

Vested Interests in Addiction Research and Policy

The influence of industry actions on the availability of alcoholic beverages in the African region

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ABSTRACT

Aims The alcohol beverage industry has been expanding its corporate social responsibility and other business activities in sub-Saharan Africa. The aim of this paper is to evaluate the effects of these activities on the physical, economic, psychological and social availability of alcohol in the region. **Methods** Narrative review. Source materials came from the business press, industry sources (websites, annual reports, press releases, conference proceedings) and the scientific literature published since 2000. **Results** The alcohol industry has intensified its activities in the African region, through their funding of social aspect organizations, technical publications, policy workshops and other corporate social responsibility activities. Marketing campaigns, new product designs and the development of industry-civil society partnerships have increased. There is evidence that the alcohol industry also engages in lobbying, information dissemination and legal action to thwart effective public health measures. **Conclusions** The corporate social responsibility activities of the global alcohol industry have provided a vehicle to promote industry-favorable policies and increase the physical, economic, social and psychological availability of alcohol.

Keywords Africa, alcohol industry, availability, corporate-borne disease, corporate social responsibility, vested interests.

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INTRODUCTION

Alcohol availability has emerged as a key concept in alcohol control policy, representing an important mediating variable in the prevalence of alcohol-related problems [1]. Alcohol availability has often been defined in terms of physical availability, which refers to the arrangements made by governments that determine how convenient or difficult it is to obtain and consume alcoholic beverages. In a broader sense, the availability concept [2,3] includes other mechanisms that control or facilitate access to alcohol, such as economic, subjective and social availability. Economic availability refers to how price and disposable income affect the affordability of alcohol. Social availability refers to the degree of normative support for drinking provided by a person's key social groups, such as family, friends, sports clubs and the neighborhood public house. Subjective, or psychological, availability refers to how accessible people perceive alcohol is to them and their response to alcohol marketing. Cultural expectations such as learned expectancies or religious beliefs could influence,

for example, how readily alcohol fits into a person's self-image and life-style [4].

In one of the first articulations of what has come to be known as 'availability theory', Eric Single ([5], p. 342) proposed that the increased availability of alcohol affects consumption and, therefore, alcohol-related problems. Beyond the direct connections between availability and alcohol-related problems, Single argued that a complete model would also include 'theoretical connections leading from the incidence of alcohol-related problems to the control system via the economic, cultural and political system' (p. 330). One neglected aspect of the latter system, according to Single, is the alcohol industry, whose structure facilitates 'large advertising expenditures, the development of new products, and the promotion of consumption in other ways as well' (p. 346).

In a related paper, we reviewed the recent concentration of the alcohol industry and its public health implications for the African region [6]. The purpose of the present paper is to describe the influence of the alcohol beverage industry on the various aspects of the availability of

alcohol in the African region. The alcohol industry's influence is documented in terms of its product design innovations, marketing activities, lobbying positions and corporate social responsibility (CSR) programs.

The source materials for this analysis consisted of papers, reviews, editorials and commentaries obtained from an extensive search of the world scientific literature published since 2000. We obtained additional information from industry web sites, newspaper reports, books, book chapters and unpublished documents. Because many documents relevant to the industry's CSR activities are proprietary, we were only able to provide an incomplete picture of key issues such as motivations, financial investments and conflicts of interest.

INDUSTRY ACTIVITIES IN AFRICA

CSR activities

Alcohol industry CSR includes responsible drinking campaigns, sponsorship schemes, educational programs, publications, governmental and civil society partnerships and the funding of 'social aspects' and public relations organizations (SAPROs). SAPROs, outwardly established to reduce alcohol-related harms and manage commercial issues in areas that overlap with public health, also promote industry-favorable policies [7–9]. For example, the industry Association for Responsible Alcohol Use (ARA) in South Africa, whose mission is to reduce alcohol-related harm [10], conducts life-skills education at schools, in addition to the promotion of marketing self-regulation, and participation in public policy development [10]. An ARA-commissioned report concluded that: (a) advertising is not linked to consumption, (b) advertising bans would be ineffective, (c) the alcohol industry contributes much to South Africa's economy and (d) alcohol-related problems are primarily the fault of the informal market [11].

The Botswana Alcohol Industry Association (BAIA), established following the introduction of a new alcohol tax in 2009, offers alternative solutions to effective population alcohol-control measures, calling for stronger family values and better parental role-modeling to combat alcohol-related problems. BAIA conducts a variety of activities, ranging from lobbying members of the Executive and the legislature, House of Chiefs and District Councils [12] to running large educational campaigns [13].

Table 1 provides descriptive information about SAPROs that are operating in the African Region. The most active SAPRO in Africa is the International Center for Alcohol Policies (ICAP*), a not-for-profit organization whose activities focus on drink-driving, underage drinking, marketing and non-commercial alcohol. ICAP organizes workshops and

meetings in African countries and distributes information about alcohol and alcohol policies [8,14,15], promoting alcohol producers as 'legitimate stakeholders in government and public health initiatives' [16]. They also offer consultation to governments, industry members, trade associations, advertising agencies, regulatory bodies and the media.

Another CSR theme is the development of industry-civil society partnerships, promoted as ways of engaging various stakeholders in a common approach to alcohol-related problems. For example, South African Breweries Limited, the South African Business Coalition on HIV and Aids (SABCOHA) and the Global Fund formalized a partnership that finances condom distribution, peer educator training, HIV AIDS counseling and testing and the Tavern Intervention Programme for Men (TIP) [14], which provides education and counseling to problem drinkers.

Many CSR activities take the form of support for international organizations, such as the World Health Organization (WHO). In 2012, a consortium of transnational corporations and other industry segments publicized a set of more than 3500 'industry actions' [14], which they claim are being conducted in support of the WHO's Global Strategy to Reduce the Harmful Use of Alcohol [21]. Table 2 provides examples of actions conducted in African countries. According to the website (initiatives.global-actions.org), (managed by ICAP) industry-sponsored activities have been initiated in at least 15 African countries, primarily in the areas of drink-driving, marketing self-regulation and alcohol education [14]. The industry actions summarized in Table 2 can be seen as part of a larger CSR strategy recently articulated by the Global Alcohol Producers Group (GAPG), which issued a set of 'Commitments to Reduce Harmful Drinking' in October 2012, also allegedly in support of the WHO Global Strategy.

Analysis of impact

Generally, the industry defines alcohol-related problems in terms of personal irresponsibility while failing to define exactly what constitutes 'responsible drinking'. Its messages rarely mention that some people should not drink at all. Studies [22,23] have found that these messages tend to be ambiguous (e.g. 'Live a 3D Life') and often portray drinking as a positive, healthy, life-style choice. For instance, 'Know When to Say Enough' [14] does not define 'enough', assumes that everyone drinks and indirectly promotes this norm, despite the fact that many African countries have high levels of abstinence [21]. Such 'responsible drinking' messages (see Tables 1 and 2) may influence the psychological availability of alcohol through the promotion of drinking rather than abstinence.

*As of 2015, ICAP changed name to International Alliance for Responsible Drinking.

Table 1 Descriptive information about Social Aspect and Public Relations Organizations (SAPROs) operating in the African Region.

Organization, website (if available)	Country, year est.	Mission statement/aim	Responsible drinking message(s)	Activities
Industry Association for Responsible Alcohol Use (ARA) [10,11] http://www.ara.co.za/	South Africa, 1989	'Reduce alcohol-related harm through combating the misuse and abuse of alcohol beverages and promoting only their responsible use'	'Enjoyment is knowing when to say when'	<ul style="list-style-type: none"> 'Get Home Safe' (free ride home for college students) Lifestyle education project 'Wacky Wine Weekend' Codes of practice Lobbied against ad ban Research and publications 'Targeted' interventions 'Global Actions on Harmful Drinking' Policy toolkits and guides Seminars, conferences and workshops on alcohol policy, self-regulation Noncommercial alcohol initiatives Promotion of partnerships Focus on self-regulation, individual responsibility 'We ID' campaign Lobbied against illicit brewers, underage drinking, taxation and legal regime Appealed to Parliament to give stakeholders an opportunity to contribute to the Alcoholic Drinks Control Amendment Bill 2012 'Guidelines on Alcohol Industry Advertising' Free shuttles for bar patrons Worked with government on 2006 National Alcohol Policy Lobbied for lower tax rates on alcohol Vowed to defy ban on production of Waragi issued by Parliament Marketing code of conduct and complaints handling Pamphlet entitled 'Preventing under-age drinking: A guide to individual and community action' Partnership with police and government ministries to address illicit alcohol Adolescent behavior change initiative Club Chibuku Shebeens Upgrade Programme
International Center for Alcohol Policies [8,14–16] http://www.icap.org/ http://www.global-actions.org/ http://initiatives.global-actions.org	International, 1995	<ul style="list-style-type: none"> 'To promote understanding of the role of alcohol in society and help reduce the abuse of alcohol worldwide. To encourage dialogue and pursue partnerships involving the beverage alcohol industry, governments, the public health community, and others interested in alcohol policy' 		
National Alcoholic Beverage Association of Kenya (NABAK) [17]	Kenya, 2003	'promote self-regulation and minimize alcohol-related harm by advocating for responsible consumption'	'We don't sell alcohol to persons under 18 years'	
Uganda Alcohol Industry Association (UAIA) [14,18]	Uganda, 2006	'promote responsible consumption'	'Live a 3D life'	
Self-Regulating Alcohol Industry Forum (SAIF) [19] http://www.saifnamibia.com	Namibia, 2007	'reduce alcohol-related harm through combating the misuse and abuse of alcohol beverages and promoting only their responsible use'	'It's Friday! Do you know who's taking you home after drinks tonight?' and 'SAIF encourages responsible drinking'	
Botswana Alcohol Industry Association (BAIA) [12,13]	Botswana, 2009	'cultivate an internal drive in the youth that will lead them to good choices.	'Ikgaemele' ('Know your Responsibility!')	

(Continues)

Table 1. (Continued)

Organization, website (if available)	Country, year est.	Mission statement/aim	Responsible drinking message(s)	Activities
Responsible Alcohol Drinks Companies Association (Radca) [20]	Kenya, 2013	happiness and joy, through the pleasure of striving to fulfil their unique purpose' 'co-ordinate and direct activities to reduce alcohol related harm in Society and promote responsible consumption'	'Don't drink and drive'	<ul style="list-style-type: none"> • Project Thusanyang (Sourcing of Local Sorghum) • Lobbied against increase in tax levy • Targeted awareness campaigns • Sit on the board of the National Authority for Campaign against Alcohol and Drug Abuse • Lobbying issues: illicit brews, distribution and marketing, underage drinking, taxation and the legal regime

All organizations funded by producers of alcoholic beverages.

Within the context of CSR, SAPROs have provided the alcohol industry with a vehicle to promote industry-favorable policies with regard to taxation, marketing and prevention. Some SAPROs may be acting as a counterforce to efforts by national and international public health authorities to promote evidence-based alcohol policies [8,9,15]. All SAPROs listed in Table 1 engage in lobbying activities, and many CSR activities can be viewed as a form of risk mitigation. This can have a direct impact on physical and economic availability by undermining or eliminating efforts to raise the price of alcohol through taxation, and could also affect psychological availability by countering efforts to adopt statutory limits on advertising or impose other regulations.

In a Round Table discussion in the *WHO Bulletin*, it was argued that industry–civil society partnerships 'lend legitimacy and provide a platform for the liquor industry to lobby against proposals to reduce the availability of alcohol, increase the price of alcohol through raising excise taxes and place restrictions on the marketing of alcohol, despite the global evidence that these measures are the most cost-effective way to decrease alcohol-related harm' ([24], p. 67). The same authors [24] asserted that the Global Fund support to SABMiller signifies the successful attempt of a highly profitable industry to position itself as committed to public health objectives.

The propriety of the industry's Commitments and Actions to Reduce Harmful Drinking has been questioned by an international group of alcohol policy experts, who issued a public Statement of Concern [25] and also wrote to the WHO Director General. The main points described in the Statement were that the producers had misinterpreted their roles and responsibilities with respect to the implementation of the WHO Global Strategy, and should not be involved in WHO's public health activities other than to allow effective, evidence-based alcohol control measures to be adopted by Member States without opposition. The industry's conflicts of interest and its fundamental differences on issues promoted by the global public health community were documented further in a commentary on the Statement published in the *British Medical Journal* [26].

An analysis of more than 400 of the industry's CSR 'Actions' [9] concluded that most of these programs, including those being conducted in Africa, reflect training programs, media campaigns and other activities that have not been evaluated or have been found to be ineffective in preventing or reducing harmful drinking. Except for the possible use of random breath testing, none of the industry-sponsored programs in Africa were devoted to effective alcohol control measures identified repeatedly in literature reviews of alcohol policy. In the context of the Smart *et al.* [2] taxonomy of availability, we conclude that the net impact of these CSR activities is likely to increase physical, economic and psychological availability of alcohol.

Table 2 Examples of 'industry actions to reduce harmful drinking' in the African region.

Title	Country	Organization	Summary
'Support for the African National Congress (ANC) Youth League'	South Africa	Industry Association for Responsible Alcohol Use (ARA)	Funded workshops to provide the ANC Youth League with a 'comprehensive policy and programs' on substance misuse
'Drink Responsibly, Drive Responsibly, Live Responsibly'	South Africa	SABMiller	A responsible drinking campaign launched in support of World Health Day which used print media, radio and billboards to display the message, 'Drink Responsibly, Drive Responsibly, Live Responsibly'
'Impala'	Mozambique	SABMiller	Production of a low-cost beer (called 'Impala') made from cassava for which SABMiller negotiated a 30% lower excise tax than conventional beer
'Know When to Say Enough'	Botswana	SABMiller	A media campaign 'to develop a culture where people know their limits and are responsible enough to acknowledge when they have had more than enough'. The campaign utilizes billboards, press, radio and TV to promote the message: 'Know When to Say Enough'
'Drinking and Driving Campaign'	Botswana	SABMiller	A national campaign aimed at road accidents, which 'did not focus on alcohol being the sole reason for road accidents'
'Employee Alcohol and Bar Policy'	Nigeria	Guinness Nigeria	Developed a policy to guide Guinness Nigeria employees on responsible drinking and use of the bars 'within the grounds'
'The National Alcohol Policy'	Ghana	Diageo plc	Engagement with the Ministry of Health and its advisers to develop the 5th draft of a National Alcohol Policy
'Someone for the Road'	Kenya	East African Breweries (EABL)	A designated driver campaign encouraging consumers to 'designate themselves' when having a few drinks with friends
'Live a 3D life'	Uganda	Nile Breweries (SABMiller subsidiary)	A program to reduce drinking and driving by using billboards and distributing bumper stickers with the message, 'Live a 3D Life'
'People's Health Project'	Namibia	Namibia Breweries	Donation of t-shirts to the People's Health Project (PHP), to be worn during environmental awareness campaigns

Source: <http://initiatives.global-actions.org/Default.aspx>

Marketing activities

In 2010, the leading transnational companies and their subsidiaries were among the 10 largest advertisers in Kenya, Nigeria, South Africa, Tanzania and Uganda [27]. Brewers and distillers such as SABMiller, Diageo and Heineken are increasingly targeting African markets by offering 'traditional' cultural beverages, sponsoring local football matches and pageants such as Miss World Kenya, and running advertisements promoting 'female empowerment'. Diageo has championed the local passion for football by sponsoring national teams and matches, including one between Argentina and Nigeria that attracted a television audience of 42 million viewers. With a 3-year sponsorship package of US\$1.4 million, Guinness has become the official sponsor of Ghana's national team.

Another marketing strategy is targeted at youth who are offered free samples of new products. Researchers examining youth exposure to alcohol marketing found that 27% in Uganda [28] and 30% in Zambia [29] reported being offered a free drink via an alcohol company representative.

Related to the industry's increasing investment in marketing activities, the promotion of self-regulation has emerged as a major industry policy initiative. ICAP has published *Self-Regulation and Alcohol: A Toolkit for Emerging Markets and the Developing World* [30], which provides a 'model code of practice' for the marketing and promotion of alcoholic beverages. ICAP also organized workshops in Cape Town, South Africa in 2006 [31] and in Dar es Salam, Tanzania, in 2008 [32] in an effort to support industry self-regulation across Africa. The meeting participants—mainly industry representatives, government officials and academics invited by ICAP—were encouraged to form partnerships and work together on alcohol policy development.

In Rwanda, ICAP worked closely with local producers to build consensus about the need for self-regulation and codes customized for each market [33]. In Nigeria, ICAP partnered with the Beer Sector Group of the Manufacturers Association of Nigeria (chaired by Chairman of Guinness Nigeria) and the Advertising Practitioners Council of Nigeria to organize a beverage alcohol summit in Lagos on 18 September 2012 as part of efforts to advocate for self-regulation [34].

Analysis of impact

Alcohol marketing in some African countries has been found to be directed at young people and women, in violation of the industry's own self-regulation codes [35]. There is strong evidence from a number of countries that self-regulation is ineffective in protecting vulnerable populations, particularly youth, from the negative effects of

alcohol marketing [1,9]. The probable impact of these activities is to create an environment where industry self-regulatory codes are adopted but not enforced, leading to increased exposure of children and youth to alcohol marketing. There is growing evidence that exposure of young people to alcohol marketing speeds up the onset of drinking and increases the amount consumed by those already drinking [36,37]. The evidence also shows that marketing influences youths' attitudes and perceptions about alcohol [38,39]. The normalization of alcohol consumption in different settings and the suggestion that drinking can lead to a better life, sporting success and independence for women is likely to increase both the social and psychological availability of alcohol. The probable impact of increased advertising and related marketing in the region is to increase per capita alcohol consumption, particularly among vulnerable and currently high-abstaining groups such as young adults and women. Additionally, the provision of free alcohol to youth may result in problem drinking and drunkenness [29].

Product design and pricing innovations

As the concentration and influence of the transnational producers has grown, new product lines have been introduced, some with high abuse potential. Diageo introduced small bottles of spirits, which are less expensive to purchase [40], as well as Snapp, an apple-flavored drink targeting the 'growing wave of independent women' in their 20s. The sale and distribution of small plastic alcohol sachets and problems related to their use by adolescents have been reported in a number of countries, such as Zambia [41], Malawi [42], Tanzania [43] and Uganda [44]—where there has been public outcry to ban their sale. Affordable to almost everyone, liquor sachets are not only being sold by licensed retailers, but also by informal street traders [41].

The industry has also devised new production techniques using traditional African crops such as sorghum and cassava. As summarized in Table 3, new product lines have been used to negotiate favorable tax incentives, which can influence alcohol prices and market share [45–47].

Analysis of impact

Consistent with sales data reported by the industry, the development of new products that are consumer-friendly and inexpensive is likely to increase alcohol consumption because of their effects on physical and economic availability. The development and promotion of products targeted at young women is likely to increase psychological and social availability in this population group. Low-cost pocket-sized liquor sachets, with names such as 'Porta shots' and 'The

Table 3 Product innovations and tax incentives negotiated in four countries.

Product	Country	Producer	Crop	Tax negotiation	Result
Eagle	Uganda	SABMiller	Sorghum	0% tax rate from 2002 to 2003; preferential rate of 20% beginning in July 2003 (versus 60%)	Accounts for half of company's 55% market share
Eagle	Ghana	SABMiller	Cassava	10% preferential rate (versus 47.5%); priced at 70% of mainstream beer	(Data not available)
Senator Keg	Kenya	Diageo's EABL	Barley	0% tax rate in 2012; then preferential rate of 50% (versus 70%); priced at 1/5 of mainstream beer	Accounts for 40% of Kenyan beer market
Impala	Mozambique	SABMiller	Cassava	A quarter of the excise tax; priced at 70% of mainstream beer	Accounts for 5% of beer market

Tot', are appealing to youth and are likely to increase the physical and social availability of alcohol.

Lobbying, legal action and political donations

Lobbying is an industry-sponsored attempt to influence decisions made by officials in the government, most often legislators or members of regulatory agencies. In 2012 South Africa was considering a new law that would restrict alcohol advertising, raise the minimum drinking age to 21, enforce stricter penalties for drunk driving, raise alcohol taxes and require warning labels on containers [48]. In response, alcohol industry representatives argued that increased taxes would motivate lower-income African drinkers to buy illicit and potentially dangerous alcohol [11,49,50]. Distell and SABMiller also joined the effort, advocating a strategy that combines education and self-regulation and penalizing drinking and driving [50,51]. The latter producer confirmed recently that it would donate R9 million to political parties for the 2014 elections, almost double of what SABMiller donated the previous three elections [52]. Alcohol companies similarly lobbied against the Alcoholic Drinks Control Act, or the Mututho Law, in Kenya [20] and an alcohol levy in Botswana [53].

After the Malawi Bureau of Standards banned the sale of liquor sachets in 2010, the Bwenzi Group, producers of sachets, obtained a court injunction restraining the Bureau from enforcement [54]. The Bwenzi Group then donated K4.5 million [approximately US\$18 000] to the police for undisclosed activities designed to minimize drug and alcohol abuse [55].

In some cases, conferences and other information dissemination efforts can be interpreted as indirect lobbying. For example, an ICAP-edited book entitled *Drinking in Context: Patterns, Interventions, and Partnerships* [56] was disseminated widely at conferences and government consultations in a number of African countries where industry representatives helped government officials to draft national policy plans for their countries. One analysis of this initiative [15] found that the national plans designed

to fit the specific needs of four African countries (Lesotho, Malawi, Uganda and Botswana) were virtually identical, with all documents originating from the Microsoft Word document of a senior executive of SABMiller, one of ICAP's funders. Subsequent to the publication of this analysis, one of ICAP's chief consultants was sanctioned by his Australian employer, the government of New South Wales, for misrepresenting his government affiliation in helping to draft these policies [57].

Analysis of impact

The impact of industry lobbying activities on alcohol availability is difficult to evaluate. The Malawi example suggests that legal action and targeted donations may prevent or delay the implementation of evidence-based policies designed to limit the availability of alcohol products that are misused by young people. Industry-funded policy conferences and edited books, although ostensibly designed to promote the dissemination of scientific information, have been used to support industry-favorable policy initiatives while advocating for ineffective or inadequate programs [8].

The impact of these activities on alcohol policies has been documented in several case studies [17,58]. Four years following the adoption of ICAP/SABMiller's alcohol policy, Lesotho's Tourism, Environment and Culture Minister stated that the national policy 'lacked a public health perspective' and had not been effective in mitigating the problems of alcohol consumption [59]. In Malawi, the weak national policy proposed by the alcohol industry helped to mobilize civil society groups into a campaign that succeeded in implementing a stronger set of alcohol control policies [58].

CONCLUSION

Table 4 describes how different corporate activities can affect the types of alcohol availability reviewed in this paper. To the extent that corporate activities are linked to increased alcohol availability, it may be possible to establish

Table 4 Alcohol industry activities likely to affect four different types of alcohol availability.

Activity	Type of availability			
	Physical	Economic	Psychological	Social
Corporate social responsibility	x	x	x	
SAPRO development	x	x		
Promotion of 'responsible drinking'			x	
Industry–civil society partnerships	x			
'Actions to reduce harmful drinking'		x	x	
Marketing and self-regulation			x	x
Product design and pricing	x	x		x
Lobbying	x	x		

SAPRO = Social Aspect and Public Relations Organizations.

evidence for a causal chain that describes how alcohol problem epidemics develop as a function of corporate activities. Such a causal chain has been postulated by René Jahiel in his theory of 'corporation-induced diseases' [60], which are defined as health problems experienced by consumers, workers or community residents who have been exposed to disease agents and other health risks contained in products marketed and produced by large global corporations such as alcohol and tobacco companies. The theory posits an epidemiological cascade starting with government-sanctioned corporate profit-making and ending with individual-level health and social consequences.

At the more distal level of the causal chain, political factors such as industry lobbying for deregulation of alcohol are assumed to structure the alcohol control policy environment. Lobbying pressures, free market economics, and industry-funded 'scientific evidence' may all influence the choice of policy options, such as low alcohol excise taxes and industry self-regulation of marketing as a substitute for statutory regulation. Given the importance of the alcohol control policy environment in shaping the nature of alcohol consumption in low- and middle-income countries [61], willingness by governments to put greater emphasis on the evidence base for action is perhaps the most important response at this level of influence.

At the next level, the actions recommended by corporate decision makers (e.g. new alcohol products, aggressive marketing of alcohol to young consumers, opposition to marketing regulations) are passed on to corporate conduits such as SAPROs and trade associations. Their actions aim to modify the environment in specific ways to promote sales of the product by making it more attractive to the drinker or by neutralizing regulatory controls. The resulting modifications in the policy environment are likely to translate into increased sales, greater alcohol consumption and an increase in alcohol-related problems.

Both the theory itself and the examples provided in this paper are subject to some important limitations. First, the measurement of corporate decision-making is difficult

because internal communications are proprietary, except in cases where government inquiries [62] or court litigation allows for subpoenaed documents to be open to public scrutiny. Secondly, the lack of quantitative data make it difficult to search for covariation between objective indicators at different levels of analysis in the causal chain. Thirdly, applying a complex multi-level theory to the countries making up a large continent is hazardous, because many of the policy decisions and their health consequences are determined at the local or national levels. In the absence of better data, the association between industry activities and alcohol availability remains circumstantial and difficult to establish through anecdotal evidence.

Certainly, much of what we describe in this paper could also be termed the legitimate business activities of any profit-making enterprise. However, when the product, alcoholic beverages, is the leading cause of death and disability in southern sub-Saharan Africa (fifth world-wide) [63], greater caution must be exercised. In this light, an important consideration in any evaluation of the alcohol industry's activities is the public health impact. As suggested but not proved in this paper, the probable impact of these activities is to increase alcohol availability, alcohol consumption and alcohol-related problems.

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