Health Taxes: A Global Overview of the Evidence

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Sin Tax Policy Reform
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Overview

• Impact of Tobacco, Alcohol, and Sugary Beverage Taxes on Use and Consequences of Use

• Myths and Facts About Economic Impact of Taxes
Impact of Taxes & Prices on Unhealthy Behaviors
"Sugar, rum, and tobacco, are commodities which are nowhere necessaries of life, which are become objects of almost universal consumption, and which are therefore extremely proper subjects of taxation."
Tobacco Consumption and Cigarette Prices
New Zealand, 1990-2013, Inflation Adjusted

Price per Pack, 2014 NZ Dollars

Tobacco, Grams per Capita

Sources: EIU, World Bank and OECD

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Cigarette Sales and Cigarette Prices
Philippines, 2002-2016, Inflation Adjusted

Cigarette Sales, Millions
Price (2016 pesos)

Sources: Euromonitor, World Bank, and Authors’ Calculations
Adult Prevalence & Price, Brazil
Inflation Adjusted, 2006-2013

Sources: Ministry of Health, Brazil; EIU; World Bank

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Cigarette Price & Youth Smoking Prevalence
Chile, 2000-2015

Source: Paraje, 2017

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Price, Consumption & Lung Cancer, France
Inflation Adjusted, 1980-2010

Lung cancer death rates per 100,000 (divided by four): men age 35-44
Relative price
# cigarettes/adult/day

Sources: Jha & Hill, 2012

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Chapter 4, Conclusion 1:

A substantial body of research, which has accumulated over many decades and from many countries, shows that significantly increasing the excise tax and price of tobacco products is the single most consistently effective tool for reducing tobacco use.
Taxes & Tax Revenues, South Africa
Inflation Adjusted, 1961-2012

Sources: Blecher & Van Walbeek, 2014

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Cigarette Tax and Revenues
Ukraine: 2008-2015

Average excise rate for cigarettes – increased 10-fold
Cigarette Tax Revenue – increased 6-fold

Source: Syvak and Krasovsky, 2017
Tobacco Control Funding & Youth Smoking
United States, Inflation Adjusted, 1991-2009

Year

total state program funding

high school prevalence

$ Millions (FY10 dollars)

Percent Current Smoking

Source: ImpacTeen Project, UIC; YRBS

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Tobacco Taxes and Revenues

The Addis Ababa Action Agenda states:

“… price and tax measures on tobacco can be an effective and important means to reduce tobacco consumption and health-care costs, and represent a revenue stream for financing development in many countries”
Alcohol Taxes, Prices & Drinking

- Extensive econometric and other research shows that higher prices for alcoholic beverages significantly reduce drinking:
  - 10 percent price increase would reduce:
    - Overall consumption by 5.1% to 7.7% in HICs
    - Overall consumption by 6.4% in LMICs
  - Tax/price increases reduce all aspects of drinking
    - Prevalence, frequency, intensity
  - Generally larger effects on youth and young adults

Source: Chaloupka, et al., forthcoming

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Distilled Spirits Prices & Sales
Ukraine, Inflation Adjusted, 2002-2016

Million Litres

Price per Litre, 2016 UAH

Sales Volume, Million Litres  Real Price

Sources: Chaloupka, et al., forthcoming

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Alcohol Taxes, Prices & Consequences

• Econometric and other research shows that higher prices for alcoholic beverages significantly reduce:
  • Drinking and driving, traffic crashes, and motor-vehicle accident fatalities
  • Deaths from liver cirrhosis, acute alcohol poisoning, alcohol-related cancers, cardiovascular diseases, and other health consequences of excessive drinking
  • Violence (including spouse abuse, child abuse, and suicide) and other crime
  • Other consequences of drinking, including work-place accidents, teenage pregnancy, and incidence of sexually transmitted diseases

Source: Xin & Chaloupka, 2012; Wagenaar et al., 2010
Federal Beer Tax & Tax Revenues
United States, Inflation Adjusted, 1945-2013

Source: Brewers Almanac, 2013, ATTTB, 2014, and author’s calculations
Prices and Food & Beverage Consumption

Extensive economic research on the effects of prices on food/beverage consumption

- Our recent review concludes 10% increase in own-price would reduce:
  - Sugar-sweetened beverage consumption by 12.1%
  - Fruit consumption by 4.9%
  - Vegetable consumption by 4.8%
  - Fast food consumption by 5.2%

Source: Powell, et al., 2013
Soda Consumption & Obesity
Selected Countries

Source: Soda consumption from Euromonitor, 2011; Obesity prevalence from OECD Health Data, 2005
Change in Soft Drink Affordability  
2000-2013, Selected Countries

Source: Euromonitor, 2015, and author’s calculations

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Soft Drink Prices & Consumption
Percentage Change, 2000-2014, Selected Countries

Source: Euromonitor, 2015, and author’s calculations
Sugary Drink Tax - Mexico

• Mexico implemented peso-per-liter tax on SSBs in 2014
  • Increased prices for SSBs relative to non-taxed beverages
    • about 10% price increase
    • pass through varies by type, size, location
  • Generated nearly 16 billion pesos in new revenue in first year
  • Also implemented a ‘junk food’ tax of 8% at the same time

Sources: Colchero, et al., 2015
Impact of SSB Tax on Sales
Mexico, 2007-2016

Significant reductions in SSB sales:
• 6% drop in 2014
• 8% drop in 2015
• 11% drop in first half of 2016

5.2% increases in bottled water sales

OLS - Adjusted for seasonality, the global indicator of the economic activity


Impact of SSB Tax on Household Purchases
Mexico, by Income Group, 2014-2015

Source: Colchero, et al., Health Affairs, 2017
Impact of SSB Tax on Purchases
Mexico, by Purchase Level, 2014

• Greatest impact on heaviest consumers
  – Highest purchasers:
    • 31% of households, purchased average of 157 liters of SSB/capita/yr
      – 10% reduction in purchases following tax
  – Middle purchasers:
    • 40% of households, purchased average of 60 liters of SSB/capita/yr
      – 8% reduction of taxed beverages post-tax
  – Light and non purchasers:
    • Remaining households; small impact on light purchasers

Ng SW, Rivera J, Popkin B, Colchero MA. Did high purchasers respond differently to the excise tax on sugar-sweetened beverages in Mexico?
Oppositional Arguments

Myths & Facts
Cigarette Taxes as Percent of Retail Price
July 2016

WHO, 2017
www.tobacconomics.org
Alcoholic Beverage Excise Taxes by Beverage Type

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.
Sugary Drink Taxes, January 2018

http://www.abc.net.au/news/2018-01-07/calls-for-a-sugar-tax-are-back-so-it-is-going-to-happen/9309386
Oppositional Arguments

- Massive job losses as consumption falls in response to higher taxes and other control policies
- Poor adversely affected by higher taxes
- Increased tax avoidance and tax evasion in response to higher taxes
Excise Taxes and Jobs

Industries tell only part of the story:

- **Focus on the gross impact:**
  - New tax or tax increase will lead to decreased consumption of taxed product
  - Results in loss of some jobs dependent on production of taxed product

- **Ignore the net impact:**
  - Money not spent on taxed product will be spent on other goods and services
  - New/increased tax revenues spent by government
    - **Offsetting job gains in other sectors**
Who Pays & Who Benefits
Turkey, 25% Cigarette Tax Increase

Source: Adapted from Önder & Yürekli, 2014

Change in Consumption

Poorest: -35.3%
Middle: -20.4%
Richest: -18.5%

Change in Taxes Paid

Poorest: -2.2%
Middle: 8.5%
Richest: 9.7%

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Source: Adapted from Önder & Yürekli, 2014
Incremental Revenues for Health and the Poor, Philippines, 2001-2016
Illicit Cigarette Market Share & Cigarette Prices, 2012

Sources: NCI & WHO, 2016

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Illicit Cigarette Market Share & Corruption, 2011

\[ y = -0.0131x + 0.2028 \]
\[ R^2 = 0.0815 \]

Sources: NCI & WHO, 2016

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Cigarette Consumption: Duty Paid, Illicit, and Cross-Border Shopping, United Kingdom, 2000-01 – 2013-14

Source: HM Revenue & Customs, 2014
Conclusions
Conclusions

• Higher tobacco and alcohol taxes, and new sugary beverage taxes will significantly reduce consumption

• Reduced consumption will lead to fewer cases of cancer, cardiovascular disease, diabetes, and other non-communicable diseases

• Counterarguments about negative economic impact false or greatly overstated

• Taxes generally considered one of the “best buys” in NCD prevention
Bloomberg Initiative – UIC

- Build capacity of ‘think tanks’ in selected priority countries and regions to provide local evidence to support tobacco tax reforms and tax increases
- High-level engagement with decision makers to build technical capacity and political support for tobacco tax policy
- Develop/disseminate resources (policy briefs, white papers, etc) on tobacco taxation to build knowledge and support for tobacco tax policy
Technical Assistance
THANK YOU!

For more information:

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