

Illicit Trade in Tobacco Products

Frank J. Chaloupka
University of Illinois at Chicago and ITEN



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Overview

- Tobacco taxes, tobacco use, and government revenues
- Types and Determinants of illicit trade
- Global evidence on extent of illicit trade
- US evidence on extent of illicit trade
- Policy options for curbing illicit trade in tobacco products

Taxes, Prices and Tobacco Use

- **Increases in tobacco product taxes and prices:**
 - Induce current users to try to quit
 - Many will be successful in long term
 - Keep former users from restarting
 - Prevent potential users from starting
 - Particularly effective in preventing transition from experimentation to regular use
 - Reduce consumption among those who continue to use
 - Particularly effective in reducing use in lower income, less educated populations
 - Lead to other changes in tobacco use behavior, including substitution to cheaper products or brands, changes in buying behavior, and compensation

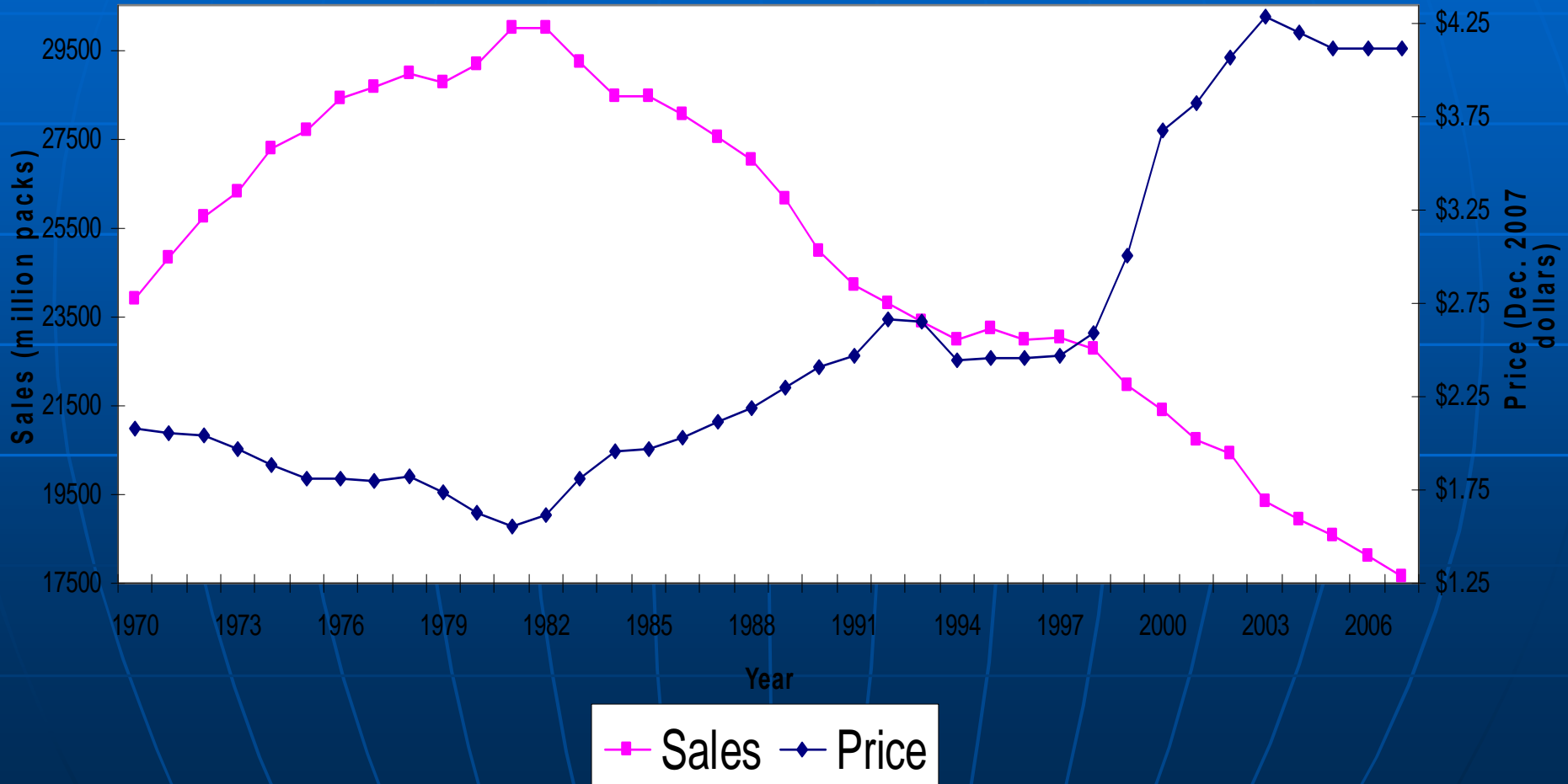
Taxes, Prices and Tobacco Use

- High-Income Countries
 - Ten percent increase in price reduces overall consumption by 2.5 to 5 percent
 - About half of impact on prevalence
 - Youth are 2-3 times more price sensitive
- Low/Middle-Income countries
 - Generally more price responsive than HICs
 - Considerable variation across countries
 - Younger people more price sensitive
 - Lower income populations more responsive to price increases

Taxes, Prices and Tobacco Use

Cigarette Prices and Cigarette Sales

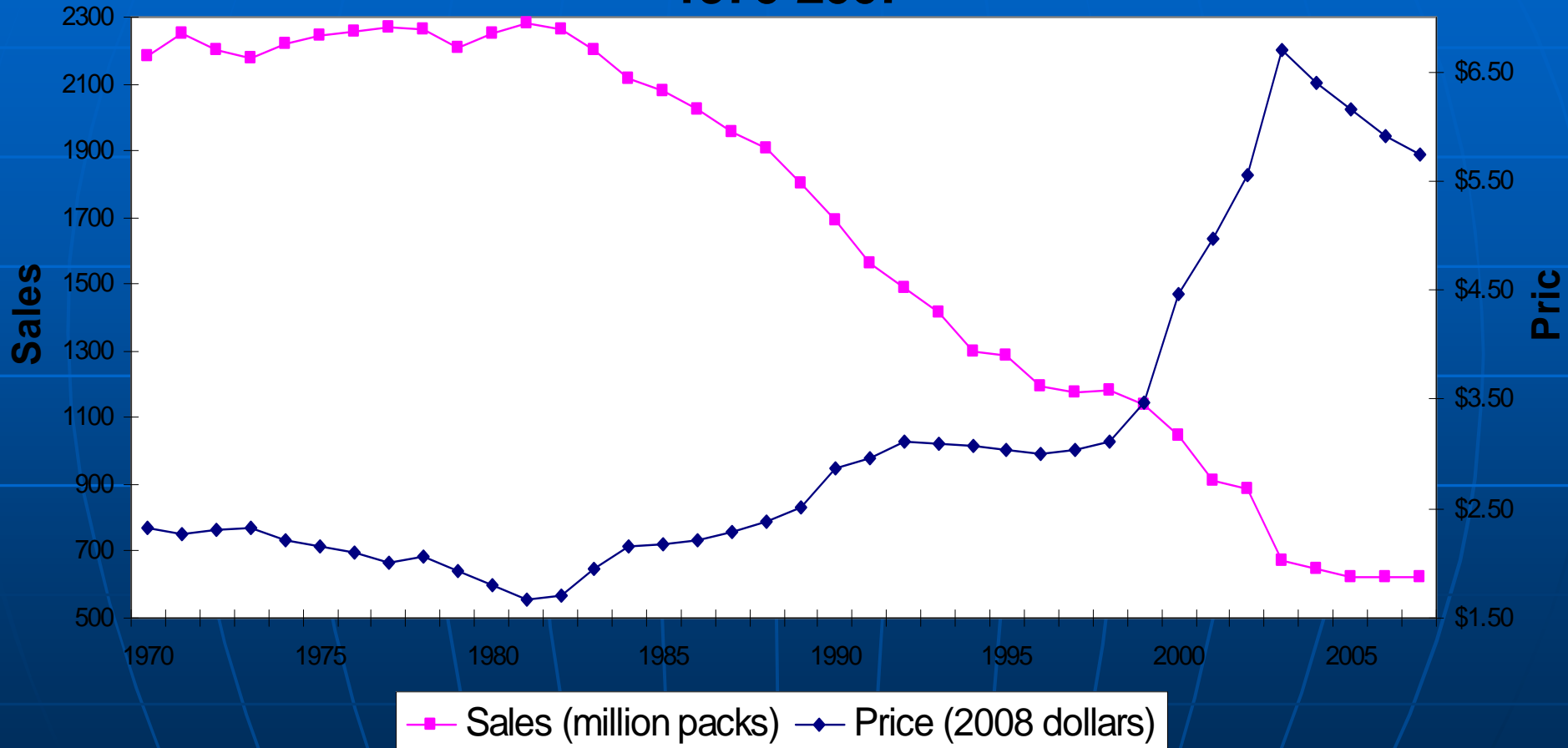
United States, 1970-2007



Source: *Tax Burden on Tobacco*, 2008, and author's calculations

Taxes, Prices and Tobacco Use

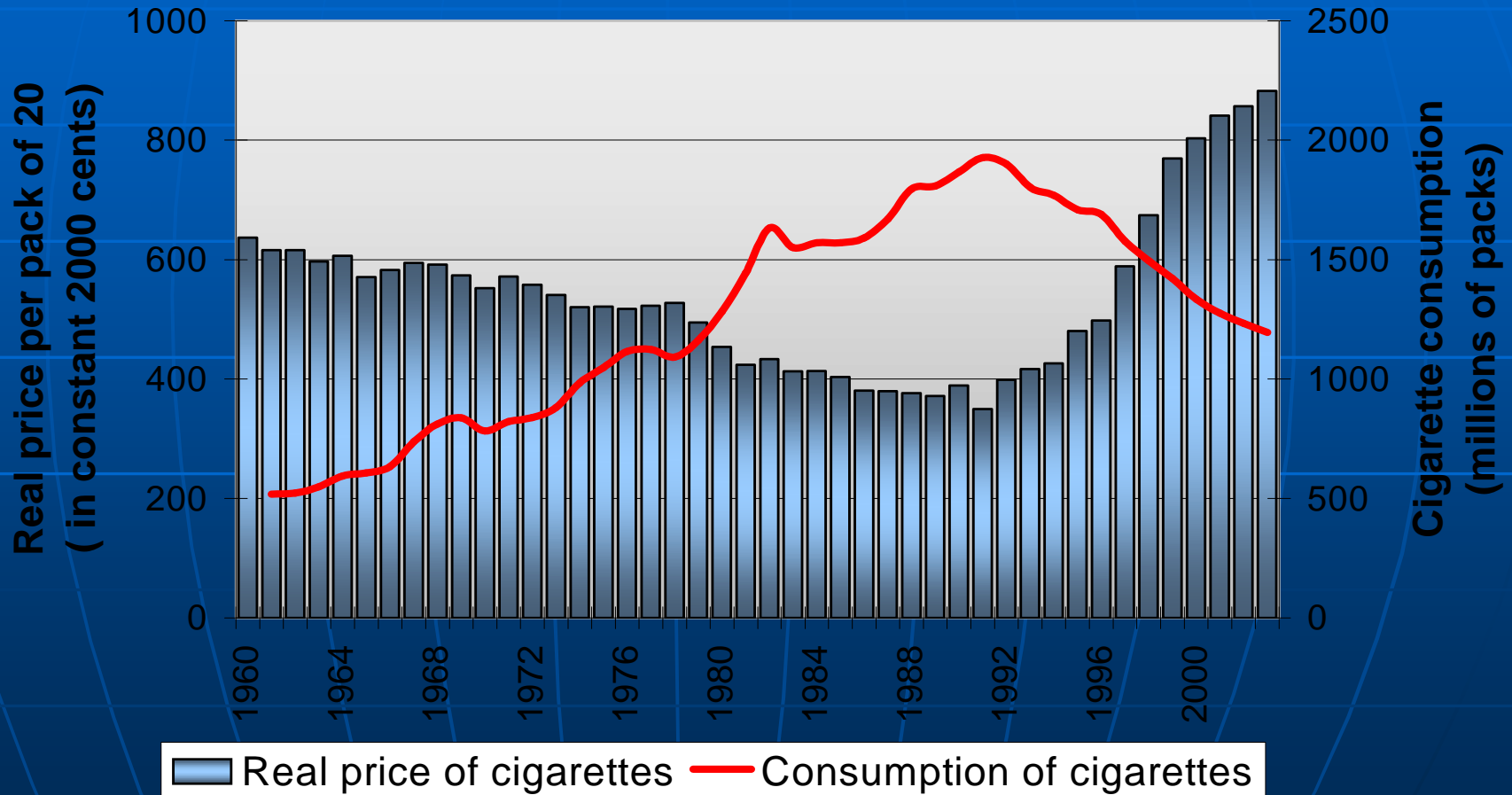
Cigarette Prices and Cigarette Sales, New York, 1970-2007



Source: *Tax Burden on Tobacco*, 2008, and author's calculations

Taxes, Prices and Tobacco Use

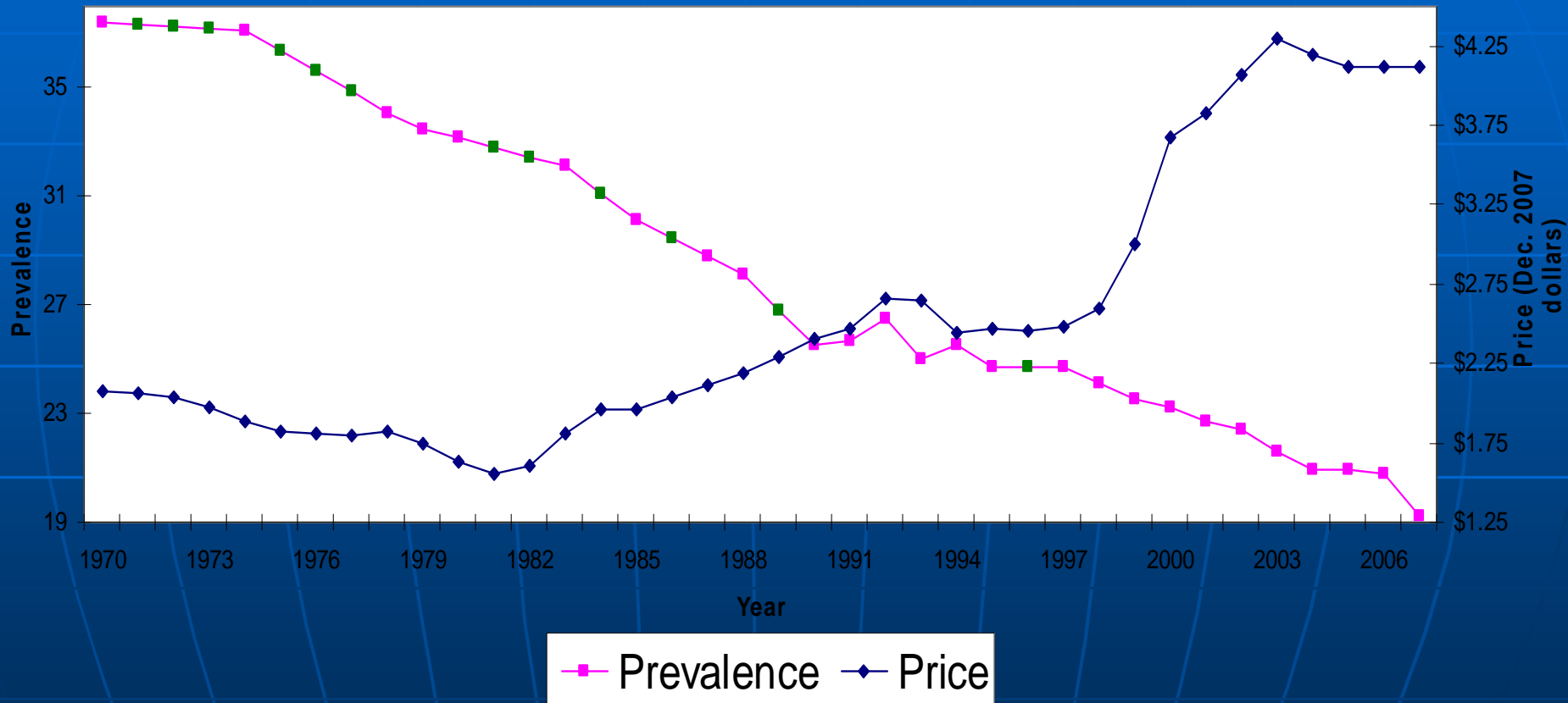
Inflation Adjusted Cigarette Prices and
Cigarette Consumption, South Africa, 1960-2003



Source: Van Walbeek, 2003

Taxes, Prices and Tobacco Use

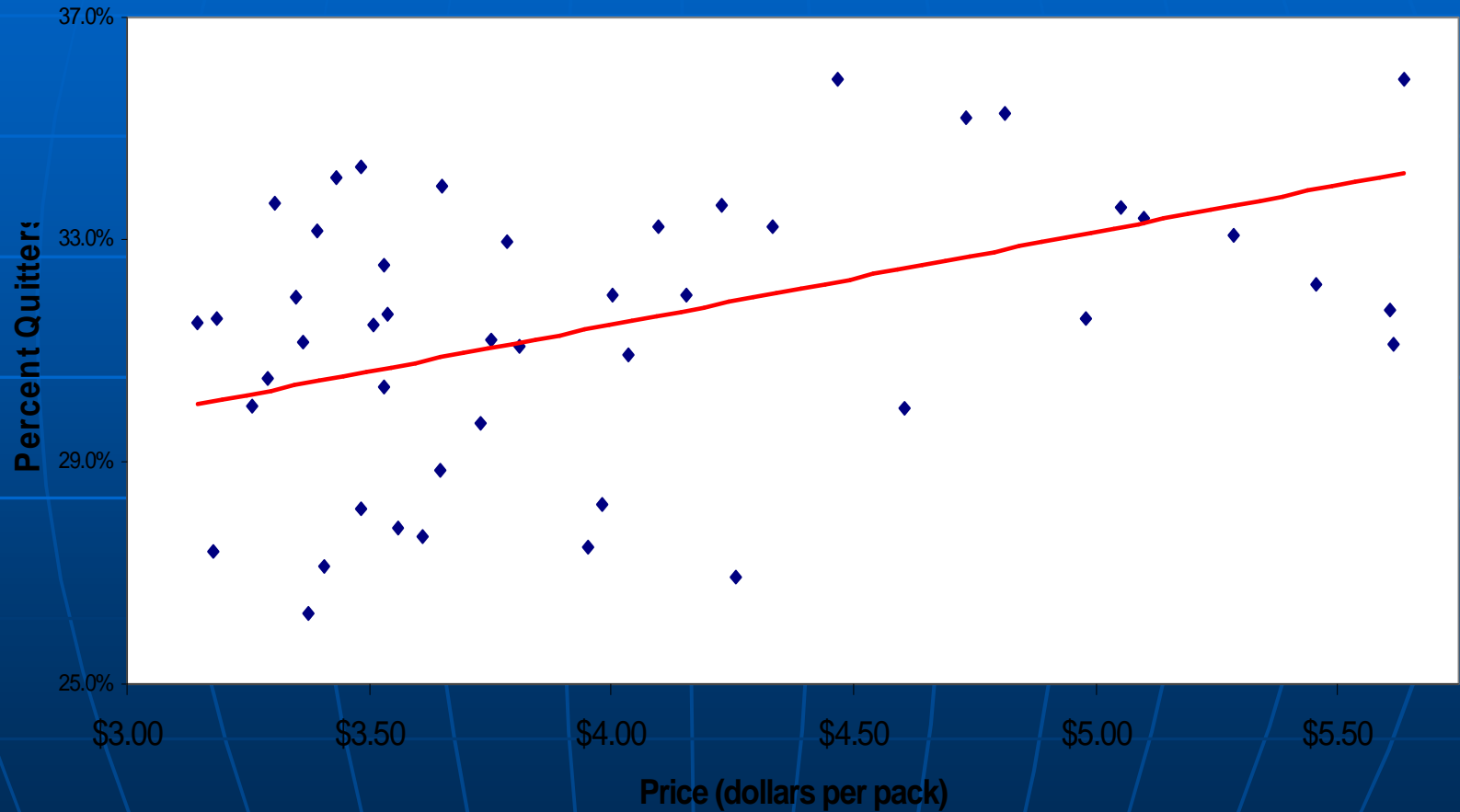
Cigarette Prices and Adult Smoking Prevalence, United States, 1970-2007



Source: *Tax Burden on Tobacco*, 2008, U.S. National Health Interview⁸ Survey, various years, and author's calculations

Taxes, Prices and Tobacco Use

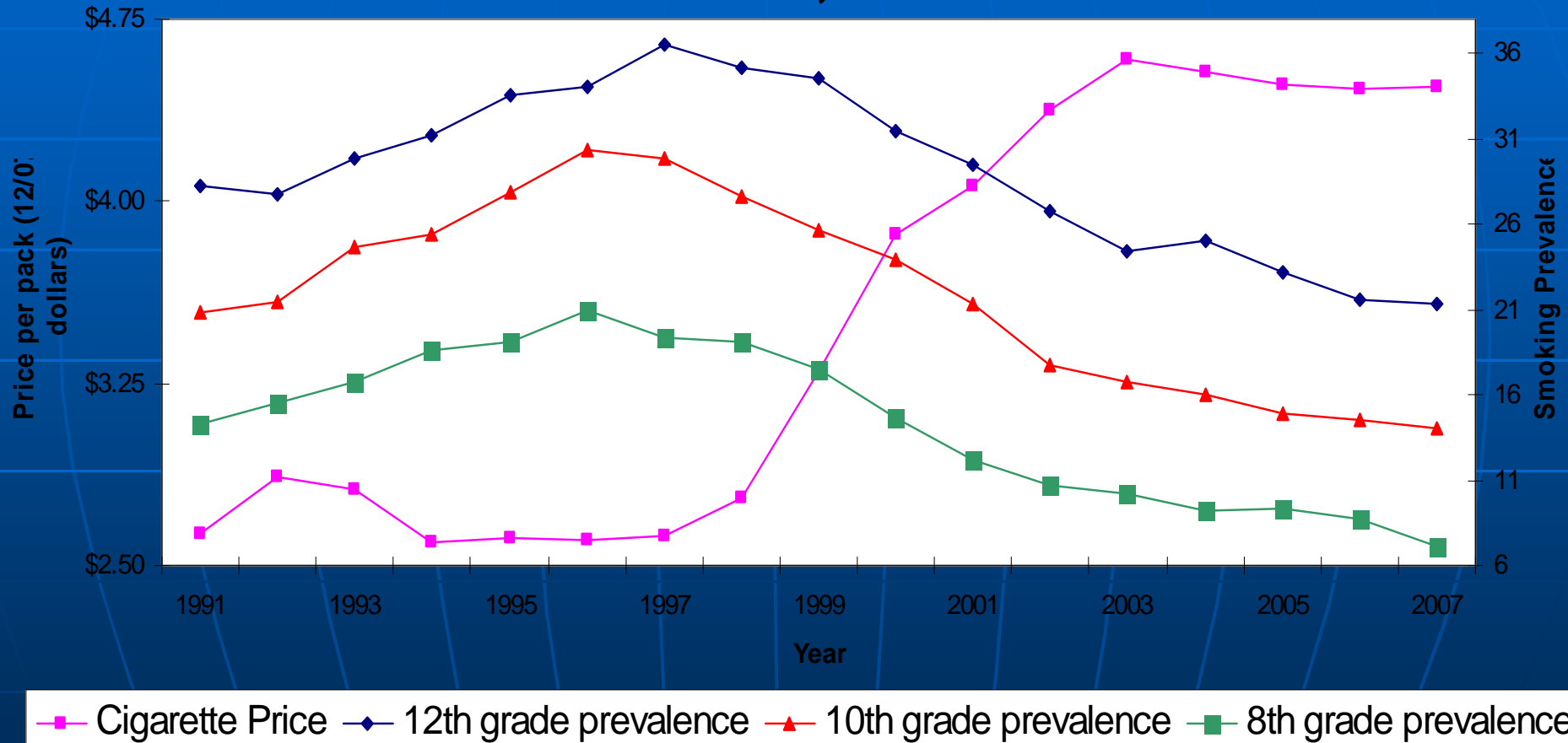
Cigarette Prices and Percentage of Ever Smokers Who Have Quit Smoking, U.S. States, 2005



Source: *Tax Burden on Tobacco*, 2006, U.S. Behavioral Risk Factor Surveillance System, 2005, and author's calculations

Taxes, Prices and Tobacco Use

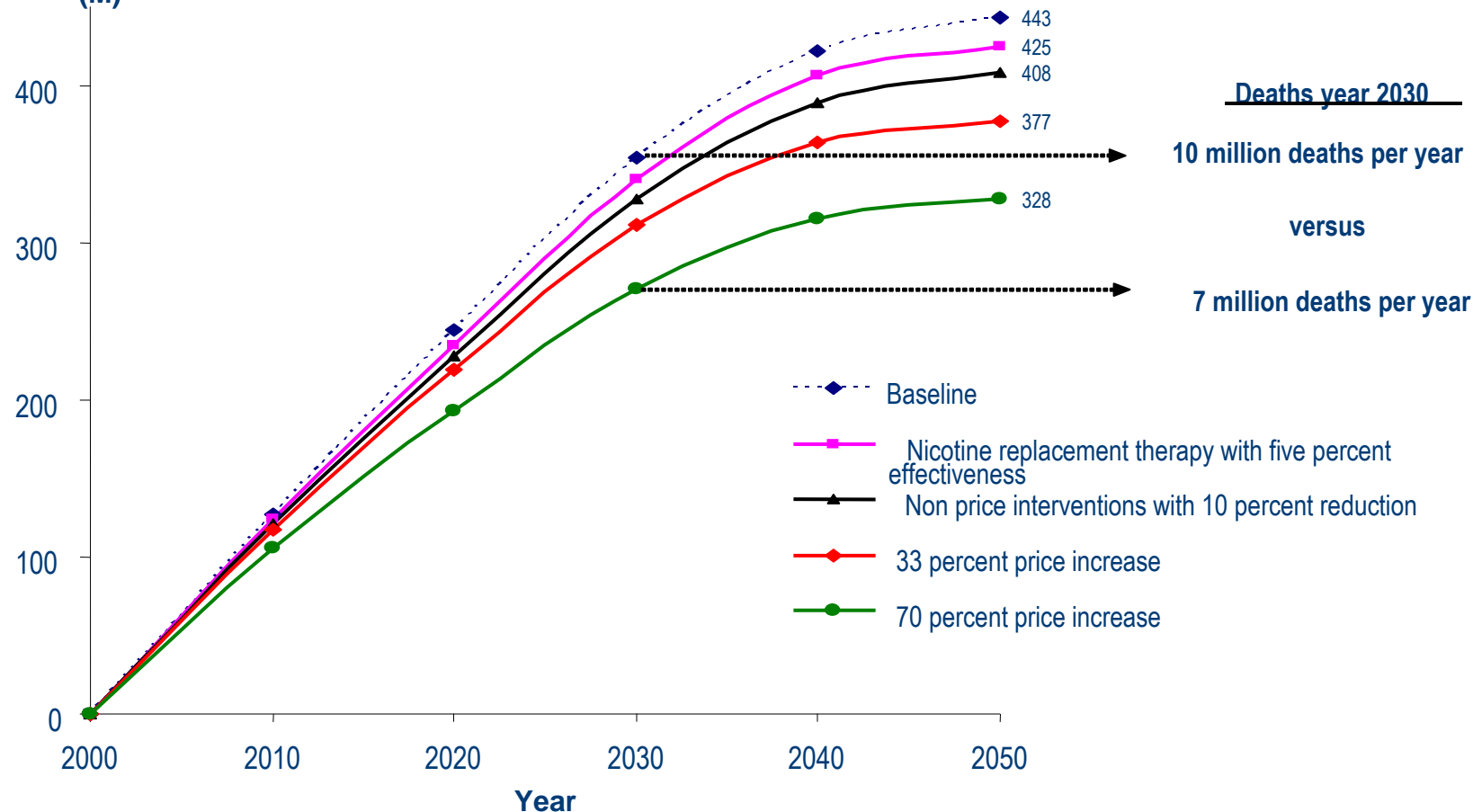
Cigarette Price and Youth Smoking Prevalence, United States, 1991-2007



Tobacco Taxes and Public Health

Tobacco Deaths and Tobacco Control

Tobacco deaths
(M)



Source: Jha, et al., 2006

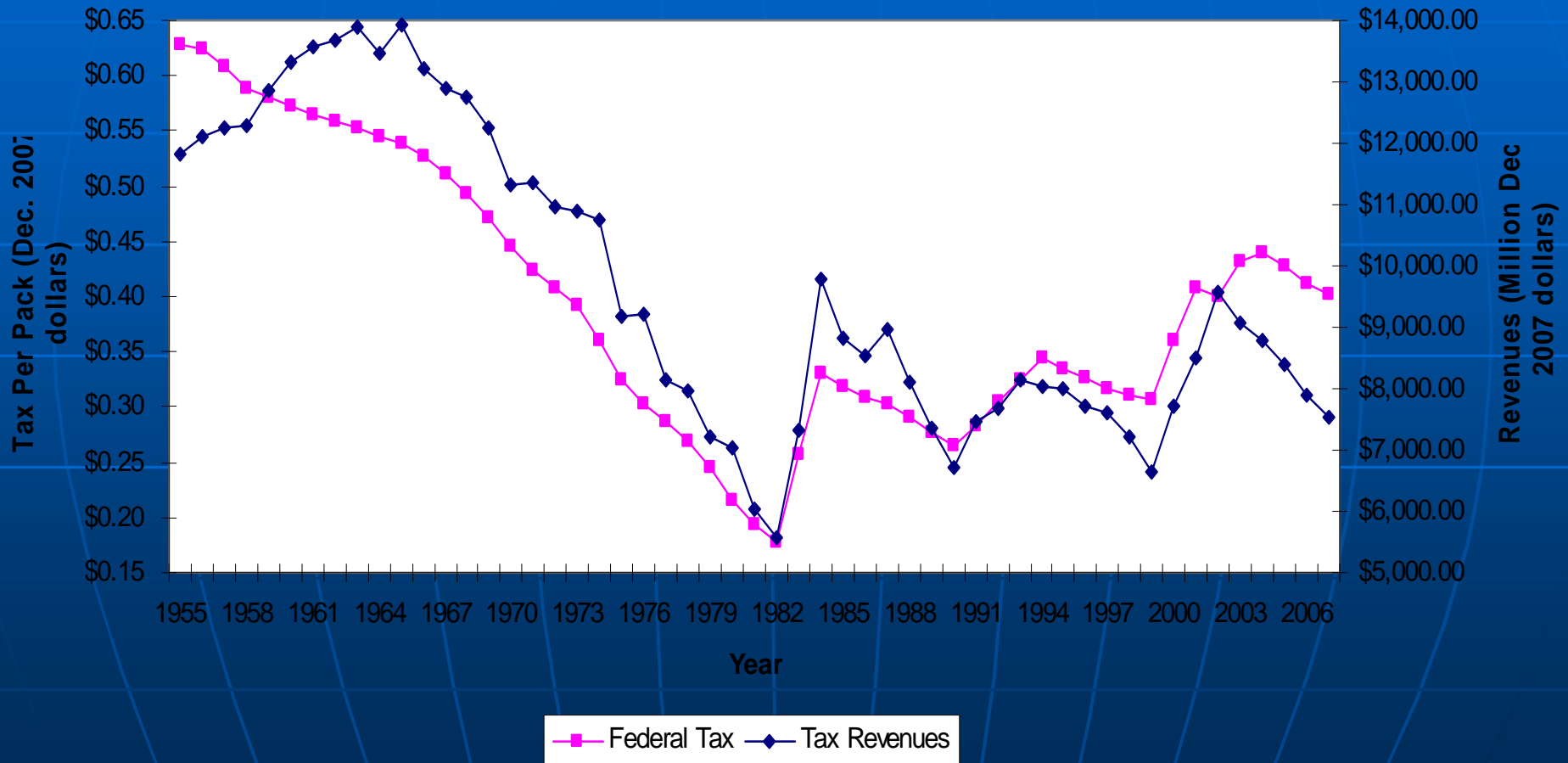
Tobacco Taxes and Revenues

- Increases in tobacco taxes lead to increases in tobacco tax revenues, despite reductions in tobacco use
 - Low share of tax in price in most countries
 - Fall in demand less than proportional to price increase in most countries
 - “inelastic” demand
- Evidence shows revenues rise even in presence of tax avoidance and smuggling

Tobacco Taxes and Revenues

Federal Cigarette Tax and Tax Revenues

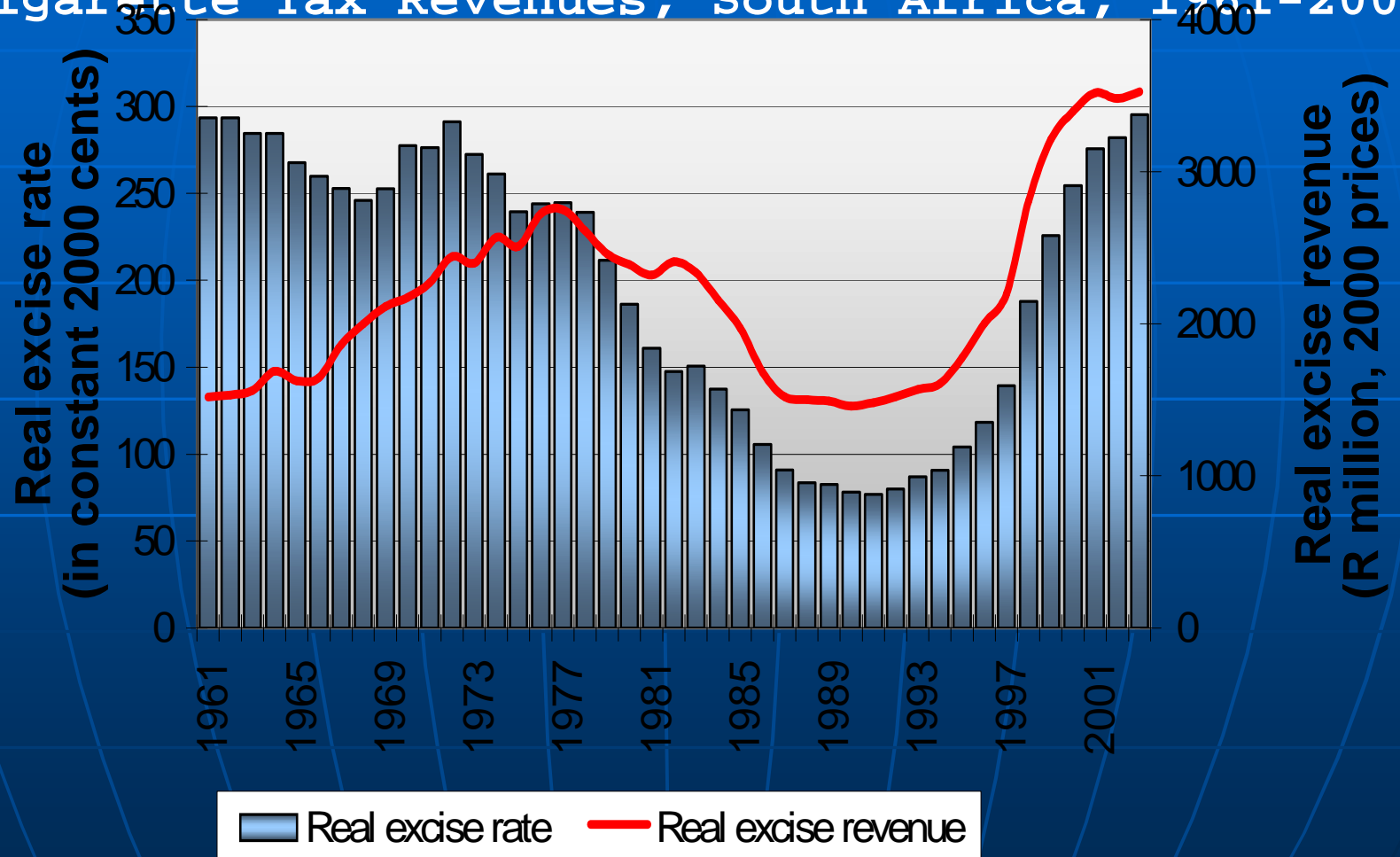
Inflation Adjusted (Dec. 2007 dollars), 1955-2007



Source: *Tax Burden on Tobacco*, 2008, and author's calculations

Tobacco Taxes and Revenues

Inflation Adjusted Cigarette Taxes and
Cigarette Tax Revenues, South Africa, 1961-2003

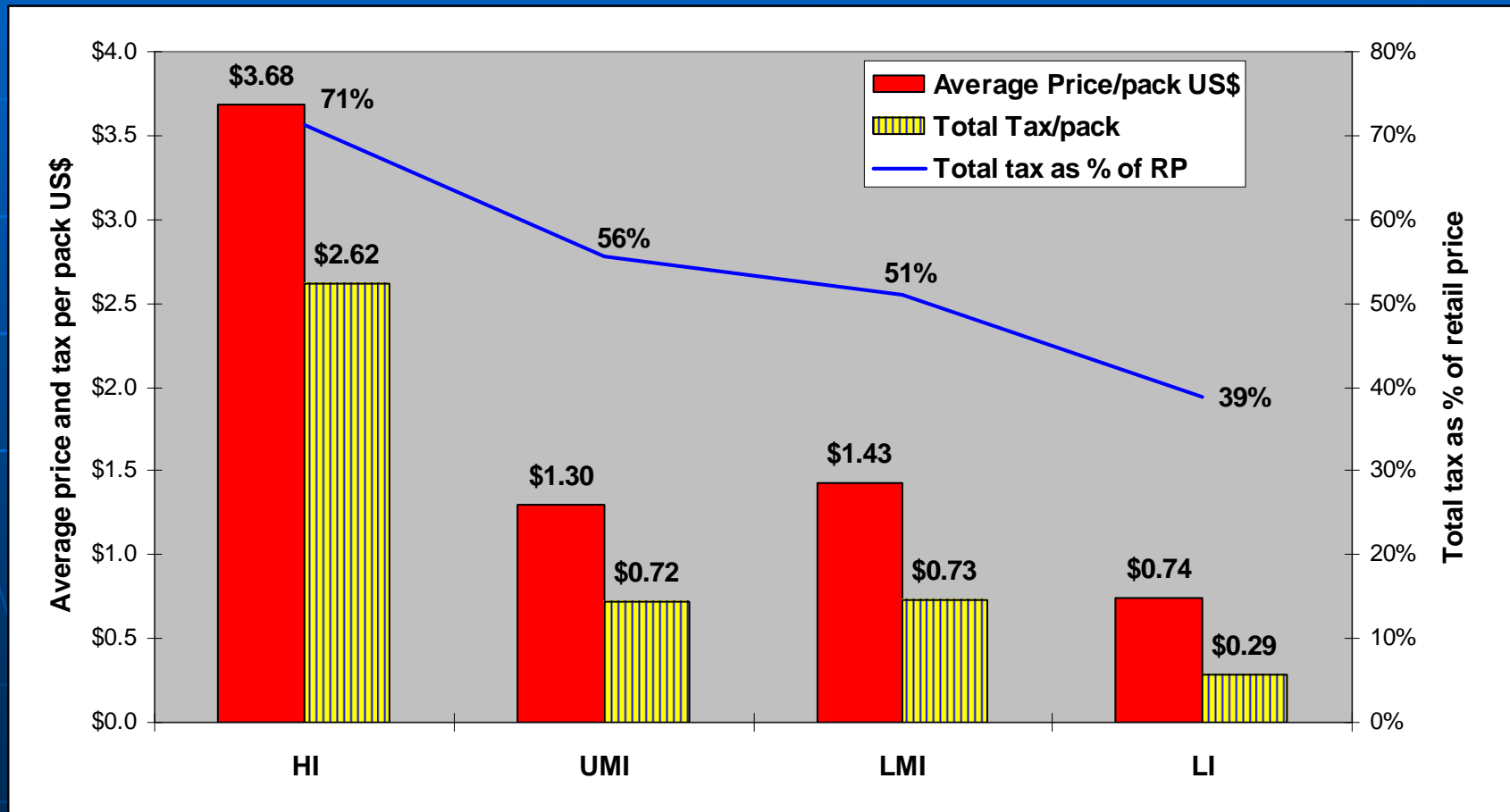


Source: Van Walbeek, 2003

Taxes and Tobacco Product Prices

- Tax levels and prices, vary widely across countries

Price and Tax by Income Level, 2004-05



Source: Yurekli and Onder, 2006

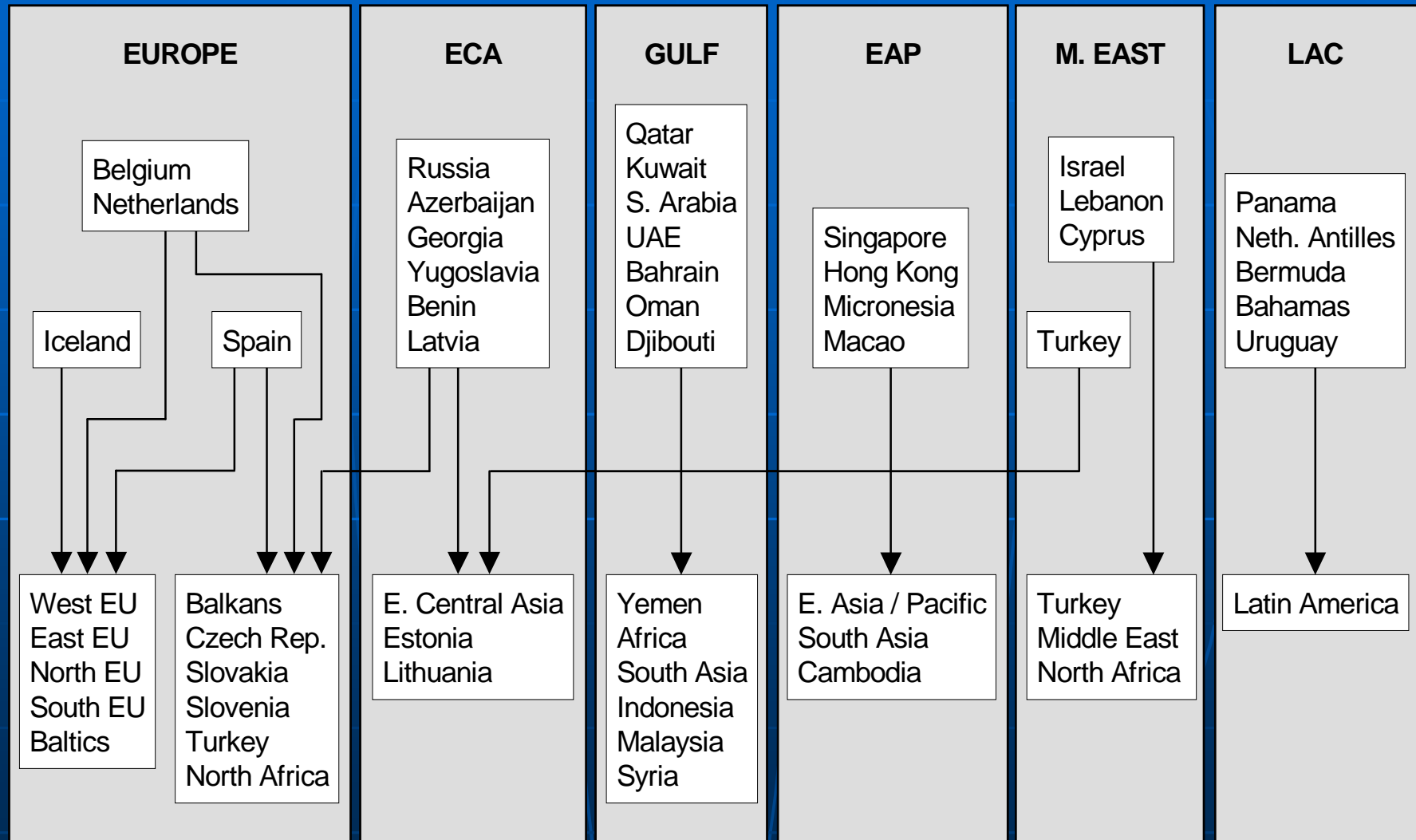
Types of Illicit Trade

- Individual tax avoidance
 - Reservation, Internet and other direct, duty-free, and cross-border purchases
 - Generally not illegal, but states require local taxes to be paid
- Bootlegging
 - Small scale purchasing of cigarettes in low-tax/price jurisdictions for resale in high tax/price jurisdictions

Types of Illicit Trade

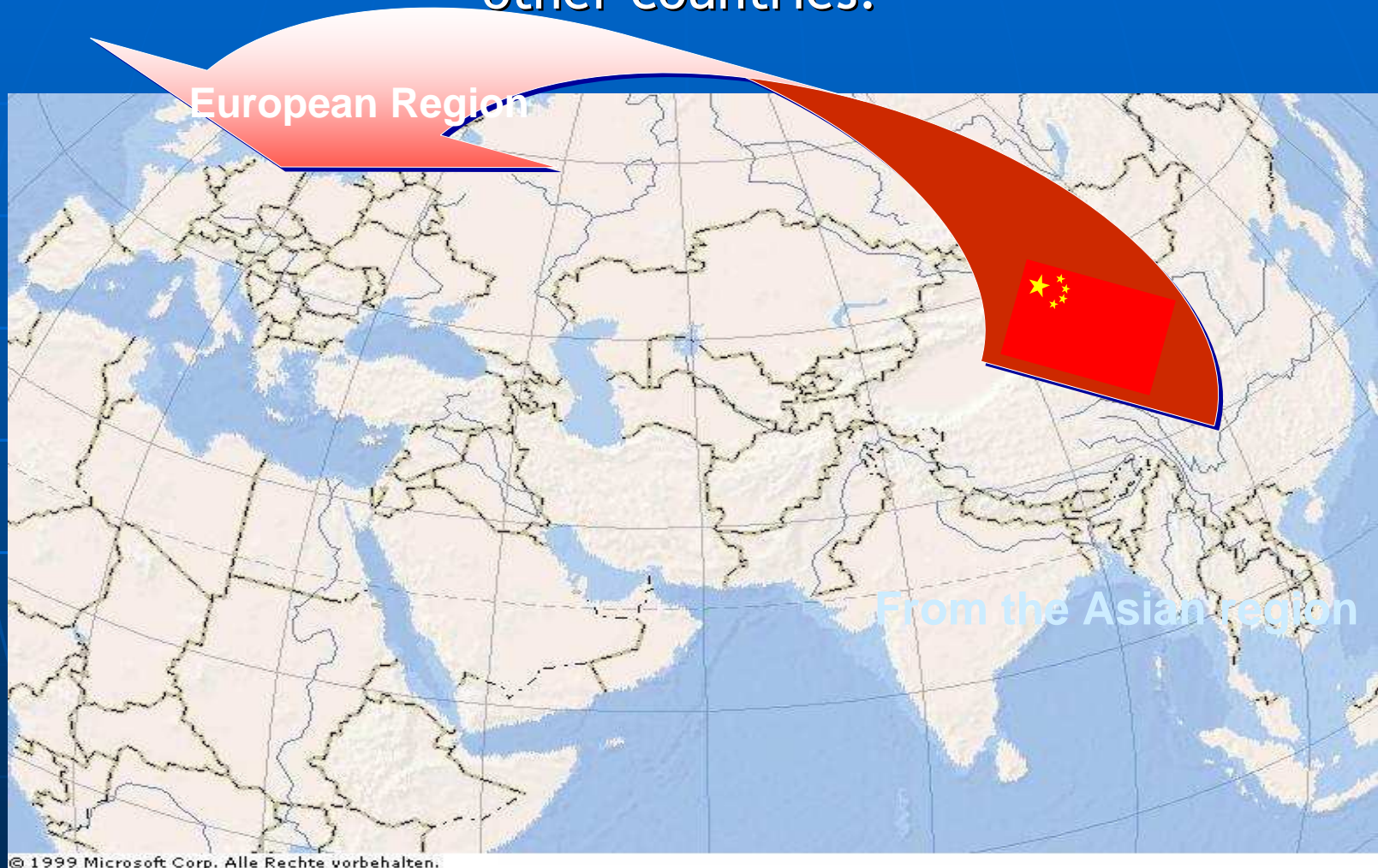
- Large scale, organized smuggling
 - Illegal transportation, distribution and sale of large consignments of tobacco products
 - Generally avoids all taxes
- Counterfeit
 - products bearing a trademark without the approval of the trademark owner
 - Often involved in organized smuggling

Organized Illicit Cigarette Trade Routes



Counterfeit Cigarette Trade:

China a major source of counterfeit cigarettes for EU and other countries:



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Source: WCO Customs and Tobacco Report 2004

Determinants of Illicit Trade

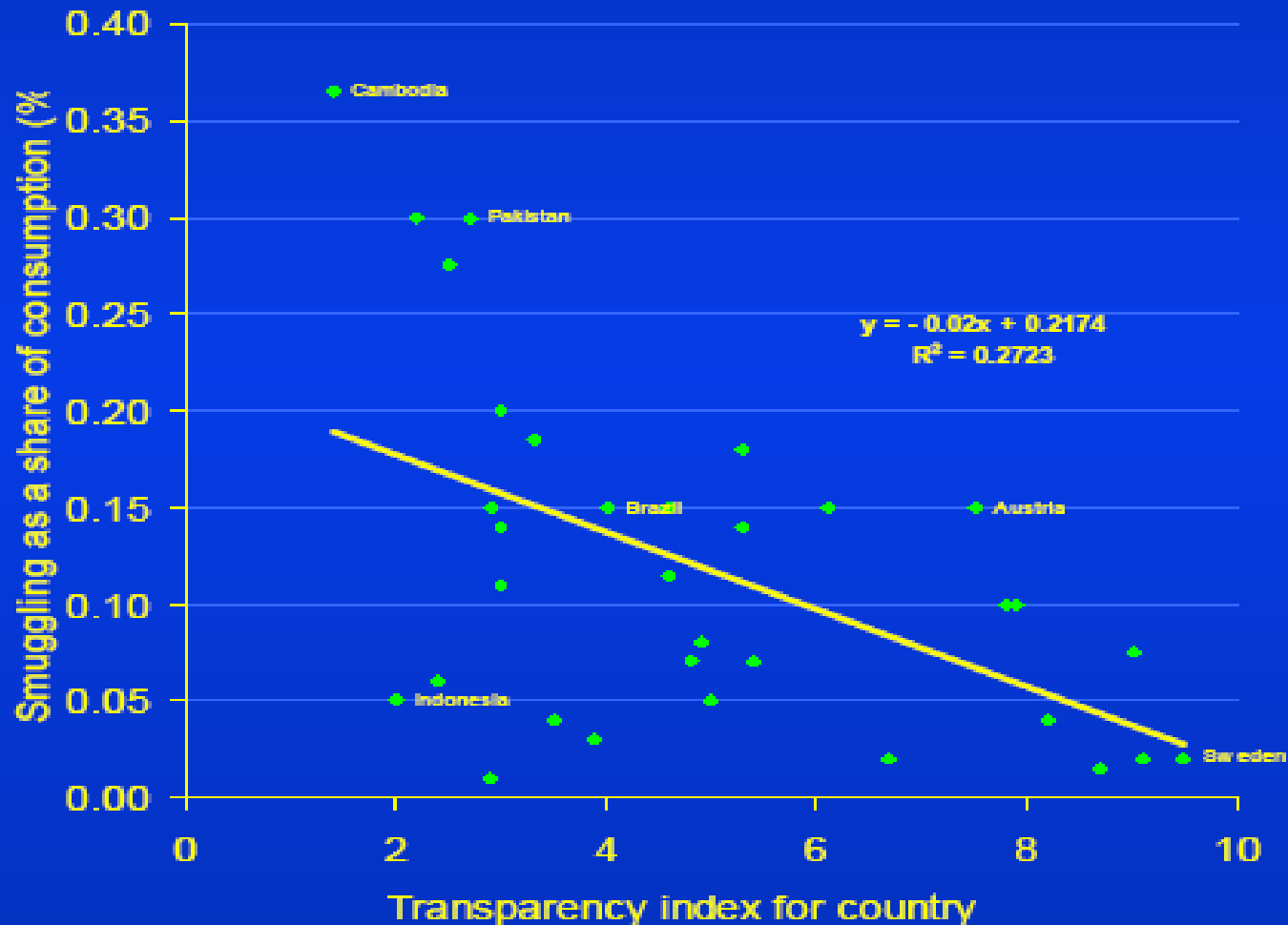
- Tax and price differentials
 - More important for individual tax avoidance and bootlegging
 - Larger scale efforts avoid all taxes
- Presence of informal distribution channels
 - e.g. Street vendors, unlicensed distributors
- Presence of criminal networks
 - e.g. Organized crime, terrorist organizations

Determinants of Illicit Trade

- Weak tax administration
 - Absence of tax stamps; weak or non-existent physical controls; unlicensed manufacturers, distributors, retailers; weak customs authorities
- Poor enforcement
 - Limited resources for border patrols, customs authorities, etc; low penalties
- Corruption

Smuggling and Corruption

Smuggling as a function of transparency index

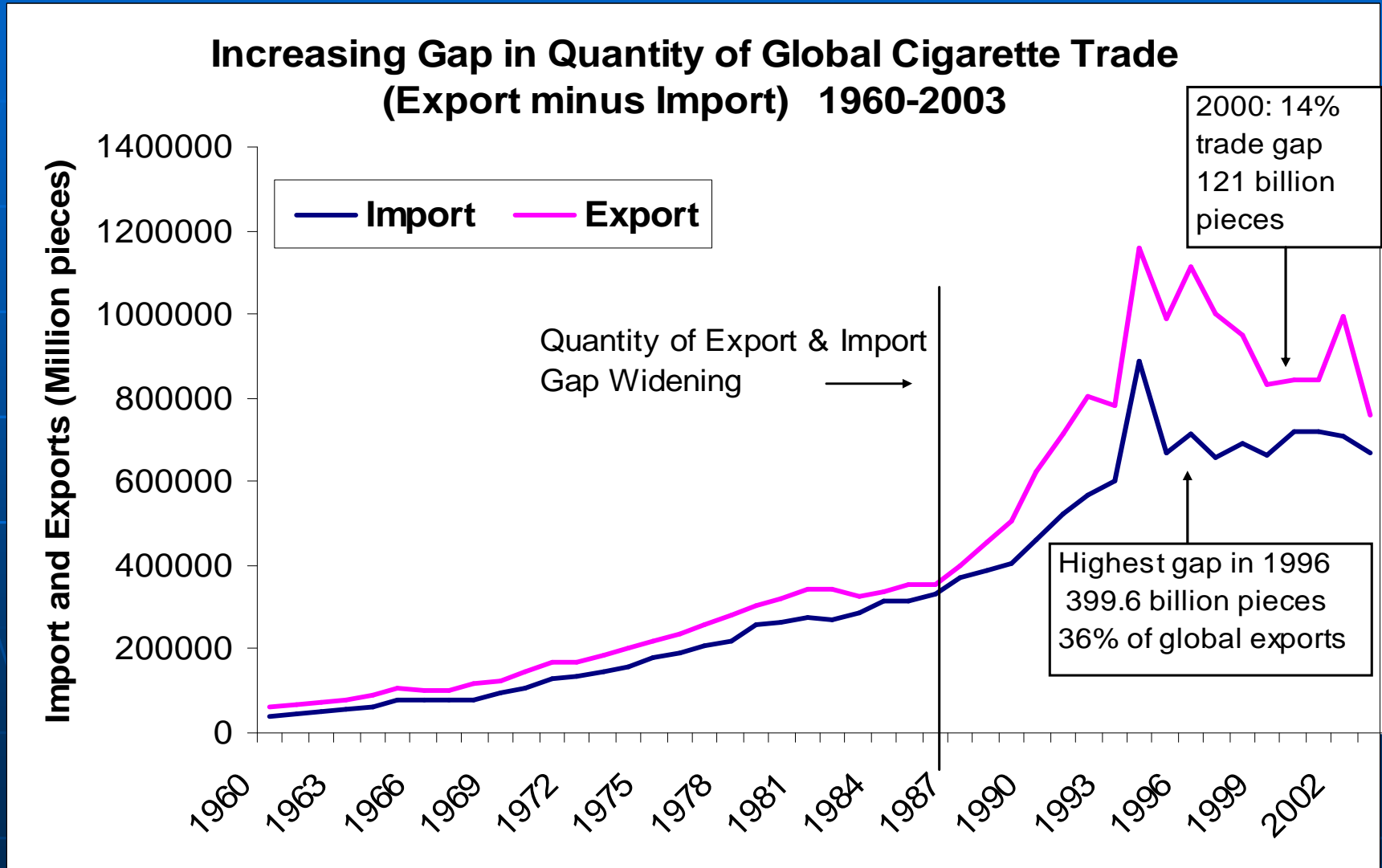


Source: Merriman *et al.*, 2000

Extent of Illicit Trade

- Difficult to measure given illegality
- A variety of approaches have been used, including:
 - Comparing recorded exports of tobacco products to recorded imports
 - Difference reflects leakage into black markets
 - Recent estimates suggest 20-30 percent of exports do not appear as imports
 - 4-10 percent of global consumption
 - Will be largely organized smuggling

Extent of Illicit Trade Globally



Source: ECOSOC Trade Database: Ayda Yurekli

Extent of Illicit Trade

- Difficult to measure given illegality
- A variety of approaches have been used, including:
 - “Expert Opinions”
 - Customs officials, tobacco industry representatives, tax authorities, and others
 - Widely varying estimates across countries
 - Average: 8.5% (wtd) - 13.3% (unwtd) in mid-1990s
 - Again, largely reflecting organized smuggling

Extent of Illicit Trade

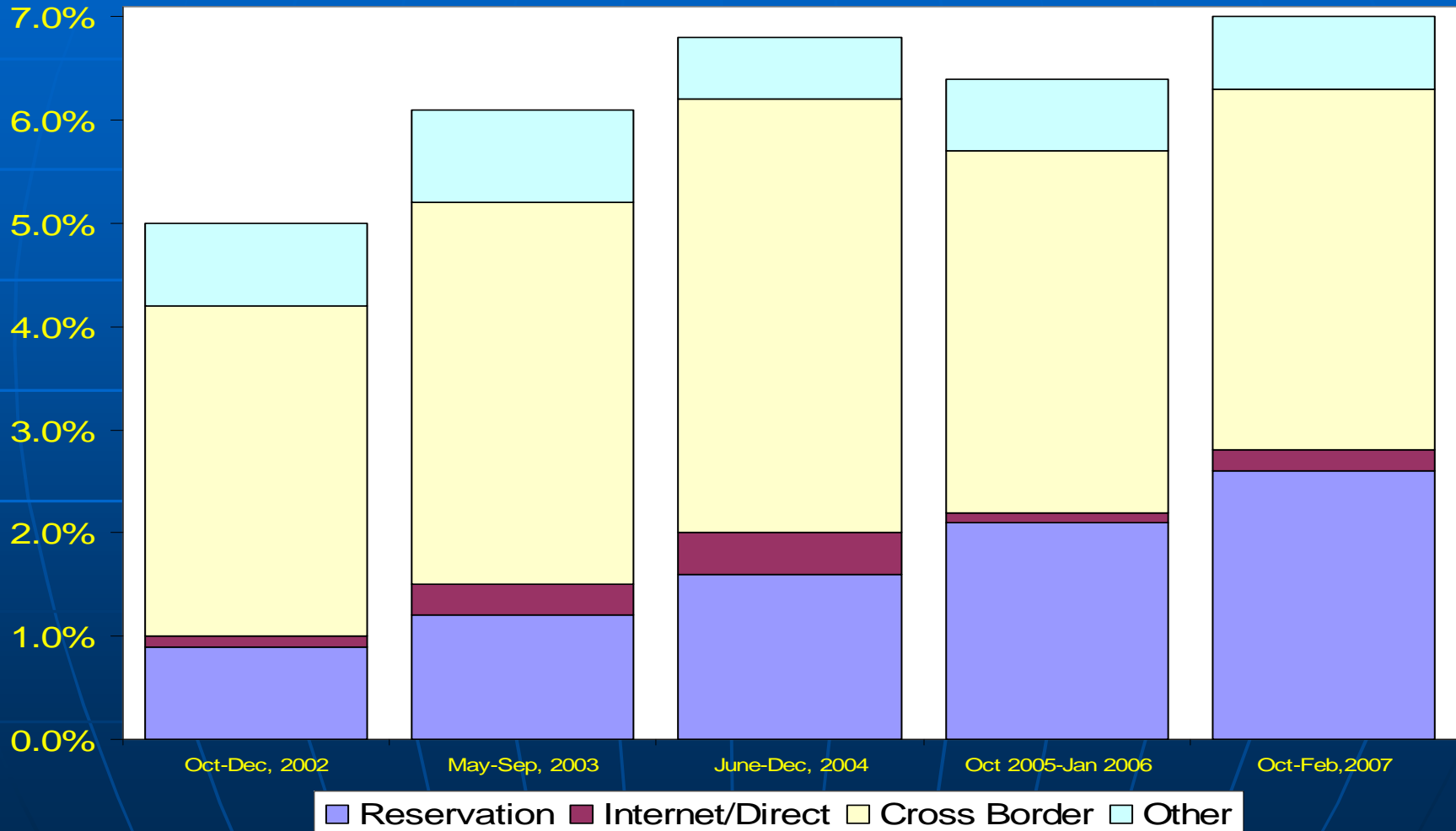
- Individual tax avoidance a bit easier to assess
 - Econometric analyses of tax paid sales that account for various factors, including:
 - tax/price differences
 - population density
 - travel patterns
 - Distance
 - US estimates suggest up to 12.5% of total consumption in early 2000s

Extent of Illicit Trade

- Individual tax avoidance – self-reported data
 - International Tobacco Control Policy Evaluation Study
 - Longitudinal, annual survey of smokers in numerous countries, including Canada and US
 - Includes questions on purchase locations, including Internet, telephone, cross-border, duty free, reservations, and more

Tax Avoidance and Enforcement

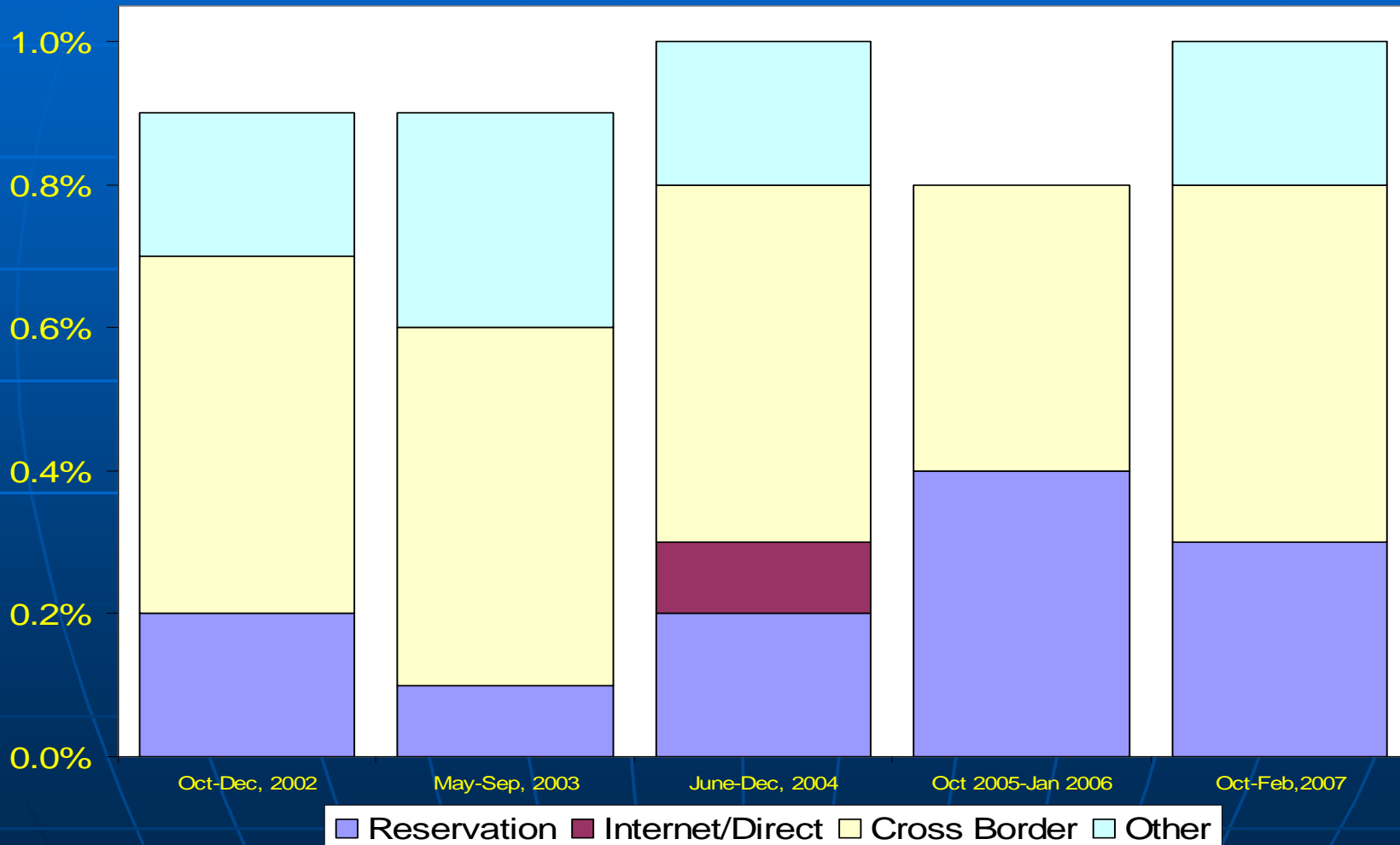
US Smokers' Tax Avoidance, Last Purchase, 2002-2007



Source, ITC project, US survey, Waves 1-5

Tax Avoidance and Enforcement

US Smokers' Tax Avoidance, Most Frequent Purchase Source, 2002-2007



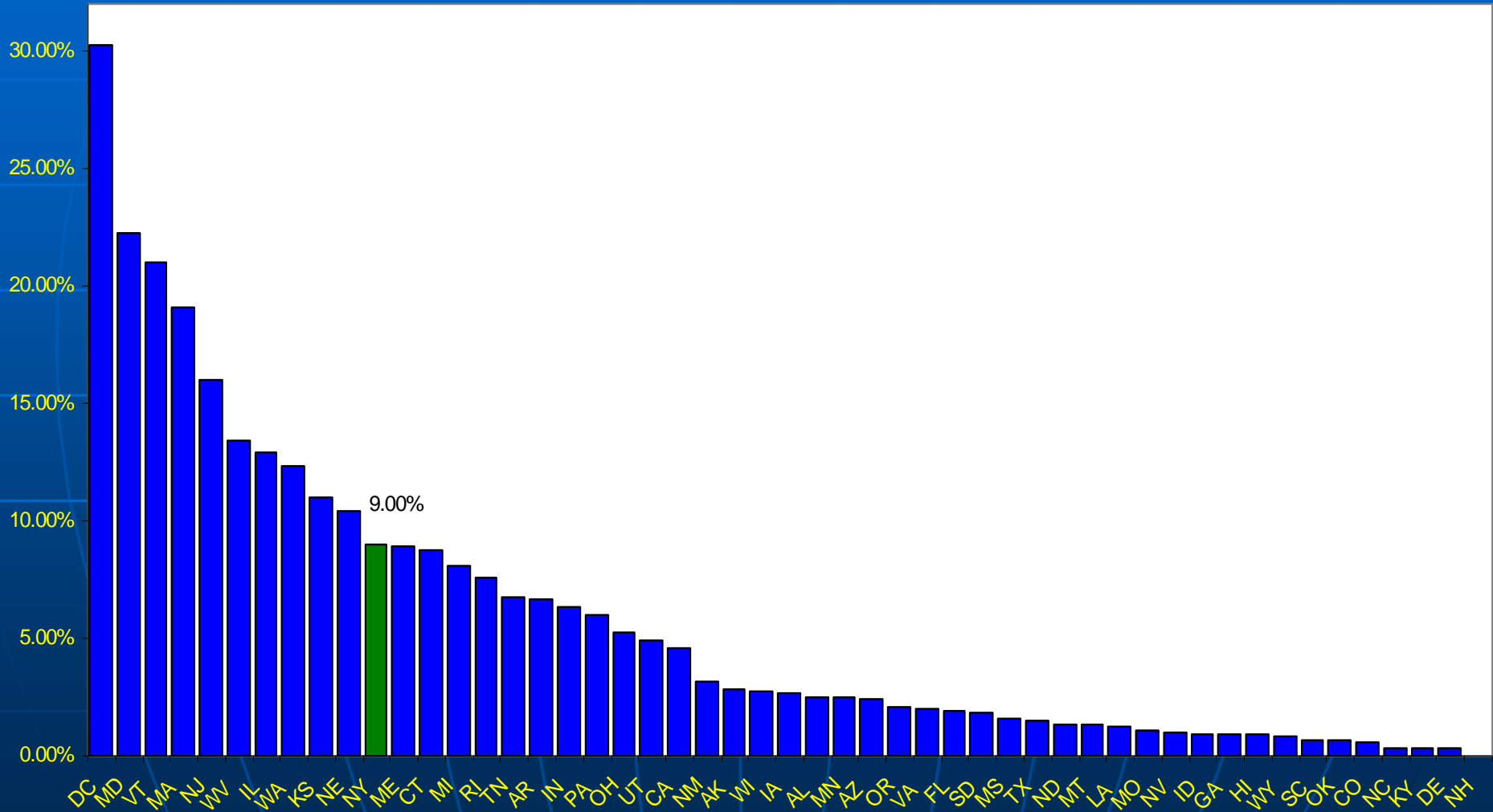
Source, ITC project, US survey, Waves 1-5

Extent of Illicit Trade

- Individual tax avoidance – self-reported data
 - Tobacco Use Supplement to the Current Population Survey
 - Periodic state representative, cross-sectional samples
 - Includes questions on price paid, whether or not purchased in own state, other state or through other channels (e.g. Internet or phone) – 2003 and 2006/07 surveys only
 - Does not pick up in-state tax avoidance (e.g. reservation purchases)
 - 2003: 5.63% 2006/07: 5.19%

Tax Avoidance – United States

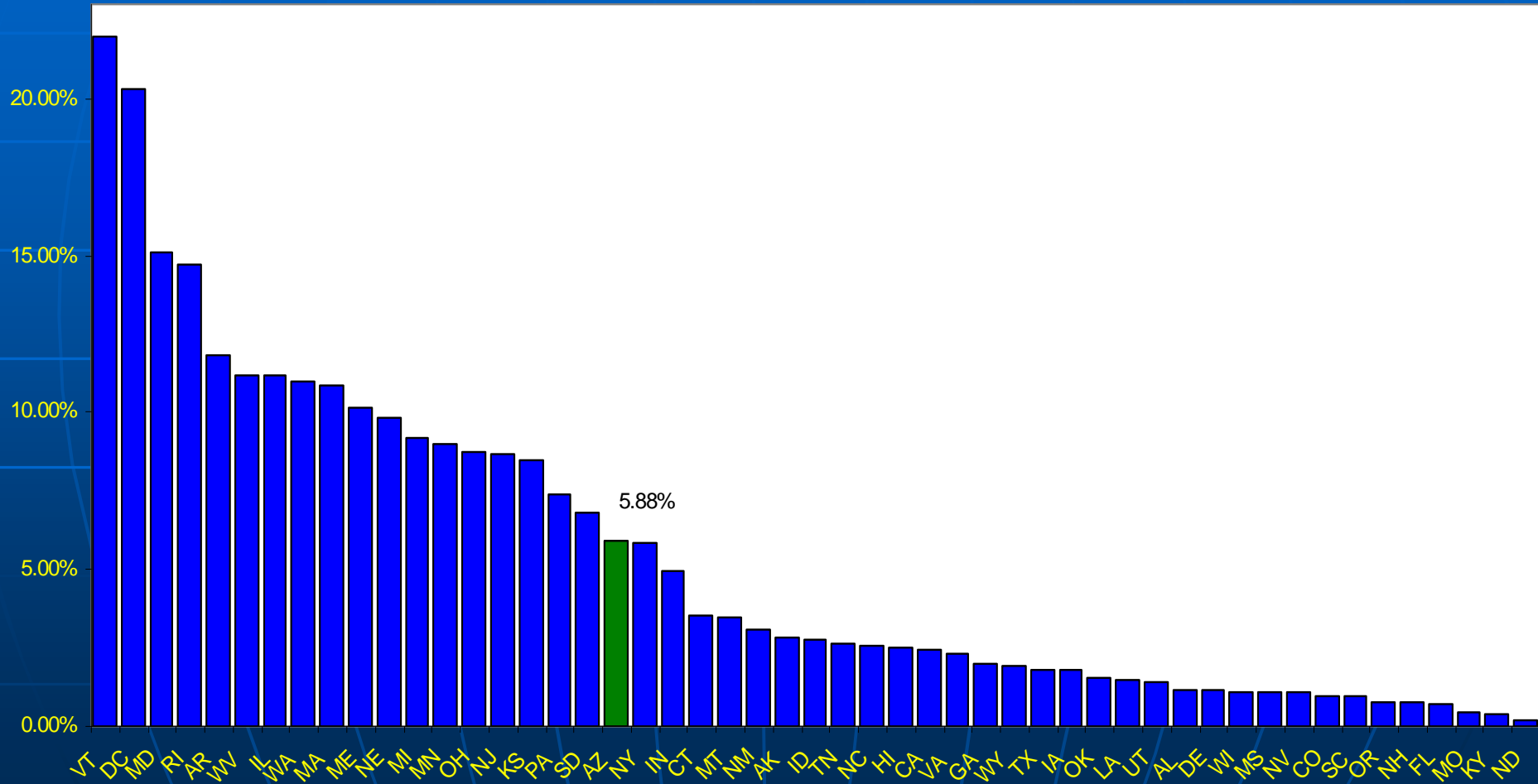
% Tax Avoiders, 2003



Source: Tax Burden on Tobacco, 2008 and TUS-CPS

Tax Avoidance – United States

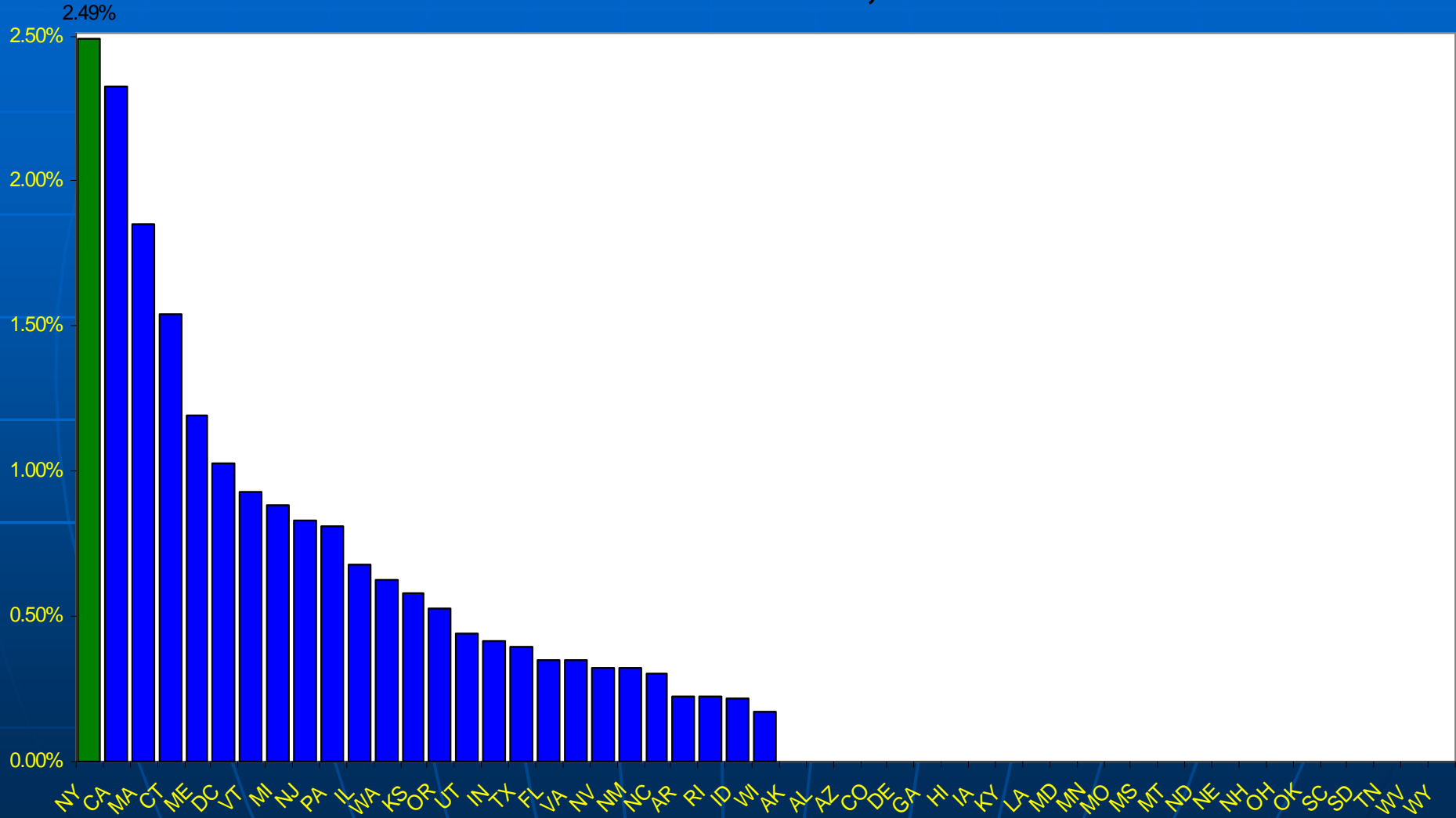
% Tax Avoiders, 2006/07



Source: Tax Burden on Tobacco, 2008 and TUS-CPS

Tax Avoidance – United States

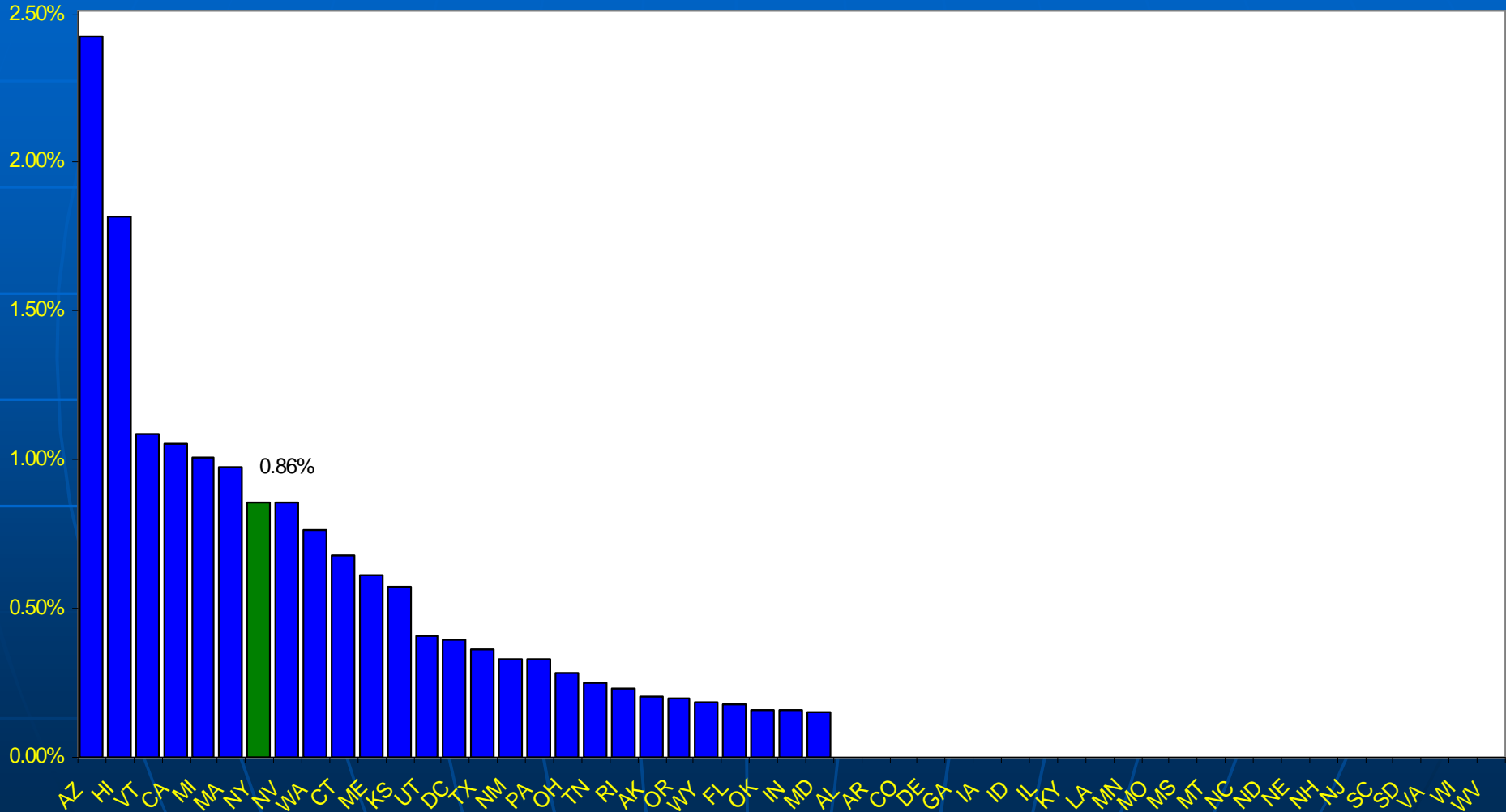
% Other Tax Avoiders, 2003



Source: Tax Burden on Tobacco, 2008 and TUS-CPS

Tax Avoidance – United States

% Other Tax Avoiders, 2006/07



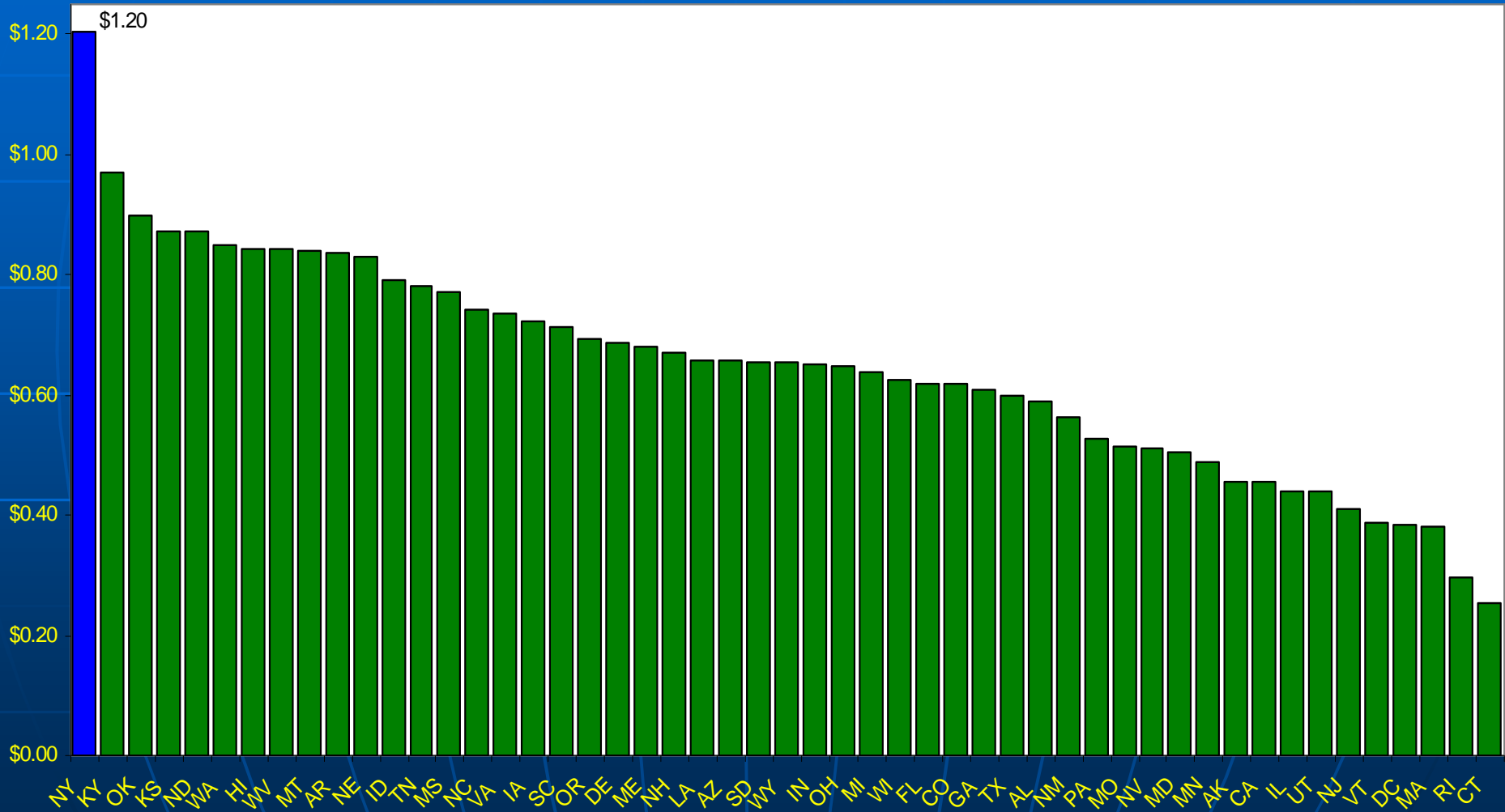
Source: Tax Burden on Tobacco, 2008 and TUS-CPS

Extent of Illicit Trade

- Individual tax avoidance – self-reported data
 - TUS-CPS
 - Does not pick up within state tax avoidance (e.g. purchases on reservations)
 - Comparison of average price paid by smokers purchasing in state from TUS to average prices reported in *Tax Burden on Tobacco*
 - Difference accounted for by several factors, including reservation purchases

Tax Avoidance – United States

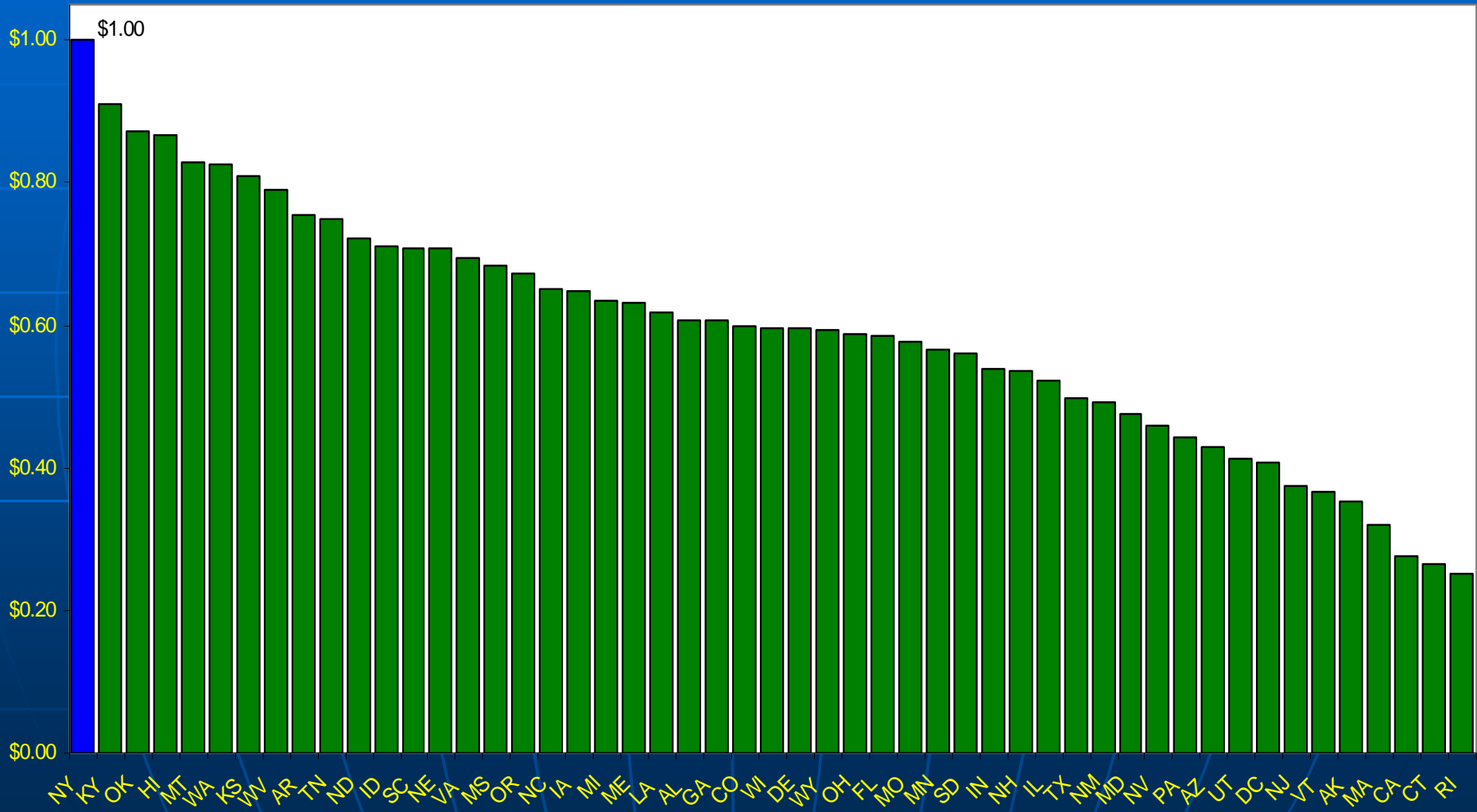
Difference in TBOT and TUS Prices, 2003



Source: Tax Burden on Tobacco, 2008 and TUS-CPS

Tax Avoidance – United States

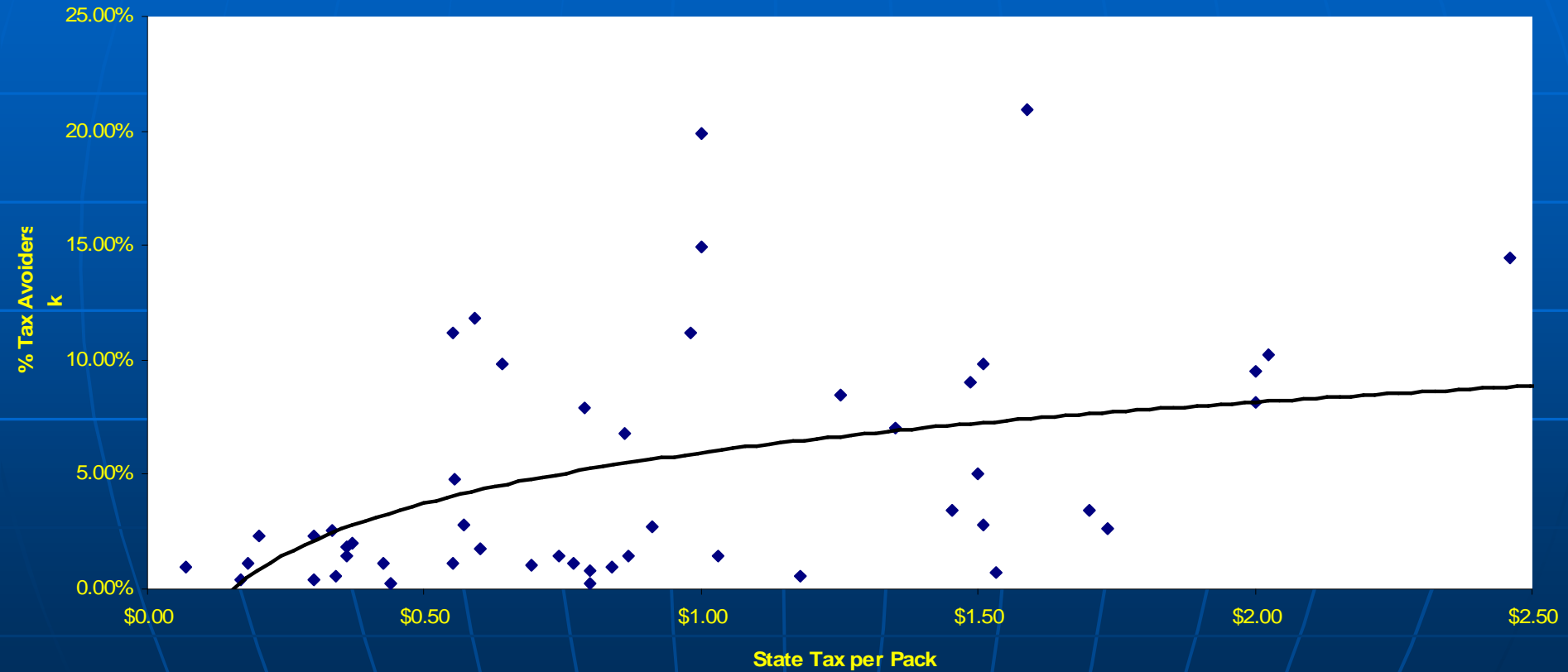
Difference in TBOT and TUS Prices, 2006/07



Source: Tax Burden on Tobacco, 2008 and TUS-CPS

Tax Avoidance – United States

Cross Border Tax Avoidance and State Cigarette Taxes, 2006/07



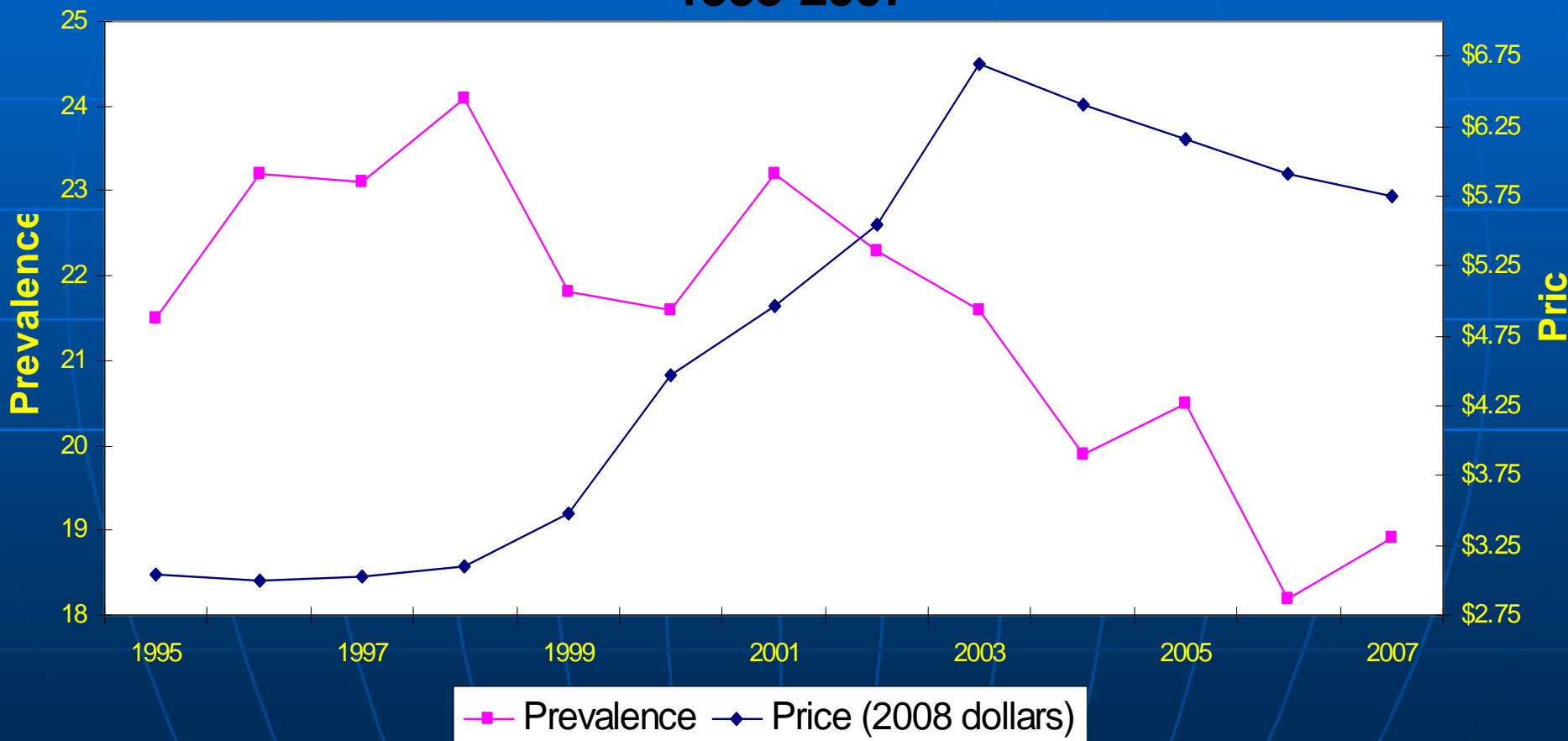
Source: Tax Burden on Tobacco, 2008 and TUS-CPS

Illicit Trade, Public Health, and Revenues

- Even in the presence of illicit trade, higher cigarette and other tobacco taxes lead to:
 - Reductions in youth and adult tobacco use
 - Increases in tobacco tax revenues
- Rather than forego tax increases, appropriate response is to crack down on illicit trade

Illicit Trade Does NOT Eliminate Health and Revenue Impact of Higher Taxes

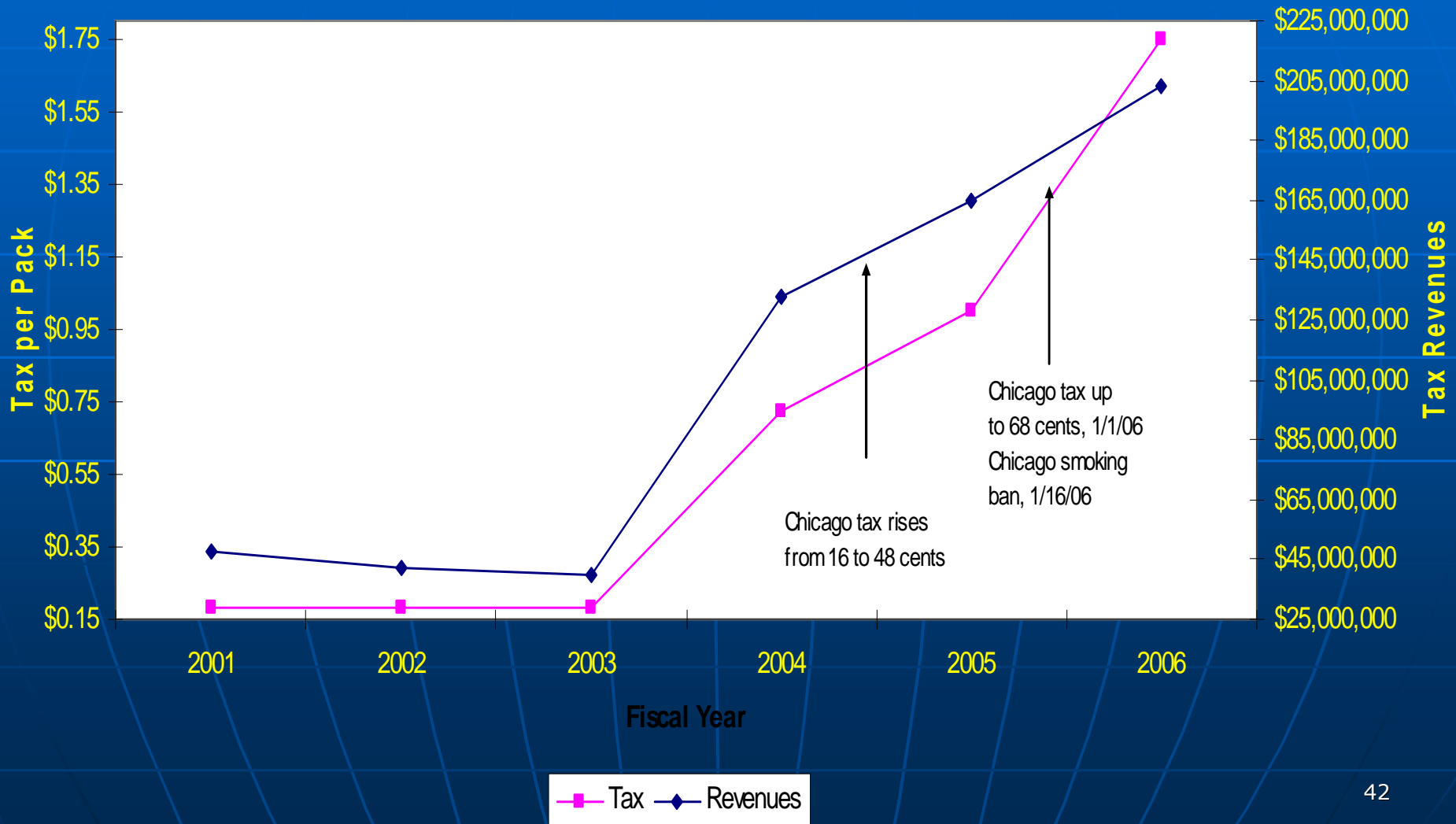
Cigarette Prices and Adult Prevalence, New York, 1995-2007



Source: Tax Burden on Tobacco, 2008 and TUS-CPS

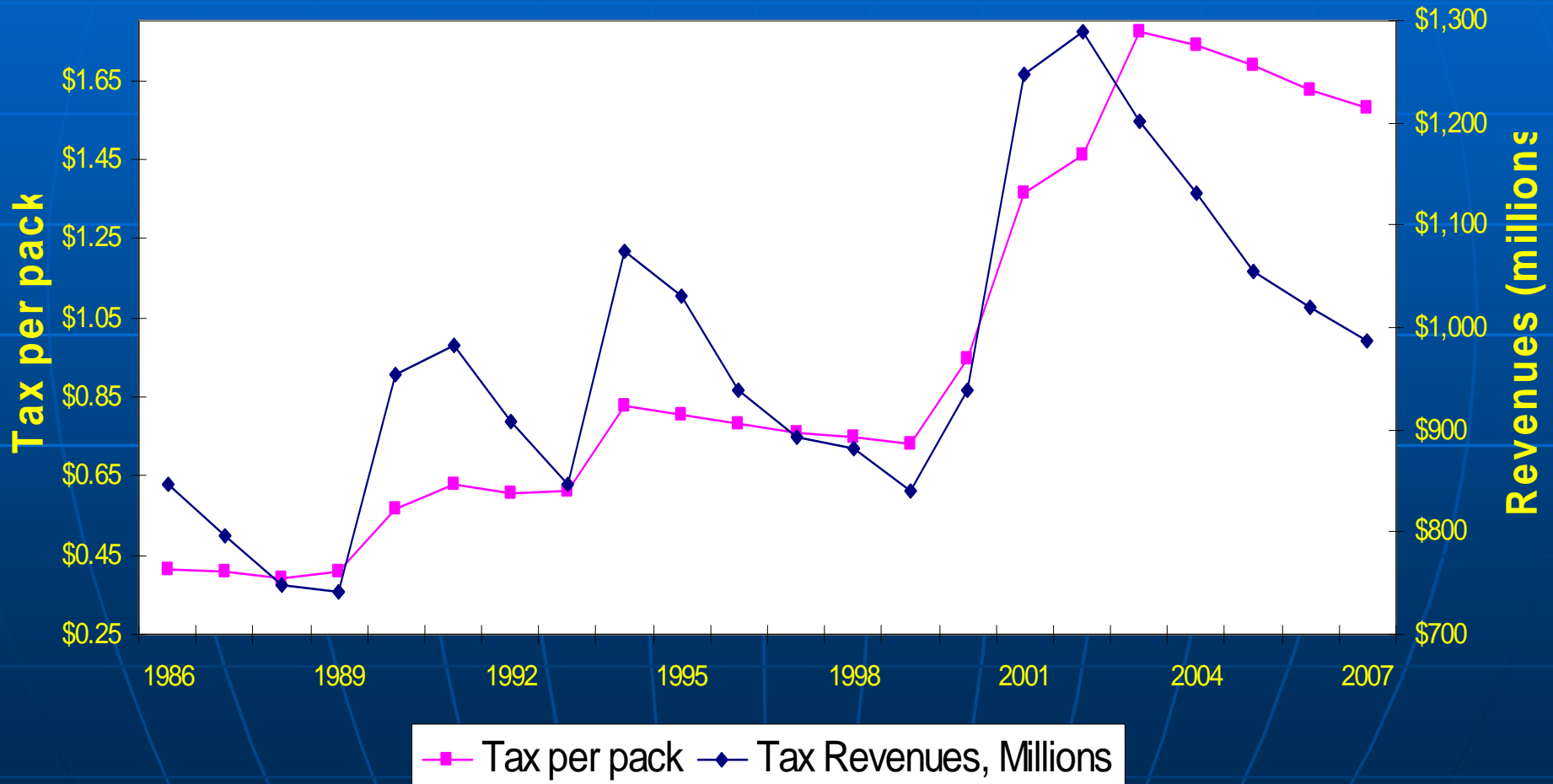
Tax Increases and Tax Avoidance

Cook County Cigarette Tax and Tax Revenues - FY01-FY06



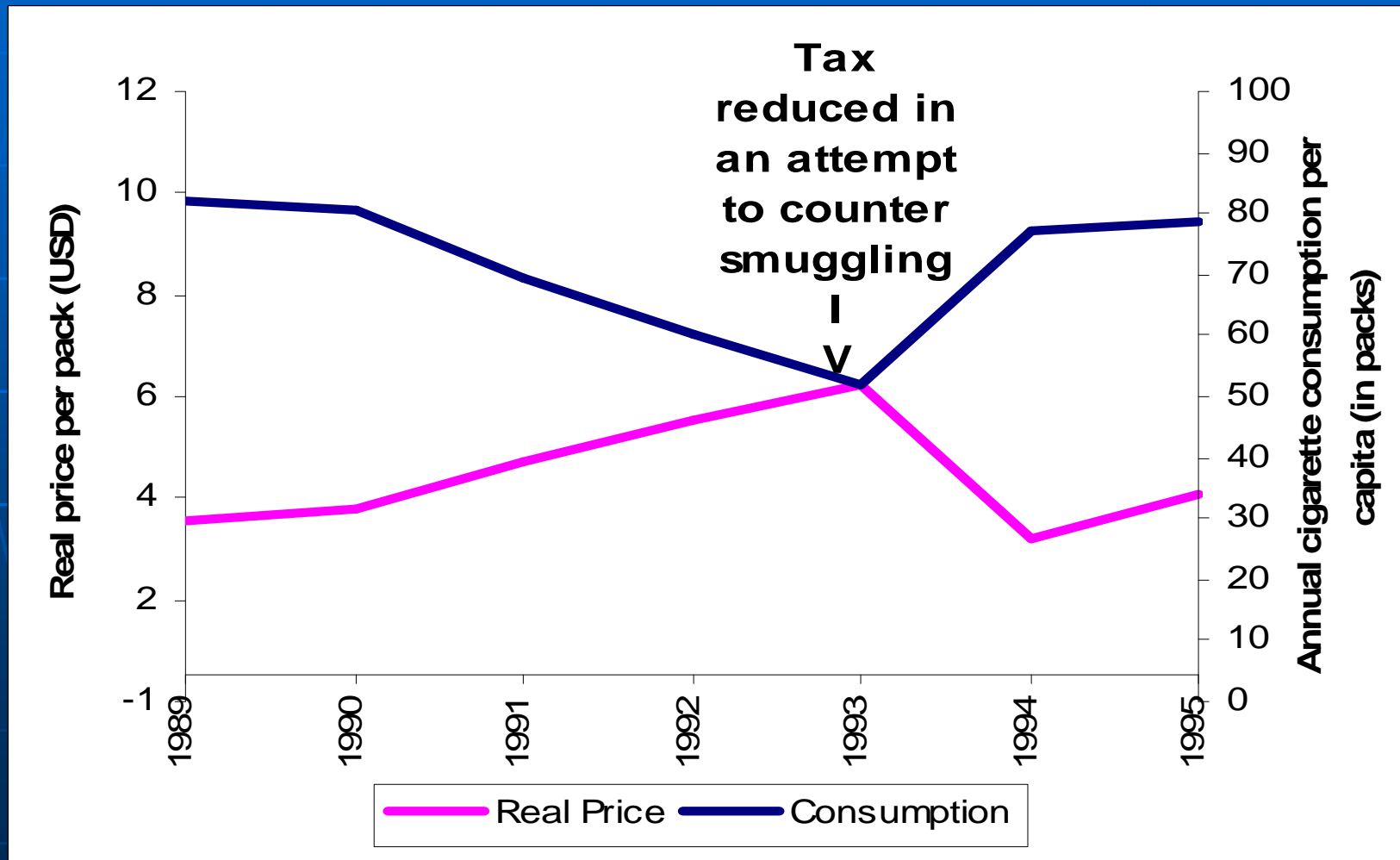
Tobacco Taxes and Revenues

Cigarette Tax and Tax Revenues, New York,
Inflation Adjusted (2008 \$s), 1985-2007



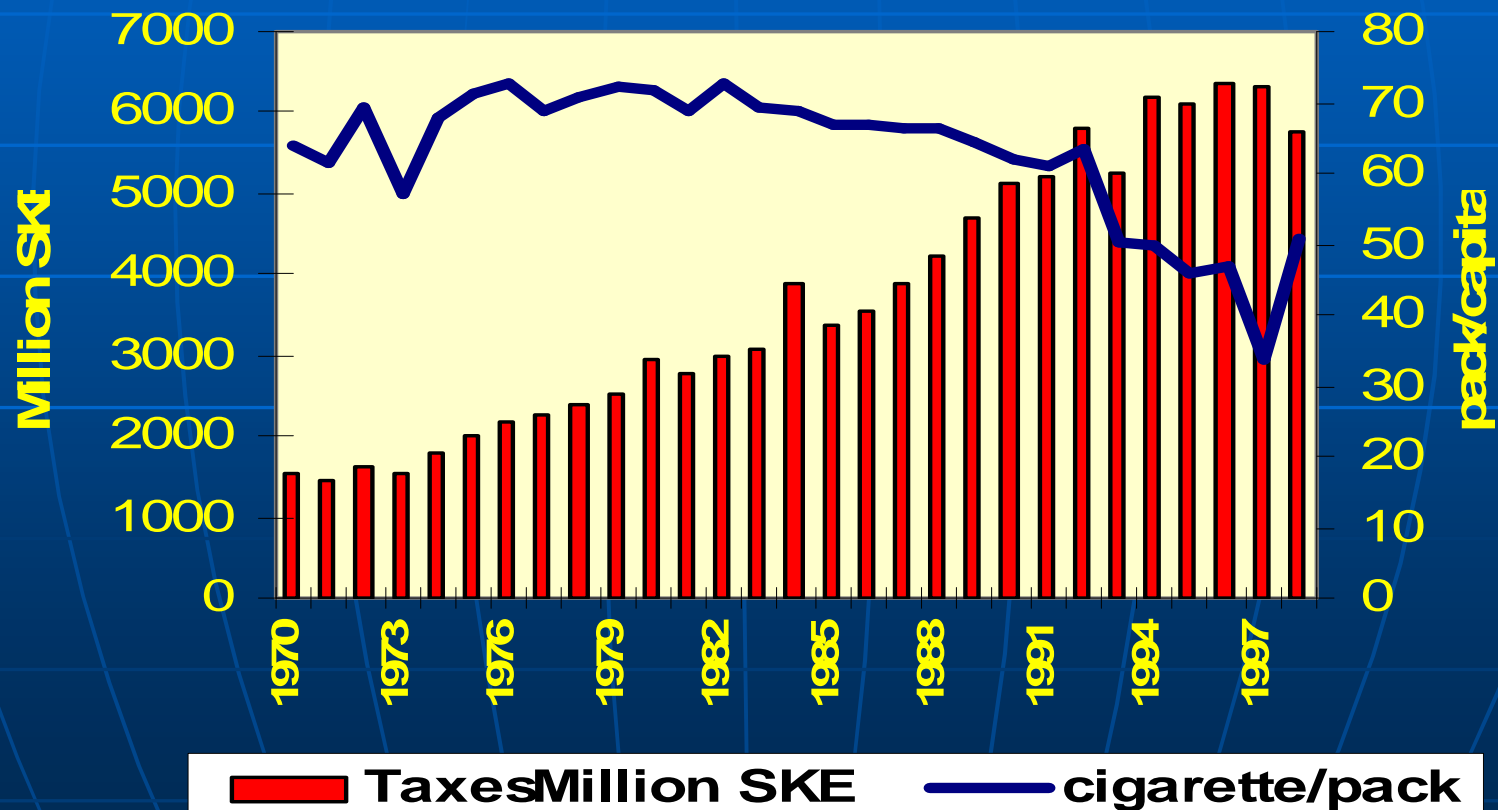
Source: *Tax Burden on Tobacco*, 2008, and author's calculations

Canada Sharply Reduced Taxes in 1993



Sweden Reduced Cigarette Taxes by 17% in 1998

Cigarette Tax Revenue and Consumption in Sweden, 1970-1998



Combating Illicit Trade

- Strong tax administration
 - Prominent, high-tech tax stamps and other pack markings
 - Licensing of manufacturers, exporters, distributors, retailers
 - Export bonds
 - Unique identification codes on packages
- Better enforcement
 - Increased resources
 - Focus on large scale smuggling
- Stronger penalties
- Multilateral tax increases

Combating Illicit Trade

- California's high-tech tax stamp
 - Adopted 2002; fully implemented 2005
 - Coupled with better licensing standards
 - Can be examined with hand-held scanners
 - Thousands of compliance checks, hundreds of citations
 - Generated over \$124 million in revenues during 20 month period (mid-2004 through late 2005)

Combating Illicit Trade

■ Spain

- Reduced share of smuggled cigarettes from estimated 15% in 1995 to 5% in 1999
 - Focus on large scale, container smuggling
 - Strengthened tax administration with new technology and better enforcement
 - Collaboration with France, Andorra, Ireland, UK and the EU Anti-Fraud Office
 - Did NOT focus on individual tax avoidance, street sellers

Combating Illicit Trade

- Framework Convention on Tobacco Control
 - 1st global public health treaty
 - 162 countries representing over 85% of the world's population have ratified
 - U.S. a notable exception
 - Calls for countries to adopt a comprehensive tobacco control policies
 - Higher taxes, bans on marketing, bans on smoking in public places/workplaces, support for cessation, and more

Combating Illicit Trade

■ FCTC and Illicit Trade

- Article 15 addresses illicit trade, calling for:
 - Pack markings to identify where intended for sale and to help identify illicit products
 - Adoption of 'track and trace' regime
 - Stronger penalties and better enforcement
 - Better tax administration
 - International cooperation
- High priority; negotiation of protocol ongoing

Summary

- Higher tobacco product taxes and prices significantly reduce tobacco use
 - Illicit trade in tobacco products reduces but does NOT eliminate effectiveness of higher taxes in reducing use and raising revenue
- Extent of illicit trade difficult to determine
 - Organized smuggling as much as 10% globally
 - Individual tax avoidance, bootlegging may be at similar levels; varies widely across jurisdictions

Summary

- Tax and Price differences a significant factor in individual tax avoidance
 - Other factors as or more important in larger scale, organized smuggling
- Effective options exist for curbing smuggling
 - High tech tax stamps, licensing, enforcement, and higher penalties
 - Multilateral action most effective
 - FCTC Article 15