

## **Attracting Entry Level Drinkers: Are Wine Coolers a Gateway to Wine Consumption?**

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### **Abstract**

One of the biggest obstacles facing wine producers today is attracting entry level drinkers. This category is important for two reasons: First, as today's core wine drinkers, the baby boom generation, ages, total wine consumption will fall. Also, the 21-30 year old age group is the fastest growing population group in the U.S. Entry level drinkers, 21-30 year old, thus represent the largest group of potential consumers. Recent overtures to this group include products by hard liquor producers such as Jack Daniels, Skyy Blue vodka, Stolichnya vodka and Sauza tequila, all of which offer flavored drinks appealing to entry level drinkers. The wine industry has also targeted entry level drinkers with products appealing to a younger palate such as fruit flavored wines under branded names such as Alice White, Abor Mist, Talus Cellars and Almaden Sangria. Ostensibly, one of the goals of these producers is to produce some brand loyalty which they hope will carry over to the main product line. This paper tests the hypothesis that appealing to consumers with entry level products will result in consumption of the main product line. The paper begins with a overview of wine consumption in the U.S. We then present a theoretical model of consumer behavior in which the consumption of entry level products leads to consumption of main product lines. We then test this model empirically using the consumption of wine coolers as a gateway to future wine consumption. The paper has important marketing ramifications. If wine coolers act as a gateway to wine consumption, then marketing efforts aimed at increasing wine cooler consumption will eventually lead to increased wine consumption. However, if the opposite is true and wine coolers act as a substitute for wine consumption, then marketing efforts aimed at increasing wine cooler consumption will decrease wine consumption. Using data on wine and wine cooler consumption for fifty states and the District of Columbia for the years 1980-2001, our results show that wine coolers do not act as a gateway to wine consumption.

## Introduction

One of the biggest obstacles facing wine producers today is attracting entry level drinkers. Recent overtures to this group include products by hard liquor producers such as Jack Daniels, Skyy Blue vodka, Stolichnya vodka and Sauza tequila, all of which offer flavored drinks appealing to entry level drinkers. The wine industry has also targeted entry level drinkers with products appealing to a younger palate such as fruit flavored wines under branded names such as Alice White, Abor Mist, Talus Cellars and Almaden Sangria. Much of this strategy is based on conventional wisdom in the wine industry that entry level products will lead to consumption of the main product line. For example, it is accepted as “common knowledge”, that increased wine cooler consumption in the 1980’s acted as a gateway to increased wine consumption in the 1990’s.<sup>1</sup> This paper test the conventional wisdom held by many in the wine industry that wine coolers acted as a gateway to wine consumption. The results of this paper have important ramifications for the wine industry. If conventional wisdom holds, then marketing products to entry level drinkers will increase future wine consumption. However, if conventional wisdom does not hold, then wine consumption may not increase and may in fact decrease. Given the state of U.S. wine consumption, this can have lasting repercussions.

Wine consumption in the U.S. has consistently lagged behind that of Europe and much of the industrialized world. In 2000, the U.S. ranked thirty-fourth in per capita wine consumption worldwide, behind Slovakia but ahead of Latvia.<sup>2</sup> Figure 1 shows per capita consumption of

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<sup>1</sup> The observation has been made by numerous wine industry professional and was recently stated in a radio interview by Robert Smiley, director of Wine Education at the University of California at Davis, Graduate School of Management.

<sup>2</sup> The Wine Institute.

wine for the years 1934-2002. From 1934 to 1965, per capita wine consumption grew modestly. However, since the mid sixties, three trends are apparent from Figure 1: the boom in wine consumption peaking in the mid 1980's; the fall in wine consumption, reaching a low in the early 1990's; the current boom which began in the mid 1990's.

The initial boom in table wine consumption of the 1970's, which culminated in the early 1980's, has been attributed to consumption by first generation baby boomers, those born between 1946-1955.<sup>3</sup> This age cohort, which reached the legal drinking age of 21 between 1967-1976, drove the boom of 1970's and continues to make up much of today's core wine drinkers.

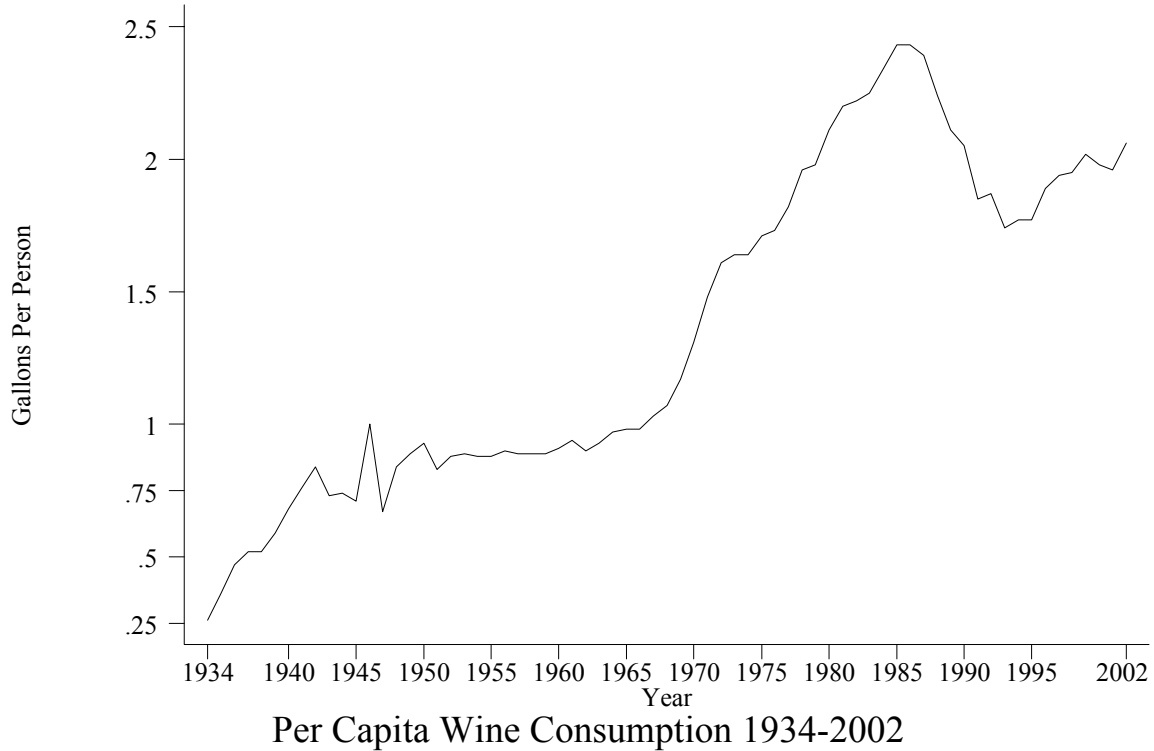
The decline in wine consumption that occurred throughout the 1980's has been attributed to several factors. First, as the first generation baby boom age cohort grew older, reaching ages 35- 44 in 1990, consumption of all alcohol leveled off. That is, although a relative preference for wine generally increases with age, total alcohol consumption including wine decreases with age. Also, as second generation baby boomers and subsequent generations came of age, they consumed considerably less wine than their predecessors. This not only affected wine consumption throughout the 1980's but will also have a ripple effect for future wine consumption.

As noted above, the conventional wisdom in the wine industry is that wine consumption tends to increase with age. However, today's young consumers drink far less wine than older generations

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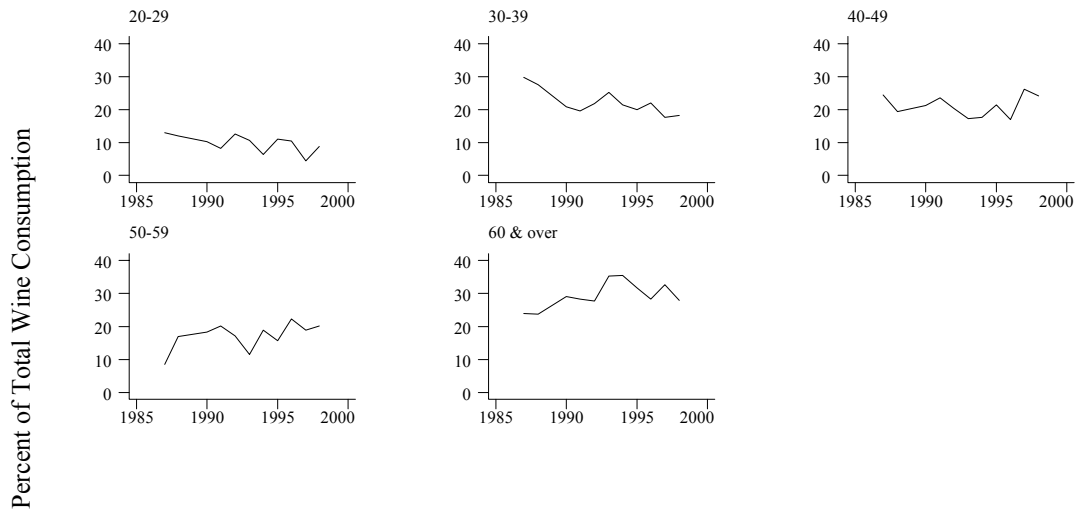
<sup>3</sup> The Wine Market Council.

**Figure 1**



of wine consumers at the same stage in their drinking life. Thus, today's young wine consumers can be expected to consume less wine as they age than previous generations, especially that of the first generation baby boomers. The problem is thus one of changing preferences. In the 1960's and 1970's, there was a greater relative preference for wine among younger drinkers than exists today. Finally, the boom of the 1990's appears to be driven mostly by economic factors rather than a changing preference towards wine consumption. Specifically, rising incomes can explain much of the rise in per capita consumption throughout the 1990's. Furthermore, much of the increase in wine consumption that did occur throughout the 1990's was due to the fact that existing wine drinkers increased their consumption of wine rather than new consumers being introduced to wine consumption. Because the rise in consumption is not driven by the entry of

**Figure 2**



Year  
**Wine Consumption by Age Group 1987-1998**

new consumers, future wine consumption will be negatively affected. That is, as with the first generation of baby boomers, total alcohol consumption can be expected to decrease, including wine consumption.

One factor contributing to the relatively low consumption of wine in the U.S., is the perception that wine is a drink for older consumers. Figure 2 shows the percentages of total wine consumption for six age groups over the period 1987-1998. From Figure 2, you can see, for example, that in 1998 the age group 20-29 consumed less than 10% of total wine consumption. For these consumers, in addition to consuming a small percentage of wine, consumption has also been decreasing. Over the period 1987-1998, the proportion of wine consumed by 20-29 year olds fell by five percent per year. For example, over the period 1987-1998, wine consumption

fell from 13% in 1987 to 8.8% in 1998.

Similarly, for the age group 30-39 consumption was less than 20% of total wine consumption in 1998. Again, however, for this age group wine consumption has been decreasing. From 1987-1998, the percent of wine consumed by 30-39 year old's fell by two percent per year, falling from approximately 30% in 1987 to less than 18.3% percent in 1998.

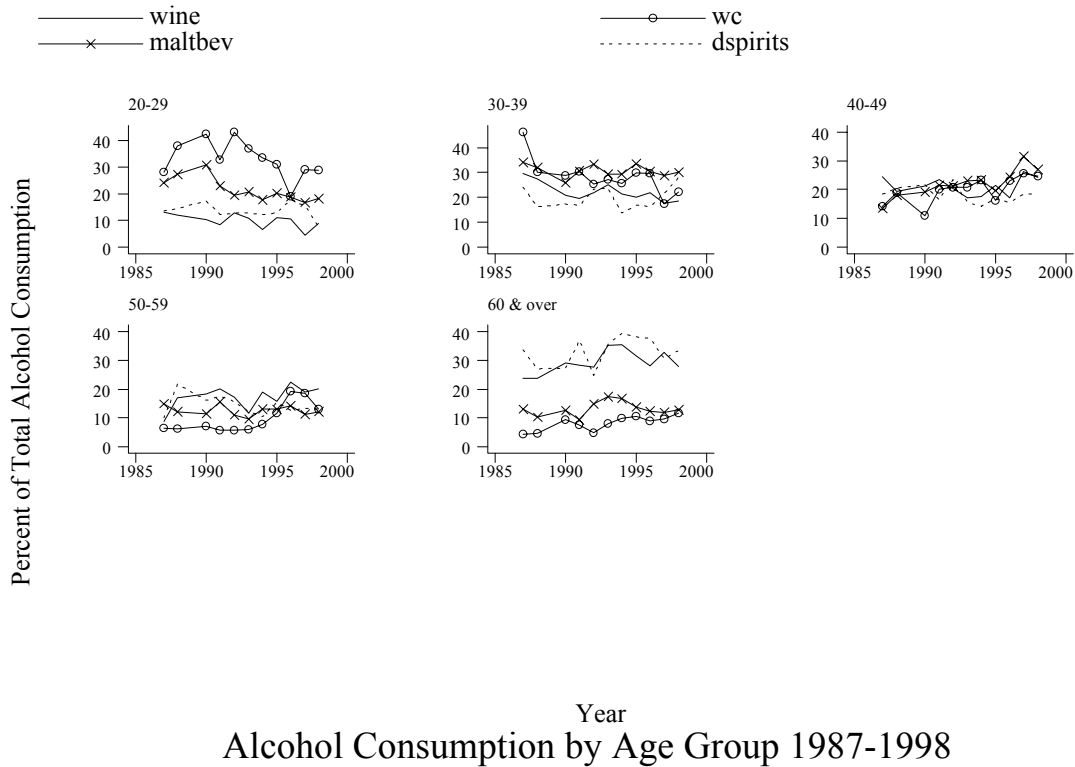
For the age group 40-49, although there has been some year to year variation, consumption has essentially remained constant over the period 1987-1998. For example, consumption of wine varied between approximately 20% - 25% of total wine consumption over the period 1987-1998, with consumption in 1998 at 24.2% of total wine consumption.

Not until the 50-59 age group do we observe a rising trend in wine consumption. The proportion of wine consumed by 50 - 59 year old's increased 4% per year from 1987-1998, rising from 8.6% in 1988 to 20.2% in 1998.

For the age group 60 & over we observe two trends. First, wine consumption rises from 23% in 1987 to 35% in 1994. Then, from 1994, wine consumption decreases to 27% of total wine consumption in 1998. For the entire period, the proportion of wine consumed increased slightly by 2% per year.

Two main observation are evident from Figure 2. First, U.S. wine consumption increases with age, confirming the idea that wine is perceived as a drink for older consumers. In 1998 nearly three fourths of total wine consumption in the U.S. was by those aged forty and older. Second, not only do younger consumers (those of legal drinking age below 40) drink a relatively small proportion of total wine consumption, but wine consumption for this group has been decreasing. The second point is especially foreboding for the wine industry if an individual's

**Figure 3**



preference for wine consumption is formed early in ones life.

To get a more complete picture of the alcoholic beverage preferences of U.S. consumers, Figure 3 shows wine, wine cooler, beer and spirits consumption by age group. Note that the scales have been adjusted for each age group so that the relative preferences can be more clearly identified. Figure 3 is quite telling in its description of U.S. wine consumption. Consider first those at the beginning of their legal drinking life, age 20-29. Relative preferences for this group are clear. Not only do they account for a relatively small amount of total wine consumption, but wine is the least favored alcoholic beverage for this age group. Wine coolers and beer are the alcoholic drink of choice for this age cohort followed by distilled spirits and wine.

For the 30-39 age group, again wine is one of the least favored alcoholic beverages.

Similar to the younger age group, wine coolers and beer are the drinks of choice, followed by wine and spirits. For the age group 40-49 no clear preferences emerge. Not until the 50-59 age group does wine become the alcoholic beverage of choice, followed by spirits, beer and wine coolers. For the age group 60 and over, wine and spirits are clearly the alcoholic beverages of choice with consumption at approximately thirty percent of total for both wine and spirits.

Clearly the untapped market for wine producers is U.S. consumers between 21- 40 years old. Not only do they consume the least amount of wine, this is also the fastest growing age group in the U.S.

The purpose of this paper is to present a model in which the current preference for a good is affected by past consumption choices. Specifically, we analyze the effects of wine cooler consumption on the consumption of table wine. We test the hypothesis that wine coolers act as a conduit to future wine consumption. As noted above, younger consumers drink a relatively small proportion of wine. Additionally, although wine consumption does increase with age, today's current group of younger drinker consumes considerably less than their baby boomer (those born between 1946-1955) cohorts.<sup>4</sup> One way of regaining the younger market share is to introduce them to wine in a format that is more amenable to their tastes, namely wine coolers. If wine coolers do act as a conduit to future wine consumption, then increases in wine cooler consumption may eventually lead to greater wine consumption. The practical applications of this hypothesis are clear. Since wine coolers are the alcoholic beverage of choice for the younger age groups, marketing efforts aimed at increasing wine cooler consumption to the 21-40 year old age cohort may increase future wine consumption for this group as they move through their

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<sup>4</sup> Wine Market Council.

consumption life. To test our hypothesis, we present a theoretical model of consumer behavior and examine data on table wine and wine cooler consumption.

### **The Standard Neo-Classical Model Consumer Behavior**

Standard microeconomic analysis usually begins with the assumption of static preferences. For example, the standard neo-classical model of consumer behavior assumes a utility function of the form

$$U=U(X_1, \dots, X_n)$$

where

$$\frac{\partial U}{\partial X_i} \geq 0 \text{ and } \frac{\partial^2 U}{\partial X_i^2} \leq 0 \quad \forall i \quad i=1, \dots, n$$

for all utility enhancing economic goods. This, however, assumes that preferences for the goods are stable and unchanging. In this paper we use a variant of the model of Stigler and Becker (1977) which allows current and future preferences to be affected by, among other things, current and past consumption. That is, although preferences are assumed stable, how those preferences are satisfied is shaped by life experiences. This is true for most goods including music, art, food and, for the purposes of this paper, wine. For example, the type of music you listen to is most assuredly affected by what type of music you are exposed during your formative years. Those exposed to classical music when young are probably more likely to listen to classical music when they get older and make their own consumption purchases. In addition, it can be argued that the more one listens to a certain type of music, the more appreciation for that music one gains. This is surely true of classical music, the example used by Stigler and Becker, but is no less true for other types of musical genres. The same analysis can be applied for most goods.

Consider U.S. wine consumption. As noted above, we know that consumption per capita

is much greater in European nations than in the U.S. Clearly the culture of wine consumption is different in the United States than in Europe. In Europe, individuals are exposed to wine consumption earlier and thus grow to appreciate wine more than their U.S. counterparts. There is definitely a demand for alcoholic beverages in the U.S.; it's just not being met by the consumption of wine. How that demand is satisfied is determined largely by the cultural institutions influencing U.S. consumers. Wine producers worldwide thus face a large untapped segment of potential wine consumers in the U.S.

### **The Stigler-Becker Reformulated Model of Consumption**

To examine wine consumption in the U.S., consider the Stigler and Becker (1977) model of the form

$$U_t = U_t(W_t, X_t)$$

where  $W_t$  is not just wine consumption in period  $t$  but “wine connoisseurship” consumed and produced in period  $t$ .

$X_t$  is a vector consisting of all goods other than wine consumed and produced in period  $t$ .

Wine connoisseurship is produced by the function

$$W_t = W_t(W_{t-1}, W_{t-2}, \dots, W_{t-n}, E_w)$$

where  $W_{t-1}$  is wine connoisseurship consumed in period  $t-1$  and

$E_w$  is a measure of education and other factors that effect wine connoisseurship.

Clearly,

$$\frac{\partial W_t}{\partial W_{t-n}} \geq 0 \text{ for } n = 1, \dots, \infty \text{ and } \frac{\partial W_t}{\partial E_w} \geq 0.$$

The first partial states simply that the more wine you consume in earlier periods, the more you learn to appreciate wine, while the second states that the more wine related education you gain

the more you will learn to appreciate wine.

To this point, the above model is a straightforward application of the Stigler and Becker (1977) model applied to wine consumption. What this paper proposes next is to argue that current wine consumption not only depends on previous wine consumption but also on prior consumption of wine related products. This behavior would explain the introduction by hard liquor producers such as Jack Daniels, Skyy Blue vodka, Stolichnya vodka and Sauza tequila, of flavored drinks appealing to entry level drinkers. In a similar fashion, wine producers have also targeted entry level drinkers with products appealing to a younger palate with fruit flavored wines under such branded names as Alice White, Abor Mist, Talus Cellars and Almaden Sangria. One explanation for the introduction of these products is that the producers are trying to create brand loyalty among younger drinkers that will carry over to the main product lines as the target consumers age.

### **The Adapted Stigler-Becker Model**

The model of Stigler and Becker (1977) is easily adapted to accommodate the effect of related products on the preferences for a main product. For example, if we assume that wine connoisseurship is not just a function of previous wine consumption but also of prior wine cooler consumption then we get,

$$W_t = W_t(W_{t-1}, W_{t-2}, \dots, WC_{t-n}, WC_{t-1}, WC_{t-2}, \dots, WC_{t-k}, E_W)$$

where,

$$\frac{\partial W_t}{\partial W_{t-n}} \geq 0 \text{ for } n = 1, \dots, \infty \text{ and } \frac{\partial W_t}{\partial E_W} \geq 0 \text{ are defined as before.}$$

The term,

$\frac{\partial W_t}{\partial WC_{t-k}}$  represents the effect of past wine cooler consumption on current wine consumption.

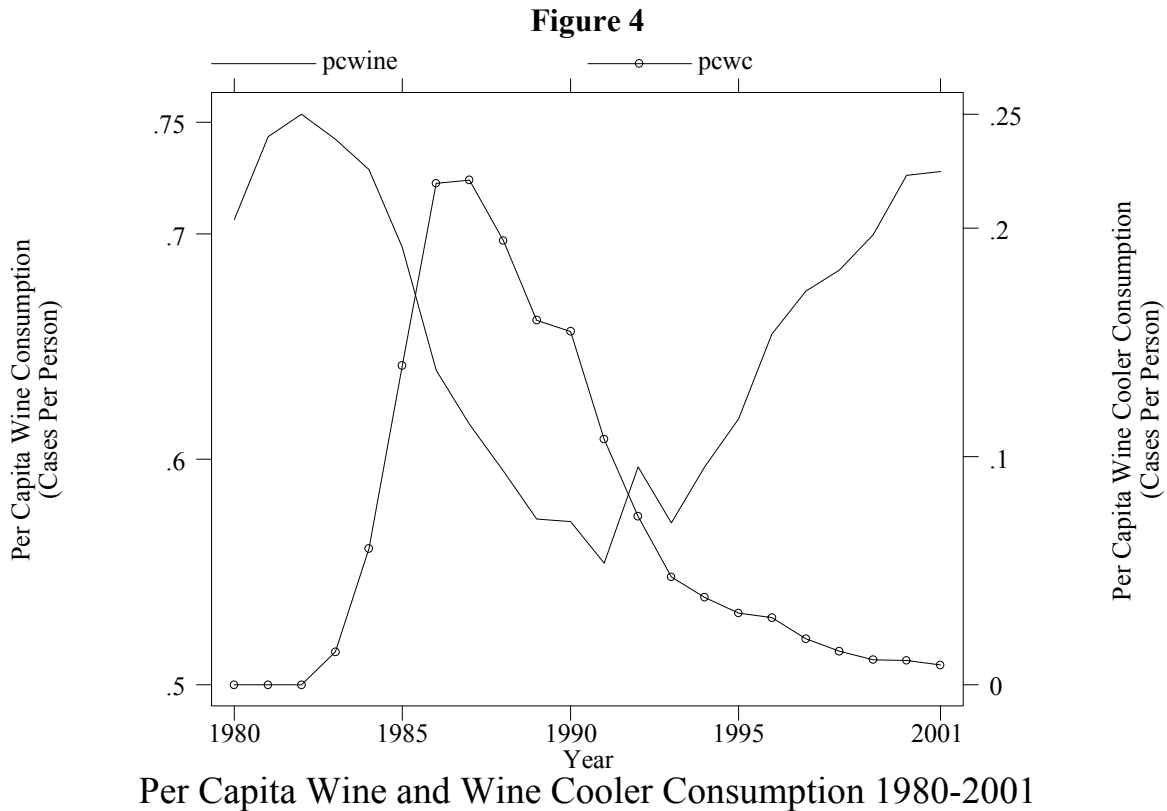
The sign of the derivative indicates whether past consumption of wine coolers increase or decrease future wine consumption. If  $\frac{\partial W_t}{\partial WC_{t-k}} \geq 0$ , then wine coolers act as a conduit to future wine consumption. Increasing current wine cooler consumption would increase future wine consumption. However, if  $\frac{\partial W_t}{\partial WC_{t-k}} \leq 0$ , then wine coolers act as a substitute for current and future wine consumption.

To test the model empirically, we examine data on wine cooler and table wine consumption. If wine coolers do act as a conduit, shifting preferences towards wine, then you would expect to see increases in wine cooler consumption lead to an eventual increase in wine consumption.

### **The Data**

To examine the relationship between wine and wine cooler consumption we examine state level data on wine and wine cooler consumption, measured in 9-liter cases, for all 50 states plus the District of Columbia. Data on wine consumption is for the years 1980-2001, while data on wine coolers is for 1983-2001. We also adjust for income and population at the state level for the relevant period. The measure of income used is current personal income for each state deflated using the consumer price index with 1982-1984 as the base.

The effect of wine cooler consumption on wine consumption is especially conducive to empirical analysis because of the unique spike that occurred during the late 1980's and early 1990's in wine cooler consumption. Figure 4 shows aggregate U.S. wine and wine cooler



consumption, in cases, for the years 1980 to 2001, the spike in wine cooler consumption is clearly evident. From Figure 4 you can see that the three distinct periods of wine consumption analyzed earlier coincide with distinct periods of wine cooler consumption. From Figure 4, it appears that wine coolers and wine acted as substitutes over the period of the wine cooler boom.<sup>5</sup> The period of interest in terms of the theoretical model however is wine consumption in the period following the increase in wine cooler consumption. That is, did the consumers of wine coolers during the spike in consumption develop a taste for wine and eventually switch to wine after the trend subsided?

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<sup>5</sup> Note that this is not the definition of substitutes as used in standard economics theory which relates the consumption of one good to another in response to a price change.

**Table 1**

Regression Results				
Sample Size = 908				
Adjusted R <sup>2</sup> = .9726				
Variable	Coefficient	Std Error	t-Statistic	P-value
Time	-0.0219	0.00209	-10.47	0
Real income	0.82501	0.10743	7.68	0
Constant	35.1195	3.42769	10.25	0

**Methodology**

To test the model we regress per capita wine consumption for each state on past wine consumption and past and present wine cooler consumption in that state using the linearly additive model,

$$\text{Per Capita Wine}_{t,j} = \beta_{t,j} + \sum_{i=1}^n \text{PerCapitaWine}_{t-n,j} + \sum_{j=0}^k \text{PerCapitaWC}_{t-k,j} + \text{Income}_{t,j} + \varepsilon_{t,j}$$

where the time subscripts t, t-j, and t-k represent the period and the subscript j represents the state. Using per capita consumption isolates any changes in wine consumption in each state due to changes in that states population while including state income separates out changes in a state's consumption due to income changes in that state. All variables except the time variable are measured in natural logarithms. Ordinary least squares regression produced the following results.

**Results**

Table 1 shows the summary statistics for the regression results. Despite the variation, from 1980 - 2001 per capita consumption of wine has fallen by approximately a 2% per year.

**Table 2**

Past Wine Consumption				
Variable	Coefficient	Std Error	t-Statistic	P-value
pcwine <sub>t-1</sub>	0.01501	0.00636	2.36	0.018
pcwine <sub>t-2</sub>	0.01163	0.0064	1.82	0.069
pcwine <sub>t-3</sub>	0.0125	0.00632	1.98	0.049
pcwine <sub>t-4</sub>	0.02706	0.00636	4.25	0
pcwine <sub>t-5</sub>	0.015	0.00639	2.35	0.019
pcwine <sub>t-6</sub>	0.02245	0.00648	3.46	0.001
pcwine <sub>t-7</sub>	0.01354	0.00637	2.13	0.034
pcwine <sub>t-8</sub>	0.01174	0.00641	1.83	0.067
pcwine <sub>t-9</sub>	0.01925	0.00636	3.02	0.003
pcwine <sub>t-10</sub>	0.01418	0.00646	2.19	0.028

The next variable of interest is income. The regression coefficient for income is positive and statistically significant at the five percent level, indicating a positive correlation between wine consumption and income. Since both per capita wine consumption and income are measured in natural logarithms, the ordinary least squared regression coefficient can be interpreted as an income elasticity.<sup>6</sup> In the economic literature, a good for which consumption rises with income is referred to as a normal good. A critical value for income elasticities is one, which separates relatively income insensitive normal goods from income sensitive luxury goods. The estimated income elasticity for wine of .825, indicates that for every one percent change in income, per capita wine consumption changes by just under one percent (.825%). This is similar to the estimated income elasticity of beer of .84 and much lower than the estimated income elasticity of spirits of 2.5.<sup>7</sup> The income elasticity of wine indicates that the per capita consumption of wine is

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<sup>6</sup> The income elasticity of a good is defined as  $\frac{\partial X_i}{\partial I} \cdot \frac{I}{X_i}$ , where  $X_i$  represents consumption of good  $i$  and  $I$  represents income.

<sup>7</sup> Houthakker and Taylor (1970).

**Table 3**

Wine Cooler Consumption				
Variable	Coefficient	Std Error	t-Statistic	P-value
pcwc	0.02662	0.00884	3.01	0.003
pcwc <sub>t-1</sub>	-0.0122	0.00586	-2.07	0.038
pcwc <sub>t-2</sub>	-0.0166	0.00579	-2.88	0.004
pcwc <sub>t-3</sub>	-0.01	0.00581	-1.71	0.087
pcwc <sub>t-4</sub>	-0.0136	0.00573	-2.38	0.017
pcwc <sub>t-5</sub>	-0.0183	0.0058	-3.16	0.002
pcwc <sub>t-6</sub>	-0.0114	0.00577	-1.97	0.049
pcwc <sub>t-7</sub>	-0.0088	0.00578	-1.52	0.129
pcwc <sub>t-8</sub>	-0.0124	0.00575	-2.15	0.032
pcwc <sub>t-9</sub>	-0.0218	0.00582	-3.75	0
pcwc <sub>t-10</sub>	-0.0151	0.00572	-2.64	0.008

less susceptible to fluctuations in income than for example spirits.

Consider next the effect of past wine consumption on current wine consumption. Per capita wine consumption was lagged for ten periods. The coefficients of the lagged per capita wine variables are positive for all ten periods and all are statistically significant at either the five or ten percent level. These results are consistent with the Stigler and Becker model where the preference for wine consumption is reinforced by past consumption. Although the estimated coefficients of lagged wine consumption are positive and significant, the coefficients are relatively small. Again because the natural logarithm of the per capita wine and lagged per capita wine are used, the coefficients can be interpreted as elasticities. From the regression output, you can see that the estimated coefficients range from .011 to .027, or that a ten percent increase in past wine consumption increases current wine consumption by less than one half of one percent.

The main results of interest for our purposes are the estimated coefficients on current and lagged wine cooler consumption. To examine the effect of wine cooler consumption on wine

consumption, the regression included current per capita wine cooler consumption and past per capita wine cooler consumption lagged for ten periods. The coefficient of the current per capita wine cooler consumption is positive and statistically significant at the five percent level, indicating a degree of complementarity between current wine and wine cooler consumption. More interesting, however, are the results of the lagged per capita wine cooler consumption. All the coefficients of the lagged per capita wine cooler consumption variables are negative and most are statistically significant at the five percent level. Again however the coefficients are relatively small indicating the effect on wine consumption is negligible. Nevertheless, the results of the lagged per capita wine cooler consumption are not consistent with the hypothesis that wine coolers act as a gateway to future wine consumption. The results are more consistent with the idea that wine coolers act as a substitute for wine, diverting consumers away from wine toward wine coolers.

Note also that there is a significant amount of variation in per capita wine consumption by state. Relative to the base state of Alaska, nearly all estimated state coefficients are statistically significant and vary considerably in both sign and magnitude. For example in 2001, per capita wine consumption varied from a low of .234 cases per person in Mississippi to a high of 1.973 cases per person in Washington D.C.

## **Conclusion**

The positive effect of lagged per capita wine consumption on current wine consumption is consistent with the model of Stigler and Becker where preferences are reinforced by past consumption. The effects of lagged wine cooler consumption, however, do not support the hypothesis that wine coolers act as a gateway to future wine consumption. In fact the opposite

appears to be true with respect to past wine cooler consumption. That is, past wine cooler consumption appears to decrease current wine consumption. There is a statistically significant, but small, positive correlation between current per capita wine cooler consumption and per capita wine consumption indicating some complementarity between wine and wine coolers.

The results of this study show that the wine cooler boom of the late eighties did not lead to increased consumption of table wine. The implication for today's wine and spirits producers mentioned earlier is that the efforts aimed at attracting entry level drinkers with related products will not necessarily lead to increased consumption of the core products in the future. The results are, however, consistent with the strategy of expanding product lines as a means of increasing market share. That is, although wine coolers extract some consumers from the wine market, the total market share of a firm producing wine and wine coolers may expand beyond that from just producing wine.

**Table 4**

State Variables				
State	Coefficient	Std Error	t-Statistic	P-value
Arizona	-0.0976	0.04371	-2.23	0.026
Arkansas	-1.0335	0.05426	-19.05	0
California	0.30433	0.03356	9.07	0
Colorado	-0.0049	0.03482	-0.14	0.888
Connecticut	0.06822	0.03762	1.81	0.07
Delaware	0.0086	0.03379	0.25	0.799
Washington D.C.	0.61159	0.03705	16.51	0
Florida	0.07741	0.03638	2.13	0.034
Georgia	-0.4162	0.04017	-10.36	0
Hawaii	0.063	0.03436	1.83	0.067
Illinois	-0.3639	0.03374	-10.79	0
Indiana	-0.5533	0.04038	-13.7	0
Kansas	-1.0789	0.03908	-27.61	0
Kentucky	-0.9726	0.04959	-19.61	0
Louisiana	-0.4119	0.05009	-8.22	0
Maryland	-0.2487	0.03288	-7.56	0
Massachusetts	0.19601	0.03307	5.93	0
Minnesota	-0.4658	0.03472	-13.41	0
Missouri	-0.5741	0.03925	-14.63	0
Nebraska	-0.6354	0.03865	-16.44	0
Nevada	0.54467	0.03465	15.72	0
New Jersey	0.12395	0.03414	3.63	0
New Mexico	-0.2787	0.05327	-5.23	0
New York	-0.0475	0.03348	-1.42	0.156
North Dakota	-0.86	0.04746	-18.12	0
Oklahoma	-0.8942	0.04777	-18.72	0
Rhode Island	0.21537	0.03575	6.02	0
South Carolina	-0.412	0.04939	-8.34	0
South Dakota	-0.9815	0.04585	-21.41	0
Tennessee	-0.8602	0.04308	-19.97	0
Texas	-0.5802	0.04056	-14.3	0
Wisconsin	-0.28	0.03854	-7.26	0
Alabama	-0.5349	0.04904	-10.91	0
Idaho	0.33166	0.04931	6.73	0
Iowa	-1.0457	0.04119	-25.39	0
Maine	0.00281	0.04368	0.06	0.949
Michigan	-0.5334	0.0358	-14.9	0
Mississippi	-1.2107	0.06183	-19.58	0

Montana	-0.0186	0.05021	-0.37	0.711
New Hampshire	0.4046	0.03321	12.18	0
North Carolina	-0.5612	0.04176	-13.44	0
Ohio	-0.6193	0.03726	-16.62	0
Oregon	0.37031	0.0391	9.47	0
Pennsylvania	-0.6629	0.03604	-18.39	0
Utah	-0.8153	0.05349	-15.24	0
Vermont	0.33014	0.04154	7.95	0
Virginia	-0.1549	0.03418	-4.53	0
Washington	0.22914	0.03512	6.52	0
West Virginia	-1.0694	0.05536	-19.32	0
Wyoming	-0.5963	0.04031	-14.8	0

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