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Diploma Thesis Abstract

Analysis of the American Craft Beer Industry

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Summary

This thesis aims to analyze the American Craft Beer Industry and the immense growth it has experienced in the recent years. The main factors that will be analyzed include a set of legislative elements that have gone through recent reform in response to changes in the American beer industry. The amount of the state excise tax per gallon, population density, and beer consumption per capita are also analyzed as secondary effects to explain the size and growth of the craft beer industry.

The key legislative components (franchise laws, self-distribution rights, and excise tax breaks) are explained and analyzed in a manner, which can effectively display theoretical value to the craft beer industry from both literature review and industry experts' publications. Additionally, their historical existence and participation in the craft beer industry is analyzed as support to the growing industry segment.

The hypothesis testing and statistical data analysis was carried out using data from industry participants, trade organizations, and certain government organizations as well. The statistical analysis takes precedent of importance to the theoretical explanations as the theoretical explanations are aimed at supporting the understanding of the variables being tested.

Keywords

Beer, Craft Beer, Franchise Laws, Self-Distribution Rights, Excise Taxes, United States Beer Industry

Objectives

One of the goals of this work will be to evaluate whether or not the existence of franchise law, self-distribution rights, and excise tax breaks at the state level for small brewers influence the proliferation of the number of craft breweries within each state. These laws have all been recently either created or changed to accommodate craft brewers within the last 25 years and are continuing to be modified and updated to this day. The amount of the state excise tax per gallon, population density, and beer consumption per capita are

also analyzed as secondary effects to explain the size and growth of the craft beer industry. Special attention is paid towards the legislative effects in the study because of the intense scrutiny they are under from various parties within the beer industry.

Methodology

A large majority of both franchise law data and self-distribution rights data for all 51 (including Washington D.C.) was collected from the individual state's legislative code from their own respective online access points. All of the data was taken from the most recent available public version of the legislative code for each state, which for nearly all cases had been updated within the past year. The additional data for the remaining variables was obtained through various trade organizations' statistics departments as well as the federal government of the United Stats.

In order to test the hypotheses in this thesis, multiple linear regression models will be constructed to properly evaluate relationships between the variables within the dataset. In all models, the dependent variables being tested is the number of breweries per 100,000 inhabitants in addition to the brewery per capita growth rate of each state. All of the models use the existence of franchise laws benefitting craft brewers, self-distribution rights for brewers, excise tax breaks for small brewers, population density, state excise tax rate and beer consumption per capita as independent variables. The analysis is carried out using two-equation, multivariate ordinary least squares regressions at the national level and additional models for the Northeastern, Midwestern, Southern, and Western regions of the United States of America. In order to test and compare the effects of the same six independent variables in the different regions, four more separate regression models were ran in order to evaluate the same relationships among the endogenous and exogenous variables.

Results and Discussion

On all levels of this study (national and regional) our hypotheses could not be absolutely confirmed, however certain aspects within them held true. At the national level we can conclude that self-distribution rights, population density, and beer consumption per capita

all play a significant role in explaining variances between states in their number of breweries per capita. The presence of self-distribution rights and the level of beer consumption per capita are both positively correlated with the amount of breweries per capita. Interestingly, we found that as population density increases, the amount of breweries per capita will slightly decrease. Also at the national level, we can conclude that self distribution rights, population density and state excise tax rates per gallon all play a significant role in explaining the variance in brewery per capita growth in the United States from the year 2012-2013. From this we can say the state excise tax rate per gallon and population density have a negative correlation with the brewery per capita growth and that self distribution rights is positively correlated with it.

In total, the results of this study were somewhat surprising. The aim was to confirm and to see at what level the laws impacted the proliferation of the industry and in the end with a few exceptions the laws had very little significant effects. I believe this suggests that the massive expansion of the craft brewing industry in recent years can also be attributed to consumer taste. Perhaps the laws are also a factor in the growing industry but the primary driver must be the consumer and the ever-increasing demand for a differentiated, well-crafted beer.

Selected Sources

Hindy, S. (2014). *The Craft Beer Revolution: How a Band of Microbrewers is Transforming the World's Favorite Drink.* New York, New York: Palgrave MacMillan.

O'Malley, M. (2015, January 8). Beer Distributor Outlook on Craft Beer Industry [E-mail interview].

Patterson, M., & Pullen, N. (2014). *The Geography of Beer: Regions, Environment, and Societies*. Springer.

Tremblay, V., & Tremblay, C. (2005). *The U.S. brewing industry: Data and economic analysis*. Cambridge, Mass.: MIT Press.