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A Correlations of Components of State Laws

Table 1: State Laws Regulating the Sales of Over the Counter Medicines Containing Ephedrine or Pseudoephedrine

	Limit on Amount	ID Required	<u>Correlations</u>		Any Restriction	States Adopting Before Federal Law
			Log Maintained	Stored Behind Counter		
Limit on Amount an Individual Can Purchase	1					35
ID Required at Time of Purchase	0.90	1				30
Log Maintained of Purchaser's Identity	0.88	0.97	1			24
Stored Behind Counter, in Line Of Sight or on Video	0.92	0.91	0.88	1		35
Any of the Restrictions Above	1.00	0.90	0.87	0.92	1	35

Notes: The correlations are all estimated weighted for state populations on data from January of 2004 through March of 2008. Only two states of the 35 states that implemented product placement restrictions (Louisiana and Michigan) allowed the items to be monitored by video or placed in a clerk's line of sight rather than behind a counter or in a locked counter.

B Law Dates

Table 2: Law Dates by State

State	Any Law	Behind the Counter	Must Show Identification	Retailer Logbook	Quota
ALABAMA	1-Jul-05	1-Jul-05	1-Jul-05	1-Jul-05	1-Jul-05
ALASKA	8-Apr-06	3-Jun-06	3-Jun-06	3-Jun-06	8-Apr-06
ARIZONA	31-Oct-05	31-Oct-05	30-Sep-06	30-Sep-06	31-Oct-05
ARKANSAS	20-Mar-05	20-Mar-05	20-Mar-05	20-Mar-05	20-Mar-05
CALIFORNIA	1-Jan-06	30-Sep-06	1-Jan-06	1-Jan-06	1-Jan-06
COLORADO	1-Jul-05	1-Jul-06	1-Jul-06	30-Sep-06	1-Jul-05
CONNECTICUT	8-Apr-06	30-Sep-06	30-Sep-06	30-Sep-06	8-Apr-06
DELAWARE	1-Oct-05	1-Oct-05	1-Oct-05	1-Oct-05	1-Oct-05
DISTRICT OF COLUMBIA	8-Apr-06	30-Sep-06	30-Sep-06	30-Sep-06	8-Apr-06
FLORIDA	1-Jul-05	1-Jul-05	30-Sep-06	30-Sep-06	1-Jul-05
GEORGIA	1-Jul-05	1-Jul-05	30-Sep-06	30-Sep-06	1-Jul-05
HAWAII	1-Jul-05	1-Jul-05	30-Sep-06	30-Sep-06	1-Jul-05
IDAHO	8-Apr-06	1-Jul-06	1-Jul-06	30-Sep-06	8-Apr-06
ILLINOIS	15-Jan-06	15-Jan-06	15-Jan-06	15-Jan-06	15-Jan-06
INDIANA	1-Jul-05	1-Jul-05	1-Jul-05	1-Jul-05	1-Jul-05
IOWA	21-May-05	21-May-05	21-May-05	21-May-05	21-May-05
KANSAS	28-Apr-05	30-Sep-06	28-Apr-05	28-Apr-05	28-Apr-05
KENTUCKY	20-Jun-05	20-Jun-05	20-Jun-05	20-Jun-05	20-Jun-05
LOUISIANA	15-Aug-05	15-Aug-05	30-Sep-06	30-Sep-06	15-Aug-05
MAINE	1-Nov-05	1-Nov-05	30-Sep-06	30-Sep-06	1-Nov-05
MARYLAND	8-Apr-06	30-Sep-06	30-Sep-06	30-Sep-06	8-Apr-06
MASSACHUSETTS	8-Apr-06	30-Sep-06	30-Sep-06	30-Sep-06	8-Apr-06
MICHIGAN	15-Dec-05	15-Dec-05	15-Dec-05	30-Sep-06	15-Dec-05
MINNESOTA	1-Jul-05	1-Jul-05	1-Jul-05	1-Jul-05	1-Jul-05
MISSISSIPPI	1-Jul-05	1-Jul-05	1-Jul-05	30-Sep-06	1-Jul-05
MISSOURI	15-Jun-05	15-Jun-05	15-Jun-05	15-Jun-05	15-Jun-05

Table 2: Law Dates by State (Continued)

State	Any Law	Behind the Counter	Must Show Identification	Retailer Logbook	Quota
MONTANA	1-Jul-05	1-Jul-05	1-Jul-05	1-Jul-05	1-Jul-05
NEBRASKA	4-Sep-05	4-Sep-05	4-Sep-05	30-Sep-06	4-Sep-05
NEVADA	8-Apr-06	30-Sep-06	30-Sep-06	30-Sep-06	8-Apr-06
NEW HAMPSHIRE	8-Apr-06	30-Sep-06	30-Sep-06	30-Sep-06	8-Apr-06
NEW JERSEY	22-Nov-05	30-Sep-06	30-Sep-06	30-Sep-06	22-Nov-05
NEW MEXICO	31-Jan-05	31-Jan-05	1-Jul-06	1-Jul-06	31-Jan-05
NEW YORK	8-Apr-06	30-Sep-06	30-Sep-06	30-Sep-06	8-Apr-06
NORTH CAROLINA	15-Jan-06	15-Jan-06	15-Jan-06	15-Jan-06	15-Jan-06
NORTH DAKOTA	1-Jun-05	1-Jun-05	1-Jun-05	1-Jun-05	1-Jun-05
OHIO	8-Apr-06	30-Sep-06	30-Sep-06	30-Sep-06	8-Apr-06
OKLAHOMA	6-Apr-04	25-Jul-04	6-Apr-04	6-Apr-04	6-Apr-04
OREGON	15-Nov-04	15-Nov-04	15-Nov-04	14-May-05	15-Nov-04
PENNSYLVANIA	8-Apr-06	30-Sep-06	30-Sep-06	30-Sep-06	8-Apr-06
RHODE ISLAND	8-Apr-06	30-Sep-06	30-Sep-06	30-Sep-06	8-Apr-06
SOUTH CAROLINA	8-Apr-06	30-Sep-06	30-Sep-06	30-Sep-06	8-Apr-06
SOUTH DAKOTA	8-Apr-06	1-Jul-06	1-Jul-06	1-Jul-06	8-Apr-06
TENNESSEE	31-Mar-05	29-Apr-05	29-Apr-05	29-Apr-05	29-Apr-05
TEXAS	1-Aug-05	1-Aug-05	1-Aug-05	1-Aug-05	1-Aug-05
UTAH	8-Apr-06	30-Sep-06	30-Sep-06	30-Sep-06	8-Apr-06
VERMONT	8-Apr-06	30-Sep-06	30-Sep-06	30-Sep-06	8-Apr-06
VIRGINIA	1-Oct-05	1-Oct-05	1-Oct-05	1-Oct-05	1-Oct-05
WASHINGTON	24-Jul-05	1-Oct-05	1-Oct-05	30-Sep-06	1-Jan-06
WEST VIRGINIA	8-Jul-05	8-Jul-05	8-Jul-05	8-Jul-05	8-Jul-05
WISCONSIN	1-Oct-05	1-Oct-05	1-Oct-05	1-Oct-05	1-Oct-05
WYOMING	1-Jul-05	1-Jul-05	30-Sep-06	30-Sep-06	1-Jul-05

C Summary Statistics

Table 3: Summary Statistics

	Mean	Standard Deviation	Fraction of Obs. Equal to 0
Total Labs	10.85	17.87	0.28
Lab Capacity Under 2oz	7.81	12.61	0.31
Lab Capacity Between 2 and 8oz	2.16	4.40	0.51
Lab Capacity Greater Than 9oz	0.88	3.00	0.67
Methamphetamine Price/Gram	44.83	25.46	0
Methamphetamine Purity	60.19	42.60	0
Positive Methamphetamine Workplace Drug Test Rate	0.39	0.30	0.05
Positive Methamphetamine Hospital Drug Test Rate	0.69	0.83	0.03
Arrest Rate for Possession of Narcotics	0.74	1.03	0.13
Arrest Rate for Sale of Narcotics	1.40	1.33	0.03
Arrest Rate for Possession of Non-Narcotics	1.84	2.23	0.05
Arrest Rate for Sale of Non-Narcotics	5.26	5.42	0.02

D Reliability of Consumption Measures

To obtain a sense of how well these two measures of drug use capture variation in drug use, we correlate them with each other. Any correlation between them is likely due to their correlation with underlying use rates. The correlation between the two series is 0.77, suggesting that they are both highly correlated with underlying drug use in the general population. We also compare the estimates from the workplace and hospital testing with estimates of state-level prevalence from the National Survey on Drug Use and Health during the period from 2004 to 2007. We are restricted to making the comparison based on state-level means calculated from a four year period because the survey will not support an analysis over a shorter period. We present these comparisons in Figure 1. Each graph is a scatter plot of the average percent of drug tests that were positive against the average fraction of survey respondents reporting methamphetamine use in the prior 12 months. The size of each bubble is proportional to the square root of state population. The rates at which employees and hospital patients test positive for amphetamine are highly correlated with survey estimates of methamphetamine use in the general population with (population-weighted) correlations of 0.89 and 0.85, respectively.¹ The strength of these correlations suggest that these two drug testing measures are truly measuring underlying use.²

¹The state-specific estimates of methamphetamine use among the general population were generated by stacking four years of the National Survey on Drug Use and Health.

²Despite likely under-reporting in surveys, the percent of the population reporting use in the surveys is larger than the percent testing positive. This is likely due to the differing reference windows for the tests relative to the survey. The survey response is regarding the prior 12 months while drug tests only capture use in the prior 3-5 days.

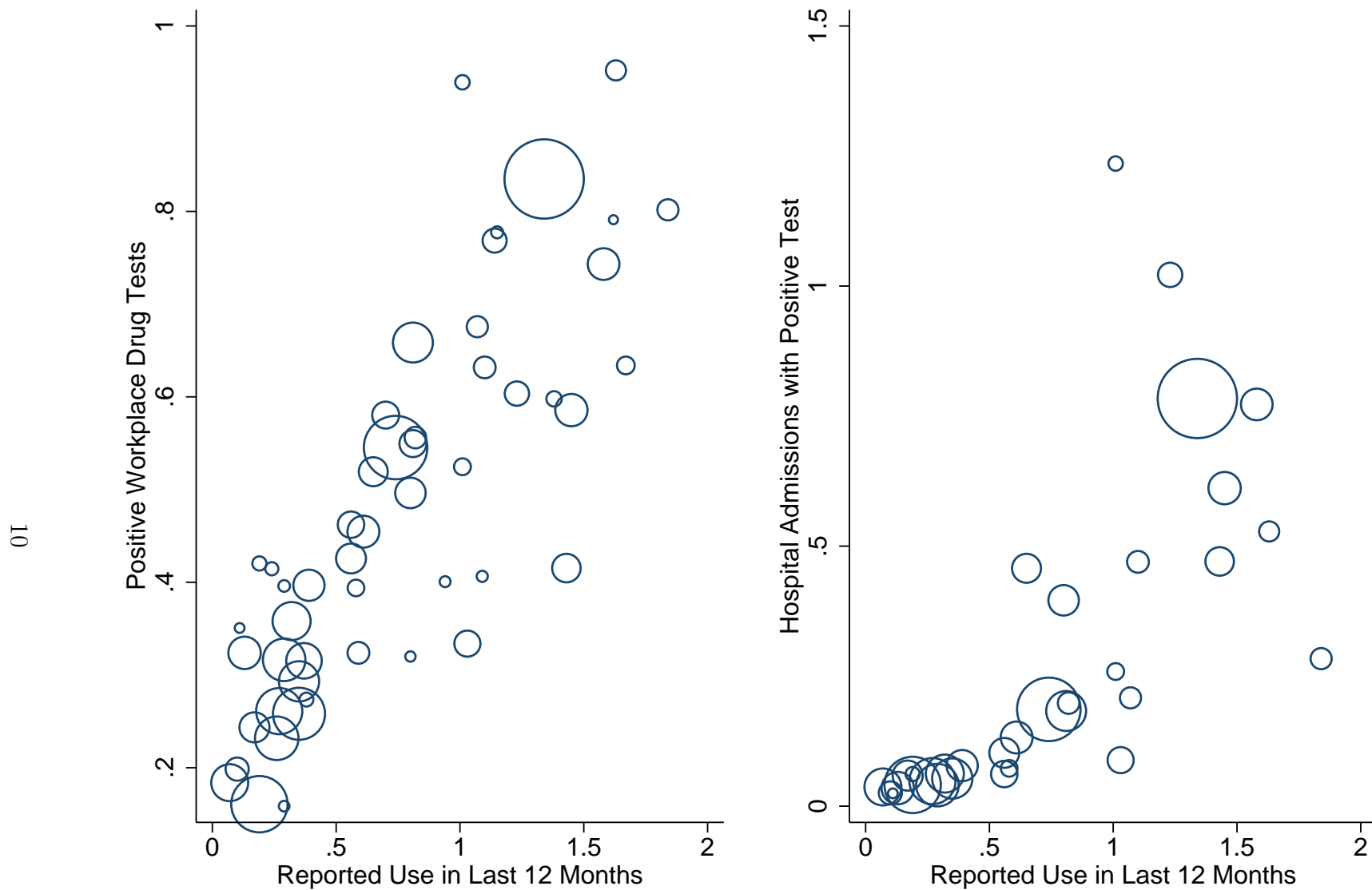


Figure 1: Correlations of Measures of Methamphetamine Use

Notes: The figures are scatter plots of the average percent of drug tests that are positive against the average percent of survey respondents in the National Survey on Drug Use and Health that report using methamphetamine in the past 12 months. The averages are calculated during the period from 2004 to 2007. Each bubble represents a state and the size of each bubble is proportional to state population.

E Event Studies with Confidence Intervals

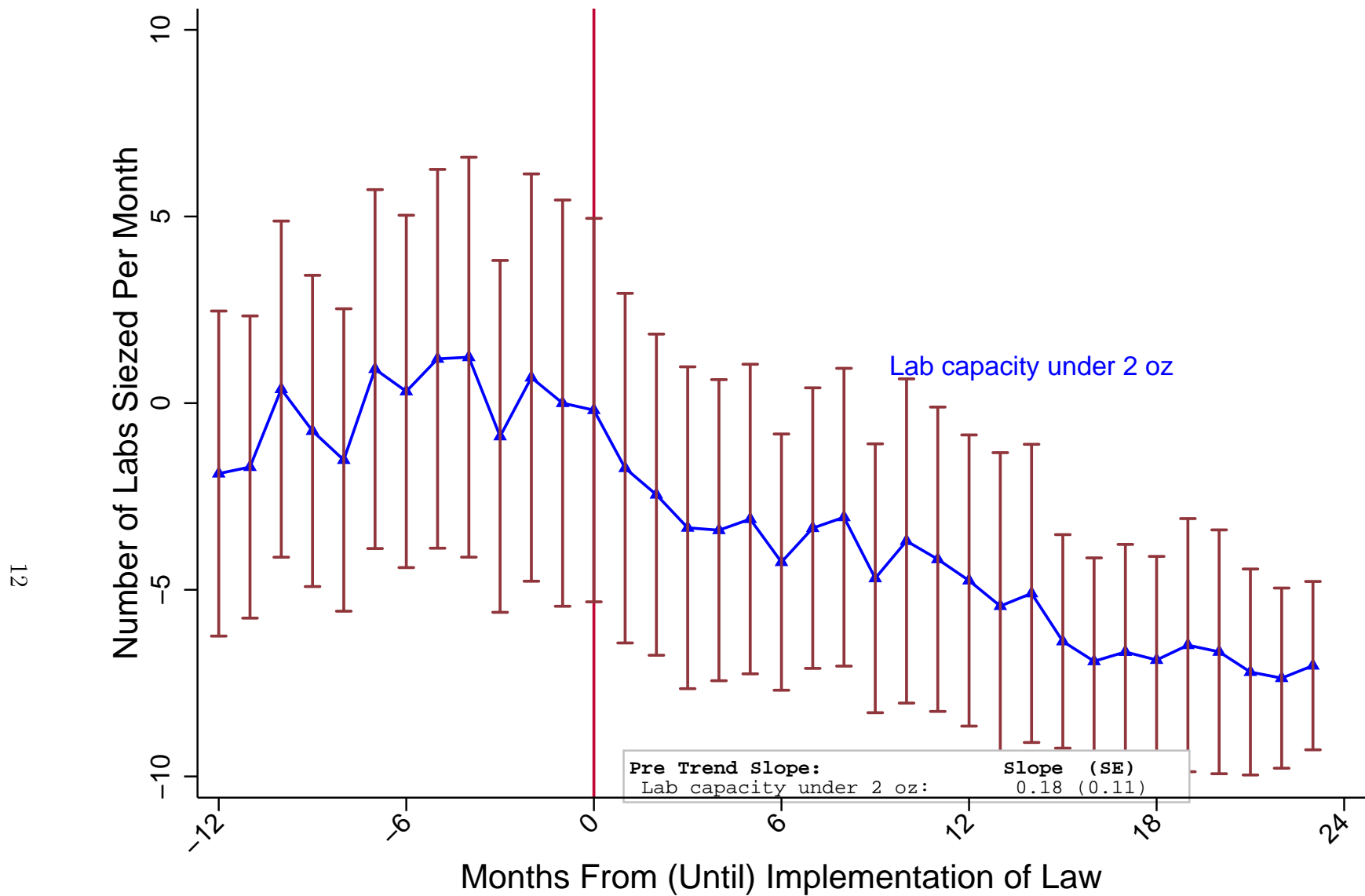


Figure 2: Event Study: Methamphetamine Labs Discovered or Seized With Capacity Under 2oz

Notes: Count of labs discovered was regressed on state fixed effects, year/month fixed effects, linear state time trends, and indicators corresponding to the number of months since any over the counter restriction went into effect. The graph contains OLS estimates of the coefficients on the indicators corresponding to the number of months since any over the counter restriction went into effect. The coefficient on the event dummy equal to one if a state enacted any OTC restriction in the next month was normalized to zero. The estimates include records for all 50 states and the District of Columbia from January 2002 through March 2008. The vertical bars represent 95% confidence intervals, constructed with standard errors clustered by state.

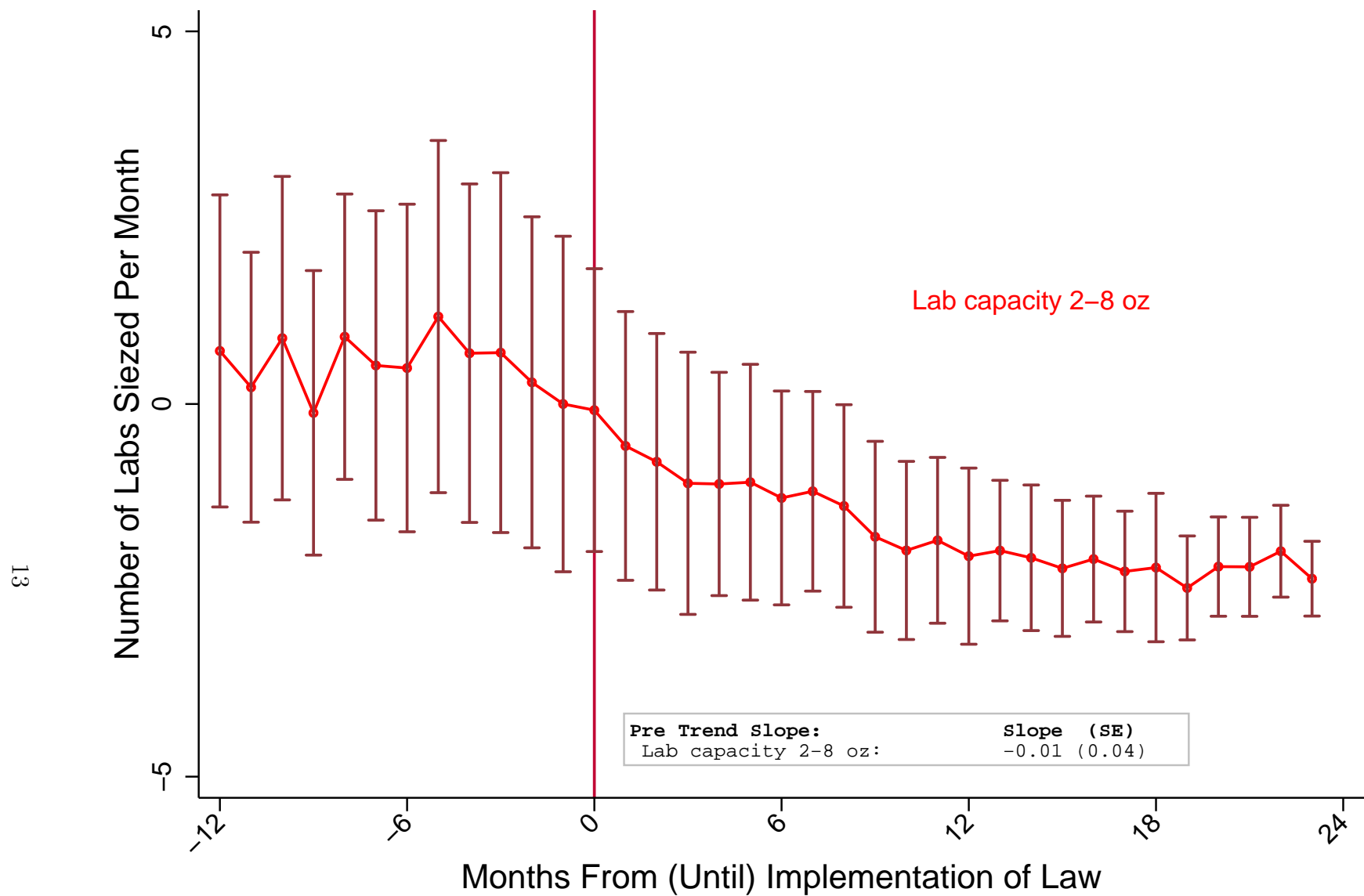


Figure 3: Event Study: Methamphetamine Labs Discovered or Seized With Capacity Between 2 and 8oz

Notes: Count of labs discovered was regressed on state fixed effects, year/month fixed effects, linear state time trends, and indicators corresponding to the number of months since any over the counter restriction went into effect. The graph contains OLS estimates of the coefficients on the indicators corresponding to the number of months since any over the counter restriction went into effect. The coefficient on the event dummy equal to one if a state enacted any OTC restriction in the next month was normalized to zero. The estimates include records for all 50 states and the District of Columbia from January 2002 through March 2008. The vertical bars represent 95% confidence intervals, constructed with standard errors clustered by state.

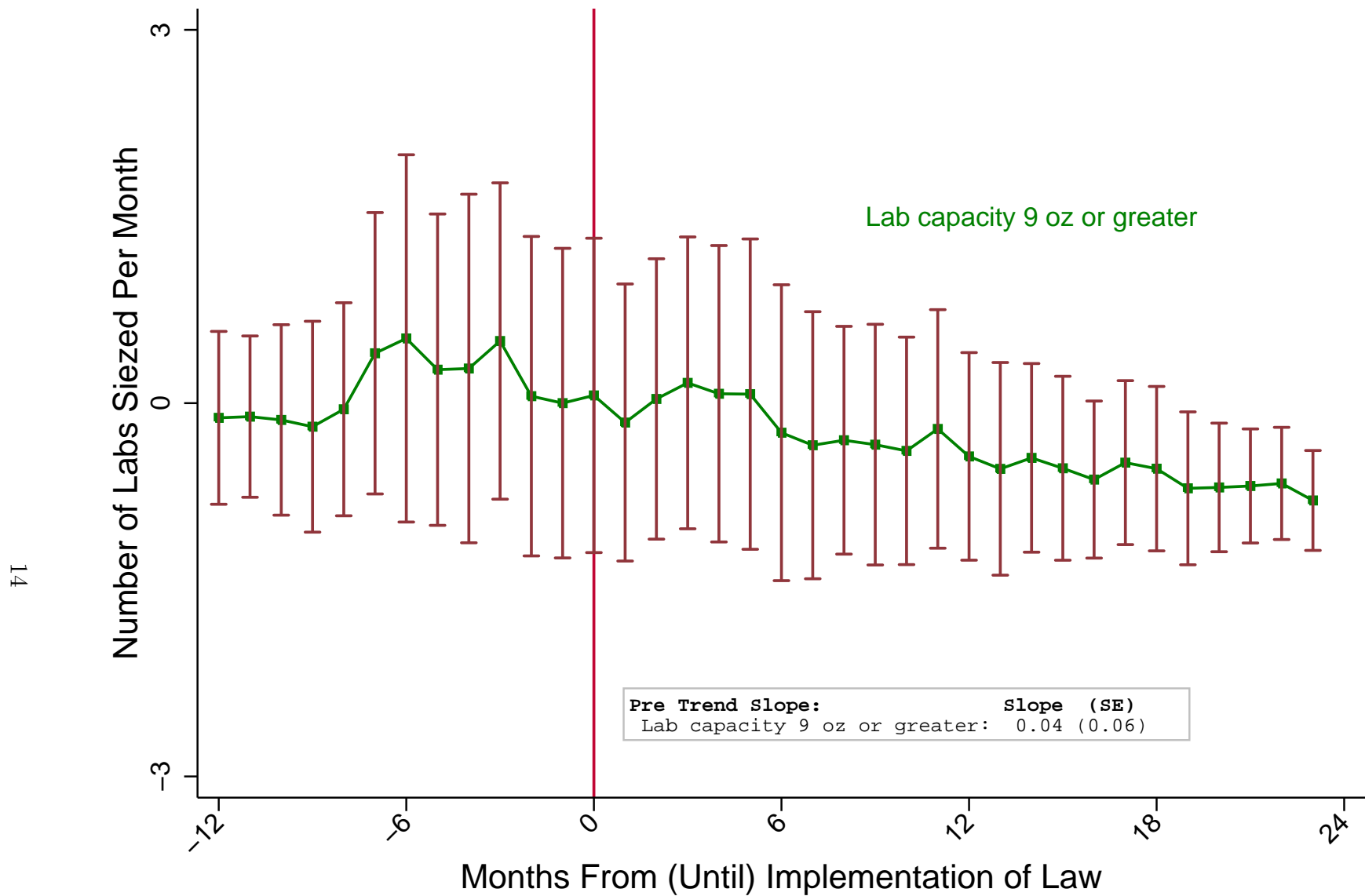


Figure 4: Event Study: Methamphetamine Labs Discovered or Seized With Capacity Greater than 9oz

Notes: Count of labs discovered was regressed on state fixed effects, year/month fixed effects, linear state time trends, and indicators corresponding to the number of months since any over the counter restriction went into effect. The graph contains OLS estimates of the coefficients on the indicators corresponding to the number of months since any over the counter restriction went into effect. The coefficient on the event dummy equal to one if a state enacted any OTC restriction in the next month was normalized to zero. The estimates include records for all 50 states and the District of Columbia from January 2002 through March 2008. The vertical bars represent 95% confidence intervals, constructed with standard errors clustered by state.

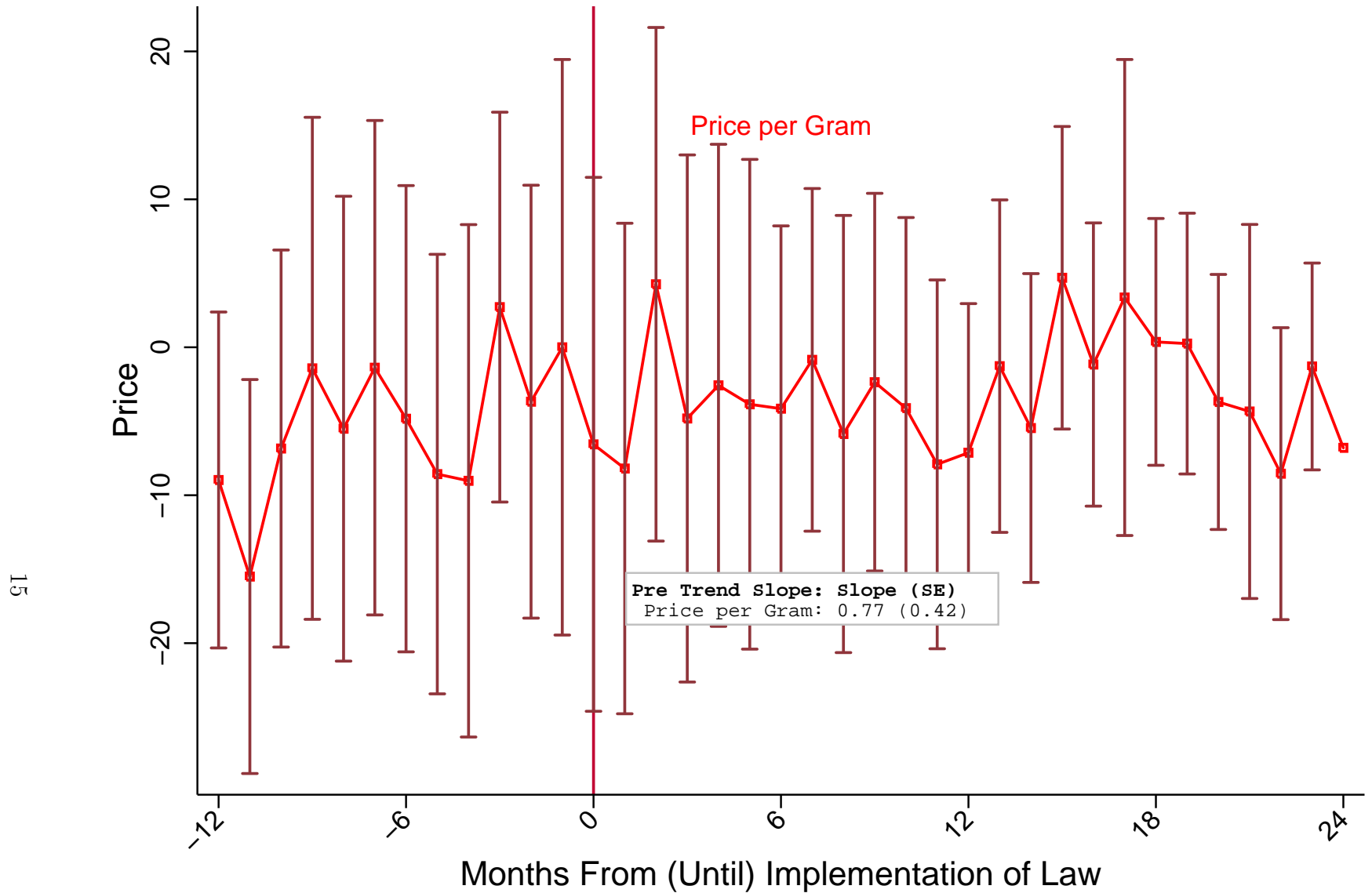


Figure 5: Event Study: Price of Methamphetamine from STRIDE

Notes: Price is measured in dollars. Average Price was regressed on state fixed effects, year/month fixed effects, linear state time trends, and indicators corresponding to the number of months since any over the counter restriction went into effect. The regressions were weighted by the number of illegal drug transactions used to derive the average price and purity measures in a state/month. The graph contains OLS estimates of the coefficients on the indicators corresponding to the number of months since any over the counter restriction went into effect. The coefficient on the event dummy equal to one if a state passed an over counter restriction in the next month was normalized to zero. The estimates include records from the District of Columbia and all 50 states except for Nebraska for January 2002 through March 2008. In many smaller states there are months without any purchases. The vertical bars represent 95% confidence intervals, constructed with standard errors clustered by state.



Figure 6: Event Study: Purity of Methamphetamine from STRIDE

Notes: Purity is measured in percent. Average Purity was regressed on state fixed effects, year/month fixed effects, linear state time trends, and indicators corresponding to the number of months since any over the counter restriction went into effect. The regressions were weighted by the number of illegal drug transactions used to derive the average price and purity measures in a state/month. The graph contains OLS estimates of the coefficients on the indicators corresponding to the number of months since any over the counter restriction went into effect. The coefficient on the event dummy equal to one if a state passed an over counter restriction in the next month was normalized to zero. The estimates include records from the District of Columbia and all 50 states except for Nebraska for January 2002 through March 2008. In many smaller states there are months without any purchases. The vertical bars represent 95% confidence intervals, constructed with standard errors clustered by state.

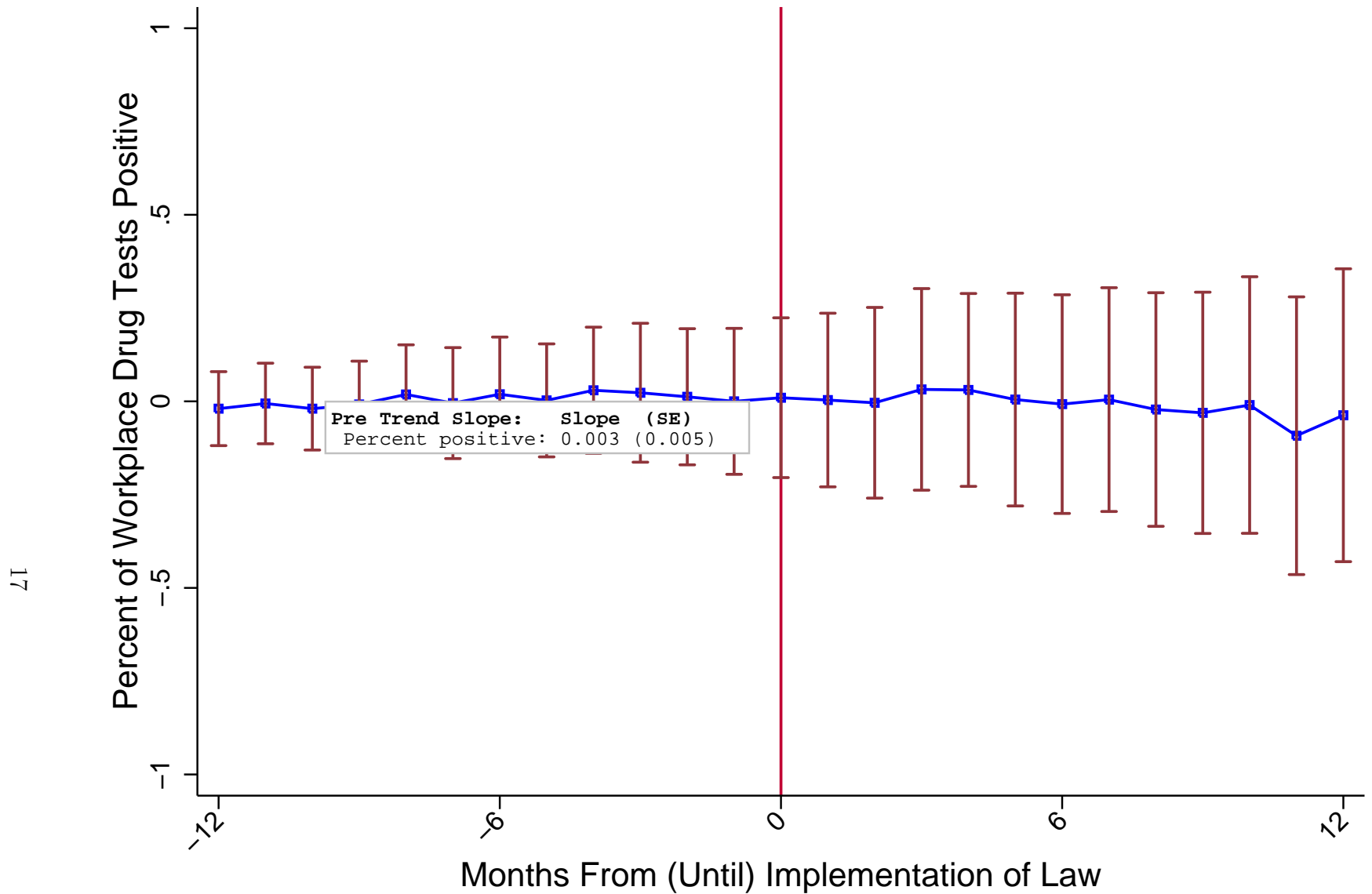


Figure 7: Event Study: Percent of Hospital Admissions with Positive Drug Test for Amphetamine (Ages 15-40)

Notes: Percent of hospitalizations among 15-40 year-olds that test positive for amphetamines was regressed on state fixed effects, year/month fixed effects, state time trends, and indicators corresponding to the number of months since any over the counter restriction went into effect. Regressions were weighted by state population between the ages of 15 and 40. The graph contains OLS estimates of the coefficients on the indicators corresponding to the number of months since any over the counter restriction went into effect. The coefficient on the dummy variable equal to one if a state passed an over counter restriction in the next month was normalized to zero. This series is derived from the HCUP NIS which includes a 20 percent sample of community hospitals from the following states AR, CA, CO, CT, GA, HI, IL, IN, KS, KY, MA, MD, MI, MN, MO, NC, NE, NH, NV, NY, OH, OR, SC, TN, TX, UT, VT, WI, WV and 100 percent of the community hospitals from AZ, NJ, and WA. For Iowa it is a 20 percent sample before 2004 and all community hospitals from 2004-2007. Approximately 90 percent of hospital stays occur at community hospitals. The estimates include records for January 2002 through December 2007. The vertical bars represent 95% confidence intervals, constructed with standard errors clustered by state.

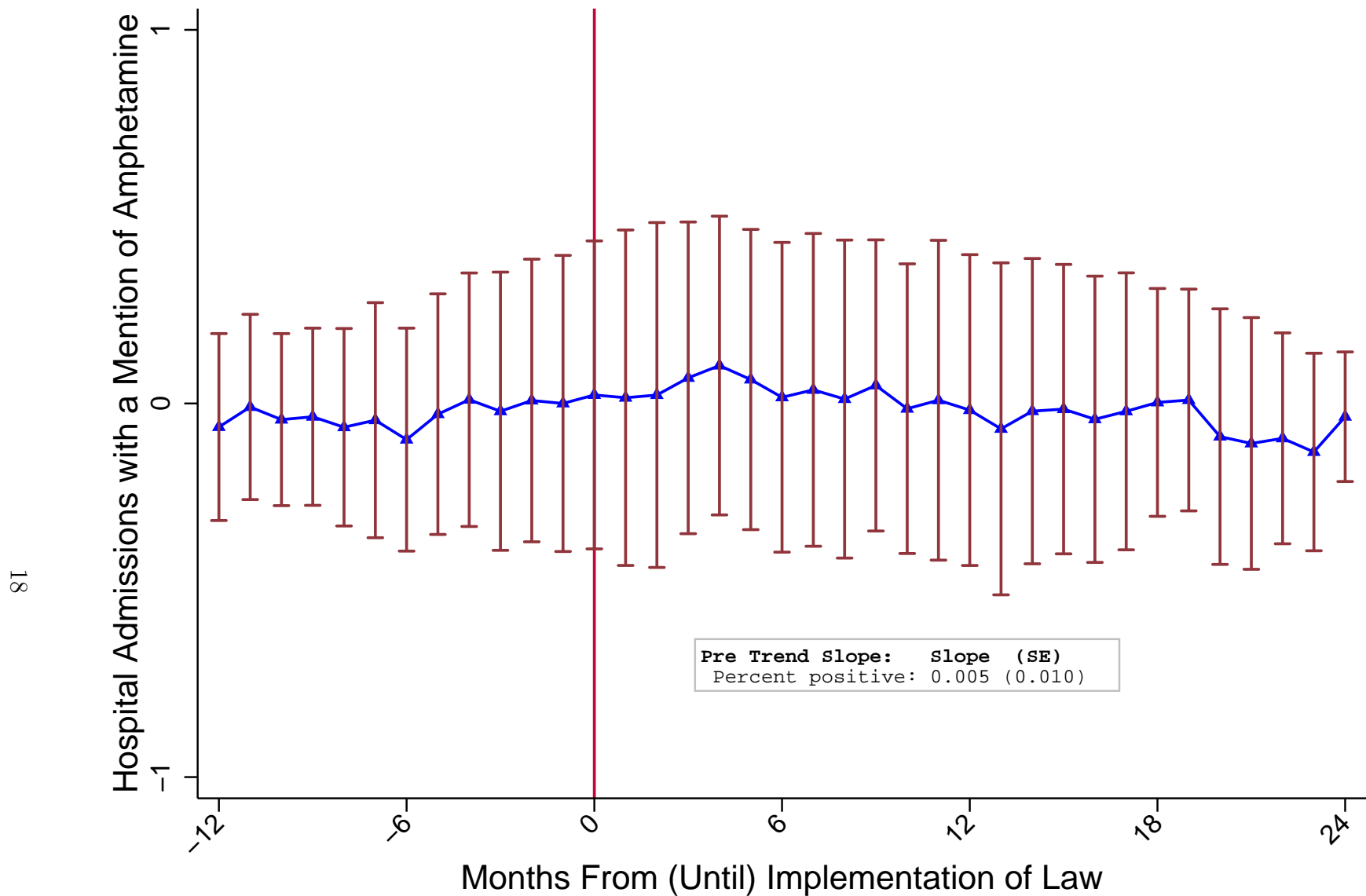


Figure 8: Event Study: Percent of Hospital Admissions with Positive Drug Test for Amphetamine (Ages 15-40)

Notes: Percent of hospitalizations among 15-40 year-olds that test positive for amphetamines was regressed on state fixed effects, year/month fixed effects, state time trends, and indicators corresponding to the number of months since any over the counter restriction went into effect. Regressions were weighted by state population between the ages of 15 and 40. The graph contains OLS estimates of the coefficients on the indicators corresponding to the number of months since any over the counter restriction went into effect. The coefficient on the dummy variable equal to one if a state passed an over counter restriction in the next month was normalized to zero. This series is derived from the HCUP NIS which includes a 20 percent sample of community hospitals from the following states AR, CA, CO, CT, GA, HI, IL, IN, KS, KY, MA, MD, MI, MN, MO, NC, NE, NH, NV, NY, OH, OR, SC, TN, TX, UT, VT, WI, WV and 100 percent of the community hospitals from AZ, NJ, and WA. For Iowa it is a 20 percent sample before 2004 and all community hospitals from 2004-2007. Approximately 90 percent of hospital stays occur at community hospitals. The estimates include records for January 2002 through December 2007. The vertical bars represent 95% confidence intervals, constructed with standard errors clustered by state.

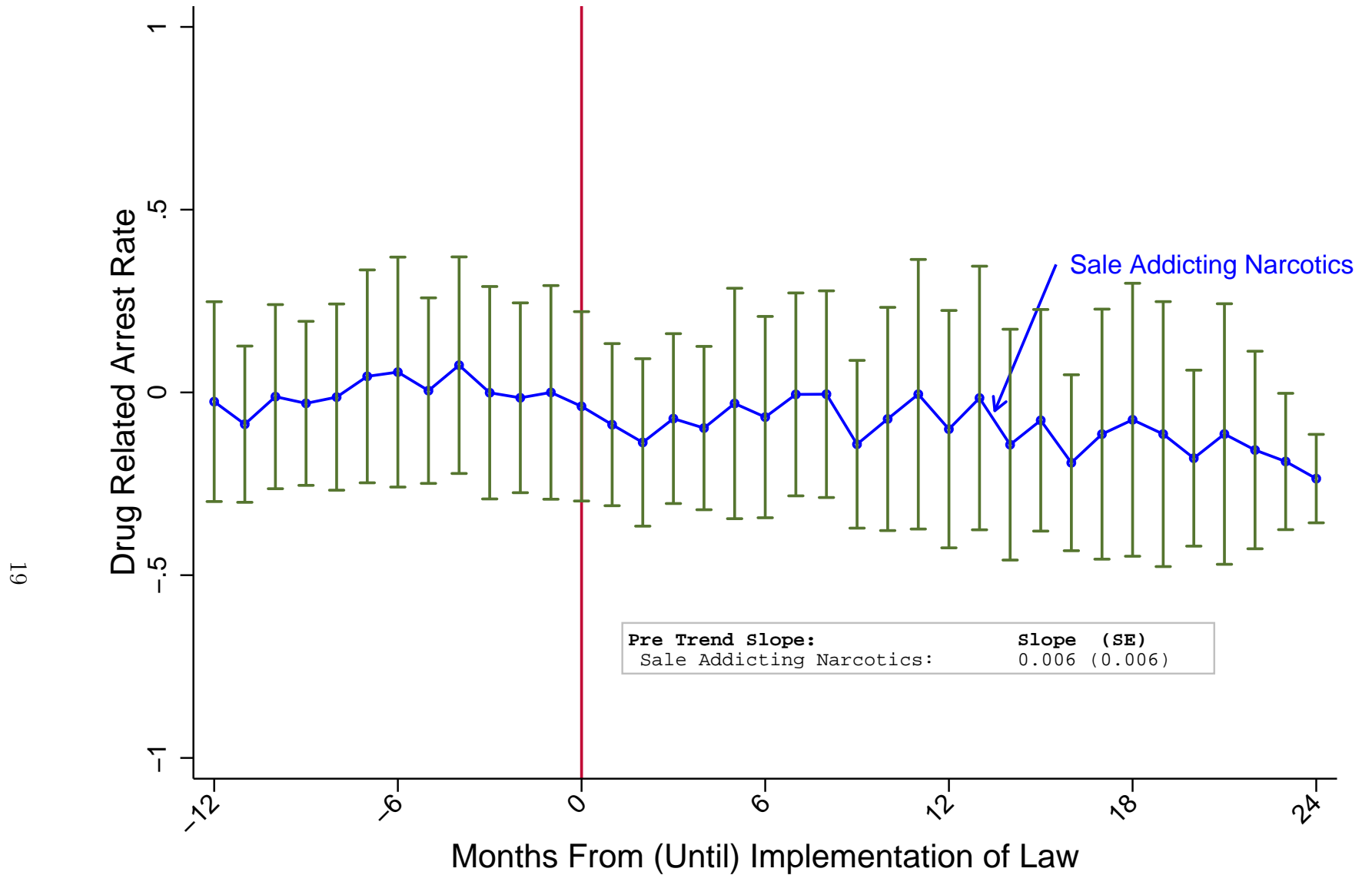


Figure 9: Event Study: Arrests for Selling Addictive Narcotics from Uniform Crime Reports

Notes: Drug related arrest rates in a month per 10,000 people were regressed on state fixed effects, calendar time effects, state time trends, and indicators corresponding to the number of months since any over the counter restriction went into effect. The regression was weighted by state population. The graph contains OLS estimates of the coefficients on the indicators corresponding to the number of months since any over the counter restriction went into effect. The coefficient on the dummy variable equal to one if a state passed an over counter restriction in the next month was normalized to zero. The series above are derived from the Uniform Crime Reports for January 2002 through December 2007. There is no data available for Alabama, Florida, and Rhode Island. Records from agencies in some states that report either annually or biannually have been dropped. The vertical bars represent 95% confidence intervals, constructed with standard errors clustered by state.

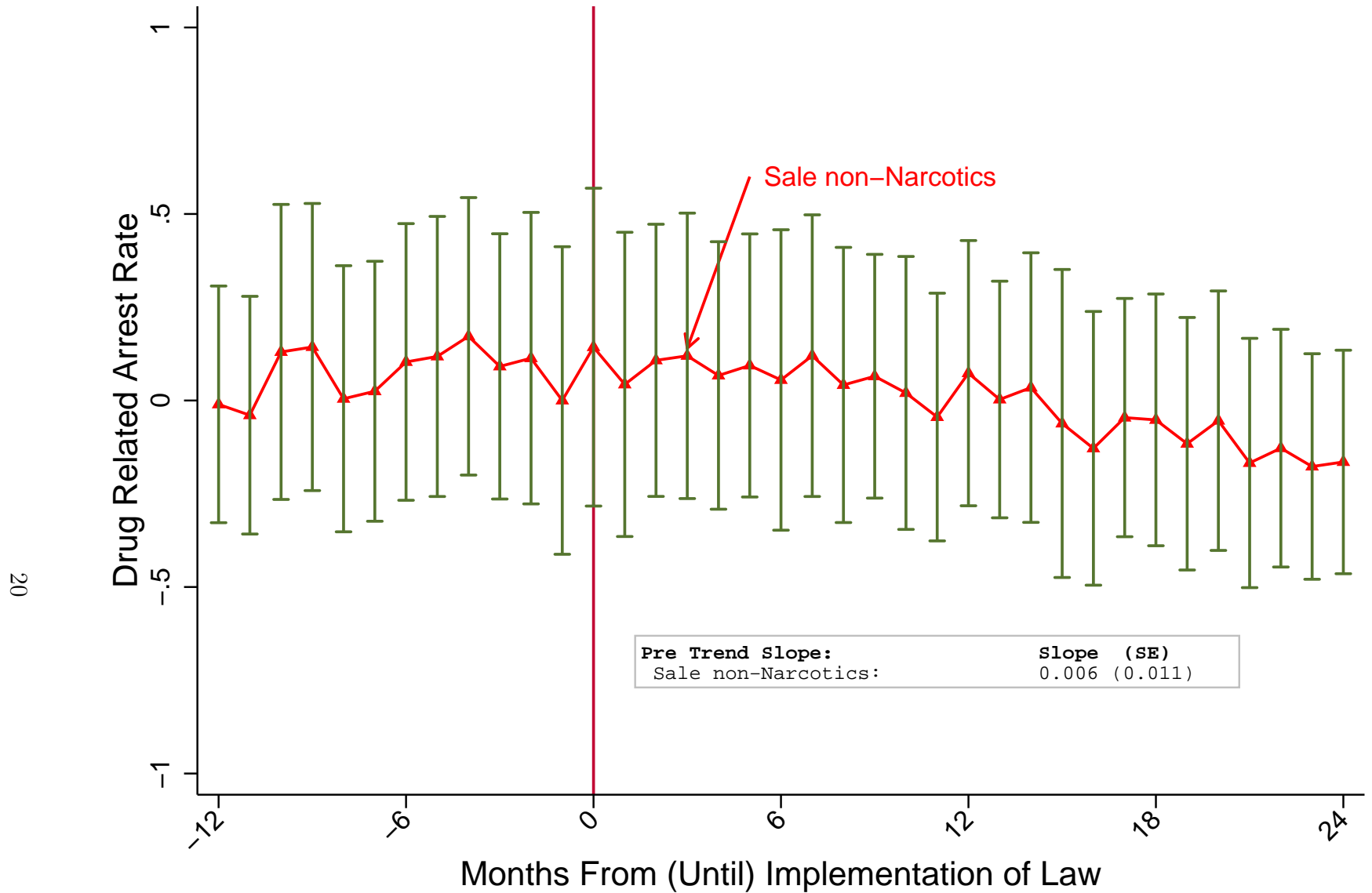


Figure 10: Event Study: Arrests for Selling Addictive Non-Narcotics from Uniform Crime Reports

Notes: Drug related arrest rates in a month per 10,000 people were regressed on state fixed effects, calendar time effects, state time trends, and indicators corresponding to the number of months since any over the counter restriction went into effect. The regression was weighted by state population. The graph contains OLS estimates of the coefficients on the indicators corresponding to the number of months since any over the counter restriction went into effect. The coefficient on the dummy variable equal to one if a state passed an over counter restriction in the next month was normalized to zero. The series above are derived from the Uniform Crime Reports for January 2002 through December 2007. There is no data available for Alabama, Florida, and Rhode Island. Records from agencies in some states that report either annually or biannually have been dropped. The vertical bars represent 95% confidence intervals, constructed with standard errors clustered by state.

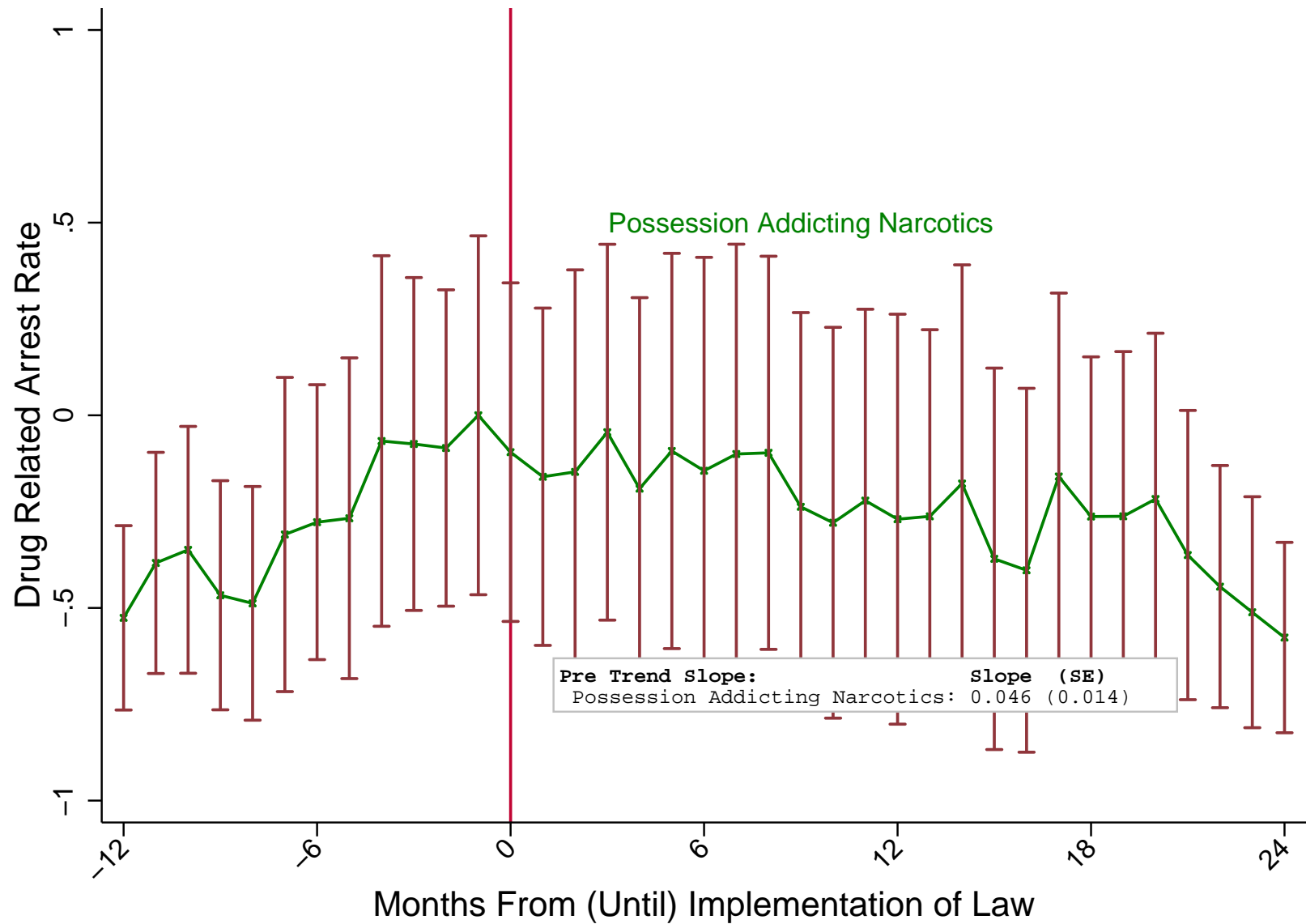


Figure 11: Event Study: Arrests for Possession of Addicting Narcotics from Uniform Crime Reports

Notes: Drug related arrest rates in a month per 10,000 people were regressed on state fixed effects, calendar time effects, state time trends, and indicators corresponding to the number of months since any over the counter restriction went into effect. The regression was weighted by state population. The graph contains OLS estimates of the coefficients on the indicators corresponding to the number of months since any over the counter restriction went into effect. The coefficient on the dummy variable equal to one if a state passed an over counter restriction in the next month was normalized to zero. The series above are derived from the Uniform Crime Reports for January 2002 through December 2007. There is no data available for Alabama, Florida, and Rhode Island. Records from agencies in some states that report either annually or biannually have been dropped. The vertical bars represent 95% confidence intervals, constructed with standard errors clustered by state.

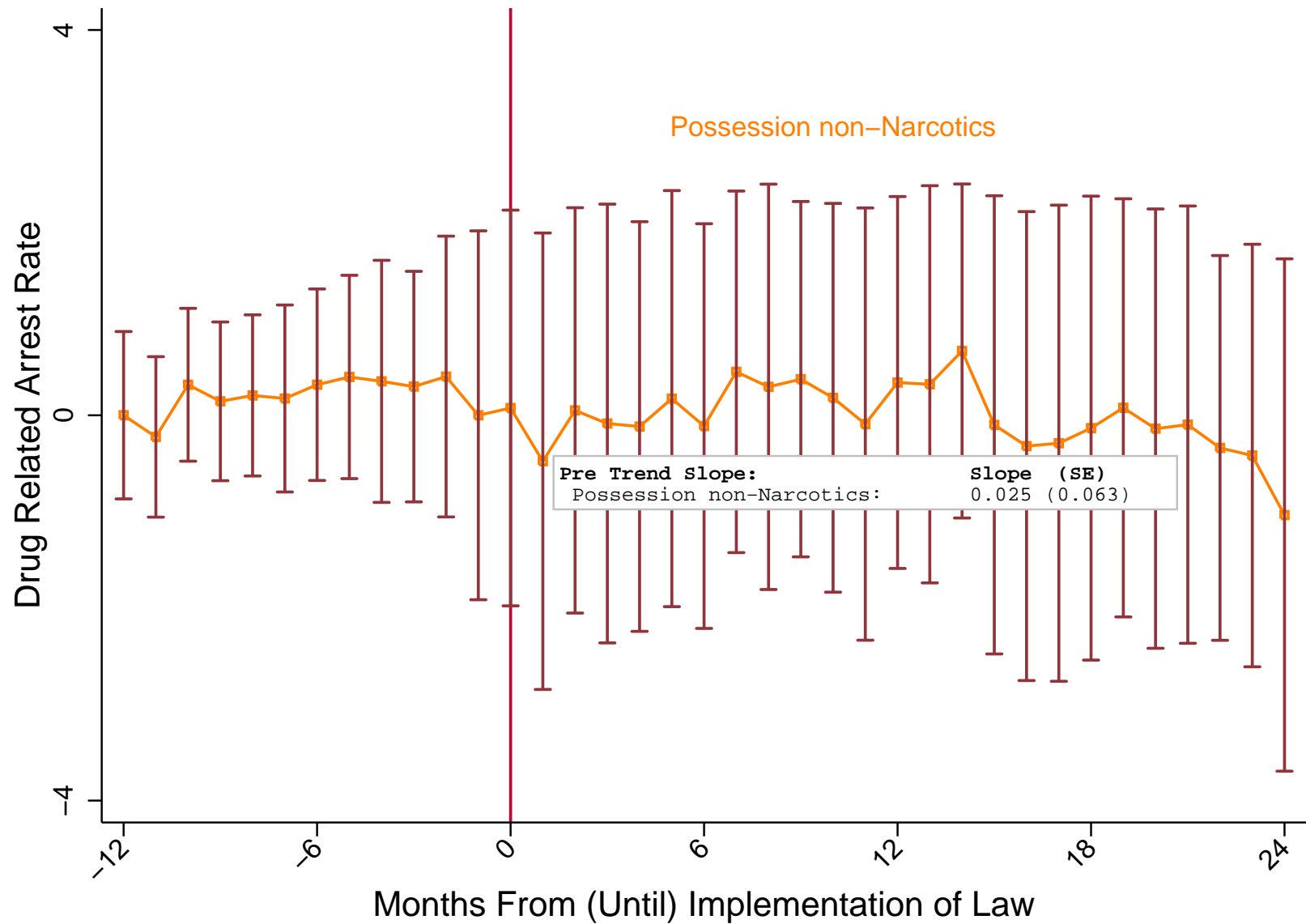


Figure 12: Event Study: Arrests for Possession of Addictive Non-Narcotics from Uniform Crime Reports

Notes: Drug related arrest rates in a month per 10,000 people were regressed on state fixed effects, calendar time effects, state time trends, and indicators corresponding to the number of months since any over the counter restriction went into effect. The regression was weighted by state population. The graph contains OLS estimates of the coefficients on the indicators corresponding to the number of months since any over the counter restriction went into effect. The coefficient on the dummy variable equal to one if a state passed an over counter restriction in the next month was normalized to zero. The series above are derived from the Uniform Crime Reports for January 2002 through December 2007. There is no data available for Alabama, Florida, and Rhode Island. Records from agencies in some states that report either annually or biannually have been dropped. The vertical bars represent 95% confidence intervals, constructed with standard errors clustered by state.

F Impact on Lab Seizures: Log of Seized Labs and Poisson Models

Table 4: Impact of OTC Regulations on Methamphetamine Lab Seizures: Poisson Regressions

	<u>Number of Labs Seized</u>			<u>Lab Capacity Under 2 Ounces</u>		
	(1)	(2)	(3)	(1)	(2)	(3)
OTC Restriction	-0.47	-0.43	-0.43	-0.45	-0.41	-0.41
	(0.13)	(0.074)	(0.075)	(0.11)	(0.069)	(0.069)
Mean Prior to OTC Restriction	13.94	13.94	13.94	9.59	9.59	9.59
$\frac{E[\widehat{Labs} OTC=1] - E[\widehat{Labs} OTC=0]}{E[\widehat{Labs} OTC=0]}$	-0.37	-0.35	-0.35	-0.36	-0.34	-0.34
Observations	3825	3825	3825	3825	3825	3825
Number of States	51	51	51	51	51	51
	<u>Lab Capacity 2 to 8 Ounces</u>			<u>Lab Capacity 9 Ounces or More</u>		
	(1)	(2)	(3)	(1)	(2)	(3)
OTC Restriction	-0.78	-0.63	-0.62	-0.27	-0.34	-0.35
	(0.15)	(0.11)	(0.11)	(0.34)	(0.28)	(0.28)
Mean Prior to OTC Restriction	3.25	3.25	3.25	1.10	1.10	1.10
$\frac{E[\widehat{Labs} OTC=1] - E[\widehat{Labs} OTC=0]}{E[\widehat{Labs} OTC=0]}$	-0.54	-0.47	-0.46	-0.24	-0.29	-0.29
Observations	3825	3825	3825	3825	3825	3825
Number of States	51	51	51	51	51	51
Linear State Trends	No	Yes	Yes	No	Yes	Yes
Covariates	No	No	Yes	No	No	Yes

Notes: All regressions include state fixed effects and year/month fixed effects. The dependent variable in the regressions is count of labs seized or discovered in a month in a particular state. These are derived from the National Clandestine Laboratory Seizure System. The estimates include records for all 50 states and the District of Columbia from January 2002 through March 2008 [(6*12+3)*51=3825]. Covariates include the unemployment rate, number of households receiving food stamps, average temperature and precipitation. Standard errors clustered by state are in parentheses.

Table 5: Impact of OTC Regulations on Log(1+Methamphetamine Lab Seizures)

	<u>Number of Labs Seized</u>				<u>Lab Capacity Under 2 Ounces</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-0.34 (0.072)	-0.24 (0.071)	-0.31 (0.065)	-0.31 (0.063)	-0.27 (0.066)	-0.18 (0.065)	-0.27 (0.064)	-0.27 (0.063)
Mean Prior to OTC Restriction	13.94	13.94	13.94	14.46	9.59	9.59	9.59	9.93
Observations	3825	3825	3825	3675	3825	3825	3825	3675
Number of States	51	51	51	49	51	51	51	49
	<u>Lab Capacity 2 to 8 Ounces</u>				<u>Lab Capacity 9 Ounces or More</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-0.43 (0.064)	-0.32 (0.055)	-0.31 (0.066)	-0.32 (0.067)	-0.15 (0.056)	-0.095 (0.057)	-0.10 (0.051)	-0.11 (0.051)
Mean Prior to OTC Restriction	3.25	3.25	3.25	3.38	1.10	1.10	1.10	1.15
Observations	3825	3825	3825	3675	3825	3825	3825	3675
Number of States	51	51	51	49	51	51	51	49
Linear State Trends	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Quadratic State Trends	No	No	Yes	Yes	No	No	Yes	Yes
Covariates	No	No	No	Yes	No	No	No	Yes

Notes: All regressions include state fixed effects and year/month fixed effects. The dependent variable in the regressions is log(1+count of labs seized or discovered in a month in a particular state). These are derived from the National Clandestine Laboratory Seizure System. The estimates include records for all 50 states and the District of Columbia from January 2002 through March 2008 [(6*12+3)*51=3825]. Covariates include the unemployment rate, number of households receiving food stamps, average temperature and precipitation. In the fourth specification we drop 150 observations because weather data is missing for Alaska and Hawaii. Standard errors clustered by state are in parentheses.

Table 6: County Level Impact of OTC Regulations: Poisson Regressions)

	<u>Number of Labs Seized</u>			<u>Lab Capacity Under 2 Ounces</u>		
	(1)	(2)	(3)	(1)	(2)	(3)
OTC Restriction	-0.47 (0.068)	-0.58 (0.079)	-0.51 (0.057)	-0.45 (0.065)	-0.55 (0.077)	-0.49 (0.062)
OTC Restriction*Border County		0.39 (0.11)	0.34 (0.097)		0.40 (0.13)	0.37 (0.11)
Border County*Neighbor State		0.075 (0.092)	0.043 (0.082)		0.11 (0.10)	0.075 (0.090)
OTC Restriction*Border County		-0.28 (0.12)	-0.32 (0.11)		-0.36 (0.13)	-0.40 (0.12)
*Neighbor State OTC Restriction						
p-value $\beta_{otc} + \beta_{border,otc} = 0$		0.048	0.036		0.157	0.187
p-value $\beta_{otc} + \beta_{border,otc}$		0.047	0.392		0.124	0.603
+ $\beta_{border,otc,neighbor} = 0$						
Mean Prior to OTC Restriction	0.23	0.23	0.23	0.16	0.16	0.16
Observations	235,725	235,725	235,725	235,725	235,725	235,725
	<u>Lab Capacity 2 to 8 Ounces</u>			<u>Lab Capacity 9 Ounces or More</u>		
	(1)	(2)	(3)	(1)	(2)	(3)
OTC Restriction	-0.78 (0.11)	-0.86 (0.13)	-0.65 (0.12)	-0.27 (0.18)	-0.40 (0.23)	-0.42 (0.20)
OTC Restriction*Border County		0.15 (0.22)	0.019 (0.23)		0.35 (0.34)	0.20 (0.29)
Border County*Neighbor State		-0.030 (0.15)	-0.026 (0.15)		-0.094 (0.30)	-0.23 (0.32)
OTC Restriction						
OTC Restriction*Border County		0.16 (0.24)	0.10 (0.25)		0.040 (0.48)	0.12 (0.48)
*Neighbor State OTC Restriction						
p-value $\beta_{otc} + \beta_{border,otc} = 0$		0.001	0.002		0.859	0.325
p-value $\beta_{otc} + \beta_{border,otc}$		0.047	0.452		0.219	0.723
+ $\beta_{border,otc,neighbor} = 0$						
Mean Prior to OTC Restriction	0.054	0.054	0.054	0.018	0.018	0.018
Observations	235,725	235,725	235,725	235,725	235,725	235,725
Linear State Trends	No	No	Yes	No	No	Yes
Quadratic State Trends	No	No	No	No	No	No

Notes: All regressions include county fixed effects and year/month fixed effects. The dependent variable in the regressions is count of labs seized or discovered in a month in a particular county. These are derived from the National Clandestine Laboratory Seizure System. The estimates include records for all 3143 county fips areas (excluding Puerto Rico) from January 2002 through March 2008 $[(6*12+3)*3143=235,725]$. Standard errors clustered by state are in parentheses.

Table 7: County Level Impact of OTC Regulations on log(1+Methamphetamine Lab Seizures)

	<u>Number of Labs Seized</u>				<u>Lab Capacity Under 2 Ounces</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-0.039 (0.0092)	-0.093 (0.032)	-0.037 (0.011)	-0.044 (0.013)	-0.026 (0.0065)	-0.029 (0.0079)	-0.024 (0.0078)	-0.031 (0.0092)
OTC Restriction*Border County		0.027 (0.0100)	0.023 (0.0090)	0.024 (0.0098)		0.019 (0.0078)	0.018 (0.0075)	0.020 (0.0080)
Border County*Neighbor State		0.0036 (0.010)	0.0020 (0.010)	0.0036 (0.0086)		0.0064 (0.012)	0.0055 (0.012)	0.0069 (0.010)
OTC Restriction*Border County *Neighbor State OTC Restriction		-0.029 (0.012)	-0.022 (0.012)	-0.024 (0.011)		-0.026 (0.013)	-0.022 (0.013)	-0.025 (0.013)
p-value $\beta_{otc} + \beta_{border,otc} = 0$		0.058	0.14	0.059		0.21	0.44	0.18
p-value $\beta_{otc} + \beta_{border,otc}$ $+ \beta_{border,otc,neighbor} = 0$		0.83	0.62	0.63		0.98	0.75	0.78
Mean Prior to OTC Restriction	0.23	0.23	0.23	0.23	0.16	0.16	0.16	0.16
Observations	235,725	235,725	235,725	235,725	235,725	235,725	235,725	235,725
	<u>Lab Capacity 2 to 8 Ounces</u>				<u>Lab Capacity 9 Ounces or More</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-0.017 (0.0041)	-0.019 (0.0048)	-0.016 (0.0045)	-0.016 (0.0052)	-0.0014 (0.0026)	-0.0022 (0.0029)	-0.0019 (0.0026)	-0.0026 (0.0022)
OTC Restriction*Border County		0.0046 (0.0057)	0.0028 (0.0052)	0.0032 (0.0053)		0.0035 (0.0021)	0.0030 (0.0022)	0.0016 (0.0019)
Border County*Neighbor State		-0.0026 (0.0031)	-0.0031 (0.0032)	-0.0025 (0.0034)		0.000069 (0.0027)	-0.00073 (0.0024)	-0.0010 (0.0025)
OTC Restriction		-0.0013 (0.0050)	0.0017 (0.0048)	0.00068 (0.0050)		-0.0027 (0.0031)	-0.0019 (0.0033)	-0.000092 (0.0028)
OTC Restriction*Border County *Neighbor State OTC Restriction		-0.0013 (0.0050)	0.0017 (0.0048)	0.00068 (0.0050)		-0.0027 (0.0031)	-0.0019 (0.0033)	-0.000092 (0.0028)
p-value $\beta_{otc} + \beta_{border,otc} = 0$		0.014	0.0080	0.027		0.66	0.71	0.58
p-value $\beta_{otc} + \beta_{border,otc}$ $+ \beta_{border,otc,neighbor} = 0$		0.82	0.66	0.68		0.56	0.78	0.71
Mean Prior to OTC Restriction	0.054	0.054	0.054	0.054	0.018	0.018	0.018	0.018
Observations	235,725	235,725	235,725	235,725	235,725	235,725	235,725	235,725
Linear State Trends	No	No	Yes	Yes	No	No	Yes	Yes
Quadratic State Trends	No	No	No	Yes	No	No	No	Yes

Notes: All regressions include county fixed effects and year/month fixed effects. The dependent variable in the regressions is count of labs seized or discovered in a month in a particular county. These are derived from the National Clandestine Laboratory Seizure System. The estimates include records for all 3143 county fips areas (excluding Puerto Rico) from January 2002 through March 2008 [(6*12+3)*3143=235,725]. Standard errors clustered by state are in parentheses.

G Impact on Lab Seizures Estimated Separately for All Lab Sizes

Table 8: Impact of OTC Regulations on Methamphetamine Lab Seizures

	<u>Lab Capacity</u> <u>Under 2 Ounces</u>	<u>Lab Capacity</u> <u>2 to 9 Ounces</u>	<u>Lab Capacity</u> <u>9 to 32 Ounces</u>
OTC Restriction	-3.05 (0.89)	-1.76 (0.47)	-0.14 (0.14)
Mean Prior to OTC Restriction	9.59	3.25	0.62
Observations	3825	3825	3825
Number of States	51	51	51
	<u>Lab Capacity</u> <u>2 to 10 lbs</u>	<u>Lab Capacity</u> <u>10 to 20 lbs</u>	<u>Lab Capacity</u> <u>20 lbs or Greater</u>
OTC Restriction	-0.15 (0.078)	0.023 (0.026)	0.027 (0.019)
Mean Prior to OTC Restriction	0.33	0.08	0.07
Observations	3825	3825	3825
Number of States	51	51	51

Notes: All regressions include state fixed effects, year/month fixed effects, linear and quadratic state specific trends. The dependent variable in the regressions is count of labs seized or discovered in a month in a particular state. These are derived from the National Clandestine Laboratory Seizure System. The estimates include records for all 50 states and the District of Columbia from January 2002 through March 2008 [(6*12+3)*51=3825]. Standard errors clustered by state are in parentheses.

H Estimates for Early Adopting States

Table 9: Impact of OTC Regulations on Methamphetamine Lab Seizures: Early Adopters

	<u>Number of Labs Seized</u>				<u>Lab Capacity Under 2 Ounces</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-10.5 (2.86)	-11.2 (3.37)	-11.9 (3.11)	-12.0 (3.12)	-7.59 (1.81)	-8.14 (2.10)	-8.54 (2.26)	-8.64 (2.25)
Mean Prior to OTC Restriction	25.33	25.33	25.33	26.57	18.03	18.03	18.03	18.91
Observations	1,650	1,650	1,650	1,575	1,650	1,650	1,650	1,575
Number of States	22	22	22	21	22	22	22	21
	<u>Lab Capacity 2 to 8 Ounces</u>				<u>Lab Capacity 9 Ounces or More</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-2.68 (0.83)	-2.84 (0.91)	-2.86 (0.93)	-2.88 (0.95)	-0.19 (0.55)	-0.26 (0.61)	-0.51 (0.43)	-0.51 (0.42)
Mean Prior to OTC Restriction	5.85	5.85	5.85	6.14	1.44	1.44	1.44	1.52
Observations	1,650	1,650	1,650	1,575	1,650	1,650	1,650	1,575
Number of States	22	22	22	21	22	22	22	21
Linear State Trends	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Quadratic State Trends	No	No	Yes	Yes	No	No	Yes	Yes
Covariates	No	No	No	Yes	No	No	No	Yes

Notes: All regressions include state fixed effects and year/month fixed effects. The dependent variable in the regressions is count of labs seized or discovered in a month in a particular state. These are derived from the National Clandestine Laboratory Seizure System. The estimates include records for the 22 states that enacted a law prior to August 1, 2005 from January 2002 through March 2008 $[(6*12+3)*22=1650]$. Covariates include the unemployment rate, number of households receiving food stamps, average temperature and precipitation. In the fourth specification we drop 75 observations because weather data is missing for Hawaii. Standard errors clustered by state are in parentheses.

Table 10: Impact of OTC Regulations on Drug Price and Purity: Early Adopters

	Price per Gram				Purity			
	Methamphetamine				Methamphetamine			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-6.04 (6.99)	-5.46 (7.17)	-9.34 (9.19)	-9.85 (9.29)	-0.29 (3.66)	-0.44 (3.69)	-0.75 (3.55)	-0.68 (3.51)
Mean Prior to OTC Restriction	55.04	55.04	55.04	58.84	44.30	44.30	44.30	42.31
Observations	1,204	1,204	1,204	1,145	1,204	1,204	1,204	1,145
Number of States	22	22	22	21	22	22	22	21
Linear State Time Trends	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Quadratic State Time Trends	No	No	Yes	Yes	No	No	Yes	Yes
Covariates	No	No	No	Yes	No	No	No	Yes

Notes: All regressions include state fixed effects and year/month fixed effects. Standard errors are clustered at the state level. The dependent value in the regressions is average price and average purity over the month of drugs purchased by law enforcement. Price is measured in dollars and purity is measured in percent. These are derived from the National Clandestine Laboratory Seizure System. The estimates include records for the 22 states that enacted a law prior to August 1, 2005 from January 2002 through March 2008 $[(6*12+3)*22=1650]$. In many smaller states there are months without any purchases particularly for Heroin and Methamphetamine. Covariates include the unemployment rate, number of households receiving food stamps, average temperature and precipitation. Weather data is missing for Alaska and Hawaii. Standard errors clustered by state are in parentheses.

Table 11: Percent of Workplace Drug Tests Positive for Methamphetamine: Early Adopters

	<u>Percent of Tests Positive</u>			
	(1)	(2)	(3)	(4)
OTC Restriction	-0.019 (0.032)	-0.032 (0.026)	-0.021 (0.028)	-0.018 (0.028)
Mean Prior to OTC Restriction	0.434	0.434	0.434	0.424
Observations	1,672	1,672	1,672	1,596
Number of States	22	22	22	21
Linear State Time Trends	No	Yes	Yes	Yes
Quadratic State Time Trends	No	No	Yes	Yes
Covariates	No	No	No	Yes

Notes: All regressions include state fixed effects and year/month fixed effects and were weighted by state population. Standard errors are clustered at the state level. The data used to construct the dependent variable are extracted from the Office of National Drug Control Policy report "Pushing Back Against Meth". It was downloaded on February 2, 2007 from www.whitehousedrugpolicy.gov/publications/pdf/pushingback_against_meth.pdf. The dependent variable is the percent of drug tests that are positive. The estimates include records for the 22 states that enacted a law prior to August 1, 2005 from January 2002 through April 2008 [(6*12+4)*22=1672]. Covariates include the unemployment rate, number of households receiving food stamps, average temperature and precipitation. Weather data is missing for Alaska and Hawaii. Standard errors clustered by state are in parentheses.

Table 12: Percent of Hospitalizations with a Positive Drug Test: Early Adopters

		Amphetamine		
	(1)	(2)	(3)	(4)
OTC Restriction	0.020 (0.27)	0.017 (0.26)	-0.098 (0.15)	-0.063 (0.14)
Mean Prior to OTC Restriction	0.671	0.671	0.671	0.656
Observations	972	972	972	900
Number of States	14	14	14	14

Notes: All specifications include state fixed effects and year/month fixed effects. Regressions are weighted by population between the ages of 15 and 40. Standard errors are clustered by state. The dependent variable in the regressions is the percent of hospitalizations among 15 to 40 years olds in a month in a state that test positive for a particular drug. This dependent variable is derived from the HCUP NIS which includes a 20 percent sample of community hospitals from the following states that enacted a law prior to August 1, 2005: AR, CO, GA, IN, KS, KY, MN, OR, WV and 100 percent of the community hospitals from WA. For Iowa it is a 20 percent sample before 2004 and all community hospitals from 2004-2007. Approximately 90 percent of hospital visits occur at community hospitals. The hospital records do not distinguish positive tests from methamphetamine from positive tests from amphetamine. In this period over 90 percent of positive tests for either methamphetamine or amphetamine are due to methamphetamine. The estimates include records for January 2002 through December 2007. Covariates include the unemployment rate, number of households receiving food stamps, average temperature and precipitation. Weather data is missing for Alaska and Hawaii. Standard errors clustered by state are in parentheses.

Table 13: Impact of OTC Regulations on Drug Related Arrests: Early Adopters

	<u>Sale of Dangerous Non-Narcotics</u>				<u>Possession of Dangerous non-Narcotics</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-0.103 (0.177)	-0.114 (0.183)	-0.213 (0.131)	-0.230 (0.132)	0.615 (1.305)	0.630 (1.312)	0.00499 (0.516)	0.0516 (0.509)
Rate per 10,000	2.04	2.04	2.04	2.03	5.92	5.92	5.92	5.87
Observations	1,488	1,488	1,488	1,413	1,488	1,488	1,488	1,413
Number of States	20	20	20	19	20	20	20	19
Linear State Time Trends	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Quadratic State Time Trends	No	No	Yes	Yes	No	No	Yes	Yes
Covariates	No	No	No	Yes	No	No	No	Yes

Notes: All regressions include state fixed effects and month dummies. Standard errors are clustered at the state level. The dependent value in the regressions is arrest rate in a month per 10,000 people in a state. Regressions are weighted by state population. These are derived from the Uniform Crime Reports for January 2002 through December 2007. There is no data available for Alabama, Florida, and Rhode Island. Records from agencies in some states that report either annually or biannually have been dropped. Covariates include the unemployment rate, number of households receiving food stamps, average temperature and precipitation. Weather data is missing for Alaska and Hawaii. Standard errors clustered by state are in parentheses.

I Event Studies Without State Time Trends

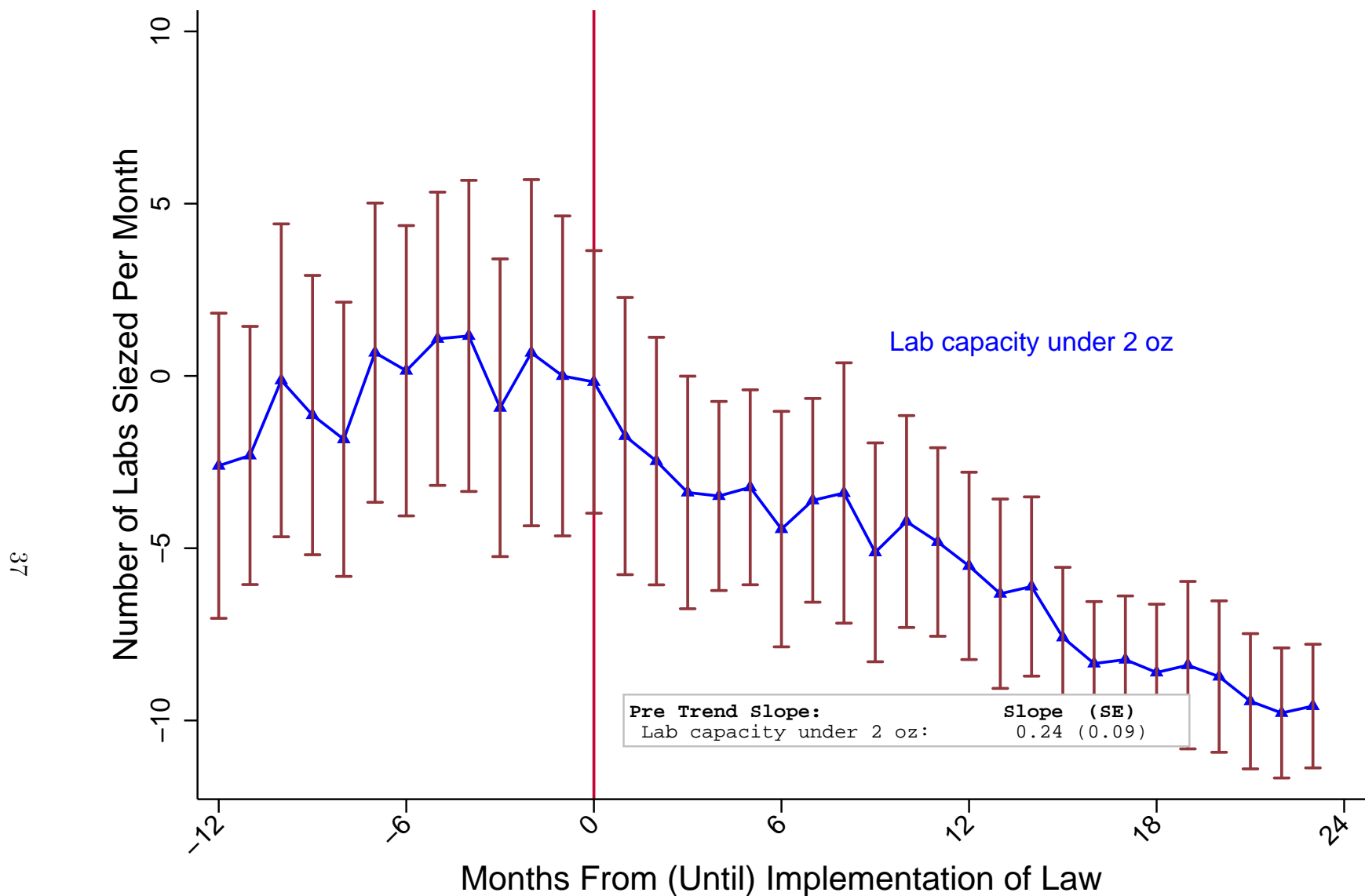


Figure 13: Event Study Without State Trends: Methamphetamine Labs Discovered or Seized With Capacity 2oz Or Less

Notes: Count of labs discovered was regressed on state fixed effects, year/month fixed effects, and indicators corresponding to the number of months since any over the counter restriction went into effect. The graph contains OLS estimates of the coefficients on the indicators corresponding to the number of months since any over the counter restriction went into effect. The coefficient on the event dummy equal to one if a state enacted any OTC restriction in the next month was normalized to zero. The estimates include records for all 50 states and the District of Columbia from January 2002 through March 2008. Standard errors clustered by state are in parentheses.

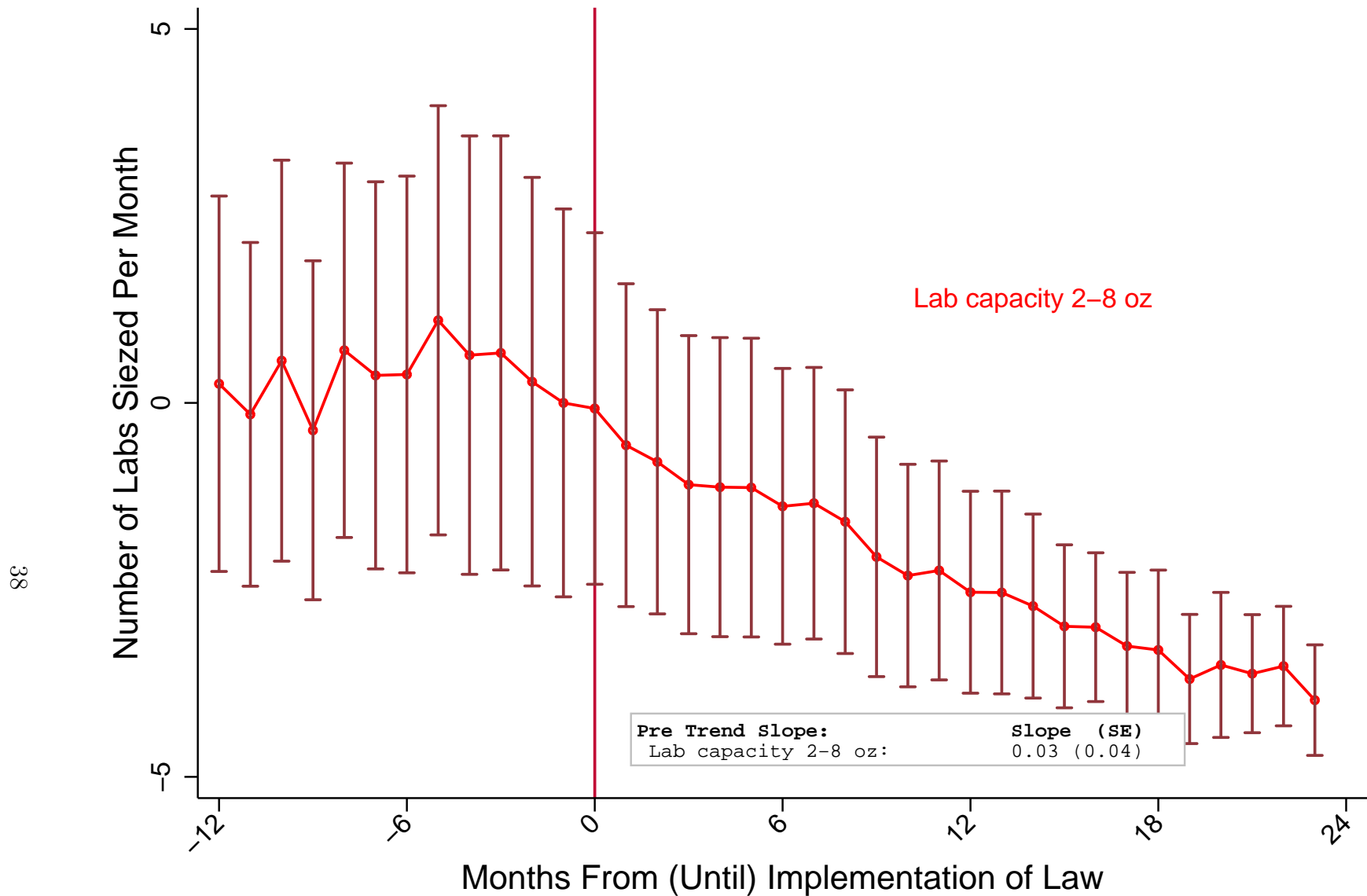


Figure 14: Event Study Without State Trends: Methamphetamine Labs Discovered or Seized With Capacity between 2 and 8oz

Notes: Count of labs discovered was regressed on state fixed effects, year/month fixed effects, and indicators corresponding to the number of months since any over the counter restriction went into effect. The graph contains OLS estimates of the coefficients on the indicators corresponding to the number of months since any over the counter restriction went into effect. The coefficient on the event dummy equal to one if a state enacted any OTC restriction in the next month was normalized to zero. The estimates include records for all 50 states and the District of Columbia from January 2002 through March 2008. Standard errors clustered by state are in parentheses.

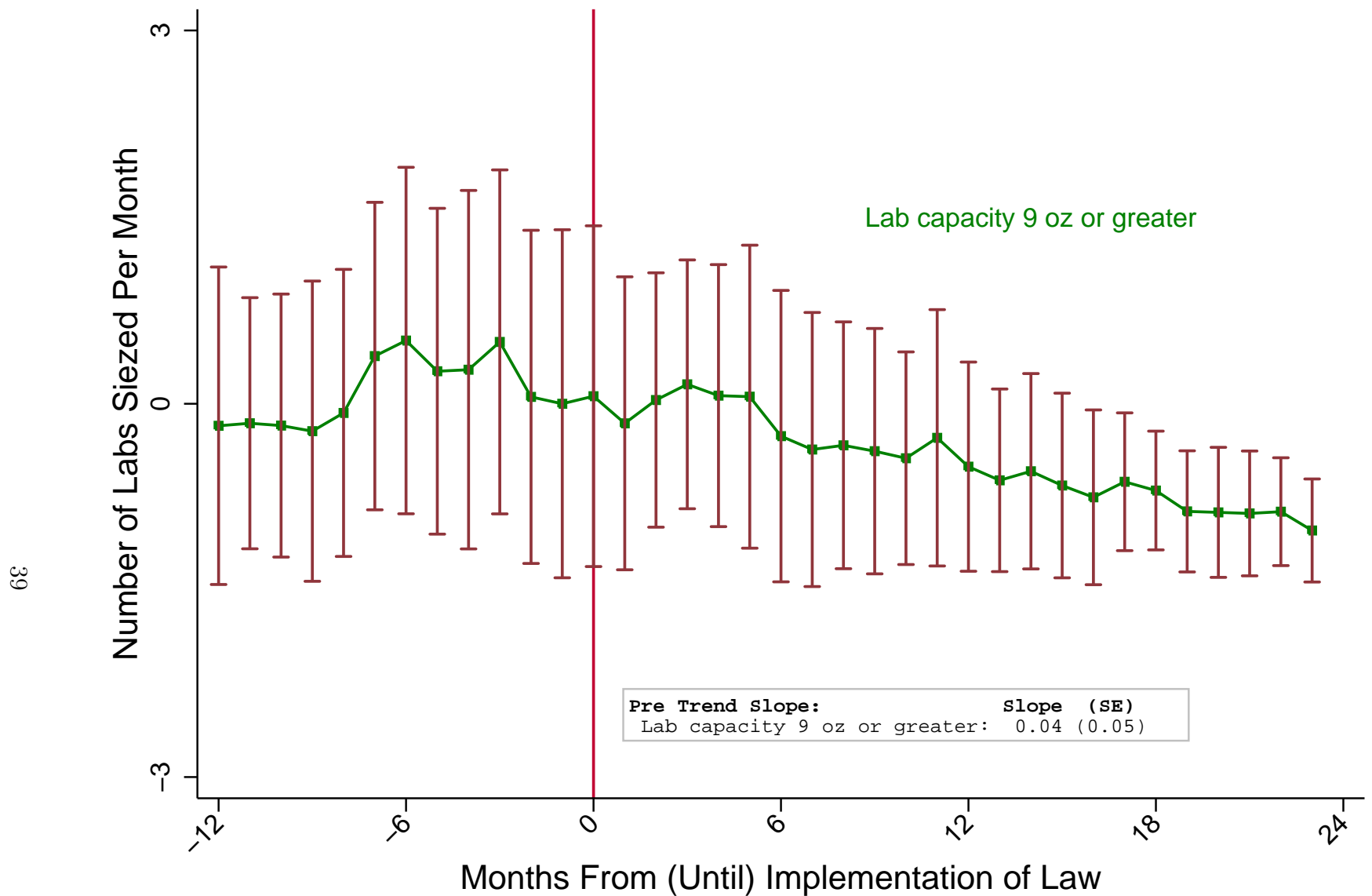


Figure 15: Event Study Without State Trends: Methamphetamine Labs Discovered or Seized by Capacity With Capacity 9oz or Greater

Notes: Count of labs discovered was regressed on state fixed effects, year/month fixed effects, and indicators corresponding to the number of months since any over the counter restriction went into effect. The graph contains OLS estimates of the coefficients on the indicators corresponding to the number of months since any over the counter restriction went into effect. The coefficient on the event dummy equal to one if a state enacted any OTC restriction in the next month was normalized to zero. The estimates include records for all 50 states and the District of Columbia from January 2002 through March 2008. Standard errors clustered by state are in parentheses.

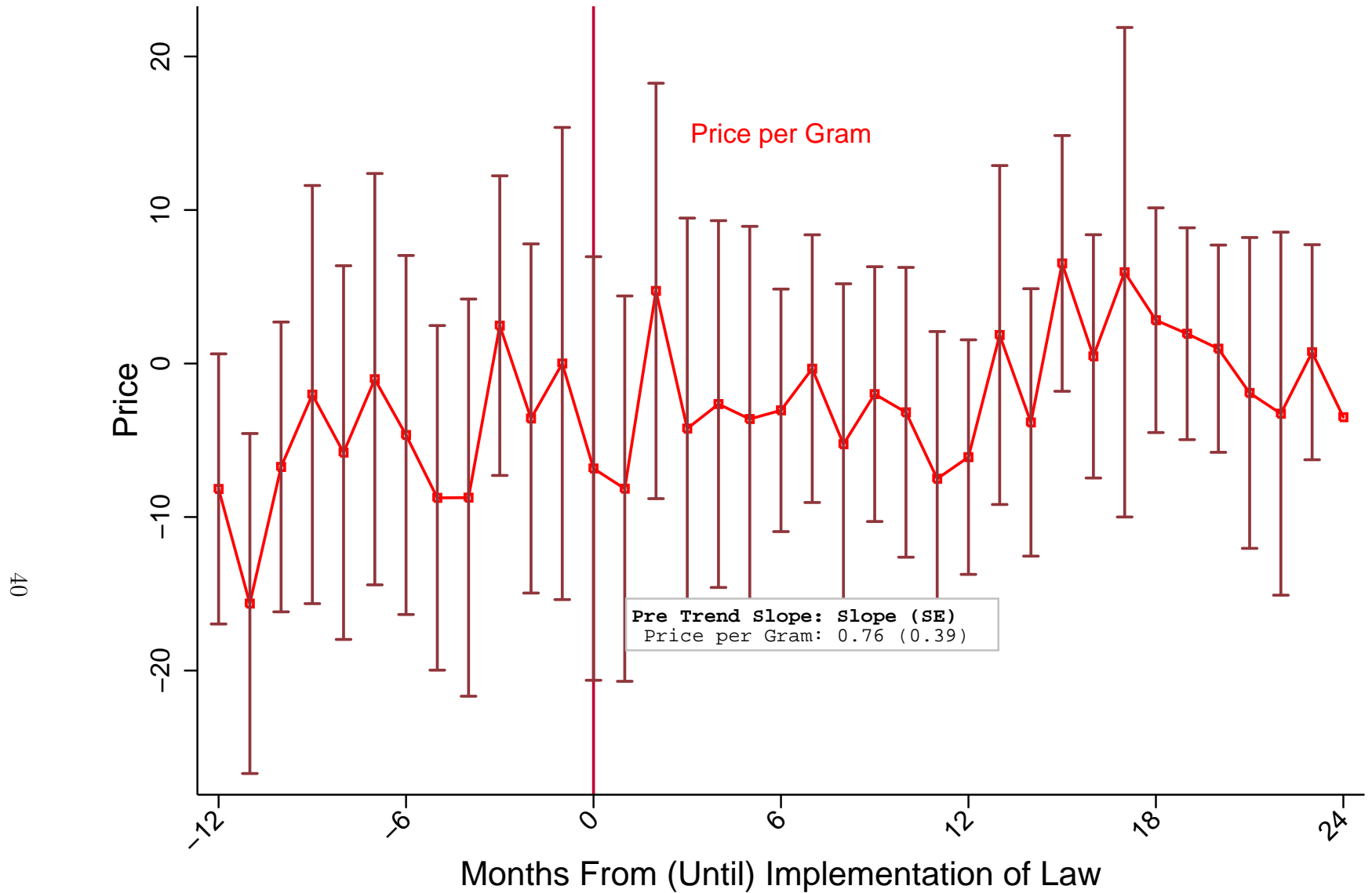


Figure 16: Event Study Without State Trends: Price of Methamphetamine from STRIDE

Notes: Price is measured in dollars and purity is measured in percent. Average Price and Average Purity were regressed on state fixed effects, year/month fixed effects, and indicators corresponding to the number of months since any over the counter restriction went into effect. The regressions were weighted by the number of illegal drug transactions used to derive the average price and purity measures in a state/month. The graph contains OLS estimates of the coefficients on the indicators corresponding to the number of months since any over the counter restriction went into effect. The coefficient on the event dummy equal to one if a state passed an over counter restriction in the next month was normalized to zero. The estimates include records from the District of Columbia and all 50 states except for Nebraska for January 2002 through March 2008. In many smaller states there are months without any purchases. Standard errors clustered by state are in parentheses.

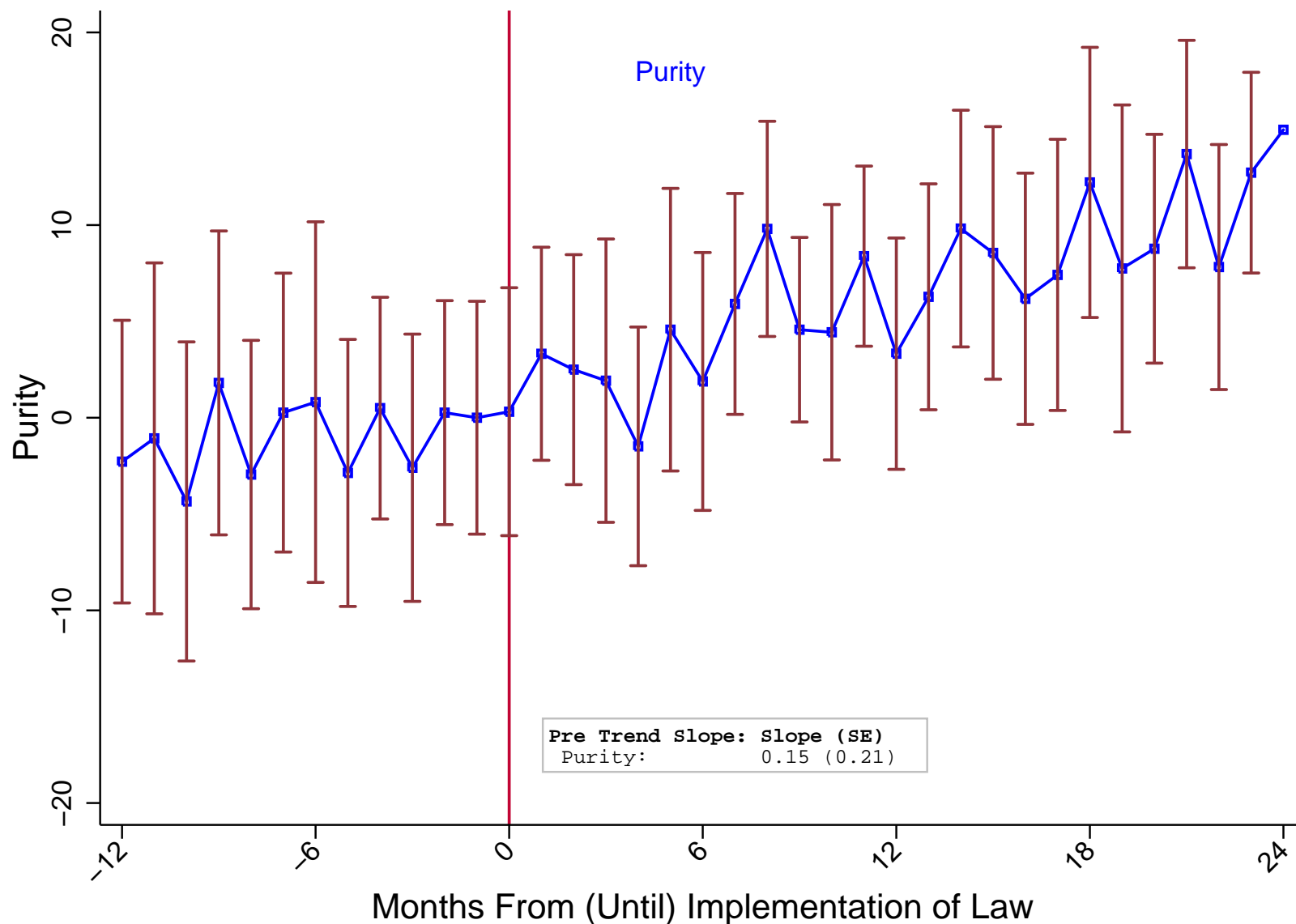


Figure 17: Event Study Without State Trends: Purity of Methamphetamine from STRIDE

Notes: Price is measured in dollars and purity is measured in percent. Average Price and Average Purity were regressed on state fixed effects, year/month fixed effects, and indicators corresponding to the number of months since any over the counter restriction went into effect. The regressions were weighted by the number of illegal drug transactions used to derive the average price and purity measures in a state/month. The graph contains OLS estimates of the coefficients on the indicators corresponding to the number of months since any over the counter restriction went into effect. The coefficient on the event dummy equal to one if a state passed an over counter restriction in the next month was normalized to zero. The estimates include records from the District of Columbia and all 50 states except for Nebraska for January 2002 through March 2008. In many smaller states there are months without any purchases. Standard errors clustered by state are in parentheses.

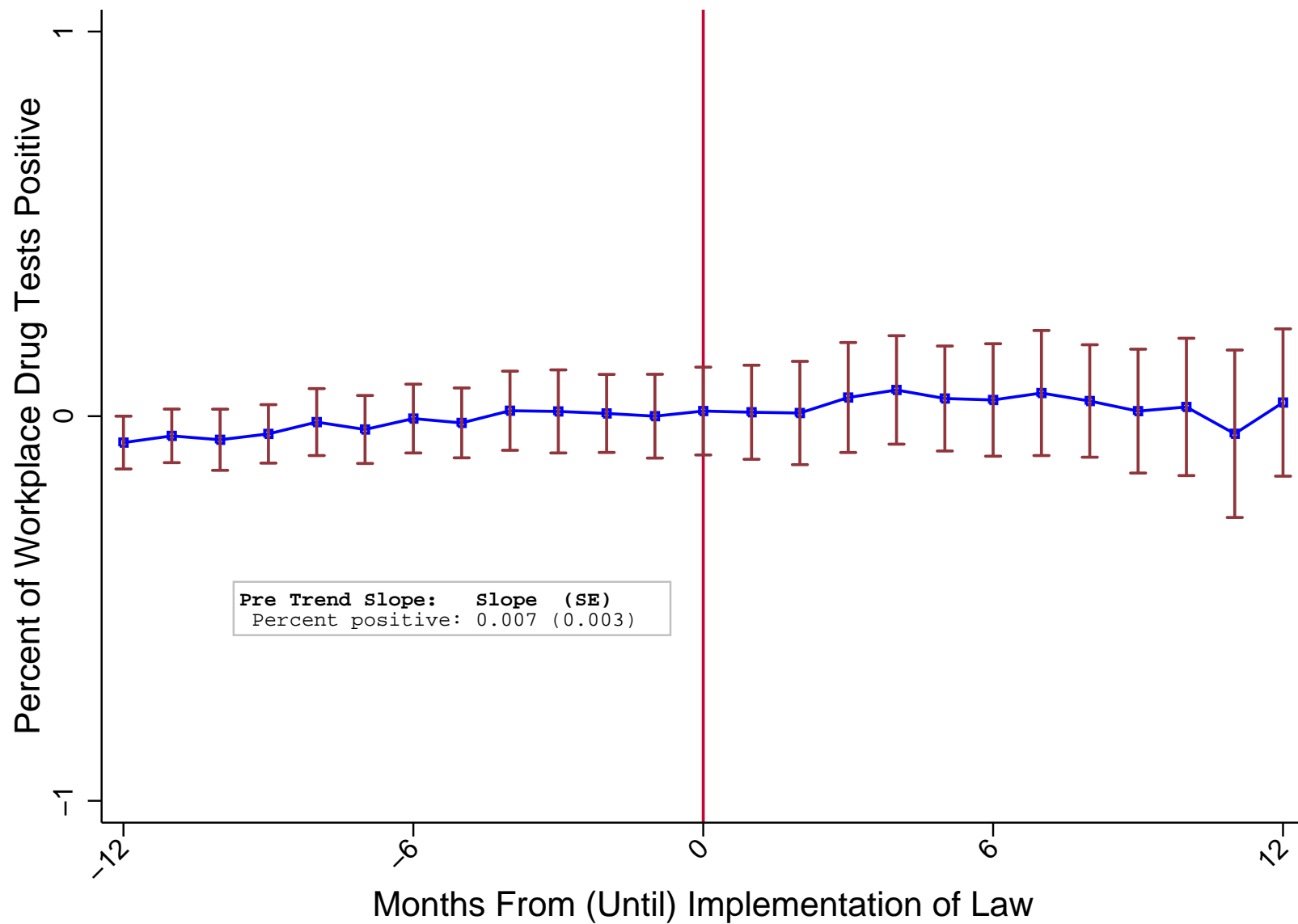


Figure 18: Event Study Without State Trends: Percent of Workplace Drug Tests that are Positive for Amphetamines

Notes: Percent of positive tests was regressed on state dummies, year/month fixed effects, and indicators corresponding to the number of months since any over the counter restriction went into effect. The regressions were weighted by state population. The graph contains OLS estimates of the coefficients on the indicators corresponding to the number of months since any over the counter restriction went into effect. The coefficient on the event dummy equal to one if a state passed an over counter restriction in the next month was normalized to zero. The data used to construct the graph above are extracted from the Office of National Drug Control Policy report “Pushing Back Against Meth”. It was downloaded on February 2, 2007 from www.whitehousedrugpolicy.gov/publications/pdf/pushingback_against_meth.pdf. The estimates include records from the District of Columbia and all 50 states for January 2002 through April 2006. Standard errors clustered by state are in parentheses.

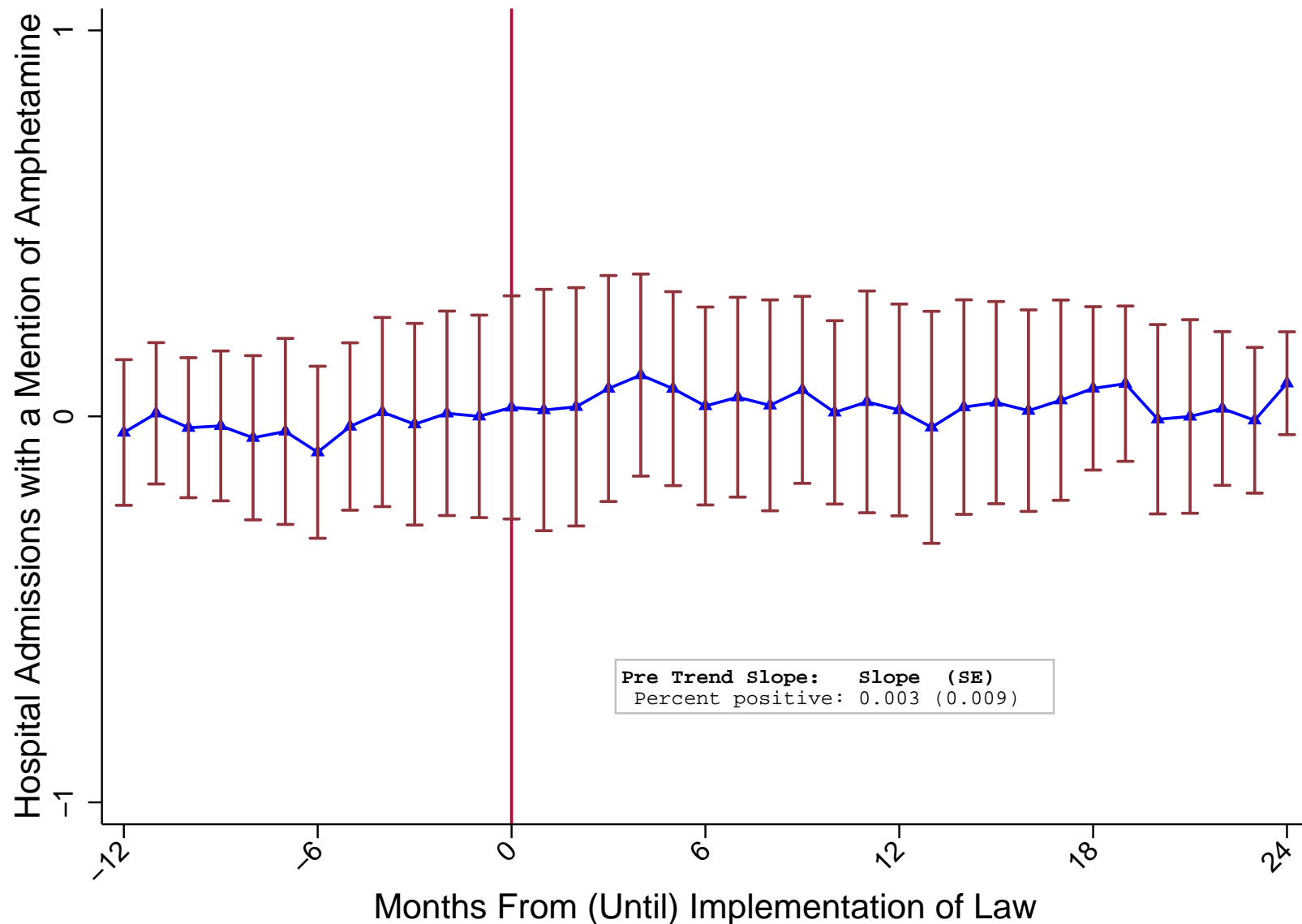


Figure 19: Event Study Without State Trends: Percent of Hospital Admissions with Positive Drug Test for Amphetamine (Ages 15-40)

Notes: Percent of hospitalizations among 15-40 year olds that test positive for amphetamines was regressed on state fixed effects, year/month fixed effects, and indicators corresponding to the number of months since any over the counter restriction went into effect. Regressions were weighted by state population between the ages of 15 and 40. The graph contains OLS estimates of the coefficients on the indicators corresponding to the number of months since any over the counter restriction went into effect. The coefficient on the dummy variable equal to one if a state passed an over counter restriction in the next month was normalized to zero. This series is derived from the HCUP NIS which includes a 20 percent sample of community hospitals from the following states AR, CA, CO, CT, GA, HI, IL, IN, KS, KY, MA, MD, MI, MN, MO, NC, NE, NH, NV, NY, OH, OR, SC, TN, TX, UT, VT, WI, WV and 100 percent of the community hospitals from AZ, NJ, and WA. For Iowa it is a 20 percent sample before 2004 and all community hospitals from 2004-2007. Approximately 90 percent of hospital stays occur at community hospitals. The estimates include records for January 2002 through December 2007. Standard errors clustered by state are in parentheses.

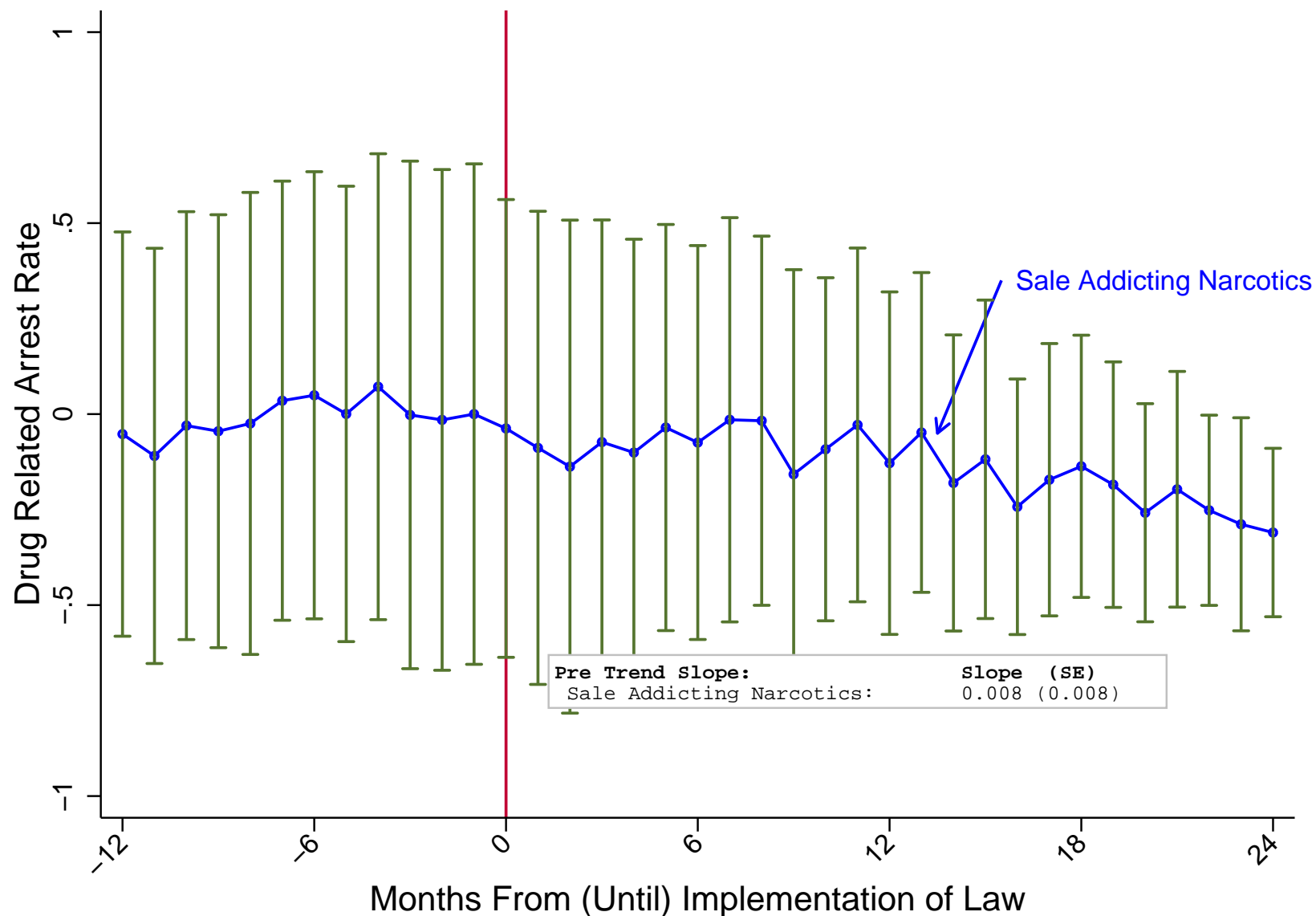


Figure 20: Event Study Without State Trends: Drug Related Arrest Rate from Uniform Crime Reports

Notes: Drug related arrest rates in a month per 10,000 people were regressed on state fixed effects, calendar time effects, and indicators corresponding to the number of months since any over the counter restriction went into effect. The regression was weighted by state population. The graph contains OLS estimates of the coefficients on the indicators corresponding to the number of months since any over the counter restriction went into effect. The coefficient on the dummy variable equal to one if a state passed an over counter restriction in the next month was normalized to zero. The series above are derived from the Uniform Crime Reports for January 2002 through December 2007. There is no data available for Alabama, Florida, and Rhode Island. Records from agencies in some states that report either annually or biannually have been dropped. Standard errors clustered by state are in parentheses.

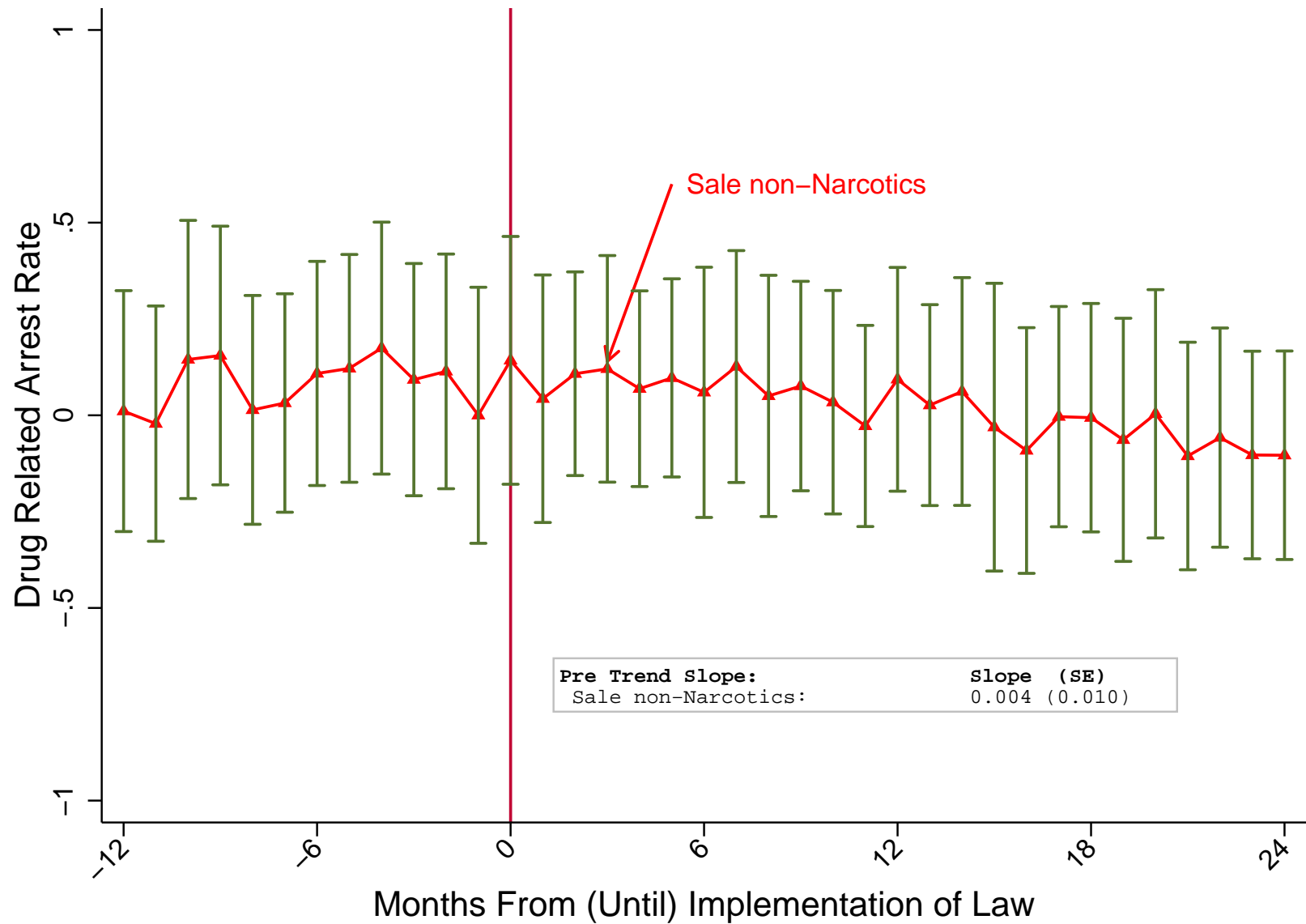


Figure 21: Event Study Without State Trends: Drug Related Arrest Rate from Uniform Crime Reports

Notes: Drug related arrest rates in a month per 10,000 people were regressed on state fixed effects, calendar time effects, and indicators corresponding to the number of months since any over the counter restriction went into effect. The regression was weighted by state population. The graph contains OLS estimates of the coefficients on the indicators corresponding to the number of months since any over the counter restriction went into effect. The coefficient on the dummy variable equal to one if a state passed an over counter restriction in the next month was normalized to zero. The series above are derived from the Uniform Crime Reports for January 2002 through December 2007. There is no data available for Alabama, Florida, and Rhode Island. Records from agencies in some states that report either annually or biannually have been dropped. Standard errors clustered by state are in parentheses.

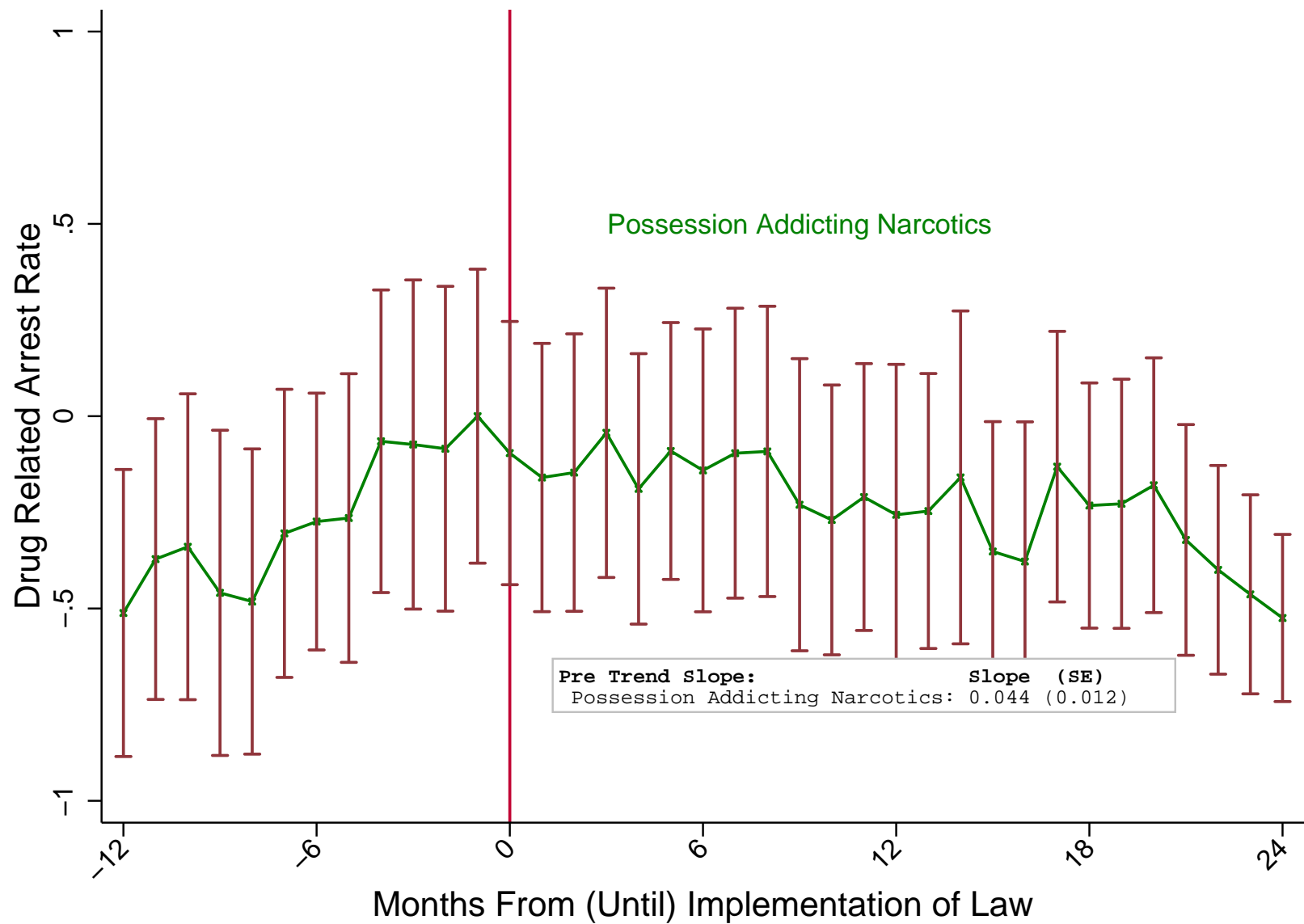


Figure 22: Event Study Without State Trends: Drug Related Arrest Rate from Uniform Crime Reports

Notes: Drug related arrest rates in a month per 10,000 people were regressed on state fixed effects, calendar time effects, and indicators corresponding to the number of months since any over the counter restriction went into effect. The regression was weighted by state population. The graph contains OLS estimates of the coefficients on the indicators corresponding to the number of months since any over the counter restriction went into effect. The coefficient on the dummy variable equal to one if a state passed an over counter restriction in the next month was normalized to zero. The series above are derived from the Uniform Crime Reports for January 2002 through December 2007. There is no data available for Alabama, Florida, and Rhode Island. Records from agencies in some states that report either annually or biannually have been dropped. Standard errors clustered by state are in parentheses.

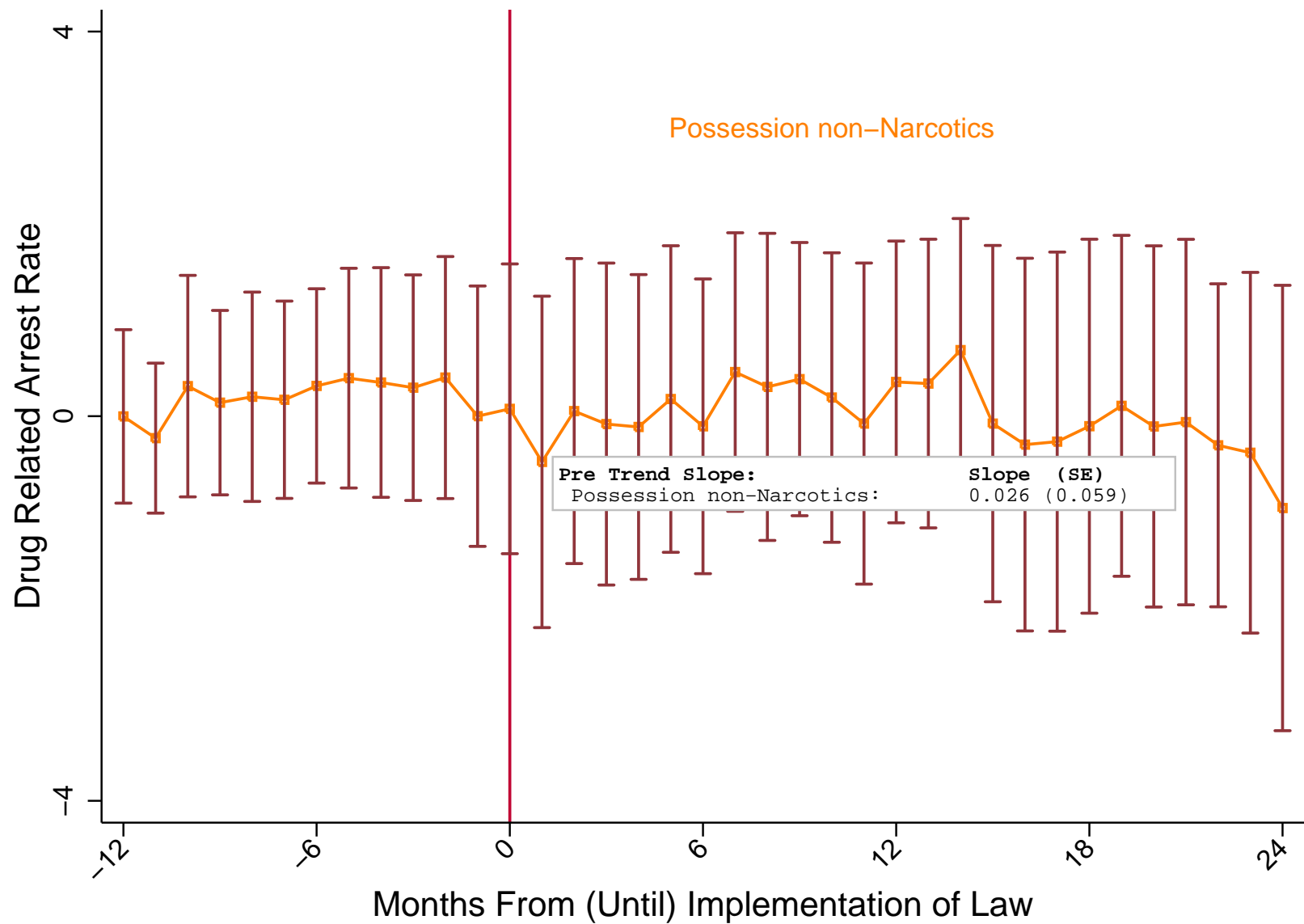


Figure 23: Event Study Without State Trends: Drug Related Arrest Rate from Uniform Crime Reports

Notes: Drug related arrest rates in a month per 10,000 people were regressed on state fixed effects, calendar time effects, and indicators corresponding to the number of months since any over the counter restriction went into effect. The regression was weighted by state population. The graph contains OLS estimates of the coefficients on the indicators corresponding to the number of months since any over the counter restriction went into effect. The coefficient on the dummy variable equal to one if a state passed an over counter restriction in the next month was normalized to zero. The series above are derived from the Uniform Crime Reports for January 2002 through December 2007. There is no data available for Alabama, Florida, and Rhode Island. Records from agencies in some states that report either annually or biannually have been dropped. Standard errors clustered by state are in parentheses.

J Results from Panel Balanced in Event Time

Table 14: Impact of OTC Regulations on Methamphetamine Lab Seizures: Balanced Panel

	<u>Number of Labs Seized</u>				<u>Lab Capacity Under 2 Ounces</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-7.07	-5.32	-4.59	-4.74	-4.77	-3.59	-3.24	-3.36
	(2.01)	(1.54)	(1.60)	(1.68)	(1.37)	(1.10)	(1.27)	(1.33)
Mean Prior to OTC Restriction	15.32	15.32	15.32	15.87	10.84	10.84	10.84	11.21
Observations	2,601	2,601	2,601	2,499	2,601	2,601	2,601	2,499
Number of States	51	51	51	49	51	51	51	49

	<u>Lab Capacity 2 to 8 Ounces</u>				<u>Lab Capacity 9 Ounces or More</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-1.84	-1.44	-1.02	-1.06	-0.45	-0.30	-0.32	-0.32
	(0.57)	(0.44)	(0.40)	(0.41)	(0.23)	(0.16)	(0.35)	(0.36)
Mean Prior to OTC Restriction	3.46	3.46	3.46	3.60	1.02	1.02	1.02	1.06
Observations	2,601	2,601	2,601	2,499	2,601	2,601	2,601	2,499
Number of States	51	51	51	49	51	51	51	49
Linear State Trends	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Quadratic State Trends	No	No	Yes	Yes	No	No	Yes	Yes
Covariates	No	No	No	Yes	No	No	No	Yes

Notes: All regressions include state fixed effects and year/month fixed effects. The dependent variable in the regressions is count of labs seized or discovered in a month in a particular state. These are derived from the National Clandestine Laboratory Seizure System. The estimates include records for all 50 states and the District of Columbia spanning a period 27 months before and 23 months after a law was enacted [(27+1+23)*51=2601]. Covariates include the unemployment rate, number of households receiving food stamps, average temperature and precipitation. In the fourth specification we drop 102 observations because weather data is missing for Alaska and Hawaii. Standard errors clustered by state are in parentheses.

Table 15: Impact of OTC Regulations on Drug Price and Purity: Balanced Panel

	Price per Gram				Purity			
	Methamphetamine				Methamphetamine			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	0.055 (3.10)	-0.41 (3.33)	-1.84 (4.11)	-2.05 (4.09)	3.81 (2.37)	3.28 (2.45)	1.10 (2.09)	0.85 (2.09)
Mean Prior to OTC Restriction	49.99	49.99	49.99	49.61	59.75	59.75	59.75	59.39
Observations	1,467	1,467	1,467	1,412	1,467	1,467	1,467	1,412
Number of States	48	48	48	46	48	48	48	46
	Price per Gram				Purity			
	Cocaine				Cocaine			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	2.19 (2.37)	1.43 (2.53)	1.96 (2.70)	1.69 (2.82)	0.075 (1.47)	0.15 (1.53)	1.86 (1.66)	2.06 (1.76)
Mean Prior to OTC Restriction	39.84	39.84	39.84	39.79	63.28	63.28	63.28	63.32
Observations	1,682	1,682	1,682	1,662	1,682	1,682	1,682	1,662
Number of States	50	50	50	48	50	50	50	48
	Price per Gram				Purity			
	Crack				Crack			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-2.30 (2.83)	-2.79 (2.93)	1.29 (3.62)	1.16 (3.81)	0.061 (1.11)	-0.16 (1.16)	0.57 (1.26)	0.55 (1.25)
Mean Prior to OTC Restriction	61.69	61.69	61.69	61.72	66.08	66.08	66.08	66.06
Observations	1,621	1,621	1,621	1,595	1,621	1,621	1,621	1,595
Number of States	49	49	49	47	49	49	49	47
	Price per Gram				Purity			
	Heroin				Heroin			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-2.11 (12.1)	-0.66 (13.1)	0.13 (13.1)	-0.61 (12.6)	2.61 (2.73)	4.24 (2.86)	2.43 (2.72)	2.82 (2.74)
Mean Prior to OTC Restriction	121.34	121.34	121.34	121.33	41.35	41.35	41.35	41.30
Observations	777	777	777	776	777	777	777	776
Number of States	43	43	43	41	43	43	43	41
Linear State Time Trends	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Quadratic State Time Trends	No	No	Yes	Yes	No	No	Yes	Yes
Covariates	No	No	No	Yes	No	No	No	Yes

Notes: All regressions include state fixed effects and year/month fixed effects. The dependent value in the regressions is average price and average purity over the month of drugs purchased by law enforcement. Price is measured in dollars and purity is measured in percent. These are derived from the National Clandestine Laboratory Seizure System. The estimates include records for all 50 states and the District of Columbia spanning a period 27 months before and 23 months after a law was enacted. In many smaller states there are months without any purchases particularly for Heroin and Methamphetamine. Covariates include the unemployment rate, number of households receiving food stamps, average temperature and precipitation. Weather data is missing for Alaska and Hawaii. Standard errors clustered by state are in parentheses.

Table 16: Percent of Workplace Drug Tests Positive for Methamphetamine: Balanced Panel

	<u>Percent of Tests Positive</u>			
	(1)	(2)	(3)	(4)
OTC Restriction	-0.050 (0.028)	-0.023 (0.020)	-0.016 (0.036)	-0.008 (0.035)
Mean Prior to OTC Restriction	0.473	0.473	0.473	0.465
Observations	814	814	814	777
Number of States	22	22	22	21
Linear State Time Trends	No	Yes	Yes	Yes
Quadratic State Time Trends	No	No	Yes	Yes
Covariates	No	No	No	Yes

Notes: All regressions include state fixed effects and year/month fixed effects and were weighted by state population. Standard errors are clustered at the state level. The data used to construct the dependent variable are extracted from the Office of National Drug Control Policy report "Pushing Back Against Meth". It was downloaded on February 2, 2007 from www.whitehousedrugpolicy.gov/publications/pdf/pushingback_against_meth.pdf. The dependent variable is the percent of drug tests that are positive. The estimates include records for all 22 states and the District of Columbia spanning a period 27 months before and 9 months after a law was enacted $[(27+1+9)*22=814]$. Covariates include the unemployment rate, number of households receiving food stamps, average temperature and precipitation. Weather data is missing for Alaska. Standard errors clustered by state are in parentheses.

Table 17: Percent of Hospitalizations with a Positive Drug Test: Balanced Panel

	<u>Amphetamine</u>				<u>Opioids</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	0.089 (0.073)	0.069 (0.069)	0.045 (0.059)	0.055 (0.060)	0.019 (0.13)	-0.013 (0.12)	0.048 (0.15)	0.059 (0.17)
Mean Prior to OTC Restriction	0.740	0.740	0.740	0.725	1.844	1.844	1.844	1.844
Observations	1,784	1,784	1,784	1,729	1,784	1,784	1,784	1,729
Number of States	33	33	33	32	33	33	33	32
	<u>Cocaine</u>				<u>Marijuana</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-0.24 (0.17)	-0.16 (0.16)	0.0081 (0.16)	0.030 (0.17)	0.068 (0.13)	0.11 (0.11)	0.22 (0.12)	0.24 (0.13)
Mean Prior to OTC Restriction	2.208	2.208	2.208	2.208	1.895	1.895	1.895	1.982
Observations	1,784	1,784	1,784	1,729	1,784	1,784	1,784	1,729
Number of States	33	33	33	32	33	33	33	32
Linear State Time Trends	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Quadratic State Time Trends	No	Yes	Yes	Yes	No	No	Yes	Yes
Covariates	No	No	No	Yes	No	No	No	Yes

Notes: All specifications include state fixed effects and year/month fixed effects. Regressions are weighted by population between the ages of 15 and 40. Standard errors are clustered by state. The dependent variable in the regressions is the percent of hospitalizations among 15 to 40 years olds in a month in a state that test positive for a particular drug. This dependent variable is derived from the HCUP NIS which includes a 20 percent sample of community hospitals from the following states AR, CA, CO, CT, GA, HI, IL, IN, KS, KY, MA, MD, MI, MN, MO, NC, NE, NH, NV, NY, OH, OK, OR, SC, TN, TX, UT, VT, WI, WV and 100 percent of the community hospitals from AZ, NJ and WA. For Iowa it is a 20 percent sample before 2004 and all community hospitals from 2004-2007. Approximately 90 percent of hospital visits occur at community hospitals. The hospital records do not distinguish positive tests from methamphetamine from positive tests from amphetamine. In this period over 90 percent of positive tests for either methamphetamine or amphetamine are due to methamphetamine. The estimates include records for these states spanning a period 34 months before and 20 months after a law was enacted. Covariates include the unemployment rate, number of households receiving food stamps, average temperature and precipitation. Standard errors clustered by state are in parentheses.

Table 18: Impact of OTC Regulations on Drug Related Arrests: Balanced Panel

	<u>Sales of Addicting</u>				<u>Sales of Dangerous</u>			
	<u>Narcotics</u>				<u>non-Narcotics</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-0.18 (0.084)	-0.11 (0.045)	-0.13 (0.047)	-0.12 (0.044)	-0.0092 (0.062)	-0.0016 (0.056)	-0.059 (0.036)	-0.048 (0.041)
Rate per 10,000	0.830	0.830	0.830	0.834	1.829	1.829	1.829	1.825
Observations	2,376	2,376	2,376	2,274	2,376	2,376	2,376	2,274
Number of States	47	47	47	45	47	47	47	45

	<u>Possession of Addicting</u>				<u>Possession of Dangerous</u>			
	<u>Narcotics</u>				<u>non-Narcotics</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-0.030 (0.096)	0.020 (0.080)	-0.082 (0.072)	-0.067 (0.077)	-0.29 (0.54)	-0.27 (0.55)	-0.57 (0.47)	-0.45 (0.44)
Rate per 10,000	1.823	1.823	1.823	1.830	8.909	8.909	8.909	8.922
Observations	2,376	2,376	2,376	2,274	2,376	2,376	2,376	2,274
Number of States	47	47	47	45	47	47	47	45
Linear State Time Trends	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Quadratic State Time Trends	No	No	Yes	Yes	No	No	Yes	Yes
Covariates	No	No	No	Yes	No	No	No	Yes

Notes: All regressions include state fixed effects and month dummies. Standard errors are clustered at the state level. The dependent value in the regressions is arrest rate in a month per 10,000 people in a state. Regressions are weighted by state population. These are derived from the Uniform Crime Reports for January 2002 through December 2007. There is no data available for Alabama, Florida, New York, and Rhode Island. The estimates include records for these states spanning a period 27 months before and 23 months after a law was enacted. Records from agencies in some states that report either annually or biannually have been dropped. Covariates include the unemployment rate, number of households receiving food stamps, average temperature and precipitation. Standard errors clustered by state are in parentheses.

K Time Series of Average Outcomes for Federal Adopters

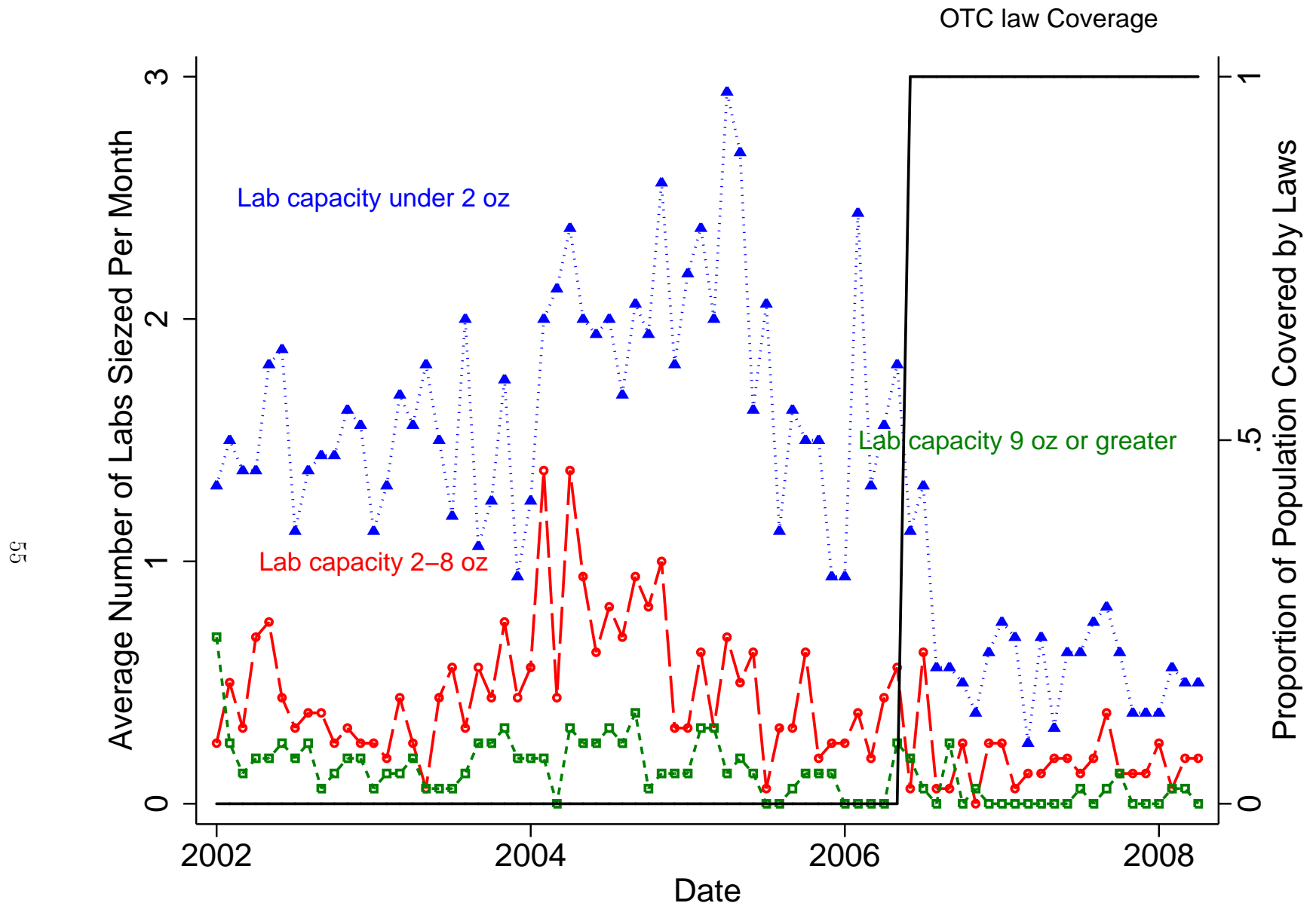


Figure 24: Methamphetamine Labs Discovered or Seized by Capacity: States Covered by Federal Law

Notes: The time series above are constructed using records from the National Clandestine Laboratory Seizure System. The figure contains the average number of labs discovered in a state by month for states where the federal law was binding.

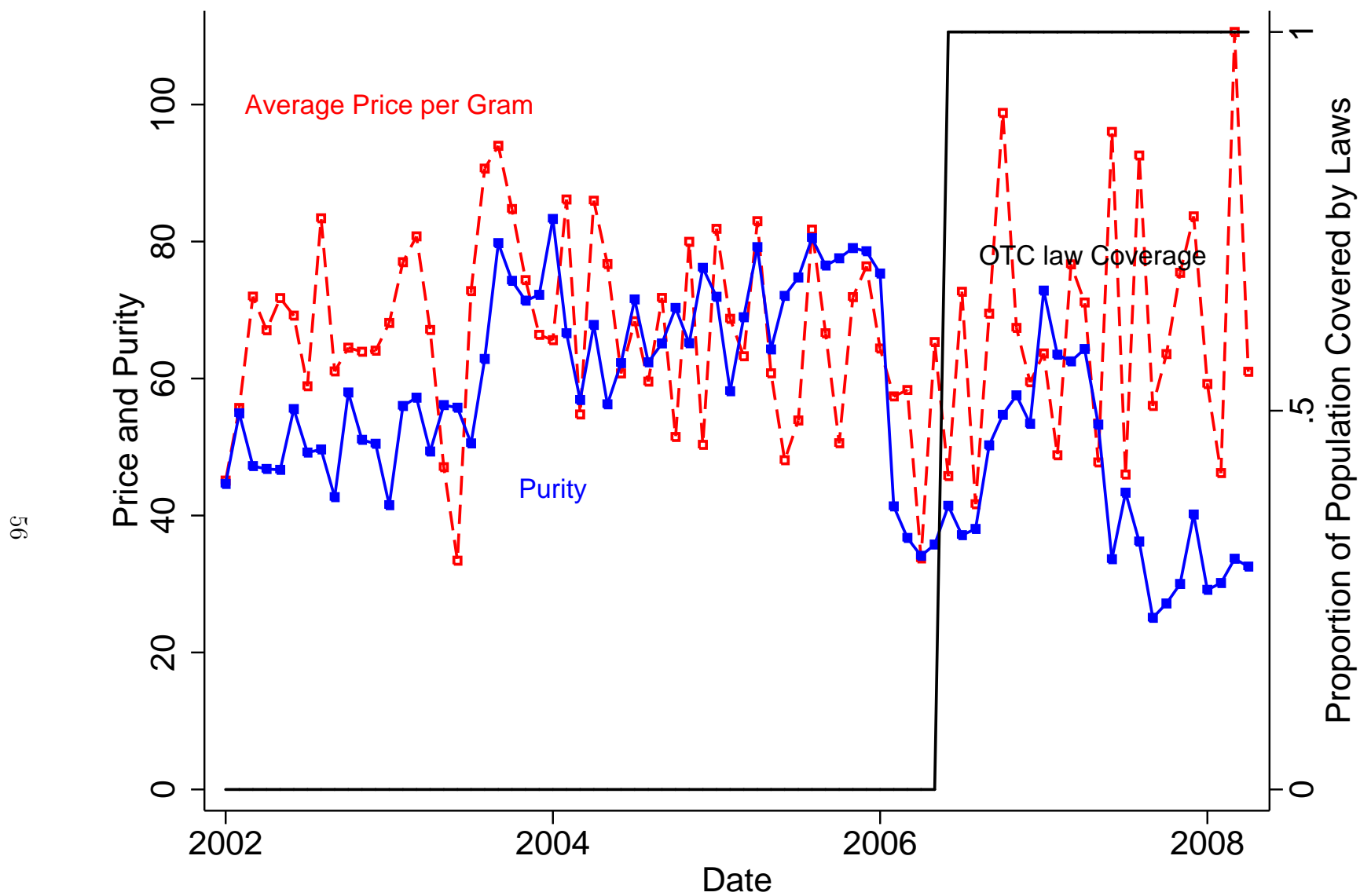


Figure 25: Price and Purity of Methamphetamine from STRIDE: States Covered by Federal Law

Notes: Price is measured in dollars and purity is measured in percent. The time series contains averages of the average price per gram and purity of drugs purchased by the police in a state by month for states where the federal law was binding.

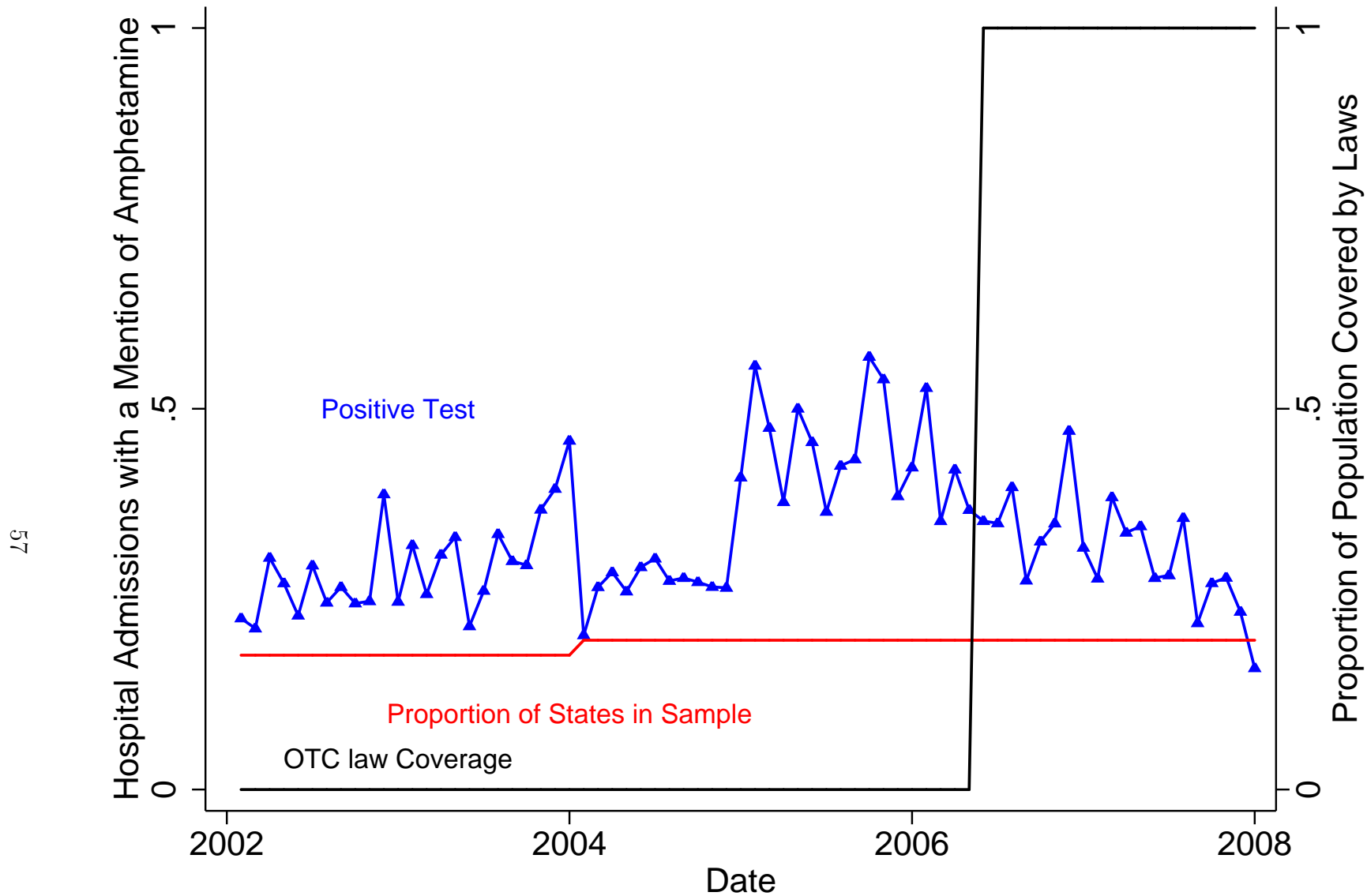


Figure 26: Percent of Hospital Admissions with Positive Drug Test for Amphetamine (Ages 15-40): States Covered by Federal Law

Notes: This series contains averages of the percent of hospital admission discharge statements with an indication of amphetamine use by month for the states where the federal law was binding.

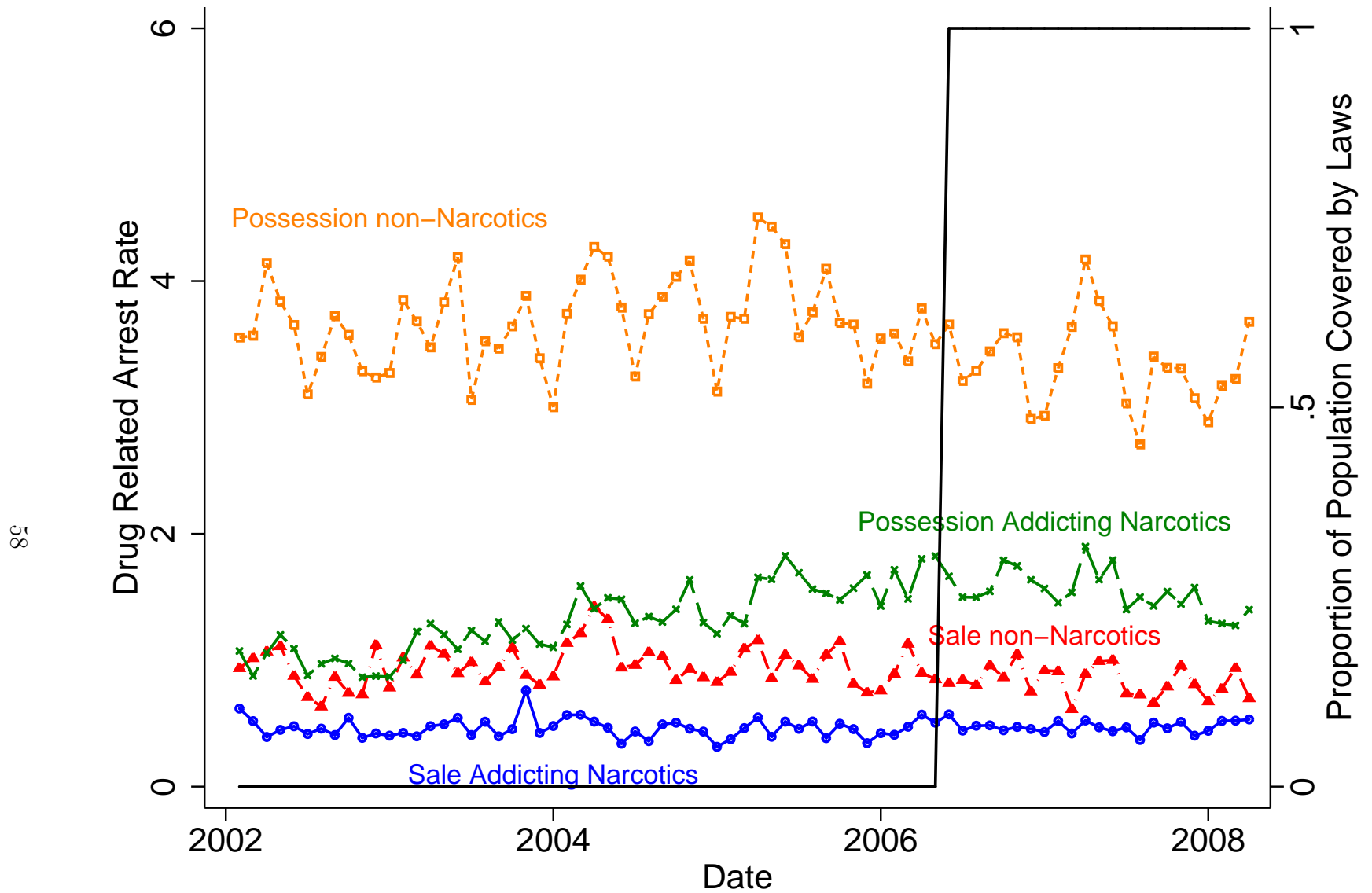


Figure 27: Drug Related Arrest Rate from Uniform Crime Reports: States Covered by Federal Law

Notes: The series above are derived from the Uniform Crime Reports for January 2002 through December 2007. There is no data available for Alabama, Florida, and Rhode Island. The figure contains the average arrest rate by month and type of crime for the states where the federal law was binding.

L Unweighted Results

Table 19: Impact of OTC Regulations on Drug Price and Purity: Unweighted

	<u>Price per Gram</u> <u>Methamphetamine</u>				<u>Purity</u> <u>Methamphetamine</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	1.30	-0.21	-3.06	-3.94	1.19	-0.68	0.095	0.34
	(5.45)	(5.44)	(6.98)	(6.94)	(2.73)	(2.59)	(2.63)	(2.67)
Observations	2,074	2,074	2,074	1,995	2,074	2,074	2,074	1,995
Number of States	49	49	49	47	49	49	49	47
	<u>Price per Gram</u> <u>Cocaine</u>				<u>Purity</u> <u>Cocaine</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-0.77	-0.069	0.027	-0.35	-0.17	-0.25	-0.69	-1.11
	(2.37)	(2.40)	(2.82)	(2.85)	(1.64)	(1.84)	(1.99)	(2.02)
Observations	2,449	2,449	2,449	2,423	2,449	2,449	2,449	2,423
Number of States	50	50	50	48	50	50	50	48
	<u>Price per Gram</u> <u>Crack</u>				<u>Purity</u> <u>Crack</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-5.99	-5.83	-5.77	-5.22	-1.31	-0.90	-1.23	-1.02
	(3.35)	(3.43)	(3.53)	(3.52)	(1.75)	(1.85)	(1.71)	(1.70)
Observations	2,381	2,381	2,381	2,342	2,381	2,381	2,381	2,342
Number of States	50	50	50	48	50	50	50	48
	<u>Price per Gram</u> <u>Heroin</u>				<u>Purity</u> <u>Heroin</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	2.59	-0.0064	0.21	-0.017	7.07	7.16	7.37	7.80
	(11.7)	(10.4)	(10.7)	(10.8)	(3.22)	(3.35)	(3.72)	(3.83)
Observations	1,166	1,166	1,166	1,165	1,166	1,166	1,166	1,165
Number of States	44	44	44	43	44	44	44	43
Linear State Time Trends	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Quadratic State Time Trends	No	No	Yes	Yes	No	No	Yes	Yes
Covariates	No	No	No	Yes	No	No	No	Yes

Notes: All regressions include state fixed effects and year/month fixed effects. The dependent value in the regressions is average price and average purity over the month of drugs purchased by law enforcement. Price is measured in dollars and purity is measured in percent. These are derived from the National Clandestine Laboratory Seizure System. The estimates include records from the District of Columbia and all 50 states except for Nebraska for January 2002 through March 2008 [(6*12+3)*50=3750]. In many smaller states there are months without any purchases particularly for Heroin and Methamphetamine. Covariates include the unemployment rate, number of households receiving food stamps, average temperature and precipitation. Weather data is missing for Alaska and Hawaii. Standard errors clustered by state are in parentheses.

Table 20: Percent of Workplace Drug Tests Positive for Methamphetamine: Unweighted

	<u>Percent of Tests Positive</u>			
	(1)	(2)	(3)	(4)
OTC Restriction	-0.0025 (0.024)	-0.023 (0.028)	-0.016 (0.026)	-0.016 (0.026)
Observations	2,652	2,652	2,652	2,548
Number of States	51	51	51	49
Linear State Time Trends	No	Yes	Yes	Yes
Quadratic State Time Trends	No	No	Yes	Yes
Covariates	No	No	No	Yes

Notes: All regressions include state fixed effects and year/month fixed effects. Standard errors are clustered at the state level. The data used to construct the dependent variable are extracted from the Office of National Drug Control Policy report "Pushing Back Against Meth". It was downloaded on February 2, 2007 from

www.whitehousedrugpolicy.gov/publications/pdf/pushingback_against_meth.pdf. The dependent variable is the percent of drug tests that are positive. The estimates include records from the District of Columbia and all 50 states for January 2002 through April 2006 $[(4*12+4)*51=2652]$. Covariates include the unemployment rate, number of households receiving food stamps, average temperature and precipitation. Weather data is missing for Alaska and Hawaii. Standard errors clustered by state are in parentheses.

Table 21: Percent of Hospitalizations with a Positive Drug Test: Unweighted

	<u>Amphetamine</u>				<u>Opioids</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	0.11	0.095	0.041	0.022	0.20	0.068	0.042	0.038
	(0.12)	(0.12)	(0.084)	(0.085)	(0.15)	(0.14)	(0.15)	(0.16)
Observations	2316	2316	2316	2244	2316	2316	2316	2244
Number of States	33	33	33	32	33	33	33	32
	<u>Cocaine</u>				<u>Marijuana</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-0.27	-0.25	-0.18	-0.18	-0.061	-0.058	0.042	0.035
	(0.15)	(0.14)	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.16)
Observations	2316	2316	2316	2244	2316	2316	2316	2244
Number of States	33	33	33	32	33	33	33	32
Linear State Time Trends	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Quadratic State Time Trends	No	Yes	Yes	Yes	No	No	Yes	Yes
Covariates	No	No	No	Yes	No	No	No	Yes

Notes: All specifications include state fixed effects and year/month fixed effects. Standard errors are clustered by state. The dependent variable in the regressions is the percent of hospitalizations among 15 to 40 years olds in a month in a state that test positive for a particular drug. This dependent variable is derived from the HCUP NIS which includes a 20 percent sample of community hospitals from the following states AR, CA, CO, CT, GA, HI, IL, IN, KS, KY, MA, MD, MI, MN, MO, NC, NE, NH, NV, NY, OH, OK, OR, SC, TN, TX, UT, VT, WI, WV and 100 percent of the community hospitals from AZ, NJ and WA. For Iowa it is a 20 percent sample before 2004 and all community hospitals from 2004-2007. Approximately 90 percent of hospital visits occur at community hospitals. The hospital records do not distinguish positive tests from methamphetamine from positive tests from amphetamine. In this period over 90 percent of positive tests for either methamphetamine or amphetamine are due to methamphetamine. The estimates include records for January 2002 through December 2007. Covariates include the unemployment rate, number of households receiving food stamps, average temperature and precipitation. Standard errors clustered by state are in parentheses.

Table 22: Impact of OTC Regulations on Drug Related Arrests: Unweighted

	<u>Sales of Addicting</u>				<u>Sales of Dangerous</u>			
	<u>Narcotics</u>				<u>non-Narcotics</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-0.036 (0.065)	-0.030 (0.063)	-0.075 (0.071)	-0.10 (0.071)	0.064 (0.087)	0.065 (0.076)	-0.042 (0.076)	-0.036 (0.076)
Observations	3,477	3,477	3,477	3,327	3,477	3,477	3,477	3,327
Number of States	47	47	47	45	47	47	47	45

	<u>Possession of Addicting</u>				<u>Possession of Dangerous</u>			
	<u>Narcotics</u>				<u>non-Narcotics</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	0.069 (0.20)	0.087 (0.19)	-0.0089 (0.16)	-0.016 (0.17)	0.73 (0.47)	0.68 (0.47)	0.20 (0.23)	0.26 (0.23)
Observations	3,477	3,477	3,477	3,327	3,477	3,477	3,477	3,327
Number of States	47	47	47	45	47	47	47	45
Linear State Time Trends	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Quadratic State Time Trends	No	No	Yes	Yes	No	No	Yes	Yes
Covariates	No	No	No	Yes	No	No	No	Yes

Notes: All regressions include state fixed effects and month dummies. Standard errors are clustered at the state level. The dependent value in the regressions is arrest rate in a month per 10,000 people in a state. These are derived from the Uniform Crime Reports for January 2002 through December 2007. There is no data available for Alabama, Florida, New York, and Rhode Island. Records from agencies in some states that report either annually or biannually have been dropped. Covariates include the unemployment rate, number of households receiving food stamps, average temperature and precipitation. Standard errors clustered by state are in parentheses.

M Impact on County Level Lab Seizures: Log of Seized Labs and Poisson Models

Table 23: County Level Impact of OTC Regulations on Methamphetamine Lab Seizures: Poisson Regressions

	<u>Number of Labs Seized</u>			<u>Lab Capacity Under 2 Ounces</u>		
	(1)	(2)	(3)	(1)	(2)	(3)
OTC Restriction	-0.47 (0.068)	-0.58 (0.079)	-0.51 (0.057)	-0.45 (0.065)	-0.55 (0.077)	-0.49 (0.062)
OTC Restriction*Border County		0.39 (0.11)	0.34 (0.097)		0.40 (0.13)	0.37 (0.11)
Border County*Neighbor State		0.075 (0.092)	0.043 (0.082)		0.11 (0.10)	0.075 (0.090)
OTC Restriction*Border County		-0.28 (0.12)	-0.32 (0.11)		-0.36 (0.13)	-0.40 (0.12)
*Neighbor State OTC Restriction						
p-value $\beta_{otc} + \beta_{border,otc} = 0$		0.048	0.036		0.157	0.187
p-value $\beta_{otc} + \beta_{border,otc}$		0.047	0.392		0.124	0.603
+ $\beta_{border,otc,neighbor} = 0$						
Mean Prior to OTC Restriction	0.23	0.23	0.23	0.16	0.16	0.16
Observations	235,725	235,725	235,725	235,725	235,725	235,725
	<u>Lab Capacity 2 to 8 Ounces</u>			<u>Lab Capacity 9 Ounces or More</u>		
	(1)	(2)	(3)	(1)	(2)	(3)
OTC Restriction	-0.78 (0.11)	-0.86 (0.13)	-0.65 (0.12)	-0.27 (0.18)	-0.40 (0.23)	-0.42 (0.20)
OTC Restriction*Border County		0.15 (0.22)	0.019 (0.23)		0.35 (0.34)	0.20 (0.29)
Border County*Neighbor State		-0.030 (0.15)	-0.026 (0.15)		-0.094 (0.30)	-0.23 (0.32)
OTC Restriction						
OTC Restriction*Border County		0.16 (0.24)	0.10 (0.25)		0.040 (0.48)	0.12 (0.48)
*Neighbor State OTC Restriction						
p-value $\beta_{otc} + \beta_{border,otc} = 0$		0.001	0.002		0.859	0.325
p-value $\beta_{otc} + \beta_{border,otc}$		0.047	0.452		0.219	0.723
+ $\beta_{border,otc,neighbor} = 0$						
Mean Prior to OTC Restriction	0.054	0.054	0.054	0.018	0.018	0.018
Observations	235,725	235,725	235,725	235,725	235,725	235,725
Linear State Trends	No	No	Yes	No	No	Yes
Quadratic State Trends	No	No	No	No	No	No

Notes: All regressions include county fixed effects and year/month fixed effects. The dependent variable in the regressions is count of labs seized or discovered in a month in a particular county. These are derived from the National Clandestine Laboratory Seizure System. The estimates include records for all 3143 county fips areas (excluding Puerto Rico) from January 2002 through March 2008 $[(6*12+3)*3143=235,725]$. Standard errors clustered by state are in parentheses.

Table 24: County Level Impact of OTC Regulations on $\log(1+\text{Methamphetamine Lab Seizures})$

	<u>Number of Labs Seized</u>				<u>Lab Capacity Under 2 Ounces</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-0.039 (0.0092)	-0.044 (0.011)	-0.037 (0.011)	-0.044 (0.013)	-0.026 (0.0065)	-0.029 (0.0079)	-0.024 (0.0078)	-0.031 (0.0092)
OTC Restriction*Border County		0.027 (0.0100)	0.023 (0.0090)	0.024 (0.0098)		0.019 (0.0078)	0.018 (0.0075)	0.020 (0.0080)
Border County*Neighbor State		0.0036 (0.010)	0.0020 (0.010)	0.0036 (0.0086)		0.0064 (0.012)	0.0055 (0.012)	0.0069 (0.010)
OTC Restriction*Border County *Neighbor State OTC Restriction		-0.029 (0.012)	-0.022 (0.012)	-0.024 (0.011)		-0.026 (0.013)	-0.022 (0.013)	-0.025 (0.013)
p-value $\beta_{otc} + \beta_{border,otc} = 0$		0.058	0.14	0.059		0.21	0.44	0.18
p-value $\beta_{otc} + \beta_{border,otc}$ $+ \beta_{border,otc,neighbor} = 0$		0.83	0.62	0.63		0.98	0.75	0.78
Mean Prior to OTC Restriction	0.23	0.23	0.23	0.23	0.16	0.16	0.16	0.16
Observations	235,725	235,725	235,725	235,725	235,725	235,725	235,725	235,725
	<u>Lab Capacity 2 to 8 Ounces</u>				<u>Lab Capacity 9 Ounces or More</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-0.017 (0.0041)	-0.019 (0.0048)	-0.016 (0.0045)	-0.016 (0.0052)	-0.0014 (0.0026)	-0.0022 (0.0029)	-0.0019 (0.0026)	-0.0026 (0.0022)
OTC Restriction*Border County		0.0046 (0.0057)	0.0028 (0.0052)	0.0032 (0.0053)		0.0035 (0.0021)	0.0030 (0.0022)	0.0016 (0.0019)
Border County*Neighbor State		-0.0026 (0.0031)	-0.0031 (0.0032)	-0.0025 (0.0034)		0.000069 (0.0027)	-0.00073 (0.0024)	-0.0010 (0.0025)
OTC Restriction*Border County *Neighbor State OTC Restriction		-0.0013 (0.0050)	0.0017 (0.0048)	0.00068 (0.0050)		-0.0027 (0.0031)	-0.0019 (0.0033)	-0.000092 (0.0028)
p-value $\beta_{otc} + \beta_{border,otc} = 0$		0.014	0.0080	0.027		0.66	0.71	0.58
p-value $\beta_{otc} + \beta_{border,otc}$ $+ \beta_{border,otc,neighbor} = 0$		0.82	0.66	0.68		0.56	0.78	0.71
Mean Prior to OTC Restriction	0.054	0.054	0.054	0.054	0.018	0.018	0.018	0.018
Observations	235,725	235,725	235,725	235,725	235,725	235,725	235,725	235,725
Linear State Trends	No	No	Yes	Yes	No	No	Yes	Yes
Quadratic State Trends	No	No	No	Yes	No	No	No	Yes

Notes: All regressions include county fixed effects and year/month fixed effects. The dependent variable in the regressions is count of labs seized or discovered in a month in a particular county. These are derived from the National Clandestine Laboratory Seizure System. The estimates include records for all 3143 county fips areas (excluding Puerto Rico) from January 2002 through March 2008 $[(6*12+3)*3143=235,725]$. Standard errors clustered by state are in parentheses.

N Impact on All Drug Prices and Purities and all Hospital Drug Tests

Table 25: Impact of OTC Regulations on Drug Price and Purity

	<u>Price per Gram</u>				<u>Purity</u>			
	<u>Methamphetamine</u>				<u>Methamphetamine</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	2.89	2.19	-1.83	-2.12	6.15	4.49	3.81	4.18
	(2.94)	(2.93)	(3.54)	(3.57)	(2.58)	(2.55)	(2.24)	(2.26)
Mean Prior to OTC Restriction	49.13	49.13	49.13	48.60	56.64	56.64	56.64	56.32
Observations	2,074	2,074	2,074	1,995	2,074	2,074	2,074	1,995
Number of States	49	49	49	47	49	49	49	47
	<u>Price per Gram</u>				<u>Purity</u>			
	<u>Cocaine</u>				<u>Cocaine</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	1.43	1.46	2.18	2.08	0.023	0.020	0.14	0.082
	(2.37)	(2.38)	(2.58)	(2.64)	(1.29)	(1.52)	(1.65)	(1.70)
Mean Prior to OTC Restriction	40.66	40.66	40.66	61.26	40.64	40.64	40.64	61.30
Observations	2,449	2,449	2,449	2,423	2,449	2,449	2,449	2,423
Number of States	50	50	50	48	50	50	50	48
	<u>Price per Gram</u>				<u>Purity</u>			
	<u>Crack</u>				<u>Crack</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-3.94	-3.19	-1.39	-1.52	0.19	0.19	-0.42	-0.50
	(2.68)	(2.33)	(3.36)	(3.21)	(1.36)	(1.28)	(1.14)	(1.18)
Mean Prior to OTC Restriction	62.69	62.69	62.69	62.68	63.55	63.55	63.55	63.19
Observations	2,381	2,381	2,381	2,342	2,381	2,381	2,381	2,342
Number of States	50	50	50	48	50	50	50	48
	<u>Price per Gram</u>				<u>Purity</u>			
	<u>Heroin</u>				<u>Heroin</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-6.41	-6.44	-4.95	-3.81	3.51	2.40	3.00	3.37
	(12.2)	(11.5)	(11.1)	(11.2)	(2.65)	(2.61)	(3.05)	(3.02)
Mean Prior to OTC Restriction	122.04	122.04	122.04	122.03	45.79	45.79	45.79	45.77
Observations	1,166	1,166	1,166	1,165	1,166	1,166	1,166	1,165
Number of States	44	44	44	43	44	44	44	43
Linear State Time Trends	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Quadratic State Time Trends	No	No	Yes	Yes	No	No	Yes	Yes
Covariates	No	No	No	Yes	No	No	No	Yes

Notes: All regressions include state fixed effects and year/month fixed effects and were weighted by the number of purchases used to construct the outcome in each state/month. The dependent value in the regressions is average price and average purity over the month of drugs purchased by law enforcement. Price is measured in dollars and purity is measured in percent. The regressions were weighted by the These are derived from the National Clandestine Laboratory Seizure System. The estimates include records from the District of Columbia and all 50 states except for Nebraska for January 2002 through March 2008 [(6*12+3)*50=3750]. In many smaller states there are months without any purchases particularly for Heroin and Methamphetamine. Covariates include the unemployment rate, number of households receiving food stamps, average temperature and precipitation. Weather data is missing for Alaska and Hawaii. Standard errors clustered by state are in parentheses.

Table 26: Percent of Hospitalizations with a Positive Drug Test

	<u>Amphetamine</u>				<u>Opioids</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	0.11 (0.093)	0.083 (0.091)	0.060 (0.057)	0.074 (0.055)	-0.014 (0.15)	-0.093 (0.13)	-0.077 (0.12)	-0.11 (0.15)
Mean Prior to OTC Restriction	0.671	0.671	0.671	0.656	1.912	1.912	1.912	1.928
Observations	2316	2316	2316	2244	2316	2316	2316	2244
Number of States	33	33	33	32	33	33	33	32
	<u>Cocaine</u>				<u>Marijuana</u>			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
OTC Restriction	-0.33 (0.20)	-0.29 (0.19)	-0.18 (0.16)	-0.22 (0.18)	-0.035 (0.13)	0.0041 (0.12)	0.11 (0.13)	0.11 (0.14)
Mean Prior to OTC Restriction	2.201	2.201	2.201	2.201	1.895	1.895	1.895	1.896
Observations	2316	2316	2316	2244	2316	2316	2316	2244
Number of States	33	33	33	32	33	33	33	32
Linear State Time Trends	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Quadratic State Time Trends	No	Yes	Yes	Yes	No	No	Yes	Yes
Covariates	No	No	No	Yes	No	No	No	Yes

Notes: All specifications include state fixed effects and year/month fixed effects. Regressions are weighted by population between the ages of 15 and 40. Standard errors are clustered by state. The dependent variable in the regressions is the percent of hospitalizations among 15 to 40 years olds in a month in a state that test positive for a particular drug. This dependent variable is derived from the HCUP NIS which includes a 20 percent sample of community hospitals from the following states AR, CA, CO, CT, GA, HI, IL, IN, KS, KY, MA, MD, MI, MN, MO, NC, NE, NH, NV, NY, OH, OK, OR, SC, TN, TX, UT, VT, WI, WV and 100 percent of the community hospitals from AZ, NJ and WA. For Iowa it is a 20 percent sample before 2004 and all community hospitals from 2004-2007. Approximately 90 percent of hospital visits occur at community hospitals. The hospital records do not distinguish positive tests from methamphetamine from positive tests from amphetamine. In this period over 90 percent of positive tests for either methamphetamine or amphetamine are due to methamphetamine. The estimates include records for January 2002 through December 2007. Covariates include the unemployment rate, number of households receiving food stamps, average temperature and precipitation. Standard errors clustered by state are in parentheses.