

Lessons from the United States Experience with Tobacco Taxes

Jason Furman

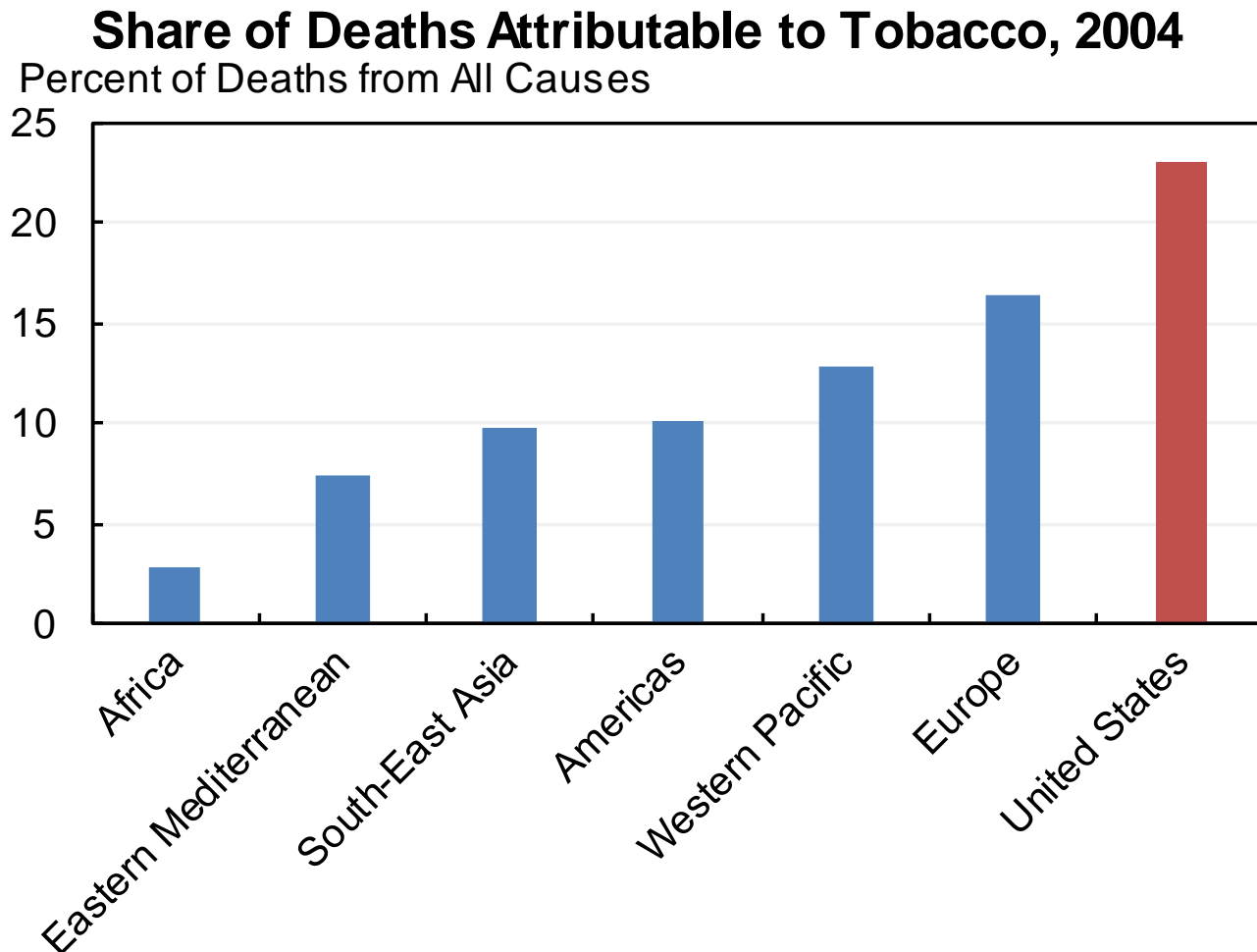
Senior Fellow, PIIE

The World Bank Group

Washington, DC

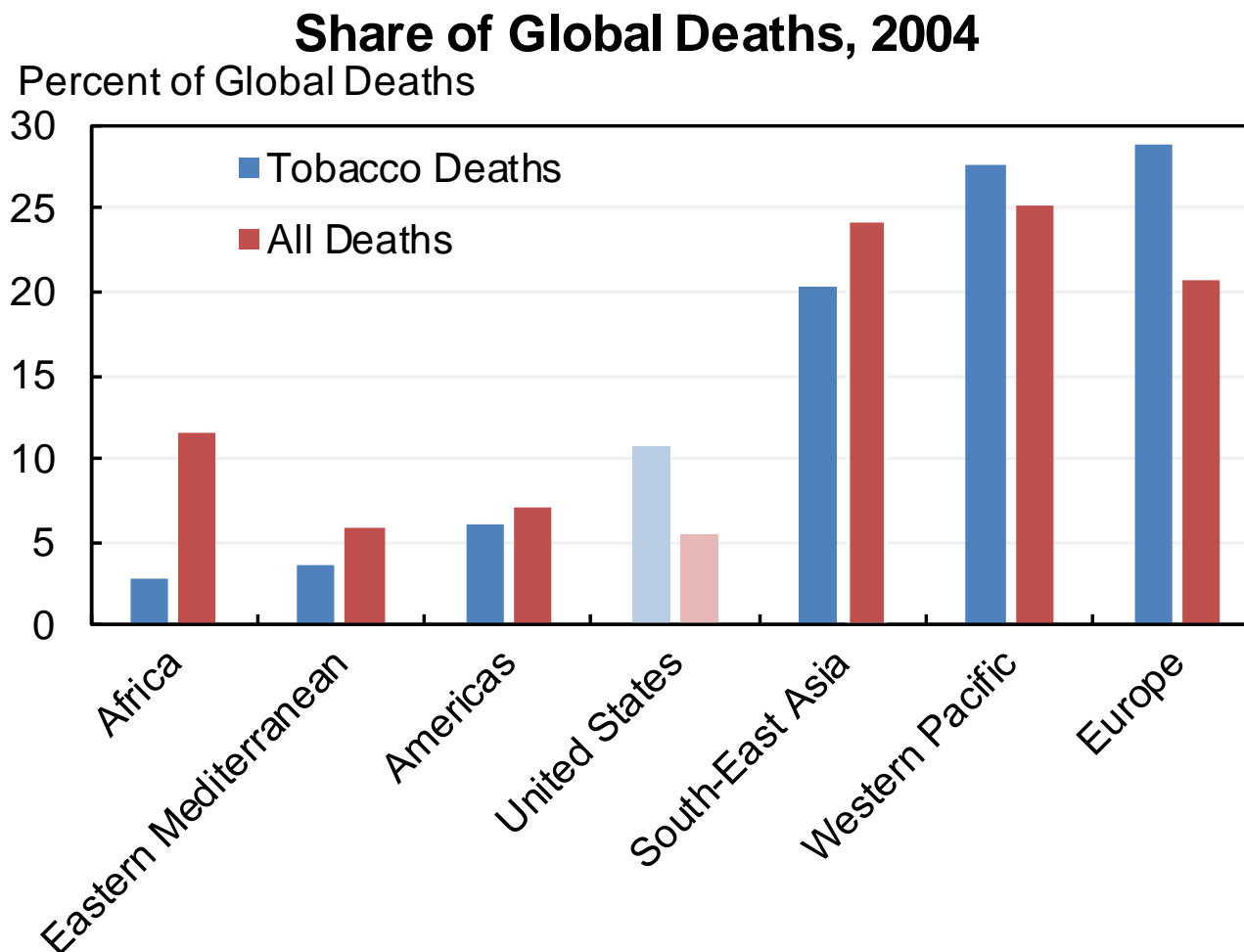
April 19, 2017

Nearly 25 Percent of Deaths in the United States Were Attributable to Tobacco in 2004



Note: For population 30 years of age and older. Americas excludes the United States.
Source: World Health Organization; author's calculations.

The United States Accounted for an Outsized Share of Deaths Attributable to Tobacco in 2004

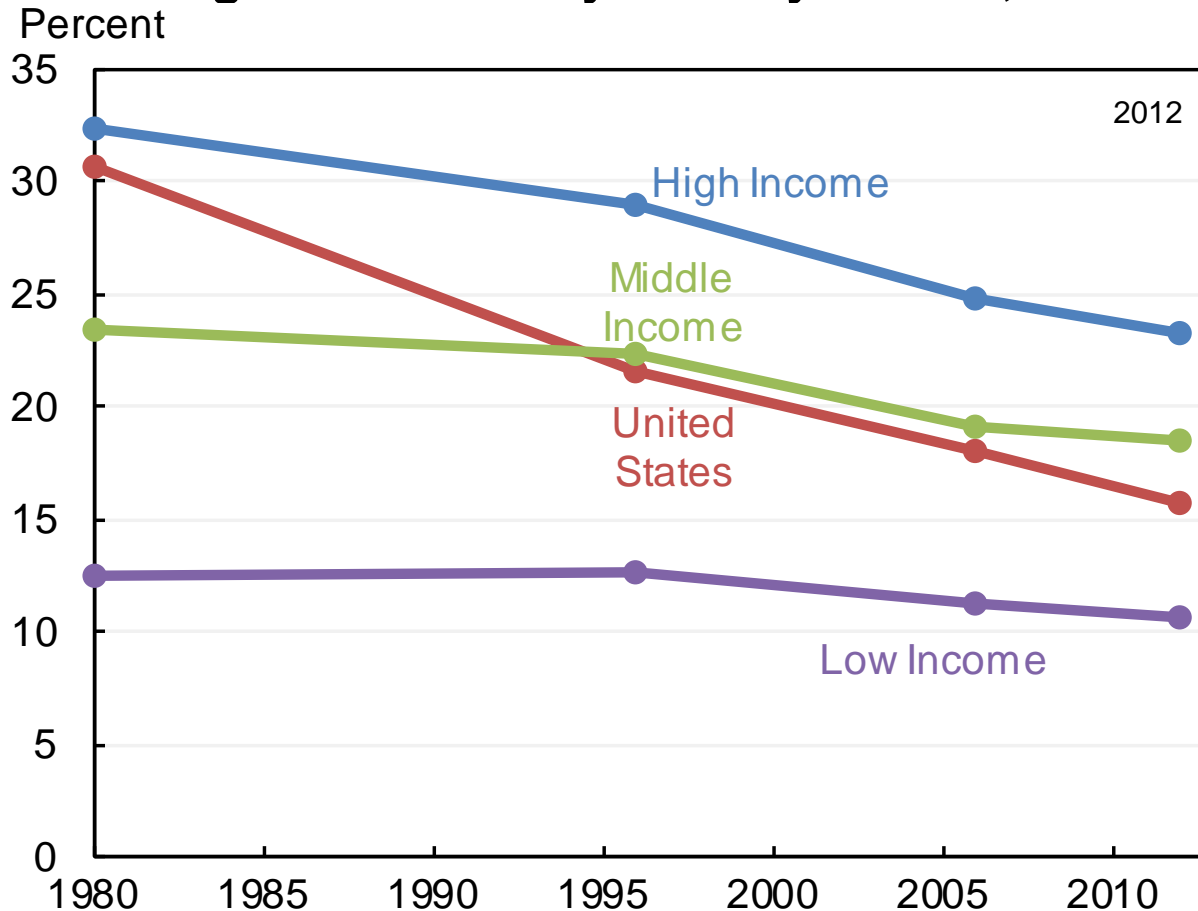


Note: For population 30 years of age and older. Americas excludes the United States.
Source: World Health Organization; author's calculations.

Smoking Rates Have Fallen Particularly Fast in the United States

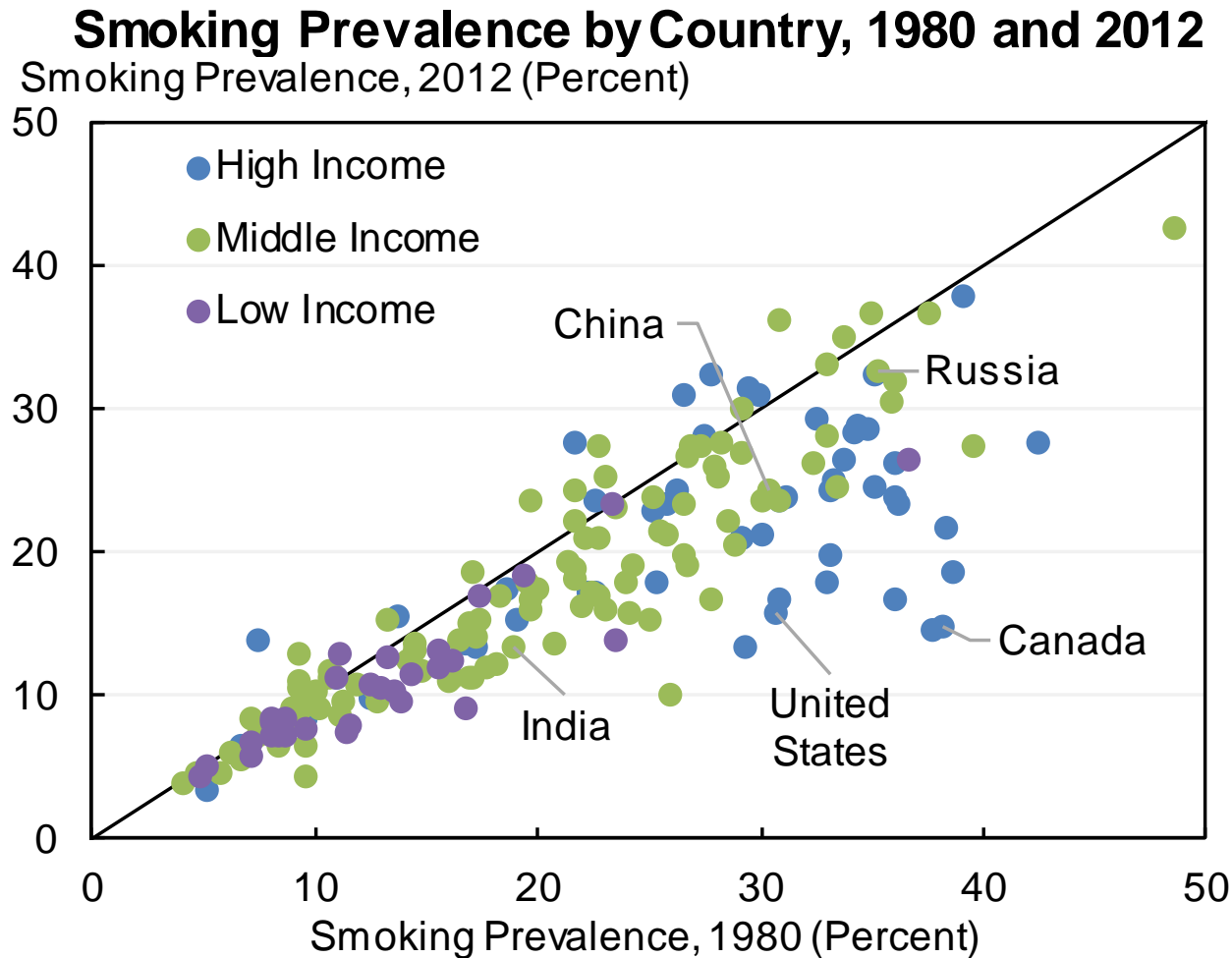


Smoking Prevalence by Country Income, 1980-2012



Note: Data are a population-weighted average within each group. High income excludes the United States.
Source: Institute for Health Metrics and Evaluation; author's calculations.

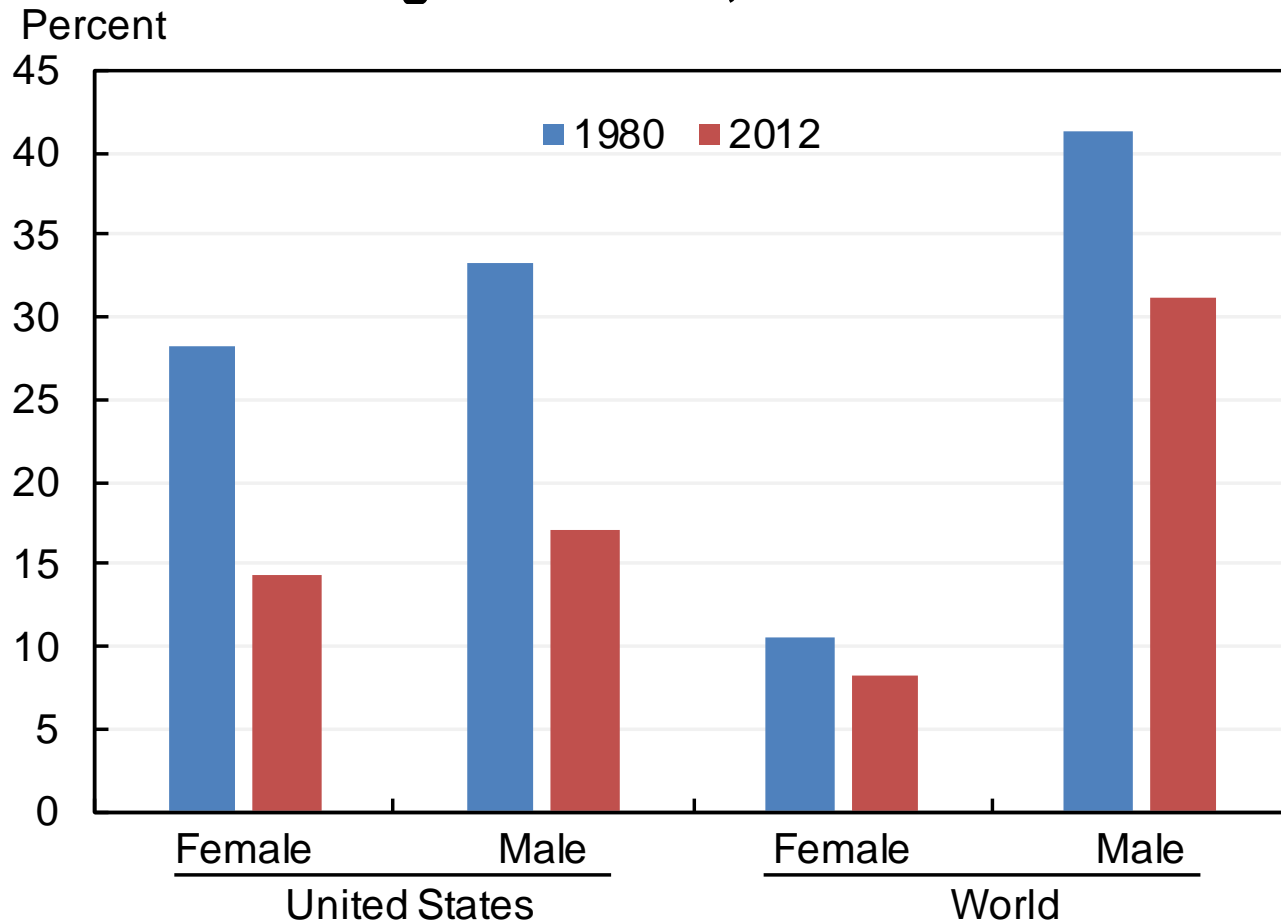
Many Countries Have Seen Reductions in Smoking, Especially Higher-income Countries





Smoking Rates Have Fallen Sharply for U.S. Women and Men Since 1980

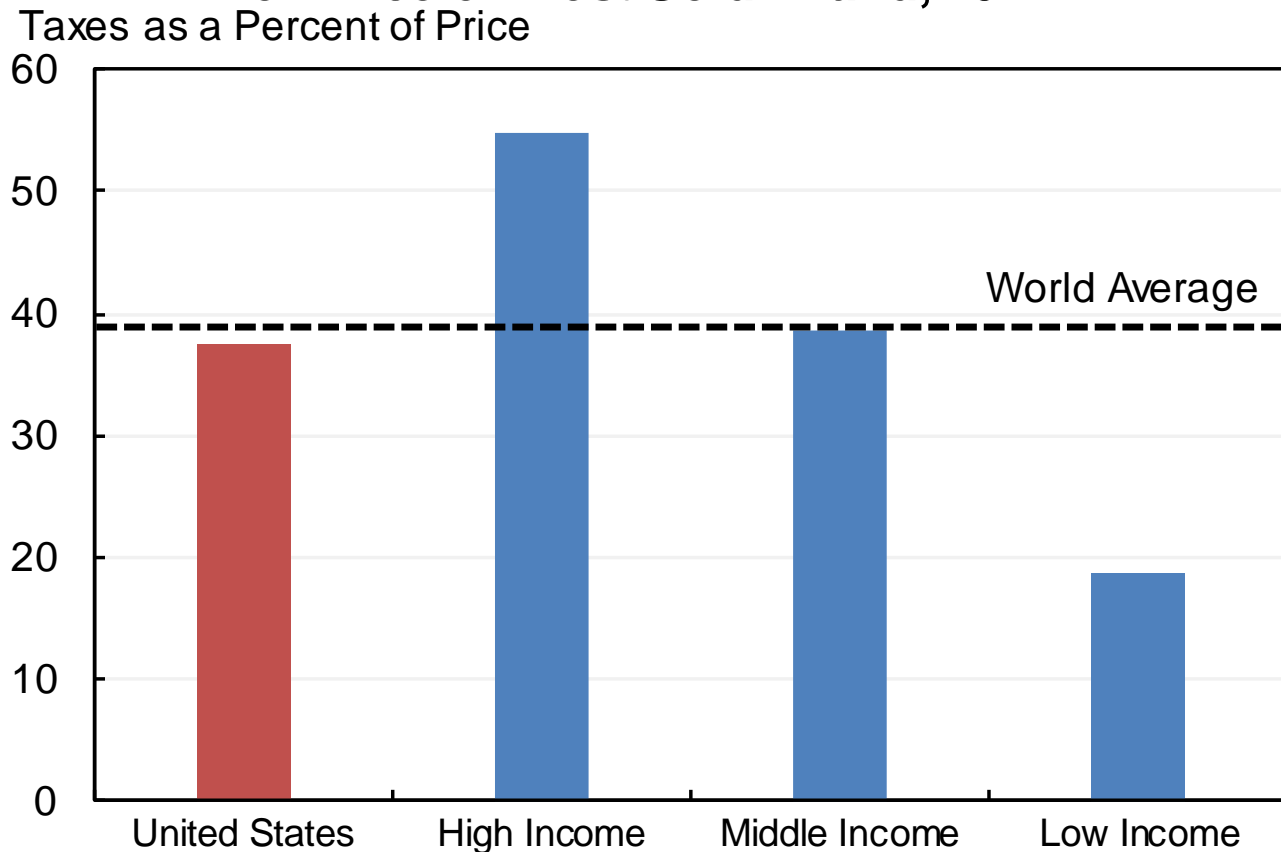
Smoking Prevalence, 1980 and 2012



U.S. Cigarette Taxes Are About Average Compared with the Rest of the World, but Lower Than Other High Income Economies



Estimated Cigarette Excise Taxes as a Percent of Price of Most Sold Brand, 2014



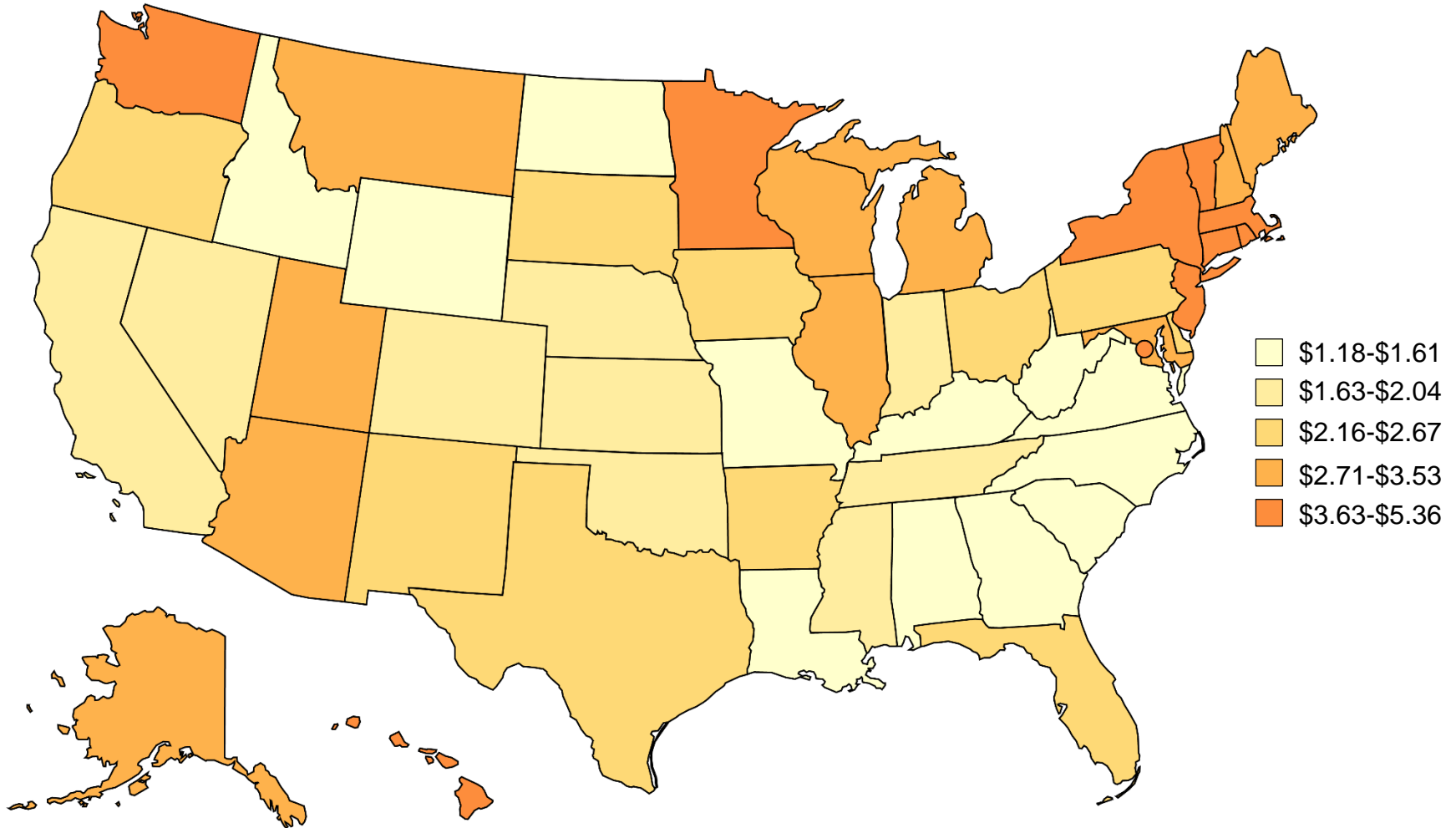
Note: Data are a population-weighted average within each group. High income excludes the United States.

Source: Tobacco Free Initiative; author's calculations.



Cigarette Taxes Vary Widely Across States

Combined Federal and State Cigarette Taxes per Pack, 2014

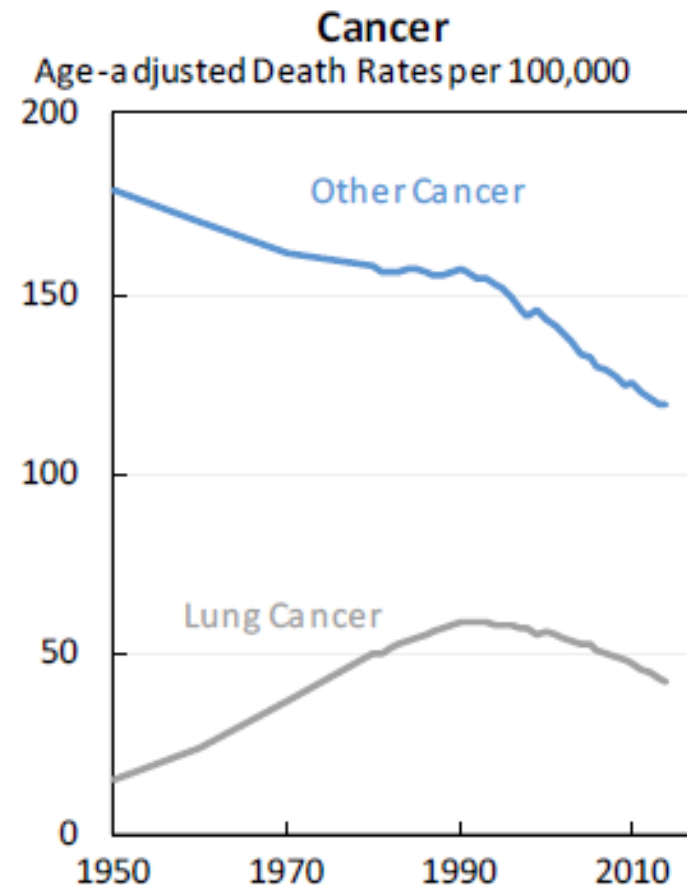
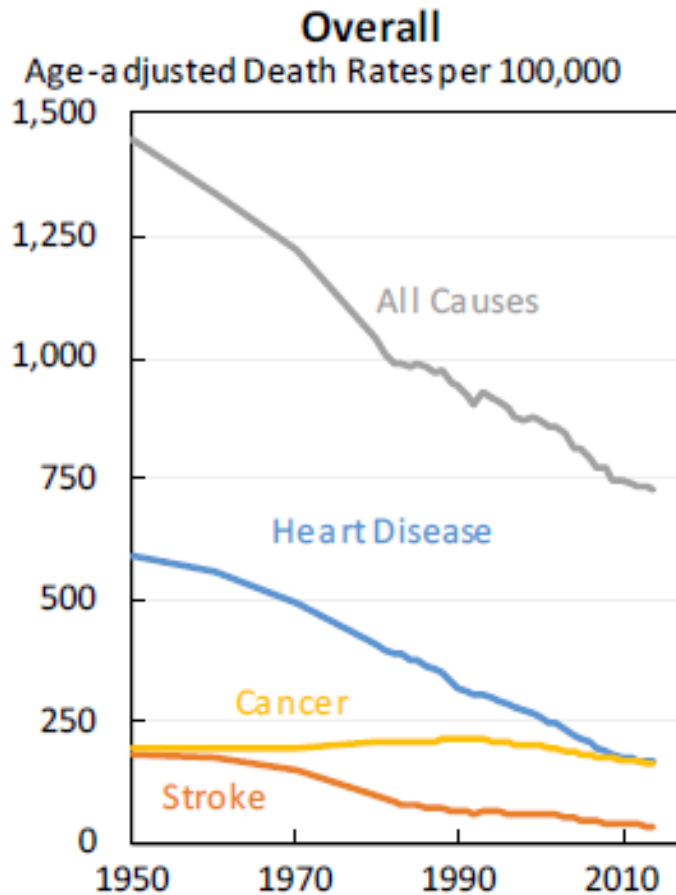


Note: The Federal cigarette tax is \$1.01 per pack.
Source: Orzechowski and Walker (2015).

Overall Age-Adjusted Death Rates Have Fallen Sharply Since the 1950s, but the Decline for Lung Cancer is More Recent



Age-adjusted Death Rates, 1950-2014



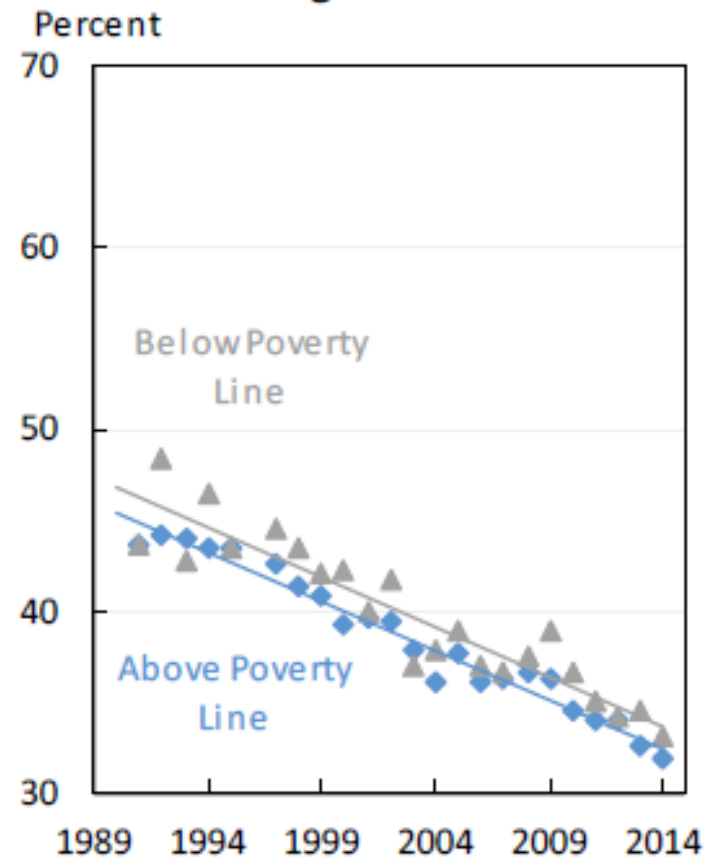
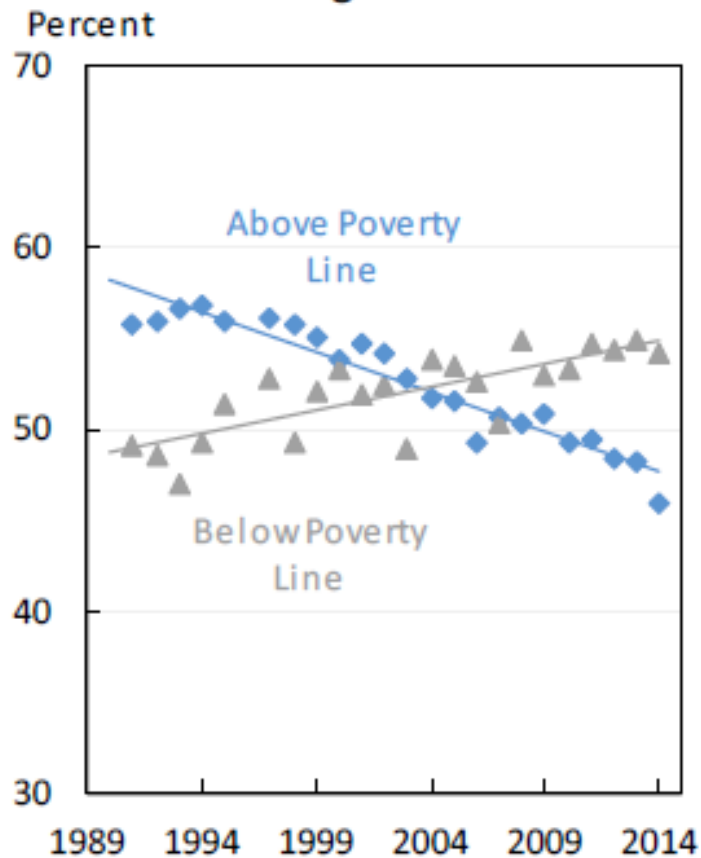
Lesson #1: Smoking Plays A Major Role in Both Mortality and Inequality of Mortality



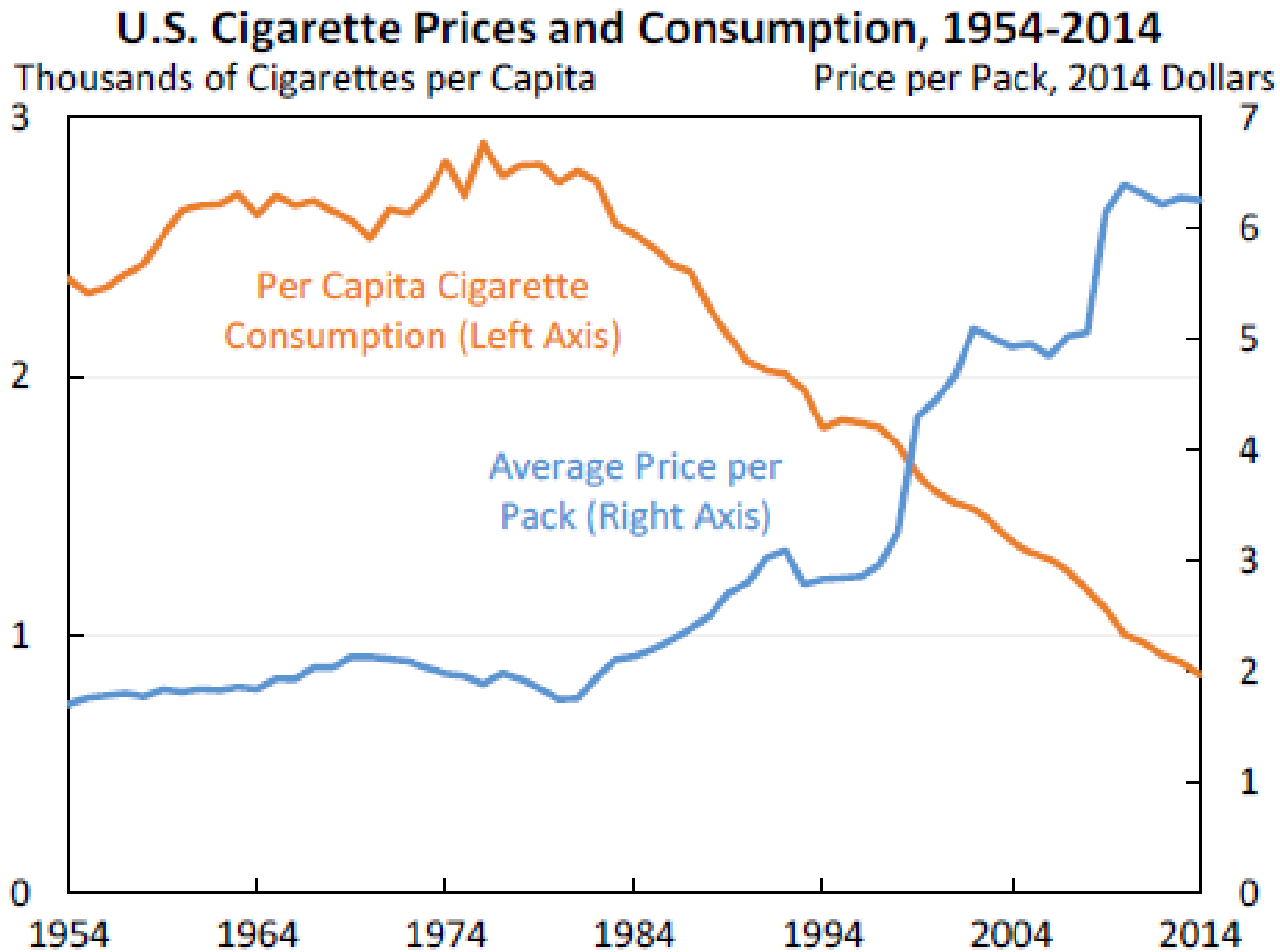
Percent that Ever Smoked by Poverty Status, 1991-2014

Age 50+

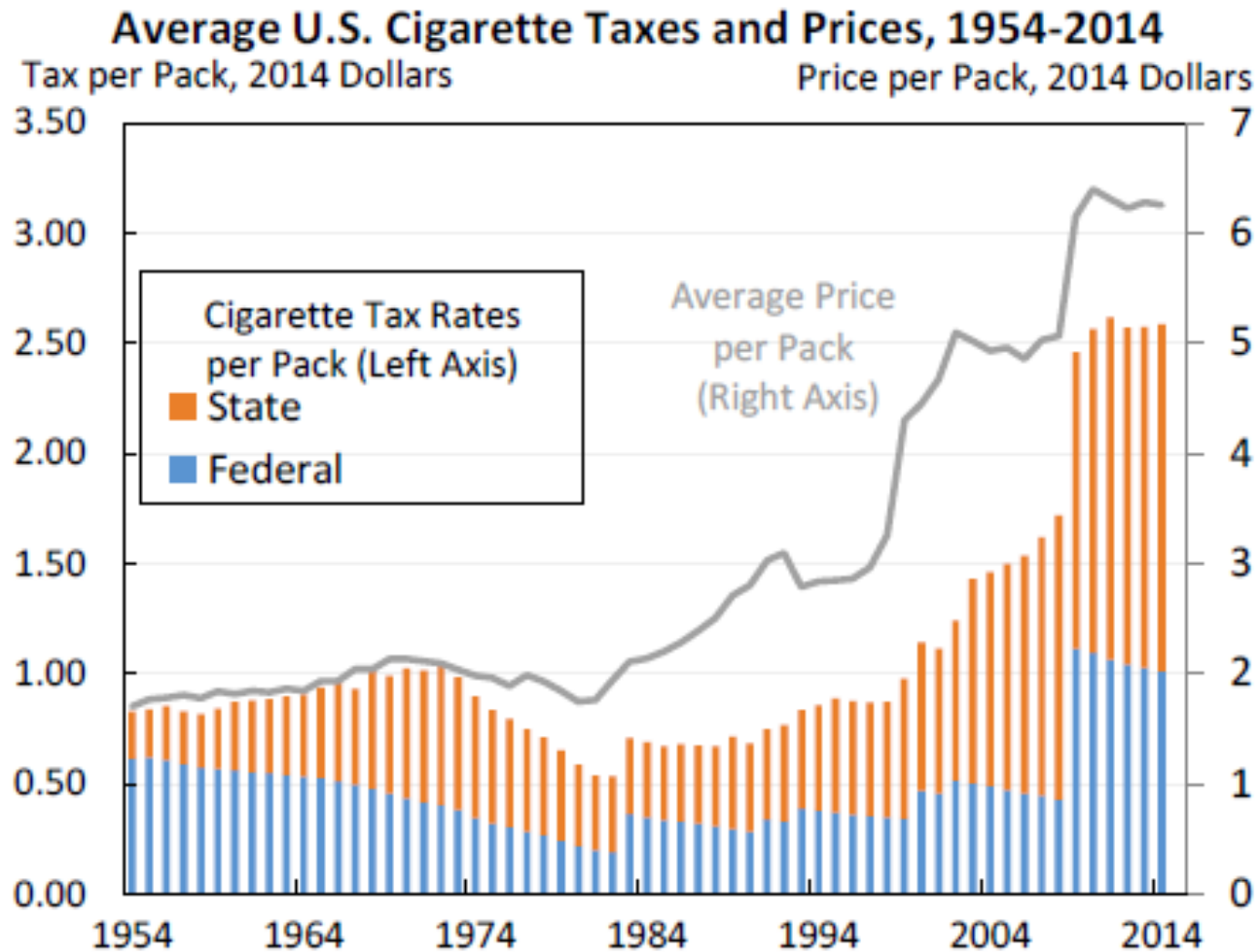
Ages 18-40



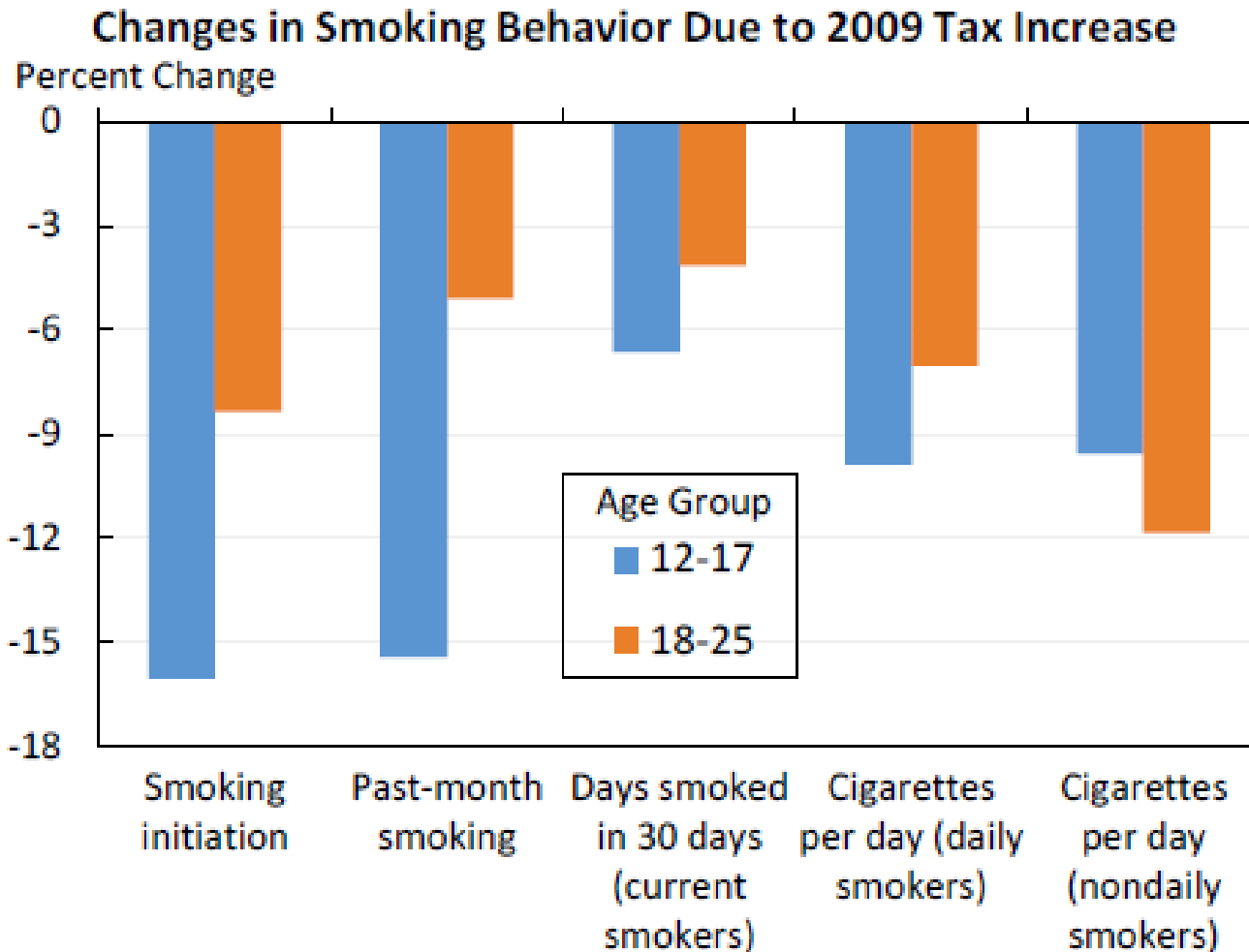
Lesson #2: Price Plays an Important Role in Smoking



Lesson #3: Cigarette Taxes Play an Important Role in Cigarette Prices



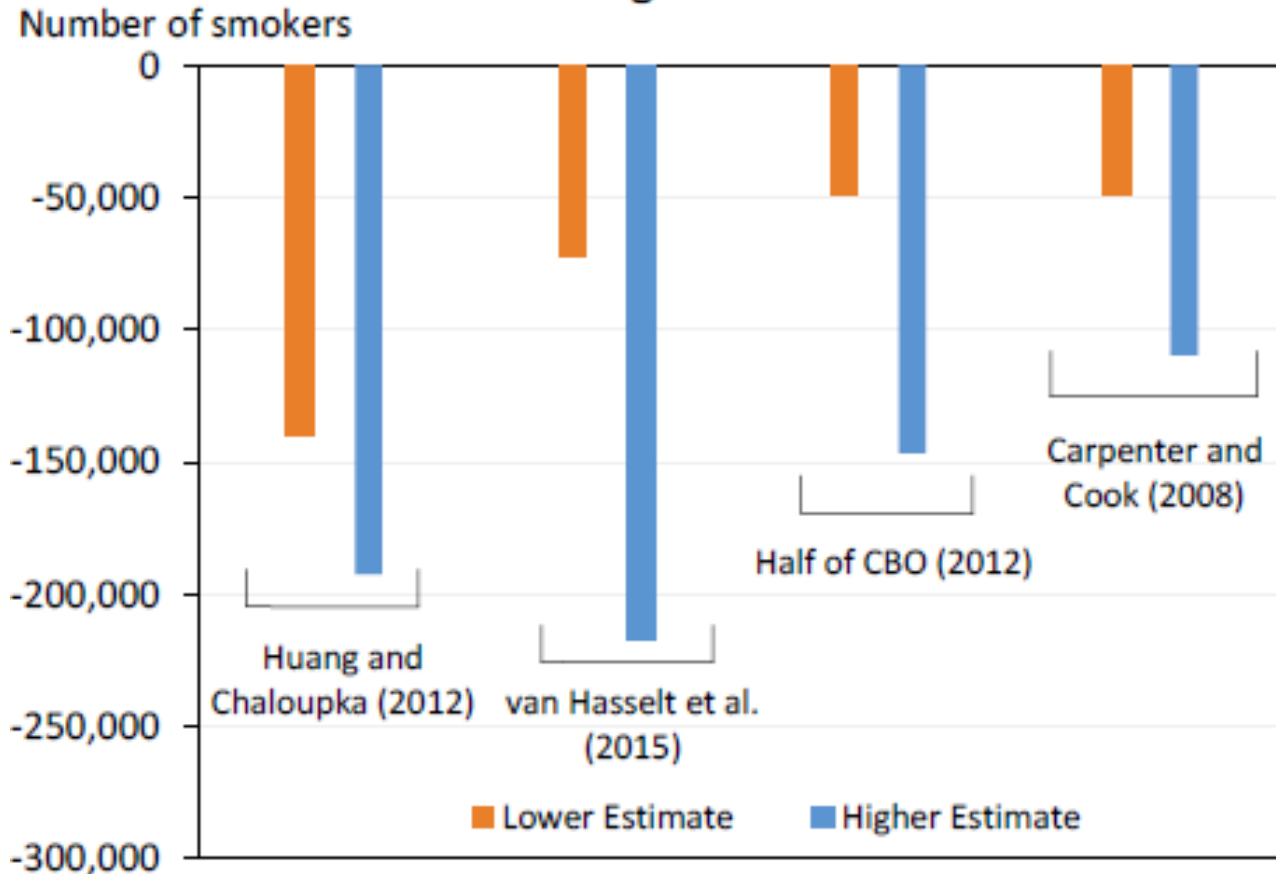
Lesson #4: Cigarette Taxes Have Large Aggregate Benefits for Public Health



The 2009 Cigarette Tax Increase Could Have Plausibly Reduced the Number of Smokers in a Cohort of 18 Year-olds by 45,000-220,000 People



**Estimated Reduction in Smokers in a Cohort of 18 Year-Olds
Due to the 2009 Cigarette Tax Increase**

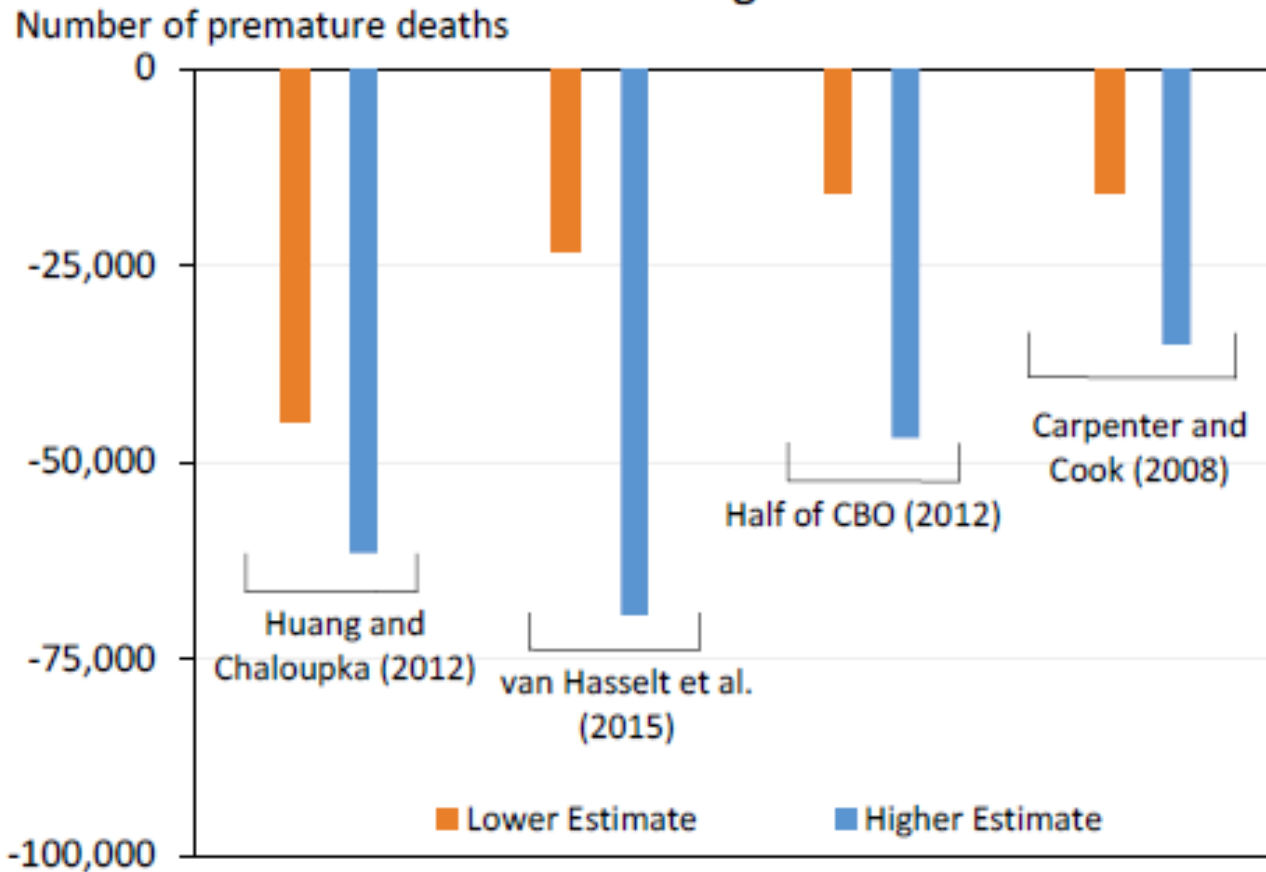


Note: Lower estimate for van Hasselt et al. (2015) is based on results for 18-25 year-olds; higher estimate is based on results for 12-17 year-olds.
Source: Huang and Chaloupka (2012); van Hasselt et al. (2015); CBO (2012); Carpenter and Cook (2008); CEA calculations.

And Reduced the Number of Premature Deaths Due to Smoking by 15,000-70,000 per Cohort



Estimated Reduction in Premature Deaths in a Cohort of 18 Year-Olds Due to the 2009 Cigarette Tax Increase



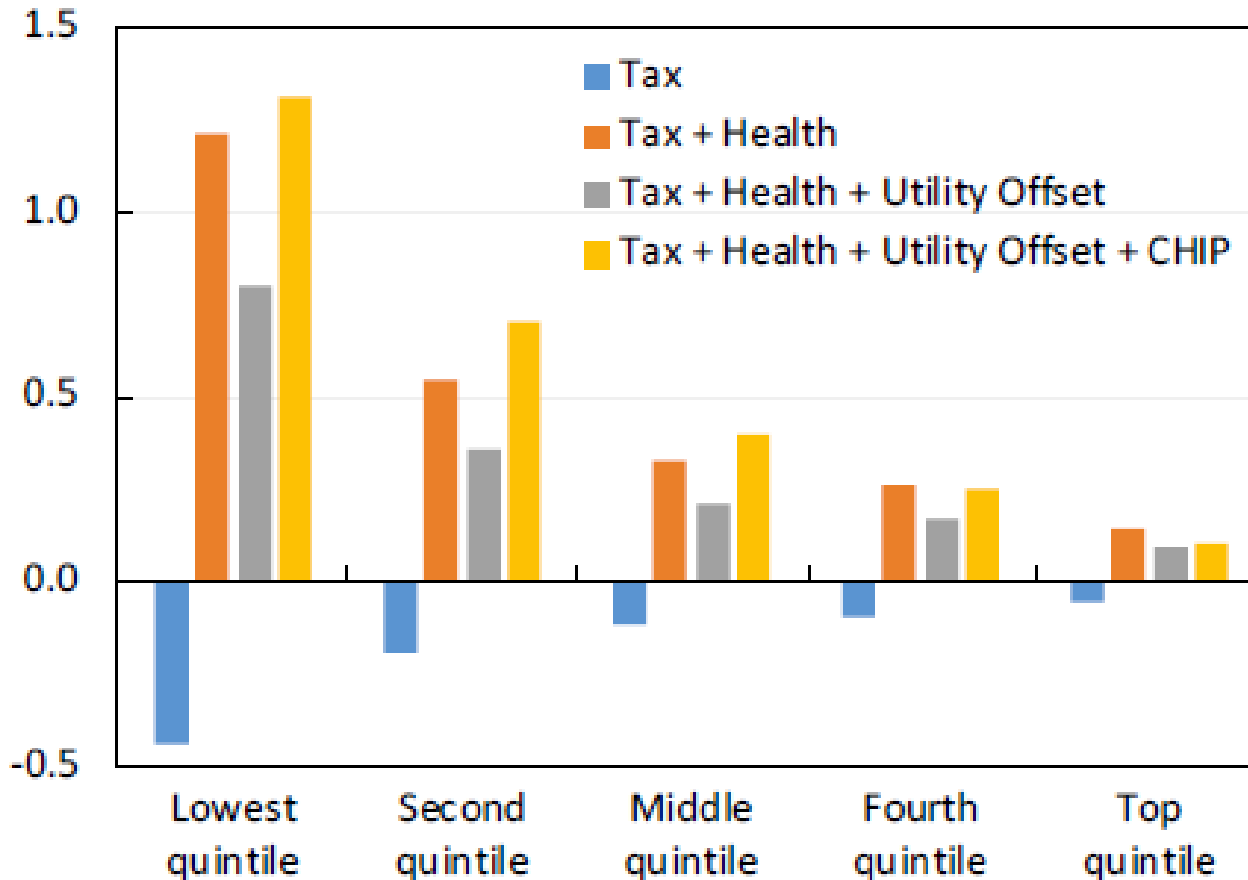
Note: Lower estimate for van Hasselt et al. (2015) is based on results for 18-25 year-olds; higher estimate is based on results for 12-17 year-olds.
Source: Huang and Chaloupka (2012); van Hasselt et al. (2015); CBO (2012); Carpenter and Cook (2008); CEA calculations.

Lesson #5: Tobacco Taxes Disproportionately Benefit Lower-Income Households



Illustrative Distribution of the 2009 Tobacco Tax Increase

Benefits as Percent of Pre-Tax Income



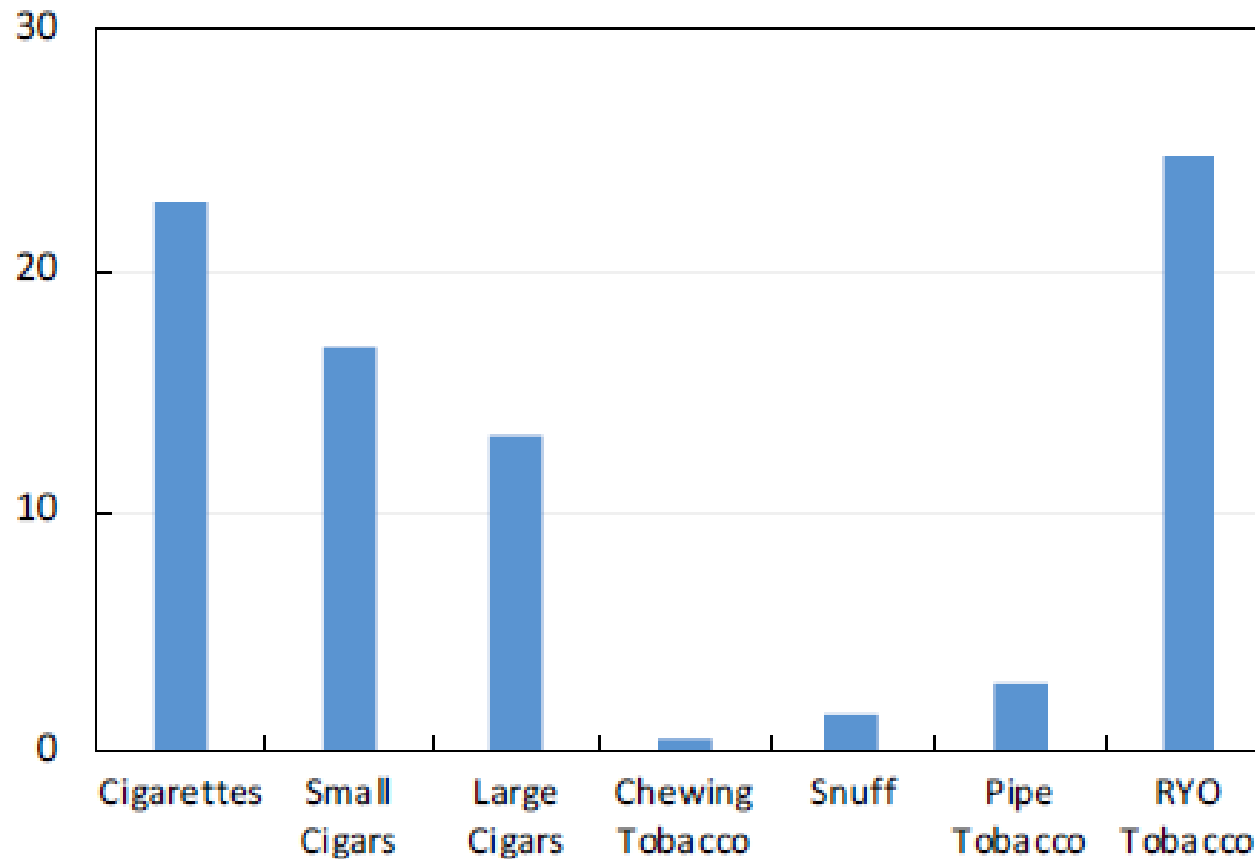
Note: The illustrative distribution is computed by allocating the burden of tobacco taxes according to the distribution of tobacco taxes reported in Rosenberg (2015), allocating \$37.5 billion in health benefits proportional to the tax burden, allocating a \$9.4 billion utility offset proportional to the health benefits (and thus also proportional to the tax burden), and allocating CHIP benefits equal in value to the tax increase proportional to the distribution of children with CHIP coverage in the March CPS.
Source: CEA calculations.

Lesson #6: It Is Really Important To Tax Similar Tobacco Products at Similar Rates



**Approximate Tax Rates Per Pound of Tobacco
by Product, 2016**

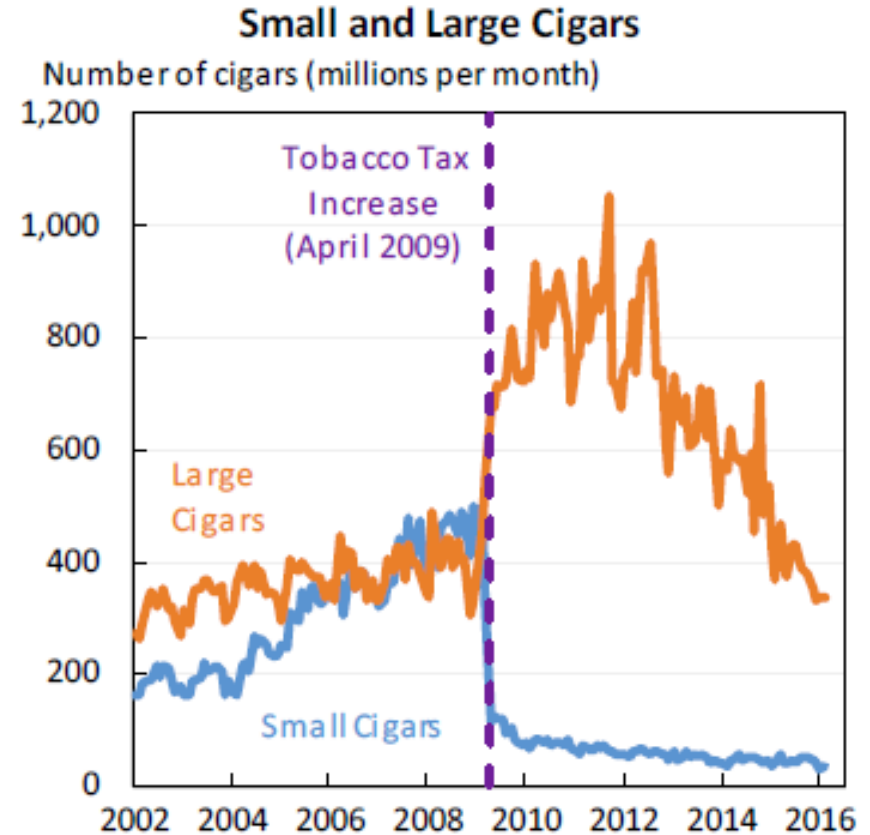
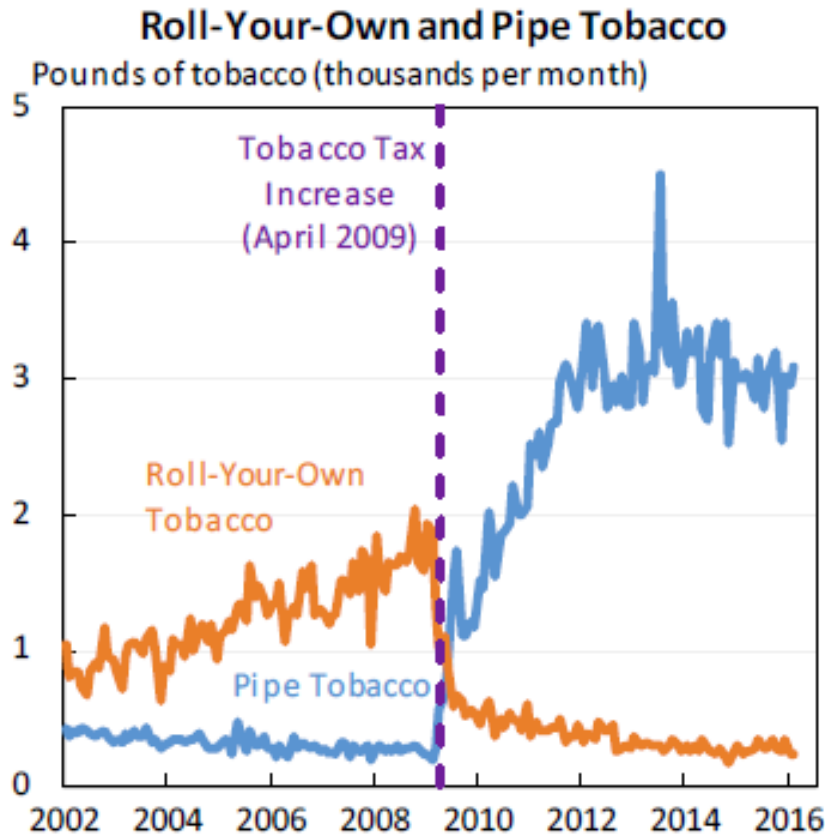
Dollars per pound



High Levels of Substitution Between Different Types of Tobacco



Sales of Selected Tobacco Products, 2002-2016



Lessons from the United States Experience with Tobacco Taxes

Jason Furman

Senior Fellow, PIIE

The World Bank Group

Washington, DC

April 19, 2017