MERCATUS CENTER
George Mason University

Written Testimony of
Jerry Ellig, Ph.D., Senior Research Fellow
Mercatus Center at George Mason University

Submitted to the
State of Tennessee
Joint Study Committee on Wine in Grocery Stores

December 8, 2009

Chairman Ketron, Chairman Todd, and Members of the Committee:

Thank you for your time and the invitation to testify today. I am an economist and research fellow at the Mercatus Center, a 501(c)(3) research, educational, and outreach organization affiliated with George Mason University in Arlington, Virginia.[1] I have been with the Mercatus Center for the past 13 years, with the exception of a two-year leave of absence from 2001–03 when I served as deputy director of the Office of Policy Planning at the Federal Trade Commission (FTC). Much of my academic research assesses the effects of regulation on the welfare of consumers—including wine consumers. I've co-authored several studies on wine retailing, including the FTC's 2003 report on anti-competitive barriers to online wine sales.[2]

Those who want to make changes in long-established laws and regulations often bear a heavy burden of proof; they are expected to prove that the current way of doing things creates problems and that some new proposal would make things better. The status quo gets the benefit of the doubt. This helps ensure that policy decisions are deliberative and prudent.

---

[1] This testimony reflects only the views of its author and does not represent an official position of George Mason University. I'm grateful to Jakina Debnam for research assistance.

[2] *Possible Anticompetitive Barriers to E-Commerce: Wine*, Report from the Staff of the Federal Trade Commission (July 2003), available at http://www.ftc.gov/os/2003/07/winereport2.pdf; Alan E. Wiseman and Jerry Ellig, "Market and Nonmarket Barriers to Internet Wine Sales: The Case of Virginia," *Business and Politics* 6:2 (2004); Jerry Ellig and Alan E. Wiseman, "The Economics of Direct Wine Shipping," *Journal of Law, Economics, & Policy* 3:2 (Spring 2007), pp. 255–74; Jerry Ellig and Alan E. Wiseman, "Interstate Trade Barriers and Potential Regulatory Competition: The Case of Virginia's Direct Wine Shipping Ban," *Journal of Private Enterprise* 19:2 (Spring 2004), pp. 26–42.

But as an economist and former federal antitrust official, I approach policies that restrict competition a bit differently. We know from experience that competition tends to give consumers the mix of price, quality, service, and other good things that they most prefer. For this reason, I encourage you to give competition, rather than the status quo, the benefit of the doubt.

If we are concerned about the welfare of consumers, restrictions ought not be imposed on competition unless the restrictions accomplish some clear public purpose. Furthermore, the restriction should be no more severe than necessary to accomplish the public purpose. This helps ensure that the government accomplishes its policy goal at the lowest possible cost to consumers.

Let me briefly summarize the points I'd like to make in this testimony:

- Three separate pieces of evidence suggest that restricting wine sales to liquor stores imposes substantial costs on consumers: (1) The experience of other states that changed their laws to permit grocery stores to sell wine, (2) A recent simulation of the effects of allowing wine sales in New York grocery stores, and (3) A review of some wine price and availability data from Northern Virginia, a market located in a state that allows grocery stores to sell wine. Consumers would benefit the most if a diverse variety of new players could enter the market, including warehouse clubs and wine superstore chains.

- There are two clear, public interest reasons that alcohol sales are regulated differently from sales of other goods and services: prevention of underage access and collection of state tax revenues. While both are important government objectives, both can be achieved with policies less restrictive than allowing only liquor stores to sell wine.

- The fact that 35 states permit grocery stores to sell wine suggests that the majority of states have found manageable ways to prevent underage access that are less restrictive than a ban on wine sales in grocery stores.

- Far from facilitating revenue collection, current policy diminishes state and local tax revenues, though the precise amount is difficult to predict. Under no conceivable circumstances would the sale of wine in grocery stores reduce state revenues.

- In the Fiscal Review Committee's December 2 Fiscal Note, the key assumption driving the sales tax, enforcement tax, excise tax, and municipal inspection fee revenues is the projected 33 percent increase in the volume of wine sales. Studies of other states that changed their laws to permit grocery store wine sales find similar or larger sales increases. Wine consumption patterns in other southern states could justify either a higher or lower figure, depending on which state(s) are taken as the benchmark for comparison. Given this evidence, the Fiscal Note's assumption seems to me to be within the range of reasonable estimates.

- The Fiscal Note's assumption that wine prices would decline by 5 percent may be accurate if the principal new competitors are conventional grocery stores, but it underestimates the price decline if warehouse clubs also become significant wine sellers. Hence, the Fiscal Note may overestimate sales tax revenues. If the state allowed wine superstore chains to compete, the price declines would likely be larger, and the tax revenue estimates would need to be adjusted accordingly.

- The Fiscal Note does not consider whether liquor tax revenues might decline because consumers substitute wine for liquor or because of a decline in consumer traffic through liquor stores. If reduced liquor sales are a concern, the state could ameliorate it by allowing liquor stores to sell food or other merchandise, allowing some food stores to sell liquor, or increasing the number of liquor licenses for stores that would still focus on selling liquor and wine.

I would like to elaborate further on each of these three issues: consumer welfare, underage access, and tax revenues.

Consumer Welfare

Restricting wine sales to liquor stores could harm Tennessee consumers in several ways:

- Market power: Limiting the number of retail stores may give individual stores the ability to unilaterally increase prices above the level that would exist if there were more competition. Restricting the number of stores could also facilitate collusion on prices in places with a very small number of stores. If regulation creates market power, consumers pay higher prices than they otherwise would, and stores earn higher profits than they otherwise would. Consumers may also be harmed if reduced competition reduces incentives for good service, marketing, or other amenities consumers find valuable. If the state licenses enough liquor stores to ensure vigorous competition, then market power concerns may be minimal.

- Increased costs: Restricting wine sales to liquor stores could also make consumers worse off by increasing stores' costs and stifling innovation. Current law locks liquor store owners into one narrow business model: the single-location retail shop that sells only wine and liquor. It is unlikely that this is the lowest-cost or most efficient business model for selling wine or liquor. As a result, even if enough liquor stores are licensed to prevent the exercise of market power, consumers pay higher prices for wine than necessary and receive a lower-quality customer experience because the stores' costs are higher than necessary and they have less incentive to innovate.

- Reduced convenience: Convenience is harder to measure than price savings, but it is a very real factor that has already been mentioned in hearings before this committee. Restricting wine sales to liquor stores means that consumers must visit two different locations to purchase food and wine, which may require two

> different trips if the liquor store is not near the grocery. Given that there are only about 550 liquor stores in Tennessee, restricting wine sales to liquor stores may force many consumers to drive further than they otherwise would. Busy consumers also lose out on the opportunity to pick up a bottle of wine to go with a meal if they happen to be shopping at a time when the grocery store is open but the liquor store is closed. "Reduced convenience" means multiple types of losses for consumers: additional time, gas, and more miles on their cars (as well as safety considerations); more traffic affecting other people -- or they simply do without.

Three separate pieces of evidence suggest that restricting wine sales to liquor stores imposes substantial costs on consumers: (1) the experience of other states that changed their laws to permit grocery stores to sell wine, (2) a recent simulation of the effects of allowing wine sales in New York grocery stores, and (3) a review of some wine price and availability data from Northern Virginia, a market located in a state that allows grocery stores to sell wine.

1. Other states' experience

Since 1969, eight states have changed their laws to permit grocery stores to sell wine. Table 1 shows the results. In two states, Maine and Idaho, wine sales more than doubled as a result. In Montana and Iowa, sales increased by about 75 percent. Alabama saw wine sales increase by 16–83 percent when the reform was first adopted in three counties and by 42 percent after it was extended to all non-dry counties. West Virginia saw a 48–52 percent increase. The smallest increase—13–31 percent—occurred in New Hampshire, where the state retained its wholesale monopoly and prohibited private sellers from charging prices below those in the state liquor stores.

The studies that found these results each have their own strengths and weaknesses. The highest figures in each range almost always come from a study by the Wine Institute, which compared wine sales volume in the year before and the year after the policy change.[3] A drawback of this approach is that it attributes any change in sales over this time period to the policy change rather than any other factors. Thus, it likely overstates the effect of the policy change on sales if sales were trending upward and understates the effect if sales were trending downward.

[3] Wine Institute, *Economic Research Report Prepared for the Winegrowers of California* (March 1986).

Table 1: Wine sales increase when grocery stores sell wine[4]

State	Policy change	Year	% Sales Increase
Washington	Groceries are permitted to purchase out-of-state wine at wholesale prices.	1969	26–48
Maine	Private licensees, including grocery stores, are permitted to sell table wines, and state liquor stores discontinued selling table wines.	1971	137–305
Idaho	Private licensees, including grocery stores, are permitted to sell table wines.	1971	150–234
Alabama	Food stores are permitted to sell table wines in three most populous counties in 1973. This was gradually extended to all non-dry counties by 1980.	1973–1980	16–83
New Hampshire	Grocery stores and other private outlets are permitted to sell table wines, but the Liquor Commission retains a wholesale monopoly and private sellers cannot under-price state liquor stores.	1978	13–31
Montana	Grocery stores are permitted to sell table wines.	1979	74–75
West Virginia	Grocery stores and specialty shops are permitted to sell table wines.	1981	48–52
Iowa	Grocery stores are permitted to sell wine.	1985	72–79

Other studies attempt to control for other factors that might have affected wine sales during the period under study.[5] They use a longer time span and estimate whether the policy change created deviations from longer-term sales trends. This implicitly controls for some other factors that affect longer-term sales trends. Most of the lower percentage sales increase figures in the table are from these studies.

Regardless of the method employed, these studies all show that allowing grocery stores to sell wine increases wine sales, usually by a very large amount. This big increase in sales implies that preventing groceries from selling wine imposes a large cost on consumers. Faced with higher prices and less convenient shopping, consumers often simply chose to go without. Some of the sales increases could simply result from consumers substituting in-state for out-of-state purchases. However, one study found that allowing grocery stores

[4] Source for figures in table: Bradley J. Rickard, "Introducing Wines Into Grocery Stores: Economic Implications and Transitional Issues," American Association of Wine Economists Working Paper No. 48 (October 2009), available at www.wine-economics.org, and other studies cited in the footnotes to this section of the testimony.

[5] Alexander C. Wagenaar and Harold D. Holder, "Changes in Alcohol Consumption Resulting from the Elimination of Retail Wine Monopolies: Results from Five US States," *Journal of Studies on Alcohol* 56 (Sept. 1995), pp. 566–73; Harold D. Holder and Alexander C. Wagenaar, "Effects of the Elimination of a State Monopoly on Distilled Spirits' Retail Sales: A Time-Series Analysis of Iowa," *British Journal of* Addiction 85 (1990), pp. 1615–1625; Scott MacDonald, "The Impact of Increased Availability of Wine in Grocery Stores on Consumption: Four Case Histories," 81 *British Journal of Addiction* (1986), pp. 381–87.

to sell wine had no effect on wine sales in bordering states.[6] This may have occurred because the study examined total sales in bordering states rather than just sales in border regions. Even if some of the increased sales in the states that changed their laws occurred because consumers substituted in-state for out-of-state purchases, the large size of the change suggests that consumers frequently chose to forego a lot of wine when they could not buy it at the grocery store.

2. New York simulation

Like Tennessee, New York licenses private stores to sell liquor and wine. In recent years, New York has considered changing its laws to allow grocery stores to sell wine. A draft study by Cornell University professor J. Bradley Rickard investigates the potential results under a variety of possible scenarios. His simulation provides a range of “if-then” possibilities rather than a prediction of what will happen or the most likely result. All of Rickard’s scenarios envision a substantial increase in wine sales if grocery stores are permitted to sell wine. The sales increases range from 10–60 percent—lower than the ranges indicated by some other states’ experiences, but still substantial.[7]

3. Northern Virginia data

Virginia allows grocery stores, including warehouse clubs, to sell wine. The state also permits wine retailers to own more than one location. In 2004, Ohio State University political scientist Alan Wiseman and I gathered data on the prices and availability of a sample of 78 popular wines in Northern Virginia wine stores and groceries.[8] The retailers we surveyed included single-location wine stores, a wine and beer superstore chain, grocery stores, and warehouse clubs.[9] Our data help show how a retail wine market with a more diverse assortment of players serves diverse consumer needs. The data also demonstrate some of the benefits consumers in Tennessee forego as a result of Tennessee’s restrictive wine retailing laws.

---

[6] Wagenaar and Holder, *supra* note 5, at Table 1.

[7] Bradley J. Rickard, “Introducing Wines Into Grocery Stores: Economic Implications and Transitional Issues,” American Association of Wine Economists Working Paper No. 48 (October 2009), available at www.wine-economics.org. The 10–60 percent figure does not appear in Rickard’s study, because he calculates separate effects for sales of New York and out-of-state wines. For each of the scenarios in his Table 3, I calculated a weighted average assuming that 23 percent of New York wine sales are New York wines and 77 percent are out-of-state wines, based on sales figures in his Table 2.

[8] Our sample consists of the Top 50 restaurant wines identified in *Wine and Spirits* magazine’s 15th annual restaurant poll. The sample actually includes 78 bottles, because *Wine and Spirits* recognizes all relevant bottles that fall under a given winery’s varietal when it identifies the most popular Chardonnays, Merlots, and so forth. For more information, see Alan E. Wiseman and Jerry Ellig, “The Politics of Wine: Trade Barriers, Interest Groups, and the Commerce Clause,” *Journal of Politics* 69:3 (Aug. 2007) at 864-65.

[9] Convenience stores and drug stores can also sell wine in Virginia. We did not include them in our survey because the original purpose of our study was to compare the price and availability of wine online and in retail stores, and we doubted that these types of locations would offer significant price savings or improvements in variety compared to the other retailers we did survey.

Table 2: Availability and pricing of wine in Northern Virginia

Sample size = 78 wines	**Single Location Stores**	**Wine Superstore**	**Grocery Store**	**Warehouse Club**
Average # of wines in sample available	9	41	16	13
# of wines offered at the lowest price	19	36	11	17

a. Single-location wine stores

Although wine is ubiquitously available from a variety of retailers in Virginia, single-location wine stores are still quite competitive. Our sample includes 13 of these stores within a ten-mile radius of McLean, Virginia, a wealthy suburb of Washington, DC. Table 2 shows that one or more of these wine stores offered the lowest price on 19 of the wines in the sample, or 24 percent. On average, though, individual stores had only nine bottles from our sample. This probably reflects the fact that the sample consists of highly popular wines, and the wine stores may specialize in other, harder-to-find wines.

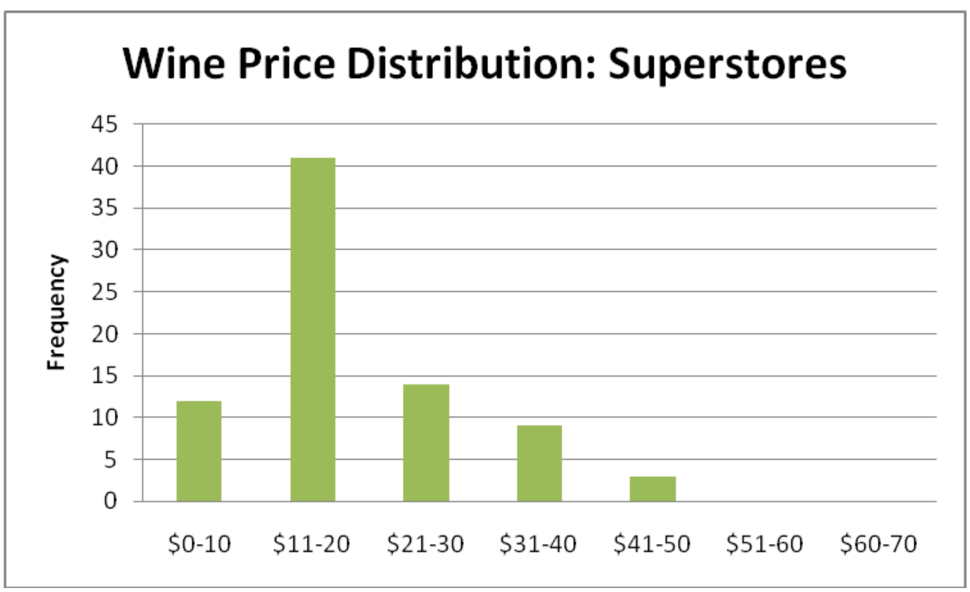
The price distribution graph below shows that these wine stores often have bottles from our sample priced in the $11–20 range.[10] Nevertheless, more than half of the bottles they carry from our sample cost more than $20. This occurs largely because the wine stores stock many of the more expensive wines.[11] They offer knowledgeable staff who can assist customers in selecting wines. Many of these stores also sell beer and gourmet foods. Single-location wine stores in Virginia seem to have found a business model that works even though they cannot sell liquor.

[10] These graphs count each bottle from the sample found in each store as one data point.

[11] In only five cases did we find single-location wine stores charging more than $20 for a bottle that other stores sold for less than $20.

b. Wine and beer superstores

The wine and beer superstores are clearly the most aggressive price competitors. They carry more than half of the wines in the sample and offer the lowest price on almost all of them. As the graph below shows, the superstores stock some of the least expensive wines and focus less on the high-end wines than the single-location stores. However, the superstores do still carry a respectable assortment of the more expensive bottles, and they have special climate-controlled areas in the stores where they keep these wines. In addition to selling beer, the superstores sell some wine-related accessories and gift items. A customer can usually find knowledgeable staff who will aid in selecting wine. By and large, the superstores seem to survive by following a low-price, high-volume strategy.

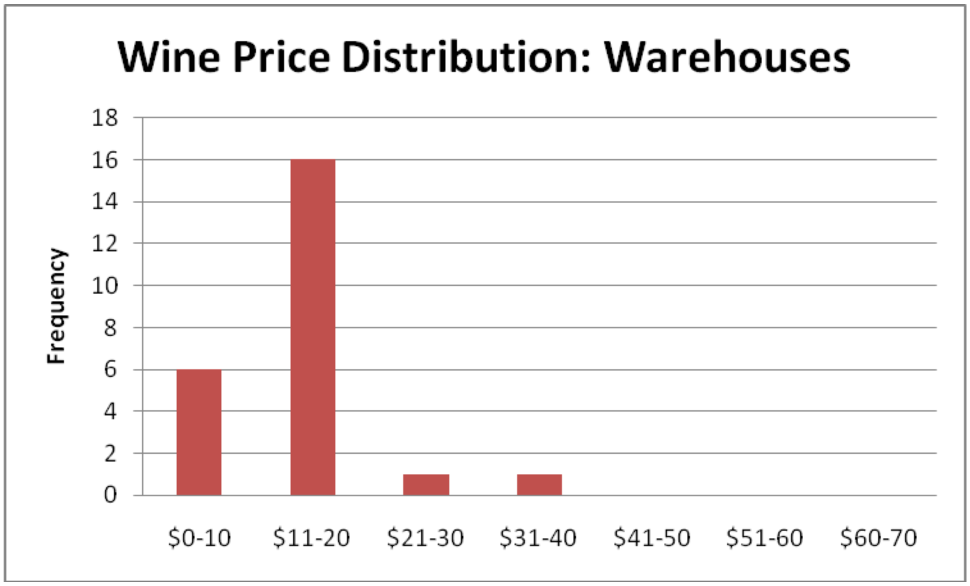


c. Grocery stores

The regular grocery stores do not seem to be striving to be the lowest-priced competitors. They offer the lowest prices on only 14 percent of the bottles in the sample. The graph below shows that they focus less on the high-end wines than either the single-location stores or the superstores. It appears that the Virginia grocery stores rely on the convenience factor to sell a lot of wine. Wine may also contribute to grocery profits in another way: short-term promotional prices on specific wines can bring customers into the store to buy other products.

d. Warehouse clubs

Statistics for the warehouse clubs indicate the significant benefits that price-conscious consumers reap when they can purchase wine wherever food is sold. The warehouse clubs are aggressive price competitors in Northern Virginia. They offer the lowest price on about the same number of wines as the single-location wine stores. But there is a key difference. When a single-location store is the low-price source for a wine in our sample, that usually occurs because the wine is not available at any other type of retailer. Warehouse clubs, on the other hand, offer the lowest price on wines that are usually available in other types of stores as well. The graph below shows that warehouse clubs focus almost exclusively on the less expensive wines. Like the superstores, the warehouse clubs follow a low-price, high-volume strategy. Unlike the superstores, they focus almost exclusively on the low-priced wines that cost-conscious customers are most likely to buy.



e. Price comparisons

Comparing average prices for bottles that are available at multiple classes of retailers gives some indication of how much Virginia consumers can save due to the presence of competitors other than the single-location wine stores. For the 26 bottles found in at least one single-location wine store and one grocery store, consumers save an average of 4.9 percent by shopping at grocery stores. The savings are even larger for the somewhat different assortments of bottles found in wine superstores and warehouse clubs—9.4 percent and 21.6 percent, respectively. These figures understate the savings, because prices at the single-location stores would likely increase if they did not face competition from other types of retailers.

Table 3: Average price savings vs. single-location wine stores, Northern Virginia, 2004

	# bottles	**$ savings**	**% savings**
Grocery store	26	$1.33	4.9
Wine superstore	34	$2.54	9.4
Warehouse club	16	$5.88	21.6

One can draw several conclusions from this brief overview of the Northern Virginia retail wine market:

1. Single-location wine stores can survive in competition with other types of wine retailers, even if they cannot sell liquor. This suggests that traditional small businesses can survive alongside grocery stores that sell wine by offering a different wine selection, specialty food items, and a strong focus on service.

2. Multi-location wine superstores are a significant source of price competition. This suggests that consumers could benefit greatly if licensed wine retailers could operate multiple stores.

3. Regular grocery stores offer the lowest prices on only 14 percent of the wines in our sample, and larger savings are available at wine superstores and warehouse clubs. Convenience rather than price seems to account for a large portion of grocery store sales. This suggests that consumers forego substantial convenience benefits when grocery stores are not permitted to sell wine.

4. Warehouse clubs are a significant source of price competition for the lower-priced wines favored by price-conscious customers. This suggests that consumers will reap much larger benefits if they can purchase wine wherever food is sold, rather than just in conventional grocery stores.

Underage Access

One reason for regulating retail package alcohol sales differently from retail sales of other products is to prevent underage access to alcohol. That does not automatically imply, however, that limiting wine sales to liquor stores is either the most effective or the least restrictive means of preventing underage access. It is clear that customers entering these stores are there only to buy alcohol, but this is clear not just to store personnel but also to minors outside who might be looking for adults they can talk into buying alcohol for them. The fact that 35 states permit grocery stores to sell wine suggests that the majority of states have found manageable ways to prevent underage access that are less restrictive than a ban on wine sales in grocery stores.

The less restrictive alternative, of course, is age verification at the point of sale, whether that occurs in a liquor store, grocery store, wine shop, wine superstore, or warehouse club. I do not have comprehensive statistics on the effectiveness of this alternative. However, for what it's worth, this 47-year-old can tell you truthfully that in Virginia I have been carded multiple times in the past year while buying wine or beer along with chips, dip, jerky, salsa, a 10-pound pork loin, hamburger, buns, and a dozen other grocery items, in a location where one would expect harried store clerks to pay the least attention: the self-checkout lane of a busy supermarket. This suggests to me that point-of-sale age verification is quite effective. Grocery store managers will not let careless employees risk losing their store's wine license; the stakes are too high.

Let me offer one suggestion to the committee on the issue of underage access that may be helpful. When I worked on the FTC's online wine report, we faced the same challenge of assessing whether online wine sales would significantly increase alcohol sales to minors. There was a lot of fear-mongering but not much hard evidence.[12] Since a lot of states

[12] There were also some sting operations conducted in states where direct-to-consumer wine shipment was prohibited, but we discounted these as atypical because they basically proved that some unscrupulous online sellers who were willing to break state laws prohibiting direct shipment were also willing to break state laws prohibiting sales to minors.

already did permit customers to order wine online and have it shipped to their homes, we simply asked alcohol enforcement officials in these states whether underage access to alcohol via the Internet was a big problem. Several said they were concerned and vigilant, but none saw any evidence that it was a significant problem. A big reason was that these states already required age verification at the time of sale and at the point of delivery.

Based on this experience, my suggestion to this committee is a simple one: if you are concerned that allowing grocery stores to sell wine will increase underage access to alcohol, consult with enforcement officials in states that permit grocery stores to sell wine to see if this has emerged as a significant problem. If it is a problem, tailor a remedy that prevents underage access without constraining retail competition in ways that harm adults.

Tax Revenues

Proponents of tight restrictions on alcohol distribution often argue that such restrictions are necessary to ensure that states can collect tax revenues. Allowing a more diverse group of retailers to sell wine, however, should not pose a challenge to revenue collection. Retailers will have to pay fees when they apply for licenses. Retailers already collect sales taxes, and wine will simply be one more taxable item.

The more relevant issue is how grocery store wine sales will affect tax revenues. The revised Fiscal Note issued by the Fiscal Review Committee on December 2, 2009 projected that grocery store wine sales would significantly increase state revenues:[13]

Alcoholic Beverage Commission	
License fees	
One-time ($300 per location)	$819,000
Recurring ($850 per location)	$2,475,600
Enforcement tax ($0.15/case)	$155,100
State wine excise tax ($1.21 per gallon)	$3,488,100
State sales tax	$8,057,000
Local sales tax	$2,758,800
Municipal inspection fee	$6,600,000

To test the plausibility of the assumptions underlying these estimates, I compared them with relevant data, studies, and my own experience as a wine consumer.

[13] Tennessee General Assembly, Fiscal Review Committee, “Corrected Fiscal Note, SB 120-HB 1158” (December 2, 2009).

1. License fees

The key assumption driving license fees is the number of new retail locations that apply for wine licenses. The Fiscal Note estimates that 52 percent of Tennessee food stores are in localities that permit alcohol sales, and it assumes that 75 percent of these stores would apply for wine licenses. The 75 percent assumption may sound high, but it is consistent with my experience as a wine consumer who has lived his entire life in two states that permit the sale of wine in grocery stores (Ohio and Virginia) and traveled extensively in three others (North Carolina, South Carolina, and Florida). Quite frankly, I cannot remember the last time I shopped in a grocery store in any of these states that did not sell wine. One could test this assumption more rigorously by gathering data on the percentage of grocery stores that have licenses to sell wine in other states.

2. Enforcement, excise, and inspection taxes

The key assumption driving the sales tax, enforcement tax, excise tax, and municipal inspection fee revenues is the projected increase in the volume of wine sales. The Fiscal Note assumes that the volume of wine sold in Tennessee would increase by 33 percent if grocery stores could sell wine. This assumption is based on the fact that neighboring North Carolina permits groceries to sell wine and had per capita sales 33 percent higher than Tennessee in 2008. Some data and studies suggest that this increase is plausible, while others suggest that a larger or smaller increase is likely.

a. Studies of grocery store sales

I noted earlier that eight states have changed their laws to permit grocery stores to sell wine since 1969. In Maine and Idaho, wine sales more than doubled as a result. In Montana and Iowa, sales increased by about 75 percent. The best estimate from Alabama suggests that sales increased by 42 percent after groceries in all non-dry counties were permitted to sell wine. Washington sales increased 25–48 percent, and West Virginia sales increased by about 50 percent. Only New Hampshire saw a relatively small increase, between 13 and 31 percent depending on the study.

Of the states listed above, Alabama and West Virginia are arguably most similar to Tennessee in terms of income, religious attitudes toward alcohol, and other factors that affect wine consumption. The most carefully controlled studies find that wine sales increased by 40–50 percent in these states when grocery stores were permitted to sell wine.

b. Consumption patterns in southern states

Another way to estimate how grocery store sales might affect Tennessee wine sales is to compare Tennessee wine sales with sales in other southern states (as the Fiscal Review Note does by comparing Tennessee with North Carolina). Table 4 shows per capita wine sales and excise taxes for the southern states. One can produce a wide variety of projected effects depending on which state or group of states one chooses as the benchmark:

- If Tennessee wine sales rose to the level in Alabama (a state with a much higher excise tax), that would be just a 7.5 percent increase.

- If North Carolina (a state with a much lower excise tax) is the benchmark, that implies a 52 percent increase based on 2005 data.[14]

- If Tennessee sales increased to the average in all neighboring states, that represents a 23 percent increase.

- An increase to the average in all southern states would be a 37.5 percent increase.

- The latter two percentages would be slightly higher if one omits Mississippi from the average. Mississippi has the smallest per capita wine sales in the south and is the only southern state that does not permit wine sales in grocery stores.

The Fiscal Note's assumed 33 percent sales increase stems from its selection of North Carolina as the comparable state.[15] A study by the Distilled Spirits Council estimates that allowing wine sales in grocery stores would increase Tennessee sales by only 15 percent.[16] The Distilled Spirits Council's study uses Alabama as its benchmark, because income is an important determinant of wine demand and Alabama has almost the same percentage of families with incomes exceeding $75,000 as Tennessee.[17] In Alabama, 23.1 percent of families have incomes above this threshold. The figure for Tennessee is 23.2 percent, and for North Carolina it is 25.3 percent. Alabama permits grocery stores to sell wine and has more than seven times the number of retail wine outlets per adult than Tennessee has.[18]

In short, comparison with other southern states can justify either the Fiscal Note's 33 percent assumption or a somewhat higher or lower figure. Given that studies of states that changed their laws usually find wine sales increases exceeding 40 percent, the Fiscal Note's figure seems well within the range of estimates justified by the totality of the evidence.

---

[14] This figure is higher than the Fiscal Note's 33 percent because I used consumption data from the 2005 Adams Wine Handbook—the most recent year for which we could obtain these data free of charge.

[15] The Fiscal Note's figure is lower than my 52 percent figure because the Fiscal Note uses more recent data.

[16] Distilled Spirits Council, Economic & Strategic Analysis, "The Impact of Wine in Grocery Stores—Tennessee" (February 24, 2009).

[17] The Distilled Spirits Council's estimate of increased sales using Alabama as the benchmark is twice as large as my data in Table 4 imply because their study uses more recent data.

[18] Distilled Spirits Council *supra* note 16, at Table 1.

Table 4: Wine policy, excise taxes, and per capita sales

State	Wine in Grocery Stores?[19]	2009 Wine Excise Tax (Per Gallon)[20]	2005 Gallons of Wine per Capita[21]
Tennessee	N	$1.21	1.60
Mississippi	N	$0.43	1.06
Kentucky	Y	$0.50*	1.39
Virginia	Y	$1.51	3.09
North Carolina	Y	$0.79	2.43
Georgia	Y	$1.51	2.38
Alabama	Y	$1.70	1.72
Arkansas	Y	$0.77	1.34
Missouri	Y	$0.42	2.36
Neighboring states average:		$1.02	1.97
South Carolina	Y	$1.08	2.06
Florida	Y	$2.25	4.09
Louisiana	Y	$0.11	2.35
Texas	Y	$0.20	2.13
Southern states average:		$0.69	2.20
*In addition to the excise tax, Kentucky has an additional 11 percent wholesale sales tax on alcoholic beverages			

3. Sales taxes

In addition to the projected sales volume increase, the other key assumption driving the sales tax estimates is the possible reduction in wine prices. If grocery stores could sell wine, wine prices could decline due to diminished market power of the liquor stores or more efficient business models for selling wine. The Fiscal Note discounts the estimated increase in sales tax revenues by 5 percent to account for a reduction in the retail price of wine; this implicitly assumes that wine prices will decline by 5 percent as a result of increased competition. Thus, the revenue effect of increased sales volumes would be partially offset by lower sales taxes per bottle.

---

19 Wikipedia, s.vv. "List of alcohol laws of the United States by state," http://en.wikipedia.org/wiki/List_of_alcohol_laws_of_the_United_States_by_state.

20 Tax Foundation, "State Sales, Gasoline, Cigarette, and Alcohol Tax Rates by State 2000–2009," July 10, 2009, http://www.taxfoundation.org/taxdata/show/245.html.

21 Adams Beverage Group, *Adams 2005 Wine Handbook* (Norwalk, CT: Adams Beverage Group: 2005), http://liq.wa.gov/3ttf-site/CostcoCourtdocs/Trial%20Test/TX328_001.pdf.

We can test the plausibility of this assumption by comparing grocery store and wine store prices in Northern Virginia for wines that are sold in both types of locations. This comparison provides a lower bound estimate of the possible price reduction, since the prices charged by wine stores in Northern Virginia already reflect the presence of competition from grocery stores, warehouse clubs, and wine superstores. Table 5 shows the average price savings consumers receive when various competitors are added to the Northern Virginia market, starting with conventional grocery stores. Unlike Table 3, this table shows the average price savings for the same 26 bottles of wine that are available in both grocery stores and single-location wine stores.[22]

Conventional grocery stores offer an average 4.9 percent price savings—close to the 5 percent assumed in the Fiscal Note. The inclusion of warehouse clubs as competitors increases the average price savings to 8 percent. The addition of superstores leads to bigger average savings, 12.5 percent.

Table 5: Average price savings vs. single-location wine stores, Northern Virginia, 2004

	# bottles	**$ savings**	**% savings**
Grocery store	26	$1.33	4.9
Grocery stores and warehouse clubs	26	$2.17	8.0
Grocery stores, warehouse clubs, and superstores	26	$3.39	12.5

These figures suggest that the Fiscal Note's 5 percent assumption may be fairly accurate if the principal new competitors are conventional grocery stores. However, if warehouse clubs become significant competitors, the average price reduction for their customers would be slightly higher. Finally, if the state also allows license holders to own multiple locations, so that wine superstores could enter Tennessee, the price savings for superstores' customers could top 10 percent. All of these figures should be taken with a larger than usual grain of salt, because they are based on the prices of only 26 bottles in our sample that were available in both single-location wine stores and grocery stores. The most reasonable conclusion to draw is that price reductions for new sales volumes may be somewhat larger than assumed in the Fiscal Note if a more diverse array of competitors enters the market.

Finally, I should note that the sales tax calculations in the Fiscal Note assume that only the new volumes of wine would be sold at a lower price. There is no offsetting calculation that reflects lost sales tax revenue on existing wine sales. It is implausible to assume that liquor stores would not reduce their wine prices at all in response to competition from grocery stores. However, it is also implausible to assume that liquor stores would always match grocery stores' prices. Liquor stores may offer customers some advantages, such as knowledgeable staff and the ability to purchase liquor and wine

[22] The calculations are done this way to ensure that any differences in price savings reflect different prices charges by different competitors for the same wines, rather than price differences on different wines.

at the same time. These advantages could allow them to charge a premium above what the grocery stores would charge. As Tables 3 and 5 show, single-location wine stores in Northern Virginia do not sell wine at the same prices as other competitors; on average, their prices are higher.

The research Alan Wiseman and I conducted on the effects of interstate direct shipment also found that wine stores price more competitively when wine becomes available from a new sales channel, but they do not necessarily cut their prices all the way down to the new competitor's level. We compared the price spread between Northern Virginia wine stores and Internet sellers before and after Virginia legalized direct shipment to consumers from out-of-state sellers. We found that wine stores priced their wines closer to the online prices once direct shipment became legal, but they did not cut their prices all the way to match the online prices.

Based on this evidence, it is likely that Tennessee liquor stores will cut their prices somewhat in response to wine sales by grocery stores. However, it is unlikely that they will always match the grocery stores' prices. Therefore, there will be some loss of sales tax revenue, but not as much as would be lost if liquor stores fully matched the grocery stores' prices.

4. Liquor tax revenues

The Fiscal Note does not assess whether wine sales in grocery stores would reduce liquor tax revenues. Liquor tax revenues could decline if consumers substituted wine for liquor, or if access to liquor became less convenient because some liquor stores closed in response to competition from grocery stores that sell wine. The Distilled Spirits Council study estimates that Tennessee would lose about $775,000 in excise tax revenue and $890,000 in sales tax revenue annually due to reductions in liquor sales. These figures reflect an assumption that 10 percent of liquor stores would close and 10 percent of their sales volume would not be picked up by other liquor stores. Combining these losses with its lower estimated increases in wine tax revenues, the study concludes that wine sales in grocery stores would increase excise and sales taxes on alcohol by $4.1 million annually.[23]

It seems intuitive that increased availability of wine could reduce liquor sales. The evidence, however, is mixed. The two studies I know of that examined states which changed their laws found that allowing grocery stores to sell wine had no effect on liquor sales.[24] On the other hand, some of the more general studies of alcohol demand find that liquor sales fall in response to changes in the price of wine, though the effect is not large.[25]

---

[23] Distilled Spirits Council, *supra* note 16, at 6.

[24] Wagenaar and Holder, *supra* note 5, at Table 1; MacDonald, *supra* note 5.

[25] X.M. Gao, Eric G. Wailes, and Gail L. Cramer, "A Microeconomic Model Analysis of US Consumer Demand for Alcoholic Beverages," *Applied Economics* 27 (1995) at 66; Dale Heien and Greg Pompelli, "The Demand for Alcoholic Beverages: Economic and Demographic Effects," *Southern Economic Journal* 55:3 (Jan. 1989) at 763.

If Tennessee policymakers are concerned that liquor tax revenues may decline, there are several possible ways to ameliorate the liquor tax revenue losses while still permitting grocery stores to sell wine:

- Allow liquor stores to sell food, mixers, and other merchandise. This could reduce liquor tax revenue losses to the extent that it allows liquor stores to retain traffic though their stores. For example, they might emulate the gourmet food and wine format seen in many Northern Virginia wine stores, with the added advantage that consumers could also purchase liquor.

- Allow at least some food retailers to sell liquor as well as wine. This would allow the state to continue capturing liquor tax revenues even if some liquor stores closed. It would also let the state continue to capture liquor tax revenues it might otherwise lose because consumers would substitute more easily-obtained wine for less easily-obtained liquor. If the state wants to achieve many of the consumer advantages of collocating liquor and food sales while retaining physically separate liquor stores, it could permit food stores to acquire liquor licenses but require customers to enter the separate portion of the store devoted to liquor sales through a separate door. (This is common practice in South Carolina, Florida, and probably other states as well.)

- License more stand-alone liquor stores. Like allowing grocery stores to sell liquor, this option would help retain liquor tax revenues by making liquor more convenient to obtain due to the larger number of locations. But it would still allow the state to limit liquor sales to a distinct class of "liquor stores." One option would be to give additional licenses to current liquor store owners that they could either use to open a second store or sell to someone else who wants to open a liquor store.

Conclusion

If public policy is concerned with the welfare of consumers, restrictions on competition ought not be imposed unless they accomplish some clear public purpose and do so in the manner that restricts competition the least. Limiting wine sales to liquor stores imposes significant costs on consumers that are unnecessary to accomplish the state's objectives of preventing underage drinking and collecting tax revenues. Indeed, it is clear that current policy diminishes state and local tax revenues while harming consumers.