The “Fake Alcohol” Situation in the United States:
The Impact of Culture, Market Economics, and the Current Regulatory Systems

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General Summary and Key Conclusions

Fake alcohol products cause immeasurable public and personal health costs and result in huge tax revenue losses throughout the world. Fake alcohol encompasses surrogate alcohol where industrial alcohol is improperly and illegally put to a commercial beverage use, moonshine and similar home-made products, and counterfeit alcohol including the refilling of brand name bottles with other products. Terms such as “noncommercial alcohol” and “unrecorded alcohol” are also used to describe these products.

The sale of fake alcohol provides money to organized crime gangs and corrupt officials. When left unchecked, it creates an economic disincentive for others to establish a legal industry that complies with laws and regulations which, in turn, ensures that safe products (in a quality control context) are widely available to consumers and enables governments to collect the revenue rightly due in order to fund social necessities such as public health programs and infrastructures. Where a country’s reputation for fake alcohol is pronounced, tourist trade and foreign direct investment may diminish having another negative economic impact.

Numerous incidents of fake alcohol products in countries around the world are routinely reported in the news media, government announcements, social media, and medical and scientific literature with the resulting deaths, social unrest, and marketplace disruptions, among other adverse outcomes. Few incidents have been reported in the United States and this study documents only a few involving industrial alcohol distributed in a commercial manner for beverage use and several others involving counterfeit alcohol in refilled liquor bottles. Moonshine in the United States is the exception here.

Several reasons are identified for the few incidents in the United States. First, there is a strong cultural respect for the rule of law and lack of corruption in governance. Second, at both the Federal and State levels, there exist strong regulatory systems that police the production, importation, distribution and retail sales of alcohol beverages through independent parties. Checks and balances exist at both government and industry levels that would identify fake alcohol products. This comprehensive regulatory framework ensures the safety (in a quality control context) of alcohol beverages produced or imported and ensures their flow to the ultimate consumer through a controlled distribution system that mitigates and generally prevents the introduction of fake alcohol. Today there is a mature, well-established regulated industry in the United States and the present regulatory system reflects a largely responsible industry in the production, importation, wholesale distribution, and retail sale of alcohol. By mature industry, this means the industry recognizes, respects, and accepts that it operates in a regulated environment and factors the costs of compliance into its operating expenses. However, this system only functions if the Congress and State legislatures provide sufficient resources and funding. Finally, the United States has a competitive marketplace that provides alcohol beverages at all price points including inexpensive safe (in a quality control context) alcohol beverages thereby negating the demand for fake alcohol (except for moonshine).
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Introduction

"America is exceptional." This declaration is commonly heard from voices as diverse as President Obama\(^1\) and The Heritage Foundation.\(^2\) The focus of this study is whether the declaration applies to the United States in protecting consumers from fake alcohol and from purveyors of fake alcohol in the domestic marketplace.\(^3\) Information from news reports, social media, scholars, and “think tanks” indicate the presence of fake alcohol in many other countries, whereas the reports of incidents in the United States of fake alcohol (except for moonshine) and the resulting serious health consequences are minimal.

Serious public health risks, including incidents of death, from consumption of fake alcohol have been recently reported in the news media from many countries such as China, Cuba, Czech Republic, Ecuador, India, Indonesia, Iran, Kenya, Libya, Pakistan, Russia Federation (Russia), South Africa, Turkey, Uganda, and the United Kingdom of Great Britain and Northern Ireland (United Kingdom or UK), among other countries.\(^4\) Most commonly these result from the methanol or toxic denaturants present in these products arising from the production or manufacturing processes utilized. That is, the fermented mash may be a material resulting in high levels of methanol during the distillation process, or the fake alcohol represents a failed attempt to remove methanol from denatured or wood alcohol, or the fake alcohol may be manufactured by blending industrial alcohol (that is, alcohol containing methanol or other toxic denaturant materials) with other substances.\(^5\)

By comparison in the United States, the incidents of fake alcohol that appear in the news media are lesser and primarily are “moonshine” investigations. Moreover, these incidents are less frequent and generally do not appear to result in the same degree of reported public health risks and deaths as found in other countries. This study aims to identify the reasons for this situation in the United States. The reasons examined will include: cultural ones, such as a respect for the rule of law and absence of corruption in governance; linked closely to the rule of law focus are regulatory controls on both beverage alcohol and industrial or denatured alcohol products at both the Federal and State levels over the production, importation, distribution, and sale of alcohol.

\(^1\) http://www.usatoday.com/story/news/world/2013/09/24/obama-america-exceptionalism-putin-un/2861129/
\(^2\) http://www.heritage.org/research/reports/2010/09/why-is-america-exceptional
\(^3\) These are two distinct types of conduct: one is the behavior of the consumer who decides to self-abuse and personally consume the fake alcohol (such as purchasing hand sanitizer and diluting it with water), while the other is the conduct of a person creating and distributing the fake alcohol to consumers for profit or economic gain.
\(^4\) For an overview of the scope of this problem internationally, see “Noncommercial Alcohol Monograph,” among other publications, prepared by the International Center for Alcohol Policies at http://www.icap.org/Publications/NoncommercialAlcoholMonograph/tabid/550/Default.aspx. Some of these publications are discussed later in this study.
beverages taking into account the systems in both private license states and control states; wide ranges of pricing in conjunction with broad brands availability of alcohol beverages in the local marketplace; and inherent characteristics of “moonshine” type products that are unique to the United States when compared to other countries where incidents of fake alcohol are reported.

A seminal study entitled “Surrogate Alcohol: What Do We Know and Where Do We Go?” published in 2007 by Canadian and European-based researchers provides a compelling overview of the varied public health consequences of surrogate alcohol consumption in various countries around the world. Triggered by an article in Lancet on the high male mortality rate in a Russian town arising from surrogate alcohol consumption, the researchers conducted a computer-assisted literature review on the chemical composition and health consequences of surrogate alcohol and identified more than 70 relevant articles dating back to 1953. While the numerical toxicology data on surrogate alcohol products is a key part of the study, the myriad public policy questions posed by these researchers is an excellent starting point for any reader interested in the challenges of combatting “fake alcohol.”

The methodology used for this study is empirical data principally from the World Health Organization (WHO) and the American Association of Poison Control Centers, news articles and social media reports, and a review of scientific, medical, social policy, and public advocacy literature and research, all of which is critically analyzed. Information on laws, regulations and government policies or judicial interpretations is derived from public sources.

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7 The American Association of Poison Control Centers (AAPCC; http://www.aapcc.org/) maintains the national database of information logged by the country’s 57 poison centers (PCs). Case records in this database are from self-reported calls; they reflect only information provided when the public or healthcare professionals report an actual or potential exposure to a substance (e.g., an ingestion, inhalation, or topical exposure, etc.), or request information/educational materials. Exposures do not necessarily represent a poisoning or overdose. The AAPCC is not able to completely verify the accuracy of every report made to member centers. Additional exposures may go unreported to PCs and data referenced from the AAPCC should not be construed to represent the complete incidence of national exposures to any substance(s).
Executive Summary

1. Data from the World Health Organization documents the consumption of alcohol beverages in 191 countries out of a total of 196 countries listed in its Global Status Report on Alcohol and Health (2014 ed.) and shows wide ranging patterns of use and abuse, legal and illicit production and trade, and fiscal, taxation, and public health policies.

2. News source reports, social media, and peer-review research and literature documents the incidents of fake alcohol” categorized as surrogate alcohol, counterfeit alcohol, noncommercial alcohol, and unrecorded alcohol in many countries with concomitant results of adverse public health and safety and, in some instances, deaths by consumers of these products. These encompass situations where a person or entity produces or manufacturers a “fake alcohol” product frequently containing methanol or other toxic denaturants to distribute for sale or other economic gain to others for their consumption.

3. Corruption, weak governance, and lack of respect for the rule of law directly contribute to the presence and breadth of presence of “fake alcohol” products. These factors foreclose or handicap the development of a regulatory regime that “fits” the tax revenue and public health needs of a country. Moreover, the incentive to comply with indigenous regulatory regimes is undercut by these factors because the financial costs of compliance result in a business model that cannot compete with the illicit market. Two negative results, among others, are (1) a marketplace that has less availability of lawful brands of alcohol beverages which are tax-paid products resulting in needed revenues for the government and (2) a lack of consumer confidence in the authenticity and quality of the brands held out as lawful in that marketplace. Moreover, the money raised from fake alcohol sales benefits corrupt officials and organized crime gangs and, thereby, contributes to more undercutting of the respect for the rule of law and good governance.

4. Most countries have traditional alcohol products made by individuals that will, in some respect, remain in the domestic marketplace as part of an illicit production and trade regardless of the efficiency and effectiveness of the regulatory regime. In some instance, like moonshine in the United States, the business model of the regulated industry perpetuates and reinforces the mystique surrounding these traditional alcohol products.

5. Incidents of “fake alcohol” products being distributed in the United States are reported much less frequently than in many other countries. This situation is distinguished from ones where an individual consumer procures industrial or denatured alcohol and manipulates it to a beverage use for personal consumption only by that individual. Refilling of liquor bottles with products of unknown origin or quality and moonshine are the more likely scenarios in the United States than is the use of industrial or denatured alcohol to make a purported beverage alcohol product. Lead content rather than methanol poses a real health threat from moonshine in the United States.

6. The strong rule of law culture, absence of corruption, and a competitive economic marketplace resulting in a wide range of lawful and safe (in a quality control context) at a
wide range of pricing (from economy or value brands to premium and super premium brands) directly contributes to the absence of a corrupt and illicit marketplace for consumers in the United States.

7. The United States has a mature and responsible alcohol industry (for both beverage and industrial alcohols) that recognizes and accepts regulatory regimes and factors the costs of compliance into its operating expenses and business models. At present, each tier of the industry—producers or suppliers, importers and wholesaler distributors, and retailers—functions with a notable degree of independence that creates the competitive business environment that negates and undermines a demand for “fake alcohol” products and an illicit production and trade marketplace.

8. The regulatory regime has been developed over the experiences of the past 150 years and has evolved with periodic changes that reflect the needs of the industry, the public and the country. The current regulatory system is a very detailed structure of controls and is the result of a transparent public process that relies on input from industry, domestic and foreign governmental units, civil society, public advocacy group, consumers, academics and educators, political figures, and the like which results in “buy-in” or ownership from all interested parties.

9. Taken together, the Federal and State governments have complementary and comprehensive regulatory controls that, among other things, license each of the three-tiers (with enforcement tools of suspension or revocation that would put the licensee out of business either temporarily or permanently), impose operational requirements that include detailed records and reports that enable the regulators to track and trace the flow of alcohol beverages from production or importation through wholesale distribution to sale ultimately by retailers, require label approvals at the Federal level and brand registrations at the State level, authorize detailed inspections and audits, and provide for progressive civil and criminal penalties and sanctions to foster voluntary compliance. States may impose additional controls such as franchise laws and exclusive territory requirements. Overall, if regulators are given adequate resources to administer and enforce the law and regulations, these regulatory controls establish a business environment where the economics of the marketplace incentivize compliance by the regulated industry and encourage self-policing whereby independent entities at different tiers of the system provide checks and balances against abuses by their competitors or members of other tiers.

10. These revisions and changes over the past 150 years reflect not a public policy of deregulation but efforts to replace and update one set of regulatory tools with another set of regulatory tools that ensure compliance by the regulated industry. As a result, the present regulatory system “fits” the United States and has been exceptionally efficient and effective in negating the presence of “fake alcohol” products or a corrupt illicit production and trade marketplace.

11. Public policies must balance competing goals and adopt a wide-range of intervention tools. Competitive pricing and availability are tools for combatting the distribution of
fake alcohol” products and preventing the creation of a corrupt illicit production and trade marketplace, but then effective intervention tools must be developed and used to offset other social harms that are associated with the availability of low cost alcohol beverages.
Fake Alcohol – The Definitional Aspects and Challenges

“Fake alcohol” is a term of many meanings and, therefore, the scope of alcohol products covered by this study must be defined. Generally, “fake alcohol” falls within three categories and sometimes the categories overlap.

- “Fake alcohol” is a product that purports to be a traditional alcohol beverage but due to its production or manufacturing processes has an ingredient, adulterant, or characteristic that negates its potability and is harmful, or deadly in some instances, to those persons who consume the product. Frequently, these products are industrial (denatured) or non-beverage alcohols that (1) have been diluted with another liquid, or have been blended with an alcohol beverage, or (2) have been subjected unsuccessfully to a process in an attempt to remove the denaturants and toxic ingredients to render the alcohol potable.

- “Fake alcohol” is a product that is created or manufactured outside of a lawful and regulated channel of commerce. These products also include distilled spirits which are produced in a manner that results in high levels of methanol or have lead, copper, or mercury present due to the equipment used in the distillation process. “Moonshine” in the United States, for example, falls within this last category.

- “Fake alcohol” for purposes of this study includes the refilling of liquor bottles or containers bearing a brand label of one product with another alcohol beverage of the same class and type but not of the brand name on the label. The alcohol placed in the refilled bottle may be a less expensive brand of the same class and type or may be a product derived from, or mixed with, industrial or non-beverage alcohol.

Alternatively, there are several categories of alcohol products that are excluded from the scope of “fake alcohol” covered by this study.

- There are lawfully made products on which the original label has been removed and a counterfeit label affixed to present the product as a rare and highly sought after bottle.8
- There are lawfully products that are mislabeled due to the non-disclosure of a required ingredient or allergen.9

The former raises unique and individualized intellectual property issues and the latter is addressed by specific food allergen statutes and policies both of which are not characteristic of a fake alcohol scenario.

Many studies and organizations recognize the definitional challenge inherent is examining the problem of “fake alcohol.” Frequently the term “surrogate alcohol” is used to describe non-beverage and illegally produced alcohols.10

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9 Pernod Ricard, USA Issues Allergy Alert on Undeclared Sulfites in New ‘TUNE’ Product,” 4-Trader, March 22, 2013. See also, Food and Drug Administration voluntary recall notice for Bourbon flavored caramel sauce and bourbon flavored fudge sauce products at www.fda.gov/Safety/Recalls/ucm345602.htm

10 Lachenmeier, DW, footnote 6, supra, at 1614-15.
(ICAP) uses the term “noncommercial alcohol” to encompass traditional drinks produced for home consumption or limited local trade, unregistered and counterfeit products, and non-beverage alcohols. In its consultation process in 2013 on a proposal to establish a wholesaler registration system for alcohol products, the United Kingdom used the terms “illicit product” and “illicit market” to describe the fraud it is seeking to combat which is essentially alcohol beverages being smuggled into the United Kingdom from the European continent without duty being paid. Frequently the terms “counterfeit” and “tainted” are used to describe alcohol products in many news articles and unfortunately these terms appear in a generic sense without further details on the unlawful nature of the product, such as the label is counterfeit, the product contains industrial or non-beverage alcohol, or the alcohol was manufactured or produced outside legal, regulatory and/or taxation channels.

The broadest definition is the one established by the World Health Organization for “unrecorded alcohol.” 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.

These various definitions must be considered when comparing the fake alcohol situation in the United States to that found in other countries because the prevalence of “fake alcohol” is examined in this study. That is, when comparing fake alcohol incidents in different countries, the definitional standard used by the source of the information for measuring the incidents in each country must be taken into account to ensure the accuracy and value of the comparative conclusions.

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11  [www.icap.org](http://www.icap.org)
Incidents of Fake Alcohol in the United States

Hard informative statistical or narrative summary data is difficult to find on this question. The National Institute on Alcoholism and Alcohol Abuse (NIAAA) does not have statistics or data on the instances of the misuse of industrial and non-beverage alcohol and a review of the National Center for Health Statistics (NCHS), Center for Disease Control and Prevention (CDC) does not disclose any relevant data.14

The National Poison Data System (NPDS) (formerly Toxic Exposure Surveillance System (TESS)) maintained by the American Association of Poison Control Centers (AAPCC) is the comprehensive poisoning exposure surveillance database in the United States and contains information on the human poison exposure case telephone calls taken by all 55 poison centers across the country.15 Dating back to 1985, the NPDS holds more than 50 million exposure case records with more than two million new records being added each year. AAPCC publishes an annual report each year with standardized summary data on poison exposure incidents for single substances by generic categories and for a fee conducts customized data searches for more detailed information about each incident. Alcohol is one of the generic categories.

The WHO maintains country profiles with socioeconomic data on alcohol consumption, patterns of consumption, and health consequences in its Global Information System on Alcohol and Health (GISAH).16 The country profile for the United States is informative. One element of data reflects the “Adult (15+) per capita consumption” in liters of pure alcohol. As evidence by the chart, the quantity of unrecorded alcohol in the United States is 1 liter out of a total per capita consumption of 9.4 liters for the period 2003 to 2005 and 0.5 liters out of a total per capita consumption of 9.2 for the period 2008 to 2010. By comparison with other countries where issues of fake alcohol have been commonly reported in the news press, the United States is modest and is consistent with the minimal incidents found in the United States. Moreover, it is important to recall that the definition of “unrecorded alcohol” is the broadest definition and includes lawful home production, duty free sales, and alcohol consumed by tourists, among others, so much of the product included in the unrecorded alcohol category may not be within the universe of fake alcohol covered by this study.

14 www.cdc.gov/nchs
15 www.aapcc.org
16 http://www.who.int/gho/alcohol/consumption_levels/total_adult_percapita/en/
As a result of the absence of standardized reporting data bases, most of the evidence of incidents of fake alcohol in the United States is based on news reports, social media, published research articles in journals, and isolated reports on government websites. The incidents found can be grouped into several categories.

**Industrial and Non-beverage Alcohol**

Operation Swill in the spring of 2013 was a New Jersey state-wide undercover operation and raid that found an on-premise consumption retailer serving rubbing alcohol with caramel coloring as Scotch whisky. (The investigation also found 29 instances of refilling of liquor bottle violations that are discussed below.) However, no adverse health consequences or deaths have been reported from this instance. Little information about this aspect of the investigation is available. The official press release from the Office of the State Attorney General does not discuss this portion of the investigation; it along with the media coverage focuses on the refilling violations and, more particularly, the fact that 13 TGI Friday restaurants were implicated.

Several other instances of the intentional distribution for consumption by others of industrial and non-beverage alcohol in the United States have been reported in medical research literature. In 1968, in Lexington, Kentucky, shellac thinner (with approximately 74 percent by volume methanol) was diluted with water (to a methanol level of approximately 34 percent by volume) and poured into half-pint bottles which sold for about 25 cents each. Some of this product was

<table>
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<th>India</th>
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<td>15.7 / 15.1</td>
<td>2.6 / 4.3</td>
<td>5.9 / 6.7</td>
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</table>

17 The data in the 2011 edition is based on an average for the period 2003 to 2005, and the data in the 2014 edition is based on an average for the period 2008 to 2010. The 2014 edition include a column with the average data for the period 2003 to 2005. For some countries, the WHO revised the 2003 to 2005 figure in the 2014 edition from that reported in the 2011 edition. For consistency, the data cited in this study retains the figures in the data actually reported in the 2011 edition.


20 Methanol or methyl alcohol is an authorized denaturant in the United States. Title 27, Code of Federal Regulations, Part 21-Formulas for Denatured Alcohol and Rum.
served as the major refreshment at a party held in a home. 22 Eighteen persons were treated at the hospital and 8 persons died as a result of this incident. In 1979, an incident at the State Prison of Southern Michigan involved the dilution of nearly pure methanol products used in photocopy machines and its subsequent distribution among inmates as pink fruity liquid called “homemade” spirits. 23 Forty-four inmates were consumers and three died from this incident.

There have been several instances of imported wines for commercial distribution containing diethylene glycol (DEG) or methanol. In Banfi Products Corporation v United States,24 the United States Court of Federal Claims, pursuant to a Congressional referral, examined whether the former Bureau of Alcohol, Tobacco and Firearms (ATF) acted improperly in requesting a recall of imported wines containing DEG as a health hazard concern. According to the evidence before the Hearing Officer, DEG was not an approved additive or ingredient for use in wine under the Federal Alcohol Administration Act, Internal Revenue Code, or Food, Drug and Cosmetic Act and, therefore, wine containing this substance was mislabeled. Additionally, ATF monitored instances of imported wines from Argentina, Italy, and Austria for methanol or diethylene glycol. 25 However, as noted, none of these incidents was a domestically produced wine situation.

There have been many reported instances of individuals manipulating industrial and non-beverage alcohol products for their personal consumption rather than for the intentional distribution to others. Recent news press reports involve hand sanitizers that contain 62 to 65 percent ethanol. 26 One news article from 2012 states that there have been about 2600 such cases reported in California since 2010. 27 Another news article reports on the consumption of cooking wine by teenagers and noted the health risks associated with the exposure to the high salt levels in such products. The article quotes a dietician as saying that a whole bottle of cooking wine is the alcohol equivalent to three or four beers. 28

The medical literature and news media have reported incidents among the American Indian population of a product colloquially called “Montana Gin.” This product is a water dilution of

hairspray or spray disinfectant.\textsuperscript{29} The incidents reported in these sources appear to be individuals preparing these solutions for their own personal consumption rather than manufacturing a batch of product for the intentional distribution to others.

As noted above, the American Association of Poison Control Centers (AAPCC) maintains a comprehensive database on reported poisoning incidents known as the National Poison Data System that includes a generic category for alcohol. Within this generic category, one subcategory relates to ethanol for beverage purposes and 11 subcategories relate to forms of industrial and non-beverage alcohol.\textsuperscript{30} For 2012, it reports a total of 26,964 single exposure incidents for alcohol of which 17,211 involve alcohols other than ethanol for beverage use. The annual report data includes general information by age grouping, reason for intake (such as unintentional, intentional, or unknown), whether the person was treated in a health care facility, and the outcome (ranging from minor impact to death.) The data for 2012 reports 121 deaths, of which 111 relating to “Ethanol (Beverages)” and 10 relating to four subcategories of: “Ethanol (Non-Beverage, Non-Rubbing)” citing three deaths; “Methanol (Excluding Automotive Products and Cleaning Agents)” citing four deaths; “Unknown Types of Alcohols” citing two deaths; and “Rubbing Alcohols: Isopropanol without Methyl Salicylate” citing one death. The first category of ethanol for beverage use would include both lawfully produced alcohol and presumably moonshine. It would include alcohol poisoning deaths arising from the overconsumption of alcohol itself rather than toxic ingredients in the ethanol product. The remaining 10 deaths from non-beverage and industrial alcohol are not broken down by age (such as toddlers), accidental exposures, suicides, individual abuse situations, and procuring the alcohol product from a third party distributing or selling it.

A customized data search by AAPCC would be required to provide more details about these incidents. However, a published study in 2002 did review more narrative additional data from this system compiled for the years 1993 through 1998 and it contains informative conclusions.\textsuperscript{31} The study opens by noting that there have been very few “clusters of methanol poisoning” in the United States compared to other countries and that the methanol poisoning incidents in the United States have involved individuals or a small series of patients. Over 90 percent of the exposures were unintentional and a significant number involved toddlers. Within the intentional classification, 51.2 percent were suspected suicides and 38.8 percent were due to misuse or abuse. About half of the cases involved windshield wiper fluid. Fatalities mainly involved adolescents and adults who were attempting suicide or were abusing methanol most likely as an ethanol substitute.

Based on the foregoing, it is important to distinguish between the accidental exposure, intentional distribution, and suicidal intake of industrial and non-beverage alcohol. Implicit here

as well, is the distinction between distribution of “fake alcohol” to other consumers as opposed to self-inflicted use such as those who personally manipulate industrial and non-beverage alcohol into a form that they only consume themselves. Utilizing these distinctions, there have been very few cases in the United States of a person making “fake alcohol” using industrial and non-beverage alcohol and then distributing it to others. Only the three incidents described above were found: Operation Swill in New Jersey in 2013; Lexington, Kentucky incident in 1968; and Southern Michigan Prison incident in 1979. Most instances of the consumption of industrial and non-beverage alcohol involved individuals misusing such alcohol for their own personal consumption or were the result of unintentional, accidental or suicidal exposures.

Finally, several other public health concerns and policy questions arise from the consumption of these types of fake alcohol:

- The actual alcohol content of the fake alcohol product is not known to the consumer and, therefore, the consumption of such product may pose additional health threats than those arising from the denaturants themselves.

- One study found that 10 to 15 percent of alcoholics hospitalized in detoxication units have consumed non-beverage alcohol (such as mouthwash, aftershave lotion, or alcohol-based fuels) and half of those patients were regular consumers. Addiction to the non-beverage alcohol may occur and its use is primarily related to easy accessibility rather than simply social or monetary factors. However, another study suggests that surrogate alcohol drinkers are often at the margins of society where poorer housing, less healthy diets, etc. might be responsible for a higher mortality rate.

- Incidents of persons ingesting these types of fake alcohol products were occurring during times when alcohol beverages sales were otherwise restricted (such as Sunday sales prohibitions or early hours of the day when sales of conventional alcohol beverages were not allowed) and the industrial or non-beverage products were the only alcohol-sourced products available for purchase at retail markets.

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32 Dr. Donna Seger, Executive Director of the Tennessee Poison Center and professor at Vanderbilt University explained on ABC News that methanol poisoning is infrequent in the United States and is often not from drinking homemade liquor but because children get into things like windshield wiper fluid, antifreeze and paint thinner. [http://abcnews.go.com/blogs/health/2013/03/14/can-homemade-booze-kill-you?](http://abcnews.go.com/blogs/health/2013/03/14/can-homemade-booze-kill-you?)

33 The fact that several medical research articles routinely cite these same incidents indirectly corroborates that there have been limited instances of the use of industrial and non-beverage alcohol in making a product for subsequent distribution to others. Davis LE, footnote 31, supra, at 500; Levy P, Hexdall A, Gordon P, Boeriu C, Heller M, and Nelson, L, Methanol contamination of Romanian home-distilled alcohol (2003), Journal of Toxicology: Clinical Toxicology, 23-28; and Lachenmeier DW, footnote 6, surpa. at 1618.


36 Lachenmeier, DW, footnote 6, supra, at 1621.

“Moonshine”

The history of moonshine in the United States from the Whiskey Rebellion (1791) forward has been well-documented and abundantly written about so it will not be repeated here. Rather, in the context of this study, the question examined looks at the present day moonshine situation in the United States and how widespread is this type of fake alcohol found in the United States.

The mystique of moonshine is ingrained into the culture of the United States. There is both legal and illegal moonshine today. Unaged, clear, and high proof distilled spirits have become popular brands marketed by lawful distillers under brand names or promotions as “moonshine.”

In recent years, instances of moonshine operations and illegal stills have been reported in many States. While one would expect to see reports in Southern States such as Alabama, Georgia, and Virginia, illegal stills making moonshine have also been found throughout the United States.


Illegal moonshine clearly constitutes the largest category of “fake alcohol” made in the United States for intentional distribution to others. Comprehensive data on total quantities produced is not available but information from investigations, criminal prosecutions and other current and historic data sources clearly indicates a significant volume of moonshine production. The large quantity of moonshine produced in the United States is the evidence from certain historic data, two contemporary Federal criminal prosecutions, and news releases from the Virginia Department of Alcoholic Beverage Control.

Historic data compiled by the former Bureau of Alcohol, Tobacco and Firearms (ATF), Department of the Treasury records quantities data from moonshine investigations during the last three decades of the 20th Century.

**ILLICIT LIQUOR**
(“MOONSHINE”)

| ILLEGAL SPIRITS | MASH
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>FISCAL STILLS</td>
<td>SEIZED</td>
</tr>
</tbody>
</table>

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42 USA Today, June 27, 2013, page 5A.
47 National Conference of State Liquor Administrators (NCSLA) 2013 Annual Conference Presentation Entitled “Shine” at www.ncsla.org
51 Under the Homeland Security Act of 2002, Pub L No 107-296, 107th Cong, 2nd Sess, § 1111 (November 25, 2002) codified at Title 6, United States Code Section 531, the Bureau of Alcohol, Tobacco and Firearms was abolished and two new bureaus were established—the Bureau of Alcohol, Tobacco, Firearms and Explosives in the Department of Justice and the Alcohol and Tobacco Tax and Trade Bureau in the Department of the Treasury.
<table>
<thead>
<tr>
<th>YEAR</th>
<th>SEIZED (GALLONS)</th>
<th>(GALLONS)</th>
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</thead>
<tbody>
<tr>
<td>1970</td>
<td>5,228</td>
<td>86,416</td>
</tr>
<tr>
<td>1975</td>
<td>889</td>
<td>16,046</td>
</tr>
<tr>
<td>1980</td>
<td>106</td>
<td>N/A</td>
</tr>
<tr>
<td>1985</td>
<td>8</td>
<td>218</td>
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<tr>
<td>1990</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>1991</td>
<td>0</td>
<td>80</td>
</tr>
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<td>1992</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>1993</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>1994</td>
<td>1</td>
<td>506</td>
</tr>
<tr>
<td>1995</td>
<td>0</td>
<td>1,600</td>
</tr>
</tbody>
</table>

Source: ATF Special Operations Division at http://www.ttb.gov/statistics/95newa08.htm

While the numbers reflect a decline in the late 1980s and 1990s, the Federal investigative resources (in conjunction with State investigative resources) were focused on a major moonshine investigation in Franklin County, Virginia that spanned from the mid-1990s to its prosecution in 2001. The goal was to put a lasting dent in the moonshining tradition of that region. 52

Two Federal prosecutions in Virginia highlight the magnitude of moonshine operations. The background of these two extensive investigations and very successful prosecutions are detailed elsewhere; 53 rather, their importance for this study is to show the contemporary large scale operations and a broadly regional distribution of moonshine far from its place of production.

- Operation Lighting Strike in southwest Virginia resulted in a criminal prosecution in 2001 that ended with plea agreements. 54 Federal authorities estimated that the defendants produced 1.5 million gallons of moonshine between 1992 and 1999, with an estimated

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52 Moonshine Suspects to Face Trial, by Chris Kahn, Associated Press, September 8, 2001.
53 Max Watman, Chasing the White Dog, (Simon & Schuster Paperbacks 2010).
54 United States of America v. Helms, et al, U.S. Dist Ct (W. VA) Docket No. 7:00CR0074. Generally, in addition to the criminal charges of illegally producing distilled spirits and failing to pay the excise tax under the internal revenue laws, these prosecutions may also include forfeitures, money laundering charges, interstate trafficking in aid of racketeering, among other criminal charges.
excise tax loss of $19.6 million.\textsuperscript{55} The moonshine was around 100 proof and distributed to “shot houses” in Baltimore, Philadelphia, and Washington, DC according to an ATF Special Agent.\textsuperscript{56} “Shot houses” are unregulated and unlicensed retail premises usually located in the seller’s residence selling alcohol by the drink and known only to neighbors and others in the local community.

- In 2008, another successful moonshine prosecution covered moonshine activity in Halifax County, in southwest Virginia for the period November 2004 through May 2006, involving Jody Alton “Duck” Smith and Margaret R. Smith.\textsuperscript{57} The operation utilized four 1200 gallon still pots.\textsuperscript{58} At the trial it was established that some of the moonshine was sold in Philadelphia.\textsuperscript{59} The Federal government evidence showed an excise tax liability of $320,045.85 for this period based on records of actual sugar purchased.\textsuperscript{60} The records established actual purchases of 124,100 pounds of sugar and there was evidence suggesting additional sugar purchases.\textsuperscript{61} Testimony established the purchase of approximately 12,000 plastic jugs.\textsuperscript{62}

Even after these prosecutions in Federal Court in Virginia, large moonshine operations have been found in Virginia. The Virginia Department of Alcoholic Beverage Control (Virginia ABC) has made several major cases each involving several hundred gallons of seized moonshine. In June 2013, the Virginia ABC and local law enforcement seized 339 gallons of untaxed distilled spirits in Pittsylvania County\textsuperscript{63} and this followed a May 2013 seizure of 182 gallons of untaxed distilled spirits and 1600 gallons of mash that was seized in Franklin County.\textsuperscript{64}

Moonshine has been treated more as a tax revenue loss issue than a public health issue. The press releases and news articles highlight the significant tax revenue losses on the untaxed

\textsuperscript{55} Moonshine Suspects to Face Trial, footnote 52, supra.
\textsuperscript{56} Ibid.
\textsuperscript{59} See discussion in text accompanying footnotes 237 to 239, infra, and Max Watman, footnote 53, supra, at 273-75.
\textsuperscript{60} United States of America v. Jody Alton Smith, Sr., et al, U.S. Dist Ct (W. VA) Docket No. 7:07CR00079, Government Exhibit 1, (Document 336-1). Due to the range of potential sugar purchases, production activity, and other evidence, the Government exhibit notes a minimum excise tax liability of $217,795.50, and a maximum excise tax liability of $555,984.00.
\textsuperscript{61} Ibid.
\textsuperscript{62} United States of America v. Jody Alton Smith, Sr., et al, U.S. Dist Ct (W. VA) Docket No. 7:07CR00079, Transcript for Day 3 (September 10, 2008) (Document No. 304) at pages 95. Testimony of Debbie Evans. The culture-focused History Museum of Western Virginia in Roanoke, Virginia has a moonshine display that includes an explanation panel under a photograph of hogsheads of moonshine stating: “Hogsheads on Wagon, 1908. In the nineteenth century, moonshiners often transported their product in wooden hogsheads like these. Over time, they realized that smaller packaging was easier to conceal, handle, and sell to individual consumers. Glass mason jars became popular, but plastic jugs are the packaging of choice today.” (Emphasis added.)
\textsuperscript{64} Virginia ABC Agents Seize Two 800 Gallon Stills in Franklin County, Press Release, May 7, 2013, at http://www.abc.virginia.gov/newsrel/press20130507.html
moonshine. Likewise, the Federal prosecutions highlight the significant tax revenue loses and the financial or monetary crimes arising from the moonshine operations. The Virginia ABC has commented on and warned about the potential public health risks arising from moonshine consumption due to lead, copper, mercury, and methanol.\textsuperscript{65} Given the high volume of moonshine produced and its distribution in major urban areas such as Washington, DC, Baltimore, and Philadelphia as established in the two Federal criminal prosecutions noted above, the absence of press and media reports on large scale incidents of illness or deaths from moonshine consumption in these communities stands out.

Methanol levels of moonshine have been noted in some moonshine investigations.\textsuperscript{66} A study published in 1953 covered 323 methanol poisoning cases in 1951 resulting in 41 deaths from “bootleg whisky” containing 35 to 40 percent methanol.\textsuperscript{67} A more recent published study analyzed 48 samples of moonshine obtained by law enforcement and found only one sample with methanol (at a concentration of 0.11 percent).\textsuperscript{68} By comparison, the illnesses and deaths reported in fake alcohol incidents in other countries single out methanol as the chief toxic component of the product consumed. Methanol occurs as part of the natural fermentation process and at low levels does not pose a health risk. Different fermentable materials result in different levels of methanol production in distilled spirits. For example, a fermentation mash made from fruit with pits results in higher levels of methanol. Accordingly, methanol levels in sugar-based moonshine may be lower as compared with other fermentable materials to make mash.

Much of the medical research literature on the health risks of moonshine consumption in the United States, however, primarily addresses lead rather than methanol.

In 2003, two significant medical reports were released that addressed lead in moonshine. The presence of lead levels in moonshine consumers in Atlanta, Georgia was the focus on a study looking at emergency department visits at Grady Memorial Hospital.\textsuperscript{69} The study was initiated after observing four adult emergency care patients with potentially lethal lead toxicity who were moonshine drinkers. Summarily, the study covered a 14-day period in April 2000, where 581

\textsuperscript{65} Police Find Moonshine During Traffic Stop, CBS 6, WTVR, Richmond, Virginia posted on February 4, 2013, at http://wtvr.com/2013/02/04/police-find-moonshine-during-traffic-stop/ noting lab reports revealing high levels of copper and lead. Comments by J. Neal Insley, former Chairman, Virginia ABC at the NCSLA 2013 Conference presentation entitled Shine at www.ncsla.org where he noted a death resulting from moonshine consumption. Subsequent to this presentation, Mr. Insley mentioned high levels of mercury due to the use of a truck radiator.

\textsuperscript{66} National Conference of State Liquor Administrators (NCSLA) 2013 Annual Conference Presentation entitled “Shine” at www.ncsla.org


\textsuperscript{69} Morgan BW, Barnes L, Parramore CS and Kaufman, RB (2003) Elevated blood lead levels associated with the consumption of moonshine among emergency department patients in Atlanta, Georgia, Annals of Emergency Medicine 43:3.
selected incoming emergency care patients were interviewed and 8.6 percent or 50 patients reported consuming moonshine within the past five years. Male patients were more likely moonshine consumers than females and males aged between 40 and 59 years of age were at the greatest risk. Of the 50 patients, 35 consented to complete the study and of the 531 patients declaring no moonshine consumption, 123 consented to complete the study. Significantly, the medium blood lead level among moonshine drinkers was 11.0 micrograms per deciliter whereas the medium level among non-moonshine drinkers was 2.5 micrograms per deciliter. Blood levels of 10 or more micrograms per deciliter are considered dangerous.

In May 2003, research from the Blue Ridge Poison Center at the University of Virginia Health System reported high lead levels in moonshine samples. Forty-eight samples of moonshine obtained from law enforcement officials were tested and 43 had lead content ranging from five to 599 parts per billion (ppb) with a mean value of 80.7 ppb. The researchers noted by comparison that the lead level for water set by the Environmental Protection Agency is 15 ppb or less and that 29 samples contained lead concentrations at or above the EPA water level. The researchers noted that moonshine has been implicated in four out of five adult deaths from lead poisoning in the United States over the past two decades. Additionally, methanol was found in only one sample at a concentration of 0.11 percent and no samples contained detectable concentrations of acetone, isopropanol, or ethylene glycol. The surrogate alcohol study cited at the beginning of this paper comments on the published Holstege study and points out that some legal distilled spirits and wine have lead contents similar to some of the moonshine samples and observes that the daily consumption of water is greater than for alcohol so the EPA standards is not the most relevant comparison.

Long term development of adverse health effects may explain lack of media coverage on large scale incidents of illness of deaths from moonshine consumption. Lead concentration in humans is cumulative and the adverse health effects take time to manifest themselves. Nevertheless, the public health risk is important to consider. A study published in 1995 (cited in the Grady Memorial Hospital study) identified 128 adult deaths linked to lead toxicity in the United States between 1979 and 1988, of which moonshine was the cause in 20 of the 25 patients for whom the actual source of lead was identified. However, some studies suggest that modern stills used by some moonshiners may be free of lead sources of contaminants and, therefore, the

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70 The published study details the exacting methodology utilized by the researchers and the reader is invited to review the study in that regard.
72 Holstege CP, footnote 68, supra.
73 Lachenmeier, DW, footnote 6, supra, at page 1615.
breadth of moonshine consumers exposed to lead is reduced today. One State law enforcement agent noted that he has seen some moonshiners using stainless steel.

Refilling of Bottles

Traditionally, the reuse of liquor bottles and containers that originally held tax-paid alcohol beverages was related to moonshine activities and there are Federal prosecutions relating to this activity. The Internal Revenue Code of 1986 (as did predecessor versions of the Internal Revenue Code and prior internal revenue laws) prohibits the refilling of liquor bottles except pursuant to regulations issued by the Secretary of the Treasury.

More recently, there have been reported instances of the refilling of liquor bottles that raise questions of consumer deception and adverse public health concerns rather than jeopardy to the tax revenue. Several reported cases involve an on-premise retailer filling an empty bottle bearing a premium label with a cheaper brand of product of the same class and type of spirits. These situations constitute “fake alcohol” in the sense that the consumer is not getting the actual alcohol product he/she expects and may be exposed to health risks. These situations pose public health concerns because the alcohol content of the substituted distilled spirits may differ from the proof on the brand label, the actual composition of the refilled substance is unknown, and sanitation concerns may arise from the refilling activity.

Operation Swill discussed earlier principally involved the refilling of liquor bottles with less expensive brands of products. This 2013 undercover operation and investigation in New Jersey revealed 29 on-premise retail establishments engaged in such conduct. This investigation also found one instance where the retailer sold rubbing alcohol with caramel coloring as scotch but the public information available does not indicate whether the retailer placed this substance in a refilled liquor bottle.

The Wisconsin Department of Revenue uncovered an on-premise retailer possessing refilled liquor bottles in October 2013. The agents seized 113 bottles and subsequent tests and

75 Lachenmeier, DW, footnote 6, supra, at 1619.
76 Joe Daniels, SAC, Enforcement Division, Oklahoma ABLE Commission.
77 The authority to regulate the use and reuse of liquor bottles dates to the Act of June 18, 1934, 48 Stat. 1020, and was re-enacted in the Internal Revenue Code of 1939, Section 2871, 53 Stat. 331, and in the Internal Revenue Code of 1954, Section 5214, 68A Stat.639-40. Criminal prosecutions under IRC 5301 include: Stilinovic v. United States, 336 F2d 862 (8th Cir. 1964) and United States v. Blanchard, 495 F2d 1329 (1st Cir. 1974). Additionally, in the two major Federal prosecutions outlined in the moonshine portion of this study at footnotes 52 to 62, supra, plastic jugs were used as the containers and there are no indications of liquor bottles being reused.
78 Title 26 United States Code, Section 5301(c). State laws also prohibit the refilling of liquor bottles with other distilled spirits or to keep or offer for sale distilled spirits in such bottles. California Business and Professions Code, Sections 25176, 25177, and 25178.
79 State of New Jersey, Department of Law and Public Safety, Office of the Attorney General Press Released dated May 23, 2013 at http://nj.gov.oag/newsreleases13/pr20130523b.html There is little information available about the outcomes of this investigation in the news media. One article in the International Business Times reports that TGI Fridays paid a $500,000 fine and agreed to a compliance monitor for a designated period of time. See, http://www.ibtimes.com/tgi-fridays-fined-500k-new-jersey-operation-swill-found-briad-group-replaced-top-shelf-liquor-cheap
investigation revealed a higher alcohol content by approximately 32 percent higher than the proof declared on the label. The bottles were labeled as Capitan Morgan rum but contained Sailor Jerry rum.

A case gaining significant publicity was an investigation by the former Bureau of Alcohol, Tobacco and Firearms (AFT), Department of the Treasury of the MGM Grand Hotel in Reno, Nevada that culminated in a $125,000 offer in compromise in February 1980. ATF determined that the hotel refilled liquor bottles with cheaper brands of distilled spirits than stated on the labels. Additionally, the hotel was reselling unconsumed drinks. The price of a show at the hotel included three unmixed drinks and the hospitality staff would refill liquor bottles with unconsumed drinks left after the show for later reserving in drink sales.

Summary

While instances of fake alcohol in the United States have been reported that involve industrial and denatured alcohol distributed for beverage use, refilling of liquor bottles, and moonshine, the instances of the first two are minimal in number whereas the production and distribution of moonshine poses a public health risk that is real and may be underestimated by consumers, emergency medical personnel, and others.

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80 Hurley Tavern Owner Charged with Refilling Liquor Bottles, AshlandWI.com, October 4, 2013.
81 Neither the current ATF nor TTB websites include information on this investigation. It is reported in an article entitled “Larceny by Menu” in Hospitality Review, 2:1 (January 1, 1984) at http://digitalcommons.fiu.edu/cgi/viewcontent.cgi?article=1066&context=hospitalityreview
Incidents of Fake Alcohol in Other Countries

Articles from news sources around the world and reports prepared by public advocacy groups and “think tanks” document the widespread and serious health consequences arising from “fake alcohol” in other countries. These are clusters or multiple deaths arising from a single reported incident of fake alcohol so these are situations where a third party has made and intentionally distributed the fake alcohol products to others for consumption. These are not self-inflicted situations where a person misuses industrial or denatured alcohol for personal consumption by himself/herself due to alcoholism or to commit suicide.

Here is a sampling of the incidents covered by the news articles or social media in the past few years.

- Counterfeit alcohol products sold as beverages in China made from isopropyl alcohol, ethylene glycol, and methanol, in addition to inferior alcohol being substituted for pricier brands. Some estimate that 80 percent of the alcohol sold in Shanghai as an alcohol beverage is either not the genuine brand on the label or fit for beverage consumption. Data from the World Health Organization’s country profile on China in the Global Status Report on Alcohol and Health (2011) states that the adult per capita consumption of 5.9 liters includes 1.7 liters of unrecorded alcohol in the 2011 edition and the per capita 6.7 liters includes 1.7 liters of unrecorded alcohol in the 2014 edition.

- In Cuba, seven deaths and 41 persons hospitalized after consuming “rum” purchased on the black market that contained methyl alcohol procured by the merchant from two pharmaceutical employees.

- Officials in the Czech Republic imposed an unprecedented emergency measure and banned the sale of distilled spirits with more than 20 percent alcohol content after vodka and rum laced with methanol killed 38 people in the Czech Republic and four in Poland. Subsequently, two producers were given life sentences and eight other persons given prison terms of eight to 21 years for their involvement.

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82 China’s Fake Alcohol: Its Black Market in Fake Alcohol is a Health Risk and Costly to Legitimate Restaurants and Bars, by Jillian Kay Meichior, The National Review, April 16, 2013.
• Ecuador declared a state of emergency after 23 people died from ingesting tainted alcohol produced as illicit moonshine.87 One hundred and three patients were medically treated.

• Multiple incidents have been reported in India. In October 2013, 42 people died from drinking toxic bootleg alcohol in Lucknow.88 In November 2012, seven people died from illicit alcohol at a Payradanga village in West Bengal, and in December 2011, 143 people died after consuming illicit alcohol in the South Parganas district of the state.89 Data from the World Health Organization’s country profile on India in the Global Status Report on Alcohol and Health (2011 edition) states that the adult per capita consumption of 2.6 liters includes 2.0 liters of unrecorded alcohol while the 2014 edition reports per capita consumption of 4.3 liters that includes 2.2 liters of unrecorded alcohol.90

• One British tourist died and several were made sick in Indonesia from a product sold in a bottle as gin but contained methanol. Reportedly the shop owner poured the gin out of the original bottle and then replaced it with methanol. The article also reported on previous incidents of an Australian dying from vodka laced with methanol and a Swede dying from a cocktail contaminated with methanol. Finally, in 2009, 25 people died after drinking a local palm wine spiked with chemicals.91

• Even though alcohol is banned in Iran, there are reported incidents of home brewed alcohol drinks or “mashrooh” delivered by brewers to others causing blindness and deaths.92

• At least 55 people died in Kenya from drinking illegal liquor in May 2014, 45 people died in June 2005 from illegal alcohol laced with methanol to boost its strength, and reportedly five years earlier about 130 people died from a toxic batch of fake alcohol.93

• More than 1066 persons were adversely affected by drinking a methanol laced product and 101 people died in March 2013, in Libya. The alcohol product was a local brew known as “bokha” which is distilled from various fruits like figs, dates or grapes and

appears to have been mixed with industrial spirits containing methanol to increase the potency of the drink.  

- In Pakistan, genuine alcohol products are stretched with local moonshine produced in unhygienic conditions and containing adulterants that cause blindness and deaths.  

- Fourteen people died in Russia from methanol poisoning after drinking counterfeit liquor reportedly purchased from a seller who brought it into Russia from China. A black market in counterfeit whisky has been reported based on official figures showing more whisky is sold in Russia than imported. The State Statistics Service reported that Russian retailers sold 9.9 million more liters of whisky than was imported into Russia in 2013. Data from the World Health Organization’s country profile on the Russian Federation in the Global Status Report on Alcohol and Health (2011 edition) states that the adult per capita consumption of 15.7 liters includes 4.7 liters of unrecorded alcohol while the 2014 edition reports per capita consumption of 15.1 liters that includes 3.6 of unrecorded alcohol. However, according to recent news reports, illegal vodka trade accounted for 55 percent of the whole vodka market in Russia in 2013.  

- South Africa has an illicit alcohol market of alcohol beverages mixed with common house products or stolen jet fuel that are purchased by consumers simply because that is what they can afford.  

- Five Russian tourists died from consuming a fake whisky in Turkey having a methanol content three times higher than normal. The fake alcohol was imported from Cyprus and some 12,000 bottles of the fake whisky were sold in Turkey under the brand name of Mister Burdon.

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96 14 Die in Russia of Suspected Methanol Poisoning, Miami Herald/Associated Press, March 16, 2014, at www.miamiherald.com/2014/03/16/v-print/3998898  
100 Turks Distributing Fake Liquor to Russians get 90-year Jail Sentence, One India News, May 21, 2013.
• In Uganda, 80 people died of methanol-laced “Waragi,” a gin derived from bananas that was mixed with large amounts of methanol to increase its potency.\(^{102}\)

• Numerous incidents of the distribution of fake alcohol containing toxic or adulterated ingredients,\(^{103}\) illicit smuggled alcohol,\(^{104}\) and counterfeit brands of bottles labeled as premium brands and containing inferior (“doggy”) or contaminated alcohol\(^{105}\) have been reported in the United Kingdom of Great Britain and Northern Ireland. The reported instances cover a myriad of varying situations. Two deaths have been reported: in 2003, a woman died in Scotland after drinking fake vodka\(^{106}\) and in 2012, a man died from methanol poisoning in Worthing, West Sussex after drinking bottled fake vodka containing methanol.\(^{107}\) Data from the World Health Organization’s country profile on the United Kingdom of Great Britain and Northern Ireland in the Global Status Report on Alcohol and Health (2011 edition) states that the adult per capita consumption of 13.4 liters includes only 1.7 liters of unrecorded alcohol while the 2014 edition reports per capita consumption of 11.6 liters that includes 1.2 of unrecorded alcohol.\(^{108}\) Interestingly, one in five (18 percent of 1,073) UK residents responding to a survey by Price Waterhouse Coopers has purchased counterfeit alcohol despite 90 percent stating the counterfeiting is “morally wrong.”\(^{109}\)

\(^{102}\) 80 People Die of Methanol-laced Gin in Uganda, Reuters, April 23, 2010, at www.reuters.com/assets/print?aid=AFJOE63M0HLM.20100423


\(^{104}\) Fake Vodka Worth £1m Found on Back of Lorry Bound for UK and Seized by Interpol, by Sam Chadderton, Daily Mirror, February 16, 2014, and Largest Alcohol Seizure in Wales, South Wales Argus, March 22, 2014.


\(^{107}\) Worthing Man Dies After Drinking “Fake”Vodka, by Peter Truman, South Wales Argus, November 7, 2012, at www.southwalesargus.co.uk/news/100030904


\(^{109}\) One in Five Buy Counterfeit Alcohol in UK–A Survey, by Chris Mercer, Decanter, October 2, 2013.
Merchants of Harm.

In 2009, British authorities raided a remote industrial plant near Dalby, Leicestershire and seized 9000 bottles of fake and counterfeit vodka labeled as Glen’s Vodka. Samples showed that a gang of six men used solvent, a denatured alcohol colored purple, in its production process. Bleach was used to remove the color before the product was bottled. Manufacturing equipment, bottles, counterfeit packaging, and over 25,000 liters of pure denatured alcohol (methylated spirits) were seized. Evidence during the subsequent trial showed a further 165,000 bottles had left the plant and been sold to shops in 2008 and 2009. The social harm from this illegal activity is multifaceted with severe health dangers to consumers, an estimated revenue loss of £1.5 million, the high risk of a major explosion in the community from the alcohol vapors at the plant, and economic damaged in the marketplace to a reputable label.110

Fake Alcohol…What to look out for:
- Spelling mistakes on the label.
- Bottles of the same product look different.
- Bottles on the shelf not filled to the same level.
- Labels not straight.
- Smell of nail varnish/nail varnish remover.
- Lack of producer details.

UK Food Standards Agency and Council Trading Standards111

Reports prepared by the International Center for Alcohol Policies (ICAP) and Global Actions on Harmful Drinking (GAHD) document and describe noncommercial alcohol which is also described as fake alcohol, counterfeit alcohol, unrecorded alcohol, or surrogate alcohol in many countries. ICAP/GAHD reviews cover certain countries, monographs cover several regions of the world, and issue briefs offer topical summaries. In many instances, they are prepared by

country-based research authors. These detailed analyses are important for furnishing more guidance on the scope and nature of the fake alcohol situations than the news articles and social media summarized above. More particularly, these reviews, monographs, and issue briefs identify underlying reasons for the noncommercial alcohol situations in a country or region rather than the journalistic factual approach of reporting specific incidents.

Essentially, the noncommercial alcohol framework utilized in the ICAP/GAHD material covers three categories of alcohol products.\footnote{International Center for Alcohol Policies (ICAP) (Ed.) (2012), Producers, sellers, and drinkers: Studies of noncommercial alcohol in nine countries [Monograph], Washington, DC, at 3; ICAP (ed.) (2008), Noncommercial Alcohol in Three Regions [Review], Washington, DC, at 1; and ICAP (Ed) (2010), Noncommercial Alcohol: Understanding the Informal Market [ICAP Policy Tools Series Issues Briefings], Washington, DC.}

- Traditional home-produced drinks made legally or illegally for home consumption or limited local trade. These alcohol drinks are made from local raw materials and may coincide with seasonal or festival times. In some countries these are high-quality artisanal drinks long associated with the local culture and community. The government may allow the resale of a limited quantity of these homemade beverages.\footnote{ICAP (Ed.) (2008), Noncommercial Alcohol in Three Regions [Review], Washington, DC, at 17.}
- Unregistered alcohol beverages produced illegally in large quantities by organized criminal groups and frequently branded as generic distilled spirits. This category includes counterfeit products of low quality and may resemble legal domestic or imported brands of products.
- Surrogate or non-beverage alcohol is derived from industrial or denatured alcohol, including medicinal preparations and cosmetics (such as aftershave or cologne), solvents, lighter fluid, or automobile products (such as ethylene glycol engine coolant or methanol-based windshield washer fluid), among others. In the case of medical compounds, the active pharmaceutical ingredients may also cause harmful health effects arising from the dosage consumed.

Alcohol products in the latter two categories are sometimes blended or mixed together before being distributed to consumers. The distribution of these three products is referred to as the “informal market.”

This study does not contain an exhaustive list of the key reasons cited in the ICAP/GAHD research on why noncommercial alcohol is present in other countries; rather, this study identifies several salient reasons found in other countries, regions, and globally for the purpose of comparing and contrasting why the fake alcohol situation in the United States is not as prevalent as found in many other countries.

Looking at general trends, the production and consumption of illegally produced and surrogate alcohol products are more prevalent during times of the lack of economic and social stability in a country that manifest as political unrest, high unemployment, unmet consumer demand for legal products, inadequate legislation and regulatory controls, weak enforcement of existing laws and regulations, and corruption.\footnote{ICAP (Ed) (2010), Noncommercial Alcohol: Understanding the Informal Market [ICAP Policy Tools Series Issues Briefings], Washington, DC at 5, and internal citations to references.}
More specifically,115

Consumer confidence may be higher in illegally produced traditional products or certain illicit products obtained from sources previously found to be reliable when the government lacks adequate regulatory controls, fails to enforce such controls due to corruption or lack of financial resources, or cannot or will not undertake actions to combat counterfeit products. These illegal products are widely available in formal establishments such as bars, nightclubs and restaurants in some countries and not simply sold by street vendors or “underground.”

Government corruption and lax enforcement undermines any incentive for a private entrepreneur to obtain a license and operate the alcohol business in a legal manner because illegal competitors will undercut the former’s ability to be successful. Some international alcohol companies seek tax breaks from the governments in countries where there is a large informal alcohol market in order to compete against the fake alcohol products.116

In lower income countries or among lower socio-economic groups within a country, the price differential between noncommercial alcohol and legal products is significant and lessens the purchase of the latter products by consumers of alcohol beverages. As income levels increase, the demand for noncommercial alcohol decreases as consumer transition to pricier legal products though ties to some traditional homemade beverages will continue for cultural reasons.

Some surrogate alcohol products are attractive to alcohol drinkers because these products have substantially higher alcohol content arising the from the industrial or denatured alcohol component.

Traditional products and other illegally produced alcohol products may provide an important income source for the poor or lower income earners who otherwise lack sound employment opportunities. In Kenya, many woman make these products at home as a means to provide income for basic necessities of their families. However, the economic benefit from such activity may be negated by domestic violence, physical abuse, and sexual assaults committed by the male consumers who excessively consume those same products. In Russia, many small scale home producers of “samogon,” a distilled spirit, do so primarily as a source of income and generally it is sold to family and friends. In both of these instances, the home producers desire to make a quality product because they sell recurrently to the same local customers but still may be making the product in unsanitary conditions and the testing of samples disclose some toxic or harmful components.

Deceptive labeling practices are utilized by producers of the counterfeit and illegal products by using established trade names or distinctive product names like Tequila. Alternatively, in many

115 Excepted as otherwise footnoted, the three ICAP/GAHD documents referenced in footnote 113, supra, identify each of the scenarios discussed below, among others.

116 With West Flat, Big Brewers Peddle Cheap Alcohol in Africa, by Paul Sonne in London, Devon Maylie in Mozambique, and Drew Hinshaw in Kenya, Wall Street Journal, March 19, 2013. This approach to tax policy in the long run may result in lower revenues for the Government than if the Government expended resources to combat the illicit alcohol trade and worked to integrate it into the regulated taxpaying industry.
instances, these noncommercial products lack labels and, therefore, consumers have virtually no information about the product or its characteristics.\textsuperscript{117}

In order to mitigate the harm from surrogate alcohol consumption, some countries do not allow certain toxic denaturants to be used in manufacturing industrial products. For example, some countries do not allow the use of methanol as a denaturant\textsuperscript{118} and some Western European countries manufacture lighter fluid from paraffin rather than from an ethanol base. Bittering agents are authorized denaturants rather than toxic materials.

\textit{Summary}

While the reasons and causes vary, it is clear that fake alcohol, however defined, is a seriously and recurring problem in many other countries with the concomitant adverse public health and safety consequences. In addition, there are significant tax revenue loss and unfair business competition considerations in these countries from presence and sale of the fake alcohol.

\begin{quote}
\begin{center}
\textbf{Four P’s…Opposite Sides of the Market.}
\end{center}

References are frequently made to the Four P’s of marketing as product, promotion, placement and price.

Fake alcohol has its own Four P’s. Drinkware’s Four P’s:
- **Place**: Buy in reputable location.
- **Price**: If it is too cheap, be careful.
- **Packaging**: Check if the labels are correct, or have been tampered with.
- **Product**: If it smells or looks bad, do not drink it.\textsuperscript{119}
\end{quote}

\begin{footnotes}
\textsuperscript{117} Lachenmeier, DW, footnote 6, supra, at 1617.
\textsuperscript{118} Lachenmeier, DW, footnote 6, supra, at 1621. Methanol is traditionally used as a denaturant because it has a boiling point close to that of ethanol and cannot be separated by a simple process. Id. at 1617.
\end{footnotes}
Assessment/Analysis of the Impact of the Cultural, Economic, and Current Regulatory Situations for the Limited Presence of Fake Alcohol in the United States

The remainder of this study examines a number of reasons why the fake alcohol situations in the United States are less prevalent, except for moonshine, than those found in other countries. It examines the strong cultural respect for rule of law, the strengths of the current regulatory system, absence of corruption, track and trace functions in the production and distribution channels, and the wide range of legal products available at different prices reflecting the economics of a competitive marketplace.

One of the challenges in a study that compares and contrasts situations in different countries is determining causation. Correlation is not necessarily causation. For purposes of this study, causation is established by the process of eliminating other influencing factors.

Moonshine

Moonshine merits its own examination as a category of fake alcohol in the United States. In many ways, its long history in the United States fits it into the traditional home-produced beverage class discussed above as well as the unregistered and illegally produced product made by the organized criminal element because there are both small scale and large scale moonshiners. Its widespread presence reflects more of the inadequacy of criminal law enforcement and prosecution resources rather than the failure of the current regulatory enforcement system.

Moonshine dates back to the beginnings of the United States and the Whisky Rebellion (1791) and reflects a cultural trait.120 The mystique of moonshine in the United States is apparent from literature, film, and the recent brands of “moonshine” produced and marketed by the regulated industry in the United States.121

Overall, a strong regulatory system indirectly combats moonshine insofar as it ensures orderly production, distribution and a marketplace where legal distilled spirits and other alcohol beverages are available to the consumer thereby undercutting the “need” for the moonshiner to fill a marketplace vacuum. More specifically, there are several statutory provisions of a regulatory character under Federal law that enable regulators to address moonshine: the internal revenue laws authorize the addition of tracer elements to distilled spirits produced at a distilled spirits plant in order to facilitate the enforcement of excise tax on such spirits;122 registration of stills requirements;123 refilling of liquor bottle restrictions;124 and requirements on closures or other devices on bottles or containers of distilled spirits.125 The closure or other device provision replaced the requirement under prior law that bottles of distilled spirits contain a strip stamp

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120 See footnotes 38, 39, and 47 supra.
121 See footnotes 39 and 53, supra.
122 Internal Revenue Code of 1986, Title 26, United States Code, Section 5201(d).
123 Internal Revenue Code of 1986, Title 26, United States Code, Section 5179(a).
124 Internal Revenue Code of 1986, Title 26, United States Code, Section 5301(c).
125 Internal Revenue Code of 1986, Title 26, United States Code, Section 5301(d).
evidencing payment of the excise tax. Due to revisions in the law over the years, the strip stamps technically no longer evidenced actual payment of the excise tax so Congress repealed the strip stamp requirement to save the Federal Government the cost of providing the strip stamps to the industry. While the closure or other device requirement protects the consumer, the elimination of the government provided strip stamps to the legal industry removed one more enforcement tool that demonstrated a particular bottle of distilled spirits in the marketplace came from a lawful source. Other prior provisions of the internal revenue laws were specially designed to enable the Treasury Department to police business activities related to the production of moonshine. In 1934, Congress enacted a provision that authorized the Treasury Department to require any person disposing of any substance of the character used in the manufacture of distilled spirits, such as sugar or yeast, to file a return on such disposition when so required. Subsequent regulations provided for the use of a demand letter that could be served on any person consigning, selling, transferring, or delivering certain enumerated substances, such as sugar. Finally, as discussed below, the current regulatory system at the Federal level enables a track and trace function through the producer, importer, wholesaler, and retailer distribution channels.

Moonshine is found in both “control states” and “private license states” so that feature of the regulatory system does not lessen the likelihood of moonshine in a State.

Having outlined the moonshine situation in the United States, one caveat is still necessary in order to put the problem in perspective in the context of the fake alcohol situation. Unlike the situation reported in some other countries, the quantity of legally produced distilled spirits still far exceeds that of moonshine. For calendar year 2012, the Alcohol and Tobacco Tax and Trade Bureau (TTB), Department of the Treasury reported net production in the United States of 211,319,037 proof gallons of whisky, 13,795,703 proof gallons of brandy, 5,814,053 proof gallons of rum, gin and vodka, and 24,358,645,438 proof gallons of other alcohol (industrial uses utilize the vast portion of distilled spirits produced in the United States). No total figures are currently available projecting the quantity of moonshine produced in the United States, but the

126 Deficit Reduction Act of 1984, Public Law No. 98-369, 98th Cong, 2nd Sess, § 454(b) (July 18, 1984).
128 Joint Resolution No. 373, entitled “Joint Resolution to protect the revenue by requiring information concerning the disposition of substances used in the manufacture of distilled spirits,” 73rd Cong., 2nd Sess., chapter 611, approved June 18, 1934, 48 Stat. 1020. See also, United States v. Turner Bros., Inc., 11 F. Supp. 908 (E.D. NY 1935).
129 The relevant regulations were reissued after amendments made by the Excise Technical Changes Act of 1958, enacting Title 26, United States Code, Section 5291 (later repealed) as Treasury Decision No. 6399, 24 Fed. Reg. 5829 (July 22, 1959). Under the regulations in former Title 26, Code of Federal Regulations, Section 173.5, the term “substance” was defined to mean: “Any grade or type of sugar, sirup, or molasses derived from sugar cane, sugar, beets, corn, sorghum, or any other source; starch; potatoes; grain, or corn meal, corn chops, cracked corn, rye chops, middlings, shorts, bran, or any other grain derivatives; malt; malt sugar, or malt sirup; oak chips, charred or not charred; yeast; cider; honey; fruits; grapes; berries; fruit, grape, or berry juices or concentrates; wine; caramel; burnt sugar; gin flavor; Chinese bean cakes or Chinese wine cake; urea; ammonium phosphate, ammonium carbonate, ammonium sulphate, or any other yeast food; ethyl acetate or any other type of ethyl ester; any other material of the character used in the manufacture of distilled spirits, or any chemical or other material suitable for promoting or accelerating fermentation; any chemical or material of the character used for the production of distilled spirits by chemical reaction; or nay combination of such materials or chemicals.”
130 See States listed in footnotes 40 through 50, supra.
historic ATF figures cited earlier would indicate that it is minor compared to lawful production. This should not minimize concerns about moonshine because its presence still poses health concerns for consumers who, based on evidence from the prosecutions cited, tend to be inner-city residents who may be on the margins of society and lack adequate or available health care.

Moonshine creates tax revenue losses and poses threats to public health and safety—both are significant public policy concerns at both the Federal and State levels. Effective efforts to combat moonshine require adequate financial resources being dedicated at both the Federal and State levels. These resources must be directed to criminal investigations, prosecutions, forfeitures, and tax assessments and collections. On the Federal level, TTB has recognized the importance of the dual enforcement tools of criminal and regulatory. In 2010, TTB established a formal criminal enforcement program.\(^{132}\) While much of the emphasis of the need for special agents and criminal enforcement assets focused on tobacco taxes (which is understandable given TTB collected $14.3 billion in tobacco taxes compared to $7.9 billion in alcohol taxes in FY 2013),\(^ {133}\) nevertheless a recent moonshine joint operation with Florida evidences TTB’s intent to utilize resources to combat moonshine.\(^ {134}\) At the State level, the study entitled “The Need for State Alcohol Regulatory Funding: Fighting Deregulation by Defunding”\(^ {135}\) documents a trend on budget cutbacks for the alcohol control enforcement. The defunding study cites regulatory enforcement aspects of alcohol controls such as licensing and permits, hidden ownership, underage sales and false IDs, after-hours operations, among others, that are hindered by the budget cutbacks. It does not expressly mention moonshine but such cutbacks likely reflect reductions in the criminal enforcement side as well. For example, it was reported in the news media that Virginia closed its illegal whisky unit in 2009.\(^ {136}\)

**Summary**

Moonshine has been present in the United States for longer than regulatory regimes have been in place. Its presence does not reflect a failure of the current regulatory system. While past statutory measures of a regulatory character may have provided more tools than those at present for combatting moonshine, effective enforcement efforts against moonshine are essentially criminal enforcement ones leading to prosecutions and forfeitures rather than regulatory ones.

**Rule of Law and Current Regulatory Systems**

“The ‘rule of law’ is important, but it is often taken for granted. In the marketplace, rule of law is like oxygen: it’s difficult to see, but you can’t survive

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\(^ {134}\) See footnote 44, supra.


Perhaps it goes without saying that in the United States the population has a strong cultural respect for the rule of law. From principles of due process embedded in the Constitution to multilateral negotiations for a rules-based international trading system at the auspices of the World Trade Organization, the United States functions on a rule of law paradigm. Rule of law captures the perceptions of the extent that the public has confidence in and abides by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the judicial independence of the courts, as well as the likelihood of crime and violence. Rule of law enables a fair and functioning society and has been framed as having four universal principles:

1. The government and its officials and agents as well as individuals and private entities are accountable under the law.
2. The laws are clear, publicized, stable, and just; are applied evenly; and protect fundamental rights, including the security of persons and property.
3. The process by which the laws are enacted, administered, and enforced is accessible, fair, and efficient.
4. Justice is delivered timely by competent, ethical, and independent representatives and neutrals who are of sufficient number, have adequate resources, and reflect the makeup of the communities they serve.

The current regulatory system in the United States is predicated on a rule of law approach. Federal laws and regulations are enacted in the public arena. Occasionally, laws are the subject of Congressional hearings before enactment and regulations are virtually always subject to notice and comment opportunity for any interested person be it industry, domestic and foreign governmental units, public advocacy group, consumers, educators, and the like. Judicial review by an independent judiciary is virtually available for all laws and regulations. The current system is a mandatory system that relies heavily on voluntary compliance. The present system reflects more than 150 years of Federal Government experience in regulating the alcohol

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139 5th Amendment and 14th Amendment to the United States Constitution.
142 The World Justice Project, Washington, DC at www.worldjusticeproject.org has articulated these four principles and developed nine factors which it uses to measure how the rule of law is experienced by ordinary people in countries around the world. The factors are: (1) Constraints on Government Powers; (2) Absence of Corruption; (3) Open Government; (4) Fundamental Rights; (5) Order and Security; (6) Regulatory Enforcement; (7) Civil Justice; (8) Criminal Justice; and (9) Informal Justice.
143 Administrative Procedure Act, Title 5, United States Code, Section 553.
industry and reflects the changes that have occurred within that industry and the country during this period. Essential to the success of the regulatory system is the fact that it has been regularly revised over time in a public and transparent manner in response to the changes in the industry and the country. Voluntary compliance is essential because administrative and enforcement resources will never be fully adequate. Accordingly, the openness and transparency in the enactment of laws and promulgation of regulations is necessary in order to educate and gain “buy-in” or ownership by the industry and the public.144

Today there is a mature, well-established regulated alcohol industry in the United States and the present regulatory system reflects a largely responsible industry in the production, importation, distribution, and retail sale of alcohol. By mature industry, this means the industry recognizes, respects, and accepts that it operates in a regulated environment and factors the costs of compliance into its operating expenses. The system has evolved significantly over time since the enactments during the Civil War that first re-imposed alcohol excise taxes (that had been repealed in 1803) and the concomitant regulatory controls and the second re-imposition of controls over beverage alcohol products following the repeal of Prohibition in 1933.145 Probably the most significant evolution in regulatory controls is exemplified in the distilled spirits industry. The present system is known as the “all-in-bond system” and replaced the pre-1980 regulatory system dating back to the Civil War based on extensive Government supervision and joint custody of distilled spirits operations. Under the former system, the production, processing or rectifying, and bottling involved a number of separate operations through a segregation of facilities with some activities conducted on bonded premises and some conducted off bonded premises. On-site Government inspectors had joint custody of the distilled spirits at different times.146 Tax determinations and payment of the gallonage and rectification excise taxes were made under a complicated set of rules based on wine gallons and proof gallons methods. The Distilled Spirits Revision Act of 1979 that was enacted as Title VIII of the Trade Agreements Act of 1979147 significantly changed the system for the taxation and regulatory control of the distilled spirits operations to consolidate the operations and require they take place on the bonded premises with the tax determination (calculated on a more uniformed method) and payment being triggered when the bottled distilled spirits are removed from the bonded premises.


145 In his book Revenuers & Moonshiners: Enforcing Federal Liquor Laws in the Mountain South, at footnote 38, supra, at page 62, Mr. Miller notes: “In 1865, Congress appointed a special revenue commission, headed by the economist David Wells, to study ways of improving the efficiency and honesty of the bureaucrats. The commission reported that the Bureau of Internal Revenue was receiving more money every quarter than the entire government took in annually before 1860, but that partisanship in appointment, fraud and collusion with tax evaders, and excessively high taxes were encouraging illicit distilling and costing the government thousands in potential revenue.” See also, the Whiskey Ring in the Midwest which involved Bureau of Internal Revenue officials and the President’s Secretary in a scheme to allow distillers to produce untaxed distilled spirits in exchange for bribes and contributions to President Grant’s reelection campaign in 1872 (Ibid. at page 64) and General John McDonald, “Secrets of the Whiskey Ring,” Burt Franklin, New York City, NY. Originally printed in 1880, and reprinted in 1969 as Burt Franklin: Research and Source Works Series 374, Selected Essays in History, Economics, and Social Sciences 87.

146 A detailed and comprehensive description of the pre-1980 system is provided in S. Rep No 96-249, 96th Cong, 1st Sess., at 218 to 221 (July 17, 1979).

Separate and apart from the provisions relating to beverage alcohol the internal revenue laws contain a number of specific provisions relating to industrial alcohol, as discussed below. While the purpose of enacting the provisions is revenue related in order to prevent the diversion of untaxed distilled spirits to a beverage use, it results in a regulatory regime that deters fake alcohol in the domestic marketplace.

Enactment of the Internal Revenue Code of 1954 made a major change to the method and mode of tax payment for distilled spirits, wine and beer by providing for the use of tax returns rather than by the purchase of stamps.\textsuperscript{148} Under the prior system, producers had to purchase these stamps in advance and affix them to the containers or packages prior to removal from the regulated premises. This change resulted in a deferral period for the payment of the excise taxes and reflects the view that Congress had a high degree of confidence in the industry to pay the taxes on or after the date that the products were removed from the regulated premises.\textsuperscript{149} Over time, the deferral periods have been established on semi-monthly, quarterly, and annual periods depending on the annual tax liability and commodity.\textsuperscript{150} Surety bonds also provide some guarantees albeit limited to the penal sum amounts for the payment of the excise taxes.

Other than the afore-noted change from stamps to tax returns, the regulation of wineries and breweries has not experienced the same fundamental degree of change over time, except that the Internal Revenue Code of 1954, in general, liberalized and modernized many regulatory activities for the operations of wine premises and breweries.

The regulation of importers, wholesalers, and retailers has evolved insofar as the framework has moved from one primarily based on a special (occupational) tax\textsuperscript{151} and recordkeeping to one more reliant on registration, recordkeeping and permits for importers and wholesalers. Retailers were also formerly liable for a special (occupational) tax but similarly are now subject to registration and recordkeeping at the Federal level.

Some of these changes over the past 80 years reflect the greater reliance of the Federal Government on the Commerce Clause rather than solely the Taxing Clause of the Constitution that has been relied upon during the past 150 years as a source of Congressional authority to enact laws regulating the alcohol industry. All of these changes over the past 150 years reflect the evolving regulatory and enforcement experience that the Congress and regulators had with the alcohol industry and the public policy conclusion that regulatory burdens could be changed

\textsuperscript{148} Public Law No. 591, chapter 736, 83\textsuperscript{rd} Cong., 2\textsuperscript{nd} Sess. (August 16, 1954).
\textsuperscript{149} House Report No. 1337, 83\textsuperscript{rd} Cong., 2\textsuperscript{nd} Sess. (March 9, 1954). The report in the section entitled “XXXIII. Excise Taxes on Alcoholic Beverages and Tobacco (Chs. 50, 51” provides a summary of the revisions made by the Internal Revenue Code of 1954, as enacted.
\textsuperscript{151} Prior to 2005, the internal revenue laws required the payment of an annual special (occupational) tax as retailer dealer in liquors (distilled spirits, wines, beer), retailer dealer in beer, wholesale dealer in liquors (distilled spirits, wines, beer), wholesale dealer in beer, or exemption from in addition to the requirement to keep records. See, American Jobs Creation Act of 2004, Public Law No. 108-357, 108th Cong, 2\textsuperscript{nd} Sess § 246 (January 20, 2004) and Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users or SAFETEA-LU, Public Law No. 109-59, 109\textsuperscript{th} Cong., 1\textsuperscript{st} Sess. § 11125 (August 10, 2005).
over time without jeopardizing tax collections and product integrity. Importantly, these revisions do not reflect a policy of deregulation even if characterized in some instances as reducing regulatory burdens or liberalization of regulatory controls; instead, they reflect public policy decisions to substitute one set of regulatory tools for another set of regulatory tools.

The soundness of the current regulatory system directly contributes to the absence of widespread fake alcohol in the United States of the nature found in other countries. There is general consensus that a sound and well-operating (including adequate financing) regulatory system is the keystone to preventing illicit and fake alcohol in a country. Among others, the World Health Organization recognizes the need to combat illicit alcohol and informally produced alcohol through the establishment of regulatory distribution controls. Moreover, when comparing and contrasting the situation in the United States with the fake alcohol situations described above, it is interesting to compare the United States and the United Kingdom because both have very strong cultural traits and tradition of the rule of law and yet both have different fake alcohol situations. As discussed more below, the study entitled “The Dangers of Alcohol Deregulation: The United Kingdom Experience” along with its 2012 update conclude that the long term trend of undoing a regulatory system has created the environment conducive to fake alcohol in the United Kingdom.

Alternatively and importantly, the rule of law culture also means that the regulated industry expects the Government to follow the rules and will utilize the legal system to challenge regulatory actions that it considers inconsistent with Federal or State laws. For that reason, regulators find themselves defending the requirements of their regulatory systems before the judiciary.

So, what are the core components of the sound Federal regulatory system in the United States? The following discussion only highlights key aspects of each core component rather than provide an exhaustive explanation of all aspects of it. The comprehensiveness of the system is important because each part complements the other parts.

**Permit/licensing or registration requirements focus on persons and places.** Persons are evaluated before entering the regulated industry. Basic permits are required for producers, rectifiers and blenders of distilled spirits and wine, bottlers of distilled spirits, and importers and wholesalers of distilled spirits, wine, or malt beverages prior to engaging in those businesses; brewers are not required to hold basic permits (but are required to file a brewer’s notice prior to commencing operations). Operating permits are required for producers of industrial use distilled spirits. Permits are required for users, dealers in, and persons who recover distilled

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154 Federal Alcohol Administration Act (1935), Title 27, United States Code, Section 203.

155 Internal Revenue Code of 1986, Title 26, United States Code, Section 5401.

156 Internal Revenue Code of 1986, Title 26 United States Code, Section 5171(d).
spirits from industrial use alcohol (including specially denatured alcohol and completely denatured alcohol in some instances). Importantly, all of these permits are conditioned upon the regulator making a determination on, among other things, whether or not the person applying (or certain persons in the business if the applicant is a corporation) is by reason of business experience, financial standing, or trade connections likely to maintain its business operations in conformity with Federal law. These permits are subject to suspension and revocation for violations of certain law relating to alcohol (after due process is afforded with notice and hearing opportunities as well as judicial review). The key value here is that these provisions enable the Federal Government to keep persons out of the industry who are not likely to operate their businesses in regulatory compliance and remove persons from the industry who later prove to be non-compliant. Equally important, they provide effective controls over both beverage alcohol and industrial alcohol producers and distributors. Because industrial alcohol is not subject to the Federal excise tax (if put to authorized uses), it is essential to have these controls over both commodities insofar as who is authorized to conduct these business activities.

Places, that is, business premises are evaluated before commencing business operations. Distilleries, wineries and wine premises, and breweries are subject to many requirements relating to physical security of the place of operations and conditions designed to protect the revenue. These requirements and conditions are designed to ensure that these taxable commodities are properly accounted for in their subject taxable or non-taxable use and facilitate inspections of the qualified premises in the administration of the law. For wholesalers and importers, there are no similar place requirements or conditions because they deal with tax-paid products in their inventory; rather, those regulated activities are subject to recordkeeping requirements, as discussed in detail below, that enable the regulators to track and trace inventory.

These permits are subject to termination if actual or legal control of the permitted operations change. In other words, they are not transferable and this prevents a person from entering the business by simply acquiring the business from an existing permit holder. Rather such person must then apply for its own permit as part of acquiring an existing business.

157 Internal Revenue Code of 1986, Title 26, United States Code, Section 5271.
158 Federal Alcohol Administration Act (1935), Title 27 United States Code, Section 204(a)(2)(B), and Internal Revenue Code of 1986, Title 26 United States Code, Sections 5171(d)(1) and 5271(c)(2).
159 Federal Alcohol Administration Act (1935), Title 27 United States Code, Section 204(d) to (i) and Internal Revenue Code of 1986, Title 26 United States Code, Sections 5171(d)(1) and 5271(e). Title 27, Code of Federal Regulations, Part 71-Rules of Practice in Permit Proceedings.
161 Importers may store imported products in customs bonded warehouses in which case the product is not tax-paid. Those premises are regulated by the Customs and Border Protection Bureau, Department of Homeland Security.
162 Federal Alcohol Administration Act (1935), Title 27 United States Code, Section 204(g), and Internal Revenue Code of 1986, Title 26 United States Code, Sections 5171(d)(1) and 5271 and Title 27, Code of Federal Regulations, Sections 19.98, 19.127, and 20.57.
In addition to these permits, distillers must file registrations,\(^\text{163}\) wineries and wine premises must file qualifications,\(^\text{164}\) and brewers must file notices prior to commencing operations.\(^\text{165}\) Wholesalers (including importers) and retailers must file registrations.\(^\text{166}\)

**Operational controls appropriate to administration and enforcement needs.** Standardized operations facilitate the ability of regulators to inspect and audit accurately. Both the Internal Revenue Code of 1986 and implementing regulations prescribe many details on how distilleries, wineries and wine premises, and breweries conduct their operations. The requirements cover locations and continuity of premises, equipment, measurements, ingredients, materials, storage, methods of production (including processing, blending, rectifying, denaturing, bottling, and packaging), movement of products within the premises or transfers between premises, containers, marks and labels, operations of other businesses on the regulated premises, recordkeeping and reports, formula requirements, and tax returns and payments (including credits, offsets, and drawback). Compliance with these detailed requirements enable the regulators to track all of the inputs (based on raw materials, bulk transfers of product, and returns of products from the market) through production and bottling, taking into account operational losses and authorized destructions, and the outputs ultimately removed from the production premises for the domestic market or export. Finally, the label approval process under the Federal Alcohol Administration Act\(^\text{167}\) not only protects the consumers from inaccurate and misleading information on labels but is an operational enforcement tool that assists regulators in determining whether a product in the retail market originates from a legitimate producer (that is, the bottler) or importer.

Industrial use and denatured alcohol is subject to additional provisions of law and regulations covering denaturing operations and the manufacture of articles (which is a product manufactured with denatured alcohol), authorized denaturing materials, and labeling requirements.\(^\text{168}\) Regulatory requirements differ depending on whether the alcohol is completed denatured or specially denatured, the latter being subject to great controls on use and distribution. Finally, certain alcohol fuel plants are subject to separate provisions of law and regulations.\(^\text{169}\)

Over the past 150 years, these operational requirements have changed significantly to keep pace with changes in the industry and the country. These revisions may have been initiated within the Executive Branch internally or as a result of trade agreements, by the Congress, or as a result of petitions from the industry, trade associations, or public advocacy groups to the Federal agency regulator. The “rule of law” process continues as regulatory revisions are considered to meet changes due to alcohol use patterns or technology. For example, between 1998 and 2011, TTB and its predecessor agency engaged in rulemaking to review the entire set of distilled spirits

\(^{163}\) Internal Revenue Code of 1986, Title 26 United States Code, Section 5171(c).

\(^{164}\) Internal Revenue Code of 1986, Title 26 United States Code, Section 5351-5363.

\(^{165}\) Internal Revenue Code of 1986, Title 26 United States Code, Section 5401.

\(^{166}\) Internal Revenue Code of 1986, Title 26 United States Code, Section 5124.

\(^{167}\) Title 27, United States Code, Section 205(e).


plant regulations. As part of the “rule of law” and transparent process, the Federal Register documents discuss in detail comments offered by the public. In one comment, revisions were sought for hand-sanitizers which, as noted earlier, is an area of abusive uses by some consumers. In another comment, a trade association sought the adoption of a “constructive segregation” of tax-paid and in-bond products in light of current technology on records management. While neither comment was adopted by TTB, the transparent process ensured that TTB responded in a public forum to the requests for regulatory revisions.170

Regulated business practices-unfair trade practices. Several years after the repeal of Prohibition, the Congress held hearings to determine how best to regulate the alcohol beverage industry in order to prevent the reoccurrence of the “social evils” that gave rise to the social and political movement resulting in Prohibition.171 This led to the enactment of the Federal Alcohol Administration Act172 that focused on ensuring independence between various business components of the distribution system. While that Act did not establish the three tier system of supplier/producer, distributor/wholesaler or importer, and retailer, it recognized the existence of the three tier system that was established under State laws. In lieu of relying solely on other Federal anti-trust laws, Congress identified four types of unfair trade practices that required special provisions in the alcohol industry: exclusive outlet, tied-house, commercial bribery, and consignment sales.173

Recordkeeping and Reports with reconciliation and cross checks. Similar to the goal of the operational controls of tacking inputs to outputs, the recordkeeping requirements cover all operational activities starting with the receipt of basic materials for the production of the distilled spirits, wines, or beer through the production operations, bottling or packaging, inventories, and ultimately removal from the regulated premises.174 Records on the receipt of the materials and transfers in bond of bulk products enable reconciliation and cross checks. Track and trace aspects of the recordkeeping in the distribution supply chain is discussed separately below.

Inspections and Audits. The alcohol industry has long been subject to close supervision and inspection.175 As a result, broad statutory inspection and audit authorities exist. These include two distinct categories of inspection authority: first, there are specific inspection authorities that apply only to the regulated industry176 and second, all of the general inspection authorities applicable to all taxpayers apply as well.177 Importantly, there is a specific authorization for inspections of any place where taxable article or object, such as alcohol, is made, produced, or

170 T.D. TTB-92 (Final Rule), 76 Federal Register 9080 (February 16, 2011), and notices of proposed rulemaking and comment period extensions cited therein.
172 Title 27, United States Code, Chapter 8, Subchapter I.
173 Title 27, United States Code, Sections 205(a)–(d), respectively.
174 Title 27, Code of Federal Regulations, Parts 19, Distilled Spirits Plants, Subpart V-Records and Reports, 24-Wine, Subpart O-Records and Reports, and 25-Beer, Subpart U-Records and Reports.
176 Internal Revenue Code of 1986, Title 26, United States Code, Sections 5123, 5203, 5207(c), 5275, 5291, 5301(b), 5366, 5367, 5415(a), 5553.
177 Internal Revenue Code of 1986, Title 26, United States Code, Sections 5560, and 7601-7613.
kept. This includes retailer premises. This authority directly facilitates investigations of fake alcohol situations. Overall, this flexibility in the scope of inspection rights is necessary in order to administer a sound regulatory system. A regulatory system of inspections and audits, however, is only as good as it is supported with adequate resources.

Wide-range of administrative, civil, and criminal sanctions that are progressively applied to encourage voluntary compliance. Appropriate sanctions applied in a progressive manner are essential for fostering voluntary compliance:

- Admonitory or Warning Letters.
- Offers in Compromise.
- Closing Agreements.
- Suspension or Revocation of Permits.
- Consent Decrees.
- Injunctions.
- Civil Monetary Penalties.
- Criminal Prosecutions.

Refilling and/or Possession of Liquor Bottles. The refilling or reuse of liquor bottles (meaning any container of a capacity of not more than 5 wine gallons designed or intended for use for the sale of distilled spirits for other than industrial use) is prohibited except for uses authorized by regulations. Specifically, no person (or agent or employee of such person) who sells or offers for sale distilled spirits shall (1) place in any liquor bottle (or possess the same) any distilled spirits that were not in such bottle at the time the Federal excise tax was determined when the bottle was removed from the regulated premises or (2) add any substance whatsoever to any liquor bottle that alters or increases any portion of the original contents contained in such bottle at the time of tax determination or possess any such liquor bottle the contents of which have been so altered or increased. Distilled spirits used to make mixed cocktails at a retailer dealer’s premises are not allowed to be placed back into the liquor bottle.

These prohibitions have broad application. They apply whether or not the tax has been paid or determined on the distilled spirits used in the refilling and whether or not the substance used to alter the original contents is even taxable under the internal revenue laws.

Moreover, the possession of used liquor bottles by any person other than the one who empties the liquor is prohibited except in five circumstances: (1) possessed for delivery to a bottler or importer at the request of the bottler or importer; (2) for destruction in a manner that will render the liquor bottles unusable as bottles; (3) in the case of unusual or distinctive liquor bottles held for disposition or sale as collector’s items or other purposes not involving the packaging of any product for sale; (4) possess an unusual or distinctive liquor bottle for purposes not involving the

178 Internal Revenue Code of 1986, Title 26, United States Code, Section 7606.
180 Title 27, Code of Federal Regulations, Section 31.204.
packaging of any product for resale; and (5) assemble or collect used liquor bottles for purposes of recycling or reclaiming the glass or other approved liquor bottle material. 182

Any person who violates the law or regulations described above on refilling or reusing liquor bottles is subject to criminal prosecution. 183

The comprehensive prohibitions on the reuse and refilling of liquor bottles directly enable regulators to address the fake alcohol situations that involve utilizing legitimate liquor bottles in the distribution of the fake alcohol, including counterfeit brands and placing inferior brands of product in the bottles of a premium brand.

Summary

The combination of a uniformed Federal regulatory system in conjunction with State and local regulatory systems 184 (the latter is discussed more below under “Complementary State Regulatory Features”) that are fashioned to meet unique or usual needs or public policies such as the adoption of private license or control states, establishment and regulation of the distribution tiers, and conditions on and the authorized numbers of local retailers, leads to a sound system that facilitates combatting fake alcohol. This concurrent jurisdiction has resulted in the three tier system under State law. In general, the Federal laws reflect this system by setting up basic permits, registrations, and other business qualifications based on the activities as a producer, wholesaler (including importer), and retailer.

The impact of the independence of each tier of the three-tier system has been advanced as a model to prevent or minimize the likelihood of fake alcohol in the United States. Several reports and papers prepared by Public Action Management, PLC conclude that the independence of businesses in each of the three tiers directly aids in preventing the distribution of fake alcohol in the commercial marketplace in the United States. 185 Essentially, each tier polices the other tier by seeing the products that the other tier is selling, distributing, and marketing and can self-identify illicit alcohol products and fake alcohol that are attempted to be introduced into the domestic commercial marketplace. The significance of independence between different functions is well-recognized by respected international organizations and governmental aid

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182 Title 27, Code of Federal Regulations, Section 31.203.
183 Internal Revenue Code of 1986, Title 26, United States Code, Section 5606. See, also, Title 18, United States Code, Section 3571.
entities as a vital internal control to prevent fraud or other improper conduct within a system. Having multiple parties involved may create some distribution and marketing inefficiencies that increase the cost of the alcohol beverage product to the consumer but may still serve a positive function of checking the power of the other tiers. Alternatively, some commentators argue that the distribution structure requiring the middle tier restricts the flexibility and freedom of producers in marketing their products and harms the consumers through reduced choices and higher prices and, therefore, advances no public interest. The staff of the Federal Trade Commission (FTC) adheres to this view when it opines on State franchise laws and exclusive territory requirements; however, in its analyses the FTC staff views the situation from solely an economic theory point of view and does not take into account whether these State laws enable the wholesale tier to maintain its independence. That is, these laws may in economic theory result in higher prices of alcohol beverages for consumers but there may be other public policy concerns relating to alcohol distribution that provide other overriding social benefits.

Track and Trace Functionality Arising from Current Federal Regulatory System

The current regulatory system allows for a track and trace accounting of lawful distilled spirits, wines, and beer sold or offered for sale in the United States thereby making it easier to identify illicit or fake alcohol products that may be introduced or attempted to be introduced into the domestic marketplace. The system is a combination of registrations and basic permits applying to all three tiers of the system, recordkeeping and reporting requirements, and is supplemented by the industry through the voluntary use of lot or batch identification numbers. Industrial and denatured alcohol is subject to specific permit, production, and labeling requirements as well that apply to its distribution.

Under the internal revenue laws, it is unlawful for a dealer to purchase distilled spirits for resale from any person other than a wholesale dealer in liquors who is required to keep the records

186 The USAID Office of Inspector General/Investigations, Fraud Indicators Handbook at http://oig.usaid.gov/sites/default/files/fraud_awareness_handbook_052201.PDF states in paragraph “31: A Single Individual Controls More Than one Key Resource Management Function: An individual who controls more than one of the key functions and responsibilities associated with any resource management activity is in a better position to exploit the system than one who responsibilities are limited to a single key area. Most resource management directives stipulate separation of functions as a safeguard against fraud....” See also the discussion on the preventing corruption by the separate of functions in Inter-American Development Bank, IDP-9: Combating Fraud and Corruption at http://publications.iadb.org/handle/11319/5850?scope=123456789%2f2f1&thumbnail=false&rpp=5&page=1&group_by=none&etal=0&filtertype_0=subject_en&filtertype_1=subject_en&filter_0=Public%20Utilities&filter_1=Business%20Development&filter_relation al_operator_1=contains&filter_1=Business%20Development&filter_relational_operator_0=equals .


189 FTC Letter dated August 24, 2005, from the Office of Policy Planning, Bureau of Economics, and Bureau of Competition to the Honorable Wesley Chesbro, California State Senate at http://www.ftc.gov/policy/policy-actions/advocacy-filings/2005/08/ftc-staff-comment-honorable-wesley-chesbro-concerning . The letter bears the routine statement that the views expressed are those of the FTC staff and the “letter does not necessarily represent the views of the Federal Trade Commission (Commission) or any individual Commissioner” even though the Commission has voted to authorize the submission of the letter.
required of such wholesalers except as otherwise provided in regulations prescribed by TTB.\(^{190}\) This provision was first enacted in 1958, in order to prohibit the purchase for resale of distilled spirits by either a wholesale or retail dealer from other than lawful sources.\(^{191}\) The provision recognizes the existence of the three-tier system for alcohol beverages traditionally established by State law following the repeal of Prohibition. Essentially, the three-tier system involves the producer/supplier tier, wholesaler/distributor (including importers) tier, and retailer tier.

The United Kingdom last year recognized the importance of a regulated distribution structure when, after two stages of public consultations,\(^{192}\) it decided to introduce a registration scheme for wholesalers to curb alcohol fraud and illicit alcohol trade.\(^{193}\) The primary motivational focus appears to be excise tax and duty collections on products entering the United Kingdom from points elsewhere in Europe but it will also help to reduce the opportunity for manufacturers of fake alcohol products from selling their products to legitimate retailers.

One of the retailers in the United Kingdom found selling fake alcohol purchased it from a sales representative who had employer identification and issued a sales invoice purporting to represent a wholesaler. However, subsequent investigation determined that no such company existed.\(^{194}\) In the United States, wholesalers and importers hold basic permits from TTB and TTB maintains a public listing on its website of such permit holders.\(^{195}\) Using this public listing, a retailer may check and confirm the permit holder status of the wholesaler or importer company from whom it is purchasing the alcohol products. In order to have this capacity, the U.S. has the basic permit requirement outlined earlier which allows it to identify the wholesalers and importers in the first place.

**Wholesale and Retail Records of Receipt and Distribution** Wholesale and retail alcohol beverage dealers are required to maintain certain records of receipt and disposition of distilled spirits, wines and beer and register the business premises where they conduct these sales operations.\(^{196}\) The definition of wholesale dealer is very broad and includes any person who

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\(^{191}\) Internal Revenue Code of 1954, Title 26, United States Code, Section 5117, as enacted by the *Excise Tax Technical Changes Act of 1958*, Public Law No. 85-859, 85th Cong., 2nd Sess. Title II, § 201 (September 2, 1959). As enacted, section 5117 provided several exceptions in the statutory provision whereas the present section authorizes TTB to prescribed exceptions in regulations.


\(^{193}\) Customs Sets Up Wholesaler Registration Scheme in a Bid to Fight Alcohol Fraud, Harpers, by Richard Siddle, December 6, 2013, and Wholesaler Registration Scheme is “Victory for the Good Guys,” by Martin Green, December 6, 2013.

\(^{194}\) Fake Vodka on Sale in Shop, Wales Online, March 5, 2009, at www.walesonline.co.uk/news/wales-news-fake-vodia-sale

\(^{195}\) http://www.ttb.gov/foia/frl.shtml

\(^{196}\) Internal Revenue Code of 1986, Title 26, United States Code, Sections 5121, 5122, and 5124, and Title 27, Code of Federal Regulations, Part 31-Alcohol Beverage Dealers, Subpart J-Records and Reports.
sells or offers for sale distilled spirits, wines or beer to another dealer.\textsuperscript{197} The breadth of the definition of wholesale dealer means that it covers activities at the supplier level as well as the traditional wholesaler level of the distribution system.\textsuperscript{198} There is an exemption for wholesalers operated by a State or political subdivision thereof or the District of Columbia provided the entity maintains and makes available for inspection records that will enable the tracing of distilled spirits, wines and beer received and all distilled spirits disposed by them.\textsuperscript{199} A wholesaler dealer in liquors may be required to file monthly summary reports with TTB.\textsuperscript{200} Importantly, retailers are required to maintain records showing the quantities of distilled spirits, wines, and beer received, from whom such products were received, and the date of receipt. This requirement provides a disincentive for retailers to acquire fake alcohol products. For certain types of limited or non-recurring retailer activities there are exemptions and exceptions to some of these requirements but these generally do not cover the types of settling where fake alcohol is distributed.\textsuperscript{201}

The principal enforcement tool for the failure to register, maintain the records of receipt and disposition, or submit reports when required is administrative action against the basic permit held by the industry members (in cases other than brewers or retailers) and criminal penalties\textsuperscript{202} that would apply to brewers not holding basic permits and to retailers.

Lot or batch identification numbers or markings are frequently placed on individual containers by the producer or labeler. These enable the industry member to monitor its products in the distribution channels for quality control, authenticity, and recall, if necessary. These lot codes in conjunction with the sales and distribution records maintained by producers, wholesalers, and importers facilitate the ability of the industry to undertake voluntary recalls of specific products in the marketplace that are later found to be dangerous or harmful to consumers.\textsuperscript{204} In 1994, TTB’s predecessor agency considered whether to require such product identification codes.\textsuperscript{205}

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\textsuperscript{197} Internal Revenue Code of 1986, Title 26, United States Code, Section 5121(c). The law establishes categories of wholesale dealer in liquors and wholesaler dealer in beer but the recordkeeping and registration requirements apply to both.

\textsuperscript{198} Under the regulations, a distilled spirits plant, bonded wine cellar (including a bonded winery), and a brewery use other filing requirements under the internal revenue laws to comply with the registration requirement. See Title 27, Code of Federal Regulations, Part 19-Distilled Spirits Plants, 24-Wine, 25-Beer, and 31Alcohol Beverage Dealers. Title 27, Code of Federal Regulations, Section 31.48.

\textsuperscript{199} Internal Revenue Code of 1986, Title 26, United States Code, Section 5121(b). Under the regulations, the governmental entity conducting retailer activities is only required to register once and not for each location. Title 27, Code of Federal Regulations, Section 31.43.

\textsuperscript{200} Internal Revenue Code of 1986, Title 26, United States Code, Section 5121(a)(1) and Title 27, Code of Federal regulations, Section 31.160.

\textsuperscript{201} Title 27, Code of Federal Regulations, Subpart D-Exemptions and Exceptions.

\textsuperscript{202} Federal Alcohol Administration Act, Title 27, United States Code, Section 204(d), including other Federal laws relating to distilled spirits, wines, and malt beverages.

\textsuperscript{203} Internal Revenue Code of 1986, Title 26, United States Code, Section 5603.

\textsuperscript{204} In 2008, the Boston Beer Company, for example, utilized these types of codes on bottles to implement a recall of beer determined to contain glass shards. See, \url{http://www.metroactive.com/bohemian/04.16.08/dining-0816.html}

\textsuperscript{205} ATF Compliance Matters 94-2, Labeling – Lot Identification Numbers at \url{www.ttb.gov/public_info/comp942.htm}

The issue of product identification codes has some significance in the area of gray market or parallel imports
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While deciding not to propose requiring such codes, in 1995, the bureau did issue a notice of proposed rulemaking that would have prohibited persons from relabeling the container in a manner that removed the product identification code placed on the container or label by the producer.206 The proposal was not adopted after the comment period.

**Industrial, Denatured and Non-beverage Alcohol.** A high percentage of the distilled spirits produced in the United States is put to industrial and non-beverage uses.207 By comparison, little wine208 and beer209 is put to such uses. At the Federal level, the industrial uses are categorized as: completely denatured alcohol, specially denatured alcohol, and other tax-free uses of un-denatured alcohol. A separate category of non-beverage uses exists that covers flavors, flavoring extracts (such as vanilla extract), perfumes and fragrances, food products (such as rum cakes), medicines, and medicinal preparations which are manufactured in a manner to make them unfit for beverage purposes.210 Finally, while a distilled spirits plant may produce distilled spirits for both beverage use and industrial use, the law does allow for the establishment of alcohol fuel plants which are distilleries used only to produce distilled spirits for fuel use.211

At the Federal level, there are a number of regulatory controls in place that are designed to prevent these industrial and non-beverage alcohols from being used for beverage purposes. Permits must be obtained by persons who procure, deal in, or use specially denatured distilled spirits, or who procure or use other tax-free distilled spirits, or who recover the distilled spirits from specially denatured or completely denatured distilled spirits.212 Manufacturers of non-beverage products must register.213 Formula requirements, recordkeeping, and labeling or marking requirements apply to these various activities.214 The regulations promulgate standard formulas for completely denatured alcohol and specially denatured alcohol.215 Essentially, the

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206 Notice No. 804, 60 Federal Register 3171 (January 13, 1995). The Supplementary Information provides a detailed explanation about the use of production identification numbers on individual bottles or containers.

207 See footnote 131, supra.

208 For example, salted wine (used for cooking) is a wine or wine product unfit for beverage use and is subject to certain production requirements. Title 27, Code of Federal Regulations, Section 24.215 and 24.307.

209 For example, sour or damaged beer (rendered unfit for beverage purposes) may be removed from a brewery for use as distilling material at an alcohol fuel plant. Title 27, Code of Federal Regulations, Section 25.191.

210 Internal Revenue Code of 1986, Title 26, United States Code, Sections 5111 to 5114 and Title 27 Code of Federal Regulations, Part 17-Drawback on Taxpaid Distilled Spirits Used in Manufacturing Nonbeverage Products. In this situation, the manufacturer obtains tax-paid distilled spirits and after using them in the manufacture of the non-beverage products files a claim with TTB for almost the entire amount of excise tax that had been paid on the distilled spirits. Some of these products (such as perfumes or medicinal preparations) may also be manufactured with industrial alcohol, that is, specially denatured alcohol. These alternative manufacturing approaches are a business decision.

211 Internal Revenue Code of 1986, Title 26, United States Code, Section 5181.

212 Internal Revenue Code of 1986, Title 26, United States Code, Section 5271.

213 Internal Revenue Code of 1986, Title 26, United States Code, Section 5112.

214 Title 27, Code of Federal Regulations, Parts 17- Drawback on Taxpaid Distilled Spirits Used in Manufacturing Nonbeverage Products, 19-Distilled Spirits Plants, 20-Distribution and Use of Denatured Alcohol and Rum, 21-Formulas for Denatured Alcohol and Rum, and 22-Distribution and Use of Tax-free Alcohol.

215 Title 27, Code of Federal Regulations, Parts 20-Distribution and Use of Denatured Alcohol and Rum and 21-Formulas for Denatured Alcohol and Rum.
difference between the two categories relates to the degree of difficulty in removing the
denaturant and, thereby, enabling the diversion of the alcohol to a beverage use. For this reason,
specially denatured alcohol (before it is used in the manufacture of another product which is then
technically called an “article”) and other tax-free uses are subject to greater regulatory controls.
These regulatory controls generally allow tracking and tracing of industrial alcohol through
production or manufacture and some of the distribution system. However, the tracking and
tracking controls are not as comprehensive as those discussed above for beverage alcohol.

Under the regulatory controls described above, there is a large volume of industrial and non-
beverage alcohol available in the United States. The regulatory controls deal with the production
and manufacture of these products and to a limited extent in the case of specially denatured
alcohol (before it is incorporated into a manufactured article such as hairspray or solvents), the
distribution of these products in the commercial domestic marketplace. Yet even given this large
quantity in the commercial domestic marketplace that could be obtained by a person to make
fake alcohol for subsequent distribution to others, as discussed above the reported incidents of
such situations are few in the United States.

Complementary State Regulatory Features

A number of regulatory features imposed by State laws and local ordinances are similar to those
found at the Federal Government level discussed above and some additional features are unique
to the States and contribute to preventing or mitigating the presence of fake alcohol in the United
States. While these are only briefly noted here in general terms because of the diversity of
regulations among the States, the salient point is that the Federal and State/local systems
complement and support each other.

As noted earlier, the three-tier system is established under State laws. At the State and local
levels, license requirements are imposed on the various tiers. Given that retailers are not
licensed as such at the Federal level, the State or local licensing requirement is important as an
enforcement tool. Some jurisdictions limit the number of retail licenses based on population size
and the fair market value of a retail license may be significant.216 Because licenses are subject to
non-renewal, suspension, or revocation depending on the jurisdiction, retailers have strong
economic incentives not to jeopardize their licenses by acquiring fake alcohol products to be
resold in violation of the law.

State regulators require records and reports of sales by producers, wholesalers or distributors,
and importers. For example, a report prepared in 2009, and updated in 2014, by KPMG for the
National Beer Wholesalers Association, a trade association, describes for beer distribution the

216 The High Cost of a Liquor License in New Mexico, by Monico Ortiz Uribe, November 27, 2013, at
http://www.fronterasdesk.org/content/9283/high-cost-liquor-license-new-mexico ; Former Owners of Princeton
Wine and Liquor Have Trouble Selling Retail Liquor License, by Jon Offredo, The Times of Trenton, August 10, 2013,
at
http://www.nj.com/mercerc/index.ssf/2013/08/former_owners_of_princeton_wine_and_liquor_have_trouble_sell
ingRetail_liquor_license.html ; and New Round of Debate Set on New Jersey Liquor Licenses, by Linda Moss,
NorthJersey.com, August 4, 2014.
general framework found at the State levels.217 State regulators used these reports from producers to confirm and reconcile reports from wholesalers on their inventory which is reported for State excise tax purposes. In turn, the wholesaler files reports on sales to retailers that provide some basic information that the States can use to determine whether retailers are paying the proper general sales taxes on all goods including alcohol beverages or special retail taxes applicable only to alcohol beverages on the alcohol beverages sold. These are ad valorem taxes so given that the retailer sets the retail price, the accuracy for the sales taxes reported by a retailer still can only be determined with certainty by an audit. The 2009 report notes that Texas has established a model, however, based on the wholesaler sales reports to identify which potential retailers to audit. Overall, the report highlights aspects of the three-tier system in additional to recordkeeping that enable the States to monitor the flow of alcohol beverages in the State and ensure that only lawful and tax-paid alcohol beverages are sold. These aspects include franchise laws and exclusive territories, requirements that retailer purchase only from licensed wholesalers, and the limited number of tax payment points all being located within the States. (Parenthetically, the tax revenue jeopardy potential arising from a proliferation of tax payment points has also been noted by the United States Treasury Department in a report to Congress in March 1998.218)

The Wine and Spirits Wholesalers of America (WSWA), a trade association, has similarly advanced that the controls inherent in the three-tier system establish mechanisms for enabling regulators to monitor the flow of alcohol beverages in the marketplace to ensure that only lawful products and not fake alcohol products enter the marketplace. WSWA articulated its views in a public comment letter219 submitted to the H.M. Revenue and Customs in the United Kingdom as part of the latter’s public consultation process in 2013, on whether to establish a wholesaler registration system.

Moreover, the wholesale tier posits that the three-tier system provides an inherent checks and balance within the entire marketplace selling alcohol beverages. This is based on several premises: first, there is wholesaler independence220 and (2) the realities that wholesalers delivering products to retailers usually see the entire range of alcohol beverage products offered for sale by retailers and are well-positioned thereby to see whether a retailer might be offering fake alcohol products for sale alongside with lawful brands of product. If wholesalers uncover the latter situations, they have an incentive to notify the regulators. Some in the industry consider this informal enforcement that benefits regulators who cannot be reasonably expected to inspect every retail premise and its inventory.221

218 Report to the Senate Committee on Finance and the House Committee on Ways and Means, entitled “Options for Moving the Collection Point for the Distilled Spirits Excise Tax” prepared pursuant to Section 909 of the Taxpayer Relief Act of 1997, Public Law No. 105-34, 105th Cong, 1st Sess, (August 5, 1997).
220 See discussion in text accompanying footnotes 185 to 189, on the checks and balances present from independent parties being involved in a transactional function.
221 The career experience of the author of this study as a Federal regulator confirms that frequently competitors or disgruntled employees are common sources of leads to regulators of violations in the marketplace.
Essentially, the greater number of regulatory controls and structures present and followed by independent parties in the production, distribution, and sale of alcohol beverages, the less likely and feasible it is for fake alcohol to enter the marketplace. These controls enable regulators to have a high degree of accountability for the alcohol beverages available in the State, although not an absolute. Of course, it continues to be important to emphasize that sound State regulatory systems are only effective where the State legislatures provide adequate financial resources for the administration and enforcement work undertaken by the regulators.

Corruption Factor

Corruption in the public sector is identified as a major cause of the failure of regulatory systems to operate effectively and efficiency.\textsuperscript{222} That is, even the soundest regulatory system will prove unsuccessful if administered and staffed by corrupt officials. There is a ripple effect when a regulatory system fails here. Several studies examining the situation in other countries indicate that entrepreneurs who want to comply with the legal requirements will decide not to comply when a failed regulatory system is present because the cost of compliance puts them at a competitive economic disadvantage compared with those who affirmatively decide not to comply.\textsuperscript{223} For both parties, the bribery and/or extortion costs of corruption are a burden they bear equally and there is no incentive to assume the added costs of doing business arising from compliance with the regulatory system.

A number of organizations have gauged corruption in countries around the world and post indices measuring corruption. Founded in 1993, Transparency International pursues a vision of “a world in which government, business, civil society and the daily lives of people are free of corruption” and has national chapters in more than 100 countries and is headed by a Secretariate in Berlin.\textsuperscript{224} Among other research projects, Transparency International publishes annually a Corruption Perception Index. No meaningful hard empirical data exists on corruption so Transparency International captures the perceptions by independent institutions in a country to offer their assessments of corruption in the public sector. It is a composite index. Importantly, the index number is not a corruption verdict on the country (its population, society, or private sector) but only on the public sector of the country. The index is a rating of 0 to 100, with a lower number representing a higher level of corruption perception. The rule of law culture of a country bears a close relationship to the likelihood of corruption in a country. The World Justice Project (WJP)\textsuperscript{225} is an independent, multidisciplinary organization working to advance the rule of law around the world. The rule of law provides the foundation for communities of opportunity and equity, that is, communities that offer sustainable economic development, accountable

\textsuperscript{222} http://www.transparency.org/topic/detail/politics_and_government
\textsuperscript{224} www.transparency.org
\textsuperscript{225} Founded by William H. Neukom in 2006 as a presidential initiative of the American Bar Association (ABA), and with the initial support of 21 other strategic partners, the World Justice Project transitioned into an independent 501(c)(3) non-profit organization in 2009. Its offices are located in Washington, DC, and Seattle, WA, USA. See, www.worldjusticeproject.org
government, and respect for fundamental rights. WJP’s work engages citizens and leaders across the globe and from all work disciplines to advance the rule of law. WJP, among other research projects, issues a Rule of Law Index. The WJP Rule of Law Index measures how the rule of law is experienced in everyday life in 99 countries around the globe, based on over 100,000 household and 2,400 expert surveys worldwide. It is the most comprehensive index of its kind and the only to rely solely on primary data. Adherence to the rule of law is assessed using 47 indicators organized around eight themes: constraints on government powers, absence of corruption, open government, fundamental rights, order and security, regulatory enforcement, civil justice, and criminal justice. In addition to country scores and rankings, the Index also includes key global findings as well as an analysis of regional strengths, rule of law challenges, best and worst performers, and trends to watch. The index ranges from 0 to 1, with a lower number indicating a great lack of rule of law culture.

Many of the countries reported having serious fake alcohol problems are countries with high levels of corruption, including the absence of a strong rule of law, on these indices.

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227 For an examination of other uncertainties and instabilities in many of these economies, see the annual reports entitled World Investment and Political Risk prepared by the World Bank Group, Multilateral Investment Guarantee Agency for 2009 through 2013, at [http://www.miga.org/resources/index.cfm?stid=1866](http://www.miga.org/resources/index.cfm?stid=1866).
228 [http://www.transparency.org/country](http://www.transparency.org/country)
229 [http://www.transparency.org/country](http://www.transparency.org/country)
Transparency International reports that there are some political corruption concerns in the United States that focus on ethical infractions by Members of Congress and some inappropriate compensation instances by local elected officials. It notes some concerns with political campaign laws and financial institution reforms but nothing relating to the alcohol regulatory arena is noted by Transparency International. One published study relating to beer taxes at the State level suggests corruption leading to lower taxes but upon examination it appears to equate political contributions to elected officials as corruption activities without identifying specific unlawful behavior. However, a few public sector examples in the United States of corruption in the distribution of alcohol have been reported on at the State level. Several incidents in North Carolina have been reported in the news media and or by other public advocacy groups. These incidents cover excessive compensation (and bonuses or travel) or gifts received by local alcohol officials or elected officials actions on the issuance of retail licenses.

Based on the foregoing data, the United States public sector does not have a level of corruption as is found in other countries that have experienced incidents of fake alcohol. One noteworthy point is that the United Kingdom has better ratings that the United States on both the Corruption Perception Index and the Rule of Law Index and yet does experience a fake alcohol problem. Accordingly, other factors such as the features of the current regulatory system in the United States may help to explain the fewer incidents of fake alcohol in the United States then in the United Kingdom.

Wide Range of Pricing in Marketplace

“The agency properly places substantial weight on the statute’s recognition that the alcohol industry is unique. Both its historic association with corruption and the general belief that cheap and plentiful alcohol is not an unmitigated social good (as opposed, say, to cheap and plentiful home heating oil or shoes) suggest that the alcohol industry requires special oversight and regulations. Yet definition of the

232 http://www.transparency.org/country#USA
‘exclusion’ criterion must also recognize adequately—as the agency’s current definition does not—the value of pro-competitive wholesale promotions. This value derives not only from the traditional benefits of competition in terms of lower prices and improved quality, but also...from the fact that a competitive alcohol market helps deter the formation of a corrupt black market. [Internal footnotes omitted]. 


Supreme Court Associate Justice Ruth Bader Ginsburg (then serving as a Circuit Judge) recognizes that competitive pricing reduces the risk of a corrupt black market. Her insights encapsulate both the point that cheap alcohol beverages are not an unmitigated social good but, at the same time, the competitive marketplace results in lower prices, higher quality, and the prevention of a corrupt black market.

The debate over alcohol beverage pricing and its impact on abusive alcohol consumption and harmful behavior is at the center of many public health policy debates on alcohol control policies and at the center of the fake alcohol situation. Studies show that higher prices can result in reduced levels of consumption but other studies also suggest that the reduced levels of consumption will not be uniformed among drinkers and some drinkers will move to fake alcohol sources. Whether such higher prices should be the result of minimum pricing of units of alcohol mandates or higher taxes on distilled spirits, wine or beer is beyond the scope of this study. Moreover, this study does not reach any conclusions on whether a public policy should be adopted that leads to higher prices as a proper tool to prevent or reduced excessive alcohol consumption abuse. Rather, this study concludes that the presence of low priced, lawful and safe

235 To the extent a Federal public policy were adopted for setting a minimum price for alcohol beverages that involved TTB, it would likely be based on an increase in the excise tax rate. Under the Federal Alcohol Administration Act, Title 27, United States Code, Chapter 8, TTB does not have authority to regulate pricing transactions unless they are proven to be a subterfuge for another violation of the unfair trade practice provisions. See, Revenue Ruling 54-161 at http://www.ttb.gov/rulings/54-161.htm ; National Distributing Company, Inc. v. United States Treasury Department, Bureau of Alcohol, Tobacco and Firearms, 626 F.2d 997 (D.C. Cir. 1980) rejecting the ATF position that the unconditional and nondiscriminatory sale of a wine to a retailer at a price below the laid-in-cost to the wholesaler was the furnishing of a thing of value, and Industry Circular 81-2, dated January 20, 1981 at http://www.ttb.gov/industry_circulars/archives/1981/81-02.html .

(in a quality control context) alcohol beverages in the United States marketplace contributes to the absence of cases of commercial distribution of fake alcohol in the United States. Again, it must be noted that instances of self-inflicted abuse by individual who use convert industrial or denatured alcohol for their own personal consumption is different from the situation where a person manufacture such fake alcohol products for commercial distribution to others. These latter situations are the ones described in the fake alcohol incidents reported outside of the United States and are the point of comparison.

In one moonshine prosecution, the person purchasing the moonshine near Roanoke, Virginia and transporting it for sale in the inner city of Philadelphia, Pennsylvania testified that he paid on average $80.00 per case but sometimes as high as $90.00 to $95.00 per case. A case consisted of six one-gallon plastic jugs. At $80.00 per case, the cost of goods for the purchaser was $13.33 per gallon or $2.66 per 750 milliliter in addition to the expenses of transporting the heavy load to Philadelphia and any other distribution costs. He would transport 50 to 60 cases per trip. Unfortunately, the witness did not testify as to the price that he resold the jugs of moonshine to others or whether he sold it directly to consumers or to owners of “shot houses” for resale (with their own mark-up) to their consumers. A news article related to the Operation Lighting Strike prosecution cites a law enforcement agent stating that the moonshine sells from $20 to $30 gallon on the street. Another news article reports reported that the street price was $12 to $25 a gallon with shot houses selling the moonshine “for a buck.” These two news articles are from 2001 to 2002 period, whereas the witness was testifying about his purchases in 2004 to 2006 period.

Several public sources of retail prices for distilled spirits are available online and show a wide range of prices from low priced economy to high priced super-premium. A review of these sources indicates that lawful and safe (in a quality control context) alcohol beverages are widely available at very low prices. For the period April to June 2014, the Virginia Alcohol Beverage Control retail stores lowest price for a 750 milliliter bottle of 80 proof domestic vodka was $6.90, for a liter bottle of 80 proof domestic vodka was $7.40, and for a 750 milliliter bottle of 100 proof domestic vodka was $9.25. Similarly, in May 2014, the Pennsylvania Liquor Control Board stores lowest price for a 750 milliliter bottle of 80 proof domestic vodka was $6.99, and for a one liter bottle of 80 proof of domestic vodka as $7.39. However, closeout prices for two brands of 750 milliliter bottles of 80 proof domestic vodka were listed at $2.99

237 The moonshine prosecution was in 2008 for criminal activity occurring between November 2004 and May 2006, so the comparisons with current year retail market prices is somewhat distorted but not in a way that would overstate the price of the moonshine in the current marketplace.
239 While a Federal Government chemist testified that he analyzed samples of the distilled spirits producer by the seller-moonshiner, his testimony did not reference the alcohol content or proof of the moonshine. The laboratory report was introduced into evidence but the author of this study could not find it in the e-copy of the court transcripts and exhibits.
240 Moonshine Suspects to Face Trial, footnote 52, supra.
242 http://www.abc.virginia.gov/Pricelist/VODKA_%28DOMESTIC%29.html
and $3.99. One brand of imported vodka was listed with a closeout price of $5.99 for a 750 milliliter bottle of 80 proof. Information from private license States also show availability of low price alcohol beverages. Smaller bottle sizes at lower prices are also available in both control and private license states.

By comparison, a recent British newspaper reporting on the fake alcohol situation in the United Kingdom described a fake alcohol incident where the 70 centiliter (700 milliliters) bottle of vodka sold in a local shop for £5.99 (approximately $9.58 USD) and stated that a 70 centiliter bottle of legal vodka would carry duty and VAT of £8.99 (approximately $14.38 USD). In 2009, a news article reported the price of a bottle of fake alcohol in an off-license shop in Wales was £7.49 (approximately $11.98 USD) and another article quotes an enforcement officer with the UK Trading Standards as warning consumers to be cautious of any bottle of vodka prices at less than £9.50 (approximately $15.20 USD). While the report cited earlier on deregulation in the UK includes a chart showing that the affordability of alcohol in the UK has increased significantly since 1970, it is important to note that affordability is a comparison value of the cost of one good to another in the context of buying power and not necessarily a decrease in actual price.

The competitive marketplace in the United States under the current regulatory regimes results in these lower prices in both private license States and control States and helps to prevent a black market that would include fake alcohol products.

244 https://www.lcbapps.lcb.state.pa.us/webapp/Product_Management/psi_ProductListPage_Inter.asp?searchPhrase=%26selTyp=%26selTypS=277%26selTypW=%26selTypA=%26CostRange=-1%25C10%26strFilter=regular%26searchCode=&submit=Search
245 States that are private license States also have public views of price postings. See, New York State at https://www.nyslapricepostings.com/PricePostings.asp?
246 Deadly Fake Wine Flooding Britain’s Off-licenses: Laced with Bleach, Nail Polish and Anti-freeze-and Passed Off as Top Brands, by Tom Rawstorne, Daily Mail, July 18, 2014.
247 Footnote 194, supra.
248 Footnote 119, supra.
249 Footnote 185, supra.
Conclusions

Public health issues are myriad with respect to alcohol beverages: alcoholism, drunk driving, domestic violence against spouses and partners, child neglect by alcoholic parents or guardians, underage drinking, binge drinking, inappropriate college student social behavior and sexual assault, work productivity loss by alcoholics, and moonshine and fake or surrogate alcohol products with toxic components. Public policies addressing these important health challenges must balance the tools that are applied to reduce these behaviors and interventions that mitigate or negate these behaviors. A tool that successfully addresses one public health issue may exacerbate another public health issue. Certain interventions may address one public health issue and, thereby, mitigate the negative effects of the tool utilized to address a different public policy issue. The conclusion of this study that the availability of low priced safe (in a quality control context) alcohol beverages in the United States through lawful distribution channels contributes to the absence of fake alcohol, in turn, raises other public policy questions about excessive consumption that may arise from cheap alcohol. Policy makers, industry members, civil society, public advocacy groups, and citizens must make decisions about how to balance tools and interventions to create the most optimal solution that addresses the largest range of the public health concerns listed in the opening of this paragraph. Some experts have observed that prior to Prohibition alcohol abuse was viewed as a moral issue and the failure of personal morals was the cause of alcohol abuse, whereas after Prohibition alcohol abuse is viewed as a medical and scientific matter to be addressed by medical and scientific public policy approaches.

Even though it has been observed that there may be a convergence in the drinking habits in more and more countries (perhaps the results of globalization and the Internet), the impact of culture and the stage of economic development or vitality of a local economy still necessitate establishing regulatory regimes that “fit” the country. The present regulatory system in the United States reflects an evolution arising from the experiences of the last 150 years in alcohol controls, first, primarily for taxation and then, following Prohibition, for advancing consumer protection and various public health policies. It reflects the cultural context of respect for the rule of law and a mature alcohol industry recognizing and accepting the regulatory environment in which it operates.

Against this backdrop, the existence of a structured distribution system at Federal, State and local levels of governments that is regulated through a transparent and corruption free regulatory regime in conjunction with a competitive marketplace offering alcohol beverages at a wide range of price points (including low prices) are the key reasons that that the incidents of the distribution of fake alcohol are fewer in the United States than found in other countries. This enables the

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250 One Canadian community service organization has utilized an interesting intervention approach of helping alcoholics learn to make beer and wine in an effort to stop them from drinking rubbing alcohol or hand sanitizer products. Nonprofit Helps Alcoholics Learn How to Brew Beer, by Olivia B. Waxman, TIME, February 20, 2014. Obviously, the public health community has developed other more mainline intervention tools and treatment models.


detection of fake alcohol products at points where attempts are made to enter them into the commercial marketplace and reduces the incentive for a black-market outside of the commercial marketplace. It reduces the demand for fake alcohol except for the limited demand for moonshine that reflects a longstanding cultural tradition. Moreover, the independence of the production, distribution, and retail sales tiers contributes to a transparent and competitive marketplace with less opportunity for a corrupt commercial marketplace. Each tier provides checks and balances on the other tiers and, indirectly, a certain degree of informal enforcement.

In the United States, the regulatory controls at the Federal and State levels operate to ensure the safety (in a quality control context) of alcohol beverages and the competitive marketplace creates a wide-range of prices for alcohol beverages including some very low prices. Both of these dynamics function against the backdrop of a culture that respects the rule of law and has an absence of significant corruption in governance. All of these factors result in a marketplace lacking the type of fake alcohol products found in many countries and posing the serious concomitant public health and safety problems.

Strong enforcement of the current regulatory system with sufficient resources is essential to maintain a level playing field where there is no economic incentive to operate outside the regulated system in order to compete with a pervasive and thriving black market. Consumers are protected from “fake alcohol” products and public health officials can focus their attention on addressing other public health problems arising from the irresponsible and inappropriate uses of alcohol beverages.

Finally, it must be recognized that for reasons of culture and tradition that certain products such as unlawful moonshine will occur and can only be addressed through criminal investigations and prosecutions. The mainline marketing of moonshine-styled and branded products will only perpetuate and reinforce the continuance of the moonshine mystique.

The United States Government expends international development and aid financial resources to teach other countries our regulatory system as part of capacity building efforts in the international community. We cite our system as representing the “best practices.” The minimal number of “fake alcohol” distribution incidents in the United States attests to the fact that we have a sound regulatory regime that “fits” the situation in the United States. In that sense, “America is exceptional.”

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253 TTB and the Office of Technical Assistance, Treasury Department recently signed a memorandum of understanding whereby TTB would assist that latter office in its responsibilities under the Foreign Assistance Act of 1961, regarding alcohol and tobacco excise tax administration programs. In particular, “TTB sharing its best practices with similarly situated officials in developing countries allows us to strengthen and expand contacts outside of the United States for information sharing and forward trace investigations related to TTB-regulated commodities.” See, http://www.ttb.gov/news/tech-assistance.shtml. This effort continues a practice since the 1990s by the former Bureau of Alcohol, Tobacco and Firearms and continued by TTB to provide capacity building training or briefings to foreign government officials on historic and current best practices in regulating alcohol and administering excise taxes.