



WASHINGTON STATE SPIRITS PRIVATIZATION: HOW SATISFIED WERE LIQUOR PURCHASERS BEFORE AND AFTER, AND BY TYPE OF RETAIL STORE IN 2014?

Thomas K. Greenfield, PhD, Edwina Williams, MPH,
William C. Kerr, PhD, Meenakshi S. Subbaraman, and Yu Ye

Alcohol Research Group, Public Health Institute,
6475 Christie Avenue, Suite 400, Emeryville, CA 94608,

Paper presented at the 143rd Annual American Public Health Association Meeting
and Exposition, Chicago, IL, October 31 - November 4, 2015



DECLARATIONS

- The authors have received funding through contracts and travel support from the National Alcohol Beverage Control Association
- Research conducted and data collected under human subjects assurances from the Public Health Institute IRB (Assurance # I13-010).
- Supported by grant R01 AA021742 from NIAAA to PHI (W. Kerr, PI)



www.arg.org



2

BACKGROUND

- In June, 2012, after passage of an initiative, Washington State ended a wholesale and retail monopoly on liquor, permitting sale of spirits in stores with > 10,000 square feet, and ending the three-tier system separating production, distribution and retail levels, in place since repeal of Prohibition.
- The initiative's success (after a previous failure) in part was due to language assuring liquor taxes to generate State revenues equivalent to the earlier Liquor Control Board's (LCB) markups. Spirits taxes in Washington are the highest in the nation.
- The initiative resulted in a 15.5% average price increase for the 75 ml size (4.7% for 1.75 l size), but also about five times as many stores selling liquor, including supermarkets, drug stores, liquor superstores, wholesale stores like Costco and others. (Kerr, Williams & Greenfield, 2015)
- The spirits privatization initiative represents a 'policy intervention' in which two important alcohol control policy levers, each of which evidence suggests are important ways of reducing alcohol-related problems in themselves—increasing taxes/price, and decreasing availability (Babor et al., 2010)—appear at the same time to be pulling in opposite directions (i.e., increased taxes/price and also increased availability of spirits).



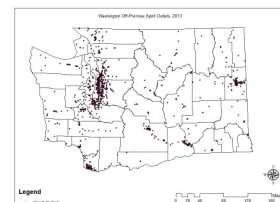
www.arg.org



3

BACKGROUND-PURCHASE EXPERIENCES

- Our project is evaluating a range of privatization outcomes, with the study presented here focused on purchase experiences pre to post privatization and between-store experiences after privatization. Prior to the privatization the Washington State Liquor Control Board (LCB) sponsored a survey of liquor purchasers (599 customers at the LCB monopoly stores, studied here) as well as non-customers.
- In 2014 our NIAAA-supported 5-year project conducted the baseline wave of an ongoing representative random digit dialed (RDD) telephone (landline and cell phone) survey of 1,202 state residents, of whom 465 were liquor purchasers of legal age (> 21 years).
- These same items as the LCB satisfaction survey were used in 2014 to compare the experiences between the types of stores "at which you last purchased liquor."



www.arg.org



4

DATA SOURCES

The LCB survey was conducted under State LCB contract by Elway Research, Inc. (a market research firm) with landline telephone surveys conducted in English between December 26 and 28, 2010. Of those reached (response rate not reported), 52% of the liquor purchasers in LCB-authorized (monopoly) stores were women; by age, 10% were 21-35, 27% 36-50, 40% 51-64, and 23% ≥ 65; 60% were employed, 8% unemployed and 29% retired. They were well distributed throughout the state and by rural, suburban, urban classification, with 96% of the purchasers reporting being drinkers themselves.

Baseline data for our ongoing Washington State surveys were collected between January and April, 2014 by ICF Macro, Inc., of Burlington, Vermont. The survey series examines changes in adult consumption, purchase decisions, beverage selection, brand-pricing, retail locations and, here, satisfaction with store features. The analytic sample included 465 adults aged ≥ 21 who purchased or drank liquor (spirits) in the prior 12 months. We used state-wide list-assisted random digit dialed (RDD) strategy, randomly selecting one adult (age ≥ 18) per landline household. For the 50% cell-phone sample, any answering adult who reported being in a safe place was eligible. The initial sample had 1,202 cases (cooperation rates: landline 50.9%, cell phone 60.9%). Of these, 465 were ≥ 21 who purchased/drank spirits in the last 12 months.



www.arg.org



5

MEASURES

- Satisfaction with retail purchase experiences** used the 10 Likert-type questions from the LCB December 2010 survey that we retained, each asking the respondent to give a grade, from A (best) to D (worst) and F (fail) to each feature of the purchasing experience. Grades were recoded to numeric values with F=0, D=1, C=2, B=3 and A=4.
- Satisfaction items** retained were: 1) courtesy of staff, 2) professionalism of staff, 3) adequate supply of product, 4) selection of liquor offered, 5) level of staff knowledge, 6) number of staff to help, 7) store prices, 8) convenience of store locations, 9) speed of checkout, and 10) store's operating hours.
- Types of retail stores** purveying liquor post privatization in 2014 were classified as follows: a) Liquor Superstores (e.g., Bevmo, Total Wine and More), b) Liquor Stores, c) Grocery Stores, d) Drug Stores, e) Department Stores, f) Wholesale (e.g., Costco), and g) Other.



www.arg.org



6

MEAN SATISFACTION WITH 10 ASPECTS OF LIQUOR PURCHASES

	Total		Male		Female	
	2010	2014	2010	2014	2010	2014
N	599	465	288	226	310	239
Courtesy of staff	3.50	3.54	3.43	3.51	3.57	3.57
Professionalism of staff	3.39	3.45*	3.34	3.42	3.43	3.51
Adequate product supply	3.36	3.50***	3.27	3.47	3.44	3.53
Selection of liquor offered	3.27	3.29	3.20	3.20	3.37	3.37
Level of staff knowledge	3.22	2.94*** ↓	3.15	2.88	3.29	3.00
Number of staff to help	3.18	3.02*** ↓	3.09	3.00	3.27	3.05
Store's prices	2.23	2.91***	2.11	2.83	2.36	2.99
Convenience of location	3.39	3.51**	3.39	3.44	3.48	3.57
Speed of checkout	3.39	3.35	3.32	3.33	3.46	3.38
Store's operating hours	3.13	3.57***	3.01	3.53	3.25	3.61
Overall mean score (10 areas)	3.21	3.31	3.13	3.26	3.29	3.36

Note: Grade ratings recoded as: 0 = F, 1 = D, 2 = C, 3 = B, 4 = A; t-tests for pre-post: *p<.05 **p<.01 ***p<.001

COMPARISON OF MEAN CUSTOMER SATISFACTION BY STORE TYPE IN 2014

	Total	Liquor Superstores	Liquor Stores	Grocery Stores	Drug Stores	Department Stores	Wholesale	Other	F*
N	465	35	31	178	13	80	49	36	
Courtesy of staff	3.53	3.78	3.23	3.56	3.63	3.44	3.60	3.44	1.72
Professionalism of staff	3.47	3.76	3.22	3.51	3.49	3.31	3.59	3.59	1.98
Adequate product supply	3.50	3.83	3.57	3.48	2.91	3.49	3.47	3.70	5.48***
Selection of liquor offered	3.28	3.81	3.57	3.12	2.94	3.22	3.38	3.53	7.17***
Level of staff knowledge	2.89	3.55	3.63	2.78	2.59	2.72	2.79	3.03	7.36***
Number of staff to help	3.00	3.60	3.41	2.96	2.97	2.84	2.76	3.06	5.87***
Store's prices	2.90	3.24	2.81	2.69	2.53	2.95	3.32	3.14	3.52**
Convenience of location	3.53	3.23	3.58	3.66	4.00	3.60	3.37	3.07	21.10***
Speed of checkout	3.35	3.71	3.62	3.33	2.91	3.25	3.09	3.48	3.08**
Store's operating hours	3.57	3.83	3.68	3.66	3.65	3.57	3.25	3.32	3.87***

Note: Grade ratings recoded as: 0 = F, 1 = D, 2 = C, 3 = B, 4 = A; * One way ANOVA F-tests: *p<.05 **p<.01 ***p<.001

SUMMARY OF MAIN PRE-POST PRIVATIZATION FINDINGS

- ❖ Five of the 10 purchase experience features were rated more favorably after privatization ($p < .05$ to $< .001$)
 - ❖ product supply, staff professionalism, location convenience, store hours and even store's prices.
- ❖ But prices were the lowest ranked attribute both times
 - ❖ (those with lowest family incomes ($< \$30K$) in 2014 appeared to rate price slightly less favorably – results not shown.)
- ❖ Liquor selection offered, staff courtesy, and checkout speed were unaltered.
- ❖ 'Number of staff to help' and 'level of staff knowledge' both declined ($p < .001$) from the 2010 experience with LCB stores compared to the 2014 privatized stores.

SUMMARY OF MAIN 2014 STORE-TYPE FINDINGS

- ❖ For five of the 10 consumer-experience satisfaction scores location, F-tests indicated significant overall differences by store ($p < .001$):
 - ❖ adequate supply of product, selection of liquor offered, level of staff knowledge, number of staff to help, and convenience of store location.
- ❖ overall satisfaction levels differed on three further experience attributes ($p < .01$):
 - ❖ store hours, speed of checkout and prices.
- ❖ Post-hoc analyses indicated five satisfaction aspects were highest for liquor superstores:
 - ❖ supply, selection, number of staff to help, operating hours and checkout speed
- ❖ 'Location convenience' favored grocery and drug stores, and 'price satisfaction' favored wholesale (Costco) stores.
- ❖ Only one attribute—staff knowledge—was highest at liquor stores.

CONCLUSIONS

- Satisfaction with liquor purchase experiences increased after privatization for half the features of the purchase experience assessed both times, and decreased for two attributes (both related to staffing (knowledge and number helping).
- Availability (location and hours) perceived product supply and staff professionalism appeared to be the most favored for open market liquor purchasers.
- After privatization it is still possible to find relatively inexpensive spirits products, so perhaps it is not as surprising that price (though still the least favorable attribute at both times), was rated somewhat better after than before privatization.
- Objectively prices went up on average 15.5% for the 75 ml size and 4.7% for the 1.75 l size (Kerr et al., 2015), but as we noted "persistent drinkers looking for low prices will be able to find them in certain stores" (Abstract). This is particularly true for the large size of spirits containers, for certain brands, in the wholesale Costco store.

CONCLUSIONS

- One additional indication that consumers were aware of the increased spirits prices and responsive to the price hike is that those close to the Oregon border have been purchasing liquor at lower-priced monopoly stores near the Washington border
 - One study indicated a 21% increase in sales at Oregon border stores post Washington's privatization (LoPiccalo, 2014).
 - The same was said to be true of Idaho, paradoxically also a monopoly state (Cull, 2014).
- Later we will consider how such experiences as well as harms experienced more broadly (purchasers and non-purchasers) affect sustained support of the privatization and for other alcohol control policies.

LIMITATIONS

- Cross-sectional, self-report results, obtained with somewhat different telephone surveys.
- Washington State LCB survey is “as is.”
- Small samples of spirits purchasers at both times.
- Descriptive findings without adjustments for demographics (other than gender).
- Nevertheless this represented an unusual opportunity to conduct a formal pre-post test of experiences with purchasing liquor in monopoly versus privatized stores after spirits privatization in Washington State.



www.arg.org



13

THANK YOU!



- **Acknowledgements:** This work was supported by R01 AA021742 (W. Kerr, PI) from the National Institute on Alcohol Abuse and Alcoholism (NIAAA) to the Alcohol Research Group, Public Health Institute. The content is solely the responsibility of the authors and does not necessarily represent the official view of NIAAA or other sponsoring institutions.
- The authors have received funding through contracts and travel support from the National Alcohol Beverage Control Association



Plan to attend Alcohol Policy 17



WEDNESDAY - FRIDAY
APRIL 29-31, 2015
RENOISSANCE ARLINGTON CAPITAL VIEW HOTEL
WASHINGTON DC NATIONAL CAPITAL AREA - USA
alcoholpolicyconference.org

Contact me at tgreenfield@arg.org Website: www.arg.org



www.arg.org



14

REFERENCES

- Babor TF, Caetano R, Casswell S, Edwards G, Giesbrecht N, Graham K, Grube J, Hill L, Holder H, Homel R, Livingston M, Osterberg E, Rehm J, Room R, Rossow I (2010) Alcohol: No Ordinary Commodity: Research and public policy 2nd ed. Oxford University Press, New York.
- Cull I (2014) Washingtonians flock to Idaho for cheaper alcohol [Accessed: 2015-01-06. Archived by WebCite® at <http://www.webcitation.org/6VOG0gdTX>], in KXLY4, Spokane, WA.
- Gallagher D (2014) More liquor for sale in Washington; prices up [Accessed: 2015-01-06. Archived by WebCite® at <http://www.webcitation.org/6VOFjIHV0>], in The Washington Times.
- Kerr WC, Patterson D, Greenfield TK (2014) Spirits and Wine Tax Rates for the Control States: 2012 estimates based on retail price impact relative to license state pricing. National Alcohol Beverage Control Association, Alexandria, VA.
- Kerr WC, Williams E, Greenfield TK (2015) Analysis of price changes in Washington following the 2012 liquor privatization [DOI: <http://dx.doi.org/10.1093/ajcal/ajv067>]. Alcohol Alcohol.
- LoPiccolo K (2014) [Dissertation] Spatial Economic Analysis of Liquor Privatization in Washington State, in Economics, University of California at Santa Cruz, Santa Cruz, CA.
- Sloan FA, Eldred LM, Xu Y (2014) The behavioral economics of drunk driving. J Health Econ 35:64-81.



www.arg.org



15