## Do Consumers Exploit Commitment Opportunities? Evidence from Natural Experiments Involving Liquor Consumption

## APPENDIX

B. Douglas Bernheim Stanford University and National Bureau of Economic Research

Jonathan Meer Texas A&M University and National Bureau of Economic Research

> Neva K. Novarro Pomona College

> > October 2015

## 1.Discussion of controls for interstate liquor flows

To illustrate the calculation of OnInflows and OffInflows, suppose state A, with a population of 100, is bordered by states B, C, D, and E. Suppose also that 10 state B residents, 6 state C residents, 12 state D residents, and 4 state E residents live in counties bordering state A. Finally suppose that Sunday liquor sales are allowed for 11 hours in state A, 7 hours in state B, 5 hours in state C, 12 hours in state D, and 14 hours in state E. We begin by calculating the number of potential person-hours of customer inflows (alcohol outflows) for each neighboring state. For state B, it is  $10 \times (11 - 7) = 40$  person-hours. For state C, it is  $6 \times (11 - 5) = 36$  person-hours. For states D and E, it is 0 person-hours (because their Sunday hours are longer). Thus, there are 76 potential person-hours of customer inflows in total. Finally, because our regression accounts for per capita alcohol sales in state A, we divide by state A's population. Thus, the value of the customer inflow variable in this example is 0.76.

To illustrate the calculation of OnOutflows and OffOutflows, let's continue with the same numerical example. Suppose in addition that 3 residents of state A live in counties bordering state B, 15 live in counties bordering state C, 17 live in counties bordering state D, and 8 live in counties bordering state E. We begin by calculating the number of potential person-hours of customer outflows (alcohol inflows) for each neighboring state. For states B and C, it is 0 person-hours (because their Sunday hours are shorter). For state D, it is  $17 \times (12 - 11) = 17$  person-hours. For state E, it is  $8 \times (14 - 11) = 24$  person-hours. Thus, there are 41 potential person-hours of customer outflows in total. Finally, because our regression accounts for per capita alcohol sales in state A, we divide by state A's population. Thus, the value of the customer outflow variable in this example is 0.41.

The definitions of our inflow and outflow variables ensure that they have sensible properties. If we split each neighboring states into two identical copies (each half as big), or if we doubled the population of a state and all of its neighbors, neither the inflow or outflow measures would change. If we doubled the subject state's population without doubling its neighbors' populations, the customer outflow variables would remain unchanged, but the customer inflow variables would fall by 50 percent. This is the correct answer because the same fraction of the subject state's population would remain susceptible to purchasing alcohol in neighboring states, while potential inflow customers would be half as numerous relative to the subject state's population.

## 2. Complete regression results

In Tables A1, A2, and A3, we present full regression results for all of the specifications in Tables 3, 4, and 5 of the main text. Coefficients are reported from OLS models with the log of per-capita liquor sales as the dependent variable; specifications include state and year fixed effects, which are not shown. Standard errors clustered at the state level are in parentheses; those significant at the 10% level are marked with \*, while those significant at the 5% level are marked with \*\*.

	(1)	(2)	(3)	(4)
SundayOnHours	0.0094**	0.0116**	0.0093**	0.0099*
	(0.0029)	(0.0035)	(0.0029)	(0.0033
SundayOffHours	0.0008	0.0012	-0.0051	-0.0000
	(0.0024)	(0.0025)	(0.0049)	(0.0027
SundayOnHours x SundayOffHours			0.0004 (0.0003)	
NonSundayAverageOnHours				-0.0013 (0.0059
NonSundayAverageOffHours				-0.0118 (0.0071
Liquor Tax (log of real dollars per gallon)	-0.0321** (0.0152)		-0.0508** (0.0229)	
Cigarette Tax (log of real dollars per pack)	-0.0278** (0.0125)		-0.0281** (0.0122)	
LegalAge18	0.0700	0.0482	0.0754	0.0482
	(0.0743)	(0.0397)	(0.0717)	(0.0831
LegalAge19	-0.0346*	-0.0057	-0.0290	-0.0274
	(0.0204)	(0.0235)	(0.0210)	(0.0210
LegalAge20	-0.0185	-0.0381*	-0.0152	-0.0325
	(0.0219)	(0.0226)	(0.0225)	(0.0250
Expand	0.0120	0.0483**	0.0083	0.0146
	(0.0203)	(0.0218)	(0.0198)	(0.0192
Restrict	-0.0458*	-0.0640**	-0.0393	-0.0311
	(0.0231)	(0.0232)	(0.0242)	(0.0202
Unemployment Rate	-0.0186**	-0.0126**	-0.0187**	-0.0251*
	(0.0040)	(0.0040)	(0.0040)	(0.0046
Population over 18	-0.0000**	-0.0000	-0.0000**	*00000-
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Potential Inflows Due to Longer	-0.0024	0.0024	-0.0031*	-0.0008
Home-State On-Premises Hours	(0.0017)	(0.0029)	(0.0017)	(0.0018
Potential Inflows Due to Longer	0.0046**	0.0010	0.0054**	0.0021
Home-State Off-Premises Hours	(0.0016)	(0.0025)	(0.0018)	(0.0015
Potential Outflows Due to Shorter	0.0121**	0.0235**	0.0120**	0.0188*
Home-State On-Premises Hours	(0.0058)	(0.0089)	(0.0058)	(0.0073
Potential Outflows Due to Shorter	-0.0020	-0.0026	-0.0021	-0.0028
Home-State Off-Premises Hours	(0.0075)	(0.0095)	(0.0074)	(0.0085
Observations	1196	1722	1196	1073

Table A1: Main Results (Full Results)

(0.0025)         (0.0023)         (0.0027)         (0.0025)           SundayOffHours         0.0003         0.0008         -0.0004         -0.0004           SundayOnHours - Lead         0.0014         -0.0010         (0.0025)         0.0025           SundayOffHours - Lead         0.0009         -0.0010         (0.0021)         0.0030           SundayOnHours - Two Leads         0.0019         (0.0026)         0.0030           SundayOffHours - Two Leads         0.0019         (0.0009)         0.00030           SundayOffHours - Lag         -0.0004         (0.0001)         0.00030           SundayOffHours - Lag         -0.0004         (0.0011)         0.0018           SundayOnHours - Two Lags         0.0018         (0.0021)         0.0018           SundayOffHours - Two Lags         0.0020         (0.0011)         0.0011           SundayOffHours - Two Lags         0.0020         (0.0018)         0.0011           SundayOffHours - Two Lags         0.0025         -0.0332***         -0.0332**           EverOfChange x Trend         0.00149         (0.0149)         (0.0125)         (0.0125)           Cigarette Tax         -0.0296*         -0.0265*         -0.0332**         -0.0313*         (0.0126)         (0.0125)         (0.		(1)	(2)	(3)	(4)
SundayOnHours         0.0003 (0.0025)         0.0003 (0.0024)         0.00024) (0.0024)           SundayOnHours - Lead         0.0014 (0.0017)         -0.0010 (0.0025)           SundayOnHours - Lead         0.0009 (0.0019)         -0.0010 (0.0021)           SundayOnHours - Two Leads         0.0030 (0.0026)         -0.0003 (0.0009)           SundayOffHours - Lag         -0.0004 (0.0026)           SundayOnHours - Lag         -0.0004 (0.0021)           SundayOffHours - Lag         -0.0004 (0.0021)           SundayOnHours - Two Lags         0.0018 (0.0021)           SundayOffHours - Two Lags         0.0018 (0.0021)           SundayOffHours - Two Lags         0.0026 (0.0018)           EverOnChange x Trend         0.0026* (0.0149)           Liquor Tax         -0.0296* (0.0131)         -0.0265* (0.0149)           Cigarette Tax         -0.0312** (0.0131)         -0.0270** (0.0125)           LegalAge18         0.0667 (0.0719)         -0.0234           LegalAge19         -0.0329 (0.0202)         -0.0311 (0.0203)           LegalAge20         -0.0131 (0.02012)         -0.0178 (0.0212)         -0.0028 (0.0212)           Expand         0.0143 (0.0208)         0.0154 (0.0221)         0.0154 (0.0216)	SundayOnHours				0.0087** (0.0029)
$(0.0017)$ $(0.0025)$ SundayOffHours - Lead $0.0009$ $-0.0010$ SundayOnHours - Two Leads $0.0030$ $(0.0031)$ SundayOffHours - Two Leads $0.0019$ $(0.0026)$ SundayOnHours - Lag $0.0004$ $(0.0009)$ SundayOnHours - Lag $0.0004$ $(0.0009)$ SundayOnHours - Lag $0.0018$ $(0.0021)$ SundayOnHours - Two Lags $0.0018$ $(0.0021)$ SundayOffHours - Two Lags $0.0018$ $(0.0021)$ SundayOffHours - Two Lags $0.0020$ $(0.0018)$ EverOnChange x Trend $0.0025$ $(0.0018)$ Liquor Tax $-0.0296^*$ $-0.0265^*$ $-0.0332^{**}$ (log of real dollars per gallon) $(0.0149)$ $(0.0149)$ $(0.0125)$ Cigarette Tax $-0.0312^{**}$ $-0.0344^{**}$ $(0.0270^{**}$ $(0.0719)$ $(0.0687)$ $(0.0981)$ $(0.0742)$ LegalAge18 $0.0667$ $0.0624$ $0.0813$ $0.0752$ $(0.0202)$ $(0.0203)$ $(0.0204)$ $(0.0212)$ $(0.0204)$ LegalAge19 $-0.0329$	SundayOffHours				-0.0000 (0.0026)
$(0.0019)$ $(0.0021)$ SundayOnHours - Two Leads $0.0030$ SundayOffHours - Two Leads $0.0019$ SundayOnHours - Lag $-0.0003$ SundayOffHours - Lag $-0.0004$ SundayOffHours - Lag $0.0018$ SundayOnHours - Two Lags $0.0018$ SundayOffHours - Two Lags $0.0020$ SundayOffHours - Two Lags $0.0020$ SundayOffHours - Two Lags $0.0020$ EverOnChange x Trend $0.0021$ Liquor Tax $-0.0296^*$ $-0.0265^*$ $-0.0332^{**}$ (log of real dollars per gallon) $(0.0149)$ $(0.0149)$ $(0.0125)$ (log of real dollars per pack) $(0.0131)$ $(0.0687)$ $(0.0270^{**})$ $(0.0125)$ LegalAge18 $0.0667$ $0.0624$ $0.0813$ $0.0752$ (log of real dollars per pack) $(0.0131)$ $(0.0270)^{**}$ $(0.0270)^{**}$ $(0.0270)^{**}$ LegalAge19 $-0.0329$ $-0.0311$ $-0.0264^*$ $(0.027)^{**}$ $(0.027)^{**}$ LegalAge20 $-0.0193$ $-0.0178$ $-0.0008$ $(0.0212)$ $(0.0225)$	SundayOnHours - Lead				
$(0.0031)$ SundayOffHours - Two Leads $0.0019$ SundayOnHours - Lag $-0.0003$ SundayOffHours - Lag $-0.0004$ SundayOnHours - Two Lags $0.0018$ SundayOffHours - Two Lags $0.0020$ SundayOffHours - Two Lags $0.0020$ SundayOffChaurs - Two Lags $0.0020$ EverOnChange x Trend $0.0025^*$ Liquor Tax $-0.0296^*$ $-0.0265^*$ $-0.0332^{**}$ (log of real dollars per gallon) $(0.0149)$ $(0.0150)$ $(0.0150)$ Cigarette Tax $-0.0312^{**}$ $-0.0344^{**}$ $-0.0270^{**}$ $-0.0313$ (log of real dollars per pack) $(0.0131)$ $(0.0144)$ $(0.0125)$ $(0.0120)$ LegalAge18 $0.0667$ $0.0624$ $0.0813$ $0.0752$ $(0.0202)$ $(0.0200)$ $(0.0234)$ $(0.0216)$ LegalAge19 $-0.0329$ $-0.0311$ $-0.0264$ $-0.0322$ $(0.0203)$ $(0.0203)$ $(0.0216)$ $(0.0216)$ $(0.0216)$ LegalAge20 $-0.0193$ $-0.0178$ $-0.0008$ $(0.0216)$ $(0.0225)$	SundayOffHours - Lead				
(0.0026)           SundayOnHours - Lag $-0.0003(0.0009)           SundayOffHours - Lag         -0.0004(0.0011)           SundayOnHours - Two Lags         0.0018(0.0021)           SundayOffHours - Two Lags         0.0020(0.0018)           EverOnChange x Trend         0.0025(0.00149)           EverOffChange x Trend         0.0014(0.0021           Liquor Tax(log of real dollars per gallon)         -0.0296^*(0.0149)         -0.0265^*(0.0149)         -0.0312^{**}(0.0150)         -0.03332^{**}(0.0150)           Cigarette Tax(log of real dollars per pack)         -0.0312^{**}(0.0131)         -0.0344^{***} -0.0270^{**}(0.0125)         -0.0313^*(0.0124)           LegalAge18         0.0667(0.0220)         0.0624(0.0203)         0.0813(0.0742)         0.0324(0.0226)           LegalAge19         -0.0329(0.0202)         -0.0311(0.0208)         -0.0264(0.0216)         -0.0324(0.0226)           LegalAge20         -0.0193(0.0215)         -0.0178(0.0208)         -0.0008(0.0212)         -0.015(0.0228)           Expand         0.0143(0.0208)         0.0154(0.0221)         0.0154(0.0206)         0.0153^{**}(0.0195           Restrict         -0.0431^* -0.0434^* -0.0513^{**} -0.0462$	SundayOnHours - Two Leads				
SundayOffHours - Lag       (0.0009)         SundayOffHours - Lag       -0.0004 (0.0011)         SundayOnHours - Two Lags       0.0018 (0.0021)         SundayOffHours - Two Lags       0.0020 (0.0018)         EverOnChange x Trend       0.0026* (0.00149)         EverOffChange x Trend       0.00110 (0.0021)         Liquor Tax       -0.0296* (0.0149)       -0.0332** (0.0149)       -0.0332** (0.0150)         Cigarette Tax       -0.0312** (0.0131)       -0.0344** (0.0144)       -0.0270** (0.0125)       -0.0313* (0.0126)         LegalAge18       0.0667       0.0624       0.0813 (0.0981)       0.0752 (0.0712)         LegalAge19       -0.0329       -0.0311       -0.0264 (0.0215)       -0.0322 (0.0200)       -0.0122 (0.0225)         LegalAge20       -0.0193       -0.0178       -0.0008 (0.0212)       -0.015 (0.0225)         Expand       0.0143       0.0190       0.0154 (0.0221)       0.0154 (0.0226)         Restrict       -0.0431*       -0.0434*       -0.0513** (0.0227)       -0.0462	SundayOffHours - Two Leads				
SundayOnHours - Lag       (0.0011)         SundayOnHours - Two Lags       0.0018 (0.0021)         SundayOffHours - Two Lags       0.0020 (0.0018)         EverOnChange x Trend       0.0011 (0.0021)         Liquor Tax       -0.0296*       -0.0265*       -0.0332** (0.0159)         Cigarette Tax       -0.0312**       -0.0344**       -0.0270** (0.0125)       -0.0313: (0.0126)         LegalAge18       0.0667       0.0624       0.0813 (0.0719)       0.0742         LegalAge19       -0.0329       -0.0311       -0.0264       -0.0324         LegalAge20       -0.0193       -0.0178       -0.0008       -0.0154         LegalAge20       -0.0193       -0.0178       -0.0008       -0.0154         Kapand       0.0143       0.0190       0.0154       0.0154         Kapand       -0.0143*       -0.0434*       -0.0513**       -0.0434*	SundayOnHours - Lag				
$\begin{array}{c} \text{SundayOffHours - Two Lags} \\ \text{SundayOffHours - Two Lags} \\ \text{SundayOffHours - Two Lags} \\ \text{EverOnChange x Trend} \\ \text{EverOnChange x Trend} \\ \text{EverOffChange x Trend} \\ \text{Liquor Tax} \\ (log of real dollars per gallon) \\ (0.0149) \\ (0.0149) \\ (0.0149) \\ (0.0149) \\ (0.0149) \\ (0.0149) \\ (0.0150) \\ (0.0120) \\ (0.0120) \\ (0.0120) \\ (0.0121) \\ (0.0120) \\ (0.0213) \\ (0.0224) \\ (0.0224) \\ (0.0224) \\ (0.0224) \\ (0.0224) \\ (0.0224) \\ (0.0224) \\ (0.0212) \\ (0.0224) \\ (0.0224) \\ (0.0212) \\ (0.0224) \\ (0.0224) \\ (0.0224) \\ (0.0224) \\ (0.0212) \\ (0.0225) \\ (0.0225) \\ (0.0225) \\ (0.0221) \\ (0.0208) \\ (0.0221) \\ (0.0206) \\ (0.0199 \\ (0.0277) \\ (0$	SundayOffHours - Lag				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SundayOnHours - Two Lags				
EverOffChange x Trend $(0.0020)$ Liquor Tax $-0.0296^*$ $-0.0265^*$ $-0.0332^{**}$ $(log of real dollars per gallon)(0.0149)(0.0149)(0.0150)(log of real dollars per gallon)(0.0131)(0.0144)(0.0125)(log of real dollars per pack)(0.0131)(0.0144)(0.0125)(log of real dollars per pack)(0.0131)(0.0144)(0.0125)(log of real dollars per pack)(0.0719)(0.0687)(0.0981)(log of real dollars per pack)(0.0719)(0.0687)(0.0981)(log of real dollars per pack)(0.0131)(0.0144)(0.0234)(log of real dollars per pack)(0.0131)(0.0206)(0.0234)(log of real dollars per pack)(0.0131)(0.0200)(0.0234)(log of real dollars per pack)(0.0131)(0.0200)(0.0234)(log of real dollars per pack)(0.0132)(0.0206)(0.0216)(log of real dollars per pack)(0.0131)(0.0206)(0.0234)(log of real dollars per pack)(0.0132)(0.0206)(0.0216)(log of real dollars per pack)(0.0133)(0.0143)$	SundayOffHours - Two Lags				
$\begin{array}{c ccccc} (0.0021\\ Liquor Tax & -0.0296^* & -0.0265^* & -0.0332^{**} & -0.0353^* \\ (log of real dollars per gallon) & (0.0149) & (0.0149) & (0.0150) & (0.0159) \\ Cigarette Tax & -0.0312^{**} & -0.0344^{**} & -0.0270^{**} & -0.0313^* \\ (log of real dollars per pack) & (0.0131) & (0.0144) & (0.0125) & -0.0313^* \\ (log of real dollars per pack) & (0.0131) & (0.0144) & (0.0125) & (0.0120) \\ LegalAge18 & 0.0667 & 0.0624 & 0.0813 & 0.0755 \\ (0.0719) & (0.0687) & (0.0981) & (0.0742) \\ LegalAge19 & -0.0329 & -0.0311 & -0.0264 & -0.0325 \\ (0.0202) & (0.0200) & (0.0234) & (0.0216) \\ LegalAge20 & -0.0193 & -0.0178 & -0.0008 \\ (0.0215) & (0.0208) & (0.0212) & (0.0229) \\ Expand & 0.0143 & 0.0190 & 0.0154 \\ (0.0208) & (0.0221) & (0.0206) & (0.0134) \\ (0.0206) & (0.0205) & (0.0237) & -0.0462 \\ \end{array}$	EverOnChange x Trend				0.0011 (0.0020)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	EverOffChange x Trend				0.0011 (0.0021)
Cigatette Tax $-0.0312^{-1.1}$ $-0.0344^{-1.1}$ $(0.0125)$ $-0.0315$ (log of real dollars per pack) $(0.0131)$ $(0.0144)$ $(0.0125)$ $(0.0120)$ LegalAge18 $0.0667$ $0.0624$ $0.0813$ $0.0755$ $(0.0719)$ $(0.0687)$ $(0.0981)$ $(0.0742)$ LegalAge19 $-0.0329$ $-0.0311$ $-0.0264$ $-0.0325$ $(0.0202)$ $(0.0200)$ $(0.0234)$ $(0.0216)$ LegalAge20 $-0.0193$ $-0.0178$ $-0.0008$ $-0.015$ $(0.0215)$ $(0.0208)$ $(0.0212)$ $(0.0229)$ Expand $0.0143$ $0.0190$ $0.0154$ $0.0134$ $(0.0208)$ $(0.0221)$ $(0.0206)$ $(0.0199)$ Restrict $-0.0431^*$ $-0.0434^*$ $-0.0513^{**}$					-0.0353** (0.0159)
LegalAge18 $0.0007$ $0.0024$ $(0.0981)$ $0.0732$ $(0.0719)$ $(0.0719)$ $(0.0687)$ $(0.0981)$ $(0.0742)$ LegalAge19 $-0.0329$ $-0.0311$ $-0.0264$ $-0.0323$ $(0.0202)$ $(0.0200)$ $(0.0234)$ $(0.0216)$ LegalAge20 $-0.0193$ $-0.0178$ $-0.0008$ $-0.015$ $(0.0215)$ $(0.0208)$ $(0.0212)$ $(0.0229)$ Expand $0.0143$ $0.0190$ $0.0154$ $0.0134$ $(0.0208)$ $(0.0221)$ $(0.0206)$ $(0.0199)$ Restrict $-0.0431*$ $-0.0434*$ $-0.0513**$ $-0.0462$					-0.0313** (0.0120)
LegalAge19 $-0.0329$ $-0.0311$ $(0.0234)$ $-0.0323$ LegalAge20 $-0.0193$ $-0.0178$ $-0.0008$ $-0.015$ $(0.0215)$ $(0.0208)$ $(0.0212)$ $(0.0229)$ Expand $0.0143$ $0.0190$ $0.0154$ $0.0134$ $(0.0208)$ $(0.0221)$ $(0.0206)$ $(0.0199)$ Restrict $-0.0431^*$ $-0.0434^*$ $-0.0513^{**}$ $-0.0462$	LegalAge18				0.0755 (0.0742)
LegarAge20 $-0.0173$ $-0.0173$ $(0.0215)$ $(0.0215)$ $(0.0208)$ $(0.0212)$ $(0.0229)$ Expand $0.0143$ $0.0190$ $0.0154$ $0.0134$ $(0.0208)$ $(0.0221)$ $(0.0206)$ $(0.0199)$ Restrict $-0.0431^*$ $-0.0434^*$ $-0.0513^{**}$ $-0.0462$	LegalAge19				-0.0325 (0.0216)
Expand $0.0143$ $0.0190$ $0.0190$ $(0.0208)$ $(0.0221)$ $(0.0206)$ $(0.0199)$ Restrict $-0.0431^*$ $-0.0434^*$ $-0.0513^{**}$ $-0.0462$	LegalAge20				-0.0151 (0.0229)
$-0.0451^{\circ} -0.0454^{\circ} \qquad -0.0402$	Expand				0.0134 (0.0199)
(0.0233) $(0.0245)$ $(0.0257)$ $(0.0231)$	Restrict	-0.0431* (0.0233)	-0.0434* (0.0245)	-0.0513** (0.0237)	-0.0462* (0.0231)

Table A2: Tests of the Identifying Assumptions (Full Results)

Unemployment Rate	-0.0190**	-0.0196**	-0.0186**	-0.0187**
	(0.0041)	(0.0041)	(0.0047)	(0.0040)
Population over 18	-0.0000**	-0.0000**	-0.0000**	-0.0000**
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Potential Inflows Due to Longer	-0.0019	-0.0007	-0.0027	-0.0024
Home-State On-Premises Hours	(0.0017)	(0.0017)	(0.0018)	(0.0021)
Potential Inflows Due to Longer	0.0039**	0.0030*	0.0049**	0.0051**
Home-State Off-Premises Hours	(0.0016)	(0.0017)	(0.0017)	(0.0020)
Potential Outflows Due to Shorter	0.0116*	0.0109*	0.0081	0.0116*
Home-State On-Premises Hours	(0.0059)	(0.0061)	(0.0056)	(0.0058)
Potential Outflows Due to Shorter	-0.0002	0.0019	-0.0022	-0.0016
Home-State Off-Premises Hours	(0.0073)	(0.0069)	(0.0070)	(0.0077)
Observations	1149	1102	1104	1196

	(1)	(2)	(3)	(4)
SundayOnHours	0.0095** (0.0028)	0.0095** (0.0028)	0.0089** (0.0028)	
SundayOffHours	0.0008 (0.0024)	0.0008 (0.0023)	0.0003 (0.0024)	
AllowsSundayOn				0.0805** (0.0366)
AllowsSundayOff				0.0367 (0.0297)
Ban on Smoking in Bars	0.0038 (0.0259)			
Liquor Tax (log of real dollars per gallon)	-0.0321**	-0.0362**	-0.0213	0.0043
	(0.0152)	(0.0158)	(0.0151)	(0.0164)
Wine Tax (log of real dollars per gallon)		0.0032 (0.0200)		
Beer Tax (log of real dollars per gallon)		0.0595 (0.0738)		
Cigarette Tax (log of real dollars per pack)	-0.0281**	-0.0314**	-0.0093	-0.0310**
	(0.0126)	(0.0125)	(0.0126)	(0.0130)
Log of Per Capita Beer Consump- tion (Ethanol Equivalent)			0.3244** (0.0890)	
Log of Per Capita Wine Consump- tion (Ethanol Equivalent)			0.1040** (0.0397)	
LegalAge18	0.0698	0.0693	0.0456	0.0677
	(0.0742)	(0.0723)	(0.0789)	(0.0777)
LegalAge19	-0.0347*	-0.0359*	-0.0252	-0.0398*
	(0.0203)	(0.0207)	(0.0221)	(0.0214)
LegalAge20	-0.0183	-0.0182	-0.0291	-0.0193
	(0.0219)	(0.0215)	(0.0217)	(0.0222)
Expand	0.0121	0.0149	0.0094	0.0153
	(0.0203)	(0.0212)	(0.0207)	(0.0216)
Restrict	-0.0467*	-0.0481**	-0.0469**	-0.0366*
	(0.0247)	(0.0233)	(0.0227)	(0.0201)
Unemployment Rate	-0.0186**	-0.0192**	-0.0154**	-0.0178**
	(0.0040)	(0.0041)	(0.0036)	(0.0040)
Population over 18	-0.0000**	-0.0000**	-0.0000**	-0.0000**
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Potential Inflows Due to Longer	-0.0024	-0.0023	-0.0029	-0.0003
Home-State On-Premises Hours	(0.0018)	(0.0017)	(0.0019)	(0.0022)

Table A3: Additional Robustness Checks (Full Results)

Potential Inflows Due to Longer Home-State Off-Premises Hours	0.0045** (0.0016)	0.0044** (0.0016)	0.0059** (0.0019)	0.0025 (0.0020)
Potential Outflows Due to Shorter	0.0123**	0.0122**	0.0099*	0.0093*
Home-State On-Premises Hours	(0.0056)	(0.0059)	(0.0051)	(0.0055)
Potential Outflows Due to Shorter	-0.0021	-0.0024	-0.0021	0.0002
Home-State Off-Premises Hours	(0.0074)	(0.0074)	(0.0067)	(0.0081)
Observations	1196	1196	1196	1196