FICCI CASCADE

ILLICIT MARKETS- A THREAT TO OUR NATIONAL INTERESTS

THE ALCOHOLIC BEVERAGES INDUSTRY

About this report:

This report has been prepared by Thought Arbitrage Research Institute (TARI) for FICCI Committee Against Smuggling and Counterfeiting Activities Destroying the Economy (CASCADE).

Thought Arbitrage Research Institute

Thought Arbitrage Research Institute (TARI) is a not-for-profit organisation set up under Section 25 of the Indian Companies Act. It is a privately-funded, independent, non-partisan Indian think-tank on:

- *Corporate Governance*
- *Whistleblowing / Vigil Mechanism*
- *CSR & Sustainability*
- *Economics & Public Policy*

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Foreword

Product counterfeiting puts consumer health and safety at a great risk. Counterfeit, fake and smuggled goods are no longer just about luxury items. Today, almost all sorts of products are being copied and smuggled, which lead to fatal consequences for the consumers.

FICCI has been at the forefront of advocating policy framework on various aspects affecting the industry. In 2012, a FICCI CASCADE study titled "Socio-Economic Impact of Counterfeiting, Smuggling and Tax Evasion in Seven Key Indian Industry Sectors" was released which was the first ever compilation of facts and figures on counterfeiting, smuggling and tax evasion in seven key industry sectors in India. After the earlier comprehensive study, which not only estimated the size of the grey market in the select industry sectors, but also highlighted the losses to the industry in sales and Government in revenue, we have now gone a step further and developed 10 sector specific reports on 'Illicit Markets – A Threat to Our National interests'. This report is specific to the alcoholic beverage industry and aims at updating the estimates of grey markets in this sector, projecting the resultant losses to the industry and assessing its impact on innovation and investment.

I would like to thank and congratulate all the committee members and stakeholders who have contributed towards this project, particularly Thought Arbitrage Research Institute (TARI). It is hoped that this study would provoke further debate on the extent of this problem and ways and means to mitigate the challenge.

I wish FICCI-CASCADE success in its future initiatives.

Dr. A. Didar Singh
Secretary General
FICCI

Chair's Message

I am pleased to present the report on 'Illicit Market: A Threat to Our National Interest' which is specific to the alcoholic beverage industry.

Illicit markets have broad economy-wide effects on trade, investment, employment, innovation, criminality, environment, and most importantly, on the health and safety of the consumers. Over and above, it also has a negative impact on the brand image and loss of revenue for industry and governments.

In the alcoholic beverage industry, the industry faces a twin problem. Firstly, the production of alcohol under non-standard conditions which are much more harmful, life threatening and, secondly, the smuggling of these products which escape state taxes and duties applicable to this sector. As alcoholic beverages industry is a state subject, manufacturers have to conform to regulations legislated by each state which vary from state to state and sometimes loopholes in such differences in regulations can fuel illicit trade.

Given the thrust on "Make in India"; technology, invention, and innovation will play a key role in India's current economic development. However, counterfeits and fakes will threaten India's growth strategy. Hence, a proactive strategy should be in place to fight this serious menace to public health and safety, and to the state exchequer.

This report has estimated the size of the illicit market; its adverse impact on innovation and investment in the alcoholic beverage industry. I am certain that the findings from this report would increase consumer awareness, drive support from policy makers in tax related reforms and step up the industry for greater investment in R&D and encourage innovation.

I hope that this research will be useful for all stakeholders including consumers, industry, policy makers and researchers on the issues in the alcohol beverages industry, and the challenges ahead if concerted efforts are not taken to curb this menace of smuggling and counterfeiting.

Chairman
FICCI CASCADE

Table of Contents

Executive Summary

The growth of the illicit markets is evident in India as in the rest of the world. The 2012 FICCI CASCADE study titled "Socio-Economic Impact of Counterfeiting, Smuggling and Tax Evasion in Seven Key Indian Industry Sectors" (FICCI CASCADE Study) established this by estimating the size of the grey market and related loss to the industries covered in the study. FICCI's Committee Against Smuggling and Counterfeiting Activities Destroying the Economy (CASCADE) has commissioned the present study to update the estimates of the size of grey market/counterfeit products for selected industry sectors in India, to project the resultant economic loss to industry and government, and to assess the impact of grey markets/counterfeit products on investments, innovation and tax arbitrage. This report is specifically for the alcoholic beverages industry, while other industries are covered in separate industry specific reports similar to this one.

ALCOHOLIC BEVERAGES

GREY MARKET ESTIMATES INDUSTRY & GOVERNMENT LOSS

IMPACT ON:
- Innovation
- Investment
- inter-state Tax Arbitrage
-Terrorism

Size of the Illicit Market in the Alcoholic Beverages Industry

Production and consumption of alcoholic beverages in India is growing for many reasons, including favourable demographics, rising disposable incomes and a greater societal

acceptance of alcoholic consumption. According to a Euro Monitor International report (" Alcohol Drinks in India", September 2013) sales of alcoholic drinks are forecast to increase by a CAGR of 8% by volume and 6% constant value CAGR in the 2012-2017 forecast period. Imported premium lager beer, blended Scotch whisky and fortified wine and vermouth are expected to grow at double-digit rates. Brown spirits (namely whiskey and rum with high alcoholic beverages content over 40 percent v/v) are the preferred drink in India, rather than beer, wine and other products with lower alcoholic beverages content, although they have been gaining in popularity among drinkers recently.

According to the Public Health Foundation of India (PHFI) India is the dominant producer of alcoholic beverages (65%) in the South East Asia region. It is now emerging as one of the key markets for the global spirits industry and is the third largest global spirits market by volume in the world, just behind China and Russia.

The illicit market in this industry is also growing at a large pace. In comparison with the results of the FICCI-TARI study of 2012 the grey market in the alcoholic beverages industry has increased from 10.2% in 2010 to 16.7% in 2012 - the largest percentage increase among all the industries under FICCI-CASCADE review. It is pertinent to note however, that it continues to be the industry with the smallest grey market percentage.

A similar trend is visible in the loss to industry estimated for 2014 in comparison with 2012. The loss to the alcoholic beverages industry has increased from ₹ 5,626 crores in 2012 to ₹ 14,140 crores in 2014, a huge leap of 151%.

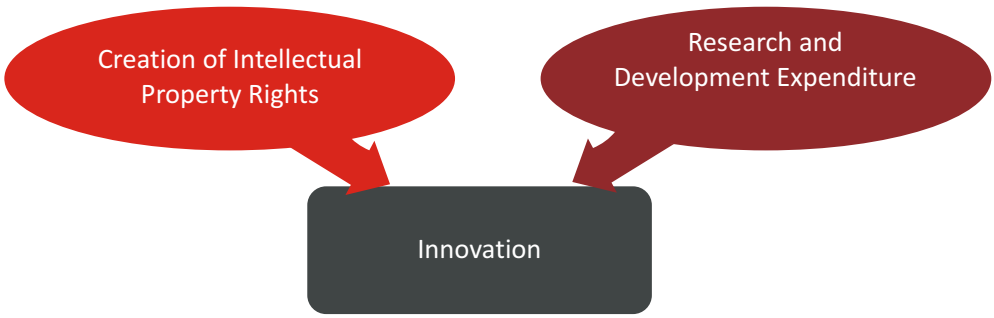
Industry	Grey Market %age		Loss to Industry (₹ crores)	
	2012	2010	2014	2012
Alcoholic Beverages	16.7%	10.2%	14,140	5,626

The total loss of taxes to the government has also shown an increase. The estimated for 2014 in the alcoholic beverages industry is ₹ 6,309 crores, up from ₹ 2,511 crores in 2012. It needs to be highlighted, that this loss is only on account of tax revenues. We have not estimated the incremental costs incurred by government on account of welfare measures, enforcement and legislation and interest costs.

Seeing the growth of the illicit markets, it is obvious that the measures being undertaken to combat this threat to legitimate markets is insufficient, considering the impact it has on the stakeholders involved. The problem presents a conundrum as long as there is a market for such illicit goods. Governments, non-government agencies and manufacturers need to therefore work in tandem to strengthen the measures already in place particularly in creating awareness and spreading information on the negative impacts of purchasing counterfeit products including the legal consequences thereof.

Impact of Illicit Markets on Innovation

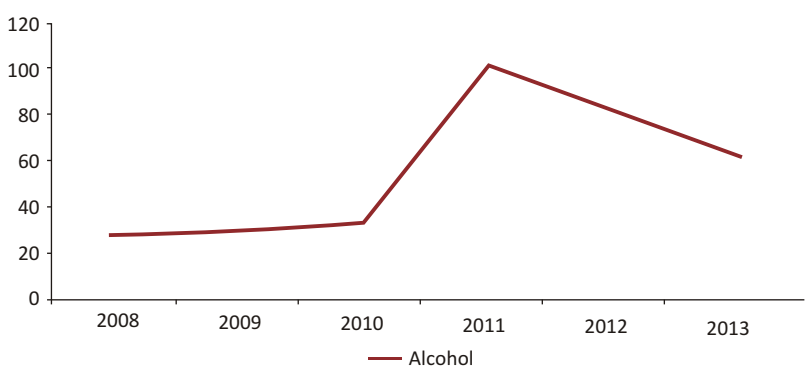
Two proxies were used in this study to measure innovation:



Our analysis of intellectual property rights and patent application filed in India has indicated, that while there is scope for innovation in the alcoholic beverages industry, there is no data in India which suggests that there is any innovation in the alcoholic beverages industry in India. This is possibly due to the high propensity for counterfeiting in this industry, as has been established earlier. Patent applications granted in India have been falling over the past five years. CSIR has filed the largest number of patents in India and abroad and the top ten industries in which patents are in force constitute almost 81% of their patents - alcoholic beverages is not amongst these.

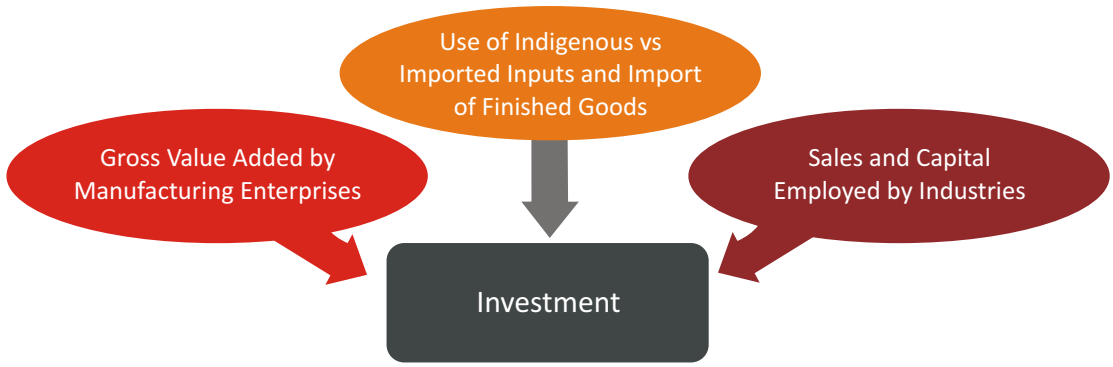
The ratio of R&D expenditure to total operating expenses of Indian companies in the alcoholic beverages sector was analysed to ascertain the significance of R&D in the overall scheme of things for these companies. It was observed that this industry has one of the lowest ratios amongst all the industries under review of FICCI-CASCADE - an average of 0.08% over the six year period from 2008 to 2013.

R & D Expenditure (in ₹ Millions)



Impact of Illicit Markets on Investments

Three ratios have been used to establish a link and assess the impact of illicit markets on investments in India.



All the ratios reveal that both the quantity and quality of investments made in Indian production processes are inadequate to boost the contribution of these sectors to India's manufacturing revenue.

In the analysis of value added by companies over a period, we conclude that a high dependence on imports and the consequent high grey market presence result in low gross value added as a percentage of total output. It also hints at the possibility of counterfeited products, particularly in sectors that require a high degree of innovation and technology use which is not readily available in India, being smuggled into India through various channels. The alcoholic beverages sector shows the least average percentage of gross value addition over total output and the largest increase in grey markets.

Sector	2010		2012	
	GVA as %age of Total Output	Grey Market %age	GVA as %age of Total Output	Grey Market %age
Alcoholic Beverages	3.56	10.2	11.8	16.7

It was also found, that while the proportion of imported raw materials over total consumption of raw materials in the alcoholic beverages industry was low (around 3.5% in 2008 and 3.22 % in 2012), the industry did see a significant increase in dependence on imports over this period.

Our analysis of the ratio of sales to average capital employed in the alcoholic beverages industry reveals that the ratio has remained fairly steady, indicating that there has been no dramatic increase in investments in the years under review against which higher sales can be expected in the coming years. At the same time, there has been an increase in the level of illicit markets.

This increase implies that companies are reluctant to make patient long term investments to generate revenue from the capital base for fear of loss of investment on account of a strong presence of the illicit markets.

Impact of Inter-state Tax Arbitrage within India

Our analysis of the alcoholic beverages industry shows tax structures are quite complex, varies from state to state and by product. It is the only industry in which there are state excise levies and also VAT. Each state is left to structure their taxes in the manner they so wish, with tax rates as high as 190%. We compared alcohol consumption with production to understand the reasons for a gap if any. It was observed that even after factoring in the possibility of legitimate inter-state sales (which is otherwise subject to a number of barriers) and closing stock, there is a net excess of 31% of alcohol consumption in 2012 vis-à-vis production in the entire country. The corresponding number for 2008 and 2010 are 27% and 17% respectively. Excess consumption raises questions on the source of this consumption and possible losses to the exchequer as well as the harmful effects on consumers. Consumption data also showed an increasing trend, among states with prohibition where there is limited or no production.

The study therefore concluded that a high and complex tax regime often results in loss of state revenues, lowering of state GDP, red tape and corruption. If the intention of higher taxes is to reduce consumption, this rarely occurs at the ground level. On the contrary, consumption either remains the same, or consumers turn to neighbouring states for their consumption or they turn to smuggled or counterfeit products. With this industry showing the largest increase in grey markets from 10.2% in 2010 to 16.7% in 2012, the revenue losses to the exchequer taking into account all state taxes and levies would be a huge number, for an industry , which is estimated to contribute over ₹ 48,000 crores to the state exchequer towards excise duty alone, annually.

Illicit Markets, Terror Organisations and Criminal Networks

While statistical data is available for the number of terrorist attacks that have taken place in India, it is difficult to directly correlate it to the grey market data in the absence of sufficient information and research, which are lacking at present, especially in the Indian context.

Furthermore, despite the existence of requisite laws in India and arrests of suspected criminals by the police, the scale of illicit markets is huge and the criminal networks and illicit markets organisations continue to thrive. Clearly, the existing laws and police operations are not resulting in the desired outcome and do not act as a deterrent. This could be due to the low conviction rates in India.

The lack of adequate data based on search and seizure in India makes it difficult to link the increase in illicit markets to terror funding. Establishment and determination of the extent of such a link calls for strategic intelligence gathering and preparation of robust databases, which are clearly missing at present. Given the security implications, if not outright financial considerations, there is little to argue against carrying out such exercises. This would be the first step to contain counterfeiting and its corollary, terror and ensure that genuine business interests do not suffer.

Conclusion & Way Forward

The alcoholic beverages industry remains the industry with the smallest grey market percentage among the industries under review of FICCI-CASCADE-16.7%. However, it has shown the single largest increase in 2012 as compared to 2010 when it was estimated at 10.2%, a growth of more than 60 %. This growth has thus helped to reasonably establish a link between the size of the grey market and its impact on innovation, investment and tax arbitrage. With the industry itself growing at double digit rates over the past few years due to changing demographics, increasing disposable incomes, easy availability and greater acceptance of social drinking, the illicit markets are likely to grow given the many barriers for entry, existence and growth in the industry.

While our research did indicate that there is scope for innovation in this industry, data available in India did not suggest the existence of any patents. This coupled with the declining ratio of R&D expenditure to total operating expenditure over the six year period of review (from 2008 to 2013) suggests that the industry is apprehensive about incurring the costs related to innovation. In fact this industry has one of the lowest ratios among all the industries under FICCI-CASCADE review. For an industry sector faced with a growing grey market, the returns on research, which is a risk activity, would be much lower on account of the greater risk of illicit markets.

The three proxies used to assess the quality and quantity of investment in India also reasonably established a link between the high/growing grey market and its impact on investment. The alcoholic beverages sector shows the ***least average percentage of gross value addition over total output*** and the largest increase in grey markets.

The use of ***indigenous inputs is predominant in this industry*** and while the grey markets have shown the largest increase from 2010 the size of the illicit markets is relatively small. In the alcoholic beverages industry ***while the proportion for finished products has remained one of the smallest, an increasing trend has been observed*** over the years under review.

The difference in percentage change in sales and capital employed (a ratio which helps to understand what level of sales are being generated by each rupee worth of assets invested in the business) did not yield a significant trend in the case of the alcoholic beverages industry. ***Similarly the ratio of sales to average capital employed remained fairly steady,*** indicating that

there has been no dramatic increase in investments in the years under review against which higher sales can be expected in the coming years. At the same time, the sector has shown an increase in the level of illicit markets. This increase implies that that ***the sector is wary of making patient long term investments to generate revenue from the capital base for fear of loss of investment.***

Taxes on alcoholic beverages in India are relatively large compared to taxes on other products indicating that it is a significant source of income for states. Our analysis has revealed, that while the complexity of the tax structures varies from state to state, rates of tax also vary as indicated. A high and complex tax regime often results in loss of state revenues, lowering of state GDP, red tape and corruption. The multiplicity of levies such as excise, VAT, labelling fee, vend fee, transportation fee, etc., also adds to the cost of compliance while not benefitting revenue. The key therefore is to harmonise taxes across states. It is also important to streamline policies related to licensing and advertising as well as effective enforcement and uniform application of age limits across states. The proposed Goods and Service Tax (GST) is a step towards this harmonisation process.

Consumption of counterfeit alcoholic beverages of course has proven detrimental to health. If the intention of higher taxes is to reduce consumption, this rarely occurs at the ground level. On the contrary, consumption either remains the same, or consumers turn to neighbouring states for their consumption or they turn to smuggled or counterfeit products. In addition unrecorded consumption estimates of which vary between 50%-67%, poses a significant barrier to policy makers who are lobbying for a national policy on alcoholic beverages.

Policy measures therefore need to be taken and effectively implemented to reduce/curb the growing grey markets, encourage innovation and investments in the industry, reduce the percentage of unrecorded alcoholic, as well as reduce the cost of healthcare. Concerted efforts in these directions would not only result in higher tax collections, it would also assist in prevention of the socio-economic-health risks related to consumption of alcohol purchased from the illicit markets.

For sustainable economic growth, investment and innovation are a pre-requisite. According to a recent Dun & Bradstreet report,[1] rising income levels coupled with increase in the young working-age population will lead private final consumption expenditure to grow steadily over the years, averaging around 7.0% during FY15-FY20. The growing illicit markets however vitiate the environment and restrain such growth, reducing business efficiency, profitability and overall development. To curb this growth collaborative efforts are required from all the stakeholders.

SUMMARY OF CONCLUSIONS

- The grey market percentage in the industry has increased from 10.2% in 2010 to 16.7% in 2012.
- Loss to the industry has increased in 2014 in comparison with 2012 from ₹ 5,626 crores to ₹ 14,140 crores, attributable to the increase in the industry size as well as grey market percentage
- The total loss of taxes to the government has also shown an increase. The estimated for 2014 in the alcoholic beverages industry is ₹ 6,309 crores, up from ₹ 2,511 crores in 2012.
- Data available in India did not suggest the existence of any patents. This coupled with the declining ratio of R&D expenditure to total operating expenditure over the period of review suggests that the industry is apprehensive about incurring the costs related to innovation, perhaps on account of the increasing illicit markets
- The 3 proxies studied for evaluation of the impact of illicit markets on investment activity, throw up some the following results:
  - This sector shows the least average percentage of gross value addition over total output and the largest increase in grey markets.
  - Indigenous inputs is predominant in this industry and
  - While the proportion for finished products has remained one of the smallest, an increasing trend has been observed over the years under review.
  - The ratio of sales to average capital employed remained fairly steady, indicating no dramatic increase in investments over the years, against which higher sales can be expected in the coming years. Coupled with the increasing grey markets this implies that the sector is wary of making patient long term investments to generate revenue from the capital base for fear of loss of investment.
- As for taxation, the multiplicity of levies it was concluded is adding to costs of compliance while not benefitting revenue. Harmonisation of taxes across states is therefore essential. The proposed GST is a step in the right direction. Streamlining policies related to licensing and advertising, and effective enforcement across states is also important.

Contrary to belief, increases in taxes have resulted in consumption either remaining the same, or consumers turn to neighbouring states for their consumption or to smuggled or counterfeit products.

- With regard to terror organisations and criminal networks, the lack of adequate data based on search and seizure in India makes it difficult to link the increase in illicit markets to terror funding. Establishment and determination of the extent of such a link calls for strategic intelligence gathering and preparation of robust databases, which are clearly missing at present.

The growing illicit market is obviously stifling growth, as innovation and investment are not forthcoming. Complex tax structures are further exacerbating the issue. To curb this menace therefore, collaborative efforts from all the stakeholders are required - industry, government (state, central and international) and consumers.

Objective of the Study

The growth of the illicit markets is evident in India as in the rest of the world. The 2012 FICCI CASCADE study titled "Socio-Economic Impact of Counterfeiting, Smuggling and Tax Evasion in Seven Key Indian Industry Sectors" (FICCI CASCADE Study) established this by estimating the size of the grey market and related loss to the industries covered in the study. FICCI's Committee Against Smuggling and Counterfeiting Activities Destroying the Economy (CASCADE) has commissioned the present study to update the estimates of the size of grey market for selected industry sectors in India, to project the resultant economic loss to industry, tax losses to the government and to assess the impact of grey markets on investments, innovation and tax arbitrage. This report is specifically for the alcoholic beverages industry.

ALCOHOLIC BEVERAGES

GREY MARKET ESTIMATES INDUSTRY & GOVERNMENT LOSS

IMPACT ON:
- Innovation
- Investment
- inter-state Tax Arbitrage
-Terrorism

Grey market percentages are currently ascertainable for 2012, as reliable government data from the Ministry of Statistics and Planning Implementation (MoSPI) of the Government of India is available for 2012. This data includes the Annual Survey of Industries for 2012 which provides data on factory production across the country and National Sample Survey

Organisation's National Sample Survey 68th round, which provides household consumption data across the country for the year 2012.

Loss to the industries concerned in 2013-14 has then been ascertained by extrapolating the industry size determined for 2011-12 based on assumptions about the growth of the industry over the two year period 2012-13 and 2013-14. These assumptions are obtained from industry reports and discussions with industry experts. Assuming that the grey market percentage remains constant over this two year period, it is applied to the market size so estimated for each industry to arrive at the loss to the industry for 2013-14.

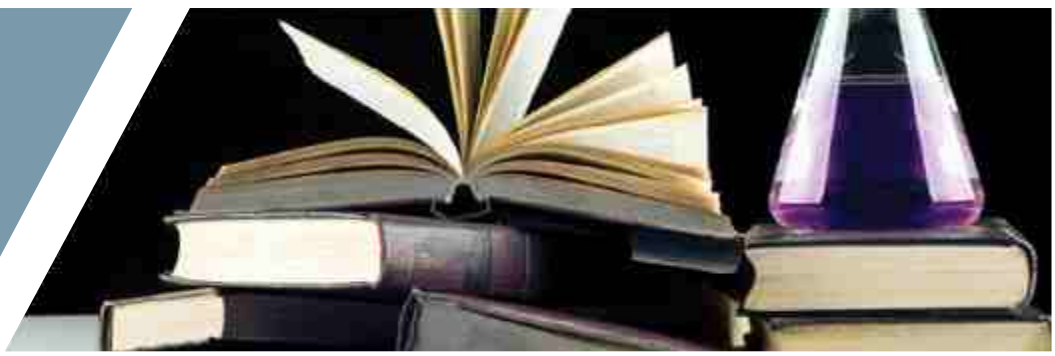
As indicated in several studies including the 2012 FICCI-TARI study, by their very nature, since counterfeiters operate outside the law, estimating the extent of counterfeiting and piracy and the harm these activities cause is extremely challenging. Illegal businesses do not report information on their activities to any government agency therefore measuring their size must be done using indirect methods.[2]

Industry Coverage

Taking off from the 2012 FICCI-TARI study, this sector, study quantifies the extent of grey markets and estimates losses due to illicit markets in the alcoholic beverages industry as well as various other aspects of the illicit markets and their impact on factors like investment, innovation, tax arbitrage, consumers, etc..

This study is perhaps the first quantitative study in India on the impact of illicit markets on various economic aspects. The study has quantified different types of impacts, depending on the quality and credibility of data available.

Literature Review



We have reviewed past studies and published research on the subject of grey markets including counterfeiting, smuggling and tax evaded goods and their impact on innovation, investment, tax arbitrage and funding terrorist activity.

This review included global studies commissioned by public institutions and agencies of repute, industry associations working on anti-counterfeiting endeavours, academia and major corporates. Such works were reviewed to analyse the scope of research, methodology adopted, analysis techniques and results.

Extracts from some of the significant reports are reproduced in Annexure I to give a broad understanding of global thinking on the subject.

Alcoholic Beverages ~ Industry Profile in India

Background of the Alcoholic Beverages Industry in India

The Indian alcoholic beverages industry is growing both in terms of production and consumption for many reasons. Among these are favourable demographics, rising disposable incomes and a greater societal acceptance of alcoholic beverages consumption. It is a maturing industry that recorded a growth of 12% between 2004 and 2009. According to a Euro Monitor International report (" Alcohol Drinks in India", September 2013) sales of alcoholic drinks are forecast to increase by a CAGR of 8% by volume and 6% constant value CAGR in the 2012-2017 forecast period. Imported premium lager beer, blended Scotch whisky and fortified wine and vermouth are expected to grow at double-digit rates. Brown spirits (namely whiskey and rum with high alcoholic beverages content over 40 percent v/v) are the preferred drink in India, rather than beer, wine and other products with lower alcoholic beverages content, although they have been gaining in popularity among drinkers recently.

According to the Public Health Foundation of India (PHFI) India is the dominant producer of alcoholic beverages (65%) in the South East Asia region. It is now emerging as one of the key markets for the global spirits industry and is the third largest global spirits market by volume in the world, just behind China and Russia,[3] larger than both United States and South Korea.[4] The alcoholic beverages industry in India includes producers of distilled spirits, beer and wine, a network of distributors and wholesalers and related industries including hotels, restaurants, bars and advertisers.

Alcoholic beverages prohibition is one of the Directive Principles under the Constitution of India under the State's duty to improving public health of the citizens. According to Article 47 (Part IV-Directive Principles of State Policy of the Constitution of India):

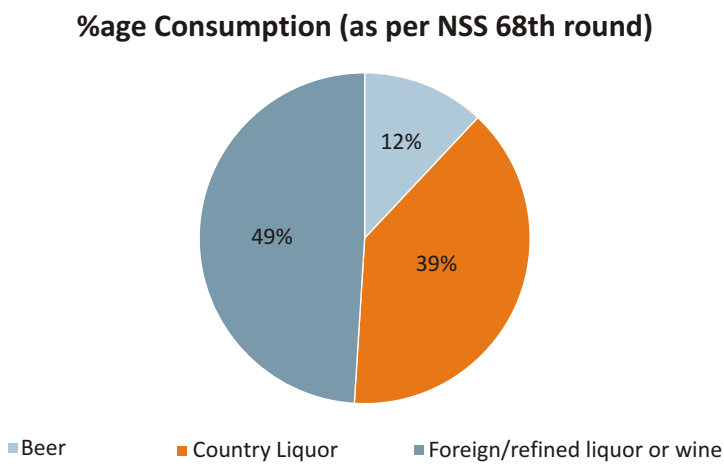
Duty of the State to raise the level of nutrition and the standard of living and to improve public health.*-The State shall regard the raising of the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties and, in particular, the State shall endeavour to bring about prohibition of the consumption except for medicinal purposes of intoxicating drinks and of drugs which are injurious to health.*

Despite this, there is no comprehensive policy on alcohol control in India and interestingly, taxation on alcoholic beverages is one of the largest sources of revenue for most states in the country. Currently Gujarat, Manipur, Mizoram and Nagaland are the only states in the country that have adopted and follow the prohibition policy in varying degrees. Lakshadweep is the only union territory to completely ban sale and consumption of liquor. Data however will show that there is some extent of production and/or consumption of alcoholic beverages in all these states as well.

Taxation of alcohol is a state subject in India, a product on which there are no central taxes. The production, distribution and sale of alcohol are therefore the responsibility of the state. Even excise duty levied on alcohol production is a state levy unlike all other products. Each state has its own tax regime and levies taxes in a manner they consider most appropriate. List II of the seventh schedule of the Indian Constitution which enumerates the heads covered under state taxation on which the State Legislative enacts laws, includes -*'Duties of excise for following goods manufactured or produced within the State (i) alcoholic liquors for human consumption, and (ii) opium, Indian hemp and other narcotic drugs and narcotics;'* List II covers areas on which **only** the state legislature can make laws.

Structure of Alcoholic Beverages Industry

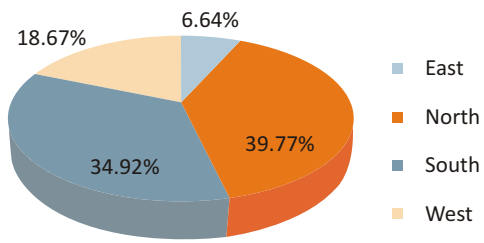
The Indian alcoholic beverages industry is divided into the following broad categories based on consumption as per NSS 68th round data, viz.



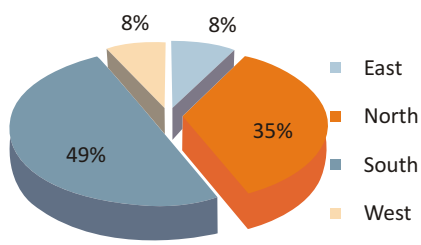
NSSO defines country liquor as liquor "which will exclude country liquor prepared at home from its ingredients and consumed." ***We have excluded consumption and production of homemade alcohol, toddy (NSSO code - 321) and similar brews produced and consumed as these have little effect on deriving illicit markets for commercially made alcohol in a factory process and are not subject to excise or customs laws.***

Liquor manufacturing is largely concentrated in the southern and northern regions of the country, both together accounting for about 75% of the total production in 2012, 2010 and 2008. The largest producers Andhra Pradesh, Karnataka, Maharashtra, Tamil Nadu and Uttar Pradesh, contribute almost 71% of the total alcoholic beverages production in the country.

Alcoholic Beverages Production by Region-2012



Alcoholic Beverages Consumption by Region-2012



Region-wise consumption also shows a similar kind of pattern. While the northern region dominated consumption in 2008, it was taken over by the southern region subsequently, now accounting for 49% of the total consumption. 84% of the liquor consumption in the country can be attributed to the northern and southern regions put together. Andhra Pradesh, Tamil Nadu, Karnataka and Uttar Pradesh account for almost 50% of the total consumption in the country.

Foreign Direct Investment (FDI) in the Alcoholic Beverages Industry

The government of India allowed 100% FDI through the automatic in the "Distillation and Brewing" sector in 2006.[5] Any further signs of de-regulating the industry, and streamlining taxes (refer section *"Impact of Inter-state Tax Arbitrage within India"*) is likely to further present a significant opportunity to global players to enter the Indian market.

Increase in FDI will result in increased forex inflows, creation of jobs, benefit local farmers (of grapes, molasses, sugarcane, potato, corn, wheat, barley, rye, etc.) and ancillary industries like warehousing, transportation, maintenance and other services, packaging and bottling, as well as bringing in modern production and storage methods.

Strengths & Weaknesses of the Industry

The alcoholic beverages industry in India has a large untapped potential on the one side with significant entry barriers on the other.

Growth Drivers

Some of the key growth drivers of the India\n industry are listed below:

- Increasing young population in India, with approximately 60% of the population below 30 and around 50% within the age group 22-54
- Growing consumption due to greater access in shopping malls and other retail stores
- Economic growth and increasing disposable incomes
- Social acceptability among the youth of the country including the female population
- Competitive advantage for players with production facilities and sales spread over a larger number of states given the restrictions of inter-state movement of alcohol

Barriers to Entry and/or Growth

Despite opening up the industry to foreign direct investment, entering the alcoholic beverages industry is not free from barriers. The liquor industry in India is a state subject and is therefore subject to laws that vary from state to state. Listed below are a few of the entry or growth barriers to the Indian alcoholic beverages industry:

- Licenses are required to produce bottle and distribute or retail all products
- Complicated tax structures and varying tax rates (VAT and excise) since they are levied by 28 different states
- Canteen Stores Departments (CSD) which account for approximately 15% of overall liquor consumption require registration which takes close to nine months
- Prices are allowed to be changed only once a year despite increases in cost of raw materials, with liquor prices being fixed by state governments.
- Ban on advertising of liquor products has given rise to the phenomenon of surrogate advertising like advertising mineral water, music CDs instead. Since brand creation is a challenge, foreign brands are likely to have limited success. Advertising is allowed only at the point of sale. However companies have devised other means of promotion, like sponsorship of sporting events, product placements in movies, promotional events (like ladies nights with unlimited alcohol and happy hours at restaurants and pubs)
- Taxes on inter-state import of molasses used in production of liquor resulting in lower profitability
- Distribution and retail are highly controlled and vary from state to state. Some states have altogether banned the consumption of alcohol, with the latest entrant into this scenario being Kerala, which announced complete prohibition in a phased manner by 2025. <Refer table in the section *'Impact of Inter-state Tax Arbitrage within India'*.

Size of the Illicit Market in the Alcoholic Beverages Industry

Data Sources

In order to calculate the grey market percentage for 2011-12, the gap between supply and demand will be derived. Listed below are the various sources of information that have been used to arrive at these numbers.

For ascertaining supply and demand we have to determine the different kinds of products that have to be considered under the industry category. They remain the same as in the earlier study, which were identified separately for each sector through literature reviews, consultation with FICCI-CASCADE members and industry representatives.

This study has used a combination of data analytics on Government of India statistics, corporate information from data aggregators and industry validations to estimate the extent and level of grey market operations. The key data sources are the Annual Survey of Industries (ASI) and National Sample Survey (NSS) published by the Ministry of Statistics and Programme Implementation (MOSPI) of the Government of India. This has been supplemented with data from the Directorate General of Commercial Intelligence (DGCIS) under the Ministry of Commerce and Industries and Ministry of Micro, Small and Medium Enterprises (MSME) and information extracted from PROWESS database for companies.

Statistical packaged software (SPSS) and STATA were used to extract ASI and NSSO data

Supply Side Estimation

ASI - Gross Sales Value: The Central Statistical Organisation (CSO) of the MoSPI collects national data on manufacturing activity for each district (rural and urban) to compile the Annual Survey of Industries (ASI) statistics. Gross Sales Value (GSV) in ASI data includes product cost, excise duty, sales tax and other distribution expenses.

GSV data of selected products identified for domestic sales was for 2012 as well. The data (after taking the multiplier effect as suggested by CSO) covered the ASI survey for the financial year 2011-12. 13.33 lakh data points were analysed. Data was extracted from Block A and Block J. Details are provided in the following.

Table: ASI Data Points Analysed

Particulars	Description of data series	Data Points evaluated
Annual Survey of Industries 2011-2012	Factory wise details of manufacturing activities pan India for the period April, 2011 to March 2012.	Block A and Block J, gross sales value, multiplier, NPCMS Code etc.

ASI 2011-2012 has changed its coding structure and now uses the NPCMS code structure for product classification and industry grouping which is a 7 digit classification. The previous FICCI-TARI study used ASICC code classification (5 digits) to determine the product classification under various industry heads.

In order to maintain consistency and comparability with the previous FICCI-TARI study results, a similar product classification has to be followed under the NPCMS code structure. Hence NPCMS codes have been mapped with ASICC codes and then allocated to the industry sector concerned. Additional NPCMS codes identified post mapping with ASICC codes have been further deciphered to allocate to the industry sector concerned.

Annual Production Amounts of MSME: ASI data captures production of units registered under the Factories Act. Broadly according to the Factories Act, 1949, a factory means any premises where ten or more people are working where manufacturing process is carried on with the aid of power or otherwise where twenty or more workers are working.

There are also a large number of micro, small and medium enterprises (MSME) in the sectors covered for FICCI-CASCADE in this series of separate industry studies. As per the MSME Development Act, a micro enterprise is one where investment in plant and machinery does not exceed ₹ 25 lakhs, while in a small enterprise the limit is between ₹ 25 lakhs to ₹ 5 crores and medium enterprises are those which have investment values between ₹ 5 crores to ₹ 10 crores.

Comparing these definitions it can be assumed that small and medium enterprises would have been covered by ASI. Accordingly annual production of micro enterprises that are engaged in manufacturing activities has been extracted from the MSME annual production.

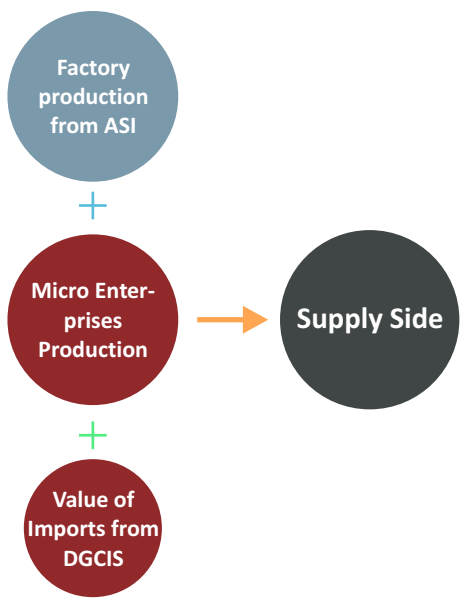
Out of the total 24.01 lakh units surveyed in 2006-2007 as a part of the MSME census, only 22.48 lakhs were found relevant to MSME of which 15.64 lakh units were found working, 4.96

lakh units were closed and 1.88 lakh units were not traceable. The survey results give details of the registered units, segregate such units into micro, small and medium enterprises and map their products into National Industry Code (NIC) classification.

In this study, the value of the goods manufactured from registered micro enterprises and supplied to the selected industry sectors has been estimated by taking inputs from MSME Census of 2006-2007 and the Annual Report of the Ministry of MSME for the year 2011-2012. These estimates supplemented the GSV obtained from ASI data.

Value of Goods Imported: The value of goods imported into the country has been taken from the data published by the Directorate General of Commercial Intelligence and Statistics (DGCIS) under Ministry of Commerce and Industry. For this study, we have used the eight digit code classification import data for the year 2011-2012. Import value data was extracted to supplement the production figures obtained from factories and micro-enterprises to arrive at the total of the supply side for domestic consumption.

ASI 2012 uses NPCMS code classification whereas import data uses ITC HS codes. It is not possible to map NPCMS and ITC HS codes. Import data follows the harmonic system code for classification and for 2010-2011 a total of 10,032 codes were scrutinised up to an 8 digit level. MSME data is based on the 2 digit classification of NIC 2004.



Consumption/Demand Estimation

The National Sample Survey Organisation (NSSO) of MOSPI conducts a survey on household consumer expenditure and employment and unemployment covering the entire country. This National Sample Survey (NSS) is one of the largest sample surveys of its kind and collects data on

household characteristics such as household size, principal and secondary occupation, household type, land ownership/ possessed/ leased, land cultivated, land irrigated, primary source of energy, household ownership, etc.

For this study, data was analysed from NSS's 68th round survey, covering the period July 2011 to June 2012. Consumption expenditure data for the last 30 days / 365 days (as the case may be) for the country, was arrived at after giving effect to the multiplier suggested by NSSO. Approximately 123.35 lakh data points were analysed for NSS 68th round where the codes were assigned to the respective industry sectors and then mapped to find the related consumption values. The blocks and codes of NSS 68 from which data was extracted for this study are given in the table below.

Table: NSS Data Points Analysed

Particulars	Description of data series	Data Points evaluated
National Sample Survey (Round 68)	Household consumer expenditure for the period July 2011 to June 2012.	Block 5, 9, 10, 11 and 12; Item code, subsample code, consumption value, multiplier, weight to be applied, NSS/NSC code.

Estimating the Illicit Markets-Methodology

Using the data obtained from the sources listed in the previous section we have ascertained the grey market percentage in 2012. The grey market percentage has been arrived at using the following formula:

$$\text{Grey Market \%age} = \frac{\textit{Total Consumption} - \textit{Total Supply}}{\textit{Total Consumption}} \times 100$$

The difference between total consumption and total supply can primarily be attributed to the following:

- Goods produced or imported and sold in the country by evading taxes.
- Sale of domestically produced counterfeited (either deceptive or non-deceptive) goods.

Alcoholic Beverages-Data Analytics

The alcoholic beverages industry in India comprises of Indian Made Foreign Liquor (IMFL), beer, imported liquor and country liquor, with country liquor and IMFL accounting for almost 85% of the market share.[6]

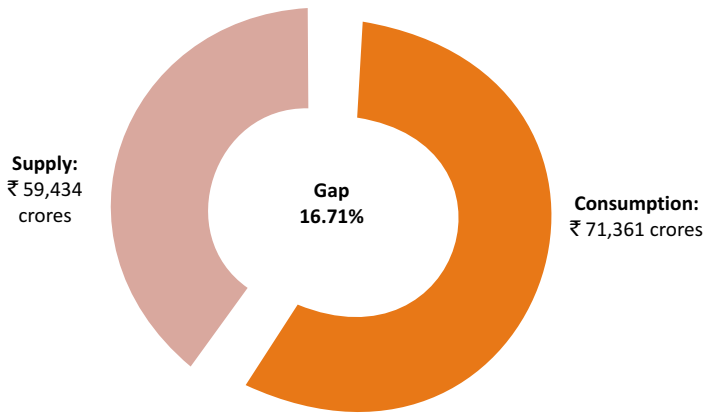
These products are counterfeited because of superior recoverable brand value, price premium, high tax and excise component of the original product makes for larger profits for counterfeiters. The most common infringement is the refilling of original bottles with inferior substitutes. Production of alcoholic beverages under non-standard conditions can be harmful and even life threatening to consumers. Reliable data however, on alcoholic beverages consumption and various alcohol related problems is not readily available in India.[7]

Total consumption in the alcoholic beverages industry has been arrived at by extracting data from the NSS 68 round (codes-322-country liquor, 323-beer, and 324-foreign/refined liquor or wine). The aggregate consumption expenditure of these codes for the last 30 days has been multiplied by 12 to arrive at the annual consumption expenditure.

This consumption has been further enhanced by 20% to account for ambivalent consumption. According to an ICAP report, WHO (2004, 2011) estimates that unrecorded alcohol accounts for nearly 30% of all alcohol consumed globally, at least two-thirds of all alcohol on the Indian subcontinent.[8] A NIMHANs report on alcohol related harm states that the precise estimate of unrecorded alcoholic beverages production is not clearly known, and is 'guesstimated' to be nearly 50% of recorded consumption.[9] According to WHO[10] *"unrecorded alcohol refers to alcohol that is not taxed and is outside the usual system of governmental control, because it is produced, distributed and sold outside formal channels. Unrecorded alcohol consumption in a country includes consumption of homemade or informally produced alcohol (legal or illegal), smuggled alcohol, alcohol intended for industrial or medical uses, alcohol obtained through cross-border shopping (which is recorded in a different jurisdiction), as well as consumption of alcohol by tourists. Homemade or informally produced alcoholic beverages are mostly fermented beverages made from sorghum, millet, maize, rice, wheat or fruits."* Unrecorded alcohol therefore includes illicit alcohol and licit homemade or informally produced alcohol. On a conservative basis therefore for this report, we have considered unrecorded or ambivalent consumption to be about 20% in 2012. Ambivalent consumption here refers to consumption that is not acknowledged in surveys by consumers due to related societal stigmas or other reasons. As the Indian economy enters a new growth trajectory there are certain socio-economic changes that are affecting alcoholic beverages consumption. Also considering wider acceptance of alcohol in society especially in the urban areas across all drinking ages, the study assumes 20% ambivalent consumption on conservative basis in contrast with 25% considered in the previous study.

Total consumption expenditure on alcoholic beverages **as a result, amounts to ₹ 71,361 crores.**

Alcoholic Beverages Supply vs Consumption Gap 2012



Alcoholic beverages production or supply has been ascertained through ASI 2012 data which lists the various types of alcoholic beverages produced in the country by 7 digit NPCMS codes which were mapped to the 5 digit ASICC codes (under the code 151) used in the previous FICCI-TARI study. These codes have been closely analysed to identify those pertaining to the edible and consumable liquor and which are prone to counterfeiting/ smuggling/ tax evasion.

ASI provides domestic production data of alcoholic beverages under various categories including country liquor, gin, liqueurs, rum, wines, whisky, beer, etc. which amounts to ₹ 58,751 crores.

To the above we add the total value of imports of alcoholic beverages and production of alcoholic beverages by micro enterprises, to arrive at the total supply side of the equation.

According to DGCIS data, alcoholic beverages imports for 2012 amount to ₹ 683 crores. Alcoholic beverages production has not been attributed to MSME enterprises as there is no specific code available for alcohol in the MSME sector. Alcohol production requires a license and presumably micro enterprises are too small to satisfy the licensing conditions.

The total supply of alcoholic beverages in the country is therefore ₹ 59,434 crores.

The grey market percentage in the alcoholic beverages industry for 2011-12 is therefore 16.7% as a result of a gap of ₹ 11,927 crores, between total consumption and total supply of alcoholic beverages in the country.

Summary

To conclude, based on analysis of the reliable data published by government sources for the year 2011-12, it has been established that in alcoholic beverages industry some amount of illicit trade exists, which may be in the form of sale of counterfeited products, smuggled goods, or tax evaded goods. The results of the analysis are summarised below:

₹crores

Industry	2012		Grey Market		
	Total Supply*	Total Consumption*	2012		2010
			Total Loss	%age	%age
Alcoholic Beverages	59,434	71,361	11,927	16.7%	10.2%

***Based on NSSO/ASI/DGCIS data for 2012**

As clearly indicated above, there has been a sharp increase in the grey market percentages in the alcoholic beverages industry. In fact, it is the largest increase (of 6.5%) among all the seven industries covered in the 2012 FICCI CASCADE report.

Impact of Illicit Market-Estimating Loss to the Alcoholic Beverages Industry

Grey market percentages have been established in the preceding pages, for the year 2011-12. For the purpose of arriving at the loss to the industry in 2013-14, we have assumed that grey market percentage will remain constant over 2012-13 and 2013-14. Industry size for 2013-14 has been arrived at for the sector with reference to expected and actual growth rates for the past two years provided by industry reports or analysts. These growth rates have been used to extrapolate the industry size established for 2011-12 to 2013-14. Industry size for 2011-12 is taken as the domestic factory production of the industry, ascertained from ASI 2012 data.

Thus loss to the industry (purely in terms of sales) has been established for each sector as follows:

Estimated Loss of Sales to Industry = Size of Industry in 2013-14 X Grey Market Percentage (2011-12)

Estimating the Loss for 2013-14

The size of the alcoholic beverages industry in 2011-12 was established at ₹ 58,751 crores.

According to an IWSR 2012 report quoted in a United Spirits June 2013 Fact Sheet[11] the Indian Total Beverage Alcohol (TBA) market is worth $6.1 billion and is forecast to grow at 15% CAGR in value over the next 5 years. Expected growth in spirits will be led by Scotch and Premium Indian Made Foreign Liquor (IMFL). According to an industry organisation study titled "Latest Trends in Domestic Liquor Market,"[12] alcohol consumption is registering a robust year on year growth of 30% by 2015.The reasons for this growth are attributed to a growing affluent middle class, the large youth population, wider acceptability of consumption and increasing disposable incomes in the hands of consumers.

Fig: Estimated Loss to Alcoholic Beverages Industry in 2013-14

Estimated Size of Industry in 2013-14 X Grey Market Percentage (2011-12) = Estimated Loss of Sales to Industry

₹ 84, 601 crores X 16.7% = ₹ 14,140 crores

Based on these estimates, we have assumed, on a conservative basis that the alcoholic beverages industry has grown by approximately 20% from 2011-12 to 2012-13 to 2013-14. Accordingly, the market has been estimated at ₹ 84,601 crores for 2013-14. Applying the grey market percentage calculated for the industry (i.e. 16.7%) to this market size, **the loss to industry on account of grey market for 2013-14 is estimated to be approximately ₹ 14,140 crores.**

Conclusion

The estimated loss to the alcoholic beverages industry for 2012 and 2014 is tabulated below:

Fig: Loss of Sales to Industries 2013-14 (in ₹ crores)

Industry Sector	2014	2012
Alcoholic Beverages	14,140	5,626

The loss to the industry indicates that the industry has shown an increase in loss of sales due to the operation of illicit markets. The largest increase is seen in the alcoholic beverages among the seven sectors covered in the 2012 FICCI CASCADE report.

It is quite clear from this that despite best efforts undertaken to curb smuggling and counterfeiting, the illicit markets continue to thrive. This poses serious challenges to various stakeholders, viz governments lose tax revenues, industries lose sales revenues, and customers who knowing or unknowingly lose out on low quality products which could often lead to hazardous health and safety consequences. While completely eliminating the existence of illicit markets may not be a feasible proposition more rigorous efforts need to be established to limit their further growth. This would include, among other things, cooperation amongst these stakeholders, streamlining of complex tax structures, introduction and/or enforcement of standard quality parameters for various products of industries, stringent governance practices and enforcement of existing laws.

Estimating Illicit Markets - Loss to Government

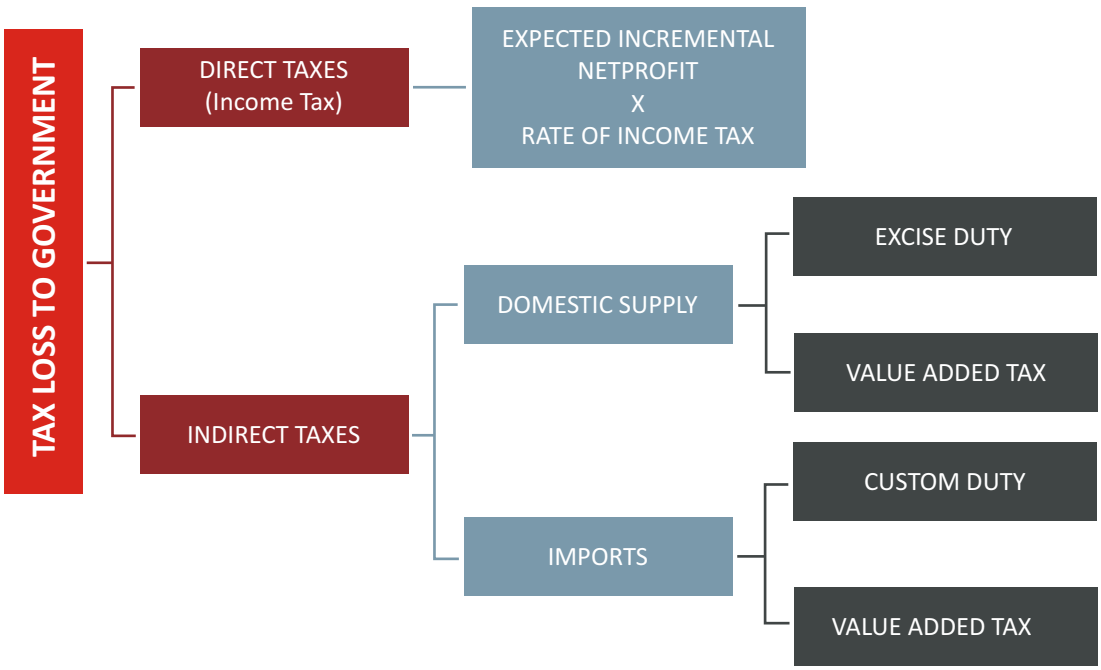
Apart for resulting in loss to the industry concerned, the operation of the illicit markets results in losses to the government in the form indirect taxes and direct taxes. Illicit markets cause losses to the original right holders in the form of reduced sales, lower profits, brand value, reputation, consumer distrust, etc. Governments lose tax, incur higher expenditure on public welfare, insurance and health services. Ultimately corporates shy away from making investments (as established in an earlier section) due to limited/no protection of rights, resulting in loss of employment opportunities.

Governments that lose taxes will find it difficult to function and will be unable to provide quality and timely public services. They will be unable to deliver their legislative programmes, provide public goods or redistribute wealth.

This section aims to estimate the loss to the government of India on account of the illicit markets in the alcoholic beverages industry. It is imperative to develop an estimate of the challenge to the National and State exchequers with the objective of introducing strong regulatory measures.

Methodology

There is very little data on the global economic impact of counterfeiting and the losses to public revenues, employment, investment and innovation.[13] This study aims to project only the consequential tax loss to government on account of counterfeiting and the presence of grey markets in India. As in the 2012 FICCI CASCADE study, the methodology used in this report is derived from the economic model used in the BASCAP report that analyses the negative impact of counterfeiting and piracy on government receipts and expenditures.



The Tax loss to government has been estimated as loss of direct taxes (income tax) and indirect taxes (value added tax, import duty and excise duty).

Revenue Loss to Government = Loss on account of Direct and Indirect taxes in case entire gap is met by the legitimate manufacturers or importers

For calculating the loss in income tax and indirect taxes (excise/customs/VAT), the following approach was followed:

Direct Taxes (Income Tax):

To determine the loss attributable to income taxes, this study analysed annual reports of a sample/representative companies in the industry concerned to determine the weighted average net profit before taxes over sales. This percentage was applied to the sales loss to the industry determined in the previous section *("Size of the Illicit Market in the Alcoholic Beverages Industry").* The resultant figure is the incremental net profit that would have accrued to the industry had legitimate industry been able to fulfil sales lost to the grey market. The number so determined is multiplied by the income tax rate to arrive at the income tax forgone by the government. Additional profit will be taxed at the highest income tax slab rate, hence the tax rate considered is 33%.

Income tax lost by the government due to the operation of the illicit markets in the alcoholic beverages industry is tabulated below:

Loss of Direct Tax Revenue to Government (₹ Crores)

Industry Sector	Net Profitability Percentage	2014	2012	Change	
				₹ crores	%age
Alcoholic Beverages	14.0	653	260	393	151%

Indirect Taxes (On Domestic Manufacture and Imports):

Loss of indirect taxes to the government on account of illicit markets has already been ascertained. This loss comprises loss on domestic production and loss on imports. The gap in consumption and supply is assumed to be met through legitimate domestic factory and registered MSME production, as well as imports, in the same ratio using 2012 ASI, MSME and DGCIS data.

Indirect tax loss in case of domestic production (ASI & MSME) arises on account of loss of excise duty and VAT. In case of imports the loss arises on import duty (basic and countervailing duty) and VAT.

Based on the principle of conservatism we have considered the following rates of indirect taxes for the alcoholic beverages industry. The table also shows the proportion of sales loss met by domestic production and imports:

Industry Sector	Loss to Industry met by .. (₹ crores)			Duty Rates (percentage)	
	Total	Domestic Production (ASI + MSME)	Imports	Excise Duty + VAT	Import Duty + VAT
Alcoholic Beverages	14,140	13,977	163	40	40

These rates of tax were applied to the sales loss to the industry ascertained earlier, to arrive at the loss to the government on account of indirect taxes.

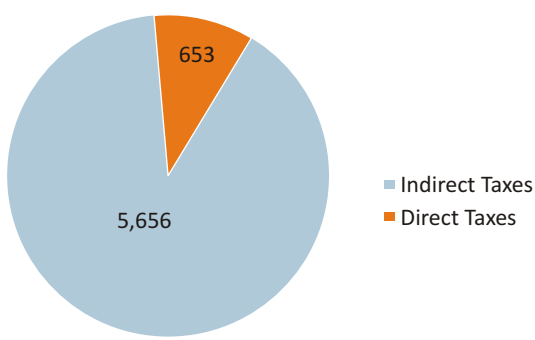
Loss of Indirect Tax Revenue to Government (₹ Crores)

Industry Sector	Excise Duty + VAT	Import Duty + VAT	Total Indirect Taxes Loss - 2014	Total Indirect Taxes Loss - 2012	Change	
					₹ crores	%age
Alcoholic Beverages	5,591	65	5,656	2,251	3,405	151%

Conclusion:

Thus, the total loss to the government estimated for 2014, on account of the illicit markets in the alcoholic beverages industry is ₹ 6,309 crores, up from ₹ 2,511 crores in 2012. As stated earlier, it needs to be highlighted, that this loss is only on account of tax revenues. We have not estimated the incremental costs incurred by government on account of welfare measures, enforcement and legislation and interest costs.

Total Estimated Loss to Government
Alcoholic Beverages
(In ₹crores)



Types of Counterfeiting in the Industry

An OECD industry survey[14] conducted in 2008 noted that the most common form of infringement of alcohol products was the refilling of original bottles with inferior substitutes. Categories of alcohol commonly used in mixed drinks are also particularly attractive, as the mixer can mask the distinctive taste of the underlying alcoholic base. The study goes on to state that while many of these substitutions use original bottles and are carried out as small scale cottage industries, according to the industry there is increasing evidence of large scale operations that include the use of semi-automated bottling lines as well as sophisticated printing machines. The investment in such operations could also include bottle moulds, production of packaging and the production of raw spirit. Respondents to the survey also indicated that the production of fake products at this scale - sometimes international in nature -- would almost certainly involve organised crime.

Factors Driving Illicit Trade in Alcoholic Beverages

In the case of all products/industries the factors that drive counterfeit production are increased revenue due to the higher volumes as a result of reduced prices. As stated earlier, the most common method of infringement is refilling original bottles with inferior substitutes; this means that cost of production and distribution is usually relatively lower than the cost of manufacturing the genuine product. Low cost packaging also very similar to the original is also a contributing factor. Low detection due to weak enforcement in the country also contributes to the flourishing market in India. Furthermore, since these are counterfeits they will be sold in the underground market resulting in tax avoidance and further reduction in costs.

From the point of view of consumers, the main factor that drives consumption of illicit alcohol by consumers knowingly is the low price of the product without any consideration for the adverse health consequences. The unwitting customer purchases an illicit product without realising what he/she is doing, which is why, a subsequent section of this report provides a few tips to look out for while purchasing a drink.

According to the OECD industry survey referred to earlier, alcohol products are prime targets for counterfeiters in the drinks sector (of the food and drinks sector covered in the survey), because of their brand value (and the price premium that they attract) and the high tax and excise component of the final price, both of which add to the prices that can be charged by counterfeiters. Alcohol was one of the more frequently mentioned food/drink products in the survey of customs authorities, and respondents to the survey.

Impact of Inter-state Tax Arbitrage within India

Introduction

Illicit markets are all pervasive, impacting all countries, industries and products. Most recognisable brands be it of mobile phones, computers, fashion accessories, pharmaceuticals, auto components, etc. can be counterfeited, or are easily available in the grey markets in the form of smuggled or tax evaded goods. In respect of certain products, consumers are also often aware that their purchases are imitations as such acquisitions are driven primarily by a necessity to display a certain social background and to feel admired, recognised and accepted by other people. Whether the seller or the buyer is complicit, the illicit markets clearly have an impact on all stakeholders, be it the manufacturer, consumer, or government in the form of loss of revenue and profits, brand dilution, health and safety concerns. It also has a bearing on the level of investments, and innovation in a country, as well as on tax revenues.

It is often claimed, that higher tax rates tend to exacerbate the illicit markets of a country. A significant reason being, that high tariffs and taxes create opportunities for those involved in illicit markets to step in and supply 'reduced' versions of the original product at lower prices.

The purpose of this section of the report is to attempt to establish a relationship between high taxes and availability of illicit products. It had been concluded that this part of the study will cover sectors with higher incidence of tax which is set at 20%-25%.

Effective April 01, 2005, most states in India supplemented sales tax with a new Value Added Tax (VAT). VAT rates for products in each of the industry sectors covered in our study were collated for all the states from the VAT rate schedules (where available) on the Commercial Taxes Department websites of the respective states.

Sectors Analysed

Under each industry sector the top 10 states with the highest rates of taxes were identified. In case of states where there are multiple rates for different sub-categories of products within an industry sector, we considered the highest tax rate in that industry category for the purpose of this study.

We observed that in case of most of the 7 key industries being covered in this study, taxes were higher than 20-25% only in the case of the alcoholic beverages and tobacco industries. Tax rates for these products also varied significantly from one state to another. In case of the other five industries, VAT rates stood mostly at 4% or 5%, with rates in a few states going only as high as 14.5% (mobile phones, auto components and a few FMCG personal goods and packaged foods).

Accordingly, our analysis in this section is limited to the alcoholic beverages and tobacco industries. The tax structures (central and state levies) in both industries are quite complex, consisting of excise, value added tax and other state-wide levies. We attempt to analyse these and draw a relationship between high taxes and their possible impact on illicit markets in these industries.

Structure of Alcoholic Beverages related Taxes in India and Impact on State Revenues

Alcohol remains an important source of taxation revenue in India. According to an ICAP study,[15] annual revenues of INR 216 billion rupees (USD $3.9 billion), however, are more than offset by losses of 244 billion rupees from adverse consequences of alcohol consumption (Gururaj, Girish, & Benegal, 2006).

As indicated earlier, it is the exclusive right of the States in India to levy excise duties on wines and spirits. In each state the amount of excise duty varies and is based on different units of measure, e.g., ex-distillery price (EDP), bulk litre (BL) or based on alcohol content where rates are expressed in terms of rupees per litre of spirit at full proof of 57.1% volume, cases, etc.

VAT is a major source of revenue for states particularly from alcohol. The multiplicity of sales tax rates across each state ranging from 1 to 25% merely increased cost of compliance without benefitting revenue. In order to streamline this levy, from April 2005 most states supplemented sales tax with the new value added tax (VAT). VAT is a multi-stage tax levied at each stage of the value addition chain with the provision of credit for input VAT paid at an earlier stage. This credit can be appropriated against the VAT liability on subsequent sale. Most state governments have classified VAT into various categories:

- Essential commodities @ 0%
- Gold ingots and expensive stones @ 1%
- Industrial inputs, capital merchandise and commodities of mass consumption @ 4% or 5%
- Other items @ 12.5%

In case of liquor the rates range from 12.5% for one category of liquor in one state, to 190% for another category in another state.

Wholesale and retail distribution in some states is controlled by the state itself. This is done through state-run monopolies (e.g., Kerala State Beverages Corporation or KSBC, public sector company owned by the Kerala state government has a monopoly over the wholesale and retail vending of alcoholic beverages in the state. Similarly, Tamil Nadu State Marketing Corporation-TASMAC is vested with the exclusive privilege of wholesale supply of IMFL for the whole State of Tamil Nadu).

Licensing procedures also vary from state to state. Importers, distributors, retailers, restaurants and hotels are required to have a license to handle alcoholic beverages. In some states, licenses are further delineated to allow for things like room service sales of alcohol. Licenses are typically subject to annual renewal fees.[16]

Structure	Description	States
Open Markets	A business may apply for a license at a set fee, provided that licenses are available. In some states new licenses have not been available for many years.	Maharashtra, West Bengal, Goa, Assam, Meghalaya, Arunachal and Tripura
Auction Markets	Licenses are auctioned to the highest bidder	Uttar Pradesh, Rajasthan, Madhya Pradesh, Bihar, Punjab, Haryana and Chandigarh.
Government Controlled	The government controlled markets have different models. Karnataka is the most open state, with the lowest trade margins. Whereas, in Delhi, Kerala and Tamil Nadu retail shops are run by the state government.	Tamil Nadu, Delhi, Kerala, Andhra Pradesh and Karnataka.
Prohibition States	Sales of alcohol are prohibited	Gujarat, Manipur, Mizoram[1] and Nagaland.

Each state therefore maintains its own system of taxation and subjects alcoholic drinks to a large number of indirect taxes and fees. The following is a comprehensive view of the kinds of taxes and duties that are levied on manufacture, sale and distribution of alcohol:

[1] *The government of Mizoram has lifted prohibition in the state vide the Mizoram Liquor Prohibition and Control (MLPC) Act 2014 to replace the Mizoram Liquor Total Prohibition Act, 1995 in force in the state for the past 17 years. The Act has been notified in the official gazette in January 2015.*

- Excise duty
- Additional duty
- Value Added Tax*
- Distillery/Brewery License Fee
- Bottling fee
- Litterage fee
- Assessment Fee
- Franchise Fee
- Permit Fee
- Gallon age Fee
- Raw Material Excise
- Availability Fee
- Brand/Label Fee
- Transportation Fee
- Import Pass Fee
- Export Pass Fee
- Educational / Welfare Cess
- Vend Fee
- License Fee
- Toll Tax

**sales tax earlier*

It is the prerogative of the State Governments to determine and levy the fees and taxes. Additionally, imported liquor attracts customs duty. States may also impose local levies on imported liquors similar to that levied on domestic liquor. Each of the state's levies one or the other of the above taxes/duties or fees. In fact with rates being different for the same type of tax (e.g.: VAT and excise) for different categories of alcohol (wine, beer, IMFL etc. also depending on their size/unit of measure), the tax structure becomes even more complicated.

As VAT and excise form the largest tax component this section will briefly discuss the varying rates (VAT) and methods (excise duty) of applying these taxes in a few states.

Value Added Tax-VAT

Tabulated below are the VAT rates on alcoholic beverages for states that have the highest prevailing rates.

Table: States with highest prevailing VAT rates

States	VAT Rate *
Andhra Pradesh	70%-190%
Gujarat	60%
Tamil Nadu	14.5%-58%
Bihar	50%
Maharashtra	20%-50%
Jharkhand	35%
Uttar Pradesh	32.50%
Uttarakhand	5% - 32.5%
Assam	30%
Haryana	15%-25%
Goa	5%-22%

**Source: State excise, taxation or commercial taxes departments*

The rates in each state vary depending on the category of alcohol-i.e. IMFL, wine, beer, country liquor, imported liquor, etc. It is noteworthy that despite prohibition in Gujarat (which has one of the highest VAT rates), the state levies VAT on liquor. This is because contrary to widespread belief, absolute and complete prohibition does not exist in the state as sale of liquor is permitted under certain conditions e.g. to foreigners and NRIs on purchase of licenses. The VAT here is 60 paise in the rupee for *'Country liquors, that is all liquors other than foreign liquors manufacture in India and foreign liquors that is potable foreign liquors brought into or manufactured in India including spirit, wines and fermented liquor'*. The low rate of 5% in Uttarakhand is applicable to wines manufactured from fruits produced in the state.

In states like Karnataka, Kerala, Punjab, alcohol is exempt from VAT. This however is compensated through excise duty levies.

Excise Duty

State levies of excise duty on alcoholic beverages also vary from state to state. The units of measure for this levy also vary. For example in Tamil Nadu[17] for instance the rates are as follows:

DUTIES & TAXES (TAMIL NADU)

A.EXCISE DUTY: I.M.S.F		Per Case (750 & 375) (X 6.75)	Per Case (180) (X 6.48)
06.03.97	ORDINARY Rs. 55/- P.L.	Rs. 370.25 and	Rs. 356.40
	ORDINARY (100 ML.) Rs55/-P.L.	Rs. 371.25	
17.03.99	(G.O.MS.No.79, P&E (III) Dept.,dt.06.03.97)		
	ORDINARY Rs. 65/- P.L.	Rs. 438.75	Rs. 421.20
	MEDIUM & PREMIUM Rs.85/- P.L.	Rs. 573.75	Rs. 550.00
	(G.O.MS.No.71, P&E (III) Dept.,dt.17.03.99)		
26.12.97	Sootch Why.Rs.85/- P.L.		
	(G.O.MS.No.289, P&E (III) Dept.,dt.28.12.97)	Rs. 573.75	Rs. 550.00
01.06.2000	ORDINARY (100 ML.) Rs85/-P.L.	Rs. 438.75	Rs. 421.20
01.01.2000	ORD./CHP.LQR.(100M.L.) Rs. 30/-P.L.	Rs. 202.50	Rs. 194.40
23.03.2002	ORD./CHP.LQR.(100M.L.) Rs. 47.50/-P.L.	Rs. 320.63	Rs. 307.80
03.06.2003	ORDINARY Rs. 93.24/- P.L. MEDIUM & PREMIUM Rs.113.24/- P.L.	Rs. 629.37 Rs. 764.37	Rs. 604.20 Rs. 733.80
11.07.2011	ORDINARY Rs. 102.93/- P.L. MEDIUM & PREMIUM Rs.125/- P.L. (G.O.Ms.No. 33H, P&E (III) Dept.,dt.11.07.2011)	**Rs. 694.78** **Rs. 843.75**	**Rs. 666.99** **Rs. 810.00**
BEER		Per Case (650 &325 ml)	(x 7.80)
18.02.99	@ Rs. 2.50 B.L.	Rs. 19.50	
03.08.2003	@ Rs. 4.36 B.L.	Rs. 34.01	
11.07.2011	**@ Rs. 7.10 B.L.** (G.O.Ms.No. 34H, P&E (III) Dept.,dt.11.07.2011)	**Rs. 55.38**	
DRAUGHT BEER			
Prior to 11.11.97	Rs. 2.50 per B.L.		
From 11.11.97	Rs. 8.10 per B.L.		
From 3.12.02	**Rs. 13.10 per B.L.**		

B.MANUFACTURES VEND FEE:

I. IMFS:	FROM 25.10.89	@ Rs. 5/- B.L.	Rs. 45/-per case	
	FROM 15.08.98		Rs. 95/-per case	
	FROM 06.03.97		Rs. 165/-per case	
II. BEER:	FROM 18.02.89	@ Rs. 0.50 B.L.	Rs. 4.50/-per case	
	FROM 15.08.96		Rs. 10/-per case	

The levy of above M.V.F has been discountinued w.e.f 3.6.2003 as per G.O. No., 112dt. 03.06.2003

C. WHOLESALER VEND FEE:

I. IMFS:

15.6.96 to 05.03.97	LOCAL : Rs.2/-B.L.	Rs. 18/-per case	
	IMPORT : Rs 68/- per case for IMFS (except Wine).	For Wine Rs.59/- per case	
From 06.03.97	IMPORT : Rs 138/- per case for IMFS (except Wine).	For Wine Rs.129/- per case	

II. BEER:

From 15.06.96	LOCAL : Rs. 0.50/-B.L.	Rs.4.50/- per case	
	IMPORT : Rs 10/- per case		

Wholesaler V.F has been discountinued w.e.f 3.6.2003 as per G.O. No., 112dt. 03.06.2003 & re-Introduced from18.05.2004 on day to day basis as per G.OMs No 323 P&E VIII dt. 10.9.2004

IMFS **(wef 18.05.2004)** **(wef 11.07.2011)**	Rs. 142/- per case (G.O.MS.No.323 P&E VIII Dt. 10.9.2004) **Rs. 224/- per case (G.O.MS.No.61 H, P&E VIII Dt. 12.12.2011)**
BEER (including Draught beer, Cider) **(wef 18.05.2004)** **(wef 11.07.2011)**	Rs. 36/- per case (G.O.MS.No.323 P&E VIII Dt. 10.9.2004) **Rs. 51/- per case (G.O.MS.No.61 H, P&E VIII Dt. 12.12.2011)**
Wines of all other Kinds (wef 18.05.2004)	Rs. 142/- per case (G.O.MS.No.323 P&E VIII Dt. 10.9.2004)

Manufacturing vend fee and Wholesaler vens fee deleted from 03.06.2003 as per G.O. No. 112 dt. 03.06.2003.
V.F by Tasmac on stock Obtained From Manufacturers re- introduced from 18.05.04(G.oms No 323 P&E VIII Dt.10.9.04)

In effect what often happens is that the price a consumer pays for alcohol ends up being almost twice the actual cost of the product, due to the many taxes and fees being levied by the state. The example provided below explains this better. Andhra Pradesh where the VAT rate varies from 70% to 190% (depending on the category of alcohol), on a local wine whose ex distillery price is ₹ 215 per bottle, the total tax burden is calculated as follows:

Andhra Pradesh (EDP = ₹ 215/bottle)[18]	Tax on Local Wines
Indirect taxes	
Import Fee (₹ 2/BL)	1.5
Excise Duty (₹ 80/PL)	13.66
EAL Fee (₹ 0.10/bottle)	0.1
Special Privilege Fee (10% of basic price, est. ₹ 230)	23
VAT (70% of cost to APBCL basic price + 20% margin)	193.2
Total Tax Burden	**231.46**

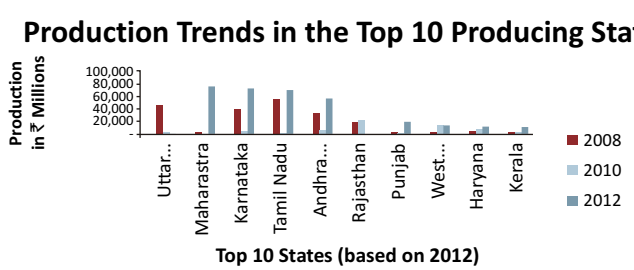
EDP: Ex-Distillery Price
BL: Or Bulk Litre refers to excise duties on the basis of the volume of liquid
PL: Proof Litre describes a litre of spirits at London Proof Litre (LPL) 57.1% alcohol by volume (% Vol)

Production and Consumption Trends of Alcoholic Beverages and Related Factors

The charts in this section will indicate the growing trends in production and consumption of alcoholic beverages in the country. In rupee terms, alcoholic beverages production has increased from 2008 to 2010 by 22% and by 66% from 2010 to 2012. Consumption has increased from 12% (2008 vs 2010) to 85%.

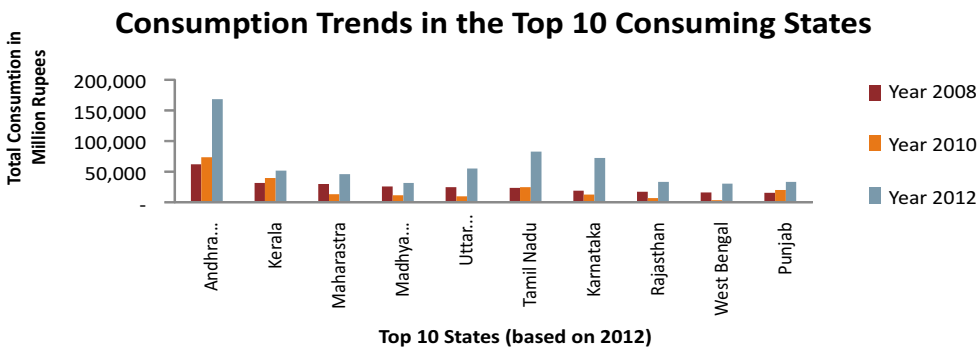
Consumption has been arrived at from NSSO data after considering ambivalent or unrecorded consumption. According to the ICAP report referred to earlier, WHO (2004, 2011) estimates that unrecorded alcohol accounts for nearly 30% of all alcohol consumed globally, at least two-thirds of all alcohol on the Indian subcontinent. According to a NIMHANs report on alcohol related harm, (also referred to earlier), the precise estimate of unrecorded alcohol production is not clearly known, and is 'guesstimated' to be nearly 50% of recorded consumption. On a conservative basis therefore for this report, we have considered ambivalent consumption to be about 20% in 2012

The following bar diagram shows the absolute increase in production of alcoholic beverages from 2008 to 2010 to 2012, amongst the top ten producers of the country in 2012.



There is an increasing trend in all the top ten states; however, amongst the top 6, production has increased by more than 50% (2010 vs 2012) with the exception of Karnataka where the increase is only 40%. In Maharashtra there is a year on year increase of 200%.

Consumption has also been increasing, by much larger proportions in fact, as indicated in the bar diagram below:



5 of the top ten alcoholic beverages consuming states have shown an increase of more than 100% in consumption from 2010 to 2012. Most states and union territories have in fact shown increasing consumption trends, with thirteen of them showing more than 100% increase, while only 3 have shown a declining trend.

This trend is only going to show further increases due to the growth drivers listed earlier

The primary purpose of presenting the above data and listing the factors contributing to the changing trends is to emphasise the fact that alcohol production and consumption are showing an upward growth trend. This implies an increasing source of government revenue coupled with a greater responsibility to curb misuse and excessive consumption of alcohol.

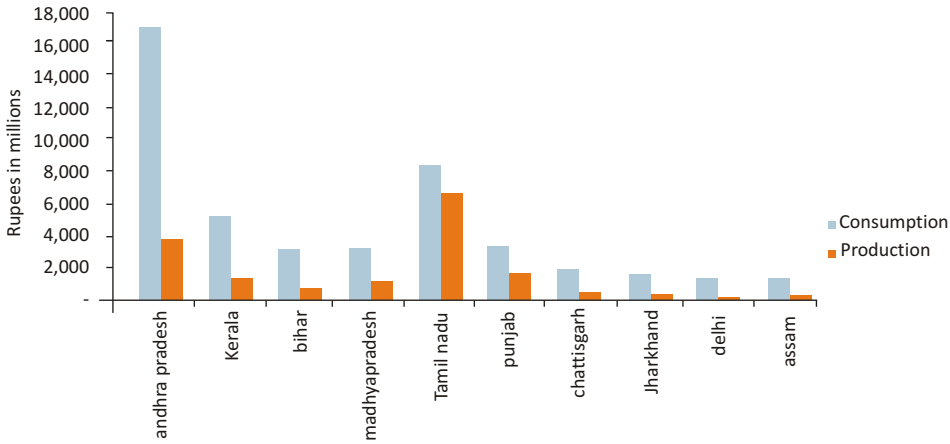
Analysis of Consumption & Production - Impact of Illicit Markets and Inter-State Tax Arbitrage

The complex and varied tax structure across states in India has been discussed in earlier sections of this chapter. This section intends to bring out the possible extent of revenue losses to a state by comparing the production values with consumption values.

Of the 35 states and union territories in India, there are only 10 in which consumption is less than production. This gap can primarily be attributed to closing stock after taking into account inter-state sales.

Consumption is greater than production in all remaining states and union territories. The bar diagram presents a comparison of the top 10 states where this gap is the largest.

Top 10 States where Consumption > Production (2012)



In 6 of these states, the gap is more than 200%; while there is no alcohol production in Delhi. Of these ten states, 6 are amongst the top ten consumers. Notably, 5 of these states are also states with the highest VAT rates for alcohol.

Furthermore, analysis of the states with highest VAT rates revealed that in 7 states consumption is higher than production (refer Table: States with highest prevailing VAT rates) Gujarat leads with the largest gap (more than 5000%) followed by Jharkhand (788%) and Assam (544%). In states where production is greater than consumption, the gap is less than 90% of production.

Even after factoring in the possibility of inter-state sales and closing stock there is **a net excess of 31% of alcoholic beverages consumption in 2012 vis-à-vis production in the entire country. The corresponding number for 2008 and 2010 are 27% and 17% respectively.** Excess consumption raises questions on the source of this consumption and possible losses to the exchequer as well as the harmful effects on consumers. The possible means of bridging this gap include streamlining of taxes and reducing complexities, stricter enforcement and governance, anti-counterfeiting measures by manufacturers in the form of special hologrammed logos etc.

As reflected in the analysis of states with highest VAT rates, counterfeiting and smuggling of alcohol can be significantly linked to high taxes and complex tax systems, lower disposable incomes, weak institutions and corruption. Affordability can be linked to high taxes, often as much as the actual cost of production (as shown in the example earlier), or to low or stagnating income levels. Both these factors lead consumers towards the black market or to the spurious liquor market.

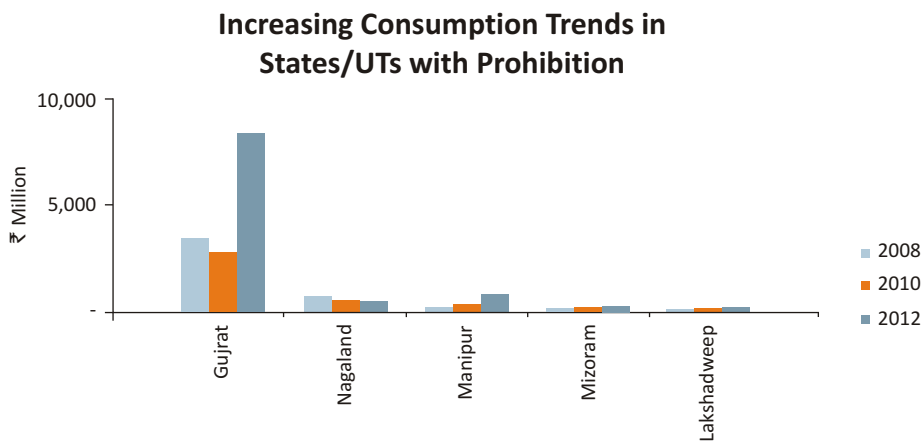
We have determined the overall counterfeiting and illicit market in the alcoholic beverages industry to be approximately 16% *(Refer Chapter: Estimating Illicit Markets - Impact on Industry).* Thus even after factoring in genuine inter-state sales and stock maintenance, the gaps above show that states are incurring huge revenue losses either to other states or to the

grey market. With production and consumption expected to increase in the future, these gaps are likely to remain or even increase, unless curbs are put in place to stop the growth of the illicit markets. States would also see this increasing trend as a future potential tax loss.

Prohibition and Related Revenue Leakages

As indicated earlier only 5 states/union territories have imposed prohibition or partial prohibition in their states/territories.

That prohibition in these states has not been quite as successful as expected, is apparent from the consumption figures. The charts below show how in each of these states / UT there is an increasing trend in consumption. Only Nagaland shows a decreasing trend. The consumption increases from 2010 to 2012 are in fact quite large. This is indicative of tax revenue losses to the state governments as consumers are quite obviously obtaining their supply through illegal means.



While the absolute consumption numbers may be miniscule in most of these states (in comparison with the rest of the country), the increasing consumption trends are an indicator of the changing demographics and possible sources and resultant loss of revenue to the state exchequers. In Manipur, Nagaland, Mizoram and Lakshadweep there has been no production in 2008, 2010 or 2012, whereas consumption (in value terms) has been increasing, except in Nagaland. In Gujarat it has increased by 143% from 2008 to 2012 (almost 200% from 2010 to 2012 itself), the increase in Manipur and Mizoram during the same period has been 192% and 210% respectively. Lakshadweep had no recorded consumption in 2008; however, from 2010 to 2012 the increase is more than 200%.

Since there is limited or no production in most of these states, one of the possible sources of alcohol for the consumer could then be through the illicit markets or illegal imports. Such illegal imports result not only in imports of sub-standard/illicit liquor, but also in loss of revenue to the

exchequer. These states should therefore either introduce measures to strengthen their prohibition policy and curb illegal smuggling of liquor into the state, or may revisit their policy so as to prevent health / social issues to consumption of illicit liquor and also add to state revenues.

Conclusion

Numerous studies have shown a correlation between high taxes and counterfeiting or smuggling. According to a 2007 OECD study the revenue losses for a government on account of counterfeiting / smuggling are particularly high in sectors such as tobacco and alcohol, where excise taxes are high and smuggling of counterfeit products to avoid those taxes is widespread.

According to the United Nations Office on Drugs and Crime (UNODC), "the ramifications of illicit markets affect everyone, with Governments, businesses and society being robbed of tax revenue, business income and jobs. The flood of counterfeit and pirated products creates an enormous drain on the global economy by creating an underground trade that deprives Governments of revenue for vital public services and imposes greater burdens on taxpayers. It also leads to more public resources being spent on fraud-detection methods by public sector authorities and larger intelligence and policing budgets being needed to counter sophisticated schemes and networks."

The above holds true in the Indian markets as well.

Impact of Illicit Markets on Innovation

The illicit markets broadly include:

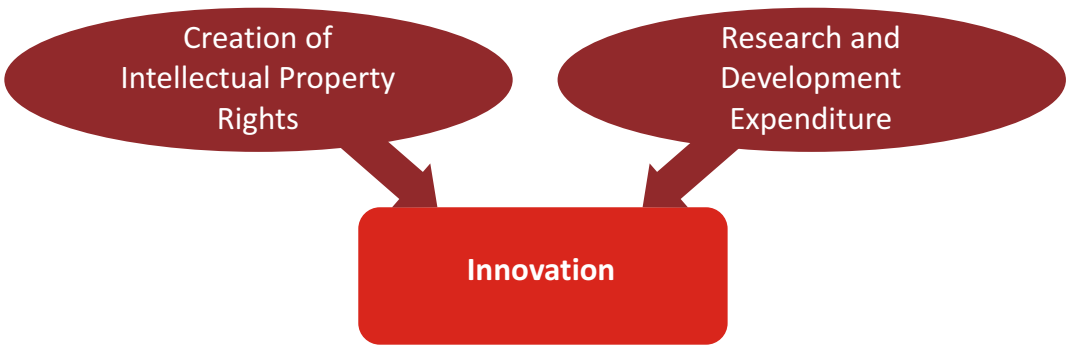
- Counterfeit goods (infringement of trademarks).
- Pirated goods (infringement of copyright).
- Smuggled goods (import or export without paying taxes). and
- Tax evaded goods (taxes on both production & distribution of goods).

Innovation includes the process of design, invention, development and/or implementation of new or altered products, services, processes, systems, organisational structures, or business models for the purpose of creating new value for customers and financial returns for the firm.[19]

An innovation is the implementation of a new or significant improved product (goods or services), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations, businesses in their zest for higher profitability look for competitive ways to succeed by developing and incorporating creative and useful innovations into products and services. It involves protection of patents, trademarks and copyrights, as well as investment in research and development.

Based on this, in order to assess the impact of illicit markets on innovation in the alcoholic beverages industry, we used both qualitative and quantitative techniques. This study attempts to point out that industries characterised by higher level of illicit markets spend lesser money on innovation. If organisations can imitate (counterfeit) an innovation at a cost that is substantially below the cost to the innovator, it reduces or even completely kills the incentive for the innovator to carry out the innovation. Patent protection does not make entry impossible or even unlikely for counterfeiters, it only generally increases imitation costs.[20]

The following proxies were used to measure innovation:



On the basis of the literature reviewed, and our discussions with subject matter and industry experts, the following proxies were identified for measuring innovation:

Creation of Intellectual Property Rights
• Types of IPR's in India - patents, copyrights and trademarks • Analysis of trends in the number of patents filed/examined/granted over the financial years 2007 to 2012 • Analysis of fields, sectors and institutions with higher concentration of patents over the financial years 2007 to 2012 • Data related to patents was collected from the Office of the Controller General of Patents, Designs, Trademarks and Geographical Indication; data pertaining to copyrights, trademarks was not available

Research and Development Expenditure
• Analysis of R&D and operating expenditure for a sample of companies over a period of 6 financial years • Analysis of ratio of R&D and operating expenditure over a period of 6 financial years for each sector • Data was extracted from the Prowess database for a sample of public and private companies in India over the sample period

Intellectual Property Rights Created

The study entailed assessing the patents filed in India. A patent is an intellectual property right for inventions and is the grant of exclusive right, for a limited period, provided by the Government to the patentee, in exchange of full disclosure of the invention, for excluding others, from making, using, selling, importing the patented product or process producing that product for those purposes. The Patent Office under the Department of Industrial Policy & Promotion, Ministry of Commerce & Industry, performs the statutory duties related to the grant of patents for new inventions and registration of industrial designs.

For this study we have reviewed the Annual Report of the office of the Controller General of Patents, Designs, Trademarks and Geographical Indication to understand the type and number of patents filed in India.

Patent applications (filed, examined and granted) of the last 5 years show a declining trend in the number of patents granted by the Patent Office. CSIR or the Council of Scientific & Industrial Research (CSIR) has filed the largest number of patents in India and abroad. The top ten industries in which CSIR's patents are in force constitute almost 81% of their patents.

According to a Thomson Reuters report, 'Research and Innovation Performance of the G20'[21] which examines research and patent information to study the scale and impact of innovation in the G20 countries -an average of 5,900 applications are filed in India per annum, which equals that of Australia and UK. Around two-thirds are those of foreign concerns seeking protection in the Indian market. Domestic innovation has remained stable at 29% since 2005. India's contribution to innovation when compared to the rest of the G20 is highly concentrated in agro-chemical and pharma-related technology sectors.

In all our study however, we did not come across information related to patents filed in India under the alcoholic beverages industry. Innovation does however play an important role in this sector, in order to pander to changing consumer tastes, and to retain a loyal customer base to keep the company relevant. It has been observed in the case of a number international players, that innovation is driving their growth.

Some innovations in the international market include introducing sweet and flavoured beverages to bring in the new LDA (Legal Drinking Age) consumers, with flavours varying from geography to geography. Craft beer is gaining popularity with major producers launching initiatives to build on this trend. Companies are also coming up with low calorie beverages to satisfy the demands of the health and fitness conscious consumer. Cocktail shots are also gaining importance worldwide as a result of which some companies are launching packaged cocktail shots.

Data in India however suggests that there is little innovation in the alcoholic beverages industry in India, possibly due to the high propensity for counterfeiting as has been established earlier in this report (refer section *'Estimating Illicit Markets - Impact on Industry')*

Research and Development Expenditure

Research and Development expenditure data is often used by researchers as one of the most significant inputs in estimating the level of innovation.

Christopher M. Kalanje, WIPO, has demonstrated the use of expenditure on research, development and information on innovation as indicators of innovation measurement to understand the role of intellectual property in innovation and new product generation.[22]

In another study, "The Impact of Innovation and the Role of Intellectual Property Rights on US Productivity, Competitiveness, Jobs, Wages, and Exports", Nam D. Pham examines a sample of 27 US industries over the period of 2000-2007. The author uses industrial R&D expenditure as a measure of the intensity of intellectual property across industries with the belief that such expenditures are direct inputs for innovation, concluding it to be one of the most widely used measures.[23]

Methodology

Based on various research reports, this study has developed the following approach with the objective of understanding the relationship between the presence of illicit markets and organisations' decisions to undertake expenditure on activities such as research and development.

R&D expenditure is one of the main inputs towards innovation and has accordingly been taken as a **proxy**. The sample size comprises the public and private limited companies operating in India and belonging to the sectors covered in this study.

Financial details of these companies have been extracted from the annual reports compiled by the CMIE, Prowess database.

There are a total of 27,650 companies whose information is available in the public domain. These details were examined to ascertain the nature of products/ services produced/ rendered by them. The companies were classified into relevant industry sectors covered in this study on the basis of the major kind of products being produced and the industry group they belong to.

A total of 2,706 companies pertaining to industry sectors under review of FICCI CASCADE were found and information relating to the following parameters was extracted for the year period 2007-08 to 2012-13:

- Research and development expenditure (both on capital and current account)
- Operating expenditure[2]

Data was collected for this six year period to ensure that a complete economic cycle of low, medium and high level of business activity is captured. More than six lac data points were analysed to understand the trend of research and development expenditure over the last six years across the selected sectors. Since comparison of absolute amounts of research and development expenditure incurred across various industry sectors will not reveal any meaningful results, the study looked for a suitable representative ratio. Based on the literature review and discussions with subject matter experts, a comparison was made of the percentage of R&D expenditure over operating expenditure for the stated period of six years.

$$\frac{\text{Research and Development Expenditure*}}{\text{Operating Expenditure**}} \times 100$$

* R&D expenditure includes both capital and revenue expenditure as it appears in the financial statements of the company

** Operating expenditure includes all types of expenditure on raw materials, labour, selling and distribution etc.

Data Analytics Results

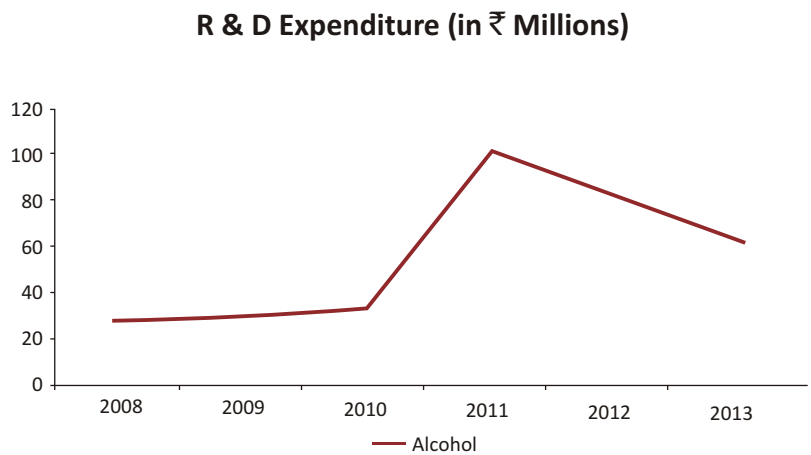
The percentage of R&D expenditure over the total operating expenditure for alcoholic beverages over the last six years is presented below:

Table: R&D Expenditure as a %age of Operating Expenditure

Industry	2008	2009	2010	2011	2012	2013	Average %age
Alcoholic Beverages	0.07	0.06	0.06	0.14	0.08	0.06	0.08

[2] *Details of items considered as part of operating expenditure for the purpose of this study are contained in Annexure III*

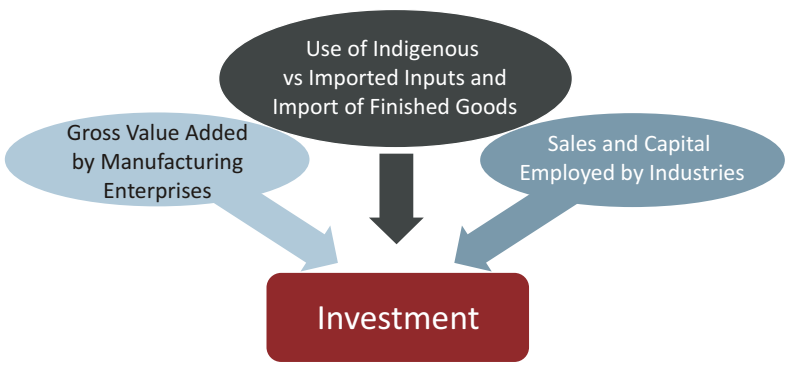
The alcoholic beverages industry shows a significantly low level of R&D expenditure as a percentage of operating expenditure. In fact our analysis has shown that average R&D expenditure in this sector is the lowest across all the sectors under overall review, with only a sudden spurt in expenses for this sector in 2010-11. The chart below depicts this:



Since research is a risky activity, returns on successful R&D must be large enough to compensate for the high proportion of R&D that is unsuccessful, generating in this way a normal return on R&D as a whole. However, for an industry sector faced by the challenges of a grey market, the returns would be much lower on account of the greater risk of illicit markets. The increase from 2010 to 2012, in grey market percentages in the alcoholic beverages industry is testimony to this as well.

Impact of Illicit Markets on Investments

In this section we measure the level of domestic investment in a country by the following proxies:



These proxies will help to understand whether Indian companies are investing in capacity enhancements or process improvements as warranted by increasing consumer demand rather than simply relying on imports of goods. They will also reflect the efficiencies achieved in manufacturing capacity over the period of investment cycle.

Investment is one of the most important drivers of growth in an economy. Among the myriad concerns of domestic and foreign investors wishing to invest in India, the threat of diminished returns as a result of the presence of illicit markets, counterfeiting and smuggling has been a major one. Counterfeiting and smuggling affects all products and sectors in the country as has been established in the other sector reports and the 2012 FICCI CASCADE study. However, some sectors are more prone to the threat of illicit markets than others. This not only raises questions regarding consumer health and safety but also adversely affects legitimate businesses.

Gross Value Added by Indian Companies

Gross value added is the value of output minus the value of intermediate consumption; it is a measure of the contribution to GDP made by an individual producer, industry or sector. GVA measures the contribution to the economy of each individual producer, industry or sector in an economy. It is also referred to as the productivity metric that measures the difference between output and intermediate consumption. Gross value added provides value for the amount of goods and services that have been produced, less the cost of all inputs and raw materials that are directly attributable to that production.

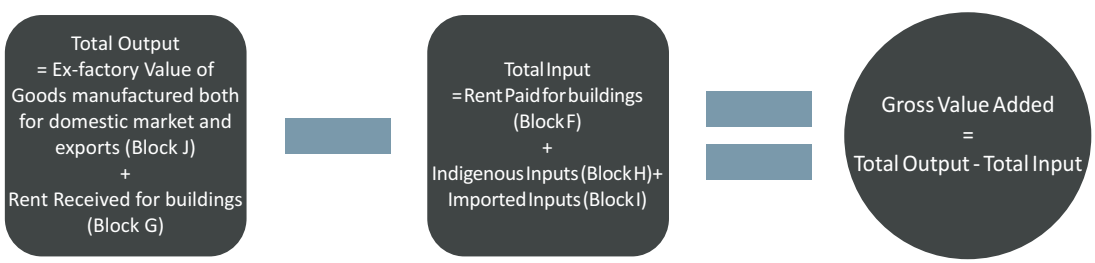
Thus, the gross value added by the manufacturing sector will measure the extent to which the output sold represents production in the country. It will quantitatively measure how much value addition actually takes place within the country or whether the value addition is taking place abroad. This will help establish whether the manufacturing sector is making enough long term investments for the sector to grow sustainably. It will be an important indicator against which the presence of illicit markets can be measured to understand whether this could be a contributing factor for the sector to be shying away from making enough investments for charting the course for long-term and sustainable growth.

Methodology

The Gross Value Added (GVA) by companies has been calculated by using ASI data for the years 2007-08, 2009-10 and 2011-12. For the purpose of the present study, a total of 13.32 lac data points have been analysed (covering all the sectors under FICCI CASCADE review).

These sample manufacturing units have been further examined in detail to understand the value of gross value added during the manufacturing process. A time series analysis for the three years 2008, 2010 and 2012 has been done to ascertain whether there is an increasing or decreasing trend towards value addition in the manufacturing process.

The formula for calculating the Gross Value Added[3] is as follows –



[3] *Gross Value Added calculation method has been taken from Block N of ASI Schedule which lists down the formulas for calculating various economic parameters.*

Data Analytics Results

GVA is expected to show an increase when there is optimum capacity utilisation or lower input costs. The factors relating to increase in consumer demand or higher rate of profitability may also contribute to increase in GVA.

Percentage of Gross Value Added over Total Output

For the present study, the proxy used to measure the value addition made by companies in the production cycle is the ratio or percentage of the gross value added over total output. The total output principally measures an industry's sales or receipts and is dependent on the demand and other pertinent characteristics of a particular industry. To make a like-to-like comparison, it is important to take into account how the industry dynamics for each sector plays out. Hence, the ratio of the gross value added as a percentage of total output is a far more representative figure.

A low percentage of gross value addition to the total output raises questions regarding the degree to which the output sold by the manufacturers represents the actual production within the country. In the present age of globalisation, countries attracting substantial amounts of foreign direct investment often have to grapple with concerns regarding the manufacturers depending on foreign sources for inputs in the manufacturing process which results in increase in imports. This also impedes the development of the indigenous suppliers through backward linkages. *Hence, the value addition may actually be taking place abroad from where the inputs are imported.* In such a scenario, the domestic manufacturing segment would function merely for final assembly operations.[24] That is clearly not a desirable situation.

The following table shows gross value added as a percentage of total output for the years 2007-08, 2009-10 and 2011-12 in the alcoholic beverages industry.

Sector	2008	2010	2012	Average
Alcoholic Beverages	3.47	3.56	11.8	6.28

Gross value added as a percentage of total output for the alcoholic beverages sector has, on an average, remained at 6% in the last five years. The total output has increased by 190% in the last five years and total input has increased by 165%. However, the indigenous inputs have increased by only 164% during the five years period under review whereas imported inputs have substantially increased by 215%.

Use of Indigenous and Imported Inputs and Imports of Goods into the Country

The key elements being examined in this study are the impact of illicit markets on investment and innovation, both of which are very closely linked. For analysing both, studying imports of inputs and goods into the country is critical. This section presents the results of the data analysis exercise to show how import of inputs and finished goods plays out with respect to investment and innovation in the country. India's increasing dependence on imports has been a cause of concern for the government. Although import of oil and gold are the most significant contributing factor to widening the trade deficit, import of intermediate and semi-finished goods too have a role to play. The latter has far reaching long term implications for the country, which is discussed in this section.

Imports of goods can be broadly classified into the following -

- Inputs to be used in the manufacturing process by Indian companies; and
- Finished goods to be sold directly in the domestic market

As businesses develop technology through new methods, new production techniques and introduce new inventions to the production process, there is a replacement of imported technology with indigenous technology. The level of sophistication in domestic production processes can be estimated by the increased use of domestic/ indigenous raw materials as compared to imported raw materials.

It has been observed that as businesses develop their own technology, the need for imported raw materials or inputs reduces. The underlying objective of most R&D projects is to enhance business efficiency thereby reducing production costs. By substituting imported raw materials with indigenous raw materials, businesses can hope to reduce their costs in the medium to long term.

Methodology

The World Economic Forum in their Global Competitiveness Report 2013,[25] points out that import as a percentage of Indian GDP is 33.7%, which is fairly high as compared to other countries. India ranks at 107th position among 148 countries on imports as a percentage of GDP. Of the same 148 countries, India stands at 52nd position in the production process sophistication ranking with a score of only 4.1 out of 7. Considering these results, this study looked at the following proxies:

- Ascertaining the percentage of indigenous raw materials and imported raw materials used in production by Indian manufacturing units

- Comparing the above ratio over a period of five financial years to examine whether there has been any import substitution with indigenous raw materials
- Analysing import of finished products as a percentage of total production over a period of five financial years

The proxy used for examining the above hypothesis is the following:-

$$\frac{\text{Imported raw materials consumed}}{\text{Total raw materials consumed*}} \times 100$$

*Total raw materials consumed is the sum of imported and indigenous raw materials

This section uses production data from ASI (for the years 2007-08, ASI 2009-10 and ASI 2011-12) and data on imports from DGCI&S to assess the level of dependence on imports against the total production. To quantify the level of reliance on imports and for a relative comparison, a proxy which serves this purpose and seems to capture the trend over years is imports as a percentage of total production.

Use of Indigenous and Imported Inputs

As explained earlier, total raw materials consumed comprises indigenous and imported raw materials. A general trend has been observed in the sectors under review, that over a span of five financial years, the use of imported raw materials has increased in comparison with indigenous raw materials, in some cases very drastically. Data shows a clear trend which is illustrated in the table below

Indigenous inputs consumption in the alcoholic beverages sector has been very high in all the years under review. Consumption of indigenous inputs over total inputs has consistently been over 96% without much variation over the years. This clearly demonstrates self-reliance of this sector. Also, the percentage increase in the consumption of indigenous inputs has increased by a whopping 258% over the sample period of five years. Although the imported inputs form a very miniscule component of the total input, the growth in its consumption has also increased over the same period.

Table: Inputs consumed by Sample factories (DSL) – Alcoholic Beverages

Source	Type	2007-08		2009-10		2011-12		%age increase during the sample years
		Amount in ₹ Mn	%age	Amount in ₹ Mn	%age	Amount in ₹ Mn	%age	
Block H	Indigenous	47,070	96.49	91,862	97.68	1,68,441	96.78	257.86
Block I	Imported	1,714	3.51	2,179	2.32	5,597	3.22	226.57
	Total	**48,783**	**100**	**94,041**	**100**	**1,74,038**	**100**	256.76

While this sector has shown the largest increase in grey market percentages over the period under study, it has had the lowest grey market percentage in both years as well, among all the sectors covered. This seems to suggest that indigenous sourcing of inputs results in lower probability of the threat of grey market presence.

Imports of Finished Goods over Total Production

We now examine the extent of imports of finished goods over total production to estimate the level of production capacity within the country. An increasing trend would show that value (and jobs) is being created outside the country while a lower trend would show greater value being retained/generated within the country.

The following table shows the trend in the percentage of imports of finished goods over the total production.

Table: Imports of Finished Goods as a Percentage of Total Production in each Sector

Industry Sector	2008	2010	2012	Trend
Alcoholic Beverages	0.35	0.91	1.15	Increasing

Although, there is no study or empirically backed assertion for a reasonable estimate or a benchmark figure for percentage of imports over total production, a relative comparison for various sectors shows certain trends. The alcoholic beverages sector have the lowest percentage of imports over total production although for both sectors, the percentage has been rising over the five year period. The alcoholic beverages sector's import percentage over total production has increased from 0.35% in 2008 to 1.15% in 2012. Compared to the high-tech sectors, these figures are relatively lower. However, unlike the technology intensive sectors, these sectors do not need to be as technology driven and hence, accruing the benefits from technology transfer is not as pertinent.

For a country's transition from a developing to a developed one, it is imperative that reliance on imports is minimal and that domestic markets are able to meet these demands. This can only be done by undertaking more innovation initiatives, which is a critical for the long term survival and growth of these sectors.

Capital Employed over Sales

This section will analyse the relationship between capital employed and the sales. Businesses invest in capital with a view to generate increased sales revenue. The ratio between sales and capital employed indicates that sales or revenues are 'x' times the money used in the business.

This ratio helps to understand what level of sales are being generated by each rupee worth of assets invested in the business.

The objective of this section is to address the following questions -

- Is the pace at which sales are generated higher than the amount of capital employed in business?
- If so, are such increased sales attributable to investments or to imports?
- Are Indian companies shying away from making an investment?

To answer the above questions, a sector wise comparison between the year on year percentage change in sales and capital employed is analysed over a period of six financial years. Also, the ratio of sales to average capital employed for each sector and for the same time frame of six years has been calculated. The ratio of sales by the average capital employed reflects a company's ability to generate sales revenue from efficient utilisation of assets.

Methodology

To analyse the relationship between sales and capital employed, the following approach has been adopted -

- Comparison between the year on year percentage change in sales and capital employed for each sector and over a period of six financial years
- Ratio of sales over average capital employed is used as a proxy for capturing the relationship between the two

Using the CMIE Prowess database, data pertaining to financial details of companies like assets, liabilities, etc., has been extracted for a period of six years, 2008-2013. Our sample size comprises public and private limited companies operating in India. There are a total of 27,650 companies whose information is available in the public domain; this was examined in detail to ascertain the nature of products/ services produced/ rendered by them. Companies were classified into the relevant industry sectors on the basis of the major kinds of products and the industry group they belong to.

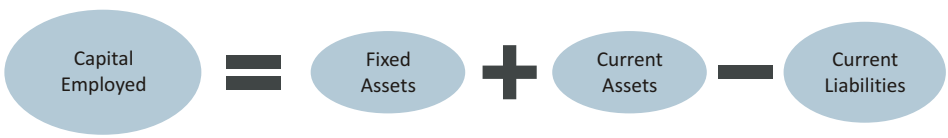
A total of 2,706 companies were selected pertaining to the industry sectors under review and information relating to following parameters was extracted for a period of six years from financial year 2007-08 to 2012-13:

- Fixed Assets
- Current Assets

- Current Liabilities
- Sales

More than seven lac data points were analysed to understand the trend in sales and capital employed over the last six years across the selected sectors. Data was collected for a period of six years to ensure that a complete economic cycle of low, medium and high level of business activity is captured.

The formula for calculating the capital employed is as follows -



$$\text{Average Capital Employed} = \frac{\text{Opening Capital Employed} + \text{Closing Capital Employed}}{2}$$

The percentage change in the average capital is then calculated and compared with the percentage change in sales for each sector over a period of six financial years.

The other metric used is the ratio of sales over average capital employed. This captures the ability of a company to efficiently use its assets to generate sales revenue. This ratio of sales over average capital employed is calculated over a period of six financial years.

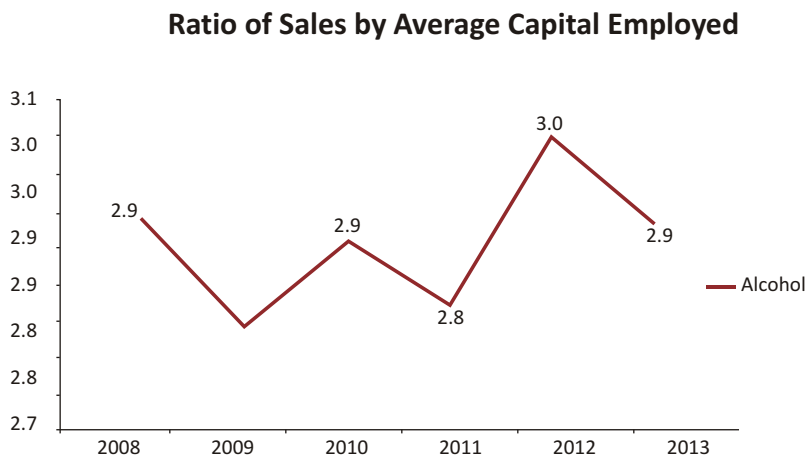
Comparison of Percentage Change in Sales and Capital Employed

The link between percentage change in sales with percentage in capital employed is explained here. Though a higher year on year percentage change in sales than capital employed implies utilisation of the assets to generate sales, a huge difference will imply either over-utilisation of assets or generation of sales revenue by sourcing through import of products instead of domestic production and is characterised by a low level of investment. However, if the year on year percentage change in capital employed is much greater than that of sales, this means that the quality of investment is low and use of assets is inefficient. In such a scenario, the investments made by the companies are not generating the desired level of sales.

For the alcoholic beverages sector the difference in the percentage change in sales and capital employed was small till 2011, where percentage change in sales slightly dominated percentage change in capital employed. However, post 2011, the gap between the percentage change in sales and capital employed started widening with no clear visible trend.

Ratio of Sales by Average Capital Employed

The ratio of sales over average capital employed measures the management's efficiency in generating revenue from the net assets at its disposal. It depicts the amount of sales revenue generated for every rupee of capital invested in the business. The higher the ratio, the more efficient the business is in utilising the net assets and generating sales revenues.



The alcoholic beverages industry has an average ratio of 2.8. *The ratio of sales to average capital employed remains fairly steady, indicating that there has been no dramatic increase in investments in the years under review against which higher sales can be expected in the coming years.*

Summary-Investments & Counterfeiting

That investment in undoubtedly one of the most important drivers of economic growth is a well-established fact. However, one of the many concerns of domestic and foreign companies investing in India has been the threat of counterfeiting and illicit markets and its impact on their investment and profitability.

Gross value added as a percentage of total output for the alcoholic beverages sector has, on an average, remained at 6% in the last five years, indicating that alcohol companies in India have not made much progress for improving the value added in the production process. Indigenous inputs as a percentage of total inputs is one of the highest for the alcohol sectors, indicating self-reliance for growth. Although imported inputs are small as compared to other sectors, its

percentage is steadily growing over the years under study. Likewise, use of imported finished goods is also increasing over the period of study, possibly indicating changing consumer preferences. Sales to average capital employed has remained fairly steady during the period under study, indicating that alcohol companies have not made significant investments in the business against which higher sales can be expected in the future.

As analysed in previous section, alcohol industry has one of the highest counterfeiting percentages at 16.7%. Coupled with the three proxies to evaluate the impact of illicit markets on investments, we reasonably conclude that counterfeiting is a threat to increased investments.

Illicit Markets, Terror Organisations and Criminal Networks

Terrorism in India

Terrorism, in all its forms, constitutes a grave threat to peace and security of a nation. Those indulging in it use disruption and violence as the weapons of intimidation against the civilian population, the government to influence public policies or even effect a regime change. By its very nature, terrorism is against the established order of the day. There is, however, no universally accepted definition of the word. Different countries fighting the menace define it differently. In India, the Unlawful Activities (Prevention) Act of 1967, amended in 2004 to fight terrorism, uses the word "unlawful activity" instead of terrorism and defines it as "any action...intended, or supports any claim, to bring about, on any ground whatsoever, the cession of a part of the territory of India or the secession of a part of the territory of India from the Union, or which incites any individual or group of individuals to bring about such cession or secession; and which disclaims, questions, disrupts or is intended to disrupt the sovereignty and territorial integrity of India.[26]

Terrorist Attacks and its Financing: Need for Funding & Costs Incurred

Running a terrorist organisation requires substantial financial resources which are transferred to the groups through clandestine and often illegal channels. Terror expert Jean-Charles Brisard argues that 90 per cent of terror financing goes toward general maintenance of cells and equipment. Less than 10 per cent actually finances the execution of operations.[27] Costs incurred by terrorist organisations include materials such as bombs, vehicles, weapons and communication equipment and those related to planning and execution of attacks and expenses for running terrorist outfits.

While it is relatively easy to provide historical data citing an observational link between counterfeiting and terrorism, it is much less so to analyse the aggregate effects of the illicit markets industry on terror crimes in general. ***Moreover, lack of reliable data on terrorist financing leads to an enormous mismatch between the costs of a single attack and the supposed costs of running and maintaining a terror organisation.*** At the same time, estimates of actual financial flows among the parties involved in terrorist activities appear rather preliminary. However this information is essential in order to develop a sound cost-benefit analysis of anti-terrorist measures associated with terror funding.

It is important to note that while statistical data is available for the number of attacks that have taken place in India, it is difficult to directly correlate it to the grey market data in absence of sufficient information and research, which are lacking at present, especially in the Indian context.

Furthermore, despite the existence of requisite laws in India and arrests of suspected criminals by the police, the scale of illicit markets is huge and the criminal networks and illicit markets organisations continue to thrive. Clearly, this means that the existing laws and police operations are not resulting in the desired outcome and are unable to act as a deterrent. This could be due to the low conviction rates in India.

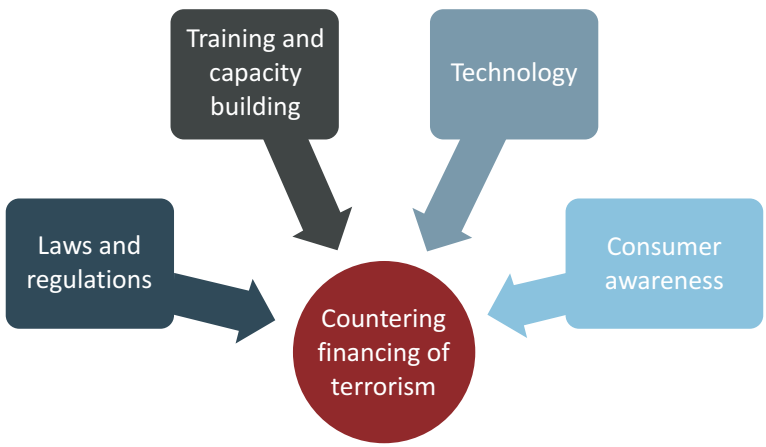
The scenario in other jurisdictions is not very different, although, credible data on seizures may be more easily available. The UK government in their Report of October 2014, has estimated that they lose about 1.3 % of their total tax collection due to criminal networks, mainly from smuggling.

A number of international studies have been conducted in the past which highlight the involvement of counterfeiting and piracy in financing of terrorist activities, for example, Al Qaeda[28] has been linked to the counterfeit industry through the sales of fake perfumes and shampoos. Also, Al Qaeda training modules recovered in 2002 reveal recommendation of sale of fake goods as a means to raise funds for cells.

The illicit markets have grown exponentially across the world, not only costing the industry and governments dear but also promoting criminal enterprises and generating funds for terror activities. Inadequate laws, poor governance and information gaps have aggravated the problem. It is, therefore, crucial to tackle the menace on a global footing in which all countries share information and join forces in creating a legal and regulatory framework, backed by effective enforcement.

So far as India is concerned, lack of adequate data based on search and seizure makes it difficult to link or correlate the increase in illicit markets to terror funding. Establishment and determination of the extent of such a link calls for strategic intelligence gathering and preparation of robust databases, which are clearly missing at present. Given the security

implications, if not outright financial considerations, there is little to argue against carrying out such exercises. This would be the first step to contain counterfeiting and its corollary, terror and ensure that genuine business interests do not suffer. It is therefore imperative to build a framework for prevention of terrorist financing which not only tracks down their financing hubs but also acts as a deterrent for them to ultimately bring down the threat of terrorism. The framework must deal with financing of terrorism from the following perspectives:



Anti-counterfeiting measures

While there are a number of laws in India protecting patents, trademarks and copyrights, their enforcement is wanting. There are a number of inter-governmental initiatives undertaken as well, in collaboration with Interpol, World Customs Organisation, WIPO, WHO etc.

Some of the measures that companies take /can take to protect from revenue losses to the illicit markets includes (including some that are common to other industries as well)):

- Using tamper-proof caps
- Bottle buy-backs to prevent original bottles being reused after first use
- Depth and colour on labels or high quality cartons
- Holographic or laser derived devices on labels
- Testing samples
- Use of tetra packs for packing alcohol as they are easy to use and tamper proof as well as eco-friendly
- Separate department focussed on anti-counterfeit measures, testing and reporting counterfeit consignments

Detecting Counterfeits: Tips

The following tips will help consumers detect whether they are purchasing and consuming a genuine product or a fake:

- Price - a price significantly lower than usual should trigger suspicion
- Location of sale of goods should be observed as most often spurious liquor, like other products will not be sold at regular outlets.
- For online purchases check for customer feedback
- Product labels - check for errors on labels sometimes as obvious as spelling mistakes, health advisories, and crooked labels
- Bottle and label colours-the consumer should be aware of the bottle and label colours of the liquor being purchased
- Inconsistency in quantity between two bottles of the same product
- Liquids with sediment in the bottle
- Odour-the smell of spurious liquor is most often a give-away. Fake liquors will normally have a smell different from what you would expect from them. Counterfeit vodka for example often smells of nail varnish

Impact on Consumers

Apart from loss of revenue to companies and tax losses to governments due to sale of alcohol in the illicit markets, consumption of counterfeit alcohol has serious consequences for the consumer. Some advocates of prohibition however attribute these consequences to excessive alcohol consumption as well. These are listed below:

Health Impacts

- Heart and liver diseases
- Some studies indicate that alcohol consumption leads to cancer, particularly of the oesophagus
- Neuro-psychiatric disorders like epilepsy, psychiatric emergencies, depression and suicide
- Death due to methyl alcohol being added to the mix, a number of such deaths get reported in India routinely
- Other obvious health effects of consuming illicit alcohol are (which may often get confused with effects of binge drinking):
  - Hallucinations and confusion
  - Loss of co-ordination
  - Temperature rising sharply, sweating and unable to cool down even if cooled outside with water/ice OR low body temperature (hypothermia)
  - Vomiting
  - Temporary loss of sight

- Nose bleed
- Irregular or slow breathing, or being unable to breathe requiring immediate medical attention

Social & Other Impacts

- Motor vehicle accidents when driving in an inebriated state
- Domestic violence
- Increase in crimes
- Reduced workplace performance, inefficiency and poor social interactions
- Substantial income expended on liquor purchase
- Economic loss of wages
- Increased medical expenses
- Effects on family, especially poor families in India, like loss of income, forcing children to skip school and work to earn / supplement the male parent's lost income, unwanted pregnancies, etc.

Conclusion

The Indian alcoholic beverages industry has been growing at double digit rates over the past few years, and changing demographics, increasing disposable incomes, greater acceptance of social drinking are expected to result in further growth of the industry. It is a dominant producer in the South East Asia region and the still large untapped potential is seen by international spirits makers as a key market for their products. However, despite opening up the sector to FDI in 2006, there has hardly been a rush of foreign investors in the country, mainly on account of other barriers that limit their entry, existence and growth. Primary among these barriers are the flourishing illicit markets as well as the variety of regulations that need to be followed. The latter is on account of the fact that the alcoholic beverages industry in India is a state subject, which allows the states to regulate the industry in the manner it so deems fit. Thus, instead of having to deal with one set of regulations at the Central Government level, a manufacturer has to comply with different regulations that differ significantly from state to state. Even excise duty (which is otherwise a central levy) is a state levy in case of alcoholic beverages. These difficulties are equally applicable to domestic producers. The ultimate effect is stifled of growth of legitimate manufacturers, indirectly encouraging growth of the illicit markets. While the illicit market in this industry is the lowest among the industries under review of FICCI-CASCADE-16.7% (based on 2012 government data), it had the largest growth, 6.5% vis-à-vis 2010 when it was estimated at 10.2%. Our study has attempted to establish a relationship between the existence and growth of illicit markets and its impact on innovation, investment and tax arbitrage.

Data Collection and Analytics

As a significant and first step stakeholders must work in tandem to improve information sharing which will enable collation of credible statistics. Credible statistics will help to draw up and implement action plans that could undermine the activities of the perpetrators of this crime. Improving information sharing would entail:

- Systematic data collection;
- Comparability across sectors and across borders; and
- Comprehensive-drawing from multiple sources.

Quality information would provide a solid basis for establishing the scope of illicit markets and form a key input in assessing the magnitude and effect of illicit markets

There are several initiatives that industries may also undertake which may include:

- Supporting research and analysis of issues related to illicit markets;
- Conducting awareness programmes for retailers and consumers; and
- Innovations in products or packaging to combat illicit markets.

Encouraging Innovation & Investments and Enhancing Regulations

Data did not suggest the existence of patents in the industry in India, despite the potential for innovation as seen in the case of international manufacturers. This coupled with the fact that the ratio of R&D expenditure to total operating expenditure in the industry has been declining over the six year period of review (from 2008 to 2013) suggests that the industry the industry is apprehensive about incurring the costs related to innovation. ***Research is a risky activity and returns on successful R&D leading to practical innovations must be large enough to compensate for the high proportion of R&D that is unsuccessful, generating in this way a normal return on R&D as a whole. However, for an industry sector faced with a growing grey market, the returns would be much lower on account of the greater risk of illicit markets.***

In the analysis of value added by companies over a period it has been concluded that a high dependence on imports and the consequent high grey market presence result in low gross value added as a percentage of total output hinting at the possibility of the counterfeited products, particularly in sectors that require a high degree of innovation and technology use which is inaccessible in India, being smuggled into India through various channels. The alcoholic beverages sector shows the least average percentage of gross value addition over total output and the largest increase in grey markets. ***This analysis quite clearly therefore demonstrates how a combination of factors establishes a link between value addition and the illicit markets.***

The analysis of imports of inputs and finished goods also points to a clear relationship between the presence of illicit markets and the degree of investment and innovation in the country with companies preferring to import in order to avoid the risks involved with loss of investment. The use of indigenous inputs is predominant in this industry in comparison with others and while the grey markets have shown the largest increase from 2010 the size of the illicit markets vis-à-vis the entire industry is the smallest, in comparison with all other industry sectors under the FICCI-CASCADE review. In other industry sectors imports are either the predominant input or their share in manufacture has significantly increased. This could be in no small measure due to the risks of loss due to counterfeiting and illicit markets. It holds true even for finished products which have shown an increasing trend in most industries in comparison with total production.

The difference in percentage change in sales and capital employed did not yield a significant trend in the case of the alcoholic beverages industry. This ratio helps to understand what level of sales are being generated by each rupee worth of assets invested in the business. The level of investments made in the business is also a barometer of the confidence or expectation of

returns from such investments. Similarly the ratio of sales to average capital employed remained fairly steady, indicating that there has been no dramatic increase in investments in the years under review against which higher sales can be expected in the coming years. At the same time, the sector has shown an increase in the level of illicit markets. This increase implies that that the sector is wary of making patient long term investments to generate revenue from the capital base for fear of loss of investment.

According to a recent Dun & Bradstreet report titled "India 2020 Economic Outlook",[29] rising income levels coupled with increase in the young working-age population will lead private final consumption expenditure to grow steadily over the years. As per D&B's projections, growth in private final consumption expenditure is expected to average at around 7.0% during FY15-FY20. Obviously this would also impact the alcoholic beverages industry. Collaborative efforts are thus required between all stakeholders to curb the rising illicit markets which vitiate the environment and restrain such growth, reducing business efficiency, profitability and overall development.

Inter-state Tax Arbitrage

Taxes on alcoholic beverages in India are relatively large compared to taxes on other products indicating that it is a significant source of income for states. While the complexity of the tax structures vary from state to state, rates of tax also vary as indicated earlier. A high and complex tax regime often results in loss of state revenues, lowering of state GDP, red tape and corruption. If the intention of higher taxes is to reduce consumption, this rarely occurs at the ground level. On the contrary, consumption either remains the same, or consumers turn to neighbouring states for their consumption or they turn to smuggled or counterfeit products.

Consumption of counterfeit alcoholic beverages of course has proven detrimental to health. A discussion paper on the shadow economy of alcoholic beverages prepared by the Institute of Economic Affairs (IEA), London concludes, *'economic prosperity, moderate taxation and minimal corruption are essential for a country to minimise the size of the alcohol black market. Without these preconditions, efforts to tackle the illicit alcohol supply through education, deterrence and enforcement are unlikely to succeed.'* A study by Victoria University professors, "Cross-Border Tax Arbitrage and Convergence of Tax Systems: A Law and Economics Approach (2012)", says that *cross-border tax arbitrage undermines the tax base of one government while increasing the tax base of another government.*

The multiplicity of levies such as excise, VAT, labelling fee, vend fee, transportation fee, etc., adds to the cost of compliance while not benefitting revenue. The key therefore is to harmonise taxes across states. It is also important to streamline policies related to licensing and advertising as well as effective enforcement and uniform application of age limits across states. The proposed Goods and Service Tax (GST) is a step towards this harmonisation process. Currently

however, the proposed bill does not include alcohol in its definition. However in their representation, industry bodies from the industry have stated that exclusion of specific goods by way of constitutional amendment would dilute the flexibility for levy of GST on these products in the future, even if the Centre and the States were to reach a consensus later. GST is set therefore to replace VAT and is likely to be in the range of 16%- 20%, implying that the multiple and varying rates in different states would become redundant. While the states' concerns on loss of revenue are understandable, introduction of GST will only widen the tax net by inclusion of more products, thereby increasing state revenues.

Countering Financing of Terrorism

With regard to funding terror organisations, owing to the extensive research carried out globally on terrorism and its links to proceeds from illicit markets, it is possible to state with certainty that illicit markets are instrumental in providing the much required funding to such organisations. In addition to the FBI, the former US Customs Service also brought attention to the link between the sale of fake goods and terrorism and has noted that the events of September 11, 2001 "changed the way American law enforcement looks at intellectual property crimes."[30]

Terrorist groups need financial resources to train and support members, maintain and sustain logistics, and meet operational costs. Therefore, if the threat of terrorism is to be nipped, the access to funding has to be choked. The truth is that many countries do not possess the legal and operational wherewithal and technical expertise needed to zero in on terrorist financing sources and initiate prosecution.

It is imperative therefore to build a framework for prevention of terrorist financing which not only tracks down their financing hubs but also acts as a deterrent for them to ultimately bring down the threat of terrorism. Such a framework will include training and capacity building among enforcement agencies, use of technology to detect and track sources of finance and increasing consumer awareness to empower consumers to take more informed decisions.

Annexures

Annexure I: Academic Literature Review

- **OECD** estimates international trade in counterfeit and pirated products could have been up to USD 200 billion in 2005 excluding domestically produced and consumed counterfeit and pirated products and the pirated digital products being distributed via the internet. The magnitude and effect of counterfeiting are of extreme significance and warrants strong, sustained and coordinated action from government, industry and consumers. Counterfeit and pirated products are infiltrating legitimate supply chains other than informal markets. The Internet has provided counterfeiters/pirates with a new and powerful means to sell their products via auction sites, stand-alone e-commerce sites and email solicitations.[31]

- **OECD** further states that the effects of counterfeiting and piracy on government come in the form of (i) lower tax revenues, (ii) the cost of anti-counterfeiting activities, including responding to public health and safety consequences and (iii) corruption. … *Tax revenues.* Tax collection is presumed to be far more effective from rights holders and their licensees than from counterfeiters and pirates. Potential losses include corporate income taxes, sales or value added taxes, excise taxes, import tariffs and social insurance charges. The revenue losses are particularly high in sectors such as tobacco and alcohol, where excise taxes are high and smuggling of counterfeit products to avoid those taxes is widespread.[32]

- **BASCAP** estimates that the total value of pirated and counterfeited products impacting G20 economies for 2008 is $455 to $650 billion and has been projected between $1,220 to $1,770 billion for 2015 including international trade, domestically produced goods and pirated digital products distributed via internet. The impact of counterfeiting and piracy on government tax revenues, legitimate employment, increased costs of crime, economic costs on consumer health and safety and downward pressures on FDI flows has been estimated at $125 billion per annum for G20 countries. Employment loss has been estimated at 2.5 million jobs for G20 countries excluding secondary impact on employment in the supply chain.[33]

- **International Anti-Counterfeiting Coalition, Inc. (IACC)** professes that low risk of prosecution and enormous profit potential has made criminal counterfeiting an attractive enterprise for organized crime groups. There are connections between intellectual property theft and terrorist groups and terrorists can use intellectual property crimes not only as a source of funding but also as a means of attack.[34]

- **GAO** states that it is difficult to quantify the economy wide impacts of counterfeiting because of varying assumptions on substitution of legitimate products with the pirated goods across industries. Hence each method of costs estimation has limitations on account of data availability and underlying assumptions and no single method can be used across industry sectors.[35]

- **UNODC** says, "The ramifications of counterfeiting affect everyone, with Governments, businesses and society being robbed of tax revenue, business income and jobs. The flood of counterfeit and pirated products creates an enormous drain on the global economy by creating an underground trade that deprives Governments of revenue for vital public services and imposes greater burdens on taxpayers. It also leads to more public resources being spent on fraud-detection methods by public sector authorities and larger intelligence and policing budgets being needed to counter sophisticated schemes and networks. Counterfeit goods also undermine employment, as products are copied and produced illegally, thereby displacing sales of original merchandise and reducing the turnover of legitimate companies. Fraudulent medicines also have a direct impact on increased medical costs due to prolonged treatment periods and medical complications in the spread of treatment-intensive diseases. The prices of products also go up because companies increase security systems to counter organised criminal activities and have to invest more in research and development."[36]

- A **WIPO** study talks about the how intellectual property rights or their protection plays a role in the innovation process, emphasising that technological innovation is a principal determinant of successful firm performance. The study also indicates that small and medium sized enterprises (SMEs) prefer to use trade secrets rather than patents as a form of protecting their inventions to stay competitive. The main reasons given by SMEs for shying away from patenting their inventions include high costs and complexity of the patent system.[37]

- **Nam D. Pham** lays emphasis on the impact of innovation and the role of IP rights in his study. The study brings to the fore, the critical importance of allocating resources to innovation in sustaining long-run economic growth in both developed and developing countries. The author argues that countries with the highest technological capacity are better able to enhance the efficiency of their production methods and exploit new market opportunities. The study states that the protection and enforcement of IP rights are imperative for creating strong incentives for innovation and safeguarding it from counterfeiting, piracy, and other forms of IP theft. It concludes that with the growing importance of knowledge as a driving force for innovation and economic expansion worldwide, the protection of property rights has attracted greater attention and concern. The counterfeiting and piracy of products are rising exponentially and are costing the global economy hundreds of billions of dollars a year

in lost revenues and thousands of jobs. The challenge for policymakers is therefore to continue encouraging investment in R&D and human capital in order to promote innovation while at the same time developing the policy instruments and frameworks to better protect intellectual property rights.[38]

- **A Harvard University** study delves into the relationship between counterfeit sales and financing of activities of terrorist organisations using a number of economic controls to analyse the effect of two proxies of annual counterfeit sales on two measures of international terrorism namely RAND database and DOS database. It states that while the societal and economic costs of counterfeit products are largely incontrovertible, one final effect of this crime industry is less definite: its support of international terrorism. Anti-counterfeiting organizations and luxury goods manufacturers are quick to suggest that counterfeit product revenues are directly funding terrorism. There is, however, only a small amount of hard data in support of this claim. The study conducts an inquiry into the purported causal link between measure of counterfeiting and terrorist incidents in a given year through a regression model but suggests that the empirical analysis fails to provide a conclusive relationship between the two.

- **A University of Wellington study** on cross border tax arbitrage states that in most cases, cross-border tax arbitrage increases the tax payable in one jurisdiction and decreases the tax payable in the other jurisdiction. 13 The decrease must be larger than the increase for the arbitrage to be worthwhile for the taxpayer. Tax arbitrage, therefore, redistributes resources not only from government treasuries to taxpayers, but often from one government treasury to another. The study says the direct consequence of cross-border tax arbitrage is to distort individuals' and corporations' investment decisions, and to reduce the revenue raised by governments. Although cross-border tax arbitrage may augment the coffers of one government's treasury, this augmentation is likely to be more than offset by a reduction in the revenue raised by the other government's treasury (otherwise the arbitrage is unlikely to be advantageous from a tax perspective).[39]

A significant anti-counterfeiting measure undertaken in recent times is the Anti-Counterfeiting Trade Agreement (ACTA). It builds on the Trade-Related Aspects of Intellectual Property Rights (TRIPS), but has been negotiated outside WTO (World Trade Organization) framework. The draft ACTA calls for increased use of criminal and civil penalties against people using copyright circumvention technologies and those accused of copyright infringements, and also for ISPs to have more responsibilities with regards to removing infringing material. **ACTA has been rejected by the European Union in July 2012.**

ACTA binds negotiating states and creates a new international standard which is likely to be imposed on third countries in future trade agreements. The current draft threatens fundamental rights in countries such as the right to freedom of expression and information,

right to protection of personal data and fair trial/due process issues related to other fundamental rights. It was negotiated in unwarranted secrecy, without adequate input from civil society or parliamentarians, but in close cooperation with major IP right holders. It has resulted in disproportionate protection to big business.[40]

Annexure II: Items considered as part of operating expenditure

S. No.	Components of Operating Expenditure
1	Raw material expenses
2	Power & fuel
3	Water charges
4	Salaries & wages
5	Repairs & maintenance of buildings
6	Repairs & maintenance of plant & machinery
7	Repairs & maintenance of vehicles & others
8	Communications expenses
9	Travel expenses
10	Selling & distribution expenses
11	Printing & stationery expenses
12	Donations
13	Social and community expenses
14	Environment and pollution control related expenses
15	Subscriptions and membership fees
16	Research & development expenses
17	Other miscellaneous expenses
18	Miscellaneous expenditure

Abbreviations

ASI	Annual Survey of Industries
BASCAP	Business Action to Stop Counterfeiting and Piracy
CAGR	Compounded Annual Growth Rate
CASCADE	FICCI's Committee Against Smuggling and Counterfeiting Activities Destroying the Economy
CSIR	Council of Scientific & Industrial Research
CSO	Central Statistical Organisation
DGCIS	Directorate General of Commercial Intelligence and Statistics
FDI	Foreign Direct Investment
FICCI	Federation of Indian Chambers of Commerce & Industry
FMCG	Fast Moving Consumer Goods
GDP	Gross Domestic Product
GSV	Gross Sales Value
GVA	Gross Value Added
ICAP	International Centre for Alcohol Policies
IPR	Intellectual Property Rights
MoSPI	Ministry of Statistics and Planning Implementation
MSME	Micro Small and Medium Industries
NIC	National Industry Code
NIMHANS	National Institute of Mental Health and Neuro Sciences
NRI	Non-Resident Indian
NSS	National Sample Survey

NSSO	National Sample Survey Organisation
OECD	Organisation for Economic Cooperation and Development
PHFI	Public Health Foundation of India
R&D Expenditure	Research and Development expenditure
TARI	Thought Arbitrage Research Institute
UNODC	United Nations Office on Drugs and Crime
VAT	Value Added Tax
WHO	World Health Organisation
WIPO	World Intellectual Property Organisation

References

[1] Dun & Bradstreet - Manappuram Finance Limited, "India 2020 Economy Outlook"

[2] Estimating the global economic and social impacts of counterfeiting and piracy, BASCAP, 2011

[3] Alcohol Marketing and Regulatory Policy Environment in India-A Report-November 2013, Public Health Foundation of India

[4] A Credit Suisse research on the market "Indian Spirits Market" date September 2012 available at ? https://doc.research-and analytics.csfb.com/docView?language=ENG&source=emfromsendlink & format=PDF&document_id=1000473291&extdocid=1000473291_1_eng_pdf&serialid=oun6%2bKXvmqM8LPKFz5bkTilydCe08R2p1Spo3jV5TOw%3d

[5] http://www.pib.nic.in/newsite/erelease.aspx?relid=15119

[6] "India Consumer - Alcoholic Beverages- Holding the Fort", an Anand Rathi Share and Stock Brokers Limited Consumer Sector Report, published in April 2012. Available at: http://www.rathi.com/ResearchUpload/634759591380781250_India%20Consumer%20-%20Alcoholic% 20Beverages%20-%20Holding%20the%20fort.pdf

[7] Economic Impact of Counterfeiting and Piracy, OECD, 2008

[8] "Producers, sellers, and drinkers -Studies of non-commercial alcohol in nine countries", a study by International Centre for Alcohol Policies (ICAP), 2012

[9] Alcohol Related Harm - Implications for Public Health and Policy in India-a study by National Institute of Mental Health & Neuro Sciences, Bangalore. Available at: http://www.nimhans.kar.nic.in/deaddiction/CAM/Alcohol_report_NIMHANS.pdf

[10] WHO - Global status report on alcohol and health (2011), available at: http://www.who.int/substance_abuse/publications/global_alcohol_report/msbgsruprofiles.pdf

[11] Available at: https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=8&ved=0CFEQFjAH&url=http%3A%2F%2Fwww.diageo.com%2FLists%2FResources%2FAttachments%2F1397%2FUSL%2520Factsheet%2520June%2520 2013%2520FINAL.pdf&ei=Mx7GU5a9BIbIuAT2xoHwCw&usg=AFQjCNGraXNwNTuTnBHtFWR6D0ujXR986A

[12] http://archive.indianexpress.com/news/liquor-consumption-in-india-to-jump-30-/869641/

[13] Global counterfeiting, Background document available at http://counterfeiting.unicri.it/docs/Global%20counterfeiting%20background.pdf last accessed on April 14, 2012

[14] "The Economic Impact of Counterfeiting and Piracy" available at ? http://apps.who.int/medicinedocs/documents/s19845en/s19845en.pdf

[15] "Producers, sellers, and drinkers -Studies of non-commercial alcohol in nine countries", a study by International Centre for Alcohol Policies (ICAP), 2012

[16] Wine Market Update 2012, USDA Foreign Agricultural Services

[17] http://www.cpe.tn.gov.in/statistics.pdf (page 41)

[18] http://www.sethassociates.com/marketing-of-wine-in-india.html

[19] As per U.S. Department of Commerce, Committee on Measuring Innovation in the 21st Century Economy

[20] Imitation Costs and patents: An empirical study by Edwin Mansfield, Schwartz Mark and Wagner Samuel (1981)

[21] http://sciencewatch.com/sites/sw/files/images/basic/research-innovation-g20.pdf last accessed on May 5, 2014

[22] Role of Intellectual Property in Innovation and New Product-Development By Christopher M. Kalanje, Consultant, SMEs Division, WIPO

[23] The Impact of Innovation and the Role of Intellectual Property Rights on U.S. Productivity, Competitiveness, Jobs, Wages, and Exports-Nam D. Pham, Ph.D. APRIL 2010

[24] NBER, Imported Inputs and the Domestic Content of Production by Foreign-Owned Manufacturing Affiliates in the United States, William J. Zeile

[25] http://www.weforum.org/reports/global-competitiveness-report-2013-2014 last accessed on April 25, 2014 (pages-483, 530)

[26] http://www.mha.nic.in/sites/upload_files/mha/files/pdf/Unlawful_Activities_Prevention_Act1967.pdf

[27] The Globalization of Terror Funding by Gil Feiler, The Begin-Sadat Center For Strategic Studies Bar-Ilan University

[28] Counterfeit Goods and Their Potential Financing of International Terrorism, Zachary A. Pollinger, Harvard University

[29] Dun & Bradstreet - Manappuram Finance Limited, "India 2020 Economy Outlook"

[30] Financing Terror, Profits from Counterfeit Goods Pay for Attacks, U.S. Customs Today

[31] Economic Impact of Counterfeiting and Piracy, by OECD 2008

[32] "The Economic Impact of Counterfeiting and Piracy", by OECD 2007

[33] Estimating the global economic and social impacts of counterfeiting and piracy, BASCAP report, February 2011

[34] International Anti Counterfeiting Coalition (IACC) White Paper

[35] Observations on Efforts to Quantify the Economic Effects of Counterfeit and Pirated Goods, By GAO, April 2010

[36] http://www.unodc.org/toc/en/crimes/counterfeit-goods.html

[37] Role of Intellectual Property in Innovation and New Product-Development By Christopher M. Kalanje, Consultant, SMEs Division, WIPO

[38] The Impact of Innovation and the Role of Intellectual Property Rights on U.S. Productivity, Competitiveness, Jobs, Wages, and Exports-Nam D. Pham, Ph.D. APRIL 2010

[39] "Cross-Border Tax Arbitrage and Convergence of Tax Systems: A Law and Economics Approach" Australasian Tax Teachers' Association Annual Conference, Sydney University, January 2012, Stephen A. Whittington & John Prebble

[40] Opinion on the compatibility of the Anti-Counterfeiting Trade Agreement (ACTA) with European Convention on Human Rights & the EU Charter of Fundamental Rights, By Douwe Korff & Ian Brown

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About FICCI

Established in 1927, FICCI is the largest and oldest apex business organisation in India. Its history is closely interwoven with India's struggle for independence, its industrialization, and its emergence as one of the most rapidly growing global economies. FICCI has contributed to this historical process by encouraging debate, articulating the private sector's views and influencing policy.

A non-government, not-for-profit organisation, FICCI is the voice of India's business and industry.

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About FICCI CASCADE

In the recent past India's economic growth story has attracted world's attention bringing new challenges for the domestic economy. One of the challenges currently faced is the growing illicit trade in counterfeits, pass offs and smuggled goods. These activities are also threatening brands not only in every region of the country but across the globe.

Contraband and counterfeit products hurt the integrity of the brand, further diluting the brand owner's reputation. This not only results in erosion of sales of the legitimate product but further [CASCADE]s onto affect the consumers in the form of health and safety hazards.

With the above insight the Federation of Indian Chambers of Commerce and Industry(FICCI) took the initiative to dedicate a forum by establishing the Committee Against Smuggling and Counterfeiting Activities Destroying the Economy - CASCADE on 18thJanuary, 2011 at FICCI Federation House, New Delhi.

FICCI Committee Against Smuggling and Counterfeiting Activities Destroying Economy (CASCADE)

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