

**Small Change,
Big Difference:**
Understanding Issues Related
to Increases in Alcohol Taxes

George A. Hacker

June 6, 2008

New Hampshire

Citizens Health Initiative

You may have heard of CSPI...



Nutrition Facts	
Serving Size 1 cup (228g)	
Servings Per Container 2	
Amount Per Serving	
Calories 260	Calories from Fat 120
% Daily Value*	
Total Fat 13g	20%
Saturated Fat 5g	25%
Trans Fat 2g	
Cholesterol 30mg	10%
Sodium 660mg	28%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	



- **Nutrition Action Healthletter**

Largest-circulation health newsletter in the U.S

- **Movie-theater Popcorn study**

- **Nutrition Facts Labels**

Now includes Trans Fat information

- **Trans-Free America**

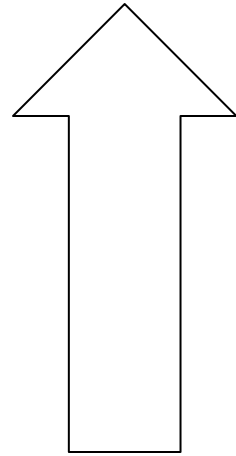
Campaign to eliminate partially hydrogenated oil from America's food supply.



The Case for Increasing Alcohol Excise Taxes

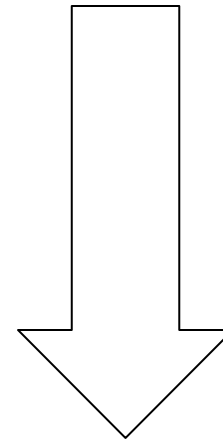
- **Help moderate drinking and alcohol-related problems and costs.**
- Alcohol taxes are low and long overdue for increases.
- Don't present an excessive burden.
- Provide a source of significant revenue, possibly to reduce the harmful effects of alcohol use.
- Enjoy strong public support.

Basic Economics

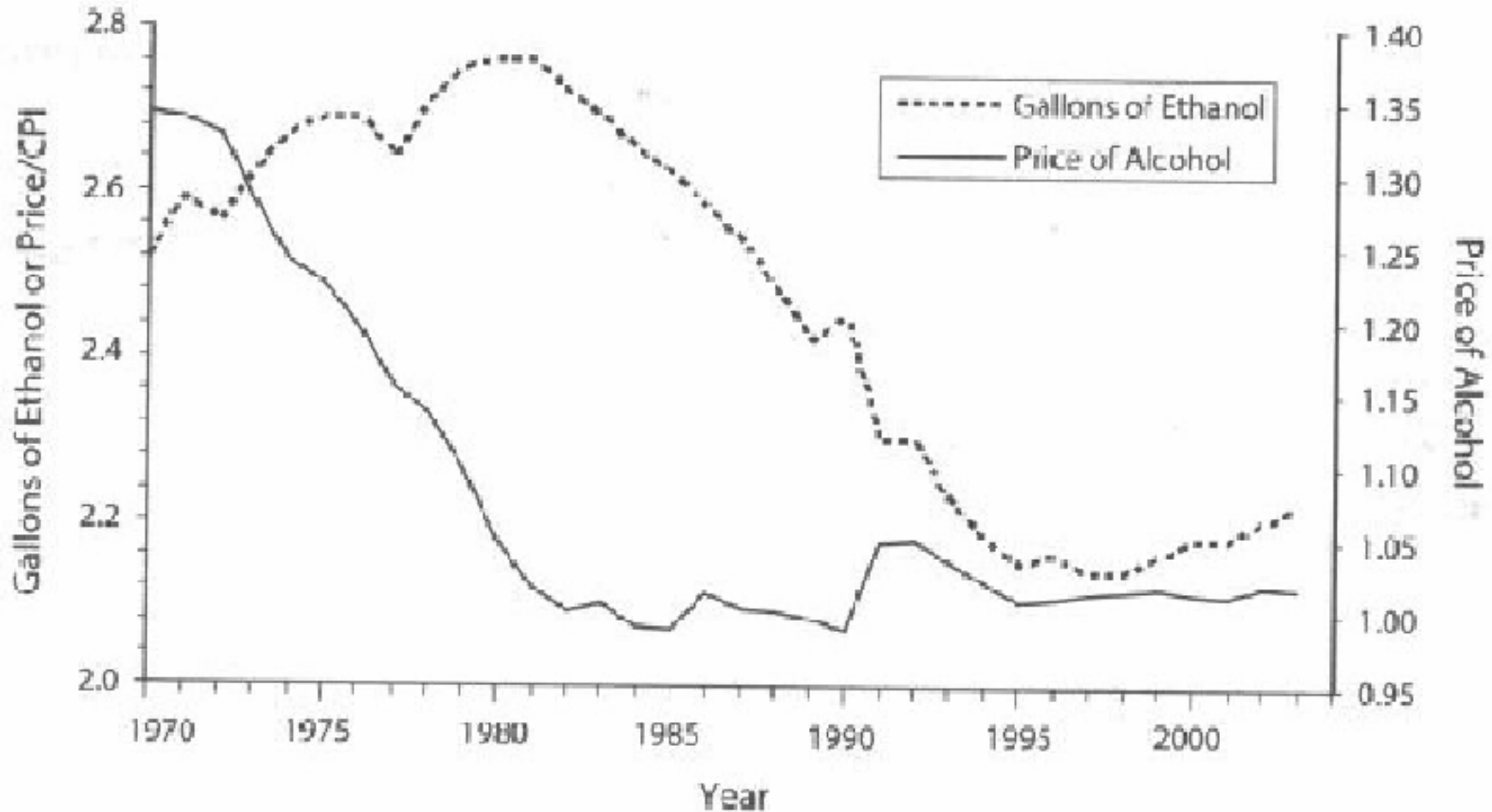


Price

Consumption



US Ethanol Consumption Per Capita (Age 14 and over) and Price of Alcohol



“[I]ncreases in the monetary prices of alcoholic beverages, which can be achieved by raising Federal, State and local alcohol taxes, significantly reduce alcohol consumption”

Chaloupka, Frank J., PhD; Grossman, Michael, PhD.; Saffer, Henry, PhD. “The Effects of Price on Alcohol Consumption and Alcohol-Related Problems.” 2002.

Research Shows Young People are Especially Affected

- More responsive to price increases than adults
- Beer prices inversely correlate with youths' decisions to drink
- Frequency and quantity of underage alcohol consumption is inversely related to the price of alcohol
- In a survey of self-reported responses, high-school students admit to reducing their overall alcohol use because of price increases
- Increasing the price on alcohol by raising excise taxes would reduce moderate and heavy drinking by college students
- College students are less likely to transition from abstainers to moderate drinkers or from moderate drinkers to heavy drinkers if alcohol prices are high.

NRC Recommends Higher Taxes

The National Research Council has recommended that states increase alcohol taxes as one key approach to reduce underage drinking. The council further recommends that taxes should be indexed for inflation so that further legislative action is not necessary to maintain the value of alcohol taxes.

Source: National Research Council Institute of Medicine, *Reducing Underage Drinking: A Collective Responsibility*, National Academies Press, Washington, D.C, 2004.

Studies Show...

Reducing alcohol consumption means:

- less drinking and driving
- less frequent and less heavy drinking
- higher college graduation rates
- reduced rates of gonorrhea and other STDs
- reduced rates of liver cirrhosis

Higher Taxes Save Lives

- “There is a consensus among researchers that higher alcoholic beverage prices and taxes result in less drinking and fewer drinking-related problems.... [A] tax increase may be a useful tool to reduce traffic fatalities, particularly among youth and young adults.”

Source: NIAAA, 10th Special Report to Congress, 1999

*adjusting the beer tax for the inflation rate since 1951 would have reduced traffic crash fatalities among 18- to 20-year-old youths by **15%***

Saffer, H., and Grossman, M. “Beer taxes, the legal drinking age, and youth motor vehicle fatalities.” *Journal of Legal Studies* 16(2):351–374, 1987

a \$1 increase in the distilled spirits tax may lower cirrhosis death rates by 5.4 to 10.8%

Cook, P.J., and Tauchen, G. "The effect of liquor taxes on heavy drinking." *Bell Journal of Economics* 13(2):379–390, 1982.

a 10% increase in the price of alcohol would reduce cirrhosis mortality by 8.3 - 12.8% after the levels of heavy drinking have fully adjusted to the price change in future years

Grossman, M. "The economic analysis of addictive behavior." In: Hilton, M.E., and Bloss, G., eds. *Economics and the Prevention of Alcohol-Related Problems*. NIAAA Research Monograph No. 25, NIH Pub. No. 93–3513. Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism, 1993. pp. 91–123.

*a \$0.25 increase in the beer tax in 1992
would have reduced work-loss days
from nonfatal workplace injuries by
4.6 million, reducing the costs of lost
productivity by **\$491 million***

Ohsfeldt, R.L., and Morrissey, M.A. "Beer taxes, workers' compensation and industrial injury". *The Review of Economics and Statistics* 79(1):155–160, 1997.

- a \$1 increase in the per-gallon liquor tax can reduce gonorrhea rates by 2.1%
- a beer tax increase of \$0.20 per 6-pack can reduce gonorrhea rates by 8.9%
- Similar, or even larger, effects of liquor and beer taxes were found for syphilis rates

Chesson, H.; Harrison, P.; and Kassler, W.J. "Sex under the influence: The effect of alcohol policy on sexually transmitted disease rates in the United States." *Journal of Law and Economics* 43(1): 215–238, 2000.

- a 10% increase in beer excise taxes would:
 - reduce the probability of overall child abuse by 1.2%
 - reduce the probability of severe child abuse by 2.3%
 - reduce unconditional overall child abuse by about 2.1%

Markowitz, S., and Grossman, M. "Alcohol regulation and domestic violence towards children." *Contemporary Economic Policy* 16(3):309–320, 1998.

- a 10% increase in beer excise taxes would reduce the number of mothers who commit violent acts against their children by approximately 2%

Markowitz, S. and Grossman, M. "The effects of beer taxes on physical child abuse." *Journal of Health Economics* 19(2):271–282, 2000.

A 10% price increase would result in the following reductions in violent acts:

- The proportion of students who get into trouble with the police and college authorities would decrease from 12.3% to 11.7%
- The proportion of students involved in property damage would be reduced from 7.5% to 7.1%
- The percentage of students who get into verbal or physical fights would fall from 31.2% to 30.2%
- The proportion of students involved in sexual misconduct would decline from 14.3% to 13.8%
- The number of students involved in violence each year would be reduced by approximately 200,000, or by 4%

Grossman, M., and Markowitz, S. "Alcohol regulation and violence on college campuses." In: *Economic Analysis of Substance Use and Abuse: The Experience of Developed Countries and Lessons for Developing Countries*.

Cheltenham, United Kingdom: Edward Elgar, 2001. pp. 257–289.

Alcohol-related Health-care Costs are Substantial

- One urgent visit to an emergency room costs \$600 minimum, while a day spent in the hospital averages \$1200.

http://www.ensuringsolutions.org/usr_doc/Primer3Costs.pdf

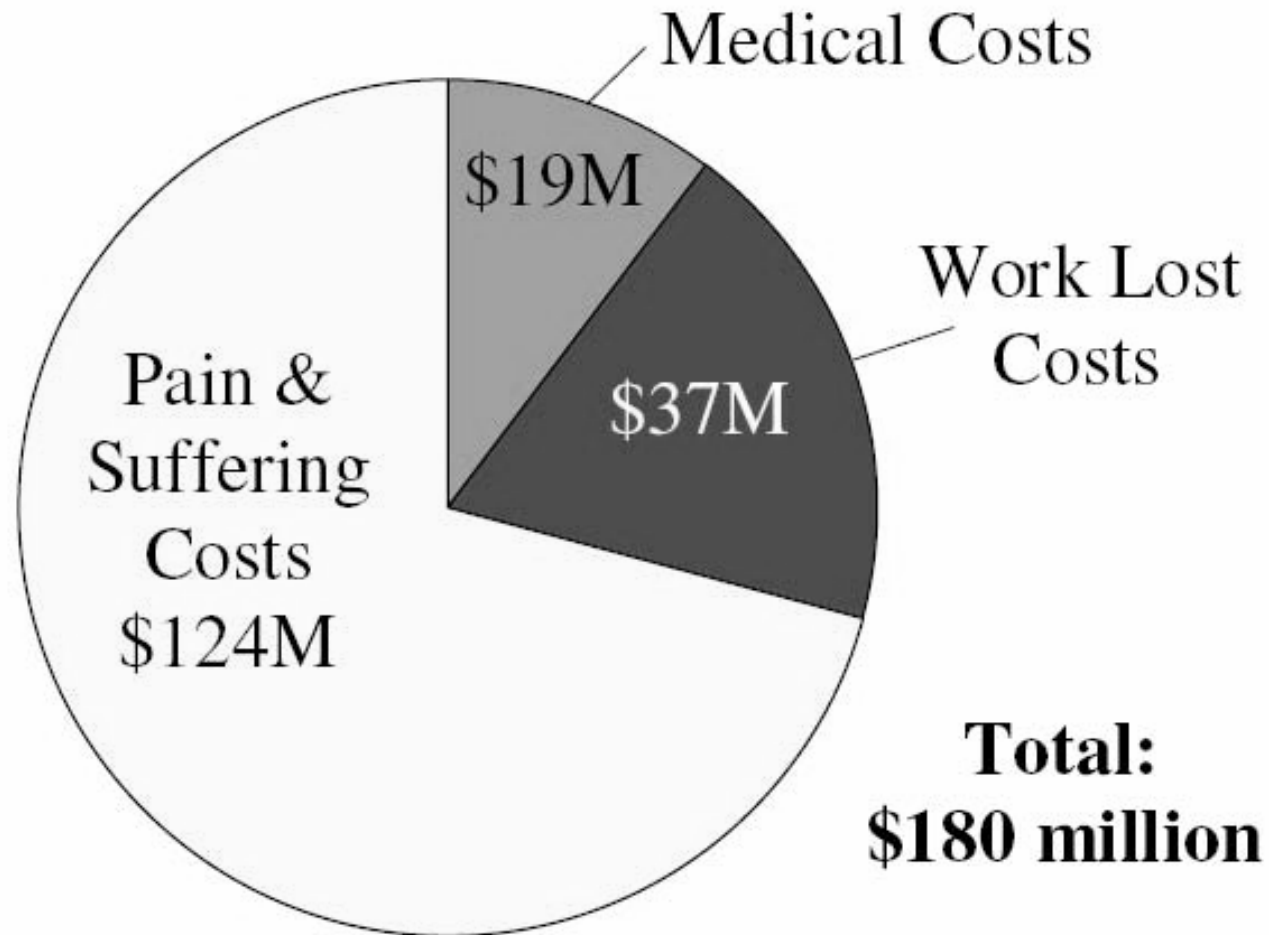
- Average cost of liver transplant, including procurement, hospital stay, and post-transplant medications: \$519,000

--Hauboldt, Richard R. "Milliman's 2005 Organ and Tissue Transplant Cost Estimates and Discussion."

- Annual national health-care costs for alcohol-related problems amount to \$36 billion.

www.alcoholcostcalculator.org

Costs of Underage Drinking New Hampshire 2005



Does Price Matter?

Alcohol consumption and alcohol-related deaths and disease have risen since Finland cut alcohol taxes by 1/3 in March 2004

Since 2003:

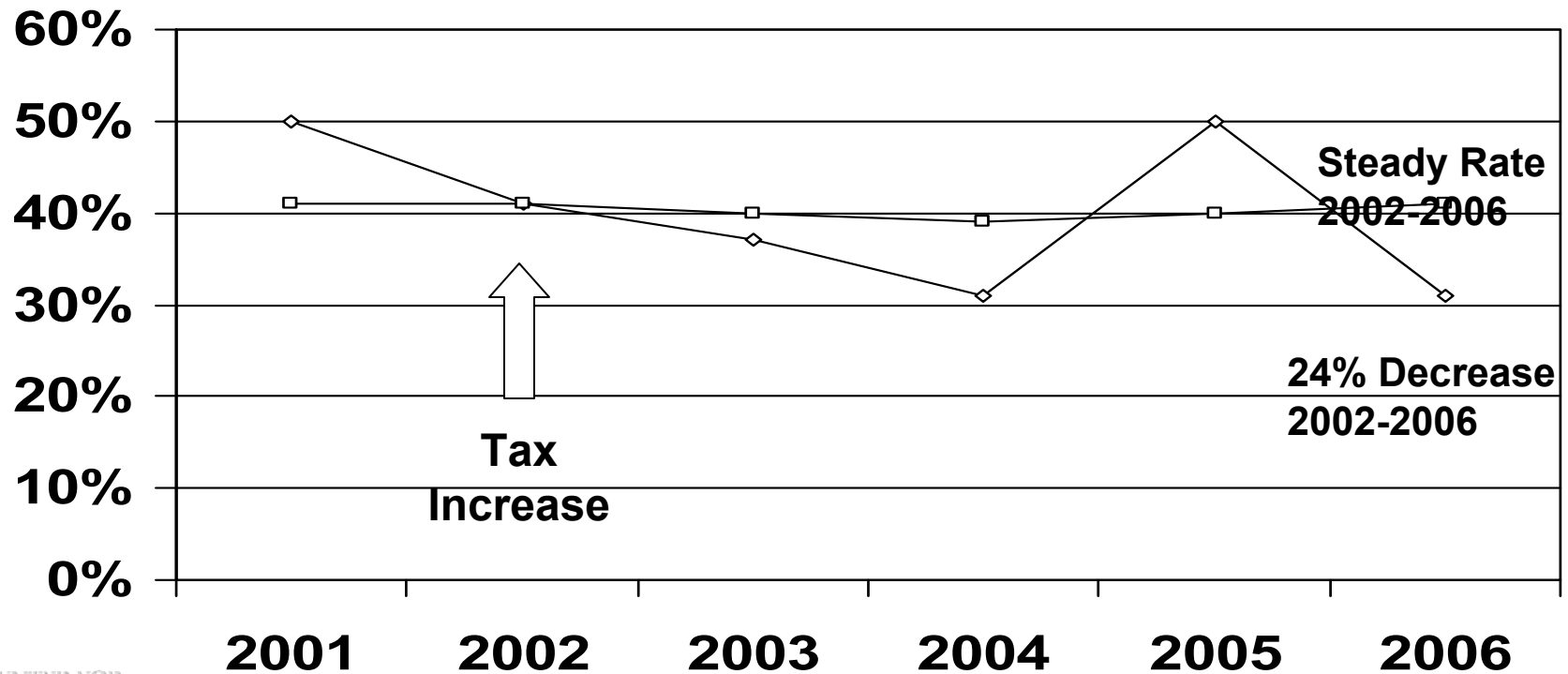
- Liver Cirrhosis Deaths ↑ **30%**
- Alcohol-Related Diseases ↑ **20%**
- Alcohol-Positive Deaths ↑ **17%**
- Alcohol Consumption ↑ **10%**

Source: Holder, Harold D. “What we learn from a reduction in the retail alcohol prices: lessons from Finland.” *Addiction*. Vol 102, Issue 3, pp346-347. March 2007.

Percent of Alcohol-Related Traffic Fatalities 2001-2006

Alaska vs. US

—◇— AK —□— US



Questions/Caveats

- Will higher taxes mean higher prices?
- Trading Down/Change in Drinking Venue
- Drug Substitution
- Bootlegging
- Home/illicit production
- Varying price effects for different beverages
- Varying effects by demographic characteristics
- Effects of other control policies

The Case for Increasing Alcohol Excise Taxes

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- **Alcohol taxes are low and long overdue for increases.**
- Don't present an excessive burden.
- Provide a source of significant revenue, possibly to reduce the harmful effects of alcohol use.
- Enjoy strong public support.

Alcohol Tax Rates per Gallon

Product	Federal	Average State Rate	New Hampshire
Beer	\$0.58	\$0.26	\$0.30
Wine*	\$1.07	\$0.78	66% markup
Spirits	\$13.50**	\$3.75***	46% markup

* 14% alcohol or less (regular table wine).

** Per 100-proof gallon.

*** Per 80-proof gallon. Average calculated for non-control states only.

Alcohol Tax Rates per Serving

Product	Federal	Average State Rate	New Hampshire
Beer (12 oz)	\$0.05	\$0.02	\$0.028
Wine (5 oz)	\$0.04*	\$0.03	---
Spirits** (1.5 oz)	\$0.13	\$0.05	---

* 14% alcohol or less (regular table wine).

** 80-proof liquor.

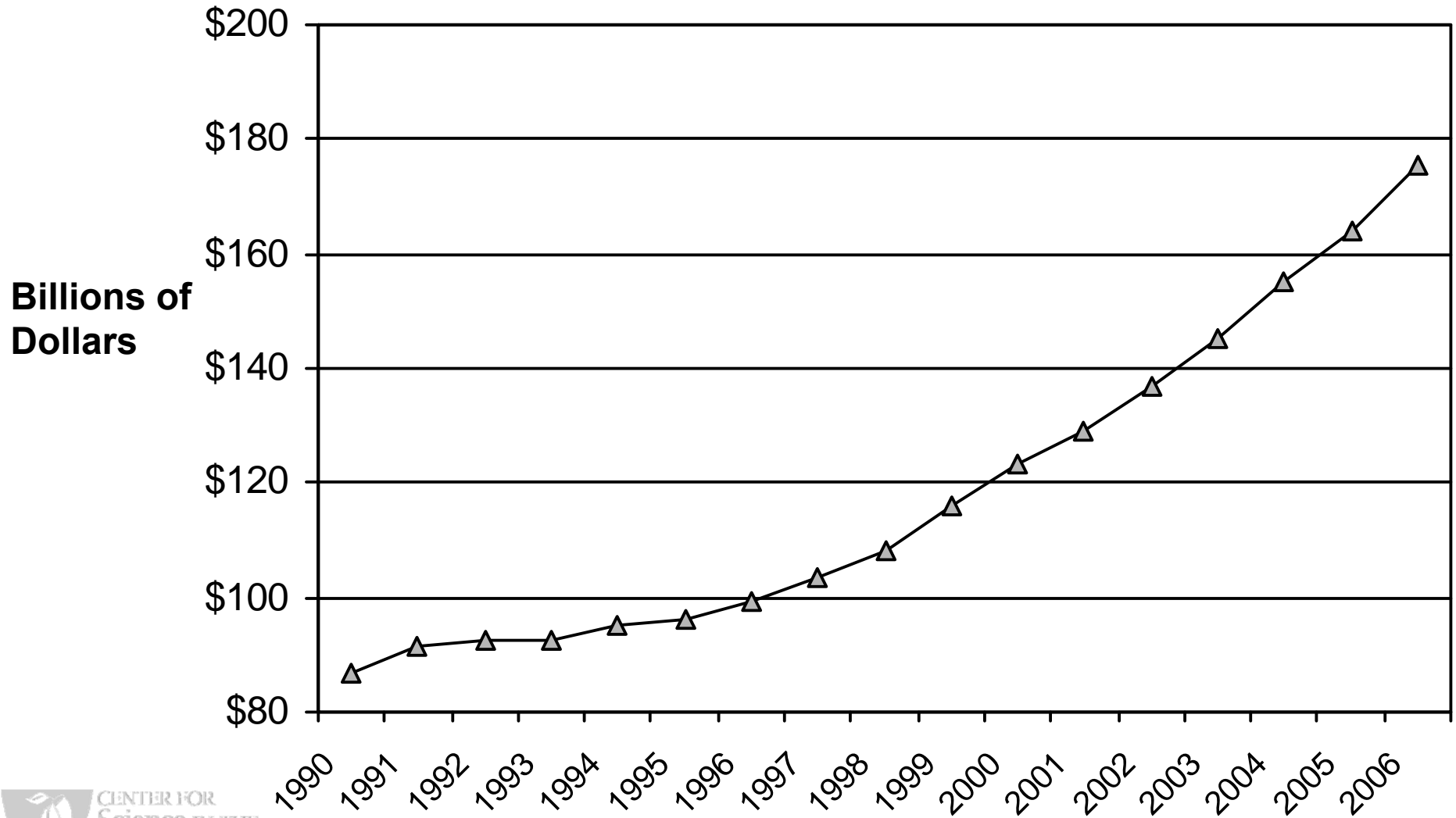
State Alcohol Tax Rates (per gallon) Range Widely

Product	Low	High
Beer	WY: \$0.02	AK: \$1.07
Wine*	LA: \$0.11	AK: \$2.50
Spirits	MD & DC: \$1.50	WA: \$19.43

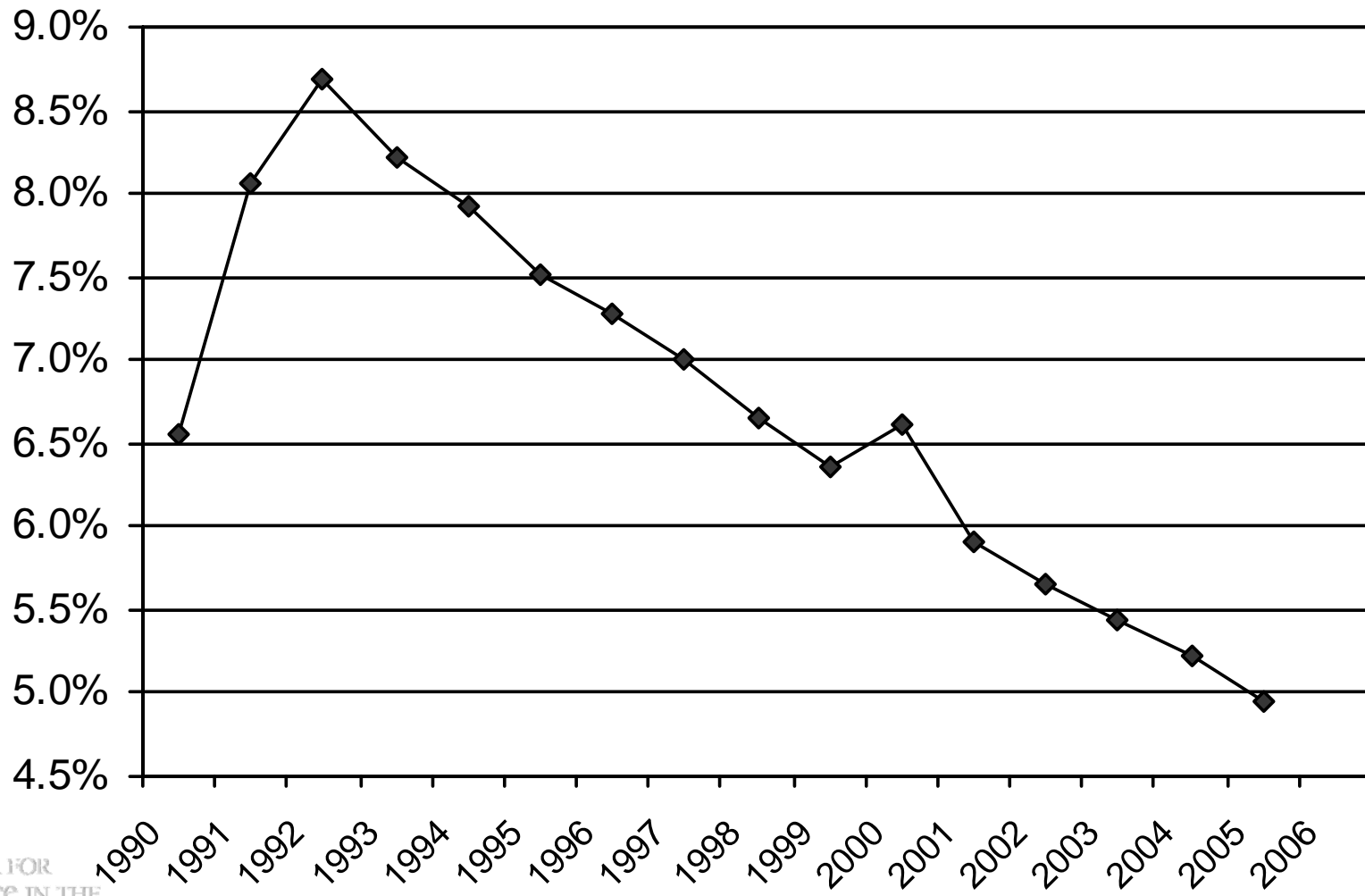
* Rates are for table wine.

Sources: Adams Beverage Group, 2006-2007 and Federation of Tax Administrators, Jan 2008.

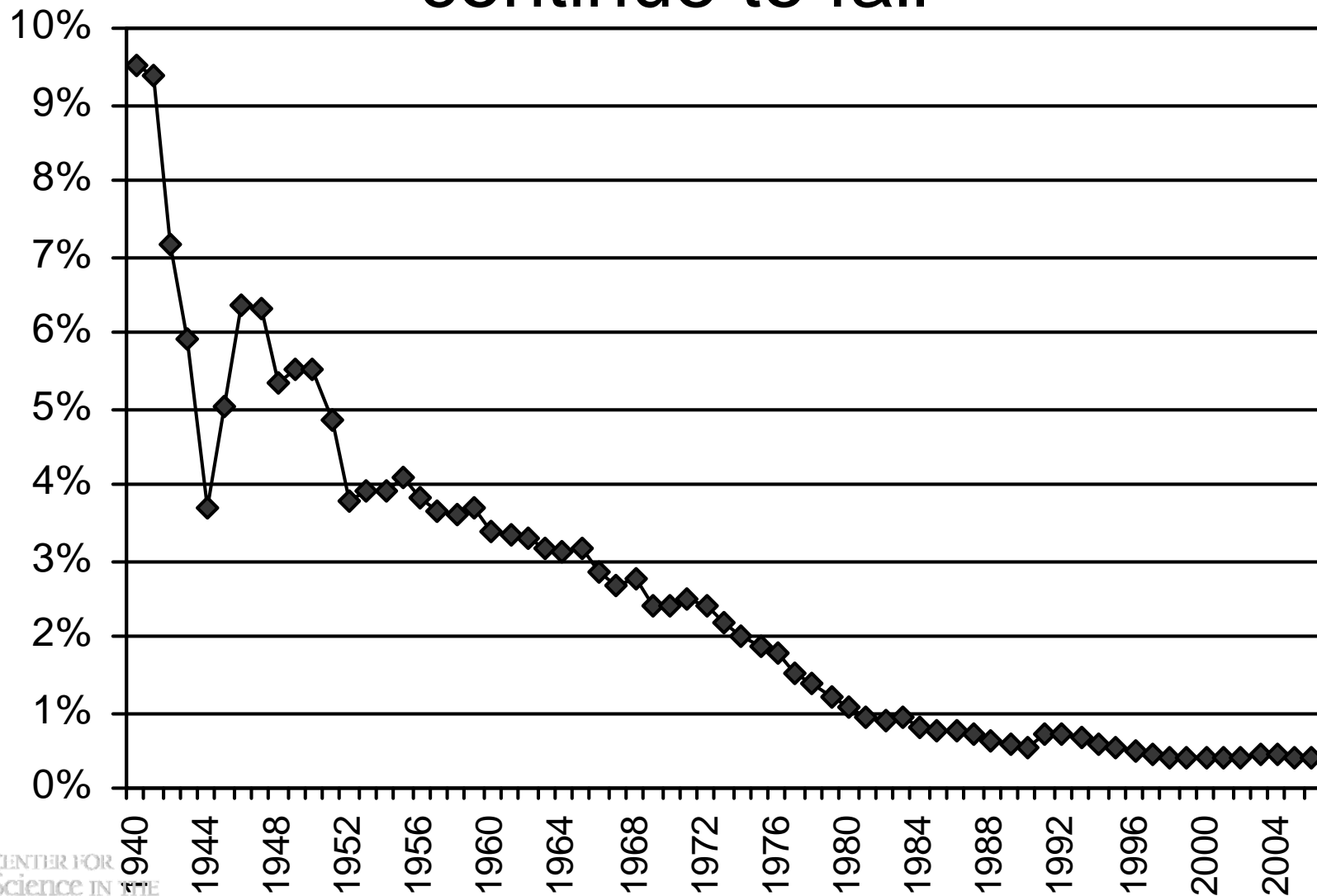
Total retail sales of alcoholic beverages are up...



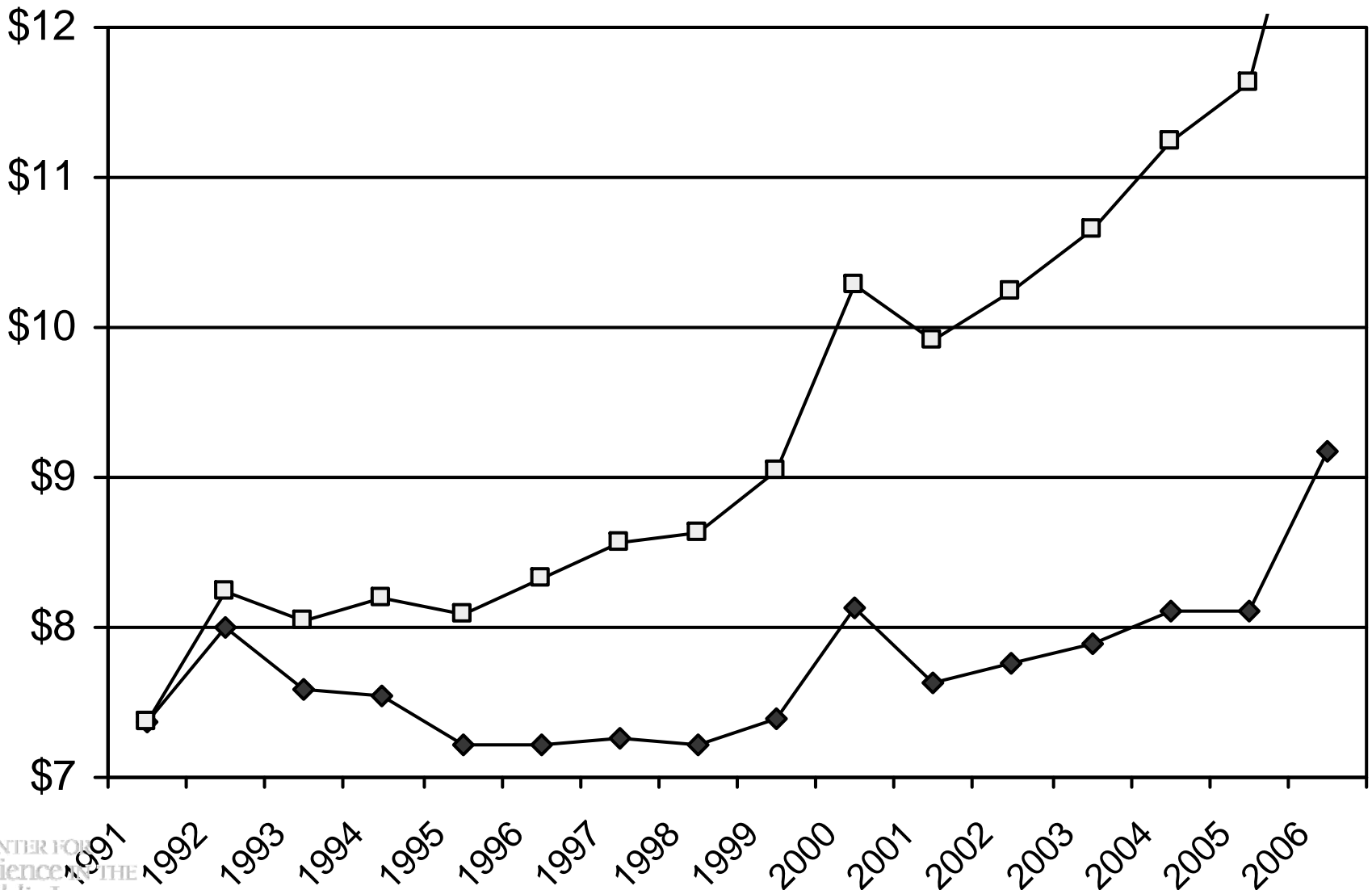
...but federal alcohol tax revenue as percentage of total alcohol sales continues to decline...



...and alcohol tax collections as a percentage of total federal revenue continue to fall



Inflation has cost the U.S. Treasury Billions since 1991



Effects of Inflation on New Hampshire's Beer-Tax Rate (in 1983 dollars)

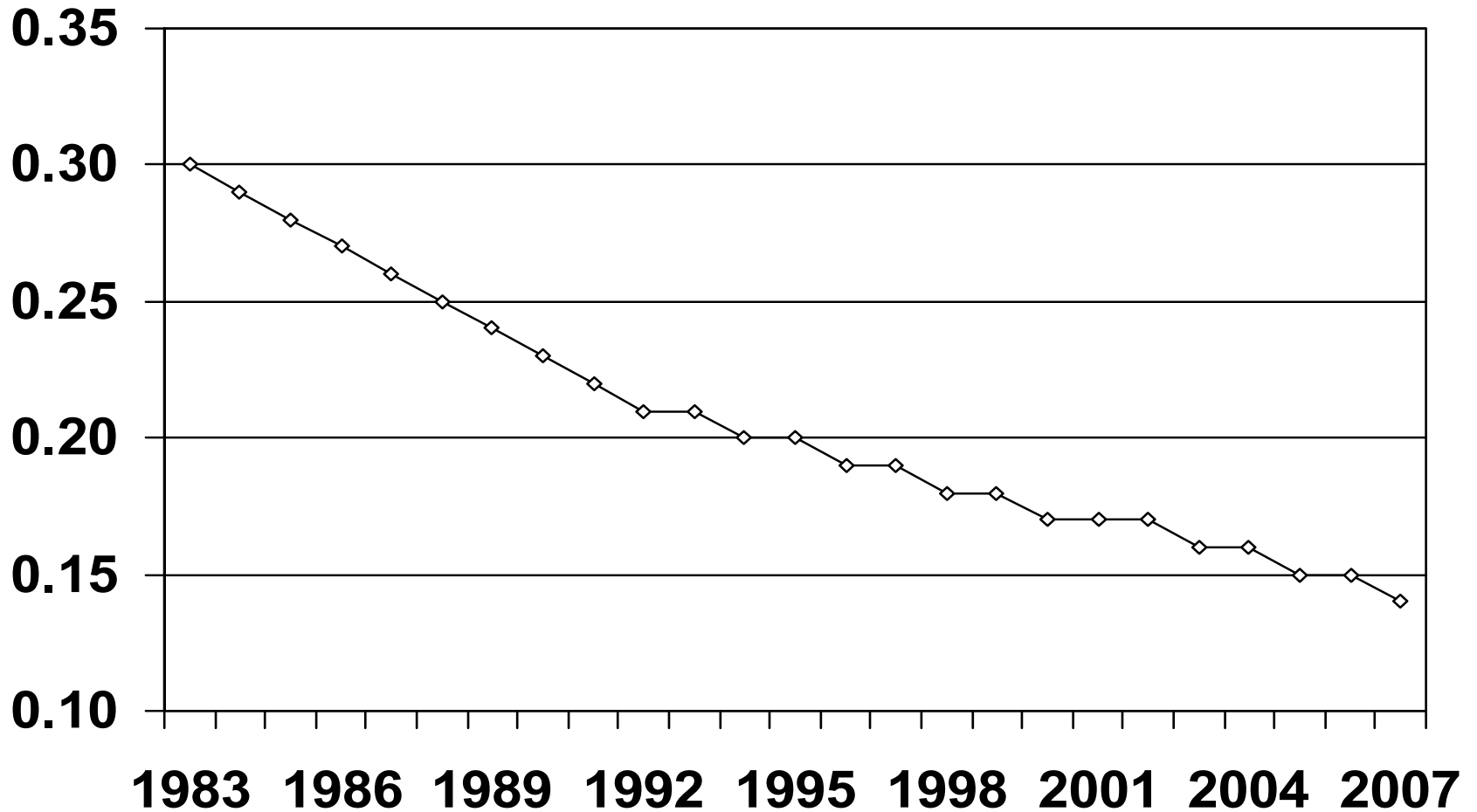
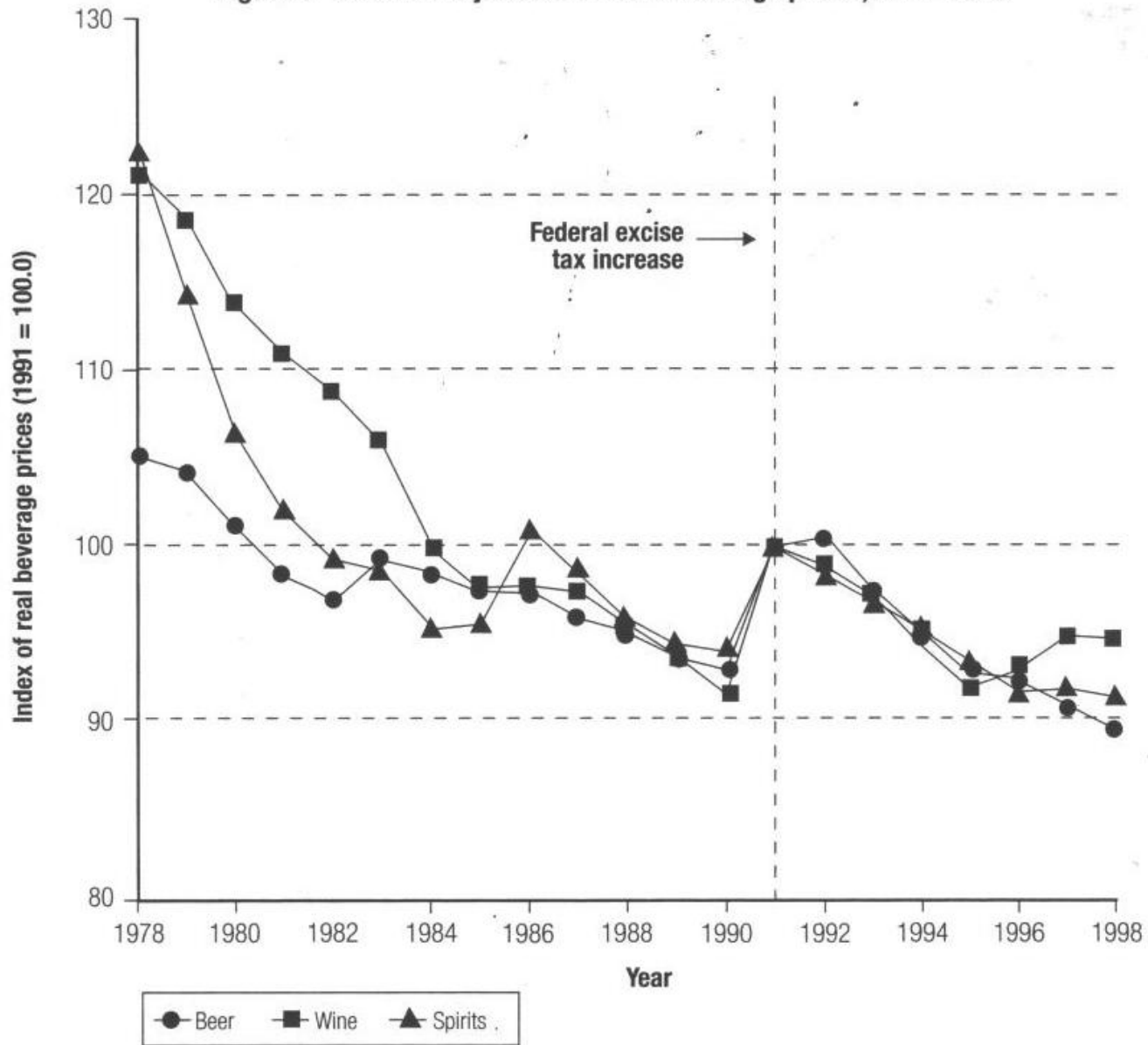


Figure 1: Inflation-adjusted alcoholic beverage prices, 1978–1998



Source: Calculated from Consumer Price Index data, not seasonally adjusted, for all items: beer, ale, and other malt beverages at home; distilled wine at home; and spirits at home. Data obtained from the Bureau of Labor Statistics web site (<http://stats.bls.gov/sahome.html>) December 1999.

New Hampshire relative to its neighbors

State	Beer Tax Rate per Gallon	Last Raised	Sales Tax	Bottle Deposits
New Hampshire	\$0.30	1983	None	none
Vermont	\$0.27	1981	6%	Liquor: \$0.15; Others: \$0.05
Connecticut	\$0.19	1989	6%	\$0.05
Massachusetts	\$0.11	1975	5%	\$0.05
Maine	\$0.54	2008	5%	Liquor: \$0.15; Others: \$0.05
Rhode Island	\$0.10	1989	7%	none
U.S. Avg.	\$0.26	n/a	5.3%	n/a



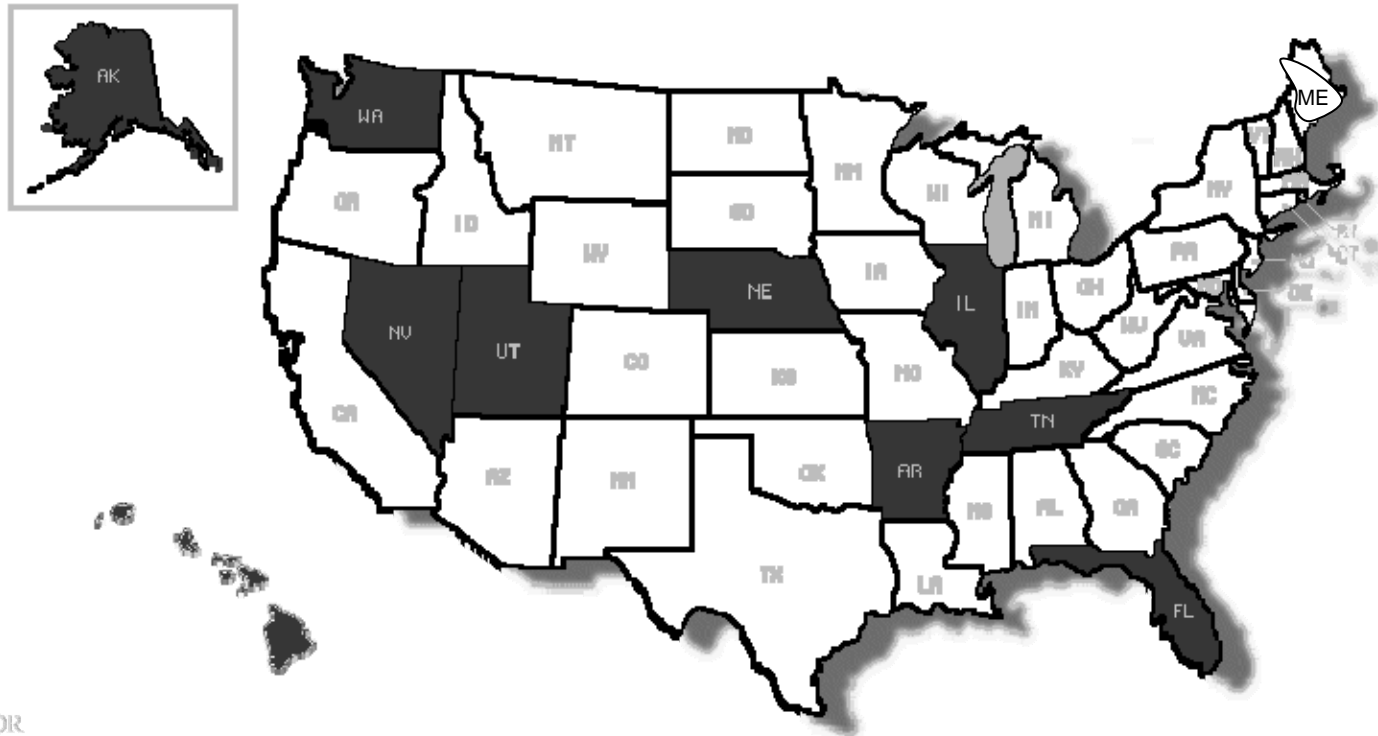
Source: The Tax Foundation



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States have been slow to raise beer taxes.

In the past ten years, only eleven states have raised beer tax rates: WA, HI, FL, IL, AR, AK, TN, NE, NV, UT & ME.



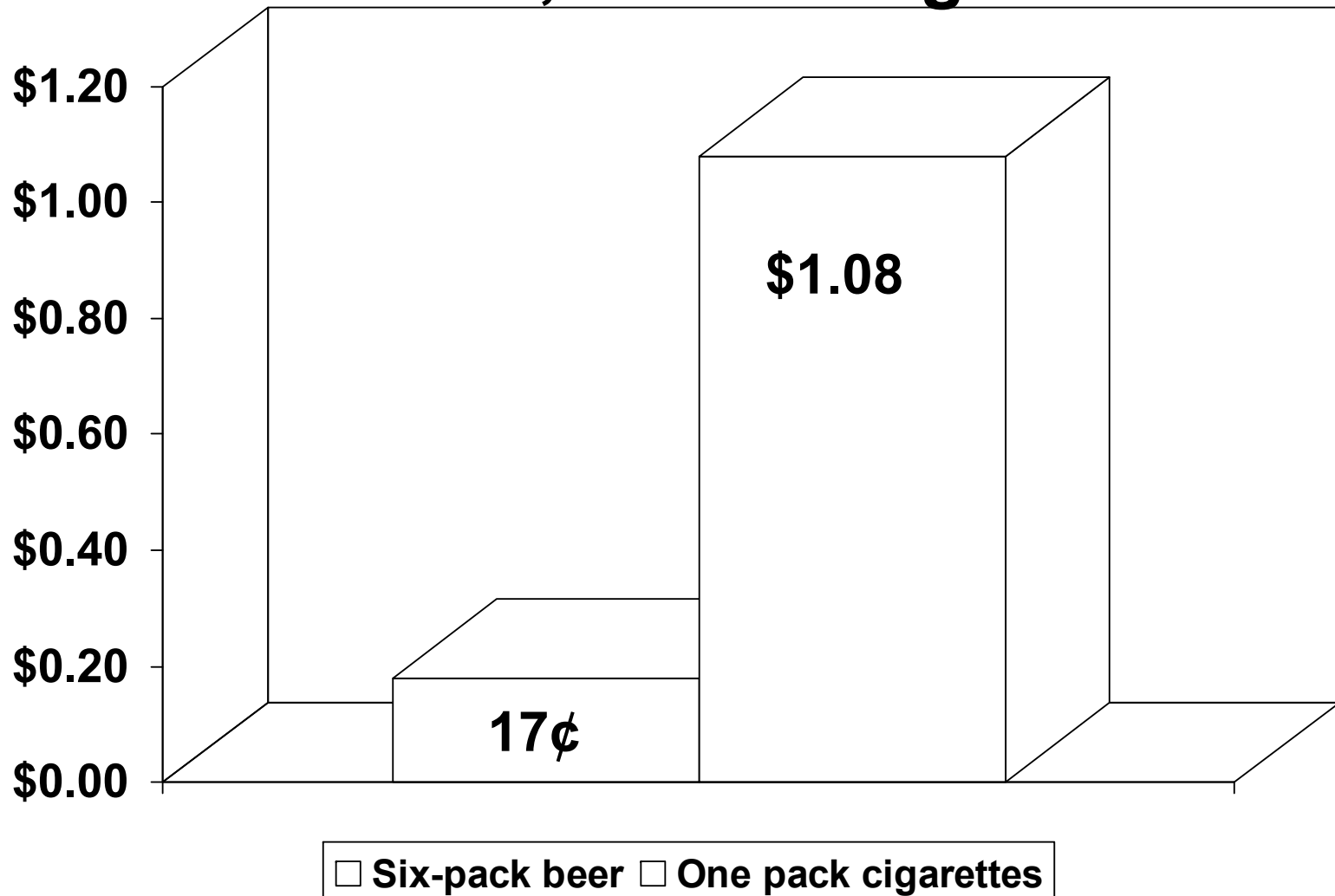
Stale Beer Taxes

28 states have not raised beer taxes in the last twenty years, and one state, Wyoming, has not raised beer taxes since 1935.

Cigarettes are taxed much higher than Beer

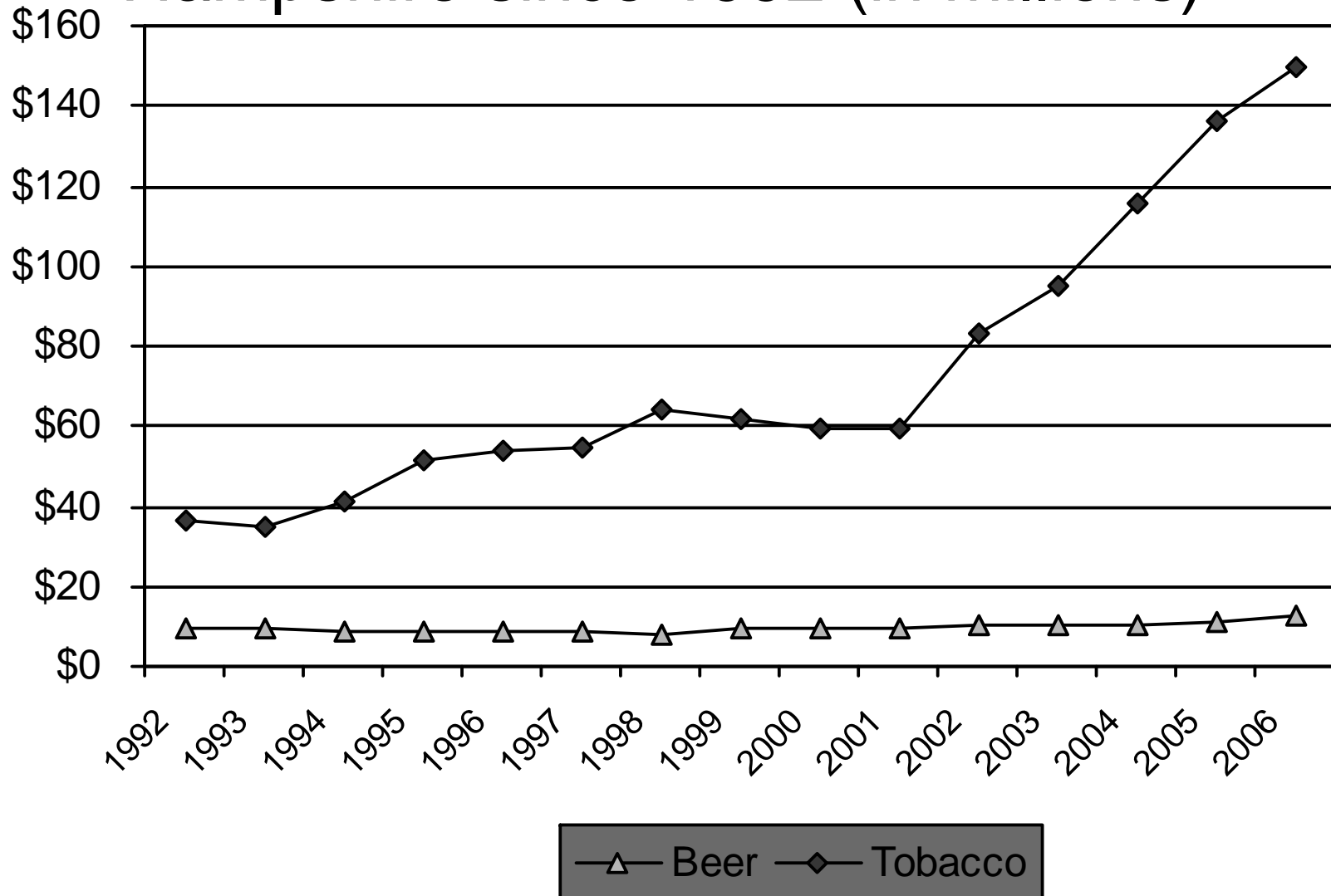
- Average state beer tax per six-pack: **\$0.14**
- Average state cigarette tax per pack: **\$1.14**

New Hampshire Tax Rates per Common Purchase Unit, Beer v. Cigarettes



Source: The Tax Foundation, State Sales, Gasoline, Cigarette, and Alcohol Tax Rates by State, 2000-2008; www.TobaccoFreeKids.org

Beer vs. Tobacco Tax Collections in New Hampshire since 1992 (in millions)



Maine Tax Increase, April 2008

- Beer Tax increase from \$0.25 to \$0.54 per gallon
- Wine Tax increase from \$0.30 to \$0.65 per gallon

The Case for Increasing Alcohol Excise Taxes

- Help moderate drinking and alcohol-related problems and costs.
- Alcohol taxes are low and long overdue for increases.
- **Don't present an excessive burden.**
- Provide a source of significant revenue, possibly to reduce the harmful effects of alcohol use.
- Enjoy strong public support.

The “Pain” from Alcohol-Tax Increases is not Widespread

- Most alcohol is consumed by high-end consumers
- Alcohol consumption skews upward on the income scale

Average Number of Drinks Per Capita Consumed in the Past Month by Decile



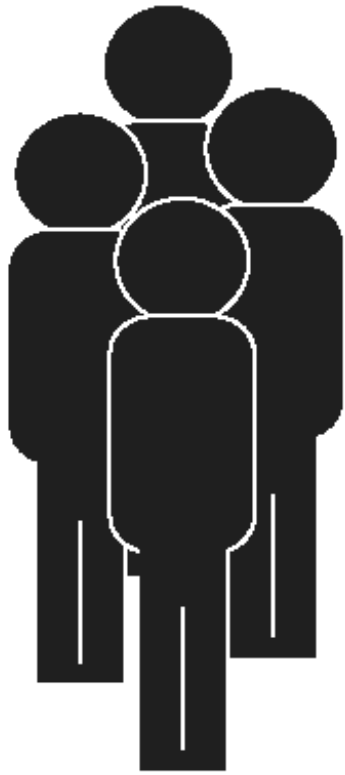
Source: Cook, Philip J. Paying the Tab: The Costs and Benefits of Alcohol Control. 2007.

Center for Science in the Public Interest

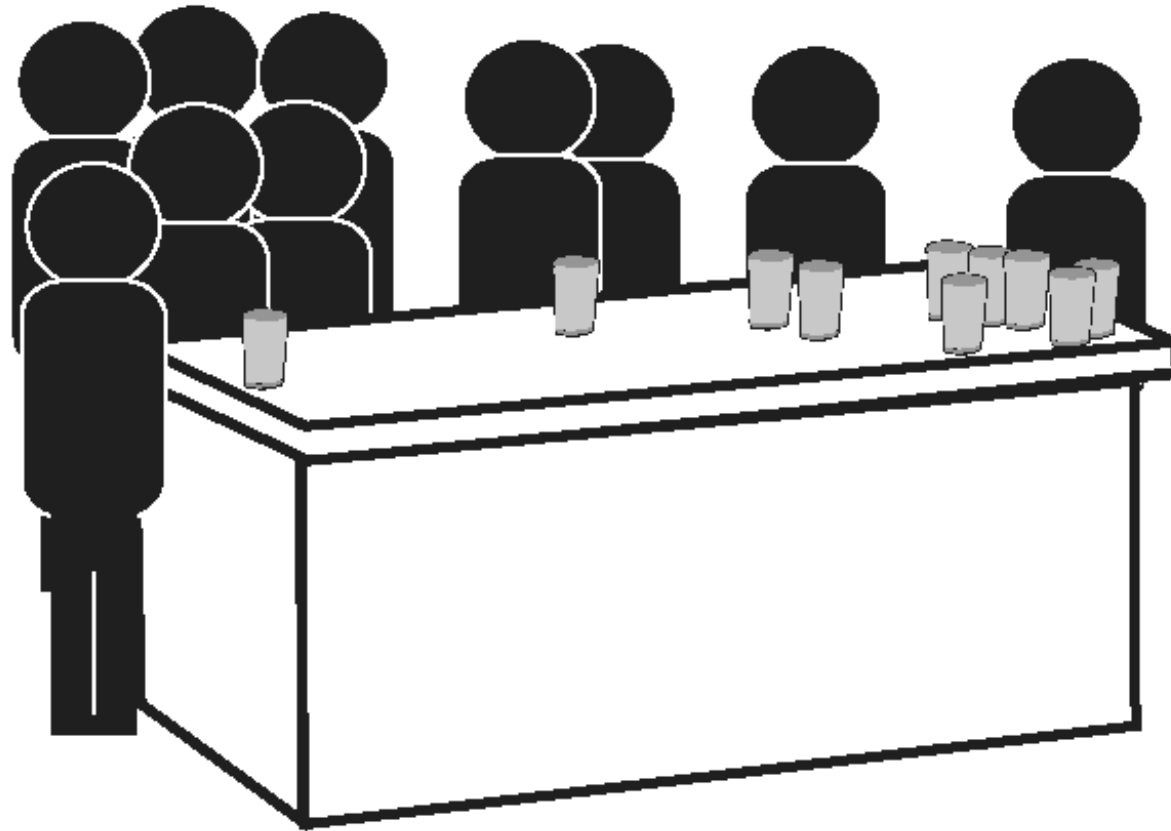
The few drink most of the alcohol

- 80% of drinkers consume only 19.6% of all the alcohol downed in the U.S.
- 5% of the drinkers consume **48%** of the total alcohol.
- **35% don't drink at all.**

Source: National Epidemiologic Survey on Alcohol and Related Conditions, 2002



This illustration approximates how consumers would share 10 drinks and the tax on those drinks.



Is New Hampshire's beer tax a burden?

At New Hampshire's current rate of \$0.30/gal, and assuming that beer is consumed proportionately to other kinds of alcohol:

- **35 percent** of adults pay nothing at all.
- **50 percent** of beer drinkers pay less than 7/10 of a penny per day or \$2.40 per year.
- **80 percent** of drinkers pay no more than about \$14.80 per year, little more than \$0.04 per day.
- At two drinks per day, the tax equals less than 6 cents.

What New Hampshire residents would pay today had the beer tax kept pace with inflation since 1983:

Median New Hampshire drinker	=	\$ 5.20 / year; 1.5¢ / day
8 of 10 drinkers pay <i>at most</i>	=	\$31.55 / year; 9¢ / day
The heaviest 5% pay <i>at least</i>	=	\$109.00 / year; 30¢ / day
Revenue Increase	=	\$13.9 million

Most Beer Drinkers Have Higher Incomes

Category	\$75,000 and over	\$60,000-\$74,999	\$50,000-\$59,999	\$40,000-\$49,999	\$30,000-\$39,999	\$20,000-\$29,999	Under \$20,000	Total
Any Beer	43.2	11.9	8.5	8.6	9.0	8.9	10.0	100.0
Regular	43.2	11.3	8.5	7.8	9.4	9.7	10.2	100.0
Light	46.0	12.4	8.6	8.6	8.5	7.7	8.3	100.0
Malt Liquor	28.1	9.0	7.6	7.3	9.6	10.7	20.3	100.0
Imported	47.1	10.9	8.6	8.1	8.8	7.3	9.2	100.0
Craft	57.7	13.1	8.0	5.1	5.7	4.7	5.7	100.0
Percent of U.S. Adult Population	37.2	11.1	8.7	9.1	10.0	9.9	14.1	100.0

Higher Income Consumers are More Likely to Drink Beer

Category	\$75,000 and over	\$60,000-\$74,999	\$50,000-\$59,999	\$40,000-\$49,999	\$30,000-\$39,999	\$20,000-\$29,999	Under \$20,000
Any Beer	53.2	49.3	44.5	43.3	41.5	40.8	32.5
Regular	29.2	25.7	24.6	21.8	23.7	24.5	18.2
Light	33.5	30.1	26.8	25.7	23.0	21.1	15.9
Malt Liquor	3.1	3.3	3.6	3.3	3.9	7.5	5.9
Imported	32.9	25.4	25.8	23.2	22.9	19.0	17.0
Craft	14.9	11.4	8.9	5.5	5.5	4.5	3.9
Total Population (millions)	75.4	22.5	17.6	18.4	20.2	20.2	28.6

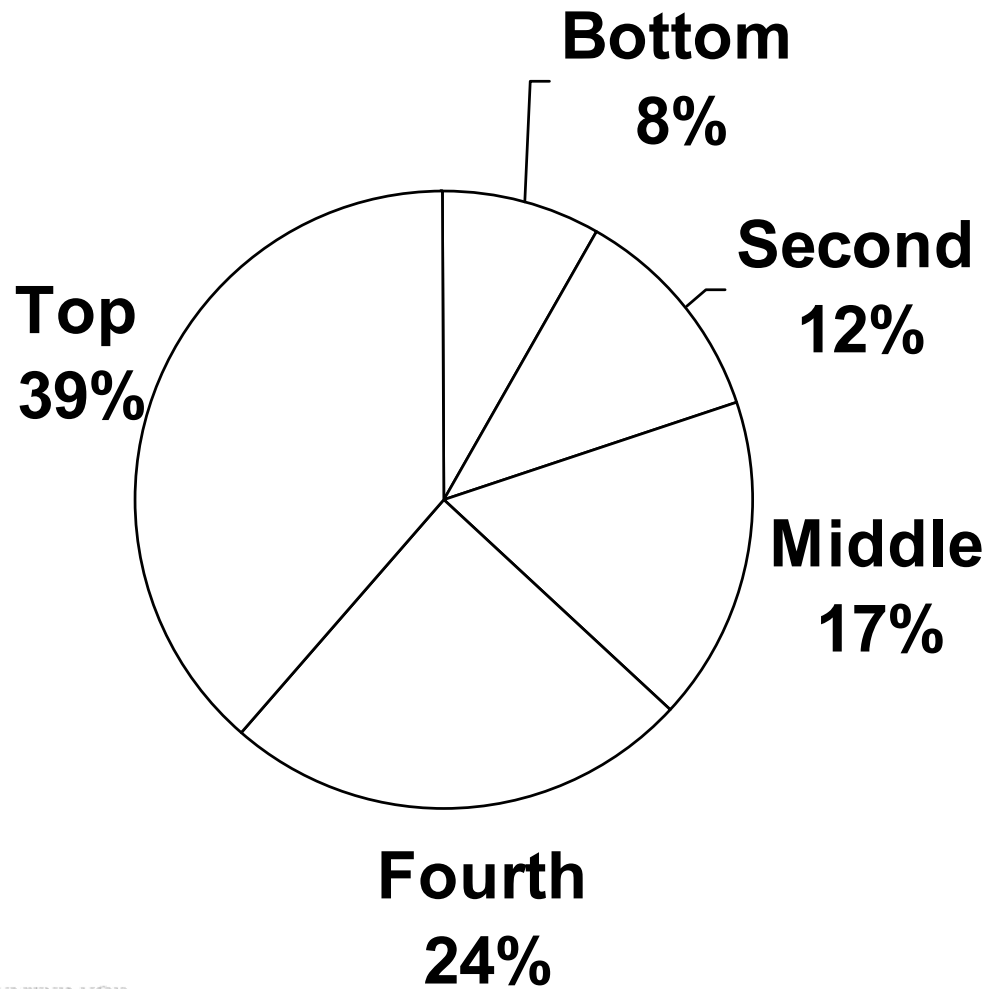
Source: *Adams Beer Handbook 2007*

Expenditures on Alcoholic Beverages As a Percentage of Post-Tax Family Income and Total Expenditures (for All Families) are Low

	% of Post-Tax Income Spent on Alcohol	% of All Expenditures Spent on Alcohol
All Families	2.0	2.0
Bottom quintile	3.7	1.5
Second quintile	2.3	1.7
Middle quintile	2.2	2.0
Fourth quintile	2.2	2.2
Top quintile	1.6	2.3

Source: Federal Taxation of Tobacco, Alcoholic Beverages, and Motor Fuels, Congressional Budget Office, August 1990.

Most Alcohol Expenditures are at the Upper End of the Income Scale



Source: *Federal Taxation of Tobacco, Alcoholic Beverages, and Motor Fuels*, Congressional Budget Office, August 1990. Note: Percentages are approximate and differ slightly from original CBO data.

Distribution of Expenditures on Alcoholic Beverages

	% of Expenditures Made by the 10% of Families with the Highest Expenditures	% of Expenditures Made by the 20 Percent of Families with the Highest Expenditures
All Families	44.4	66.7
Bottom quintile	59.4	82.8
Second quintile	52.3	74.6
Middle quintile	45.4	67.5
Fourth quintile	38.6	59.3
Top quintile	34.7	54.3

Source: Federal Taxation of Tobacco, Alcoholic Beverages, and Motor Fuels, Congressional Budget Office, August 1990.

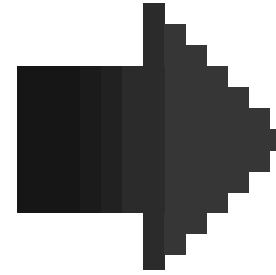
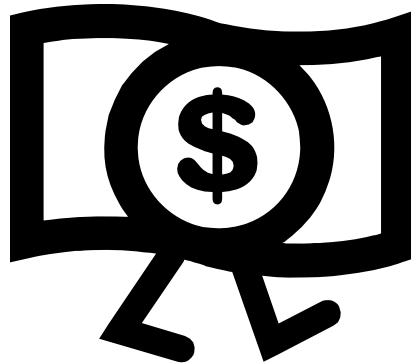
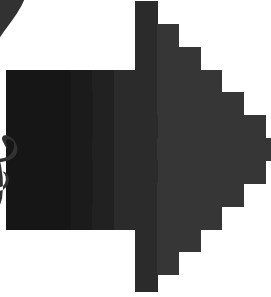
Alcohol taxes, although regressive, have limited impact on lower income consumers

- Low-income people drink less and a smaller percentage buy alcoholic beverages, compared to wealthier consumers.
- The percentage of total expenditures that goes to alcohol is about the same for all income groups.
- Heavy drinking is more concentrated among low-income people, imposing a “tax burden” only on a relatively few lower-income drinkers.

The Case for Increasing Alcohol Excise Taxes

- Help moderate drinking and alcohol-related problems and costs.
- Alcohol taxes are low and long overdue for increases.
- Don't present an excessive burden.
- **Provide a source of significant revenue, possibly to reduce the harmful effects of alcohol use.**
- Enjoy strong public support.

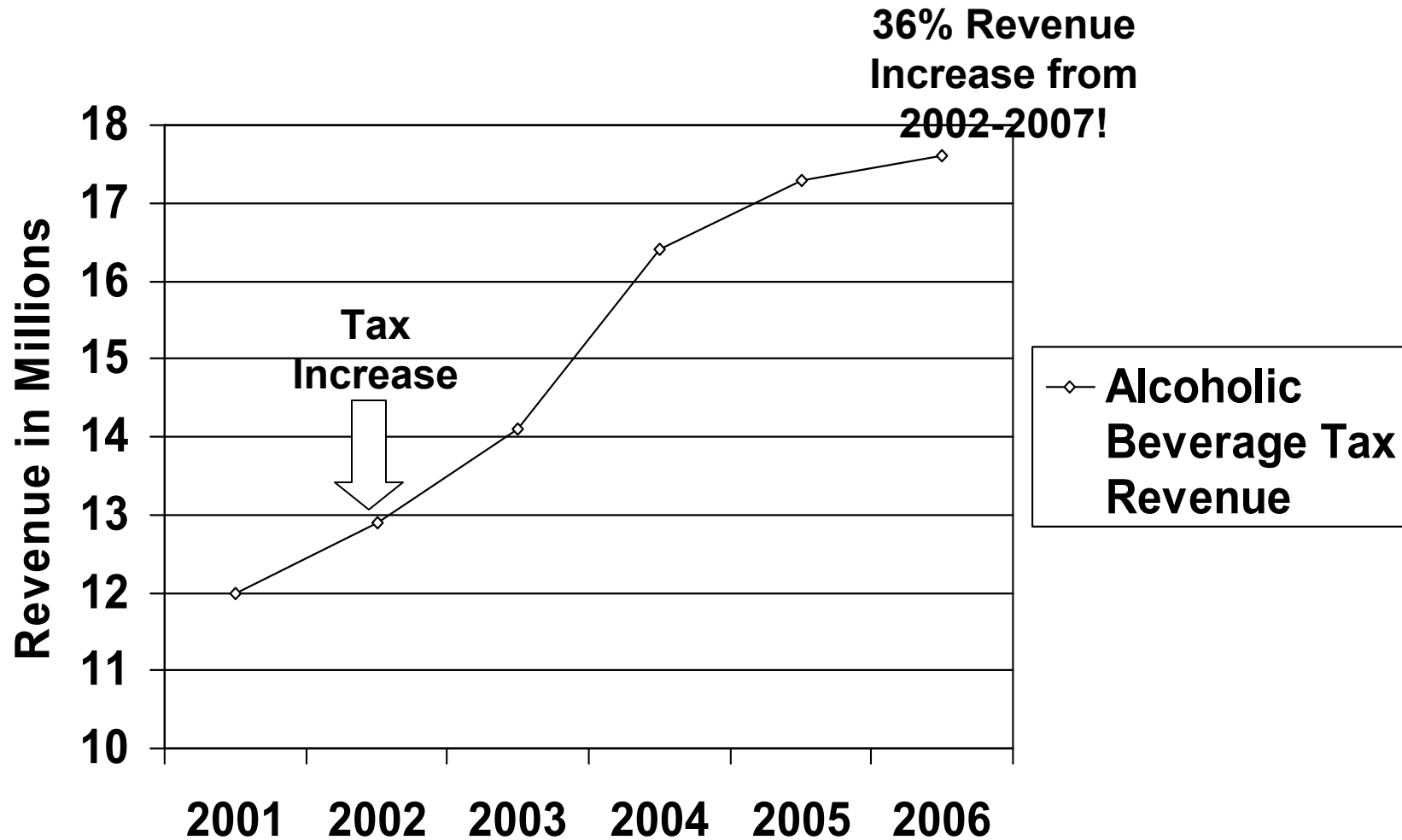
Increase Alcohol Excise Taxes



If alcohol revenues had tracked inflation since 1983, New Hampshire's take would have been **\$286.45 million, \$148.85 million (108%) greater than actual collections**, assuming no drops in consumption occurred.

Source: New Hampshire State Liquor Commission Annual Report and Statistical Section for the Fiscal Year Ended June 30, 2007

Alcohol Tax Increases Boost State Revenues: Evidence from Alaska

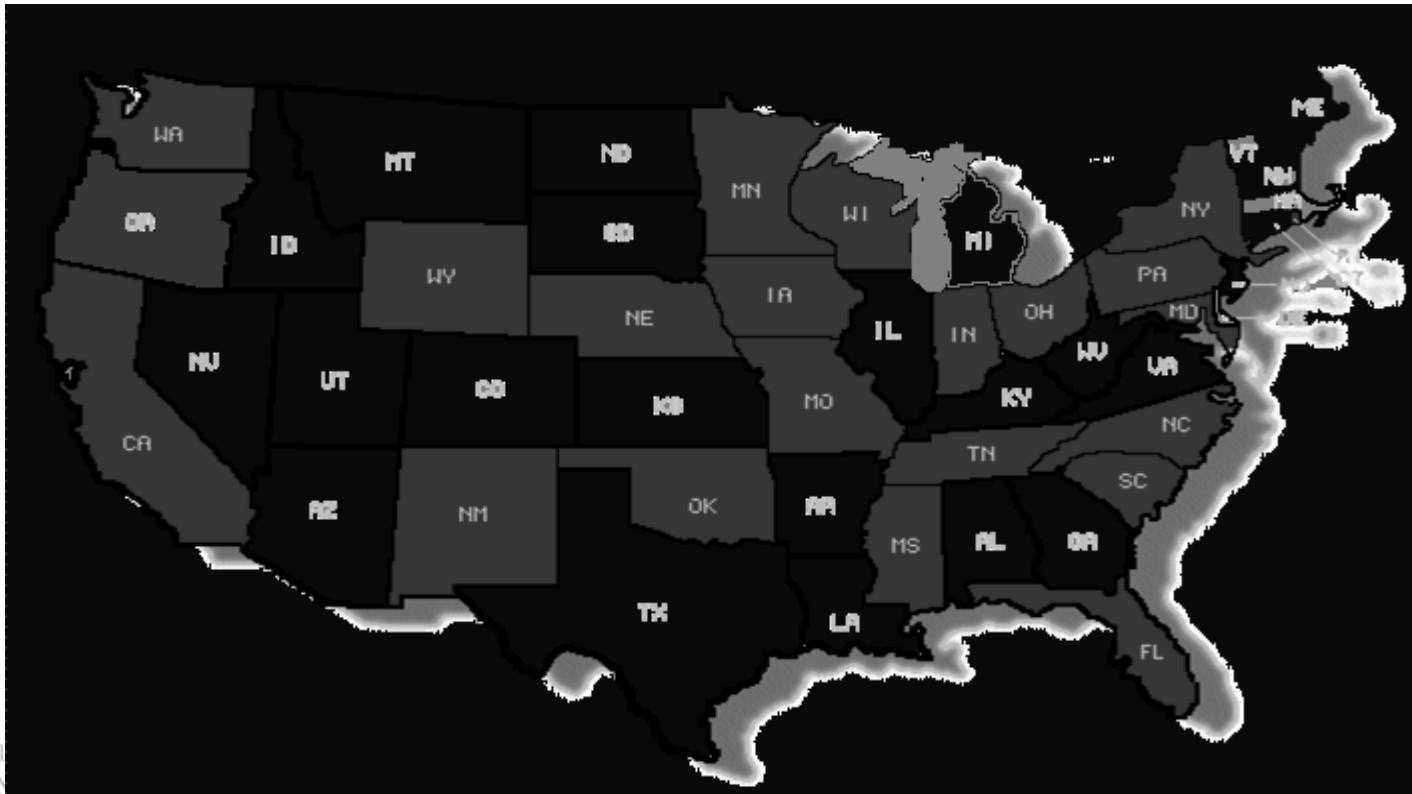


The Case for Increasing Alcohol Excise Taxes

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- **Enjoy strong public support.**

State Bills on Alcohol Taxes Abound

In 2005-07, legislation to increase alcohol taxes was proposed in at least 21 states (red).



Surveys Show:

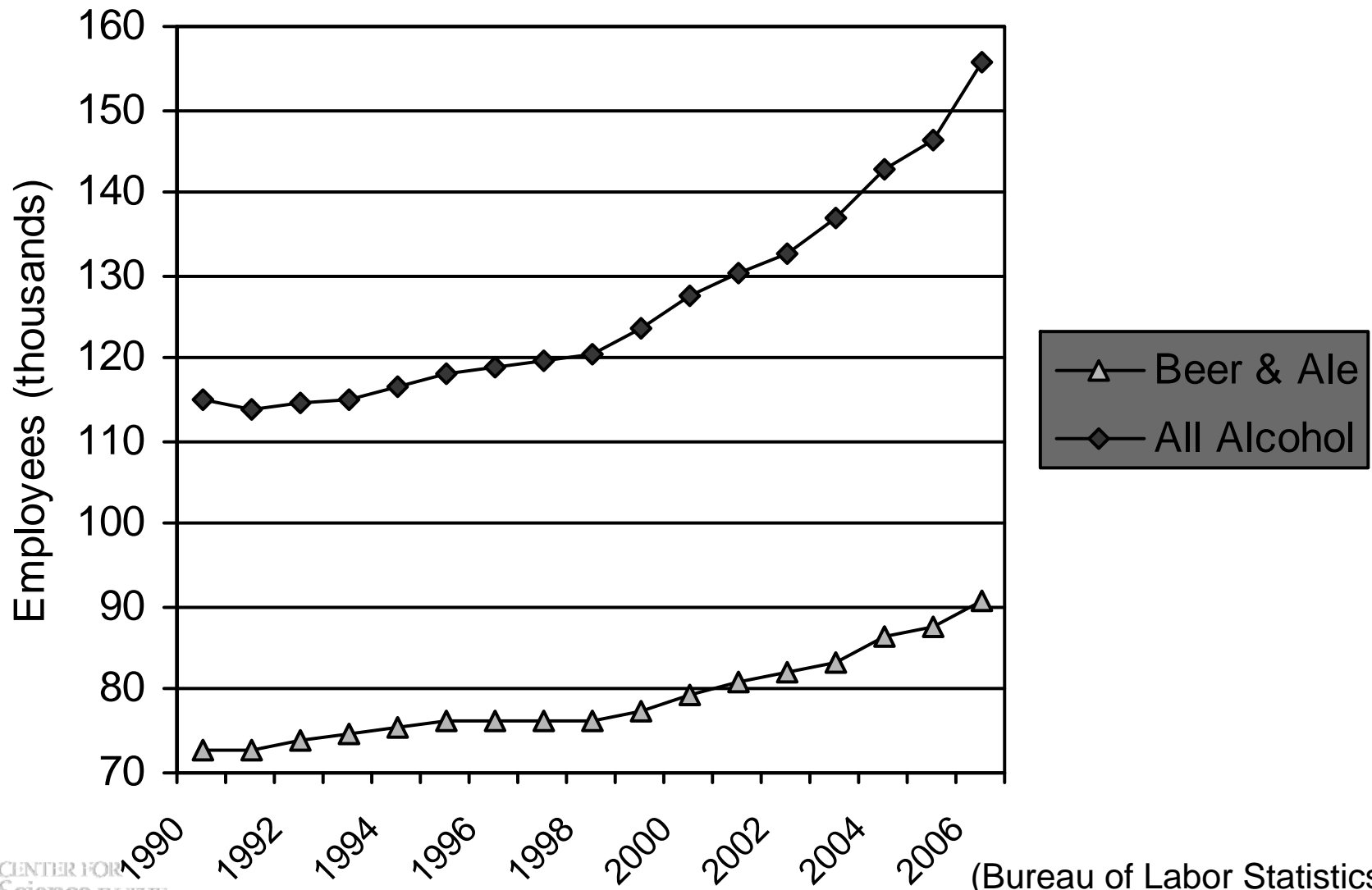
- 71% of respondents support a 5 cent per drink increase in the national tax on alcohol (Global Strategy Group/CSPI Poll, 2005)
- 75% of **drinkers** support increasing the beer tax if the funds were used for substance abuse prevention (Penn, Schoen, and Berland/CSPI Poll, Aug. 2001)
- 82% of respondents support an increase in alcohol taxes to pay for underage drinking prevention and alcohol treatment programs (RWJF 1998)
- When told that the tax on alcoholic beverages is 3 cents per drink, 61% of respondents support state alcohol tax increases (CSPI Poll, Aug. 2001)
- Americans favor an increase in state alcohol taxes by more than a 2 to 1 margin (64% to 30%) when the funds would go to programs to reduce teen drinking and strengthen enforcement of laws to prohibit alcohol sales to underage youth (The Mellman Group & QEV Analytics/AMA Poll, April 2004)

Industry Claims

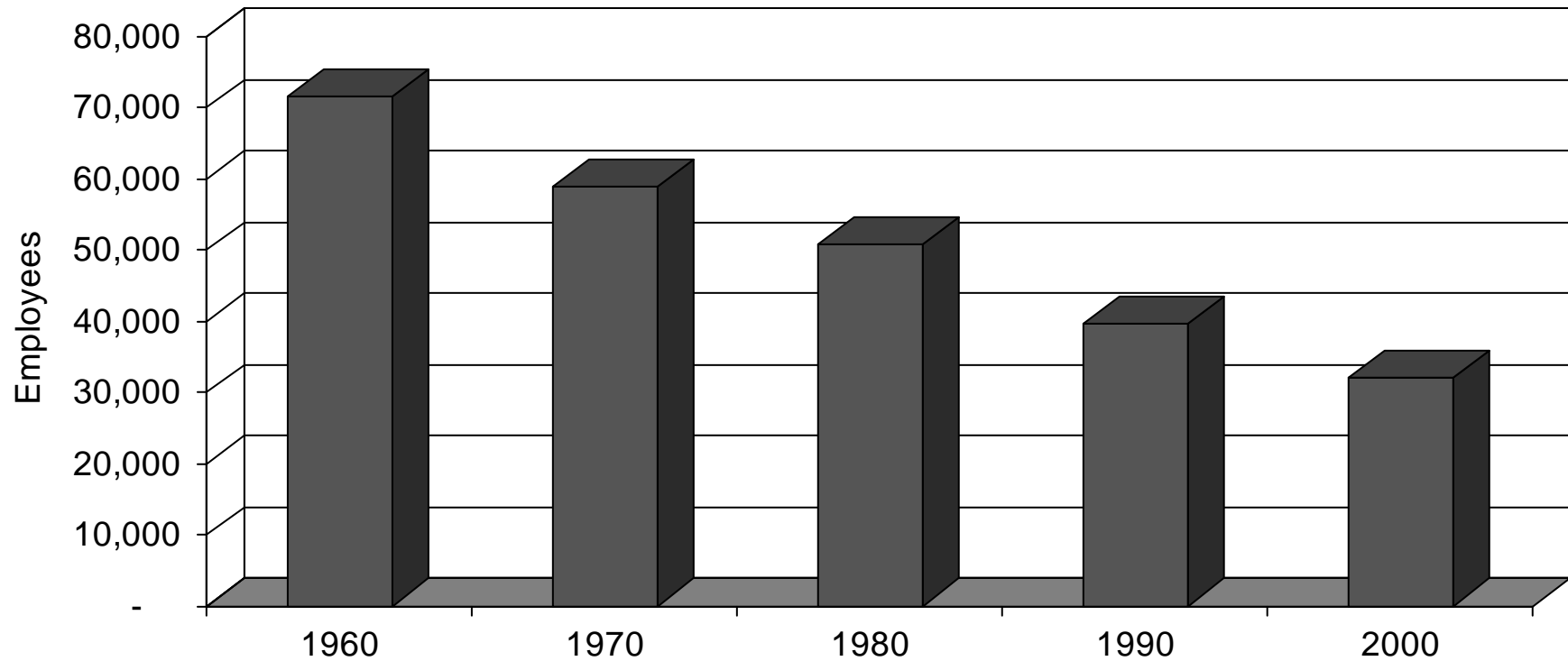
Increasing alcohol taxes:

- Punishes moderate and responsible consumers
- Will not affect the drinking habits of alcohol abusers
- Is regressive, disproportionately affecting middle- and working-class Americans
- Will destroy jobs throughout the economy

Wholesale Trade Employees in Beer & Ale Sector and Alcoholic Beverage Industry At-Large since 1990

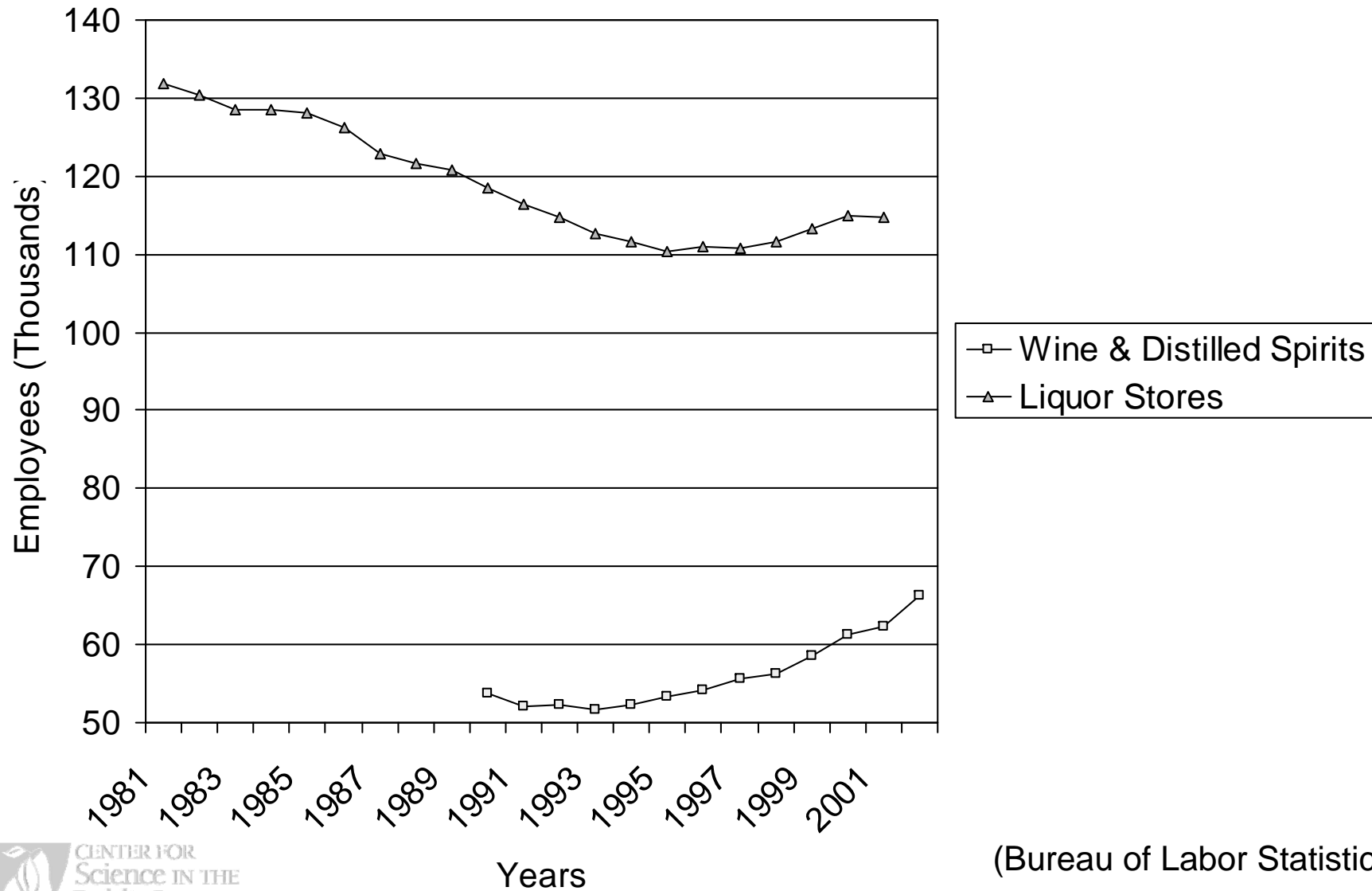


Malt Beverage Manufacturing: All Employees, 1960-2000



(Source: Bureau of Labor Statistics)

Wine & Distilled Spirits Wholesale and Liquor Store Employment



(Bureau of Labor Statistics)

To Summarize

Alcohol tax increases:

- Will help moderate drinking and alcohol-related problems and costs.
- Are low and long overdue for increases.
- Don't present an excessive burden.
- Provide a source of significant revenue, possibly to reduce the harmful effects of alcohol use.
- Enjoy strong public support.

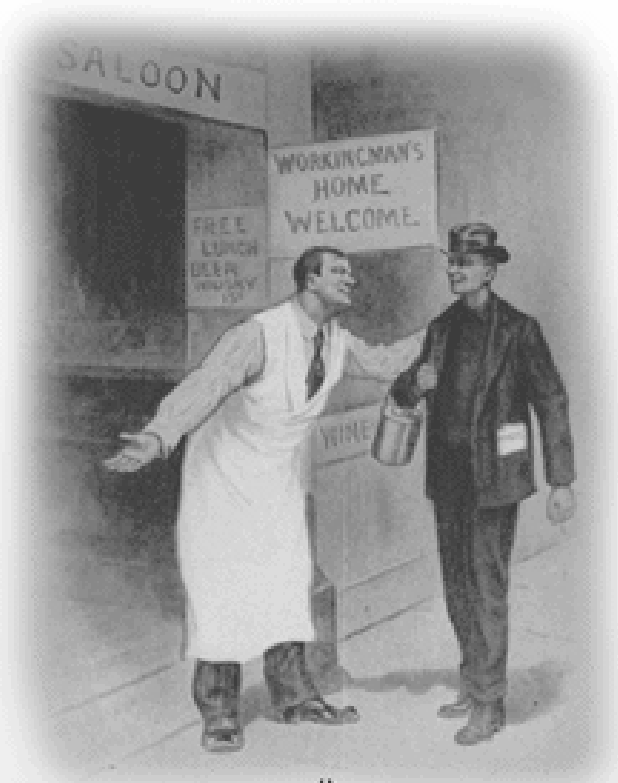
www.cspinet.org/booze/

The screenshot shows a Microsoft Internet Explorer browser window with the title 'Tax Resources - Microsoft Internet Explorer'. The address bar contains the URL 'http://cspinet.org/booze/taxguide/TaxResources.htm'. The main content area features the 'Alcohol Policies Project' logo and the text 'Advocacy for the Prevention of Alcohol Problems' and 'CENTER FOR SCIENCE IN THE PUBLIC INTEREST'. Below this is a 'Tax Resources' section with a table of links. A sidebar on the right contains the text 'For more information, please send us an email.' and an 'Adobe Reader' logo. The browser's status bar at the bottom shows 'Internet'.

Tax Resources	
Tax Index	
Alcohol Policies Home	Grassroots Tool Box
Project Description	BeerSoaksAmerica.org
Project Issues	A Factbook on State Beer Taxes
Action Alerts	Action Guide: Responding to the NAS Report -- 10/7/03
Fact Sheets	Fact Sheets
Press Releases	Price Elasticities
Washington Report	Calculating Average Retail Sales Price
News & Resources	
Publications	
Links	
Employment	
CRAP	

For more information, please send us an email.





PAYING THE TAB
The Costs and Benefits of Alcohol Control

Philip J. Cook

Cook, Philip J. Paying the Tab: The Costs and Benefits of Alcohol Control. 2007.

“Higher alcohol excise taxes and other supply restrictions are effective and underutilized policy tools that can cut abuse while preserving the pleasures of moderate consumption.”

For more information:

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