

# THE EVIDENCE BASE IN SUPPORT OF TOBACCO TAXES



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# First things first

- I will ignore proposal to decrease MI cig tax as means of increasing revenue.
  - *Will not increase revenues*
  - *Will increase smoking*
  - *Will increase Medicaid costs*
  - *Screwball idea of the first order!*



# What an increase in the MI cigarette tax will accomplish

- ① Decrease smoking
  - *Proportionately larger impact on youth*
- ① Decrease disease burden of smoking
  - *Decrease health disparities*
- ① Decrease state's Medicaid burden
- ① Increase state's revenues

# Any undesired side-effects?

- ⦿ Financial burden on lower-income (continuing) smokers (regressive tax)
- ⦿ Enhanced incentive for smuggling or other non-taxed purchases
  - *Indian reservations*
  - *Online*
- ⦿ Loss of jobs due to reduced cig sales
- ⦿ Incentive to shift to other tobacco products (unless comparable OTP tax increase)
  - *Is this necessarily undesirable?*

# How do we know what we know?

- ① > 100 studies of price elasticity of demand for cigarettes
- ① Sizable body of research on revenues generated, Medicaid cost consequences, smuggling, etc.

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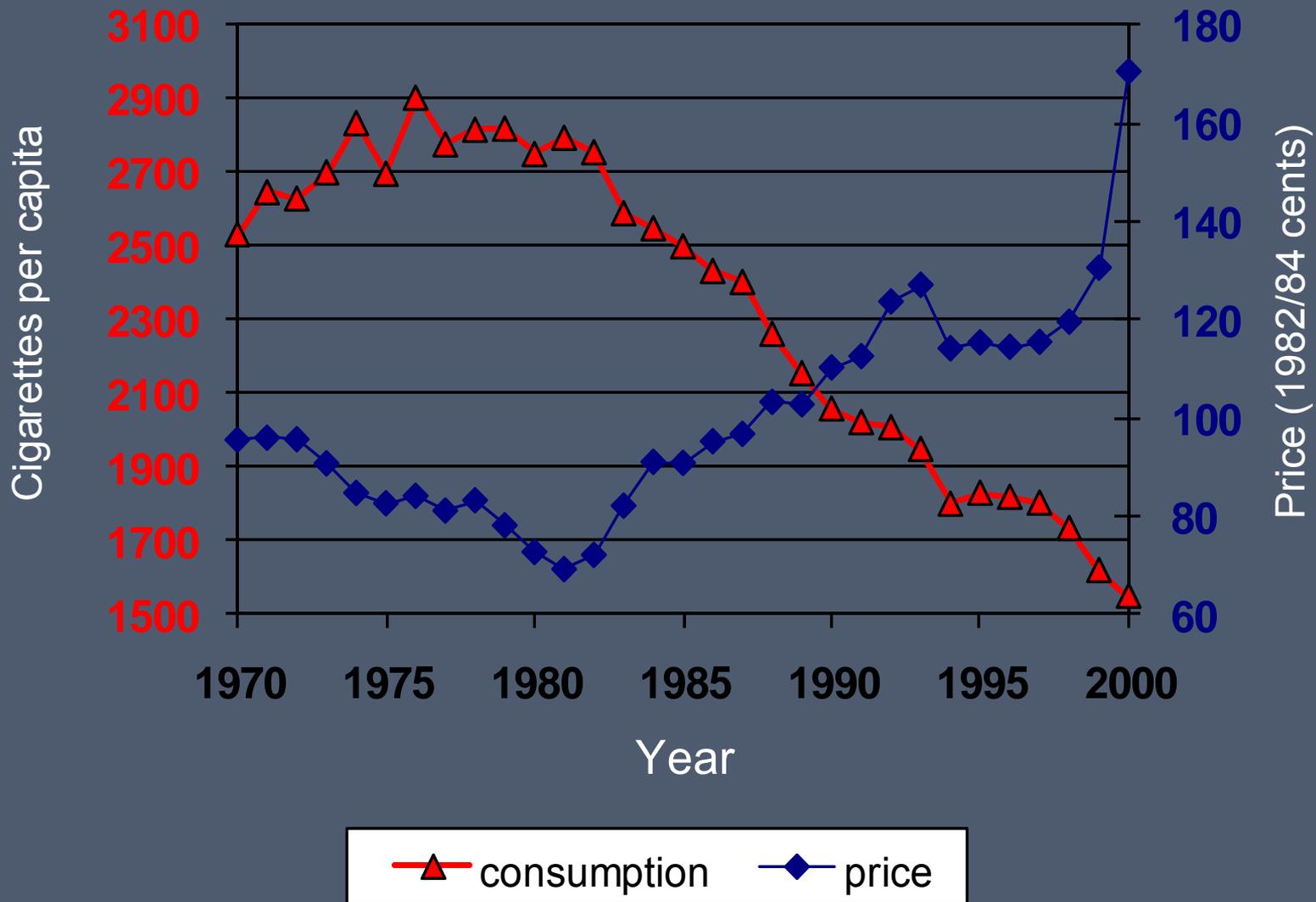


# Impact on smoking: Adults



- ◎ Price elasticity of demand = -0.3 to -0.4
  - *Meaning: 10% increase in price of cigarettes → 3-4% decrease in quantity of cigs demanded*

# Real cigarette prices & per capita consumption US, 1970-2000



# Impact on smoking: Adults



- ◎ Price elasticity of demand = -0.3 to -0.4
  - *Meaning: 10% increase in price of cigarettes → 3-4% decrease in quantity of cigs demanded*
  - *Approximately 1/2 quitting, 1/2 reduction in daily consumption*
- ◎ Poorer smokers more price-responsive than more affluent smokers
  - *Hence, tax increase has bigger impact on poorer smokers – the largest group of smokers*
    - Reduces disparities in smoking and in health



# Impact on smoking: Youth

- ◎ Price elasticity of demand 2-3 times greater than that of adults
  - *10% increase in cig price → 6-12% decrease in demand for cigs*
- ◎ Specific mix of impacts on initiation, quitting, daily consumption not well documented
  - *But price ↑ definitely → youth smoking ↓*

# Effect of \$1 increase in MI excise tax on cig smoking in MI

- Current price/pack  $\approx$  \$6.40
- \$1 tax increase = 15.6% price increase
- Effect on adults
  - 4.7-6.3% decrease in total consumption
  - 2.4-3.2% quitting
    - Implies 36,000-48,000 adults quit as result of \$1 tax increase

# Effect of \$1 increase in MI excise tax on cig smoking in MI (cont'd.)

## Effect on youth

- *9.4-18.9% decrease in total consumption*
- *If  $\frac{1}{2}$  = quitting or not starting, implies 5,000-10,000 fewer high school kids smoking*



# Health impact of \$1 tax increase *(if maintained in real terms)*

- ④ 400-600 fewer smoking-produced deaths/year in MI
- ④ 8,000-12,000 fewer people disabled by smoking each year



# Impact on Medicaid of \$1 increase in cig tax

- \$25-30M reduction in smoking-related expenditures per year\*

\* Crude “ball-park” estimate.



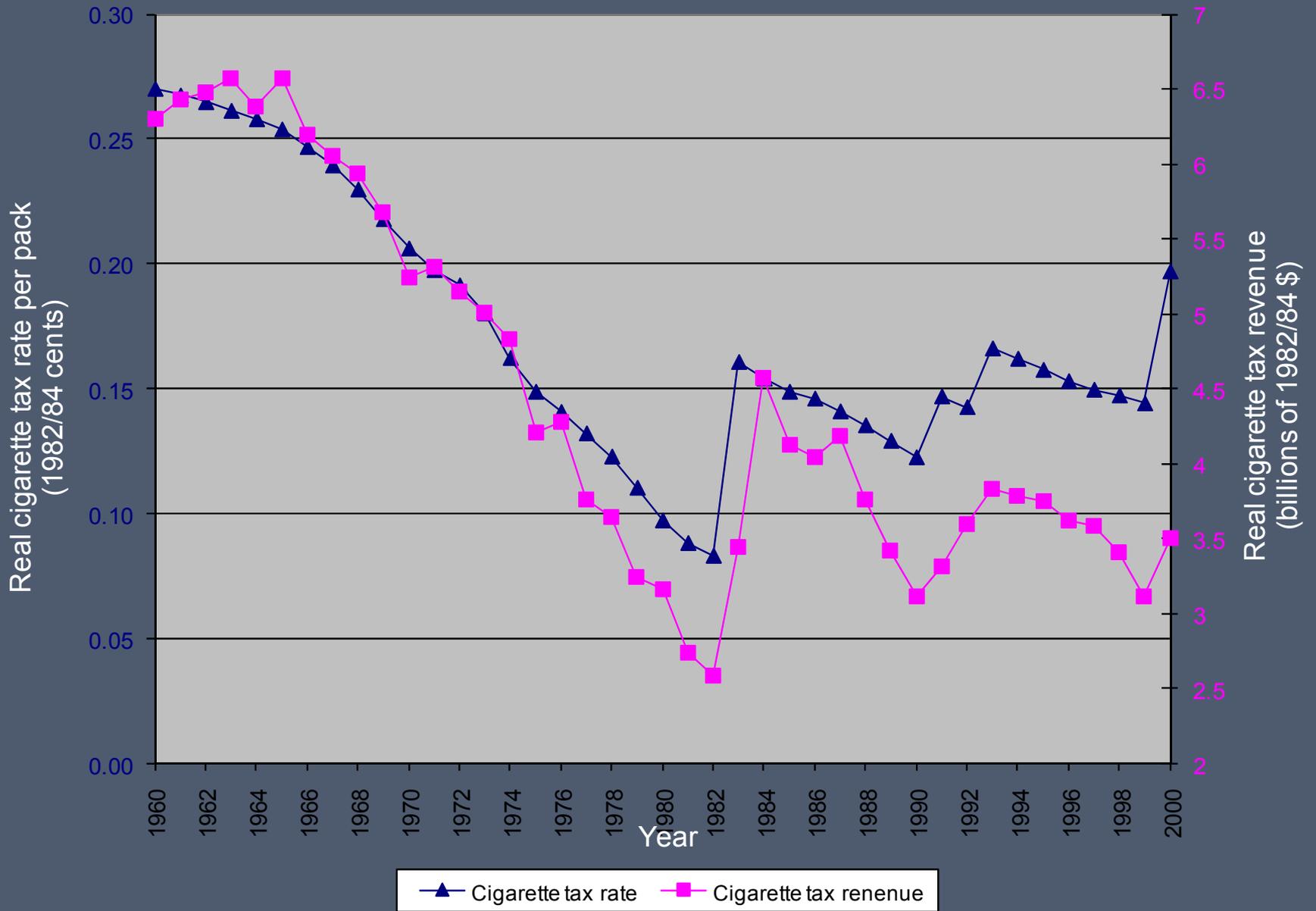
# Tax revenue implications

- Cig tax revenue in FY09 = \$986M
- With \$1 tax increase, and allowing for 5.5% ↓ in quantity of cigs sold, revenue ↑ to \$1.4B



- *Revenue gain of \$400M or 40%*
- *Ignores impact on revenues from OTPs (\$50M in FY09)*
  - ↑ a little whether or not their tax rates increased
- *Does not factor in changes in smuggling and other sources of non-taxed cigs (small)*
  - Revenues ↓ a little

# Federal cigarette tax rate & cigarette tax revenue in the US 1960-2000



# Other revenue implications

- Smoking causes estimated \$4B in productivity losses in MI each year
  - *Decreased smoking → productivity ↑ and hence income tax revenue ↑*
    - Benefits to private sector
    - Benefits to gov't.



# Cigarette tax increase is a *Win-Win-Win-Win!*

- ① Decreases smoking
- ① Increases health
- ① Decreases health care costs, especially for the state (Medicaid)
- ① Increases state revenues, directly and indirectly

**But...**

Those pesky negatives...

# Financial burden on low-income smokers: The problem

- ◎ Real, and potentially significant
  - *Think of effect of \$1/pack increase on couple who together smoke 2 packs/day and earn \$20,000/year*
- ◎ Cigarette tax is regressive (equity)
  - *But tax increase may not be regressive!*
    - More low-income smokers quit than high-income
    - But even if tax increase not regressive, burden on continuing smokers is substantial

# Financial burden on low-income smokers: The response

- ◎ Tax increase has progressive impact on health
  - *Smoking = a major source of health disparities*
  - *Tax increase = policy tool to reduce disparities*
- ◎ Gov't. should devote portion of new revenues to assisting low-income smokers with cessation
- ◎ Still, equity issue doesn't "disappear"

# Smuggling: The problem

- ⦿ OH tax = \$1.25/pack
- ⦿ IN tax = \$0.995/pack
- ⦿ MO = \$0.17/pack
- ⦿ Incentive for smuggling
  - *Formal organized crime*
  - *Informal cross-border shopping*
  - *Indian reservations + online*
- ⦿ Mackinac Center estimated MI's smuggling rate in 2009 at 26%



# Smuggling: The reality

- My calculations – based on simple arithmetic (smoking rates and MI gov't. revenues) – indicate smuggling  $\leq 13\%$
- \$1 tax  $\uparrow$  = 50%  $\uparrow$  in tax *rate*
- Consumption  $\downarrow$  by 5-6%
- Tax revenue *must*  $\uparrow$  even with substantial smuggling
- Smuggling a function of many factors – not just price – including law enforcement

# Job loss: The alleged problem



- Smoking ↓ due to tax ↑ creates job losses, especially in retail

# Job loss: The reality

- Approximately  $\frac{1}{2}$  of spending on cigarettes is “exported” to cig-growing and manufacturing states
  - *Compares with  $\frac{1}{4}$  for expenditures on all goods & services in MI*
- Reduced spending on cigs in MI → increased spending on other goods & services
  - *More of that spending stays in MI to create jobs here*
  - *Jobs will increase*



# Shift toward other tobacco products (OTPs): The problem

- Unless OTP taxes raised equivalently, cig price  $\uparrow$  will shift demand toward OTPs
  - *Substituting one bad for another?*

# Shift toward other tobacco products (OTPs): The realities

- Shift will occur to some extent (absent OTP tax increase)
- Conceivable that that's a good thing
  - *OTPs, especially non-combusted (and especially newer low-nitrosamine smokeless products), represent far less risk than cigs*
  - *Example of snus in Sweden at least raises question*



# Bottom line



- ◎ Cigarette taxation = most effective means of rapidly reducing cig smoking and its adverse health consequences
- ◎ Popular tax, sometimes even among smokers!
- ◎ Allows gov't. to do well while doing good
  - *Revenues will rise while public health will too*

*Thank you!*

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