International Demand for Bourbon and its Effect on the Kentucky Economy

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[Include any grant/funding information and a complete correspondence address.]

Abstract

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# WHAT IS BOURBON?

Bourbon whiskey is a type of American whiskey which are barrel-aged distilled spirits made primarily from corn. The use of the term "bourbon" for the whiskey, derived from the French Bourbon dynasty, has been traced to the 1820s, and the term began to be used consistently in Kentucky in the 1870s. It is disputed whether Bourbon County in Kentucky or Bourbon Street in New Orleans inspired the whiskey's name (Kiniry, 2013). Although overall sales of Kentucky Bourbon continued to rise in 2015 (Patton, 2016), international exports of Bourbon peaked in 2014 where sales exceeded $1 billion but dropped by almost 30% in 2015 (Distilled Spirits Council of the United States, 2015).

## Origins of Bourbon Whiskey?

The use of the term "bourbon" for the whiskey has been traced to the 1820s, and the term began to be used consistently in Kentucky in the 1870s (Kiniry, 2013). Jacob Spears, of Bourbon County, is credited with being the first to label his product as Bourbon whiskey (Kleber, p. 103). Louisville historian Michael Veach disputes that Bourbon whiskey is named after Bourbon County and asserts that “the whiskey was named after Bourbon Street in New Orleans, a major port where shipments of Kentucky whiskey sold well as a cheaper alternative to French cognac” (Veach, pp. 7-9)

### What Makes a Whiskey, Bourbon?

According to the ATF Title 27 CFR, Section 5.22 Bourbon must be (ATF, n.d.):

1. Made from a fermented mash with a minimum of 51% and a maximum of 79% corn
2. Distilled at less than 80% alcohol/volume (160 proof)
3. Stored in a new, charred, white oak barrel at a maximum of 62.5% alcohol/volume (125 proof) for at least 2 years
4. The original color and flavor of the whiskey cannot be filtered or altered in any way
5. Must be produced and stored (for at least one year of the aging) in Kentucky to be called Kentucky Bourbon

Although they typically don’t include the term “Bourbon” on the label, according to these guidelines Tennessee whiskey is also technically Bourbon (McLafferty, 2014). This, with the fact that Jack Daniels, a Tennessee whiskey, that is also the highest selling American whiskey in the world (Stengel, 2012), is owned by Louisville, KY based Brown-Forman Corporation (Jack Daniels, 2010) means that many statistics that report on Kentucky Bourbon also include Jack Daniels in them.

## Legal Recognition within the United States.

Bourbon whiskey was recognized as a "distinctive product of the United States" by the United States Congress, on May 4, 1964 (Kentucky Distillers' Association, 2010) and regulations were established by the Bureau of Alcohol, Tobacco, Firearms and Explosives as to what constitutes Bourbon. On August 2, 2007, the U.S. Senate passed a resolution sponsored by Senator Jim Bunning (R-KY) officially declaring September 2007 to be National Bourbon Heritage Month, marking the history of bourbon whiskey (Kentucky Barrels LLC, 2003). Federal regulation also defines "bourbon whiskey" to only include "bourbon" produced in the United States (ATF, n.d.).

## **International Protections.**

There have been a number of trade deals struck that directly benefit Kentucky Bourbon whiskey. Because these products are defined by US law, they are easy to incorporate into foreign legal frameworks The Office of the United States Trade Representative has negotiated to include Kentucky Bourbon in international trade agreements with the primary goals being the recognition of Bourbon as a distinct product and to reduce or eliminate tariffs for distilled spirits imported into foreign countries (Jones, 2004).

### The North American Free Trade Agreement.

NAFTA was enacted on January 1, 1994 and in general provides a stringent enforcement mechanism for member countries. Chapter 3, Annex 313, titled "Distinctive Products" specifically benefits Kentucky Bourbon because it requires Canada and Mexico to follow Title 27 CFR 5.22 (NAFTA, n.d.)

### US-Chile Free Trade Agreement.

Signed on June 6, 2003, this is the first trade agreement between the US and a South American country and does several things to benefit KY Bourbon exports. Firstly, it provides distinct product status to Bourbon and Tennessee whiskey as outlined under Title 27 CFR 5.22. Secondly, the agreement allows bourbon to compete equally with the distilled spirits of Mexico, Canada, and the EU which Chile also has trade agreements with. The third provision is the "zero-for-zero" initiative begun in the Uruguay Round prompted the US to eliminate virtually all tariffs on distilled spirits in exchange for equal treatment by other nations, these tariff reductions were done over time and the twelfth reduction took place on 1 January, 2015 making all US exports into Chile 100% duty free (Office of the United States Trade Representative , 2004).

### US-EU Agreement on Nomenclature for Distilled Spirits.

Signed in June, 1994 between the US and the European Union, this agreement requires the EU to recognize distinctive products of Title 27 CFR 5.22 and also passes those protections to EU products imported into the US. Namely Scotch Whiskey from the UK, Irish Whiskey from Ireland, Cognac from France, Armagnac and Calvados from France, and Brandy de Jerez from Spain (European Commission, 1994).

### US-Australia Free Trade Agreement.

Entered into agreement on 1 January, 2005 this extends the Title 27 CFR 5.22 distinctive products rules into Australian law (Office of the United States Trade Representative, 2005)

## Significance to Kentucky.

While Bourbon does not have to be made in Kentucky, 95% of all Bourbon is, making Bourbon a key Kentucky product. Overall Kentucky Bourbon is a $3 billion industry supporting 15,400 jobs with a payroll of $707 million. As of 2014 there were $1.9 billion worth of barrels currently aging in Kentucky. With nearly 60% of the sale price of a bottle of Bourbon going to taxes and fees Bourbon is a major source of income for Kentucky. Barrel fees alone were 515.2 million in 2013 (KENTUCKY DISTILLERS’ ASSOCIATION, 2016). Beginning in 2010 Kentucky was home to almost half of all distilling jobs in the US and distilling ranks 4th among all manufacturing industries of Kentucky in total employment and job multiplier (Fischer, 2010). This makes the “Bourbon Boom” important to Kentucky because as international sales increase so does Kentucky’s impact on the global economy.

# WHAT IS THE BOURBON BOOM?

The “Bourbon Boom” refers to an increase in demand, internationally and domestically, for American made whiskey, specifically Kentucky Bourbon and Tennessee whiskey.

## When did the Bourbon Boom Start?

It is generally agreed that popularity of Bourbon began to increase in 1999 (Louisville Kentucky, 2013) where sales by volume began to increase at about 2 - 4% per year but then sales and production seems to stagnate in 2009. When identifying the start date of the Bourbon Boom, data suggests that it started in 2010 where both sales and production by volume of Bourbon began increasing at 3% and continued to have year after year increases, up to 7% in 2014.

## Related Industries.

In order to get a true picture of the effect that Bourbon exports has on Kentucky we need to identify key industries that benefit either directly or indirectly. Direct beneficiaries would be the industries that supply the materials needed to make Bourbon. These would include corn farmers and manufacturers of the white oak barrels used to store the Bourbon. Examples of indirect beneficiaries would be tourism and the transportation industry that primarily ships the Bourbon for export.

# PRE-BOOM DATA

## International Sales.

Starting in 1999 we begin seeing the shift in consumption from low cost “value” Bourbon to more expensive “premium” brands. Figure 4 shows us that in 2003 some countries had already started developing a preference for high quality Bourbon, namely Spain, Italy, Greece, and the UK. From 2003 to 2008 we see a gradual rise in sales by volume and revenue of higher quality Bourbons while lower quality Bourbons slightly drop and in 2008 we see a large spike in revenue of super premium Bourbons relative to the volume produced indicating that distillers began charging more for their highest quality products (Figures 5 & 6).

## Post-Boom Data.

### Overall Sales.

### International Sales.

### Average Growth Per Year.

### Supporting Industries.

### Kentucky Economy Pre-Boom.

#### Average Growth.

#### Surplus / Deficit.

#### Tax Income.

### General U.S. Economy.

## Data Analysis

References

ATF, n.d. *TITLE 27 CFR 5.22,* s.l.: s.n.

Distilled Spirits Council of the United States, 2015. *Distilled Spirits Exports by Value December 2015,* s.l.: s.n.

European Commission, 1994. *http://ec.europa.eu.* [Online]   
Available at: http://ec.europa.eu/transparency/regdoc/rep/1/2006/EN/1-2006-690-EN-F1-1.Pdf

Fischer, T., 2010. *Bourbonblog.com.* [Online]   
Available at: http://www.bourbonblog.com/blog/2010/01/20/first-ever-economic-impact-study-bourbon-industry-kentucky-distillers-association/

Jack Daniels, 2010. *Jack Daniel's Tennessee Whiskey.* [Online]   
Available at: Jackdaniels.com

Jones, M., 2004. *TED Case Studies: Number 711.* [Online]   
Available at: http://www1.american.edu/TED/kentuckybourbon.htm

Kentucky Barrels LLC, 2003. *About Kentucky Bourbon.* [Online]   
Available at: http://www.kentuckybarrels.com/KentuckyBourbon.html

Kentucky Distillers' Association, 2010. *Kentucky Bourbon History.* [Online]   
Available at: http://kybourbontrail.com/index.php/history/

KENTUCKY DISTILLERS’ ASSOCIATION, 2016. *kybourbon.com.* [Online]   
Available at: http://kybourbon.com/bourbon\_culture-2/key\_bourbon\_facts/

Kiniry, L., 2013. *Smithsonian.com.* [Online]   
Available at: http://www.smithsonianmag.com/arts-culture/where-bourbon-really-got-its-name-and-more-tips-on-americas-native-spirit-145879/?no-ist

Kleber, J. E., 1992. *The Kentucky Encyclopedia.* Lexington: University Press of Kentucky.

Last Name, F. M., Year. Article Title. *Journal Title,* pp. Pages From - To.

Last Name, F. M., Year. *Book Title.* City Name: Publisher Name.

Louisville Kentucky, 2013. *louisvilleky.gov Mayors Office.* [Online]   
Available at: https://louisvilleky.gov/sites/default/files/mayors\_office/bourbonreport5.pdf

McLafferty, C., 2014. Beginner's Guide to Bourbon and Tennessee Whiskey. *Paste Magazine,* 5 December.

NAFTA, n.d. *nafta-sec-alena.org.* [Online]   
Available at: https://www.nafta-sec-alena.org/Home/Legal-Texts/North-American-Free-Trade-Agreement?mvid=1&secid=2d3a1faf-08c1-4bec-81e3-dce96918011b#An313

Office of the United States Trade Representative , 2004. *ustr.gov.* [Online]   
Available at: https://ustr.gov/trade-agreements/free-trade-agreements/chile-fta

Office of the United States Trade Representative, 2005. *Free Trade Agreements Australia.* [Online]   
Available at: https://ustr.gov/sites/default/files/uploads/agreements/fta/australia/asset\_upload\_file778\_3889.pdf

Patton, J., 2016. *Lexington Herald Leader.* [Online]   
Available at: http://www.kentucky.com/news/business/article57947968.html

Stengel, J., 2012. Jack Daniel's Secret: The History of the World's Most Famous Whiskey. *The Atlantic*, 26 March.

Veach, M. R., 2013. *Kentucky Bourbon Whiskey: An American Heritage..* Lexington(Kentucky): University Press of Kentucky.

Tables

Table 1

DISTILLED SPIRITS - EXPORTS BY VALUE (U.S. DOLLARS)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 2015 | 2014 | $ CHANGE | % CHANGE |
| WHISKEY, BOURBON | 722,755,084 | 1,021,980,075 | (299,224,991) | -29% |
| WHISKEY, OTHER | 355,497,190 | 72,225,068 | 283,272,122 | 392% |
| TOTAL WHISKEY | 1,078,254,289 | 1,094,207,157 | (15,952,868) | -1% |
| RUM | 93,158,899 | 97,457,684 | (4,298,785) | -4% |
| BRANDY | 93,782,350 | 84,810,485 | 8,971,865 | 11% |
| GIN | 6,884,192 | 4,907,460 | 1,976,732 | 40% |
| VODKA | 63,622,174 | 51,000,009 | 12,622,165 | 25% |
| CORDIALS | 90,663,881 | 89,408,273 | 1,255,608 | 1% |
| OTHER DISTILLED SPIRITS | 138,492,124 | 139,856,150 | (1,364,026) | -1% |
| TEQUILA | 5,621,518 | 6,651,931 | (1,030,413) | -15% |
| TOTAL NON-WHISKEY | 492,225,138 | 474,091,992 | 18,133,146 | 4% |
| GRAND TOTAL | 1,570,479,427 | 1,568,299,149 | 2,180,278 | 0% |

Note: Data reflects international sales of Bourbon whiskey as it relates to other distilled spirits sales (Distilled Spirits Council of the United States, 2015).

Table 2

BOURBON SALES BY VOLUME (9-Liter cases)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| YEAR | VALUE | %CHG | PREMIUM | %CHG | HIGH END PREMIUM | %CHG | SUPER PREMIUM | %CHG | GRAND TOTAL | %CHG |
| 1999 |  |  |  |  |  |  |  |  | 12,380 |  |
| 2000 |  |  |  |  |  |  |  |  | 12,628 | **2%** |
| 2001 |  |  |  |  |  |  |  |  | 12,880 | **2%** |
| 2002 | 2,972 |  | 4,281 |  | 5,576 |  | 309 |  | 13,138 | **2%** |
| 2003 | 2,972 | **0%** | 4,278 | **0%** | 5,823 | **4%** | 332 | **7%** | 13,405 | **2%** |
| 2004 | 2,972 | **0%** | 4,318 | **1%** | 6,237 | **7%** | 385 | **16%** | 13,912 | **4%** |
| 2005 | 2,816 | **-5%** | 4,388 | **2%** | 6,666 | **7%** | 431 | **12%** | 14,301 | **3%** |
| 2006 | 2,633 | **-6%** | 4,499 | **3%** | 7,116 | **7%** | 496 | **15%** | 14,744 | **3%** |
| 2007 | 2,619 | **-1%** | 4,415 | **-2%** | 7,310 | **3%** | 568 | **15%** | 14,912 | **1%** |
| 2008 | 2,642 | **1%** | 4,267 | **-3%** | 7,500 | **3%** | 662 | **17%** | 15,071 | **1%** |
| 2009 | 2,808 | **6%** | 4,367 | **2%** | 7,231 | **-4%** | 658 | **-1%** | 15,064 | **0%** |
| 2010 | 2,778 | **-1%** | 4,529 | **4%** | 7,372 | **2%** | 764 | **16%** | 15,443 | **3%** |
| 2011 | 2,717 | **-2%** | 4,637 | **2%** | 7,782 | **6%** | 907 | **19%** | 16,043 | **4%** |
| 2012 | 2,796 | **3%** | 4,984 | **7%** | 8,079 | **4%** | 1,019 | **12%** | 16,878 | **5%** |
| 2013 | 3,007 | **8%** | 5,048 | **1%** | 8,743 | **8%** | 1,234 | **21%** | 18,032 | **7%** |
| 2014 | 3,149 | **5%** | 5,493 | **9%** | 9,244 | **6%** | 1,471 | **19%** | 19,357 | **7%** |
| 2002-2009 | -6% |  | 2% |  | 30% |  | 113% |  | 15% |  |
| 2009-2014 | 12% |  | 26% |  | 28% |  | 124% |  | 28% |  |
| TOTAL | 6% |  | 28% |  | 66% |  | 376% |  | 56% |  |

Note: Data reflects Bourbon sales by volume separated by price category. %CHG indicates the percentage increase or decrease to the value from the previous year. (Distilled Spirits Council of the United States, 2015)

Table 3

BOURBON SUPPLIERS GROSS REVENUES (MILLIONS)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| YEAR | VALUE | %CHG | PREMIUM | %CHG | HIGH END PREMIUM | %CHG | SUPER PREMIUM | %CHG | GRAND TOTAL | %CHG |
| 2003 | $ 148 |  | $ 339 |  | $ 768 |  | $ 63 |  | $ 1,318 |  |
| 2004 | $ 151 | **2%** | $ 369 | **9%** | $ 837 | **9%** | $ 74 | **17%** | $ 1,431 | **9%** |
| 2005 | $ 145 | **-4%** | $ 380 | **3%** | $ 938 | **12%** | $ 84 | **14%** | $ 1,547 | **8%** |
| 2006 | $ 140 | **-3%** | $ 393 | **3%** | $ 1,020 | **9%** | $ 98 | **17%** | $ 1,651 | **7%** |
| 2007 | $ 139 | **-1%** | $ 401 | **2%** | $ 1,079 | **6%** | $ 112 | **14%** | $ 1,731 | **5%** |
| 2008 | $ 142 | **2%** | $ 406 | **1%** | $ 1,142 | **6%** | $ 143 | **28%** | $ 1,833 | **6%** |
| 2009 | $ 153 | **8%** | $ 424 | **4%** | $ 1,115 | **-2%** | $ 137 | **-4%** | $ 1,829 | **0%** |
| 2010 | $ 152 | **-1%** | $ 439 | **4%** | $ 1,154 | **3%** | $ 161 | **18%** | $ 1,906 | **4%** |
| 2011 | $ 150 | **-1%** | $ 456 | **4%** | $ 1,272 | **10%** | $ 194 | **20%** | $ 2,072 | **9%** |
| 2012 | $ 157 | **5%** | $ 499 | **9%** | $ 1,344 | **6%** | $ 222 | **14%** | $ 2,222 | **7%** |
| 2013 | $ 172 | **10%** | $ 515 | **3%** | $ 1,490 | **11%** | $ 273 | **23%** | $ 2,450 | **10%** |
| 2014 | $ 181 | **5%** | $ 566 | **10%** | $ 1,611 | **8%** | $ 325 | **19%** | $ 2,683 | **10%** |
| 2002-2009 | 3% |  | 25% |  | 45% |  | 117% |  | 39% |  |
| 2009-2014 | 18% |  | 33% |  | 44% |  | 137% |  | 47% |  |
| TOTAL | 22% |  | 67% |  | 110% |  | 416% |  | 104% |  |

Note: Data reflects Bourbon revenue in millions of dollars, separated by price category. %CHG indicates the percentage increase or decrease to the value from the previous year. (Distilled Spirits Council of the United States, 2015).

Figures

Figure 1. Pie chart showing the relationship between whiskey vs Bourbon whiskey and total whiskey sales vs other distilled spirits (Table 1).

Figure 2. Line chart showing the percent change from the previous year in both volume produced and revenue from sales (Tables 2 & 3).

Figure 3. Mixed chart showing the top 10 bourbon importing countries. The bar is showing the top spenders in US Dollars, which is labeled on the left, and the line is showing the top importers by volume, which is labeled on the right (Distilled Spirits Council of the United States, 2015).

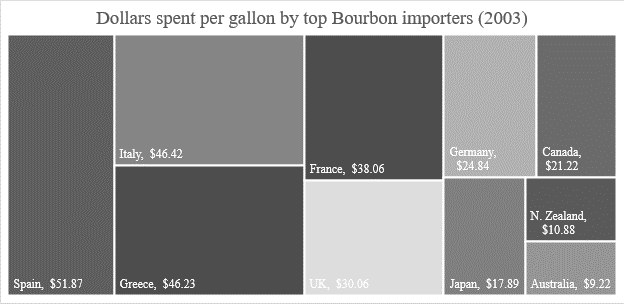


Figure 4. This treemap chart more clearly shows which countries were buying premium Bourbon in 2003 (Distilled Spirits Council of the United States, 2015).

Figures 5 & 6. These scatter chart shows us how demand for higher quality Bourbon affected the production and sales of different types of Bourbon (Tables 2 & 3).