

FocusPoint

ESG and alcohol: invest responsibly

Active engagement of NN Investment Partners

This FocusPoint discusses the harmful use of alcohol, ways of reducing harmful impact and the investment risks and opportunities involved. How does NN Investment Partners (NN IP), as a responsible asset manager, engages with alcohol producers on issues such as responsible drinking, carbon footprint and water scarcity.



- Alcohol producers have to play an important role in reducing the harm of alcohol
- Stricter rules and regulations result in investment risks as well as opportunities
- In search of the opportunities, NN IP continues to focus on active engagement with alcohol producers



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Alcohol has been widely consumed over the world for thousands of years. In ancient times, fermented alcoholic beverages were often consumed in communal activities. As time has gone by, drinking alcohol has become a behavior associated with entertainment and social occasions.

However, harmful use of alcohol can have a lot of health and socio-economic consequences. Reducing it plays an important role in achieving the UN's Sustainable Development Goals (SDGs). Moreover, with one fourth of the EU traffic deaths being alcohol related, the need to reduce these harmful effects becomes even more vital.

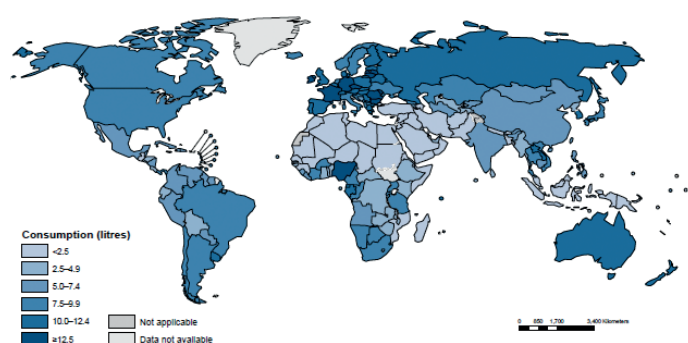
Stricter policies and rules by governments and regulators to reduce the harm of alcohol, creates risks but also offers opportunities for alcohol producers. From an investment point of view, well-prepared companies are better positioned to survive declining volumes. For example by responding to the "premiumization" trend, whereby consumers drink lower amounts of alcoholic beverages but do opt for those with higher quality. With more focus on premium products, alcohol producers could significantly improve their profitability.

Moreover, by introducing alternatives in the form of no or low alcohol beer, brewers can meaningfully contribute to reducing the harm of alcohol. At the same time that provides brewers the opportunity to effectively respond to the trend of increasing health awareness. Hence, instead of bluntly excluding alcohol producers, NN IP believes in the value of engaging with companies that are willing to collaborate to reduce the harmful effects of alcohol on both society and environment.

Alcohol consumption: the categories and numbers

Generally, there are four main categories of alcoholic beverages: beer, wine, spirits and other, such as fortified wines, rice wine or other fermented beverages made of sorghum, millet or maize.

Figure 1: Total alcohol per capita consumption (APC) (15+ years; in liters of pure alcohol), 2016



Source: World Health Organization, 2016

In 2016, the World Health Organization (WHO) estimated that 45% of the total recorded alcohol consumption in the world is consumed in the form of spirits, followed by beer which accounts for 34%. Wine ranked third in consumption at 12%.

In 2016, worldwide alcohol consumption was estimated at 6.4 liters pure alcohol per person (aged 15 years and over). That is marginally more compared to the estimated 6.2 liters in 2010.

The harms related to alcohol

Health consequences

According to research done by the WHO there is a causal relationship between harmful use of alcohol and heart, cancer and liver diseases. It can also be linked to mental and behavioral disorder, other noncommunicable conditions as well as injuries. In fact, the harmful use of alcohol is a causal factor in more than 200 kinds of diseases and injury conditions.

In 2013, alcohol was the seventh leading risk factor after dietary risks, high blood pressure, child and maternal malnutrition, tobacco smoking, air pollution and high body-mass index for the global burden of disease. According to the WHO, every year 3 million deaths result from harmful use of alcohol globally. This represents 5.3% of the total number of fatalities. The relationship between harmful use of alcohol and deaths is even stronger early in life; in the age group 20-39 years, approximately 13.5% of the total deaths is related to alcohol.

Socioeconomic consequences

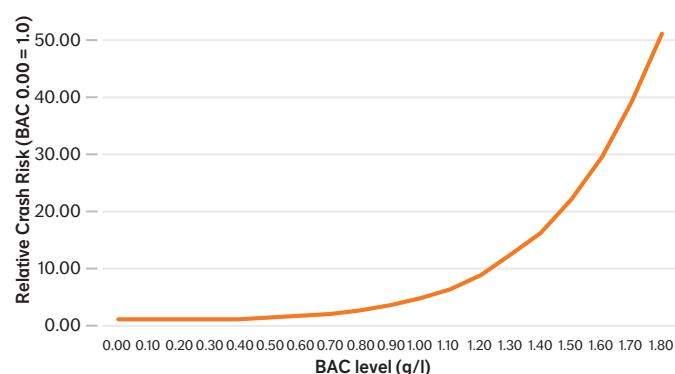
In addition to physical harm, misuse of alcohol can also have a socioeconomic impact on drinkers. Drinking will be negatively judged by others, not only in countries where it is forbidden, but also when certain "boundaries of acceptable drinking behavior" are crossed in countries where consuming alcohol is legal. As a result drinkers may experience socioeconomic consequences, such as low productivity, loss of earnings, unemployment, family issues and property damage.

Harms to other individuals

Harm can also be done to other individuals. A person who misuses alcohol might, either intentionally (e.g. assault) or unintentionally (e.g. a traffic incident), cause injury to other people and/or damage their property. In addition, certain wrongdoings, such as abuse or threat, can affect family members and friends.

Drunk driving remains the most significant harm to other individuals. The relationship between relative crash rate and Blood Alcohol Concentration-level (BAC-level) is significant and exponential. From Figure 2, we may conclude that, though still below the legal limits (between 0.4 and 0.8 g/L in a majority of countries), driving under the influence of alcohol can increase the crash rate and lead to dangerous situations on the road.

Figure 2: Relative rate for drink drivers to be involved in a crash as their BAC-level increases. The rate of a sober driver is set at 1.



Source: Compton et al, 2002

In 2014, alcohol-impaired driving fatalities (9,967) accounted for 31% of overall driving fatalities in the United States. The European Commission estimated that one quarter of the entire annual road fatalities in the European Union are due to alcohol. According to several researches in different countries (e.g. Germany, Finland, Netherlands and France), such estimation might not be an exaggeration.

Figure 3: Nine voluntary global targets for the prevention and control of noncommunicable diseases

-  A **25%** relative reduction in risk of premature mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases.
-  At least **10%** relative reduction in the harmful use of alcohol, as appropriate, within the national context.
-  A **10%** relative reduction in prevalence of insufficient physical activity.
-  A **30%** relative reduction in mean population intake of salt/sodium.
-  A **30%** relative reduction in prevalence of current tobacco use in persons aged 15+ years.
-  A **25%** relative reduction in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure, according to national circumstances.
-  **Halt the rise** in diabetes and obesity.
-  At least **50%** of eligible people receive drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes.
-  An **80%** availability of the affordable basic technologies and essential medicines, including generics, required to treat major noncommunicable diseases in both public and private facilities.

Source: World Health Organization, 2018

Harm to society at large

The abovementioned problems caused by the harmful use of alcohol also create a huge burden to society at large. For example, alcohol-attributable costs have been estimated at approximately €125 billion in the European Union in 2003, where in 2011 alcohol misuse did cost the United States \$249 billion. Such social and economic costs represent between 1.3% and 3.3% of gross domestic product. Misuse of alcohol is one of the main risk factors for noncommunicable diseases (NCDs) that kill 41 million people each year. This equates to 71% of all deaths globally. Therefore, reducing harmful use of alcohol plays an important role in achieving UN's SDGs, one of which is reducing premature death from NCD's by one-third by 2030. In addition, the WHO together with the UN's Development Program (UNDP) has set up nine targets to achieve a 25% reduction in premature deaths from NCDs by 2025. One of these goals is a *10% reduction in the harmful use of alcohol*.

The role of stakeholders

Governments and Regulators

To reduce harmful use of alcohol, the WHO highlights some cost-effective population-based policy options for governments:

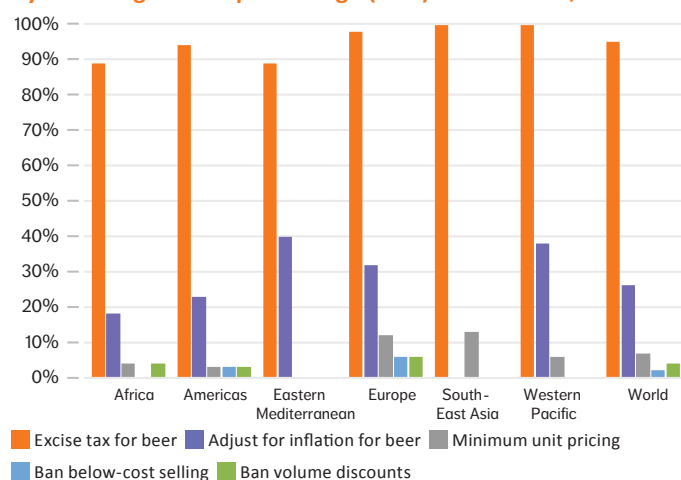
- Using taxation to help regulate demand for alcoholic beverages
- Restrictions on the availability of alcoholic beverages
- Comprehensive restrictions or bans on alcohol advertising

Price

Price is an important factor that determines alcohol consumption. Several empirical studies have demonstrated the negative price elasticity of demand in alcoholic beverage, both in high income countries (-0.46 to -0.80) and low & mid income countries (-0.50 to -0.79). Hereby a price elasticity of -0.5 means that a 20% price increase translates into a 10% sales volume drop.

Taxation and pricing policies are believed to be the most cost-effective tools for governments to reduce the harmful use of alcohol. In fact, a majority of countries (more than 90%) levies tax related to alcohol.

Figure 4: Implementation of selected price and tax measures by WHO region and percentage (in %) of countries, 2016

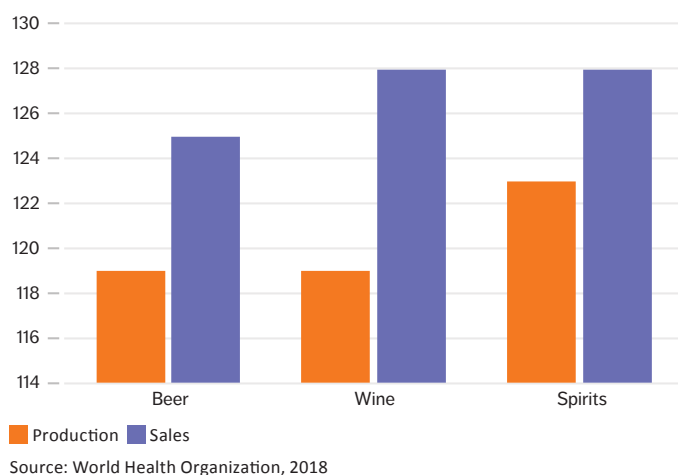


Source: World Health Organization, 2018

Availability

Several policies have also globally been applied to restrict the availability of alcoholic beverages. In most countries, governments have implemented a licensing model that regulates the production, distribution and sales of alcohol.

Figure 5: National legislation to prevent illegal production and/or sale of informally-produced alcoholic beverages, by beverage type and number of countries, 2016



Another widely implemented policy to restrict the availability of alcohol is minimum purchase or consumption age. This is highly effective in reducing alcohol consumption among the young population. According to research of the WHO, the most common age limit is 18 years. In 2016, around 66% (108 out of 164 reporting countries) of countries had an on- or off-premise legal purchase age for at least one alcoholic beverage (beer, wine or spirits) set at 18 years.

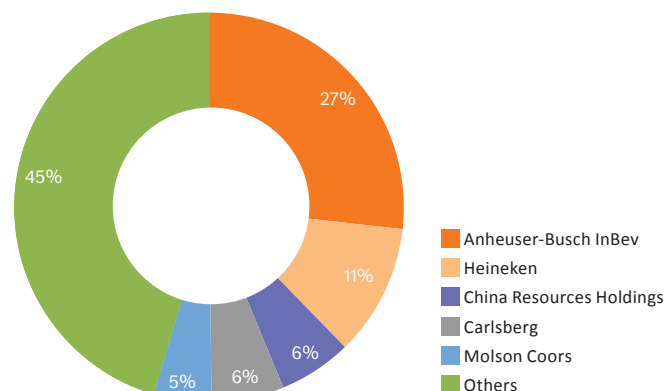
Advertising

Numerous studies have found that alcohol marketing makes a young audience more likely to start drinking, or drink more if already drinking. Thus, restriction on alcohol advertising can have a positive impact on reduction of harmful alcohol use, especially among young populations. However, it's still not a common exercise for governments to implement such restrictions across different means of media.

Alcohol Producers

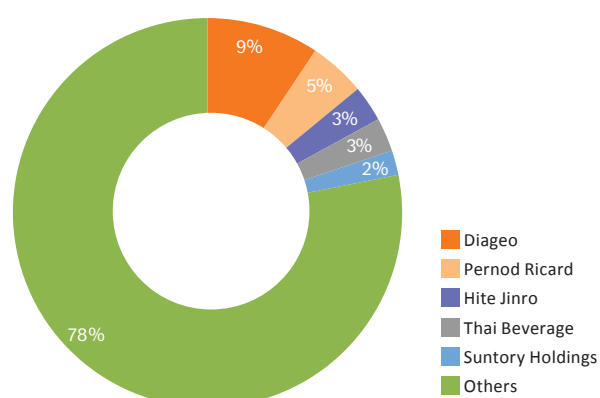
The two most popular alcoholic beverage types, spirits and beer, account for close to 80% of all recorded alcohol consumed. Thus, their producers should be most responsible to assist governments in reducing harmful use of alcohol. Moreover, both large spirits and beer producers also hold significant market shares globally. Especially beer brewers with the top 5 players accounting for 55% of global volume. Therefore, their commitment on promoting "responsible drinking" is definitely important to successfully reduce harmful use of alcohol.

Figure 6: Beer global market share by volume in 2017



Source: Bloomberg, NN IP, 2018

Figure 7: Spirits global market share by volume in 2017



Source: Bloomberg, NN IP, 2018

Campaigns and marketing on "responsible drinking" (e.g. no-driving after drinking and no-drinking during pregnancy) are key in preventing harmful use of alcohol. Companies use different measures, such as commercials, training programs and even apps, to educate consumers about the importance of responsible drinking. Besides that, transparent labels on the products – with not only information on ingredients and nutrition, but also facts about harmful use of alcohol – can better inform consumers regarding their choices about drinking. In addition, numerous beer brewers have started to introduce no or low alcohol beer products, providing a significant opportunity to reduce harmful use of alcohol. Thanks to innovation, those products can be good alternatives for consumers who want to enjoy the taste of an alcoholic drink, but without the alcohol.

Investment risks and opportunities

It's understandable that governments and stakeholders are making efforts to reduce the harmful use of alcohol given the relevant substantial burden, both socially and financially. In our view, all the actions to achieve the goal of 10% reduction in the harmful use of alcohol by 2025 will inevitably slash the consumption of alcohol. Eventually that will pose a negative impact on alcoholic beverage producers. For example, the recently implemented ban on selling beer in PET bottles larger than 1.5 liters has significantly trimmed the beer sales volume in Russia.

In addition, increased regulation and tax will result in higher costs for alcohol producers. We believe that pressure will be put on the profitability of those companies that fail to successfully pass on the rising costs to consumers.

However, apart from downside risks, the trend of reducing harmful alcohol use also provides opportunities. The more consumers get educated by governments and stakeholders, the more aware they will be of the potential severe damage of harmful use of alcohol. As a result they tend to consume a lower amount of alcohol while opting for alcoholic beverages with higher quality. This so-called premiumization trend provides alcoholic beverage producers with a significant opportunity to improve their profitability.

In addition, we believe that the negative volume trend of alcohol consumption is not only driven by efforts from governments and stakeholders, but also by the increasing focus on personal health awareness. As consumers care more about their diets they may choose healthier alternatives, such as water or fresh juice, rather than drinking alcohol. For beer brewers, no or low alcohol beer products actually fit the healthcare trend fairly well and even provide a great potential to acquire consumers who are abstinent from alcohol.

Our focus on engagement

Though the negative impacts from harmful alcohol use are clear, the health impact from moderate alcohol drinking remains complicated and indeterminate. Several studies indicated that moderate alcohol use may provide some health benefits, such as reducing the risk of heart disease, diabetes and possibly ischemic stroke. Therefore, we do not think that excluding alcoholic beverage producers is beneficial. Instead, we believe that engagement is the better approach. For our engagement we have developed several objectives:

Responsible drinking marketing

Responsible drinking continues to play major role in reducing harmful use of alcohol. Alcohol producers should proactively promote responsible drinking through their advertising and marketing campaigns and other business activities. This is particularly important for teenagers and new drinkers as they are often more vulnerable to heavy episodic drinking behavior.

Human rights

There are allegations of sexual exploitation connected to beer promotion activities in several different markets. Beer producers are accused of being aware and tolerant of a culture in which beer promoters (girls) are sometimes encouraged to tolerate sexual harassment and alcohol consumption during work for financial gain. Such behavior severely violates the basic human rights of the beer promoters and should be immediately terminated.

Carbon footprint

As climate change continues to be a top issue for the environment, we think it's important to also focus on the carbon footprint of alcoholic beverage producers. The processes of fermenting and distillation consume a large amount of energy and emit a significant

portion of CO₂. In addition to that, the sourcing of crops and packaging with both aluminum can and glass bottle are the main contributors to the carbon footprint of alcohol producers.

Figure 8: Largest contributors to beer carbon footprint

	Europe (33 cl bottle)		North America (335 ml can)	
	CO ₂ e (grams)	Percent of Total	CO ₂ e (grams)	Percent of Total
Malt	54.4	38.9	106.2	33.2
Aluminum Can (355 mL)	NA	NA	131.2	41.0
Brewery GHG Emissions	35.0	25.0	37.7	11.8
Glass Bottle - Returnable	18.3	13.1	NA	NA
Transportation	17.6	12.5	24.6	7.7
Electricity and Natural Gas (Retail)	4.9	3.5	7.1	2.2
Corrugated Tray	NA	NA	4.0	1.2
Domestic Refrigeration	2.2	1.6	3.5	1.1
Others	7.6	5.4	5.7	1.8
Total (grams CO₂e per package)	140	100	320	100
Total (grams CO₂e per liter)	420		900	

Source: Beverage Industry Environmental Roundtable, 2018

Figure 9: Largest contributors to spirits carbon footprint

	Column Distillation		Pot Distillation	
	CO ₂ e (grams)	Percent of Total	CO ₂ e (grams)	Percent of Total
Pot Distillation			1,195.7	40.3
Column Distillation	992.3	36.1		
Glass Bottle - Returnable	559.4	20.4	559.4	18.8
Maturation (Additional Ag Burden)	138.8	5.1	160.5	5.4
Warehousing	283.5	10.3	283.5	9.5
Corn	240.4	8.8	240.4	8.1
Transportation	185.5	6.8	185.5	6.2
Barley	95.3	3.5	95.3	3.2
Bottling	74.4	2.7	74.4	2.5
Electricity	62.1	2.3	62.1	2.1
Corrugated Cardboard	57.4	2.1	57.4	1.9
Others	60.9	2.2	55.8	1.9
Total (Closed Loop)	2,750	100	2,970	100

Source: Beverage Industry Environmental Roundtable, 2018

Thus, increasing usage of renewable energy, better sourcing of crops and improving the packaging can significantly cut the carbon footprint of the industry. We believe that green bonds, whose proceeds are aimed at sustainable investments, could be a good tool to finance the investments and achieve such goals.

Water scarcity

Water is the number one ingredient for alcoholic beverage. However, water scarcity has become one of the most urgent issues in the world. According to the UN around 700 million people suffered from water scarcity in 2013. By 2025, 1.8 billion people are expected to be living in countries or regions with absolute water scarcity. Therefore, it's important for alcoholic beverage producers to use and protect water access in a sustainable way.

Conclusion

Harmful use of alcohol can result in a heavy burden, both socially and financially as well as both at individual and society level. The initiatives from governments and stakeholders to reduce the harmful use of alcohol are essential steps to build up a more sustainable world. Though these measures will inevitably throw certain threats to the industry, it's pleasing to see that many alcohol producers are still willing to work with governments to promote the concept of responsible drinking.



Jod Hsu

Investment Analyst Food & Beverage
NN Investment Partners

Since it's an irreversible trend to reduce harmful use of alcohol, we believe that well-prepared companies are better positioned to benefit in the long term. Also, NN IP, as a responsible investor, will continue to engage with them, as we believe that alcohol producers that promote responsible drinking, show respect for the human rights of workers, reduce their carbon footprint and use scarce water resources more efficiently, will contribute to minimize the harmful use of alcohol for a better world. At the same time, we also believe that those companies will provide us with the best investment opportunities.

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