



Specifically, "wholesalers must post a schedule of prices with the Comptroller" by the fifth of each month and these prices are: (1) made available to all other wholesalers; and (2) locked in for the following month. *Id.* Under the volume-discount ban, a wholesaler must offer every retailer the same price for a given product; this prevents wholesalers from cutting prices to large retailers. *Id.*

The Fourth Circuit has determined, *inter alia*, that: (1) Maryland's post-and-hold liquor pricing system and volume-discount ban are *per se* violations of the Sherman Act; and (2) the regulatory scheme is not shielded by state-action immunity. *TFWS, Inc. v. Schaefer*, 242 F.3d 198, 209-11 (4th Cir. 2001) ("*TFWS I*"). The Fourth Circuit has required that the State have the "opportunity to assert and substantiate its Twenty-first Amendment defense." *Id.* at 213.

The State has the burdens of production and persuasion for its Twenty-first Amendment defense. "[A] state must demonstrate that its liquor regulatory policies directly serve the interests it proffers under the Twenty-first Amendment." *Id.* at 212.

"'[U]nsubstantiated state concerns' under the Twenty-first Amendment are not sufficient to trump the 'goals of the Sherman Act.'" *Id.* (quoting *California Retail Liquor Dealers Association v. Midcal Aluminum, Inc.*, 445 U.S. 97, 114 (1980); citing *324 Liquor Corp. v. Duffy*, 479 U.S. 335, 350 (1987)). "In the end,

the state's interests must be of sufficient weight to 'prevail against the federal interest in enforcement of the antitrust laws.'" *Id.* (quoting *324 Liquor*, 479 U.S. at 350 n.12).

After the trial, this Court found that the regulatory scheme does not increase Maryland liquor and wine prices. *TFWS, Inc. v. Schaefer*, 315 F. Supp. 2d 775, 782 (D. Md. 2004) (the "Trial Opinion").

The Fourth Circuit remanded the case because the Court had not controlled for the difference between Delaware and Maryland excise taxes or explained why such an adjustment is unnecessary. *TFWS, Inc. v. Schaefer*, No. 04-1688, slip op. at 4 (4th Cir. Oct. 5, 2005) ("*TFWS III*"). The Fourth Circuit instructed the Court to answer the following questions:

1. Whether, and if so, to what extent the Court must control for the difference in excise taxes between Delaware and Maryland in comparing the wholesale prices of wine and liquor of each state;
2. Whether the State proves that the challenged regulations raise Maryland wine and liquor prices for consumers;
3. Whether the State proves that increased consumer prices caused by the regulations decrease wine and liquor consumption in Maryland; and
4. Whether "the state's interest in temperance (to the extent that interest is actually furthered by the

regulatory scheme)"<sup>1</sup> outweighs "the federal interest in promoting competition under the Sherman Act." *TFWS I* at 213; *TFWS III* at 13.

## II. Controlling for the Difference in Excise Tax

Maryland's excise taxes on wine and liquor are significantly lower than those of Delaware. As of January 2005, Maryland's excise taxes were \$1.50 per gallon on liquor and 40 cents per gallon on wine; the comparable Delaware excise taxes were \$3.75 and 97 cents, respectively. Pl.'s Ex. 98 at 536.

TFWS argues that controlling for the excise-tax differential produces data that are too hypothetical to support the State's argument that the challenged regulations actually decrease consumption. TFWS contends that the State's real policy is to keep prices low, as evidenced by the comparatively low excise tax, and that even if Maryland were to raise its excise taxes to match Delaware's, the General Assembly would take other steps to ensure lower prices for consumers.

Lacking direct evidence of the regulatory scheme's effect on consumption, Maryland seeks to establish that a state like Maryland--without the challenged regulations--has cheaper wine and liquor. Delaware is used to simulate a hypothetical Maryland

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<sup>1</sup> It should be emphasized that the weight of the State's Twenty-first Amendment defense is determined by the effectiveness of the regulations in furthering the State's interest in temperance.

without the regulations, and the simulation is more reliable if the Court controls for the difference in tax between the two states because, as the Fourth Circuit stated, "Any difference in prices could be due to excise taxes, the challenged regulations, or both." *TFWS III* at 10. As the State contends, the relevant question is not whether Maryland prices are actually higher than Delaware's, but whether Maryland's prices would be lower without the challenged regulations.

In their analysis of Maryland and Delaware excise taxes, the parties apply the same method to control for the excise tax differences between the states. First, the excise tax differential for each product is determined by subtracting the excise tax collected on that product in Maryland from the Delaware excise tax value. Pl.'s Ex. 95 at 3. The excise tax differential is then added to the respective product's Maryland wholesale price, resulting in a tax-adjusted Maryland price for comparison to the actual Delaware wholesale price. *Id.* Put simply, the Maryland wholesale prices are raised by the amount the Delaware tax exceeds the Maryland tax on the assumption that all of the tax would be passed through to the retailer.<sup>2</sup>

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<sup>2</sup> For example, a case of twelve one-liter bottles of Captain Morgan's Spiced Rum equals 3.17 gallons of liquor (1 liter X (12 bottles per case) X (0.2642 gallons per liter)). The excise tax differential for the case of rum is \$7.13 ((\$3.75 per gallon in Delaware - \$1.50 per gallon in Maryland) X 3.17 gallons). Thus, the tax-adjusted wholesale price for Captain Morgan's is raised from an actual \$155.93 to a tax-adjusted \$163.06 per case, which

### III. The State's Price Evidence

#### A. The State's Price Data

The State continues to rely on retail price data from the ACCRA Cost of Living Index. The ACCRA data consist of the quarterly prices of single brands of wine and liquor at selected retailers. As noted in the Trial Opinion, the data are not entirely representative of each state and do not consistently survey the same retailers. The Maryland ACCRA prices do not include stores in Prince George's or Montgomery County, and the Maryland counties surveyed vary annually. The ACCRA data for Delaware do not include prices from the Plaintiff's two stores in Milltown and Claymont, Delaware, which together comprise 30 to 35 percent of Delaware's retail liquor sales. The ACCRA data also come with the following caveat:

Because the number of items priced is limited, it is not valid to treat percentage differences between areas as exact measures. Since judgment sampling is used in this survey, no confidence interval can be determined. Small differences, however, should not be construed as significant-or even as indicating correctly which area is the more expensive.

Pl.'s Ex. 45 at 3660.

Although the State voices several criticisms of the wholesale price data produced by TFWS from its Maryland and

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is then compared to the actual wholesale price in Delaware.

Delaware stores and from prices published in two industry publications, the *Delaware Beverage Monthly* and the *Maryland Beverage Journal*, the State used TFWS's wholesale price data in Plaintiff's Exhibit 93A to conduct its own analysis of Maryland and Delaware price differences while controlling for the differences in excise taxes.

B. The State's Price Analysis

The State has not provided any new analysis of the ACCRA data to assist the Court in controlling for the effects of excise taxes. Instead, the State cites several hundred pages of exhibits, which the State claims "tend[] to demonstrate the challenged regulations result in retail prices for alcoholic beverages in Maryland that are higher and more stable than they would be without the regulations." Defs.' Mem. 6.

Much of the State's expert opinion evidence, submitted by Dr. Chaloupka, is a defense of the proposition that higher excise taxes lead to higher retail prices--a proposition that TFWS does not dispute. Dr. Chaloupka also opined that it is not possible to identify the effects of the challenged regulations on retail prices with the data available. Pl.'s Ex 101 at 193-94.

The State has conducted a separate analysis of TFWS's data in Exhibit 93A. The State compared each product's Maryland price for each month to the lowest available Delaware price for the

same month, which was frequently the quantity-discount price.

Under this analysis, 62.6% of the wholesale prices would have been lower in TFWS's Delaware stores, had Maryland retailers paid Delaware's excise taxes. Applying TFWS's sales-volume figures for each product for 2003, TFWS's Maryland store would have paid \$251,404 more for the 770,308 items it sold in 2003 than it would have in Delaware. The average wholesale cost incurred by TFWS in 2003 under the State's analysis would have been roughly 33 cents per bottle more in Maryland, had Maryland retailers paid Delaware's excise taxes.

TFWS contends that the State should have compared the lowest monthly Maryland price (corrected for the excise tax differential) with the lowest quantity-discount price in Delaware. Although the State's approach does not allow for any discount via bridge buying<sup>3</sup> in Maryland, it does apply the quantity discount to all Delaware prices, even though the discount is not available to all Delaware retailers.

#### IV. TFWS's Price Evidence

##### A. TFWS's Price Data

TFWS uses a database of wholesale prices paid for 2637 wine and liquor products sold in its Towson, Maryland store, and its

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<sup>3</sup> Bridge buying is a retailer's practice of buying extra quantities of particular products when the wholesale prices are relatively cheap.



stores in Milltown and Claymont, Delaware. Pl.'s Ex. 93. These prices were augmented with excise tax data for each product. Pl.'s Ex. 93A. The Maryland data include the wholesale price of each product for each month of 2003. The Delaware data include two prices per product for each month: a non-discounted "front" price, and a price with a full quantity discount.

The Maryland prices should represent the wholesale prices paid by all the retailers in the state. However, as Delaware does not require price maintenance, the Delaware prices may be less accurate representations of state-wide prices. The data also do not indicate what proportion of Delaware retailers benefit from the quantity discount.

TFWS's Exhibit 93A also includes total 2003 sales for each product for its Maryland store, which it uses to provide a volume-weighted analysis of the differences in state prices.

TFWS also provides wholesale prices for 40 "top selling" products, including the wine and liquor used for the State's ACCRA retail price data (a 1.5 L bottle of Livingston Chablis Blanc and a 750 ml bottle of J&B Scotch). The data cover June to December 2003, and come from the *Delaware Beverage Monthly* and the *Maryland Beverage Journal*. Pl.'s Ex. 94. Exhibit 94A adds the excise tax for each product.

The State argues that there has not been a satisfactory explanation for the products selected for Exhibits 93A and 94A.

Exhibit 93A accounts for only 2637 of the more than 4000 products sold in TFWS's Delaware and Maryland stores. Similarly, the State argues that the 38 "top selling" products in Exhibit 94A were not the 38 best-selling items in the stores. The State also contends that the comparison of Maryland and Delaware monthly prices is imperfect, because unlike under Maryland's post-and-hold system, Delaware prices may fluctuate. Thus, the Delaware prices are not the prices actually paid by retailers during each month. The State also argues that TFWS's 2003 data present only a brief snapshot of the twelve-year period since 1992, when Delaware chose to drop its version of the challenged regulations.

Notwithstanding the State's criticisms of TFWS's data, the State's ACCRA data are far less reliable, and no other price data have been presented on remand.

#### B. TFWS's Price Analysis

TFWS's analysis began with a comparison of the lowest monthly Maryland price for each product with the lowest price offered in Delaware, the quantity-discount price. TFWS argues that this analysis errs in favor of the State, because the lowest Maryland price, unlike the Delaware quantity-discount price, is available to all Maryland retailers. After controlling for excise tax, roughly 45 percent of the products are cheaper in Maryland.

TFWS then multiplied the price differential for each product by the total sales volume for TFWS's Maryland store for that product in 2003. TFWS contends that factoring the price by sales volume should correct for the effects of product substitution, as consumers may choose those wine or liquor products among the 45 percent selling at a lower price in Maryland over those higher priced products, thus limiting the effects of those higher priced products on overall consumption. Applying this volume-weighted analysis, and compensating for excise taxes, TFWS shows that the Maryland store paid \$16,738 more for the 770,308 items it sold in 2003 than it would have in Delaware. Thus, controlling for excise taxes, the average wholesale cost incurred by TFWS in 2003 was only *two cents* per bottle more in Maryland.

TFWS also analyzed the data in Plaintiff's Exhibit 94A with the excise tax differential. When the lowest monthly tax-adjusted Maryland price was compared to the lowest quantity-discounted price in Delaware, 25 of the 40 products were more expensive in Maryland. When TFWS factored in annual sales volume figures for those 40 products, the average price per bottle was three cents more in Maryland.

The State criticizes TFWS's comparison of the lowest annual Maryland price to the Delaware quantity-discount price. The State argues that most Maryland retailers are unable to engage in bridge buying, which enables large-quantity purchases when prices

are lowest, because of limited product shelf-life, inadequate storage space, and the inability to finance large purchases or predict price changes. The State notes that Mr. Trone, the owner of TFWS, testified that TFWS, a large retailer, does not engage in bridge buying but instead buys "week-to-week." Def.'s Ex. 12 at 75. Thus, the State argues that TFWS should not compare a low price that is not available every month in Maryland to Delaware's quantity-discount price.

The State's argument is not persuasive because Delaware's quantity-discount price, although offered more frequently than the lowest monthly price in Maryland, is not available every month. Moreover, Delaware's quantity discount is not available to all Delaware retailers, although the lowest Maryland price is available to all Maryland retailers.

TFWS also compared the mean of the seven monthly prices in Maryland to the mean of the "front" and quantity-discounted prices in Delaware (summing the seven front prices and seven discount prices and dividing by fourteen). The result, controlling for excise taxes, is that 31 of the 40 items are cheaper in Maryland.<sup>4</sup>

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<sup>4</sup> The State incorrectly argued that TFWS averaged only the highest and lowest Maryland prices for the seven-month period, when in fact it averaged the Maryland prices for all seven months. The State also criticizes, *inter alia*, TFWS's averaging of the Delaware front and quantity-discount prices as a "peculiar" "made-up measure," and its lack of a sales-volume weighted analysis.

V. Summary of Price Evidence

The State has acknowledged that it is unable to produce direct evidence of the challenged regulations' effect on wine or liquor prices. Pl.'s Ex. 101 at 57 (Chaloupka deposition). The State's ACCRA data are unreliable circumstantial evidence of the effects of the challenged regulations on retail prices, and have not been used by either party to control for excise tax differences.

Although TFWS's data are far from perfect, they permit a more reliable comparison of Maryland and Delaware wholesale prices. The State has produced nothing better, and relies on TFWS's data in conducting its analysis.

Of the analyses performed, the most reliable is TFWS's excise-tax controlled analysis of the data set in Exhibit 93A. TFWS's analysis may implicitly assume too much bridge buying, but it compares the lowest annual price in Maryland to the lowest annual price in Delaware; and, that assumption may be offset by the limited availability of Delaware's quantity-discount prices.

That being said, there is evidence that the challenged regulations result in wholesale prices that are from two cents to 33 cents per bottle higher in Maryland than in Delaware—depending on whether the TFWS or State data are accepted. The evidence of

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TFWS's average-price analysis of Exhibit 94A seems less reliable because it relies on a much smaller, inexplicably selected subset of the product data provided in Exhibit 93A.

slightly higher wholesale wine and liquor prices in Maryland is only circumstantial evidence of the challenged regulation's effects on wholesale prices. A second inference must be made that higher wholesale prices result in higher retail prices for consumers.

## VI. The Effect of Higher Prices on Consumption

### A. The State's Consumption Evidence

As the Court has found, actual wholesale prices in Maryland, not controlled for excise tax differentials, are considerably lower than in Delaware. Actual consumption data exist for the two states, but are not helpful for measuring the effect of the hypothetical wholesale price differential controlled for excise tax, as a valid comparison would require controlling the consumption data for the excise tax differential, which neither party has attempted. The State thus relies primarily on economic theory to prove that increased consumer prices due to the challenged regulations decrease consumption.

The State argues that there is no dispute between the parties' experts on the downward-sloping demand curve and price elasticities of demand for alcoholic beverages. The Trial Opinion noted that "[t]here is a general consensus that there is some relationship between alcohol price and alcohol demand." Trial Opinion 782 n.9 (*citing* Defs.' Ex. 1 at 2, ¶ 15; Overstreet

Tr. (10/10/03) at 114).

The State contends that there is a "wealth of research . . . demonstrating that, over time, higher and more stable prices reduce consumption of alcoholic beverages of all types and brands, among all categories of drinkers." Defs.' Mem. 36. The State cites to Defendants' Exhibits 69-102, 73 published research articles. These articles generally establish that higher prices reduce alcoholic beverage consumption.

The State has produced evidence of price elasticities of 1.0 for wine and 1.5 for liquor. Defs.' Ex. 22C. Thus, a 10% price increase in price would decrease wine consumption by 10% and liquor consumption by 15%, if all other affecting variables are neutral.

The State also contends that alcohol consumption in Delaware has increased significantly since that states' post-and-hold regulations were relaxed and volume-discount ban was abandoned in 1992. The State's expert, Dr. Chaloupka, concluded that from 1992 to 2000 wine consumption increased 14.3% and liquor consumption was 54.4% higher than would have been predicted had the regulations remained in effect. Defs.' Ex. 105 at 35, 40-41.

TFWS argues that the divergence between projected and actual consumption patterns in Delaware after 1992 is not statistically significant, and is more readily explained by other market factors. Because Pennsylvania has a state monopoly on wine and

liquor sales, making retail prices comparatively higher than in Delaware, cross-border sales to residents in the populous Philadelphia area are likely to have a significant impact on Delaware consumption data. Trone testified that his Claymont, Delaware store is the largest retail liquor store in the United States, is within minutes of the Pennsylvania border, and the majority of the store's customers come from Pennsylvania. Trone Tr. (10/10/03) at 47-52.

#### B. TFWS's Consumption Evidence

TFWS does not challenge the general economic theory, supported by numerous empirical studies, that higher prices tend to decrease demand for alcoholic beverages, but it argues that there has been no empirical study that measures the effect of wholesale post-and-hold price regulations or quantity-discount bans on consumption. As the Court noted in the Trial Opinion:

[I]n theory the regulations can reduce consumption only if they increase liquor prices in a manner that is not off-set by non-price influences. Interestingly, beer consumption in Maryland has decreased despite its exclusion from the regulations. 10/10/03 Overstreet Tr. at 31-34. This indicates that decreased consumption is not dependent on the regulations.

Trial Opinion 782 n.9. Although beer consumption has declined in Maryland relative to the national average, "Dr. Overstreet's empirical evidence suggests that Marylanders actually consume wine and spirits in about the same quantities as the rest of the



United States, further calling into question whether the regulations affect consumption." *TFWS II* at 242; Overstreet Tr. (10/10/03) at 31-34; Pl.'s Ex. 42 at 14-15.

Dr. Overstreet has also testified that there was no significant increase in per capita consumption in California or Nebraska after regulations in those states similar to the ones being challenged were repealed. Overstreet Tr. (10/10/03) at 34-48; Pl.'s Ex. 42 at 15-17.

TFWS contends that the State's theoretical approach does not account for countervailing effects of the challenged regulations, such as consumers purchasing a lower-priced brand or product substitute when the price of their favored brand rises, an economic concept known as substitution. TFWS's volume-weighted analysis of wholesale prices attempts to correct for consumer substitution, although it more accurately accounts for retailer substitution.

TFWS also contends that quantity-discount bans benefit small retailers at the expense of larger ones, with the result that, as the State's expert concedes, those smaller retailers receive lower wholesale prices. Pl.'s Ex. 101 at 155-56. TFWS argues that this protection of smaller retailers causes a greater number of retail outlets than would exist without the regulations, thereby increasing consumer convenience and access to alcoholic beverages. Pl.'s Ex. 42 at 8-9.

The State contends that there is no empirical evidence supporting TFWS's theories of the challenged regulations' offsetting effects on any decrease in consumption.

The State further contends that price elasticity of demand takes into account consumer substitution. However, the State's evidence for this assertion comes from studies of the effects of uniform price increases, such as higher excise taxes, and does not attempt to account for the varying price differentials of individual products caused by the challenged regulations.

Finally, the State argues that the number of retailers in Maryland is controlled by licensing requirements, and has decreased since the challenged regulations were adopted. Defs.' Exs. 21S, 31 (showing total licensees for 1951 and 2000). But the State does not account for the factors that may account for the decline in the number of liquor stores or retail establishments in general during that period.

#### C. Summary of Consumption Evidence

Although there is ample empirical evidence of the downward-sloping demand curve and price elasticity of demand for wine and liquor, there is no empirical study demonstrating that the challenged regulations either have a negative impact on consumption, as argued by the State, or have offsetting effects that increase consumption, as argued by TFWS. Thus the economic

evidence that the regulations' increase of wholesale prices has any effect on consumption is limited to the general, but well supported, economic theory of elasticity of demand, and unsupported and conflicting expert opinion on the effects of the regulatory scheme in question.

Furthermore, the examples of Delaware, California, and Nebraska demonstrate no significant increase in consumption after the abolition of similar regulations in those states. Overstreet Tr. (10/10/03) at 34-48; Pl.'s Ex. 42 at 15-17.

VII. The Proven Temperance Effect vs. Promoting Competition under the Sherman Act

The State argues that state liquor-control policies are "supported by a strong presumption of validity and should not be set aside lightly." *North Dakota v. United States*, 495 U.S. 423, 433 (1990). But, as TFWS argues, the cases the State cites in support of this presumption regard the validity of state alcoholic beverage regulations under the Dormant Commerce Clause, and do not weigh state Twenty-first Amendment interests against the federal interest in promoting competition under the Sherman Act.

The State further contends that it is not sufficient for TFWS to rely on a finding of a *per se* violation of the Sherman Act, and that TFWS has made no effort to demonstrate the extent

to which the federal interest in competition is damaged by the challenged regulations.

TFWS contends that there is no such requirement in this case, arguing that, in *Midcal* and *324 Liquor*, the Supreme Court measured the states' interests against the "'familiar and substantial' federal interest in enforcement of antitrust laws." *324 Liquor*, 479 U.S. at 350 (quoting *Midcal*, 445 U.S. at 110.). The Fourth Circuit's instructions do not require TFWS to prove the regulations' effect on free competition.

TFWS urges the Court to follow the recent decision of the U.S. District Court for the District of Washington, in which the court struck down similar regulations in Washington supported by the expert opinions of the same state expert witness, Dr. Chaloupka. The district court found that:

To the extent that the restraints may have a minimal effect in advancing the state's interests under the Twenty-first Amendment, the Court finds that the state's interests do not trump the federal interest in promoting competition. The citizens of this nation have long relied upon a healthy competitive market to distribute goods efficiently and economically, a policy that is embodied by the Sherman Act of 1890. In light of the minimal effectiveness of the challenged restraints in advancing the state's interests under the Twenty-first Amendment, these restraints must yield to the national goals of a competitive, free market economy.

*Costco Wholesale Corp. v. Hoen*, No. C04-360P, 2006 WL 1075218, at \*13 (W.D. Wash. Apr. 21, 2006), order corrected by 2006 WL 1303107 (W.D. Wash. May 9, 2006).

TFWS also evokes the Fourth Circuit's pronouncement in *TFWS I* that "[i]n the end, the state's interests must be of sufficient weight to 'prevail against the federal interest in enforcement of the antitrust laws.'" *TFWS I* at 212 (quoting *324 Liquor*, 479 U.S. at 350 n. 12).

Finally, TFWS argues that the State has demonstrated little or no actual interest in promoting temperance, and points to evidence that establishes a long-term policy of the Comptroller and General Assembly to maintain low retail prices for alcoholic beverages in Maryland. Although this evidence of actual intent is revealing, it is not relevant to the question of whether the particular regulations challenged by TFWS work to promote temperance.

#### VIII. Conclusion

1. Whether, and if so, to what extent the Court must control for the difference in excise taxes between Delaware and Maryland in comparing the wholesale prices of wine and liquor of each state?

Although TFWS attempted to dissuade the Court from controlling for excise taxes, doing so is a logical means of eliminating a separate variable that has a likely effect on consumer price differences between Maryland and Delaware. Clearly, all the excise tax differential should be eliminated if it is to be taken into account.

2. Whether the State proves that the challenged regulations raise Maryland wine and liquor prices for consumers?

TFWS presented the most reliable analysis of the effect of the challenged regulations on wholesale prices, which shows that, controlling for excise taxes, 45 percent of the products in TFWS's data set are cheaper in Maryland, and when weighted for sales volume, TFWS's Maryland store paid on average only two cents more per bottle of wine or liquor than its Delaware store. Thus, assuming the entire wholesale price increase is passed through to the consumer, if the average price of a bottle of wine or liquor without the regulations is only \$10 (which is probably a low estimate), a two-cent increase is only 0.2% more expensive for the Maryland consumer.

3. Whether the State proved that increased consumer prices caused by the regulations decrease wine and liquor consumption in Maryland?

The State's evidence of the impact of the increased wholesale prices on consumption is tenuous. Well-supported economic theory indicates that a uniform 0.2% price increase will cause a proportionate decrease in wine consumption, and a 0.3% decrease in liquor consumption. There is no economic study that indicates how a regulatory pricing scheme which causes non-uniform price increases effects consumption. The studies of states that have abolished similar laws indicate no significant change in consumption patterns.

