taxi Driver Competition

This program was launched in 2004 with the aim of improving road safety through educating minibus taxi drivers to be responsible drivers.⁴⁹⁵ According to a Brandhouse press release in November 2010,⁴⁹⁶ Brandhouse partnered with Toyota and the Road Traffic Management Corporation on this project in 2010, with 2 240 taxi drivers participating in the program. Brandhouse declined to give details on the contents of the program, but according to the press release, participants receive instruction in advanced driving from the Toyota Advanced Driving Academy. There are Regional and National competitions for the best taxi driver; criteria for selection of the best taxi driver include not drinking and driving. No data is provided as to how this is established or how the problems of drink driving and drunken pedestrians are dealt with in the training.

Due to the paucity of information provided, it is not possible to comment on whether or not this program is in line with available evidence on reducing alcohol-related road deaths.

6.2.4.3 Jonny Walker Red Label "Join the Pact" program

Brandhouse launched the Jonny Walker Red Label Join the Pact campaign in South Africa, which is part of Diageo's global campaign to raise awareness about drunk driving by asking consumers to sign a pledge not to drink drive, either online or at particular events.⁴⁹⁷ No further details about the program were provided by Brandhouse. According to a communication issued by the Office of the Premier of the Western Cape⁴⁹⁸ the campaign was launched in November 2010 at the FNB Whiskey Festival.

The author is not aware of any scientific evidence that has demonstrated that signing a pledge reduces drink driving, and it is not mentioned as a suggested strategy in the World Health Organisation's Report on the prevention of road injuries or in the WHO Global Alcohol Strategy recommendations. However, there is evidence that media campaigns in general are an effective add-

⁴⁹⁴ Global Road Safety Partnership 2007

⁴⁹⁵ Brandhouse. 2010.

⁴⁹⁶ <http://www.brandhouse.co.za/News.aspx?Page=2>. Accessed 20 January 2011.

⁴⁹⁷ Brandhouse. 2010.

⁴⁹⁸ <http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=14210&tid=23611>. Accessed 20 January 2011

on to strengthen other drink-driving interventions,⁴⁹⁹ therefore there are some merits to the broader campaign on raising awareness about the harms of drunk driving.

6.2.4.4 Under-age drinking program

Brandhouse is planning an intervention to address teen-drinking, targeting high-school learners from grades 8-12.⁵⁰⁰ As it is not currently operational, it is excluded from this analysis. However, it should be mentioned that adolescents are not the main group experiencing alcohol-related harm in South Africa.⁵⁰¹

6.2.4.5 Drink IQ

Drink IQ is a website created by Diageo that provides information to consumers about alcohol and its harms as well as providing tips on how to consume alcohol responsibly. According to Brandhouse, it will be launched to the South African public in January 2011.⁵⁰² No further information on the website was provided by Brandhouse.

The content of the website (www.drinkIQ.com) covers a wide range of topics, including those often neglected in South African educational interventions, such as mental illness. However, major alcohol-related harms in South Africa, such as drunken pedestrians, violence, mental illness and sexual risk behaviour, are not highlighted and tips for avoiding these harms are not provided. Additionally, it appears that the information and video material are not provided in any South African languages except English. This, combined with the fact that just over 10% of South Africans are able to access the internet,⁵⁰³ would make this program largely inaccessible to those most at risk for alcohol-related harm in South Africa. Furthermore, the global evidence on general educational campaigns indicates that they are not effective in reducing alcohol-related harm.⁵⁰⁴

6.2.4.6 Summary of Brandhouse anti-abuse initiatives

A summary of the analysis of Brandhouse initiatives aimed at reducing alcohol abuse and its harms is shown in Table 84 below.

⁴⁹⁹ Global Road Safety Partnership 2007

⁵⁰⁰ Brandhouse. 2010. Brandhouse Corporate Social Responsibility (Report submitted for this study)

⁵⁰¹ We acknowledge that adolescents are at high risk for binge-drinking, and thus that addressing binge-drinking in this group could possibly be beneficial in the short-term. However, it has not been established that such measures will have any long-term effect, particularly where binge-drinking remains the norm amongst adult groups that adolescents emulate, and will certainly not have any immediate effect on alcohol-related harm at a population level.

⁵⁰² Brandhouse. 2010. Brandhouse Corporate Social Responsibility (Report submitted for this study)

⁵⁰³ <http://www.worldwideworx.com/2010/01/18/sa-internet-growth-accelerates/>. Accessed February 2011.

⁵⁰⁴ Babor et al 2003

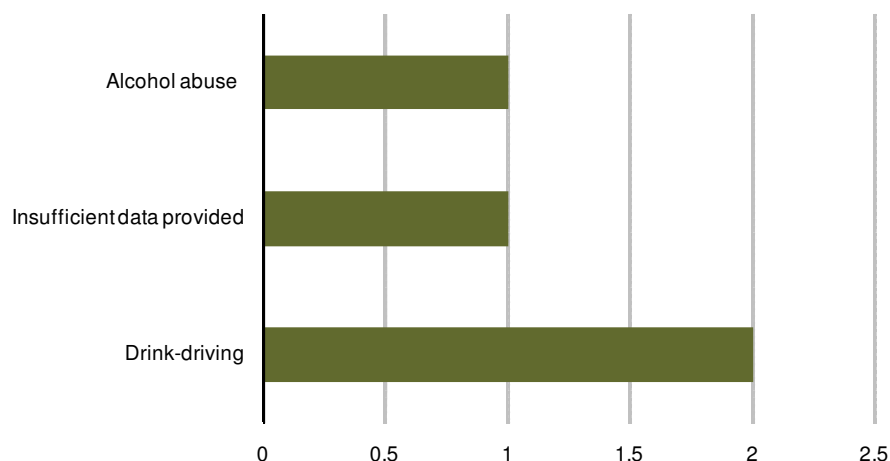
Table 84: Brandhouse anti-abuse initiatives, 2010

Program name	Funding amount	Aim	Target Area	Does it address the main contributors to alcohol-related BoD?	Does it target/reach those most at risk for the harm in question?	Evidence-based?	Number of people reached?	Evaluated?	Effective?
Drive Dry Initiative	No data provided	To reduce drink driving	Drink-driving	Yes	Insufficient data provided	Yes	Mass media therefore likely to be large	No evidence of an evaluation provided	No evidence of effectiveness provided
No 1 taxi Driver's program	No data provided	To improve road safety	Insufficient data provided	Insufficient data provided	Insufficient data provided	Insufficient data provided	Insufficient data provided	No evidence of an evaluation provided	No evidence of effectiveness provided
Jonny Walker Join the Pact campaign	No data provided	To reduce drink driving	Drink-driving	Yes	No	Yes	Insufficient data provided	No evidence of an evaluation provided	No evidence of effectiveness provided
Drink IQ website	No data provided	To raise awareness of how to drink responsibly	Alcohol abuse	Yes	No	No	Insufficient data provided	No evidence of an evaluation provided	No evidence of effectiveness provided

Source: Brandhouse data, own analysis

Figure 76 below indicates that drunk driving is the main focus of Brandhouse 's alcohol abuse programs. Both alcohol abuse and drink driving are major contributors to the BoD, so these are appropriate areas to invest in. However, the absence of programs addressing other major harms such as drunken pedestrians, violence, HIV and mental illness is of concern.

Figure 76: Number of Brandhouse interventions in each target area, 2010



Source: Brandhouse data, own analysis

Half of the programs are evidence-based but none were shown to be targeting the populations most at risk for these harms (see Table 84 above). No evidence of evaluations of the programs or their effectiveness was provided.

6.2.5 Profile of initiatives by Wine Cellars SA and VinPro, 2010

Wine Cellars SA and VinPro reported the following four anti-abuse programs in 2010, which meet the study's inclusion criteria.

1. Code of Good Practice for Wineries (Wine Cellars SA)
2. Promotion of responsible conduct by the wine industry through Wineland Magazine (VinPro)
3. Cape Wine Academy
4. RUDNET

6.2.5.1 Code of Good Practice for Wineries (Wine Cellars SA)

Wine Cellars SA indicates that they have recently adopted a Code of Good Practice to provide the industry with guidelines on the responsible marketing of alcohol products, with the aim of protecting

consumers from potential alcohol-related harm.⁵⁰⁵ The code and details of its implementation were not provided, therefore it is not possible to give a detailed analysis of the program. However, as stated above, there is strong evidence that self-regulation of alcohol marketing is ineffective.⁵⁰⁶

6.2.5.2 Promotion of responsible conduct by the wine industry through Wineland Magazine (VinPro)

The Wineland magazine is published by VinPro and is used by VinPro to communicate “the importance of responsible conduct in the industry” to its readers, who are said to include wine growers, wineries, wine marketers and consumers.⁵⁰⁷

No details were provided on what specific industry practices have been promoted, or if there has been an attempt to evaluate whether or not these practices have indeed been adopted as a result of this publication. Due to paucity of data, it is not possible to comment on whether or not the measures promoted are in line with available evidence.

6.2.5.3 Cape Wine Academy

The Cape Wine Academy (CWA) trains approximately 2 000 students a year in wine studies, which includes a component on how to serve alcohol responsibly. Students include liquor retailers, students studying hospitality and tourism and members of the general public. Bursaries were recently provided by the CWA to 37 students from disadvantaged backgrounds.⁵⁰⁸

The global evidence on alcohol-related harm prevention indicates that responsible server training is only effective if monitored and enforced.⁵⁰⁹ As this program is a training program, there is presumably no monitoring and enforcement of responsible server practices associated with it. It is therefore unlikely to achieve the aim of reducing alcohol abuse and related harm. The efforts made to ensure access to persons from disadvantaged backgrounds are to be applauded, however it is not clear that these include existing retailers trading in poorer areas, where many of the alcohol-related harms accumulate.

6.2.5.4 RUDNET

RUDNET is partially funded by Wine Cellars SA and/or VinPro and consists of a network of non-governmental organizations whose central aim is to enhance the quality of life of farm-workers through the provision of several programs, which include the following:⁵¹⁰

- Empowerment programs for youth and women, which include providing information on alcohol abuse (seven areas of implementation are listed, all within the Western Cape)

⁵⁰⁵ Wine Cellars SA and VinPro. 2010. Wine Cellars Sa and Vinpro Submission (Report submitted for this study).

⁵⁰⁶ Jones et al 2008

⁵⁰⁷ Wine Cellars SA and VinPro. 2010. Wine Cellars Sa and Vinpro Submission (Report submitted for this study).

⁵⁰⁸ Wine Cellars SA and VinPro. 2010. Wine Cellars Sa and Vinpro Submission (Report submitted for this study).

⁵⁰⁹ Wells & Graham 2003; Ker & Chinnock 2006

⁵¹⁰ Wine Cellars SA and VinPro. 2010.

- Life Skills training
- Training to local Drug Action Committees in 16 districts across the Western Cape (funded by the Western Cape Department of Social Development)
- Farmworker lay-counselling training programs, which train farmworkers to provide counselling on domestic violence, substance abuse, FAS and HIV/AIDS.
- Support for people affected by abuse
- Creation of work opportunities

According to RUDNET's website,⁵¹¹ the organisation has several funders, including several government departments. No information was provided by Wine Cellars SA or VinPro on the extent of their funding to the organization, or the nature of the programs (e.g. what methods are used to prevent or treat substance abuse). Due to the paucity of information it is not possible to comment on the likely impact of the programs listed.

6.2.5.5 Summary of initiatives by Wine Cellars SA and VinPro

Table 85 below summarises the data on alcohol-abuse initiatives of Wine Cellars SA and VinPro.

⁵¹¹ http://www.rudnet.org.za/index.php?option=com_content&view=article&id=48&Itemid=53. Accessed 20 December 2010.

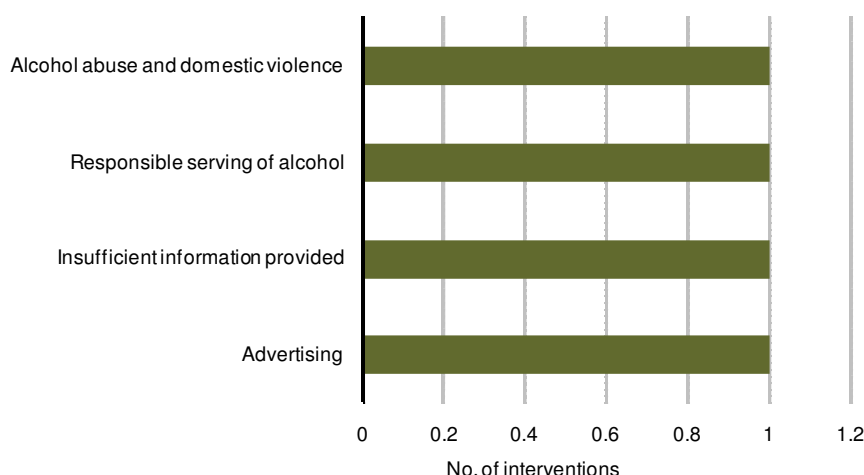
Table 85: Wine Cellars SA and Vinpro anti-abuse initiatives, 2010

Program name	Funding amount	Aim	Target Area	Does it address the main contributors to alcohol-related BoD?	Does it target/reach those most at risk for the harm in question?	Evidence-based?	Number of people reached?	Evaluated?	Effective?
Code of Good Practice for Wineries	No data provided	Responsible marketing of alcohol	Advertising	N/A	Insufficient information provided	No	Insufficient information provided	Insufficient information provided	Insufficient information provided
Promotion of responsible conduct by the wine industry through Wineland Magazine (VinPro)	No data provided	Adoption of responsible practices by the Wine Industry	Insufficient information provided	Insufficient information provided	Insufficient information provided	Insufficient information provided	Insufficient information provided	Insufficient information provided	Insufficient information provided
Cape Wine Academy	No data provided	To promote responsible serving of alcohol	Responsible serving of alcohol	N/A	Insufficient information provided	No	At least 2000 per year	No evaluation provided	No evidence on effectiveness provided
RUDNET	No data provided	To enhance the quality of life of farm-workers, includes reducing alcohol abuse and domestic violence	Alcohol abuse and domestic violence	Yes	Insufficient information provided	Insufficient information provided	Insufficient information provided	No evaluation provided	No evidence on effectiveness provided

Source: Wine Cellars SA and VinPro data, own analysis

Figure 77 below summarises the intervention areas of Wine Cellars SA and VinPro initiatives.

Figure 77: Number of Wine Cellars SA and Vinpro interventions in each target area, 2010



Source: Wine Cellars SA and VinPro data, own analysis

Across the four programs, one addresses a major BoD harm, two (50%) are not evidence-based and no data on evaluations or effectiveness were provided (see Table 85).

6.3 Discussion of findings

Despite the many gaps in the data supplied by industry it has been possible to draw a number of conclusions as to the likely effectiveness of industry anti-abuse programs. It is encouraging to see evidence that the liquor industry appears to be broadening its scope of interventions (with many of such programs appearing to have been initiated late in 2010). Several new initiatives are targeted at previously ignored areas, such as violence and HIV, which is encouraging. However, although the major manufacturers of alcohol have invested in a wide range of anti-abuse programs, a number of issues have significantly reduced the effectiveness of their spending, including the following:

- **Industry spending priorities are out of keeping with local evidence on alcohol-related harm:** anti-abuse programs are currently heavily focused on FAS, drink-driving and underage drinking, which is out of keeping with local evidence on the burden of alcohol related harms. FAS is a relatively minor harm (6% of total BoD), there are more drunk pedestrian deaths than drunken driver/passenger deaths, and the highest risk group for alcohol-related harms are aged 18- 35 years, not adolescents).⁵¹² Major alcohol-related harms such as violence, HIV/AIDS,

⁵¹² We acknowledge that adolescents are at high risk for binge-drinking, and thus that addressing binge-drinking in this group could possibly be beneficial in the short-term. However, it has not been established that such measures will have any long-term effect, particularly where binge-drinking remains the norm amongst adult groups that adolescents emulate, and will certainly not have any immediate effect on alcohol-related harm at a population level.

tuberculosis, mental illness and drunken pedestrians receive disproportionately little attention from the liquor industry. In some instances there are no programs addressing these major burdens, and where they do exist, they tend to be inappropriately targeted, not evidence-based and too small to have any population level effect.

- **The majority of programs are not evidence-based and are not evaluated:** a large body of research is available on what anti-abuse interventions work and which do not. Unfortunately, the majority of programs currently implemented by the liquor industry are not based on this evidence. At worst, money is being spent on interventions which have been shown to be ineffective. At best, non-evidence based interventions should be regarded as experimental (in which case more attention must be paid to assessing effectiveness). For example, the largest and most expensive programs undertaken by industry are mass media educational campaigns, which, with the exception of mass campaigns around drunk driving, have been shown by global researchers to be ineffective. Where ineffectiveness has not been proven, there is no indication that additional effort is being expended made to evaluate experimental interventions. Indeed, of all 36 programs reviewed, only 4 programs were found to have been evaluated.
- **The majority of industry abuse programs do not target the groups most at risk for the harm they are seeking to reduce:** for an intervention to be effective, efficient and equitable it should target those most at risk for the harm in question. Improper targeting always reduces the effectiveness of spending, and if issues with targeting the wrong population are severe enough, the effectiveness of a program can be almost entirely wiped out. Poor targeting of programs can be considered a major opportunity cost as this money could be spent more usefully on those at highest risk.

Lastly, perhaps one of the most significant findings of this study has been the difficulty faced by the regulator when gathering evidence on industry anti-abuse initiatives. Many members of the liquor industry have been unwilling to provide detailed data on the amounts spent on projects, methodology employed, number of beneficiaries reached and whether or not their projects are evaluated.

As indicated earlier, the starting point of this research was to circulate a questionnaire to the major liquor manufacturers as regards the detail of their anti-abuse programs (attached as Appendix 6). None of the recipients of this questionnaire filled in the requested information. Where appropriate, the questionnaire was amended to take account of concerns raised by industry, (for example by rewording questions about harms to acknowledge the sometimes indirect nature of causation from alcohol consumption). Despite this concession, industry participants remained unwilling to complete the questionnaire, and instead, the major liquor manufacturers compiled their own reports about their programs, which supplied very limited information in general.

As commercial entities, liquor producers are incentivised to cut costs and maximise profits. Although ethical companies may voluntarily spend appropriately on anti-abuse programs, even where such

programs may reduce sales and thus lower profits,⁵¹³ an inherent conflict of interests exists. In order to ensure that spending levels are appropriate and appropriately focused, it is essential that the state be able to access detailed program information, in order to monitor compliance. The ability of the industry to deny program data to the regulator (as evidenced by this research process, undertaken on behalf of the NLA) indicates a lack of accountability, which raises serious doubts about the concept of industry-led anti-abuse programs.

6.4 Way forward

As has already been established, the economic and social burden of alcohol abuse in South Africa is extremely large, and effective interventions to reduce this burden should be regarded as a policy priority. The global evidence on alcohol abuse interventions demonstrates unequivocally that the most cost-efficient interventions are whole population interventions, which reduce access to alcohol through mechanisms such as raised alcohol price, reduced trading hours and/or limiting liquor outlet density. The liquor industry rejects these measures in favour of “targeted” interventions. For targeted interventions to have any significant impact, they need to prioritize addressing the commonest problems (burden of disease) caused by alcohol, target the most at-risk groups and adopt the most effective interventions for these specific harms. Unfortunately, this analysis suggests that the majority of industry programs in South Africa are typically not aligned with the burden of disease (BoD), do not target those most at risk and are not evidence-based.

It is not enough for industry to simply invest in anti-abuse programs, regardless of their effectiveness. In the context of the enormous costs incurred by alcohol abuse, as demonstrated in this report, it is clear that there is a massive opportunity cost associated with investing in programs that do not reduce the BoD because they target the wrong harm, the wrong target group or make use of ineffective interventions. Similarly, to have several large programs targeting the same problem (e.g. drink-driving or FAS) while there are major gaps in other areas (e.g. drunken pedestrians, violence or mental illness) will minimize the ability of industry to contribute to reducing the harm from its products.

Of course, certain harms are easier to reduce than others, but to reduce the massive cost of alcohol in South Africa, it is crucial to address the biggest harms using evidence-based interventions. There is a wealth of evidence available on what is effective,⁵¹⁴ and where there are strong grounds for adapting these interventions to the local context, or where new types of interventions need to be tried, these programs need to be monitored for effectiveness. To minimize wastage, proven programs should receive the bulk of funding.

More fundamentally, consideration needs to be given to whether or not it is appropriate for the liquor industry to select and administer anti-abuse and harm reduction programs. The liquor industry may currently lack the knowledge or skill to effectively design, implement and evaluate anti-abuse

⁵¹³ The global evidence base indicates that the most cost-effective approach to rapidly reducing alcohol-related harm is by reducing access to alcohol, through, for example, raising prices, reducing trading hours or reducing the density of liquor outlets. (Anderson et al 2009).

⁵¹⁴ Anderson et al 2009; World Health Organization 2011

programs, although this problem could be overcome with time. What is much more difficult to overcome is the inherent conflict of interest between the commercial objectives of profit maximisation (which will often include maximising volumes sold), and the obligation placed on industry to invest in measures intended to decrease how much people drink.

As a minimum, more clarity is needed as to industry anti-abuse obligations. At present, s13 of the Liquor Act 2003 states that one of the criteria on which applications for registration will be evaluated is “the applicant’s proposed contribution to combating alcohol abuse, including whether the applicant has subscribed to any industry code of conduct approved by the Minister.” No further guidance is provided as to the required level of spending, whether anti-abuse programs should be targeted on specific aspects of the burden of disease, what types of interventions are needed, who should be targeted, what the scope of such projects should be, and whether evaluations of effectiveness are necessary. Such requirements could be formalised in the Liquor Act regulations, but would require high-level monitoring, surveillance and enforcement.

However, more stringent regulation of anti-abuse programs will not deal with the inherent conflict of interest between the profit-maximising goals of industry, and the need to reduce the volume of harmful drinking. Policing such regulations may also be onerous for the regulator. Given the massive burden of health and economic harm from alcohol abuse, it is imperative to set up an independent body sufficiently skilled to design, implement and evaluate programmes that will effectively and rapidly reduce alcohol-related harm.

One way in which this could take place would be to earmark funds from excise collections for a government or independently managed anti-abuse fund (if responsibility for financing anti-abuse initiatives was removed from the liquor industry, an increase in excise rates to finance such earmarked funds would arguably be appropriate).⁵¹⁵ An independent Alcohol Research, Intervention and Evaluation Unit, populated by both government representatives and experts in the field, would not face a conflict of interest in dealing with alcohol abuse, and would be better placed to address the national pattern of the burden of disease.

Additional research on this area is needed, in order to evaluate whether more stringent regulation of industry or an independent anti-abuse body is more likely to have the required effects (although it seems likely on a prima facie basis that the best regulatory outcome would be the establishment of an independent body). What is clear though is that some form of intervention is needed, as the current status quo is ineffective. The size of the effects of alcohol abuse on some of South Africa’s most vulnerable communities make this a policy priority.

⁵¹⁵ Parry, C.D.H., Morojele, N.K., Jernigan, D. 2008. *Action for a Sober South Africa* [News & Notes] Addiction, 103, 2071

7 CONCLUSIONS AND RECOMMENDATIONS

Alcohol has an unusual position in modern society. As a psychoactive substance, it is addictive, and has been shown to be associated with a number of negative health and social outcomes. At the same time, however, the use of alcohol is firmly entrenched in most modern societies, provides a great deal of pleasure to those who consume it, and when consumed in a responsible manner, has a positive impact on health outcomes. Because of these factors, and to some extent because of the long history of alcohol consumption in many cultures, alcohol remains one of the very few psychoactive substances which is more-or-less freely available to the general population.

In practise, these characteristics of alcohol mean that, in order to maximise the value added by its production and minimise the harms associated with its consumption, much more active regulation of this product is needed than of much of the rest of the economy. The liquor industry can and should be a positive influence on both the economy of South Africa and its culture, but more needs to be done to ensure that this is the case.

This report has covered a very wide range of topics, and numerous recommendations have been made during the course of the text. In this concluding section we begin by focusing on five areas of particular concern, where policy and regulatory interventions are needed most urgently. A summary of other potential interventions is then provided.

1: Shebeen licensing

Far too high a proportion of South African on-consumption and off-consumption retail activity takes place at unlicensed outlets or shebeens. Because so much of the market is unlicensed, the legitimacy of the regulatory regime is compromised, and it becomes extremely difficult to control outlet numbers or enforce responsible business practices. This has placed limits on the scope of what South African alcohol policy can achieve, and has been associated with high costs of alcohol abuse in the impoverished communities in which shebeens are most often found.

Increasing the proportion of licensed shebeens is a complex issue that intersects with a number of other regulatory problems, not least the backlog in commercial zoning in townships. An initiative which might help to accelerate change would be to investigate whether current license requirements are part of the impediment to rolling out licenses, and specifically whether there are license requirements that can be removed or reduced without substantively affecting the safety of patrons. This kind of intervention should only be undertaken if careful research on its likely impact on social, economic and health outcomes has first been conducted.

2: Tying and foreclosure

The ability to physically place product in reach of the consumer is crucial to liquor producers from a competitive standpoint. In other words, the ability to restrict one's competitors from getting shelf space at on- and off-licenses has the potential to cause great harm to competitive forces. A specific restriction on tying (which is typical of this kind of anti-competitive strategy), which was contained in the 1989 Liquor Act, is no longer present in the Liquor Act 2003. Its re-inclusion in the legislation should be considered.

Prohibitions on tying are of particular relevance given the importance of licensing shebeens. An unlicensed outlet cannot be directly supplied by producers, and thus cannot be tied in. Once a license is issued, the producer can sell directly to the outlet, and the potential for anti-competitive tying is created. The greater the impetus to license the informal sector, the greater the potential for anti-competitive tying.

Tying is only one of a range of anticompetitive actions which dominant firms may take. A prohibition on tying could be usefully supplemented by including all the prohibited practices listed in Chapter 2 of the Competition Act 1998 in liquor licensing conditions.

3: Illicit alcohol

The ability to control the physical product is a critical part of alcohol regulation, in order to ensure the orderly collection of excises, to guarantee the safety of the product for human consumption, and to guard against retail practices which may increase the likelihood of alcohol abuse. This research process uncovered substantial albeit often anecdotal evidence of large volumes of illicit product in the South African liquor market.

More efforts need to be made to control such illicit activity. No single recommendation is likely to resolve the problem, as action appears to be needed in several areas. Initiatives that should be considered include encouraging larger retail chains to self-regulate to ensure that they do not stock pirate brands (and publicising any failure to do so); improving cooperation between the various agencies involved in regulating this market, both domestically and on a cross-border basis; and (possibly) licensing ethanol manufacturers.

4: Anti-abuse programs

Far too many of the industry anti-abuse programs currently in place are failing to address the principle harms associated with alcohol abuse, as they are targeting the wrong harm, the wrong target group or making use of ineffective interventions. An effective intervention would be to remove the responsibility for conducting anti-abuse programs from industry and place it in the hands of an independent or state-run body. This would have the advantage of removing the inherent conflict of interest between the goals of anti-abuse programs and the commercial incentives faced by alcohol producers to try to promote sales growth. If an independent body is not possible, at the very least more needs to be done to set formal requirements on liquor companies as to their obligations in this area, and to monitor that those obligations are met.

5: Regulatory capacity

Effective regulation starts with adequately resourced regulators – in other words, regulators which have enough staff, with the right skills and experience, and adequate funding of operations, to undertake the regulatory task set out in legislation. The size of the economic and social costs associated with alcohol abuse are substantial, and suggest that investment in regulatory capacity in this sector would be likely to have direct economic benefits. However, anecdotal evidence suggests that national and provincial regulators may be under-capacitated. This is of particular concern given

that research suggests that many of the possible interventions into the industry are only effective at reducing harm if they are properly enforced and monitored.

International good practice shows that most regulators assess their resourcing requirement by undertaking an analysis of their regulatory tasks and the associated level of effort. This can be done by mapping all regulatory tasks and determining the gaps between the current status-quo and their legislative objectives, and by ensuring that regulatory tasks are configured so as to mitigate industry risks (for example, a rise in the availability of illicit alcohol). This extensive analysis is generally reviewed on a regular basis (e.g. every five years) to ensure that regulatory capacity remains adequate to the needs of the sector. It would be appropriate to undertake such analysis on the NLA at this time.

6: Other possible interventions

Other areas of concern include the following:

- **Better regulatory record-keeping:** data on liquor licensees is currently extremely difficult to collate, both at a national and provincial level. Data is typically either stored in paper files, or in unwieldy and outdated electronic format. As a result, it is extremely difficult to use the data inherent in these records to assist the task of regulating. Initiatives to improve the quality of regulatory record-keeping, ideally by transforming it into electronic formats, need to be prioritised.
- **The quality of regulatory data:** a related issue concerns the quality of regulatory data. Although substantial data is currently collected on licensee activities, the way in which it is formatted reduces its usefulness substantially. For example, at national level there is no consistency in the way volumes sold are reported – some licensees do so by revenue, some by volume of physical product, and others by another measure. Attention is needed in this area.
- **Legislative complexity:** although differences between provincial legislation can be a useful way of trialling regulatory initiatives, arbitrary differences between provincial legislation for no good reason simply make enforcement more complex without yielding any benefits. A reduction in such arbitrary differences would be useful.
- **Alcohol advertising regulation:** the manner in which alcohol advertising is regulated seems fairly permissive from an international perspective. It may be worthwhile to conduct research as to whether a more rigorous regime is advisable.
- **Excise exemptions for communal drinking:** the consumption of informally produced concoctions poses health risks for the very poor. It may be possible to crowd out concoctions by reducing excise rates on formally produced beverages, while protecting excise collections levels by only doing so on liquor packaged for communal consumption in the informal market. The pros and cons of such an initiative should be carefully evaluated to ensure that the risk of encouraging binge drinking does not outweigh the potential benefits.

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APPENDIX 1: CHOICE OF INTERNATIONAL COMPARATORS

Because every country and society is unique, it is never possible to choose a perfect international comparator. However, a carefully chosen comparison group can provide invaluable insights into possible regulatory paths, and highlight what achievements are in fact possible. Conversely, a poorly chosen comparison group will include countries that are so different that the lessons of their regulatory experience are irrelevant, and/or countries which have very poor regulatory outcomes and which should not be emulated.

Methodology

The starting point for the selection of relevant country comparators was the World Bank's World Development Indicators, which contains data on 211 countries. The starting group of 211 countries was then systematically reduced, by stripping out countries which either were felt to be poor comparators to South Africa, or poorly performing in terms of their liquor regulatory environment. World Bank data was supplemented with data from the World Health Organisation's 2004 "*Global Status Report: Alcohol Policy*," and consideration was given to data availability issues.

The following factors were taken in to consideration:

- **dti preferences:** as per dti's request, Australia and Canada were excluded from the sample group
- **Population size:** countries with very small or very large populations may have very different regulatory approaches. In order to reduce the influence of this on the sample, and to reduce the sample size to manageable limits, all countries with populations below 4 million or above 1 billion in size were removed from the sample
- **Cultural differences in treatment of alcohol consumption:** the largest single cultural difference in the treatment of alcohol consumption is related to religious beliefs, and specifically the prohibition on alcohol in Islam. Therefore all countries with large Muslim populations were removed from the sample (defined as approximately 50% or more Muslim population, as per the CIA World Fact Book)
- **Development:** Very poor countries are generally characterised by weak human capital and institutions, and have a very different set of policy priorities and constraints than more developed countries. Countries with a GDP per capita (in constant 2000 US\$ terms) of below \$1000 were therefore removed from the sample, in order to enhance comparability to the South African socio-economic and policy environment.
- **Strength of legal rights index:** regulation relies on the enforceability of laws for its efficacy. Countries with a rating of 2 or below on the legal rights index⁵¹⁶ were thus removed

⁵¹⁶ The index is defined as follows: "Strength of legal rights index measures the degree to which collateral and bankruptcy laws protect the rights of borrowers and lenders and thus facilitate lending. The index ranges from 0 to 10, with higher scores indicating that these laws are better designed to expand access to credit." Source: World Bank, Doing Business project (<http://www.doingbusiness.org/>).

- **Evidence of a substantive liquor regulation environment:** countries which have only a skeletal liquor regulation framework will not make good regulatory comparators. To that end countries which lacked certain key indicators of a comprehensive regulatory framework were excluded from the sample, as follows:
 - Countries which lack either a definition of what constitutes alcohol, or of what constitutes a maximum blood concentration of alcohol
 - Countries which have no age limits on the purchasing of alcohol
 - Countries which do not restrict the retailing of alcohol, because they have neither a monopoly on the retail sale of alcohol, nor a licensing requirement for retail sales

This process winnowed down the initial group of 211 countries to a short-list of 36 countries, from which the appropriate regulatory comparators can then be selected. These countries are shown in Table 86 overleaf. For the purposes of selecting two developed and two developing world comparators, the countries are grouped as per income categories.

The table shows patterns of alcohol consumption and the extent of unrecorded alcohol consumption in each of the shortlist countries. It is desirable to select countries which do not have very high degrees of unrecorded alcohol consumption, as this may reflect poor regulation. It is however quite difficult to use data on drinking patterns to select comparator countries, as drinking patterns appear to be so heavily influenced by culture, and countries which have a continuing pattern of abusive drinking may in fact have developed very good regulatory structures in an attempt to reduce social harms flowing from such abuses.

The final selection of a comparator group can to some extent be guided by data availability and the preferences of the dti. It would be ideal to include a high proportion of countries which, like South Africa, also have substantial domestic and export liquor industries. There is however no one right way to select a comparison group. That being said, DNA would like to make an initial recommendation as follows:

Developed comparators:

- **California:** the United States has a complex federal system, and thus state-by-state analysis of American regulation would be prohibitively complex. However, the state of California is an interesting example of regulation in a wine-producing region, and analysis of the impact of inter-state differences in regulation can be highlighted by focusing on California alone.
- **Norway:** the Nordic countries have a history of alcohol abuse and binge drinking, and thus also have a history of proactive regulation of the liquor industry. The inclusion of a Nordic country allows analysis of this unique perspective, as well as discussion of the regulation of liquor within a customs union environment.

In the European Union, a common set of regulations apply to much of the liquor industry, although there is still substantial room for state autonomy in areas of regulation such as advertising and retailing. It is therefore preferable to include only one EU country in the sample.

Developing comparators:

- **Chile:** Chile has a local liquor industry of long standing, with significant export value. It has experienced conflict between domestic liquor regulations and international trade law which are of interest (in the case of taxation of pisco liquor).
- **Argentina:** like Chile, Argentina is a Spanish-speaking country with an established local liquor industry, including export activity.

Table 86: Shortlist of possible comparators

	Abstainers (% of population, last year or lifetime)	Heavy & hazardous drinkers	Alcohol dependence	Youth drinking (at least weekly)	Unrecorded alcohol consumption (litres pure alcohol per cap)	Patterns of drinking score
High income						
Denmark	3.0%	11.8%	3.7%	46.5%	2.0	2.0
Norway	6.0%	3.9%		19.7%	2.0	3.0
France	6.7%	11.4%	8.7%	16.9%	1.0	1.0
Finland	7.4%	4.3%	4.0%	16.8%	2.0	3.0
Sweden	11.3%	6.5%		20.1%	2.0	3.0
United Kingdom	12.0%	9.9%	4.7%	52.0%	2.0	3.0
New Zealand	13.0%	23.1%	18.9%	5.3%	0.5	2.0
Japan	13.5%	11.9%	4.1%	9.9%	2.0	2.0
Portugal	15.5%			15.5%	1.0	1.0
Netherlands	15.8%	14.2%	5.5%	51.4%	0.5	1.0
Hungary	17.5%	2.8%		24.4%	4.0	3.0
Ireland	22.0%	26.0%		17.4%	1.0	3.0
Switzerland	22.5%	5.7%	5.0%	33.5%	0.5	1.0
Italy	25.0%	5.8%	2.0%	37.1%	1.5	1.0
Korea, Rep.	27.1%	46.2%	8.3%	28.0%	7.0	#N/A
United States	33.9%	5.7%	7.7%	16.0%	1.0	2.0
Spain	37.8%	2.6%		28.3%	1.0	1.0
Singapore	74.5%	0.4%		1.2%	1.0	2.0
Middle income						
Colombia	15.1%	31.8%	4.8%	7.5%	2.0	3.0
Argentina	16.2%	6.6%	4.3%	25.8%	1.0	2.0
Poland	18.7%	8.6%	12.2%	19.2%	3.0	3.0
Russian Federation	20.8%	2.4%		21.6%	4.9	4.0
Chile	25.3%	16.0%	6.4%	35.4%	2.0	3.0
Romania	38.0%			18.0%	4.0	3.0
Mexico	41.6%	3.2%	1.8%	2.9%	3.0	4.0
Bulgaria	48.6%	9.5%		16.0%	3.0	2.0
Costa Rica	60.0%	1.6%	7.0%	52.0%	2.0	3.0
South Africa	69.2%	2.3%	18.8%	23.6%	2.2	3.0
Low income						
Paraguay	21.7%	3.1%		16.1%	1.5	3.0
El Salvador	23.2%			41.6%	2.0	4.0
Honduras	23.2%			44.3%	2.0	4.0
Azerbaijan	24.0%		0.8%		1.9	3.0
Ecuador	55.2%	4.1%	7.7%	5.1%	1.0	3.0
Thailand	67.4%	10.0%		11.0%	2.0	3.0
Guatemala	70.7%	0.7%		1.7%	2.0	4.0
Sri Lanka	83.4%	2.3%		0.8%	0.5	3.0

Source: DNA; World Health Organisation Global Status Report on Alcohol 2004

APPENDIX 2: ALCOHOL ATTRIBUTABLE BURDEN AND ALCOHOL-AFFECTED HEALTH OUTCOMES AS A PERCENTAGE OF OVERALL DISEASE BURDEN

	Burden attributable to alcohol					Total burden from specific health outcomes (and as % of total disease burden)				Disprop. private?
	Deaths	YLLs	YLDs	DALYs	AAFs	Deaths	YLLs	YLDs	DALYs	
Non-communicable diseases*	13 480	170 205	241 134	411 339		121 727 (23.48)	1588248 (14.87)	659 337 (12.05)	2247599 (13.92)	
Cancer mouth/pharynx	345	4 108	197	4 304	25.2	1 369 (0.26)	16 302 (0.15)	782 (0.01)	17 079 (0.11)	Yes
Cancer oesophagus	1 726	19 937	298	20 235	32.1	5 377 (1.04)	62 109 (0.58)	928 (0.02)	63 037 (0.39)	Yes
Cancer liver	680	8 303	95	8 398	25.8	2 636 (0.51)	32 182 (0.3)	368 (0.01)	32 550 (0.2)	Yes
Cancer larynx	301	3 263	0	3 263	40.4	745 (0.14)	8 077 (0.08)	0 (0)	8 077 (0.05)	Yes
Female breast cancer	165	2 160	165	2 326	5.6	2 946 (0.57)	38 571 (0.36)	2 946 (0.05)	41 536 (0.26)	Yes
Type II diabetes (beneficial)	-491	-5 467	-1 475	-6 942	-3.9	12 590 (2.43)	140 179 (1.31)	37 821 (0.69)	178 000 (1.1)	Yes
Epilepsy	1 176	25 037	12 180	37 217	41.2	2 854 (0.55)	60 769 (0.57)	29 563 (0.54)	90 333 (0.56)	No
Hypertensive disease	2 642	24 450	631	25 081	17.3	15 272 (2.95)	141 329 (1.32)	3 647 (0.07)	144 977 (0.9)	Yes
Ischaemic heart disease	1 292	11 958	768	12 726	4.4	29 364 (5.66)	271 773 (2.54)	17 455 (0.32)	289 227 (1.79)	Yes
Stroke (harmful)	2 266	24 656	1 674	26 330	7.5	30 213 (5.83)	328 747 (3.08)	22 320 (0.41)	351 067 (2.17)	Yes
Cirrhosis liver	2 582	37 567	6 269	43 836	46.1	5 601 (1.08)	81 490 (0.76)	13 599 (0.25)	95 089 (0.59)	No
Alcohol use disorders/dependence	760	13 052	153 509	166 561	100	760 (0.15)	13 052 (0.12)	153 509 (2.81)	166 561 (1.03)	No
Depression/other nervous system disorders	0	0	4 269	4 269	1.5	0 (0)	0 (0)	284 600 (5.2)	284 600 (1.76)	No
Low birth weight	36	1 181	88	1 269	0.3	12 000 (2.31)	393 667 (3.69)	29 333 (0.54)	423 000 (2.62)	No
Foetal alcohol syndrome	0	0	62 466	62 466	100	0 (0)	0 (0)	62 466 (1.14)	62 466 (0.39)	No
Injuries *	22 869	612 077	101 720	713 799		55 331 (10.67)	1472326 (13.78)	333 036 (6.09)	1805368 (11.18)	
Road traffic injuries	6 166	154 319	8 031	162 350	43.9	14 046 (2.71)	351 524 (3.29)	18 294 (0.33)	369 818 (2.29)	Both
Poisonings	114	2 848	0	2 848	28.4	401 (0.08)	10 028 (0.09)	0 (0)	10 028 (0.06)	No
Falls	204	3 858	2 662	6 520	14.7	1 388 (0.27)	26 245 (0.25)	18 109 (0.33)	44 354 (0.27)	No
Fires	1 648	38 925	6 149	45 074	49.4	3 336 (0.64)	78 796 (0.74)	12 447 (0.23)	91 243 (0.57)	No
Drownings	252	6 615	0	6 615	50.8	496 (0.1)	13 022 (0.12)	0 (0)	13 022 (0.08)	n/a
Other unintentional injuries	70	1 857	4 895	6 752	4.8	1 458 (0.28)	38 688 (0.36)	101 979 (1.86)	140 667 (0.87)	No
Suicides	1 674	42 218	16	42 235	32.3	5 183 (1)	130 706 (1.22)	50 (0)	130 759 (0.81)	Yes
Homicide and violence	12 741	361 437	79 967	441 405	43.9	29 023 (5.6)	823 319 (7.71)	182 157 (3.33)	1 005 478 (6.23)	No

Source: Schneider et al. 2007, 669

APPENDIX 3: INTERNATIONAL EVIDENCE – COST OF ALCOHOL ABUSE

Comparison of the results of different surveys on the costs of alcohol abuse is a complex exercise, as the methodology for such surveys varies substantially. Table 87 below shows the results of four such international studies. Although all four explicitly state that the basis of analysis is to estimate the costs of alcohol abuse only, such principles are not consistently applied. For example, the Canadian mortality estimate nets out the beneficial effects of alcohol on some health problems.

Table 87: Results of analysis – sample of international studies on the cost of alcohol

Country and year	Basis of analysis	Cost findings	Cost as % of GDP	Reference
United Kingdom, 2003	Estimate of the costs of alcohol misuse only	Health costs of £1.4 to £1.7bn, productivity costs of £5.2 to £6.4bn and crime costs of £11.9bn. Total cost of £18.5bn to £20.0bn. 5,789 alcohol attributable deaths	1.6 to 1.8% of GDP of £1 140bn	UK Cabinet Office 2003
California, 2005	Estimates only the costs of harmful drinking	Health \$18,180.4m; Injury \$4,023.9m; Violent crime \$7,025.1m; Property crime \$801.3m; Traffic collisions \$8,354.9m; Prevention \$73.7m; Total: \$38,459.4m; 9,439 alcohol attributable deaths	2.4% of state GDP of \$1 622.1bn	Rosen et al. 2008
Thailand, 2006	Negative costs of alcohol consumption only - any positive effects explicitly excluded	156,105.4 million baht, of which productivity losses equal 149,592.5 million baht; 39,460 premature deaths	1.99% of GDP	Thavorncharoensap et al. 2010
Canada, 2002	Costs of abuse only, defined as occurring "when substance use imposes costs on society that exceed the costs to the user of obtaining the substance"	Healthcare costs of CA\$3.3bn, productivity costs of CA\$7.1bn, other costs of CA\$4.2bn. Total cost of CA\$14.6bn. 4,258 deaths attributed to alcohol *	1.3% of GDP	Rehm, et al. 2006

Source: As shown; World Bank World Development Indicators

* Mortality estimate nets out the positive impact of alcohol on certain conditions

The basis on which the cost of mortality and morbidity is measured also varies substantially across these four studies:

- Thailand: the cost of mortality is measured using the net present value (NPV) of lost earnings

- California: mortality is costed on the NPV of lost earnings, with DALYs measured on a financial estimate of the value placed on a quality-adjusted life year (QALY)
- United Kingdom: NPV of lost earnings
- Canada: friction costs of finding new employees, plus the cost of replacing unpaid labour of workforce entrants

In contrast, this study has used a measure of lost earnings due to premature mortality and morbidity that takes into account only earnings in the current year, and calculates such earnings based on a simple average employee compensation per capita, as opposed to the lifetime value lost estimate produced by NPV calculations.

In order to produce cross-country comparisons of the impact of alcohol abuse, it would therefore first be necessary to undertake careful analysis of the research in question, and make adjustments to estimates in order to facilitate cross-comparison. This is outside of the scope of this research.

APPENDIX 4: TEXT OF COVER LETTER FOR ANTI-ABUSE PROGRAM QUESTIONNAIRE

Dear XXX,

DNA Economics has been commissioned by the National Department of Trade and Industry (dti) to conduct a baseline study on the Liquor Industry in South Africa (please see letter of introduction attached). The study has a wide remit, and will aim to provide a balanced picture of the economic and social costs and benefits associated with the industry, as well as any outstanding regulatory issues. One of the aspects of this study is a review of liquor industry programmes that aim to reduce alcohol abuse and alcohol-related harm in South Africa. In order to obtain high quality information in this regard, we have drawn up a comprehensive questionnaire that aims to elicit information on a range of possible anti-alcohol-abuse initiatives: please find the questionnaire attached for your completion.

The dti has requested that the data from the questionnaires be utilized to contribute to the assessment of the following:

- Evidence of effectiveness of industry programmes
- Alignment of the programs with the burden of disease caused by alcohol in South Africa (as defined by the Burden of Disease research of the Medical Research Council of South Africa- see attached)
- Alignment of the programs to globally accepted alcohol-abuse priorities and evidence-based intervention recommendations, including those published by the World Health Organisation
- Alignment of programs to pattern of sales
- Whether or not the programs are equitable

If you have difficulty completing certain sections of the questionnaire please indicate as such so that we can clarify what information is needed. If certain information is not available or accessible, please indicate as such in the questionnaire.

Please note that a wide range of possible interventions and messaging options have been included for the purposes of being comprehensive; failure to have programmes or messaging in a particular area will not necessarily be interpreted as implying neglect on the part of the respondent company. On completion of the study, you will be provided with an electronic copy of the report, which will allow you to assess how your programs perform in comparison with international guidelines. We trust you will view this study as an important opportunity to highlight, review and refine your anti-abuse initiatives.

We would be grateful if you can forward this mail to the relevant person in your company/organisation and complete the questionnaire by the 28th October 2010. Please email completed questionnaires to sarah.truen@dnaeconomics.com, and if you need an extension on this deadline please let us know as soon as possible.

Please also confirm receipt of this mail so that we can follow up on possible errors in email addresses if we do not receive such confirmation.

Thanks very much for your time and effort.

Regards

Sarah Truen

APPENDIX 5: DTI LETTER OF INTRODUCTION



the dti

Department:
Trade and Industry
REPUBLIC OF SOUTH AFRICA

Private Bag X84, PRETORIA, 0001 • the dti Campus, 77 Meintjies Street, Sunnyside, 0002, Tel: (012) 394 0000
the dti Customer Contact Centre local: 0861 843 384 International: +27 12 394 9500, www.thedti.gov.za

TO WHOM IT MAY CONCERN

Dear Sir/Madam

BASELINE STUDY ON THE OUTLOOK OF THE LIQUOR INDUSTRY IN SOUTH AFRICA

The Department of Trade and Industry, through the National Liquor Authority (NLA), has commissioned a baseline study on the outlook of the liquor industry. The report will provide a snapshot of the status of the liquor industry in South Africa, which will serve as an authoritative reference point for the NLA, which can be used as a benchmark study to guide the NLA in its regulatory function and for comparison against future research.

The study will focus on a number of issues in the liquor industry including legislation, regulations, barriers to entry, market structure, alcohol anti-abuse initiatives and cross-border trade of alcohol, in order to better understand the dynamics of the liquor industry in South Africa.

The NLA has commissioned DNA Economics in partnership with UCT's School of Public Health to undertake the study on behalf of the NLA. This letter, therefore, serves to introduce the Service Provider, as well as to request the cooperation and assistance of your company/association in providing them with the necessary information and statistics that may be requested. It is envisioned that the Service Provider will be requesting both qualitative and quantitative data from a wide range of companies and associations in order to provide a thorough assessment of South Africa's liquor industry.

For more information on the scope and purpose of the study please do not hesitate to contact Tebogo Tsotetsi at 012 394 1421 or TTsotetsi@thedti.gov.za.

Your co-operation in this regard will highly be appreciated.

ZODWA NTULI
DEPUTY DIRECTOR GENERAL
CONSUMER AND CORPORATE REGULATION DIVISION
15/06/2010

Lefapha la Dikgwebisano le Dilintaseteri • Lefapha la Kgwebo le Indasteri • uMnyango wezoHwebo neZimboni • Muhasho wa zwa Mbambadzo na Indasiteri • Departement van Handel en Nywerheid • Kgoro ya Kgwebo le Indasteri • Ndzawulo ya to Mabindzu na Tindastri • LTiko leTekuhweba neIlMboni • ISebe lezoRhwebo noShishino • UmNyango wezokuRhwebelana namaBubulo

Batho Pele - putting people first



DNA Economics

APPENDIX 6: ANTI-ABUSE PROGRAM QUESTIONNAIRE

A> Balance sheet & general info		
		Answer
1	Name of person/person completing this questionnaire	
2	Designation	
3	Name of company/organisation	
4	Average total social responsibility spend as a percentage of net profit over the last 5 years	
5	Amount spent on social responsibility in past 3 years:	
a	2009/10 financial year	
b	2008/09 financial year	
c	2007/08 financial year	
6	Please attach breakdown of social responsibility spending for financial year 2008-2009	

B> Previous financial year's harm prevention programmes		
2	Please provide information on all your social responsibility programmes that addressed alcohol abuse and its harms in the year 09/10:	

Programme 1 (previous financial year)		Answer
1	Name of Programme	
2	Please attach any documentation you have on the projects' aims, objectives etc.	
3	Budget of this programme	
4	Programme aim and objectives	
5	programme site/sites	
6	target group of programme	
7	Number of recipients of this programme (where applicable)	
8	duration of the programme	
9	outputs (e.g. number of recipients, number of billboards etc)	
10	outcomes (statistics indicating that the project reduced the alcohol-related harm in question) Note: If outcome measurement was not possible please indicate as such and explain the reasons	
11	Was the programme scientifically evaluated?	
12	If yes, please attach the scientific evaluation report	
13	Who implemented the programme (and their qualifications/experience)?	
14	Who evaluated the programmes' effectiveness (and their qualifications/experience)?	
15	Do you regard this programme as a success? (Explain as necessary)	
16	Have you funded this project again in the current financial year?	
17	If yes, have you increased or decreased funding to this project	

Programme 2 (previous financial year)		Answer
1	Name of Programme	
2	Please attach any documentation you have on the projects' aims, objectives etc.	
3	Budget of this programme	
4	Programme aim and objectives	

5	programme site/sites	
6	target group of programme	
7	Number of recipients of this programme (where applicable)	
8	duration of the programme	
9	outputs (e.g. number of recipients, number of billboards etc)	
10	outcomes (statistics indicating that the project reduced the alcohol-related harm in question) Note: If outcome measurement was not possible please indicate as such and explain the reasons	
11	Was the programme scientifically evaluated?	
12	If yes, please attach the scientific evaluation report	
13	Who implemented the programme (and their qualifications/experience)?	
14	Who evaluated the programmes' effectiveness (and their qualifications/experience)?	
15	Do you regard this programme as a success? (Explain as necessary)	
16	Have you funded this project again in the current financial year?	
17	If yes, have you increased or decreased funding to this project	

	Programme 3 (previous financial year) (cut & paste questions AS REQUIRED)	Answer
1	Name of Programme	
2	Please attach any documentation you have on the projects' aims, objectives etc.	
3	Budget of this programme	
4	Programme aim and objectives	
5	programme site/sites	
6	target group of programme	
7	Number of recipients of this programme (where applicable)	
8	duration of the programme	
9	outputs (e.g. number of recipients, number of billboards etc)	
10	outcomes (statistics indicating that the project reduced the alcohol-related harm in question) Note: If outcome measurement was not possible please indicate as such and explain the reasons	
11	Was the programme scientifically evaluated?	
12	If yes, please attach the scientific evaluation report	
13	Who implemented the programme (and their qualifications/experience)?	
14	Who evaluated the programmes' effectiveness (and their qualifications/experience) ?	
15	Do you regard this programme as a success? (Explain as necessary)	
16	Have you funded this project again in the current financial year?	
17	If yes, have you increased or decreased funding to this project	

C>	Programmes relating to access to alcoholic beverages	Answer
1	Does your company take any measures to prevent the sale of alcohol to/by illegal (unlicensed) outlets? (If yes, please explain)	
2	Does your company/organisation take any measures to prevent the sale of alcohol to people under 18 years old ? (If yes, please explain)	
3	In your opinion, would your company be willing to increase the price of your products?	

D> Responsible messaging/information about drinking alcohol										
1	Please indicate which of the following areas your company/organisation provides education/information on:	yes/no	television	radio	newspaper/magazine	pamphlets/posters/website	educational talks or plays	warning labels	Part of drink responsibly message at bottom/end of an advert promoting an alcohol brand	Estimate of number people reached (where possible)
a	How to recognise if you are a binge-drinker									
b	How to recognise if you are an alcohol abuser									
c	How to recognise if you are an alcoholic									
d	Information on treatment options for alcohol abusers									
e	Information on treatment options for alcoholics									
f	Information on underage drinking									
g	Information on the indirect/direct links between drinking and violence/aggression									
h	Information on the indirect/direct links between drinking and unsafe sex									
i	Information on the indirect/direct links between drinking and cancer									
j	Information on the indirect/direct links between drinking and cardiovascular diseases									
k	Information on the indirect/direct links between drinking and depression									
l	Information on the indirect/direct links between drinking and anxiety disorders									
m	Information on the indirect/direct links between drinking and suicide									

n	Information on the indirect/direct links between drinking and low birth weight									
o	Information on the indirect/direct links between drinking and fetal alcohol spectrum disorder									
p	Information on the indirect/direct links between drinking and transport injuries									
q	Information on the indirect/direct links between drinking and fetal alcohol spectrum disorder									
r	what amount of alcohol is legal to consume if one is going to drive									
s	Information on the indirect/direct risks of drunk-walking									
t	Information on how to drink alcohol without getting drunk									
u	Information on how to sober up if you want to drive									

		Answer
2	What measures, if any, have been taken by your company/organisation to ensure that your marketing of alcohol is responsible?	

E> Drinking and recreational environments

		Answer
1	Many communities have indicated the need for alcohol-free recreational spaces in low socio-economic areas- in your opinion, would your company be interested in investing in this type of programme?	
2	Has your company invested in any programmes to create safer drinking environments in low socio-economic areas? (If yes, please explain)	
3	Has your company invested in any programmes to promote responsible serving of alcohol in liquor outlets (e.g. not serving drunk customers)? (If yes, please explain)	
4	Does your company reward liquor outlets for achieving sales targets of your products?	

F> Collaboration with Government

		Answer
1	Is your company/organisation currently working with any government department to reduce alcohol abuse and its harms? (Please specify)	
2	If yes, please provide the contact details of the person in government who can provide us with details of this collaboration	

G> Other social responsibility programmes (not aimed at alcohol abuse or its harms)

2	Please provide information on all your social responsibility programmes that addressed alcohol abuse and its harms in the year 09/10:	
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H> Opinion about this questionnaire

		Answer
1	Do you feel this questionnaire adequately captures your company/organisation's social responsibility activities?	
2	If No, what would you like to add?	

APPENDIX 7: ARA SUBMISSION ON INDUSTRY ANTI-ABUSE PROGRAMS- RESPONSE TO QUESTIONNAIRE

ADDRESSING THE MISUSE AND ABUSE OF ALCOHOL BEVERAGES

Contents

As input into a baseline study of the South African liquor industry to enable the Department of Trade & Industry to better understand the dynamics of the industry, the ARA has prepared this report which includes the ARA's evidence-based view on the most effective means of reducing alcohol-related harm and how the association and its members have tackled the issue over three decades.

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Part One

ARA Core Beliefs

We understand that although alcohol is enjoyed responsibly and in moderation most of the time by most consumers who choose to drink, a minority of individuals abuse and misuse alcohol products, resulting in illness, injury and death.

We are committed to working in partnership with all stakeholders to find effective ways to combat alcohol abuse and misuse.

We respect the rights of informed adults to choose to drink alcohol beverages – or to choose not to drink at all.

We believe that moderate alcohol consumption by adults not at risk can be compatible with a healthy lifestyle and that abusive consumption of alcohol can impact health and wellbeing.

We believe that all alcohol beverages sold in a society should be appropriately and effectively regulated by government.

We believe alcohol producers can share a wealth of experience with governments, non-governmental organisations and other stakeholders in discouraging irresponsible alcohol consumption and preventing alcohol abuse and misuse.

We believe that alcohol consumption patterns are strongly influenced by cultural and religious factors. To be effective, alcohol policy must take into account different societies' cultural and religious traditions.

We believe the most realistic and effective measures to successfully reduce alcohol abuse and misuse are evidence-based programs that take into account identifiable drinking patterns and target specific problems. Broad-based restrictions designed to decrease the alcohol consumption of society as a whole are largely ineffective in addressing the minority who abuse alcohol and may result in unintended consequences that negatively impact public health and wellbeing.

We believe that each society, based upon its respective cultural and religious traditions, should set a minimum age at which its citizens are deemed responsible enough to drink alcohol; that people under this age should not consume alcohol products, and that laws should penalise those who illegally supply alcohol to underage people, as well as the underage people who try to illegally obtain alcohol beverages. We believe that alcohol advertising and marketing should not be directed toward or appeal to those who are underage.

We believe that each society should establish laws that prevent driving while intoxicated, impose serious penalties for violations of such laws, and encourage responsible behaviour (such as designated driver schemes and promotion of public transport).

We believe that multi-stakeholder partnerships offer an excellent opportunity to promote the complex mix of measures required by each society to combat alcohol misuse.

We believe that alcohol producers should market their products responsibly to of-age adults and that industry self-regulation of advertising and marketing is the most responsive and effective way to regulate this activity.

We believe the illicit production and trade of alcohol products can cause serious public health and law enforcement problems that require the cooperation of alcohol producers, governments, and other stakeholders to address.

Part Two

Introduction

For over 5,000 years, people have consumed various forms of alcohol beverages as a normal part of a variety of social activities. Around the world, beverage alcohol products are enjoyed every day by adults as an ordinary part of life. However, alcohol can benefit as well as harm those who consume it.

The duality of its nature makes alcohol unlike many other commodities and plays an important role in why people drink and in the outcomes they are likely to experience. Drinking—like many other behaviours—is learned, it can be accompanied by responsible choices, and the potential for harm is preventable. In selecting alcohol policies, societies must decide how to encourage some behaviours and discourage others, while maintaining what they perceive as an appropriate balance between state and individual responsibility.

Per capita consumption measures are a convenient way of collecting relevant data and are useful gross indicators of drinking in a population. However, they do not capture the myriad ways in which individuals drink. To get a better understanding of drinking among individuals and groups, the harms and benefits that may accompany their drinking, and interventions likely to minimize harm, it is necessary to understand patterns of drinking. These comprise a number of facets: the quantity of alcohol consumed per occasion; types of beverages being consumed; the duration and frequency of drinking; the characteristics of individual drinkers; the settings in which drinking takes place and activities that accompany drinking; and the cultural role of alcohol and the social mores that surround it.

The ARA believes that patterns of drinking are the best way to describe drinking behaviour and predict both positive and negative outcomes in a given society; that targeted interventions are key in maximizing the benefits and minimizing the harms related to drinking; and that multi-stakeholder partnerships offer an excellent opportunity to promote the complex mix of measures required by each society. In the broadest terms, the purpose of alcohol policies in countries where alcohol beverages are permitted should be to establish appropriate, realistic, and sustainable approaches that will help reduce alcohol-related harms, promote safer drinking behaviours, and enhance the positive function of alcohol consumption for individuals and society.

No policy measure exists in a vacuum and whatever measures are implemented around alcohol policy, they can only be effective if backed by proper enforcement, education of the general public about drinking patterns and outcomes, the implementation of adequate prevention, and the involvement of the broader community.

Limitations of Population-Based Alcohol Policies

Interventions aimed at reducing the potential harm associated with drinking can be divided into two basic categories, which are by no means mutually exclusive and may be used in tandem to complement and strengthen each other. One is the population-level approach to prevention, consisting of across-the-board measures. These efforts rely heavily on controlling the volume of drinking across entire populations. The other approach involves interventions that are applied in a targeted way, focusing on particular groups, behaviours, drinking patterns, or settings where the potential for harm is elevated.

The split between whole-population and targeted interventions is not always neat, because some population-level measures (e.g., health warning or information labels) can be aimed at both the whole drinking population and its subgroups (such as pregnant women, young people, or older adults) ¹

However, the critical question regarding the effectiveness of population-level measures is not whether they are able to curtail consumption across a population, but whether they are able to have an impact on those whose drinking is associated with harm. As noted in the WHO Global Status Report: Alcohol Policy 2004, population-based policies..... are usually seen as relatively 'blunt' instruments, because, rather than being directed at only those people with drinking problems, they affect all drinkers.

In answering the challenge of reducing harm, population-level measures alone are inadequate. ² Even if some population-level measures might have a positive impact on alcohol-related harm, they could have detrimental unintended effects. They are insensitive to cultural variations and needs of at-risk individuals and groups, their implementation requires elaborate political negotiation, and they can be unpopular, at least in part because they are perceived to be discriminatory. Thus in the real world they are less appropriate and hence less effective than more targeted interventions.

Whereas, in the past, efforts focused more on population-based policies aimed at reducing the overall per capita consumption of alcoholic beverages, there has now been a general international trend away from attempts to merely reduce alcoholic beverage consumption in the general population and towards efforts to address harmful drinking in certain groups or particular settings. ³

A successful design for alcohol policies that is both realistic and sustainable should therefore rely on balancing population-level measures with targeted interventions thereby ensuring the well-being of a society without infringing upon individual freedom and choice, while maximizing benefit and minimizing harm. How this balance is created will vary from one country to another, reflecting prevailing attitudes, social and economic circumstances, and culture.

The Value of Targeted Interventions

Targeted interventions are pragmatic, flexible, efficient, and culturally-sensitive approaches to the complex issue of why some people drink to excess. Targeted interventions identify the particular individuals, populations, and settings in society where harmful drinking patterns exist and focus exclusively on them, rather than on society at large. The ARA believes that by targeting those with problematic drinking patterns, and understanding the factors leading to their inappropriate alcohol consumption, alcohol abuse and its consequences can be significantly reduced.

There are many kinds of targeted intervention programmes that have well-documented success in changing drinking patterns and behaviour. Early identification and brief intervention strategies are extremely important. ⁴ These approaches, which can take place in doctors' offices, medical clinics, and a host of other settings, can be used to reach problem drinkers who otherwise may lack access to adequate health care. Early identification promotes health by focusing the interventions at a time when

behaviour is most amenable to change. Other kinds of targeted intervention programs can be tailored to address particular issues, including drinking and pregnancy, “binge drinking,” and responsible hospitality. For example, drink-drive programs, which may include responsibility advertisements, educational campaigns, server training, and “designated driver” programs, have proven to be successful complements to the enforcement of laws targeting drunk driving, and have contributed to the reduction in alcohol-related traffic fatalities in countries across the globe. Targeted interventions are an important way in which governments, public health organizations, and the alcohol beverage industry can partner together in fighting alcohol abuse and misuse.

The aim of targeted interventions is to minimize alcohol-related risks by shifting behaviours and norms linked with drinking to ensure that when people consume alcohol, they do so in the safest possible manner. Because they focus on settings, situations, and at-risk individuals, targeted interventions are adaptable to the needs of diverse cultures and contexts. This flexibility allows them to be developed on the basis of the assessment of particular drinking patterns and practices. The research and evaluation literature gives some guidance as to which interventions are likely to be effective, although there are dangers in accepting “off-the-shelf” solutions: What works in some cultures, may not be appropriate for others.

In targeting behaviours, initiatives can be developed to separate drinking from other risky activities through, for example, information and awareness building.

Education is the Key to Responsibility

Education about alcohol gives individuals over the legal drinking age the facts to make informed, responsible choices about drinking or not drinking. The ARA supports and participates in a wide variety of education programs, including industry-initiated programs and those conducted in collaboration with a variety of partners. Broad programs, such as responsibility advertising campaigns, have been effective in altering drink-drive behaviours.

There are many school-based programs that teach at-risk youth the effects of intoxication and long-term effects of alcohol abuse. And many alcohol beverage producers have developed expert-designed guides that give parents strategies for talking with their children about drinking. The ARA strongly supports alcohol education, and is eager to continue working with governments, public health organizations, and communities in promoting educational programmes and campaigns.

Underage and Youth Drinking

Countries differ widely in setting their minimum drinking age. Although the most common legal drinking age is 18, some countries, including the United States, Indonesia, and Egypt, have a legal drinking age of 21.

Researchers have long studied why young people experiment with alcohol. Drinking is one marker of adulthood in most countries, and adolescents throughout world history have always wanted to participate in adult activities before they were legally allowed to do so. Societies exhibit different attitudes toward underage drinking and, not surprisingly, youth drinking is a larger problem in some countries than in others. The scientific literature has clearly established that parents and peers are the primary influences on a young person's decisions about drinking. 13-15 Many complex factors contribute to youth drinking, and young people who drink often exhibit other risky behaviours that adversely affect their health. Targeted intervention programs can identify at-risk youth and reduce alcohol abuse and harmful consequences.

Advertising

Long before the first alcohol beverage commercial aired on television or appeared in a magazine, some people have consumed to excess and people under the legal drinking age have experimented with drinking. These behaviours exist today even in parts of the world with limited access to advertising and mass media or where advertising is banned entirely. Indeed, in many parts of the world people drink non-commercial alcohol that is not advertised and in a number of countries drinking has declined over decades or remained flat despite increases in alcohol advertising. Decades of research have not shown that alcohol advertising causes an individual, including a person under the legal drinking age, to drink or abuse alcohol. 5-10

ARA members market their products solely to adults above the legal drinking age, and the ARA has adopted a voluntary advertising and marketing code to make its intentions abundantly clear. Alcohol advertising influences brand choice, it does not make "drinkers" out of non-drinkers. Advertising is an important method of communicating information to those who have made the choice to consume alcohol beverages. It also is a primary tool to promote free and fair trade, and is essential to foster innovation and new products. Without advertising, market entry is impeded and brand competition is undermined.

Risky Behaviours

It should be no surprise that people who abuse alcohol also engage in other high-risk behaviours that endanger their health and the health of others. That does not mean, however, that those high-risk behaviours are caused by drinking. Indeed, an equally plausible explanation is that certain individuals for various reasons are more likely to engage in dangerous or self-destructive behaviours generally, and that when they do so, they are likely to engage in clusters of such risky behaviours. Thus, although the scientific literature may report associations between alcohol abuse and certain other risky behaviours, that literature does not establish a causal relationship between the two.

Violence and Alcohol Abuse

Violent behaviour occurs in all societies, including those that largely abstain from drinking. Cultural factors clearly play a role in the observed association between some forms of violence and alcohol abuse. For example, in Mediterranean countries where drinking is part of everyday life and dining, the rates of alcohol-related violence are much lower than in Nordic and Northern European countries where episodic drinking is more prevalent. 17 Importantly, where violence is condoned on a societal level, there are stronger associations between violence and drinking.

Targeted interventions, such as public education, social norms programs, and responsible hospitality measures, can address community attitudes about violence and alcohol abuse. Law enforcement is another important component in effecting change and individual factors also clearly play a role. Violence and alcohol abuse share numerous risk factors, including poor parental modelling, prior physical abuse, and mental illness. Targeted interventions can effectively screen for people who are predisposed to engage in violence and alcohol abuse and seek to prevent such destructive behaviours through education and treatment.

Sexually-Transmitted Diseases and Alcohol Abuse

Although a general association between sexually-transmitted diseases (“STDs”) and alcohol abuse is reported in the literature, none of the studies purports to establish a causal connection between the two, only an association between alcohol abuse and STDs. 16 Moreover, these studies do not control for the many other factors associated with individuals who engage in high-risk sexual behaviours, and most do not differentiate between amounts of alcohol consumed.

Furthermore, they do not control for the level of education individuals may have about the risks that various sexual activities may pose for contracting STDs. In this area too, targeted interventions can be used to (i) educate the public (and specific populations) in culturally-sensitive ways about risk avoidance, (ii) screen for individuals who may engage in such high-risk behaviours and implement brief interventions to change behaviours, and (iii) modify the drinking environment to implement safeguards that may reduce the potential for harm.

Moderate Alcohol Consumption

Although it is clearly known that the abuse of alcohol leads to a variety of negative health outcomes, a scientific consensus has emerged around the world that moderate consumption of alcohol has potential health benefits for some people or is at least compatible with a healthy lifestyle. Over the last decade, many studies have confirmed that people who drink in moderation, regardless of the form of alcohol beverage they drink, experience a lower risk of premature death than do people who abstain from drinking.

It is established that moderate or low alcohol consumption may have a protective role for certain diseases, such as cardiovascular disease, ischemic stroke, and diabetes.¹¹ Also known but less noted is the broader benefit of drinking—its positive contribution to individual and social wellbeing. To that end, three general areas of benefit have been identified: psychosocial benefits (such as subjective health, mood enhancement, stress reduction, and mental health), social benefits (such as sociability and social cohesion), and cognitive and performance benefits (such as long-term cognitive functioning, creativity, and income earned).¹² To date, no means exist for assessing the value of these important outcomes in a quantitative fashion. The inability to include the broader positive contribution of alcohol to health and wellbeing in calculations of net benefit and harm represents a significant confounder in the available analyses and is an obstacle to balanced decision-making.

Again, targeted interventions can effectively focus on those who drink to excess without negatively impacting those who may derive benefits from drinking moderately.

Non-Commercial Alcohol

Non-commercial alcohol beverages have a rich history in most cultures and may represent as much as half of the total worldwide consumption of alcohol beverages. These products are not advertised and exist largely outside of the regulatory framework governing commercial alcohol products, and they are among the most understudied areas of alcohol policy research. Non-commercial and illicit alcohol beverages of poor quality present serious health risks.

Population-based government policies aimed at restricting the sale and consumption of commercial alcohol can have the unintended consequence of increasing the production and consumption of non-commercial and illicit alcohol, which exist outside regulatory controls designed to protect public health. Much more study on non-commercial and illicit alcohol needs to be undertaken, and policymakers must keep this large market in mind when setting policies regarding commercial alcohol.

Evaluating interventions: Appropriateness, feasibility, and impact

What constitutes “success” of a certain measure is a complex issue. Effectiveness research—along with assessment of local conditions—is increasingly an important component of prevention, especially given the growing emphasis on evidence-based prevention programming. When done well, such research allows interventions that work to be separated from those that do not, and modifications to be made in order to improve particular approaches. But it should be noted that the vast majority of policy measures and prevention programs is not evaluated, and that many programs are designed or implemented in such a way as to make evaluation difficult or meaningless. Rigorous insistence on measurement may not always be possible. Whereas quantitative measures are certainly fairly straightforward to interpret, qualitative indicators are also important but more rarely taken into consideration. For instance, is it possible to quantify change in drinking culture?

The complexity of assessing interventions means that many efforts are never formally evaluated. This lack of formal evaluation is often emphasized by the critics of various targeted intervention approaches. However, this raises an important issue that is largely ignored for political or other reasons: The lack of evaluation is by no means proof that certain approaches do not work; it simply means that a program or an approach has not been evaluated, nothing more or less. ² Clearly, every measure has its strengths and weaknesses, and no single approach is a panacea. In assessing an intervention or policy, other useful criteria, beyond the availability of scientific evidence for effectiveness, may be used. These should include a consideration of what is feasible—in other words, what can be realistically implemented with the available resources and within given political, economic, and social contexts—and what is acceptable to the target group, stakeholders, decision makers, and public.

Although many programs have not been evaluated, the totality of their efforts has produced change. There is certainly a need for more rigorous evaluation and the resources to achieve that goal.

Part Three

What should be done to effectively reduce alcohol-related harm

Alcohol abuse and alcoholism are related to the complex interaction of biological, socio-cultural and psychological factors in the environment, which will not respond to simplistic and cosmetic measures of prevention.

It is the opinion of ARA that no single action is likely to reduce alcohol problems, but rather a mix of self-regulation, enforcement of existing laws governing sale and consumption, and targeted interventions, combined with individuals taking personal responsibility for their drinking choices.

The ARA individually and in partnership is committed to continuing to develop, implement and support a broad array of targeted intervention programs to achieve substantial reductions in irresponsible consumption and a substantial improvement in public health.

ARA initiatives to combat abuse and promote only the responsible use of alcohol beverages

The Industry Association for Responsible Alcohol Use (ARA) was established in 1989 and is an association comprising members that include the major manufacturers of alcohol beverages in South Africa, such as SAB Ltd, companies represented by the South African Liquor Brandowners Association like Distell, Brandhouse, KWV, and DGB, the members of VinPro and Cellars SA, E Snell & Co and many others. In addition, a number of distributors and some retail chains such as Tops, Makro and Diamond Liquors have now joined the ARA as associate members. There are currently more than 150 associate members and the ARA continues to receive enquiries from interested parties.

The ARA is registered as a non-profit organisation (NPO) with the Department of Social Development and is focused on the prevention of the negative consequences of alcohol abuse. The association's mission is to reduce alcohol-related harm through combating the misuse and abuse of alcohol beverages and promoting only their responsible use.

The primary targets for its interventions are two broad groups namely young people and those adults who are vulnerable and most at risk of suffering the negative consequences of alcohol abuse and misuse.

The ARA has three main focus areas and, in the period since its establishment 21 years ago, has embarked on a number of initiatives in these three areas;

- Effective self regulation - by member companies and other alcohol beverage manufacturers, distributors and retailers
- Partnerships - with government, public health bodies and other relevant stakeholders to combat misuse and abuse
- Education - on the nature and risks of alcohol misuse and abuse, and on the responsible use of alcohol beverages by those not at risk who have made the decision to drink alcohol beverages

Effective self regulation

1. Code of Commercial Communication

In 1989, the ARA adopted a strict Code of Commercial Communication, which has been updated and expanded on a number of occasions since that time. The Advertising Standards Authority based its own alcohol beverage code on the ARA Code.

In accordance with the Code, measures adopted by the members of the ARA include a ban on any claims of beneficial effects of their products, a bold statement on all their advertising that their products are not for sale to persons under the age of 18 years and a clause in their standard sales agreements to stop supply to any vendor who is found guilty of the sale of alcohol beverages to underage persons.

The ARA officially launched its "Advertising Complaints Hotline" in March 2007. Any member of the public can now lodge a complaint if they think that an alcohol related advertisement is in breach of the Code of Commercial Communication.

The Code includes rigorous compliance procedures, and final rulings on complaints are adjudged by an independent arbitrator. Ultimate punishment for non-compliance is expulsion from the ARA which can lead to the loss of a licence to operate,

2. Retail Code

The problem of unlicensed outlets ('shebeens') poses a challenge for licensing authorities as well as society at large as the environment around these outlets does on occasion attract other illegal activities. At the invitation of the national and provincial liquor licensing authorities, the ARA and its members assisted in efforts to regularise the retail trade. Codes of Business Practice developed by the ARA have been promoted by licensing authorities in the provinces, with the 'shebeens' being a particular target. Thousands of the Codes were distributed to the informal trade and a significant number of traders have endorsed the Code and display it prominently in their outlets.

3. Code of Conduct

In 2008, a new code was developed by the ARA which regulates the conduct of all participants in the alcohol beverage market. The Code is currently with the Minister of Trade and Industry for his endorsement and thereafter it is anticipated that membership of the ARA and adherence to the Code will, in accordance with the National Liquor Act of 2003, be regarded as a pre-requisite for the award of a liquor licence to manufacturers and distributors.

Partnerships

4. International cooperation

The ARA has sponsored and participated in international conferences including the International Alcohol & Harm Reduction Conference in 2006 and the International Workshop on Alcohol Dependence in 2008. In addition the ARA worked with the World Health Organisation on data collection in Africa and in the development of the Global Strategy to Reduce Harmful Drinking.

The ARA also played a leading role in the establishment of responsibility organisations in Namibia and Botswana.

5. ANC Youth League

As an apolitical organisation, the ARA has successfully engaged with the ANC Youth League (ANCYL) in the past which resulted in ANCYL developing its original policy on substance abuse. In addition the ARA has entered into debate with the ANCYL on the most effective ways of dealing with the problems of alcohol misuse and abuse.

6. National, Provincial and Local Government

The ARA partnered with the Department of Health on a poster campaign warning of the dangers of drinking during pregnancy, partnered with the Western Cape government in the development and execution of a commuter awareness campaign on the problems of alcohol abuse, assisted the Department of Trade and Industry in an outreach awareness campaign in the Free State and Gauteng and provided the material for a SAPS youth day programme.

The ARA also funded and participated in a parliamentary committee study tour to New Zealand and Australia to learn about those countries' efforts to combat abuse.

The ARA played a meaningful role in the banning of the 'papsak' which was contributing to the problem of abuse.

7. The Foundation for Alcohol Related Research

In 1997 the ARA sponsored the establishment of the Foundation for Alcohol Related Research (FARR) and annually funds the Foundation's administrative expenses. At the invitation of and in partnership with the Departments of Health, and under the auspices of FARR, epidemiological research and prevention programmes have been undertaken in communities where the risk of children being born with foetal alcohol syndrome is significant. Additional partners in these endeavours are the Centres for Disease Control and Prevention (CDC) and the National Institute on Alcoholism and Alcohol Abuse (NIAAA) and their funding beneficiaries in the USA, the Medical Research Council (MRC) of South Africa, the National Health Laboratory Services (NHLS) in South Africa and the March of Dimes in the USA, to mention a few. In order to increase capacity in this area, the ARA funded post-graduate fellowships. Four medical specialists have already been trained under this fellowship scheme.

ARA also assisted in the opening of 'safe houses' in De Aar, Upington and Ashton where communities are educated on the problems of drinking during pregnancy and steps are taken to discourage the practice. A recent study in De Aar (July 2010) has demonstrated that FARR's interventions in that town have led to a 30% reduction in FAS prevalence.

Most recently the ARA funded the establishment of a training facility within FARR to meet the number of requests received from NGO's and government establishments for assistance in identifying the problem and introducing preventative measures.

The Foundation for Alcohol Related Research (FARR) is renowned internationally for its ground-breaking work in addressing the problem of foetal alcohol syndrome (FAS).

8. Northern Cape

The ARA has partnered with the Committee for Crime Prevention in the Northern Cape (a body established under the auspices of the Premier of the Northern Cape) and provided over half a million rand for the crime and violence prevention programme in the area and the sponsoring of the Gravel Road Theatre a touring group that performs for schools and communities across the province creating awareness about substance abuse. ARA has also assisted the youth development arm of SANCA (South African National Council on Alcohol and Drug Dependencies) to run their youth programmes involving prevention and awareness of alcohol abuse in Upington.

9. Ignite Foundation

Due in part to South Africa's history, farm worker communities have become especially vulnerable to alcohol-abuse and many live in poor conditions where alcohol-abuse is rife and leads to a complex mixture of social and health problems. The ARA is addressing this problem through its support of the Ignite Foundation, a non-profit organisation that promotes education on alcohol and substance abuse on farms in the Stellenbosch (Western Cape) area. Ignite's intervention programme includes screening for alcohol use disorders as well as providing people with the tools for understanding their own drinking patterns and enabling them to make informed decisions.

10. Life Talk Forum

Life Talk is a non-profit organisation addressing the challenges faced by teenagers in today's society. The ARA has partnered with Life Talk, providing the funds to enable the organisation to appoint representatives in Gauteng and the Western Cape, believing this organisation has the expertise to provide direction and positive solutions to the challenges faced by teenagers, a large proportion of which revolve around substance abuse.

11. The Pebbles project

The Pebbles Project's purpose is to enrich the lives of children from disadvantaged backgrounds with special educational needs. Especially those whose lives are affected by alcohol, through providing support and training to local wine farm and township crèches and establishing after-school provision for older children living in the Winelands.

KWV funded the Lifeskills programme, specifically for a teens and young adults. This programme is geared towards preparing individuals for the new and often demanding social and business situations they will meet on completing school. The programme prepares the learners for a range of situations, including job interviews, creating good first impressions, handling introductions, behaving with confidence, dress and style advice, college interview preparation and listening skills. Many of the children that Pebbles works with from the wine farms do not have the opportunities to master these life-skills, and are therefore at a disadvantage when it comes to college and work situations. KWV staff also assisted Pebbles by renovating crèches at the following wines estates Remhoogte, Hartenberg, Bellvue and the after-school club at Fairview.

12. SALBA and SANCA

SALBA, in its capacity as the Trade Association for the Manufacturers and Distributors of liquor, annually donates R50 000 to SANCA Western Cape to assist with the costs of their programmes.

Education

13. Teenagers & Alcohol guide

A guide for parents and their children was developed in co-operation with the Business Support Unit at Bishops school in Cape Town and leading medical professionals, psychologist and educators. The ARA funded the publication of the guide and a pilot initiative in schools in the Western Cape. The guide is intended to catalyse open and honest conversations within families about alcohol use and thereby reduce the harmful consequences of underage drinking. The guide has been used by various NGO's as well as the South African Police Services and a number of provincial authorities have expressed interest in using the guide to address the problems of underage and excessive drinking.

14. "One More" campaign

November 2009 saw the launch of a series of hard-hitting ARA television adverts aimed at educating parents on the impact of their drinking behaviour on their children using the payoff line 'Who says one more drink won't hurt'. The campaign creates a direct link to this message about parents needing to behave responsibly for the benefit of their children and has received critical acclaim winning two Vuka awards and being nominated for Loerie awards. The 'One more' campaign depicts three real-life scenarios where parents' behaviour has directly impacted on the lives of their children. The campaign has been expanded to include three radio advertisements which will be aired during the 2010 festive season. The investment in the campaign has exceeded R20 million.

15. "Good Idea, Bad Idea"

The ARA engaged in a multi-media campaign (including five television advertisements), using the theme 'Good Idea Bad Idea' to highlight the dangers of underage alcohol use. The campaign was evaluated and the results particularly in terms of awareness creation were positive.

16. The Rock Challenge

To further discourage underage drinking, the ARA embarked on a four year, multi million rand sponsorship of the "ARA Be Your Best Rock Challenge" which used the mediums of dance and music as a means of creating positive behaviour change amongst young learners.

17. The Buddy campaign

The Buddy Campaign has been one of the ARA's most visible initiatives through the years. It has been running on various university campuses across South Africa for the past three decades and aims at promoting responsible drinking among students, with particular emphasis on drinking and driving.

18. Retail awareness campaign

The ARA has engaged with smaller distributors and some of the major retail chains to develop an in-store awareness campaign which highlights the work done by the Life Talk Forum and the availability of the Teenagers & Alcohol Guide to encourage customers to take responsibility seriously. The campaign involves in-store material that includes stands at the doors, till stands and leaflets distributed nationwide through ARA associate members including Tops, Makro and Diamond Liquors.

19. Age Watch

In the early 90's the ARA also embarked on an "Age Watch" campaign with the retail trade, which encouraged them to display notices at the entrances to their outlets that alcohol was not for sale to persons under the age of 18 years.

20. Life Skills education

One of the ARA's very first initiatives was to fund the late Dr Sylvain de Miranda to develop a life-skills training programme which was launched in a number of private schools in Gauteng. In addition the ARA funded the Institute for Health Training Development to further develop the training programme to engage younger learners and also for a number of years funded a similar training programme run under the auspices of the church group Horison in the Western Cape

Additional company and industry initiatives

1. For additional Distell initiatives see attached annexure A
2. For additional SAB initiatives see attached annexure B
3. For additional wine industry initiatives see attached annexure C
4. For additional Brandhouse initiatives see attached annexure D

Part Four

Conclusion

The responsible consumption of alcohol beverages by those not at risk can be compatible with a balanced and healthy lifestyle.

For over 5,000 years, people have consumed various forms of beverage alcohol as a normal part of a variety of social activities. Around the world, beverage alcohol products are enjoyed every day by adults as an ordinary part of life. Most people who drink alcohol beverages do so moderately and responsibly. Only a minority abuse alcohol and cause problems for themselves or others.

The ARA remains deeply concerned by the problems of alcohol abuse and misuse and accepts a responsibility to make every effort to reduce alcohol-related harm.

The goal of the ARA is to reduce alcohol-related harm by combating the abuse and misuse of alcohol beverages and by promoting only the responsible use of its products.

History has shown that population-based approaches to promote temperance generally – such as increased taxes, bans on sales and advertising, and prohibition – will not stop that minority of people who engage in problem drinking or alcohol abuse.

The ARA and its members are committed to working independently and in partnership with like-minded organisations and individuals to identify and implement the most appropriate and effective programmes to combat the abuse of alcohol.

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Annexure A

ADDRESSING THE MISUSE AND ABUSE OF ALCOHOL BEVERAGES ARA REPORT FOR THE DEPARTMENT OF TRADE AND INDUSTRY

November 2010

Distell Foundation initiatives to prevent alcohol abuse or to minimise or mitigate the impact of alcohol abuse (ARA initiatives excluded):

- Distell financed industrial-theatre-type shows through Take-Away Theatre to explain FAS in a dramatic and entertaining way to schoolchildren, farmworkers and some Distell factory workers. Take-Away's own polls showed that only 4 percent of audiences understood what FAS was before the shows, and 90 percent understood what FAS was after the shows.
- Distell gave support to FASfacts during 2008 and 2009 to do training programmes to farmworkers about FAS. The support given during 2009 allowed FASfacts to reach 100 adults and educate them in an action-learning way about the dangers of FAS.
- Distell has been running two pilot programmes at primary schools in the Wellington area to test interventions aimed at improving the intellectual capability of children who display FAS symptoms. Early signs show that the interventions are making minimal difference, but the educational psychologist who is running the programme is sufficiently encouraged for Distell to continue with it.
- Distell supports the Trauma Centre to help victims of violence and trauma (in some cases alcohol abuse has played a role in the violence).
- Distell continues to support the Association for the Physically Disabled to "re-able" people who have become physically disabled as a result of inter alia physical assault or motor accidents (in several cases alcohol abuse has played a role in the violence or accidents);
- Distell has given support to the Turfhall Cheshire Home, which provides care for quadriplegics, some of whom are victims of road accidents and physical violence where alcohol abuse has played a role.
- Distell has supported Groote Schuur Hospital's Neonatal Unit, which often has to provide more extended care to babies born with FAS.
- Distell gave support to two safe houses – one for women and one for children – which assisted victims of assault, inter alia from drunken family members;
- Distell is co-running programmes at Neethlingshof and Stellenzicht via the Anna Foundation for young children to provide further development after school so that they develop responsible habits from early childhood already.



DNA Economics

- Distell is working with its Durbanville Hills Winery and the “Stigting vir die Bemagtiging van Afrikaans” to provide life skills training for farmworkers. Amongst other things, the teaching has focussed on self-respect and money management, and indications are that the increased knowledge and awareness is helping to lower the level of alcohol abuse amongst some farmworkers.
- Through the Nederburg Charity Auction, support is being given to the Goedgedacht Trust in the Swartland to provide a variety of programmes for teenagers and adults. Among other things, regular courses help parents and young adults to understand the role they have to play as parents. They learn about child development, nurturing, appropriate disciplining and how to release the full potential of their children. They are also taught about climate change, foetal alcohol syndrome and HIV/AIDS.
- Support is also being given through the Nederburg Charity Auction to the Pebbles Project, which works to enrich the lives of children from disadvantaged backgrounds with special educational needs. Pebbles works especially with people whose lives are affected by alcohol, through providing support and training to local wine farm and township crèches and establishing after-school provision for older children living in the Winelands. Pebbles is currently impacting on the lives of over 500 children.
- Distell supports Stellemplooy and Bergzicht with their skills development and job placement programmes. Both programmes have a job-placement success rate of over 90 percent. Government has identified skills development and job creation as key strategies to prevent unemployed people from turning to excessive alcohol consumption out of a sense of despair and hopelessness.
- Distell is assisting over 25 Arts and Culture projects, most of which have a development component. Arts and Culture has been identified as a key area via which provincial governments plan to tackle the challenge of anti-alcohol-abuse education.
- Distell runs in-house awareness campaigns featuring ARA initiatives on its internal website and through the distribution of booklets and newsletters.
- Distell provides social and psychological counselling for its employees with alcohol-addiction problems.
- Distell actively discourages drinking and driving through branded campaigns run by its Klipdrift and Savanna brands. For example, Klipdrift uses billboards displaying the “Stadig oor die klippe/Please drink responsibly” message, and Savanna has a TV “Lights out” advertisement.
- Distell’ brand homes highlight the dangers of drinking and driving in well-displayed signage, and staff are trained to discourage excessive consumption by patrons.

Enquiries:

Vernon de Vries, 021-809-8308 or 082-8092809 or vcdevries@distell.co.za

Annexure B

The South African Breweries: Alcohol Strategy

As South Africa's leading alcoholic beverage company, SAB has the responsibility to lead the attack on alcohol abuse. It has a business uniquely equipped to do so and uses this to ensure that we are able to make a real, sustainable impact. SAB recognises the importance of reaching a balance between inspiring people to do the right thing, encouraging self regulation and supporting enforcement

SAB six principles on alcohol

SAB has made discouraging irresponsible drinking one of its top sustainable development priorities. The reason is simple. When people drink too much, they can hurt themselves, other people and the communities in which they live. No one benefits.

There is no simple solution. SAB believes, however, that there are things that can make a difference. These include making sure that information about alcohol is accurate and balanced; enforcing of laws against drinking and driving, underage drinking and disorderly conduct; and reaching out to help the people who are most at risk.

SAB's six principles on alcohol are:

- Our beer adds to the enjoyment of life for the overwhelming majority of our consumers
- We care about the harmful effects of irresponsible consumption
- We engage stakeholders and work collectively with them to address irresponsible consumption
- Alcohol is for adults and is a matter of individual judgement and accountability
- Information provided to consumers about alcohol consumption should be accurate and balanced
- We expect our employees to aspire to high levels of conduct in relation to alcohol consumption

To assist people in making informed decisions about drinking alcohol based on accurate, balanced information, SABMiller (SAB Ltd's parent company) created www.talkingalcohol.com. The site provides information about the risks and benefits of alcohol consumption and links to other valuable alcohol-related resources. It also provides some of the latest news and views on alcohol. In creating this website, SABMiller used information from a wide range of reputable sources and consulted with experts in epidemiology, toxicology and medicine.

SAB's position on responsible alcohol use

Alcoholic beverages, when consumed responsibly, can make a positive contribution to the quality of life of those who choose to use them and are often at the centre of social unity and celebration. At the same time, SAB fully understands and accepts that excessive or irresponsible consumption of alcohol can result in personal, social and health costs for individuals, their families and society as a whole.

The majority of people who consume alcoholic beverages do so responsibly. SAB aims to ensure that this trend is encouraged. The company believes that effectively combating abuse and misuse requires addressing drinking patterns and behaviours. That means tackling not just chronic patterns of abuse, but also the harm that may result from occasional over-consumption by those whose total overall consumption may not be excessive.

No single action is likely to reduce the problems the misuse of alcohol can cause. Enforcement of existing laws governing sale, consumption and behaviour once intoxicated; education to equip individuals to take personal responsibility for their drinking choices; and self regulatory controls are the most effective way forward.

SAB recognises it has a responsibility to make consumers aware of the dangers arising from the misuse of alcohol, such as drinking and driving and underage drinking.

SAB's strategy to tackle alcohol abuse: beyond education

In September 2009, SAB announced an innovative plan of action to tackle alcohol abuse in South Africa. SAB's strategy to tackle alcohol abuse is a continuation of decades of work and is based on a thorough review that indicated the need for targeted interventions which go beyond communication and education. SAB intends to make a real impact and drive real change.

SAB's strategy to tackle the issues of alcohol abuse is framed around three key dimensions:

- Living the example
- Leading co-regulation
- Investing in real impact programmes

Living the example

Responsible marketing

SAB's advertising is aimed at adults who have already made the decision to drink alcohol. SAB does not encourage those who do not drink to do so, but rather, through responsible advertising, it aims to provide consumers with the right information to make their brand choices.

As a leading player in the liquor industry in South Africa, SAB maintains the strictest compliance with regulations around alcohol advertising. The company also maintains its own stringent internal codes of compliance to regulate its advertising, such as responsible messaging on advertising, which is based on an industry-agreed code of commercial communication.

Employee alcohol policy and programmes

As part of SAB's strategy to tackle alcohol abuse, new codes of conduct were developed for employees, aimed at setting new standards of behaviour, coupled with a zero tolerance for drunk driving. The programme includes random alcohol testing at all SAB sites in South Africa and is supported by Alcohol Way Training which is provided to all employees from Directors to shop floor on an annual basis, and promotes positive conduct in relation to consumption of alcohol by employees. Once trained, employees are expected to have a better understanding of the responsible use of alcohol and the management of alcohol in their lives and those of their families. They also get to grips with the company's position and policies on alcohol and learn how to be positive examples of the company's position on alcohol use.

Marketing and commercial partnerships

In response to the concerns of the community around advertising in areas of high abuse, SAB has removed all brand billboard advertising in high FAS areas and has significantly reduced the number of brand billboards in areas of high poverty. While we do not believe that advertising drives the abuse of alcohol, we are respecting the views of those communities.

Leading co-regulation

SAB has increased resources to build partnerships with government and the industry. In addition, focus is on driving real advances in the normalisation of the industry through supporting and incentivising shebeens to come into the formally regulated market. SAB is committed to collaboration and self-regulation in the industry. The company assists the relevant stakeholders with licensing and supports regulators in this regard.

Responsible Trading

In 2009 SAB launched a programme aimed at generating awareness and commitment to responsible alcohol trading amongst liquor traders. Ongoing training sessions are held around the country and a comprehensive programme is due to roll-out from 2011.

Tavern Intervention Programme

The Tavern Intervention Programme for Men, known as TIP, is a unique and progressive initiative lead by the South African Breweries Limited (SAB) in partnership with Men for Development in South Africa (Medsa). The purpose of TIP to deal with the problem of violence against women and children and the spread of HIV/Aids as causal effects of alcohol abuse. The programme targets men, identified by law enforcement, community based organisations, community leaders and members, as perpetrators of these crimes.

The aim is to inspire change in the men and to encourage them to become champions and ambassadors of change in their respective communities. The men participate in a six-session

workshop held in a local tavern during which they are encouraged to discuss social issues affecting them.

The TIP workshops include comprehensively structured modules which are based on four trends prevalent around the world, as well as in South Africa:

- Responsible Alcohol Usage: changing behaviours towards and relationships with alcohol
- HIV/Aids: create awareness
- Gender-based violence: change perceptions of traditional role of women in society and behaviour towards women
- Children's Rights and Abuse: change perceptions of children's roles in society and behaviour towards children

Investing in real impact programmes

SAB believes that targeted interventions focused on those drinking patterns which are associated with harm are the most effective ways to tackle alcohol abuse. Current initiatives aimed at tackling the harmful effects of alcohol abuse include:

Foetal Alcohol Syndrome

SAB is committed to creating real interventions which have tangible results and which improve the standards of living of the community at large. Foetal Alcohol Syndrome (FAS) is a severe issue which has been identified by SAB as a core focus.

Whereas the prevalence of FAS in developed countries such as the USA varies from 0.1% to 0.8% of the population, the Western and Northern Cape provinces of South Africa have the highest reported incidence of FAS worldwide. In certain areas in the Northern Cape, FAS has been diagnosed in 122 out of every 1,000 children – a staggering 12.2%.

FAS is more than a mental disability – it is a social disorder with immense cost implications for both government and society.

FASFacts collaboration

In 2010 SAB sponsored FASfacts, a local non-profit organisation, in order to work towards combating Foetal Alcohol Syndrome (FAS). SAB provided a sponsorship of R1 million in 2010 which has benefitted 1050 children, 525 adults and 95 shebeen owners.

FASfacts' main priority is to educate the public about the severe damaging effects of maternal alcohol consumption during pregnancy. The NGO aims to highlight the effects of FAS and draw attention to the crisis in South Africa, with the intention of working towards eradicating its effects and reducing the number of children born with FAS. FASfacts also aims to ease the financial burden carried by the societies associated with the combating, or the treatment of FAS.

As a direct result of the financial support from SAB, FASfacts was able to erect a permanent office in Upington in the Northern Cape – one of the areas hardest hit by FAS in South Africa. This will serve as the operational base from where FASfacts will roll-out the FAS prevention programs in the Northern Cape.

DSD Partnership

SAB and the Department of Social Development have recently announced a partnership, the objective of which is to make a tangible impact on the lives of South Africans affected by alcohol abuse, by addressing the effects of alcohol on unborn children, or helping those who are already affected by FASD, or both.

The FAS programme commenced with a FAS Indaba on the 18th and 19th of November 2010, the purpose of which was as follows:

- To create a shared vision on the prevention of FAS between all impacted stakeholders
- To solicit views from subject matter experts on FAS and improve understanding of the condition
- To deliberate on FAS with an aim of developing FAS prevention programmes to adopt and roll-out
- To develop a programme of action to be consolidated from the Indaba
- To generate terms of reference for the appointment of an NGO to roll-out the agreed FAS programme
- To generate awareness of FAS amongst the public

Various FAS NGO's will be assessed and selected against jointly agreed criteria by a multi-stakeholder team still to be confirmed, after which programme/s will begin being implemented.

Alcohol related road deaths

Drinking and driving – Alcohol Evidence Centres

SAB has partnered with a local and provincial law enforcement to open state-of-the-art Alcohol Evidence Centres (AECs). The AECs are equipped with the necessary equipment to detect a driver's breath alcohol concentration level accurately through a single breath sample. To date, ten AECs have been opened around the country with another five planned for the 2010/2011 financial year. This will bring the total number of AEC's in South Africa by the end of March 2011 to fifteen, effectively covering most major centres in South Africa.

The accuracy of the data collected at these centres has dramatically improved the prosecution rates of those detained under suspicion of driving under the influence of alcohol. The equipment supplied to the centres includes breathalysers and a closed-circuit television network and server to monitor the testing process. The breathalyser machines are able to take an instant and accurate reading of individuals' breath alcohol level. The reading is then used as evidence to secure a conviction of drunk

driving.

Pedestrian safety – Bobs for Good Foundation collaboration

In 2010 SAB and the Bobs for Good Foundation launched a R1 million partnership which will see 10,000 learners across the country receive school shoes with specially developed reflective strips to promote pedestrian safety. This partnership will initially last for one year and will benefit schools across the country.

The initiative was conceptualised after SAB's extensive research showed that pedestrian accidents accounted for the highest number of deaths of learners aged between 10 and 14 years in South Africa (and the second most in the 5-9 years age group). Experts estimate that a significant proportion of these deaths are caused by drunk drivers. These incidents peak between 4pm and 7pm, when children are returning home from school or playing, often in or adjacent to the street.

Beneficiary schools are selected, in partnership with the Department of Education, based on a real and genuine need for school shoes and on being situated in areas where children will need to walk significant distances to and from school or to their transport.

SAB and Bobs for Good developed unique reflective strips fitted on the shoes, which serve to draw attention to children walking during twilight hours and in the dark, making them more visible to drivers. They also developed distinctive shoeboxes which offer pedestrian safety tips for children and parents.

This is in keeping with research conducted by the World Health Organisation, which indicated that one of the best interventions in addressing pedestrian deaths in children was education - both to parents and children - as well as the use of reflective apparel.

Underage drinking

It is a deep concern of SAB's as a leading producer and distributor of alcoholic beverages that the issue of underage drinking in South Africa is so prevalent. These high levels of alcohol abuse amongst South Africa's youth are a reality we are determined to address in partnership with like-minded individuals and organisations.

According to studies, some of the major contributory factors of underage consumption include

- Alcohol acting as a diversion from teen boredom
- Youth find escape in it from domestic problems, poverty and abuse
- It is a statement of independence and lowers inhibitions
- Lack of parental guidance and structure, and
- Emulating the irresponsible drinking habits of some adults

Compounding the problem is the involvement of youth in incidences of crime.

Sports Diversion Programme

We believe that organised sport is a key step towards addressing the social ill of underage drinking. According to the United Nations, youth sport represents one of the most dynamic mechanisms in society for transforming dangerous and violent conflict situations.

Sport can have a significant positive impact on youth - it can:

- Empower the youth
- Increase their self-esteem and feeling of belonging
- Provide positive role models, and
- Meet their need for excitement and risk taking

In Australia, sport camps focusing on team work, character building and self-esteem, resulted in a 49% reduction in youth crime in targeted communities. In South Africa, the facilities available to children, especially in rural areas, are limited. Neighbourhood streets and nearby vacant fields become their makeshift sports grounds.

In late 2010 SAB launched a pilot project with the KwaZulu-Natal Department of Arts, Culture, Sport and Recreation to establish two sports fields in the province to help curb underage drinking. Structured, long-lasting football turfs have been constructed in areas identified as hotspots for youth crime and underage drinking and are also close to schools to ensure majority youth participation in organised sport.

The first sports fields are in Umbumbulu, south of Durban and another in at Ngome, Inkosi Bhambatha Zondi Sports Complex.

It is not sufficient to communicate the problem and educate on the consequences of underage drinking. SAB's approach is to find and implement workable solutions to the problem.

One of the key priorities for SAB is to encourage youth development and provide alternatives to underage drinking by addressing some of the social issues which hamper this. These sporting facilities are a first step towards achieving this objective.

Reality Check

In October 2009 SAB launched its 'Reality Check' advertising campaign. Targeted at drivers and mothers-to-be, the R50-million campaign is the largest investment to date by SAB in raising awareness about the negative consequences of irresponsible drinking and is intended to reinforce the real impact programmes that SAB has invested in.

The campaign presents a range of scenarios and perceptions, each offering a 'reality check' on the ramifications of various irresponsible and short-sighted views and activities associated with the misuse of alcohol.

Public engagement points for the campaign included washrooms, campuses, carwashes, buses and other high traffic outdoor areas. In addition, the campaign was presented in mass reach media, like newspapers, radio, magazines and billboards.

The 'Reality Check' advertising campaign is regularly refreshed to ensure longevity and continued impact.

Annexure C

WINE CELLARS SA AND VINPRO SUBMISSION

DTi Research Project

November 2010

1. Background

The South African wine industry is a modern agricultural industry that makes a significant contribution to the South African economy. Whilst the common denominator in the industry is wine growing, production and marketing of wine, the economic impact of the industry spans much wider. Wine tourism, leisure activities and property development is but a few income generators associated with the industry.

The wine industry is well structured and organized. Wine Cellars SA represents the interests of 64 larger wineries, which accounts for approximately 75% of total wine production in South Africa. VinPro, on the other hand, represents the interests of some 4300 wine growers in the South African agricultural landscape.

Numerous other associations like WOSA (Wines of South Africa), WIETA (Wine Industry Ethical Trade Association) to name but two, are dedicated to promote the interests of the industry as a sustainable, responsible resource and asset of the South African economy.

The South African wine industry has in recent years made significant progress in understanding the impact of the abuse of its products on its workforce, on consumers of wine and society at large.

There is a growing awareness amongst wine growers, wine cellars and marketing companies that they should be pro-active in reducing the negative consequences of alcohol abuse.

A greater understanding of the social problems created by alcohol abuse as well as a willingness to address the legacy of abuse in the Winelands manifests itself in the development of intervention programs on wine farms and cellars to tackle abuse and the consequences thereof. Success is partly dependant on breaking the cycle of poverty and providing value based education.

The Industry is instrumental in raising awareness and supporting measures which could address these problems, even if it implies losing market share. The industry initiated the ban of the sale of wine in 5 liter 'papsakke' and is currently involved in measures to protect consumers from illicit, cheap forms of alcohol.

The industry is committed to make a real difference, not only through initiatives utilizing its own structures and capabilities, but through working closely with Government departments, health agencies and service providers to prevent the abuse of its products.

2. Programmes

2. 1 Interventions on Wine farms (VinPro)

The nature of the relationship between wine growers and farm workers is often conducive to establish mentorship programmes where personal and group level discussions with workers and their families can resolve pertinent problems and provide guidance on, amongst other issues, the responsible use of alcohol.

2.1.1 Wine Grower participation in formal education and life skills programmes.

The industry is dependant on a talented, healthy, skilled workforce to succeed in the competitive global environment.

Farm worker development and training is therefore a critical component of a strategy to compete internationally and a great deal of effort and investment is allocated towards improving the skills set of the industry labour force.

The objective of the current training programmes is not only to improve work specific knowledge, but ultimately aims to develop multi-skilled individuals that can make meaningful contributions to the industry and to society at large.

Examples of services of training institutions currently being used in the industry are:

- Amos
- FASFacts
- Badisa
- Dopstop
- Alta Foster
- Shine
- Various youth organizations

2.1.2 General social upliftment initiatives

Farm workers and their families are important to wine growers and they take many extra measures to protect the well being of their employees. However, more needs to be done. Some of the initiatives include the following:

- Appointment in some instances of full time social workers to attend to the needs of families on the farm or regular visits by social and health workers.
- Provision of farm facilities and infrastructure to assist community upliftment projects and health care issues.
- Facilitation of upliftment through church-related interventions.
- Carrying the costs of alcohol rehabilitation of farm workers where required.

2. 2 Wine Cellar SA - Cellar Worker of the Year programme

The South African Wine Industry Cellar Worker Programme, in partnership with other industry stakeholders, empowers cellar workers through training and the transfer of knowledge and skills to develop themselves and their careers.

The programme objective is to establish role models for cellar workers and to encourage service excellence through cellar specific- and life skills training, as well as mentorship programmes. Wine appreciation and responsible alcohol use is promoted during training sessions.

The programme also recognizes the contribution made by cellar workers to the South African wine industry and offers a prestigious award for the ultimate winner.

During 2009 a total of 45 cellar workers participated in the programme which grew to 145 in 2010.

Wine makers have confirmed that the SA cellar worker programme has a pronounced effect on cellar workers. There is a noted increase in confidence levels and assertiveness to excel in their personal lives.

2. 3 Wine Industry Ethical Trade (WIETA)

WIETA is a not for profit, voluntary association of many different stakeholders, who are committed to the promotion of ethical trade, initially in the wine sector, and now in agriculture as a whole.

Stakeholders include producers, retailers, trade unions, non-governmental organisations and government.

WIETA's mission is to improve the working conditions of employees in agriculture by:

- Formulating and adopting a code of good practice governing employment standards for those involved in primary growing and secondary production operations;
- Promoting the adoption of and adherence to the code of good practice amongst all producers and growers;
- Educating producers and workers on the provisions of the code;
- Appointing independent social auditors to ensure that members of the association observe and implement the code of good practice;
- Determining ways of encouraging implementation of and compliance with the code and determining measures to be taken in the case of non-compliance with the code.

2. 4 Wine Cellars SA - Bursary Scheme

Wine Cellars SA introduced a bursary scheme for previously disadvantaged individuals in 2009 to the value of R500 000, allocated over a 3 year period. The scheme sets out to create opportunities for individuals from the designated target group who wish to develop a career in the wine industry.

In the process much needed talent is attracted to the industry and a platform is created to improve the career prospects of beneficiaries. Role models are developed and the beneficiaries will ultimately benefit financially and on a personal level.

It should also be acknowledged that this constitutes a small, but important step to break the cycle of poverty in the Winelands of the Western Cape.

2. 5 Wine Cellars SA - Code of Good Practice for Wineries

Wine Cellars SA recently adopted a Code of Good Practice to provide standardized industry guidelines for activities associated with brand marketing and the promotion of wine at individual wineries.

The code establishes a common set of conduct rules for wineries to promote wine responsibly and goes beyond what the relevant liquor legislation requires.

The objective is ultimately to protect consumers from the potential harm associated with alcohol abuse and to inform them of their own responsibilities through responsible marketing messages.

2. 6 Promoting Responsible Alcohol Awareness through Wineland Magazine



The Wineland magazine is recognized as one of the leading wine magazines in South Africa.

It is published under the auspices of VinPro and is a valuable asset in communicating responsible alcohol messages to wine growers, wineries, wine marketers and ultimately consumers.

Recent feature articles highlighted the importance of responsible conduct in the industry and have set out to promote a shared set of values.

Greater awareness of responsible alcohol practices is evident in the industry and we believe that a better understanding of the pertinent issues associated with alcohol abuse, will ultimately lead to more responsible behaviour.

2. 7 WINETECH

WINETECH is a technical institution in the wine industry that seeks to improve the competitive position of the South African wine industry through the development of leading edge technology and the expansion of human resource capacity.

The institution is funded by the industry members of SALBA, VinPro and WCSA and contributes to the training and education of farm workers and cellar personnel.

Winetech is mandated to:

- To support the wine industry with expertise.
- To support the training and education of groups and individuals in the industry.
- To facilitate the development of resource poor and previously disadvantaged producers and hence improve their access to the industry and their chance to succeed.

2. 8 Cape Wine Academy

The Cape Wine Academy (CWA) was established in 1979 and was instrumental to educate over a 100 000 people in wine studies, supporting responsible use and promoting the responsible serving of wine. During this time they ran courses for retailers in the liquor trade, at tertiary institutions for hospitality and tourism learners, for the general public and presented many corporate tastings to increase the knowledge of wine.

Since 2005, the CWA took charge of the administration for the Cape Wine Master's qualifications and they currently have two students from previously disadvantaged groups studying towards this prestigious qualification.

Approximately 2000 students are annually exposed to a variety of wine and wine related courses. The majority of students that are currently undertaking wine studies at the various tertiary institutions stem from previously disadvantaged groups and as such the institution plays an important transformation role in the wine and hospitality industries.

The Cape Sommelier qualification for wine stewards in the industry was instituted in 2008. Nine 'ordinary waiters' have been trained since then and they could substantially improve their positions in the hospitality industry and ultimately their remuneration.

Bursaries were recently awarded to a number of students from previously disadvantaged groups; four received bursaries to enroll for Higher Diplomas, one beneficiary enrolled for the Cape Wine Masters course, 34 for the South African Wine School presented at various under privileged cookery schools within townships and two currently unemployed aspirant Sommeliers.

2. 9 WIDA

WIDA (The Wine Industry Development Association) is an organisation which aims to promote transformation and social upliftment in the Wine industry through economic empowerment, an HIV/Aids focus, human resource development through training, sound industrial relations and social development.

As such the association impacts on poverty and provides a valuable transformation platform for the industry.

The institution is funded by the industry members of SALBA, VinPro and WCSA.

2.10 Wine and Spirit Board

Whilst the primary functions of The Wine and Spirit Board are the running and administration of the Wine of Origin, Integrated Production of Wine and Estate Brandy schemes, it also supports the industry from time to time to reach certain training objectives.

The Board has been supporting the industry with an Introductory Course in

Wine Evaluation aimed at cellar workers, as well as a basic training programme for the same target group over a number of years.

2.11 WOSA

Wines of South Africa (WOSA) is a non-profit NGO responsible for the promotion of the South African wine industry's image in the international arena. The industry is an important earner of foreign currency in the South African economy and stimulates economic activity in rural areas.

WOSA believes that the industry can play a role in community development in the rural wine growing regions and that the development of farm workers and their families are important elements of a long term, sustainable wine business.

From a transformation point of view, WOSA assists Black-owned Brands and BEE brands with export readiness. This is done through workshops/seminars, one-on-one consultation, assistance from international consultants and financial assistance to attend international wine shows, as well as the biennial Cape Wine show.

WOSA launched the FUNDI project as part of its 2010 Soccer World Cup activities in terms of which 2010 wine stewards from previously disadvantaged communities were trained.

2. 12 Rudnet

RUDNET is a network of non-governmental organizations (NGO's) committed to enhance the quality of life of farm-working communities through the provision of a cohesive and sustainable programme of integrated and quality development services.

RUDNET is involved in community upliftment programmes on various farms and in a number of urban areas. Their empowerment programmes focus on the social challenges faced by the youth and women today and they aim to prevent alcohol and drug abuse, raise HIV / AIDS awareness and share information on prevention. Farm workers from Grabouw, Paarl, Wellington, De Doorns, Rawsonville, Robertson and Helderberg have all benefited from training provided by RUDNET.

RUDNET facilitates the offering of Life Skills and Career Development programmes, which is accredited by various Setas'. The organisation also provides training to local drug action committees in 16 districts across the Western Cape on behalf of the Dept of Social Development.

As an industry training institution, it offers courses in viticulture, wine processing, plant production and vegetable farming. RUDNET also conducts capacity building training programmes for 160 farm workers as lay-counselors to enable them to offer counseling services to people that are affected by domestic violence, substance abuse, FAS and HIV/AIDS. RUDNET also offers support for individuals affected by abuse.

Through their empowerment programmes, the organisation also promotes new business ventures for previously disadvantaged individuals.

Their Art & Culture Project Programme focuses on the youth, women and people with disabilities. The programme was implemented in four provinces across South Africa and the objective is to develop new work opportunities for the youth through the arts.

2.13 SAWIT - The South African Wine Industry Trust

SAWIT was formed a number of years ago as a partnership between the KWV and Government.

Its purpose was to promote transformation and social upliftment in the wine industry.

KWV provided R369 million in funding to the Trust.

KWV and other key industry representatives subsequently resigned from its Board of Trustees and we therefore cannot express a view on what SAWIT has done or is still doing.

2.14 B-BBEE Initiatives

The wine industry recognises that poverty and poor socio economic conditions on farms are creating huge challenges for the industry today.

The industry also acknowledges that BEE projects are an important tool to develop the wine industry workforce and its dependants in the future.

As a direct result, the industry implemented numerous BEE projects in the Western- and Northern Cape wine growing regions.

These projects will improve the representation of previously disadvantaged groups in the industry and will expand ownership for those working and living on wine farms. VinPro, in particular, is contributing R10m over a 10 year period to establish a BEE advisory desk which not only facilitates these transactions, but also assists wine farmers in setting BEE scorecard targets which are then reviewed on a regular basis.

It will also assist to redress the imbalances in society and redistribute wealth in an orderly and sustainable manner. We share the view that alcohol abuse and the many social problems that accompany abuse can be addressed through improved living standards, quality education and training.

The following list is not static and will expand over time. It will eventually develop into a significant contributor to uplift poor farm communities in the future.

No	Project Name	District	Master Mentor	No of beneficiaries	Ha
1	Jacobsdal	Northern Cape		7	134
2.	Hartswater	Northern Cape		18	10
3.	Groblershoop	Northern Cape		12	58
4.	Kanoneiland	Northern Cape		8	5.2
5.	Modderrivier	Northern Cape		6	6
6.	Eksteenkuil	Northern Cape		48	6
7.	Bouwland	Stellenbosch		58	
8.	Kweekvlei	Paarl		71	
9.	Vinola Park	Worcester		37	
10	Nelson's Creek	Wellington			
11	Carlsheim	Overberg			8
12	Thandi Wines	Stellenbosch			
13	Trawal / Stella	Olifantsrivier		120	
14	Omaza / Litouw	Olifantsrivier		30	
15	Riebeeck Valley	Malmesbury		121	
16	Mont Piquet	Malmesbury		60	
17	De Goree / Van Loveren	Robertson		119	
18	Gelukshoop	Robertson		23	
19	Silwermyyn	Robertson			
20	Na-die-Oes	Robertson		44	
21	Robertson Kleinboere Vereniging	Robertson		72	
22	Graham Beck Centre	Robertson			
23	Osplaas	Worcester		36	
24	De Doorns Wynkelder / Saamwerkers	De Doorns		9	
25	Women in Wine	Stellenbosch		24	
26	Blouvlei	Paarl		9	
27	Black Vintners and Taverners	Paarl		14	
28	SAWIT Bursary Holders				
29	Emerging Agri (Burgundy)				
30	Foreman Study Group				
31	Papkuilsfontein / Tukul Corporate				
32	Bonnievale Workers Empowerment Trust	Robertson		23	
33	Robertson Wynkelder/ BEE Klipdrift Projek	Robertson			
34	Wamakersvallei/Phambili Wines	Wellington			
35	Tulbach Cellars / Moravia Ontwikkeling	Tulbach		334	60

Annexure D

Brandhouse Corporate Social Responsibility

At Brandhouse, we believe a sustainable business is one that plays a responsible part in the communities in which it operates. We investment in initiatives that have scale, impact and broad partnerships across stakeholders including government, NGOs and other corporate organizations.

Our Corporate Social Responsibility Portfolio includes;

Community Enrichment Programmes:.

Adult Learning:

- We align with government's top priority – education – by investing in and supporting tertiary level adult learning institutions and programmes that aim to fulfill the country's endemic shortage of high level professional and managerial skills.
- The Tertiary School in Business Administration (TSiBA) provides an innovative and comprehensive solution to addressing inequality in a sustainable manner.
- By providing access to high quality business education that is focused on entrepreneurship and leadership, TSiBA (which means 'to leap' in Xhosa) enables young people to jump the gap between rich and poor.
- TSiBA's holistic model of education ensures the retention and well-rounded development of talent who can fulfill the country's endemic shortage of high-level professional and managerial skills.
- Brandhouse leaped at the opportunity to become a strategic partner in TSiBA's programme.

Enterprise Development:

- Job creation and the growth of our economy will come from small businesses, many of them in the informal sector.
- At brandhouse, we believe that he future of South Africa lies in harnessing the informal sector and energy of South African entrepreneurs. Therefore we are committed to the promotion and development of leaders and entrepreneurs in a country with so much potential.
- Our Pitch and Polish campaign has provided us with a unique opportunity to embrace a community of young entrepreneurial leaders and to create a stimulus for growth and investment at grass roots level.

- Through this initiative, brandhouse and its partners will provide local emerging entrepreneurs with the opportunity, support and expertise to succeed in their own businesses.

Water of Life:

- There are still millions of South Africans who don't have access to safe and regular supply of water and even more without access to basic sanitation.
- The government is trying to combat this problem but, is struggling with a general lack of capacity and overburdened workload.
- Brandhouse has partnered with various trusts and foundations in order to provide communities with safe and regular water.
- One of our objectives is also to contribute towards the Diageo goal of helping 1 million people in Africa access clean water every year until 2015.
- The Mbashe Water Project 2010 – Mbashe is a rural area in the Eastern Cape, with the majority of people living in small villages. It is one of the poorest parts of South Africa, having been part of the Transkei homeland during the Apartheid era
- At present there is a huge backlog in the Mbashe area in terms of access to safe water (67% of people use river water).
- As a result there are high incidences of waterborne diseases such as typhoid and cholera.
- The provision of communal standpipes will have positive impacts for women, and in particular young girls, whose responsibility it is to fetch water

Responsible Drinking

Our view on Alcohol In Society:

- The mis-use of alcohol is a complex issue involving physiological, psychological, social and cultural factors. Most experts acknowledge that to reduce it requires multiple approaches including effective, enforced regulation, information campaigns and individual interventions. Long term integrated programmes can change attitudes and behavior.
- With our Brandhouse Marketing Code, we aim to maintain high standards of responsibility in our own activities and promote these strongly in our industry. In addition, we apply our best creative talents and resources to try to change people's attitudes to alcohol and reduce its mis-use.

At Brandhouse we have invested in the following programmes;

Brandhouse Drive Dry Initiative:

- Our flagship Responsible Drinking programme which is a Through The Line consumer awareness and intervention programme.
- The brandhouse drive dry initiative seeks to raise consumer awareness around drinking and driving.
- The lack of a conclusive study into South Africa's key motivations and perceptions around drinking and driving led brandhouse to commission consumer research into the subject.
- One of the questions brandhouse wanted answered was why so many South Africans drink and drive when it is clearly irresponsible and illegal.
- The research found that consumers are aware of the dangers of drinking and driving but, believe they won't get caught or have an accident – “it won't happen to me”
- Brandhouse then launched the Drive Dry – “it won't happen to me” campaign.

No 1 Taxi Driver Competition:

- When we looked around to find the right area we could convey the message of road safety and responsible behavior, our focus fell on the taxi industry mainly because of its impact on the lives of so many.
- There are more than 200 000 minibus taxis on the road in South Africa that transport millions of people every day, over short or long distances.
- Because of this, the taxi industry carries a huge responsibility for road safety. This becomes acute over December and Easter, with road congestion doubling.
- Driver fatigue increases as taxi drivers attempt to meet the additional demand placed upon them.
- For all these reasons, brandhouse launched the No. 1 Taxi Driver Campaign in 2004.
- It is the only public-private sector initiative of its kind in the taxi industry and is very highly regarded by the government, the taxi industry and the commuters who benefit from having better, more informed drivers.
- The aims of the campaign are positive and educational and serve to encourage taxi drivers to be responsible, and that road safety is paramount to them, their commuters and other road users.

Johnnie Walker Red Label “JOIN THE PACT”:

- One of the most popular consumer brands in our stable recently launched the “Join the Pact” initiative.
- This is a global consumer awareness campaign that calls on consumers to sign a pledge either on-line or at various activations to Never, drink and drive.

Under-Age Drinking Programme:

- Brandhouse has embarked on a new partnership with LifeTalk, Khulisa and SANCA in order to develop an intervention that will target high school learners from grades 8 to 12.
- The objective of the programme is to reduce alcohol related harm in teens.
- The programme will see students, educators and parents in pre-identified high risk areas being taken through a series of talks and counseling.
- The topics covered in these sessions will include, identifying alcohol and substance abuse in teens, how to cope with alcohol and substance abuse.
- Peer Educators will be trained, equipped with relevant information and reference material.
- The Pilot programme will be launched in February 2011 in the Western Cape – Khayelitsha and Cape Flats areas.
- A full measurement and evaluation will be conducted before launching the programme nationally.

DrinkIQ:

- DRINKiQ combines cutting edge information - facts and figures about alcohol consumption, the effect alcohol has on your body and social implications of drinking, in an informative and easy to understand manner
- The information portal is designed to equip us with the knowledge about alcohol to make the right decisions about how much we drink and how frequently – Knowledge is Power!
- All new employees at Brandhouse are trained on DrinkIQ and this is a portal we will be launching to the public in January 2011.
- www.drinkIQ.com

PhuzaKahle:

- Phuza Kahle - literally translated means 'drink responsibly/carefully'
- This is our Internal Responsible Drinking campaign aimed at educating our staff who are our biggest responsible drinking ambassadors to drink responsibly.
- Various internal communication channels are creatively utilised throughout the year to communicate key messages to staff.
- We believe that our staff have huge influence in the communities they live, play and work in.

APPENDIX 8: ARA CODE OF COMMERCIAL COMMUNICATIONS

ARA CODE OF COMMERCIAL COMMUNICATION

Including: the Commercial Communication Basic Rules additional rules relating specifically to Packaging, Promotions, Media, Sponsorships, Brand homes and Digital

the Compliance, Monitoring and Complaints Handling Procedures

ARA CODE OF COMMERCIAL COMMUNICATION

INTRODUCTION

This Code represents a firm commitment by the members of the Industry Association for Responsible Alcohol Use (ARA) to high standards in all of their commercial communication activities. The Code incorporates mechanisms to deal effectively with transgressions. Members' commitment to the Code ensures that their commercial communication activities are, at all times, responsible, legal, decent, honest and truthful.

The ARA's approach is informed by the body of scientific evidence which indicates that responsible, moderate consumption by those not at risk can be compatible with a balanced and healthy lifestyle. At the same time, excessive or irresponsible consumption of alcohol may result in negative personal, social or health consequences, and the ARA believes it has a role to play in seeking to find and implement solutions to the problems of alcohol misuse and abuse.

While the ARA believes that advertising does not impact on overall consumption or misuse, and is supported by international research in this regard, the association deems it necessary to follow a strict self-regulatory code:

- Because its members wish to make absolutely clear that they do not encourage irresponsible drinking.
- Adherence to the Code and compliance system is also a way to reassure society of the ARA members' objective – to responsibly market their products only to adult consumers not at risk, who have chosen to consume alcohol beverages. Effective self-regulation is essential to the ARA's partnership with government and to maintaining the South African public's trust.

OBJECT OF THE CODE

The object of the Code is to provide guidance for the commercial communication of alcohol beverages. As such, the Code is in addition to all regulatory requirements that already exist in South Africa.

Commercial communication includes advertising in all media (including all digital channels), packaging, promotions, merchandising and sponsorship.

Compliance must be to both the letter and the spirit of the Code.

BASIC RULES

1. Commercial communication must:

- be legal, decent, honest and truthful and conform to accepted principles of fair competition and good business practice
- be prepared with a due sense of social responsibility
- demonstrate sensitivity in regard to issues of culture, gender, race and religion
- not be unethical or otherwise impugn human dignity or integrity
- not employ themes, images, symbols or figures which are likely to be considered offensive, derogatory or demeaning
- comply with all regulatory requirements

2. Commercial communication may not feature or encourage irresponsible, risky or excessive drinking.

3. Commercial communication may not present abstinence or moderate consumption in a negative light.

4. Commercial communication may not be directed at persons under the age of 18 years, and no one depicted in the act of drinking in commercial communication may be younger than 25. Persons under the age of 18 may be depicted where it would be usual for them to appear, e.g. in family scenes or in background crowds, but it may not, in any way, be suggested that they have or are about to consume alcohol beverages.

5. Commercial communication may not employ images or icons that have unique appeal to children.

6. Commercial communication may not imply that alcohol beverage consumption is essential to business and/or social success or acceptance or that refusal to consume is a sign of weakness.

7. Commercial communication may not be suggestive of sexual indulgence or permissiveness, portray nudity or present an improper portrayal of near nudity, present any situation derogatory to the virtue of either sex or claim or suggest that alcohol beverages can contribute directly to sexual success or seduction.

8. Commercial communication may not induce people in an improper manner to prefer a drink because of its higher alcohol content or intoxicating effect. Factual information on alcohol strength may be included for the guidance of consumers.

9. Commercial communication may not claim that alcohol beverages have curative qualities, or offer it as a performance enhancer, stimulant, sedative or tranquilliser.

10. Commercial communication may not depict or include pregnant women.
11. Commercial communication may not suggest the consumption of alcohol beverages under circumstances that are generally regarded as irresponsible, inadvisable, improper or illegal, e.g. preceding or during any operation requiring sobriety, skill or precision.
12. Commercial communication may not suggest any association with aggressive, violent or anti-social imagery or behaviour, illicit drugs or drug culture.

ADDITIONAL RULES RELATING TO PROMOTIONS

1. Events and competitions directed primarily at persons under the age of 18 may not be linked to any alcohol beverage brand or product through sponsorship. It should be stated specifically that persons under the age of 18 are ineligible to participate in events and competitions aimed at promoting a brand or product.
2. Product launches and promotions may not include activities which encourage excessive or irresponsible consumption such as “boat races” or “down-downs”.
3. Consumers who attend promotions must be encouraged to assume personal responsibility for their decision to drink or not to drink.
4. Extended promotions and tastings may not be confined to the consumption of alcohol beverages alone. Appropriate snacks or meals should be available.
5. On-campus promotions by ARA members will be arranged in a manner which meets with the approval of the university authorities and when in doubt proof of age will be requested to ensure that alcohol beverages are not served to those under the legal drinking age.
6. Members may not run promotions which encourage increased consumption over a limited period of time, such as “two for the price of one” promotions. Price, however, may be used in on-premise promotional activity provided that it is directly linked to the trial of a specific brand or product.

ADDITIONAL RULES RELATING TO PACKAGING

1. In order to promote the responsible use of alcohol beverages, packaging of the highest practical quality, which leaves absolutely no doubt as to the fact that the product contains alcohol, must be used.
2. Packaging which improves the convenience of storage, transport and serving is acceptable, provided that it does not encourage the impression that alcohol is a bulk commodity.
3. Labels, which tend to degrade alcohol beverages by using colloquial names such as dop, booze and grog may not be used.

4. The alcohol strength of a product may not be used as the principal subject of a label. Legislation requires that the alcohol strength be provided for the guidance of the consumer.
5. The packaging of alcohol beverages may not be directed at persons under the age of 18 and may not have unique appeal to children.
6. Labels may not convey sexual innuendo.

ADDITIONAL MEDIA RULES

Regardless of any regulations which may already be applied by media owners, ARA members subscribe to the following:

1. Advertisements may not be transmitted in the commercial breaks immediately before, during or immediately after children's programmes on television or radio.
2. Advertisements will not be placed in any medium aimed specifically at children.
3. TELEVISION: In addition to 1 and 2 above, the following rules apply to advertisements in the television medium.
 - I. Programmes with a verifiable 30% or more viewership of persons under the age of 18 may not contain alcohol beverage advertisements. (the so-called 70/30 rule)
 - II. Alcohol beverage advertisements may not be flighted between 14h00 and 17h00 on Monday to Friday.
 - III. Alcohol beverage advertisements may not be flighted before 12h00 on Saturday and Sunday.
 - IV. In the case of sporting events where the main sponsor is an alcohol beverage company, the 70/30 rule outlined in I above will still apply for the flighting of alcohol beverage advertisements.
 - V. All alcohol beverage advertisements on television will contain the statement: "Not for sale to persons under the age of 18". Examples are contained in annexure A and the minimum specifications for this statement are:
 - a. Arial bold is to be used as the standard font
 - b. True Type Title casing is to be used
 - c. The statement must be visible and legible and placed at the bottom of the advertisement
 - d. A white block with black rule at the top of the block is to be used as a holding device for the underage line.
 - e. The block should be 10% of the height of the advertisement

- f. The statement is to run as one unbroken line.
 - g. The whole duration of any TV ad should have the statement in the above format.
 - h. “Enjoy Responsibly” or a similar message may be included as part of the underage statement depending on the execution and providing it does not detract from the underage statement.
4. RADIO: In addition to 1 and 2 above, the following rules apply to advertisements in the radio medium.
- I. As the current measurement of listenership only profiles an audience of 16 years and above, the ARA will assume that such a profile serves as a proxy for those under 16 years of age.
 - II. For alcohol beverage advertisements on radio, the 70/30 rule will apply.
 - III. No alcohol beverage advertisements will be broadcast between 06h00 and 09h00 and between 14h00 and 17h00 Mondays to Fridays and between 08h00 and 12h00 on weekends.
 - IV. In addition to the rules above, airings must take into account the programme’s appeal to youth based on verifiable profile data, the programme presenter’s profile and the profile of the audience call-ins.
 - V. All advertisements on radio will contain the statement: “Not for sale to persons under the age of 18”. The minimum specifications for this statement are:
 - a. The last 5 seconds of any Radio ad should feature the underage statement read in a voiceover in the same language as the main message.
 - b. The voice should be clear, audible and unrushed and may be different voice to that used in the main message
 - c. “Enjoy Responsibly” or a similar message may be included as part of the underage statement depending on the execution and providing it does not detract from the underage statement.
5. CINEMA: In addition to 1 and 2 above, the following rules apply to advertisements in the cinema medium.
- I. The 70/30 rule will apply and the ARA members will ensure that compliance with this rule is achieved through contractual arrangements between members and cinema owners.
 - II. Cinema advertisement selling companies will be required to submit film titles to the ARA with a qualitative assessment of the audience profile in terms of the 70/30 rule.
 - III. All alcohol beverage advertisements in the cinema will contain the statement: “Not for sale to persons under the age of 18”. The minimum specifications for this statement are:

a. Same as for Television

6. PRINT: In addition to 1 and 2 above, the following rules apply to advertisements in the print medium.

I. The 70/30 rule will apply.

II. The proxy for the age profile will be the same as used for the radio medium.

III. All advertisements in print will contain the statement: "Not for sale to persons under the age of 18". Examples are contained in annexure A and the minimum specifications for this statement are:

a. Arial bold is to be used as the standard font

b. True Type Title casing is to be used

c. A white block with black rule at the top of the block is to be used as a holding device for the underage statement

d. The block must be 10% of the height of the advertisement

e. The block must be at the bottom of the advertisement and must run the entire width of the advertisement

f. Where the advertisement covers more than a page, for example a four page foldout, the statement must be displayed on each page

g. "Enjoy Responsibly" or a similar message may be included as part of the underage statement depending on the execution and providing it does not detract from the underage statement.

7. OUTDOOR: As viewership age profiles are not available for this medium, the following rules will apply to achieve the objectives of the ARA commercial communication rules.

I. No billboards advertising an alcohol beverage brand or product will be placed within 200 meters of schools, community centres and churches.

II. In the case of building wraps and billboards larger than Super 96 size, no alcohol beverage advertisement will be placed within 500 meters of schools, community centres and churches.

III. All alcohol beverage advertisements in outdoor media will contain one of the statements (on an equivalent basis): "Not for sale to persons under the age of 18" or "Be Responsible. Don't Drink and Drive". Examples are contained in annexure B and the minimum specifications for these statements are:

a. Arial bold is to be used as the standard font

- b. True Type Title casing is to used
- c. A white block with black rule at the top of the block is to be used as a holding device for the underage statement
- d. The block should be 10% of the height of the advertisement
- e. The block must be at the bottom of the advertisement and must run the entire width of the advertisement however for large formats such as landscape wraps the underage statement must appear at 20 metre intervals on every wrap face
- f. "Enjoy Responsibly" or a similar message may be included as part of the underage statement depending on the execution and providing it does not detract from the underage statement.

8. ADVERTORIALS:

- 1. All advertorials to carry the underage statement as specified for print.

9. DIGITAL

See attached annexure C

ADDITIONAL RULES FOR SPORT SPONSORSHIPS

- 1. Irrespective of the time of the event, the normal television and radio time rules apply for brand advertisements.
- 2. No sponsorship by alcohol beverage brands of sport or sporting teams with players under the legal drinking age. Sponsorship of sports development programmes using the corporate brand is permitted.
- 3. No brand logos permitted on sports clothing intended to be worn by children
- 4. No sportsmen or sportswomen are permitted to be portrayed drinking alcohol beverages in advertisements
- 5. Sports sponsorships to be used to promote responsibility using responsible messages at sporting venues and in the media. One responsibility advertisement for every four brand advertisements

ADDITIONAL RULES FOR 'BRAND HOMES'

This section of the Code applies to production facilities that have a liquor licence to sell alcoholic beverages directly to the public or to provide products free for promotional reasons.

- 1. Public road signage

All billboards and other signage (excluding brown governmental tourism signs and flags) to include the following message: “Be responsible. Don’t drink and drive”.

2. Directional on-site signage

Brand Home entrance and exit signage to include the “Be responsible. Don’t drink and drive” message.

3. Printed material

Notices on tasting room tables, coffee tables, bars, etc. to include the “Be responsible. Don’t drink and drive” message.

All other printed material, i.e. posters, brochures, flyers, pamphlets, to include the “Not for sale to persons under the age of 18” message.

4. Advertising, including websites

All websites and advertising on websites to include the “Not for sale to persons under the age of 18” message.

Include the “Be responsible. Don’t drink and drive” message as part of the signature on email correspondence

The inclusion, or not, of the under age disclaimer, or responsible consumption of alcohol message on merchandising display stands and other merchandising material supplied by head office brand marketing teams, will be at the discretion of that brand team

Similarly to the previous point, this will be applicable to retail merchandise, i.e. souvenirs, available for sale to visitors.

5. Activities

Encourage the taking of meals with the consumption of liquor, other than just tasting. This applies to events, i.e. music concerts, presented by brand homes where alcoholic beverages are sold to visitors attending these events.

All tastings to include tasting biscuits, if no form of food is involved in the actual tasting, i.e. food and wine pairing tasting.

No competitions or lucky draws will be offered to visitors, where the entry mechanics involve the encouragement of increased consumption of alcoholic beverages.

Tour guides to encourage visitors to identify designated drivers, who will instead be served non-alcoholic beverages as part of the tasting.

Refuse to serve inebriated visitors, and supply staff with proper written guidelines on how to handle sensitive situations involving excessive alcoholic beverage consumption by an individual or group

MONITORING, COMPLIANCE AND COMPLAINTS HANDLING PROCEDURES

Members of the ARA undertake to have in place within their organization a programme to monitor compliance with the Code by their organisation. Such a programme would include procedures to make all employees aware of the Code, its contents and purpose, and the requirements in regard to compliance. Management takes responsibility for all aspects of the programme, required training and implementation within their organization.

Compliance with the Code must be secured as a pre-requisite when awarding business to:

- advertising agencies
- market research companies
- media buyers and other external consultants
- event management companies.

Each member will be required to sign an annual Certificate of Compliance confirming the extent of their compliance or non-compliance with the Code and the remedial action taken in the case of the latter. A copy of the Certificate will be submitted to the National Liquor Authority and a copy to the ARA for purposes of record.

Definitions

In this section, unless the context otherwise indicates –

“Advertisement” includes “activity and service”

“ARA” means “the Industry Association for Responsible Alcohol Use, a voluntary organisation which carries on business in the alcohol industry to combat alcohol abuse and promote responsibility”

“ARA Code” means “the Code of Commercial Communication; the Commercial Communication Basic Rules; the additional rules relating specifically to Packaging, Promotions, Media, Sport Sponsorship and Brand Homes; the Compliance and Monitoring Procedures; and the Complaints Handling Procedure, as amended by the ARA from time to time”

“ARA panel” means “the panel considering the complaint, and comprises of the arbitrator and the assessor”

“ASA” means “the Advertising Standards Authority of South Africa, a section 21 company registered according to the company laws of South Africa, which carries on business as a voluntary regulatory body in the advertising industry”

“ASA Code” means “the Code of Advertising Practice, and the Sponsorship Code, as administered by the ASA, individually and collectively”

“Assessor” means “an individual who is appointed by the ARA Management Committee for his or her expertise in the subject matter of a specific complaint, or to serve for such period as the ARA Management Committee may decide” and “assessors” has the same meaning.

“Arbitrator” means “an individual who is appointed by the ARA Management Committee with suitable dispute resolution expertise to serve for such period as the ARA Management Committee may decide”

“Day” means any day but excludes Saturdays, Sundays and national holidays as well as the period from 25 December to 1 January, and in the calculation of a period of days as prescribed by the Code or as determined by the ARA, day will have this prescribed meaning”

“Executive Director” means “an individual with suitable expertise in the alcohol industry and who is duly appointed by the Management Committee of the ARA to serve for such period as the Board of the ARA may decide”

“Member of the ARA” means the organisations, institutions and entities that are members of the ARA in good standing at any given time.

“Respondent” means “the entity, commercial or otherwise, at whose instance the advertisement appears”

“Voluntary undertaking” means an undertaking by a respondent to remove an advertisement about which there was a complaint without a ruling from the Arbitrator and with the express acceptance by the respondent that the advertisement will not be used again.

Advice

1. A member of the ARA may request a non-binding opinion from the Executive Director on whether an advertisement conforms to the ARA Code, unless the advertisement is already the subject of a complaint before the ARA or the ASA.
2. The Executive Director will, at his or her discretion, provide such opinion verbally or in writing.
3. The Executive Director may, at his or her discretion, also provide non-binding advice on suitable changes to the advertisement in the event that the proposed advertisement does not, in the view of the Executive Director, conform to the ARA Code.

Complaints Handling Procedures

4. The ARA Code is not intended to be interpreted in a purely legalistic manner. The spirit and intent of the ARA Code will form the basis of all judgments.

5. Any interested party may submit a complaint in terms of the ARA Code.

5.1. The general public will be advised on how to lodge complaints via the Complaints Line: 0860 ARA ADS (272 237).

6. All complaints lodged with the ARA must meet the following criteria:

6.1. The complaint must be in writing.

6.2. The identity and contact details of the complainant(s) must be disclosed to the ARA.

6.3. The complaint must be against a member of the ARA for the normal procedures to be followed. However in the case of a non-member the complaint will be forwarded to such non-member with a non-binding opinion from the Executive Director.

6.4. The grounds on which the complaint is based must be clearly stated as well as the relevant sections of the ARA Code to which the grounds of complaint relate.

6.5. The complainant(s) must either attach the advertisement to which the complaint relates, or provide sufficient details including the medium to identify the advertisement.

6.6. The advertisement complained against must be current and/or have been published within the last 90 days of lodging the complaint.

7. Complaints and responses to complaints may be submitted as follows:

7.1. By delivery, to the ARA at 154 Dorp Street, Stellenbosch;

7.2. By post, to PO Box 236, Stellenbosch, 7599, South Africa;

7.3. By telefacsimile, to +27 21 886 4412; or

7.4. By electronic mail, to info@ara.co.za.

8. Responsibility for establishing receipt by the ARA of a complaint lies with the complainant.

9. On receipt of a complaint, and if, at the discretion of the Executive Director (or an assessor in the event the Executive Director provided the respondent with an opinion on the advertisement complained against), the complaint -

9.1. Meets the requirements of the ARA Code;

9.2. Is not vexatious or spurious taking into account factors such as malicious motive and bad faith; and

9.3. Is prima facie with merit,

the complaint will be investigated.

10. If it is determined that the complaint will not be investigated, the complainant(s) and the respondent will be informed in writing, and the reason(s) for the determination will be set out.

10.1. At the discretion of the Executive Director, or an assessor in the event that the Executive Director provided the respondent with an opinion on the advertisement complained against, the complainant(s) may be afforded an opportunity to amplify or rectify the complaint.

11. If it is determined that the complaint will be investigated, the complaint will be submitted in writing to the respondent.

11.1. The respondent will be given 14 days to respond.

11.2. The respondent's failure to respond within the allotted period will not preclude the ARA panel from considering whether the advertisement is in breach of the ARA code.

12. After the respondent's period to respond lapsed, the complaint and the response, if any, will be made available to the ARA panel.

13. In determining whether the advertisement complained against complies with the ARA code, the ARA panel will base its consideration on the written complaint and the written response, if any.

13.1. If, in response to the complaint, the respondent voluntarily undertakes to withdraw or amend the advertisement complained of, and at the discretion of the ARA panel, such voluntary undertaking resolves the dispute, the arbitrator will record the respondent's voluntary undertaking, in writing, as a ruling of the ARA panel.

14. The arbitrator will hand down the ARA panel ruling, and will give written reasons for such ruling.

15. The Executive Director, assessor and arbitrator may, individually and collectively, perform all such acts and do all such things as are reasonably necessary for or ancillary, incidental, or supplementary to the performance of any of their functions. Should circumstances arise where good and valid reasons justify a departure from usual procedure, these will be taken into account, but always at the discretion of the Executive Director, assessor or arbitrator, acting individually or collectively.

16. The respondent will put into effect the ARA panel ruling.

17. Should the respondent choose to ignore the ARA panel ruling the ARA will make a public statement to indicate that the respondent had its membership of ARA terminated, with reasons for the termination.

17.1. A copy of this announcement will be submitted to the Director-General of the Department of Trade and Industry.

APPENDIX 9: ARA LIQUOR ADVERTISING COMPLAINTS RECEIVED, 2010

Date lodged	Date of response	Company	Brand	Complaint	Outcome
12/02/2010	17/02/2010	E.Snell	Wellington Brandy	Branded waterbottles handed out to students	Brandy in bottles had been emptied before leaving the enclosed drinking area
12/02/2010		Blaauklippen Wines	Blaauklippen Wines	Half Price promotion on billboard	Code communicated to marketing manager who was not informed of such a code
09/03./2010	09/03/2010	Halewood	Red Square Promotion	Reference to condoms	Advert had been withdrawn immediately
14/04/2010	15/04/2010	Ambeville Imports	Armagnac	Health Claims	Distributor did not place advert, but will find out who is responsible.
03/05/2010		Wine Show		Nudity	Liezie has communicated Code to organizers
17/02/2010	17/02/2010	Brandhouse	Smirnoff Billboard	no clear black line separating the body of ad from the message	Artwork will be changed to comply to the Code
11/11/2010		RGBC	Belvedere Vodka	Nudity/ near nudity/ sexual success	Awaiting feedback from RGBC
DOH Complaints:					
03/05/2010		SAB	Bigger is Better Campaign	Promotes excessive drinking	Withdrawn
		SAB	One man One beer	Shows that one is empowered if you drink	Advertising discontinued
		SAB	Sink the balck	drinking makes you a winner	Associated with the game of pool; not in contravention of the Code
		SAB	Brutal Fruit	Sexual innuendo/ sexy	Contains real lemon juice, invented name, emphasis on alcohol content; not in contravention of the Code
			Hennesey	Sexual innuendo/ sexy	Advertising discontinued early 2009
		Distell	Savannah	Encouraging excessive drinking/feel	Advertising discontinued 3 years ago

Date lodged	Date of response	Company	Brand	Complaint	Outcome
				better after drinking	
		Brandhouse	Archers Aqua - Stylish, summer, fun	Aimed at youth	Advertising discontinued
		Brandhouse	Archers Aqua- Chic, confidence, Paris comp	alcohol gives you confidence	No advertisement was submitted. No ruling could therefore be made
		KWV	Wild Africa	encourages irresponsible and excessive drinking	The marketing team has been alerted to this complaint. Advertising discontinued
			Dreher	If you don't drink, you are under-qualified	Advertising discontinued
			Tango Bite	More powerful because of higher alcohol content	Voluntarily withdrawn
			Potency	Potency/ Sexy/suggestive	Voluntarily withdrawn
		Distell	Hunters	Refreshes like nothing on earth? Water? Not truthful	Not in contravention of the Code
		Brandhouse	Heineken	Will feel great and bring opportunities to you	Advertising discontinued
		SAB	Black label- You've earned it	Not honest and truthful	Advertising discontinued
		SAB	BL - Do you have the mark of a champion?	If you drink, you're a champion?	Advertising discontinued
		Brandhouse	Johnny Walker-Dream	Alcohol will turn your dreams to reality	Advertising discontinued
		Brandhouse	Johnny Walker-Silver	Essential to winning	Advertising discontinued
		Brandhouse	Johnny Walker - good	Turn you from good to great	Symbolize where a stride could take you. Not in contravention of the Code
		Brandhouse	J & B start a party	Need J&B to start a party	A party can be started anywhere, any place. Ads does not show product being consumed to start a party. Not in contravention of the Code

Date lodged	Date of response	Company	Brand	Complaint	Outcome
		SAB	Berrylicious	Appeal to children	Clearly stated underage line. Not in contravention of the Code
		SAB	Sarita	Essential to success	In contravention of Rule 6 but not a contravention of Rule 7. Campaign has been discontinued
		SAB	Peroni	Good life associated with drinking	Advertising discontinued
		Brandhouse	Amstel	If you drink Amstel, you can make a success of yourself	No implication that alcohol played a role in the success of the individual. Not in contravention of the Code
		Distell	JC Le Roux	JC is essential to good living	The use of wine, or any other alcoholic beverage as part of a particular lifestyle is an individual choice, not prohibited by the Code. Not in contravention of the Code
			Double Act	Appealing to kids/ cookies/ cupcakes	Not a member of the ARA, not bound by the Code
			Chucky's Party Balls	Games appealing to kids	No further bottling in the current pack will be done. Use of the character must be clarified and its origin before ruling is made

APPENDIX 10: EFFECT OF POLICY MEASURES

The following table is an excerpt from Anderson Chisholm & Fuhr 2009, 2234-2235, which provides a summary of the available research on the effectiveness of various policy measures, with the level of evidence ranked according to availability of evidence. Original sources are extensively cross-referenced in the original text, which is published in The Lancet.

	Evidence of effect	Level of evidence
Education and information		
School-based education	Some positive effects on increased knowledge and improved attitudes but no sustained effect on behaviour. An SR of 14 SRs identified 59 high-quality programmes, of which only six were able to show any evidence for effectiveness	1
Parenting programmes	An SR of 14 parenting programmes noted reductions in alcohol use in six parenting programmes	2
Social marketing programmes	An SR of 15 programmes noted eight of 13 studies with some significant effects on alcohol use in the short term (up to 12 months), four of seven studies with some effect at 1–2 years, and two of four studies with some effect over 2 years. (Some of the described programmes are not strictly social marketing programmes, and other reviews have concluded the same programmes as ineffective).	2
Public information campaigns	Little scientific research; individual studies generally ineffective	5
Counter-advertising	Little scientific research; inconclusive results	5
Drinking guidelines	No scientifically published assessment	6
Health warnings	SR of the experience in the USA noted some effect on intentions to change drinking behaviour, but no effect on actual behaviour change itself	2
Health-sector response		
Brief advice	An MA of the effectiveness of brief interventions for hazardous and harmful alcohol consumption noted a positive effect of brief interventions on alcohol consumption, mortality, morbidity, alcohol-related injuries, alcohol-related social consequences, health-care resource use, and laboratory indicators of harmful alcohol use. ⁴⁷ An SR of 12 studies noted that a combination of educational and office support programmes increased rates of screening and advice giving of primary health-care providers from 32% to 45%	1; 2
Cognitive-behavioural therapies for alcohol dependence	Effective—an SR of 17 studies of behavioural self-control training found a combined effect size of 0.33 (SE 0.08) for reduced alcohol consumption and alcohol-related difficulties	1
Benzodiazepines for alcohol withdrawal	Effective—an SR of 57 trials recorded an RR of 0.16 (95% CI 0.04–0.69) for seizures compared with placebo	1
Glutamate inhibitors for alcohol dependence	Effective—an SR of 17 RCTs reported an RR of point prevalence abstinence of 1.40 (95% CI 1.24–1.59) at 6 months and 1.62 (1.37–1.92) at 12 months	1
Opiate antagonists for alcohol dependence	Effective—an SR of 29 RCTs reported a significant reduction in relapse, at least in the short term (3 months) (RR 0.64 [95% CI 0.51–0.82])	1

	Evidence of effect	Level of evidence
Community programmes		
Media advocacy	Little scientific research; but advocacy in media aimed at uptake of specific policies can lead to increased attention to alcohol on political and public agendas	5
Community interventions	Evidence of effectiveness of systematic approaches to coordinate community resources to implement effective policies, when backed up by enforcement measures	5
Workplace policies	An SR noted little evidence of effect in changing drinking norms and reducing harmful drinking	2
Drink-driving policies and countermeasures		
Introduction and/or reduction of alcohol concentration in the blood	Effective in reducing drink-driving causalities—an MA of nine studies in the USA reported implementation of a legal concentration of 0.8 g/L alcohol in the blood resulted in 7% decrease in alcohol-related motor vehicle fatalities	1
Sobriety checkpoints and unrestrictive (random) breath testing	Effective in reducing alcohol-related injuries and fatalities—an MA of 23 studies noted that alcohol-related fatal crashes reduced by 23% after introduction of sobriety checkpoints and by 22% after introduction of random breath testing	1
Restrictions on young or inexperienced drivers (eg, lower concentrations of alcohol in blood for novice drivers)	Some evidence—an SR of three studies of lower alcohol concentrations in the blood detected reductions in fatal crashes of 9%, 17%, and 24%	2
Mandatory treatment	Evidence for effectiveness—an MA of 215 assessments of remedial programmes noted that they reduced recurrence of alcohol-impaired driving offences and alcohol-related accidents by 8–9%	2
Alcohol locks	Some evidence—an SR of one RCT and 13 controlled trials noted that interlock participants had lower recurrence of offences than did controls, an effect that did not extend once the interlock was removed	2
Designated driver and safe-ride programmes	No evidence for effectiveness. An SR of nine studies was unable to draw any conclusions about effectiveness	2
Addressing the availability of alcohol		
Government monopolies	Effective—privatisation followed by higher density of outlets, longer hours or more days of sale, changes in price, and an increase in consumption	2
Minimum purchase age	Effective—a review of 132 studies published between 1960 and 1999 noted that changes in minimum drinking age laws can reduce youth drinking and alcohol-related harm, including road traffic accidents	2
Outlet density	Effective—an SR reported consistent evidence for the effect of outlet density on violence, harm to others, and drink-driving fatalities	2
Days and hours of sale	Effective—reviews noted consistent evidence that increases in days and hours of sale increase consumption and harm, and that reductions in days and hours of sale reduce consumption and harm	3
Addressing the marketing of alcohol beverages		
Volume of advertising	Effective—an SR of 13 studies noted an effect of advertising on youth initiation and heavier drinking among current users. An MA of 322 estimated advertising expenditure elasticities detected a positive effect of	1

	Evidence of effect	Level of evidence
	advertising on consumption (coefficient 0.029)	
Self-regulation of alcohol marketing	No evidence for effectiveness. Studies show that self-regulation does not prevent types of marketing that can affect young people	5
Pricing policies		
Alcohol taxes	Effective—an MA of 132 studies noted a median price elasticity for all beverage types of –0.52 in the short term and –0.82 in the long term, elasticities being lower for beer than for wine or spirits. An MA of 112 studies noted mean price elasticities of –0.46 for beer, –0.69 for wine, and –0.80 for spirits. Increasing taxes reduce acute and chronic alcohol-related harms. Setting minimum prices can reduce acute and chronic harms	1
Harm reduction		
Training of bar staff, responsible serving practices, security staff in bars, and safety-oriented design of the premise	Little effectiveness. An SR detected little effect unless backed up by police enforcement and licence inspectors	2
Reducing the public health effect of illegally and informally produced alcohol		
Informal and surrogate alcohols	Some experience from reducing alcohol-related harm, by, for example, not allowing methanol to be used as denaturing agent	5
Strict tax labelling	Some evidence of effectiveness drawn from other psychoactive substances (tobacco)	5

Note: Levels of evidence: 1=more than one systematic review; 2=one systematic review; 3=two or more randomised controlled trials; 4=one randomised controlled trial; 5=observational evidence; 6=not assessed.

SR=systematic review. MA=meta-analysis. RR=risk ratio. RCT=randomised controlled trial.

APPENDIX 11: INTERVIEWEES

Andile Hlela	SARS
Asyia Sheik	Brandhouse
Boitshoko Ntshabele	Department of Agriculture, Forestry and Fisheries
Christo van Wyk	SARS
David Asherson	Edward Snell
Dirk Conradie	Pernod Ricard
Garry Hendry	Massmart
Gavin levers	Pick 'n Pay
Gift Sehloho Sethunya	UNB
Helena Tripmaker	SARS
Henk Bruwer	Wine Cellars SA
Hymli Krige	KWV
Lebo Thutlwa	UNB
Lebona Tsotetsi	UNB
Michael Mokhorro	Distell
Nozicelo Ngcobo	SAB Miller
Patrick Matlotti	SARS
Peter Starling	NCP Alcohols
Riaan Kruger	SALBA
Riaan Meyer	KWV
Saint Madlala	SALTA
Steven Powell	ENS Forensic
Su Birch	WOSA
Tim Hutchinson	DGB
Tshepo Kgoele	Brandhouse
Vernon De Vries	Distell
Yvette van der Merwe	SAWIS



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