

NCI Monograph 21: The Economics of Tobacco and Tobacco Control

Presentation to the 5th Joint Meeting of the NACAAA, NCAB and NACDA

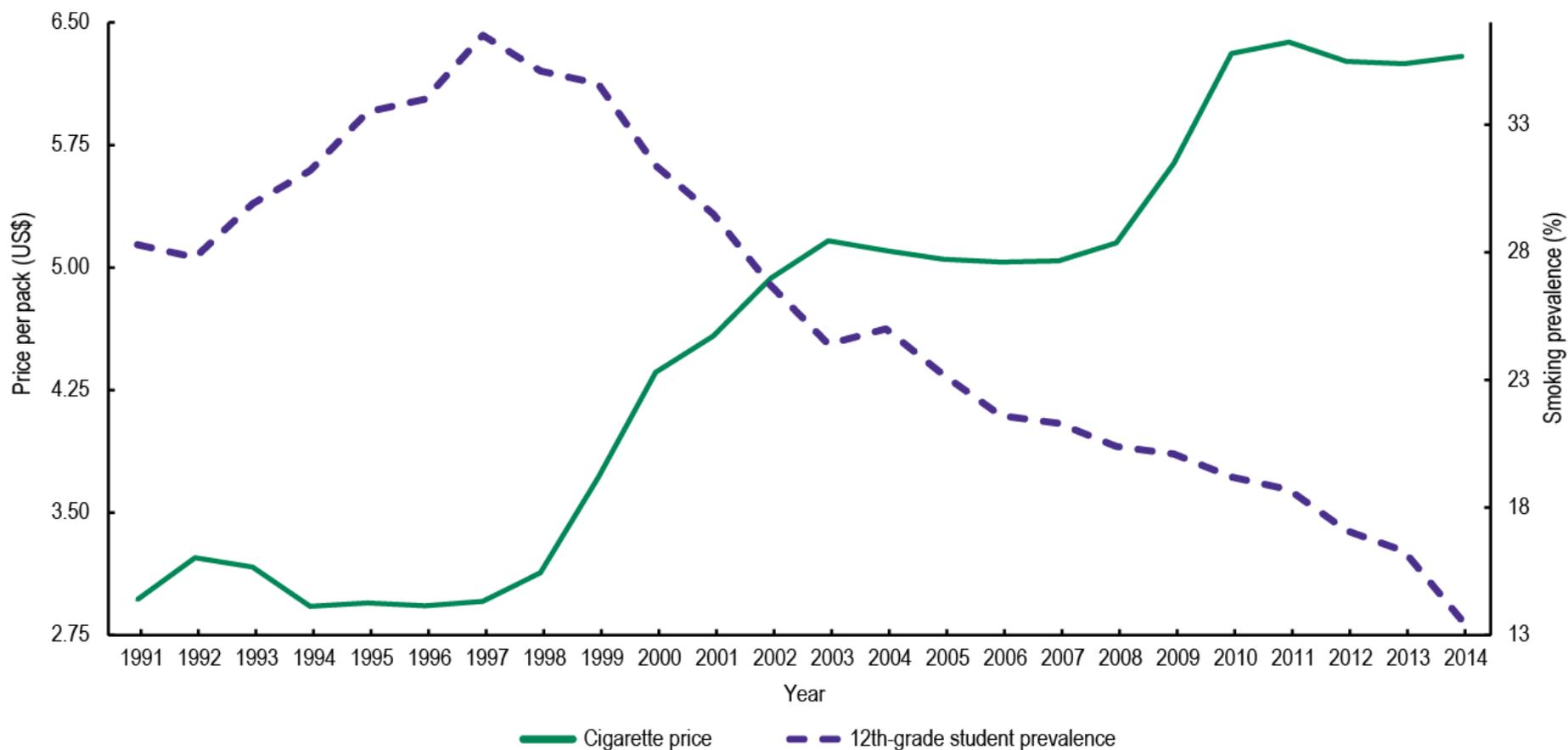
Michele Bloch, MD, PhD

Mark Parascandola, PhD, MPH

Tobacco Control Research Branch

Why Study the Economics of Tobacco Use?

Figure 4.6. Inflation-Adjusted Cigarette Prices and Prevalence of Youth Smoking in the United States, 1991–2014



Note: Currency adjusted for inflation using a 2014 base.

Sources: Johnston et al. 2016. Orzechowski and Walker

Tobacco Control: Global Cancer Research Priority

- November 2012: Research leaders from 15 countries came to NIH to discuss priorities in global cancer research.
- “With respect to modifiable lifestyle risk factors for cancer, there is a consensus that tobacco use remains, by far, the most important at a global level.”
- Measures can already be taken to control tobacco use: removing tobacco products from trade agreements, increasing taxes on tobacco products, controlling tobacco industry marketing, building support among health professionals.

Source: H. Varmus, H. S. Kumar, Addressing the growing international challenge of cancer: A multinational perspective. *Sci. Transl. Med.* 5, 175cm2 (2013).



WHO Framework Convention on Tobacco Control (FCTC)

- First global health treaty negotiated by the World Health Organization (WHO)
- First “legal instrument” designed to reduce tobacco-related deaths and disease around the world
- Unanimously adopted by WHO’s 192 Member States on May 21, 2003
 - Entered into force on February 2005
 - **180 countries** are Parties to the treaty
- Governing body: Conference of the Parties (COP), meets regularly and establishes detailed “guidelines” for implementation of specific FCTC articles. Technical assistance by WHO.

Latest Party:

Zimbabwe

March 4, 2015

The Global Tobacco Control Laboratory

- Ongoing introduction of many new tobacco control policies driven by the Framework Convention on Tobacco Control (FCTC), but policies and timelines differ widely across countries.
- Diverse and changing conditions in products, patterns of tobacco use, cultural and social attitudes, economic forces, and healthcare environments.
- An enormous “natural experiment” is currently under way.
- Opportunity for studying the impact of different policies in different environments and understanding what works.

Expanding tobacco control research and research capacity in low- and middle-income countries is crucial to reducing the disproportionate burden of tobacco use and cancer.

The International Tobacco and Health Research and Capacity Building Program (TOBAC) Country Collaborators, 2001-2016

Co-funded by FIC, NCI and NIDA

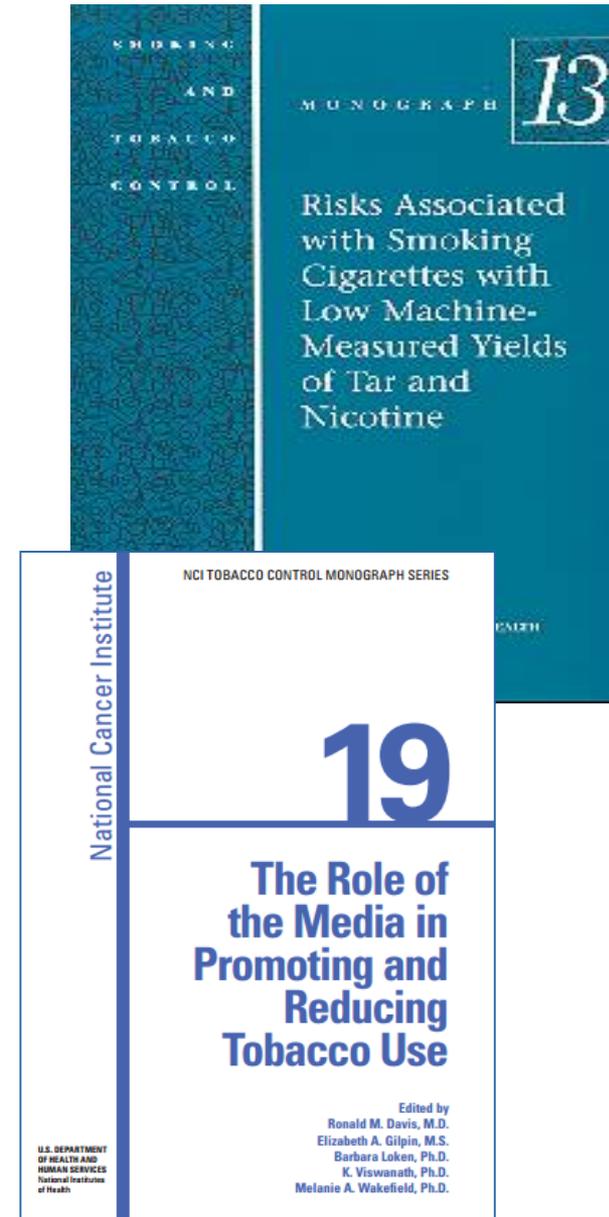


Source: <https://www.fic.nih.gov/programs/pages/tobacco.aspx>

NCI Tobacco Control Monograph Series

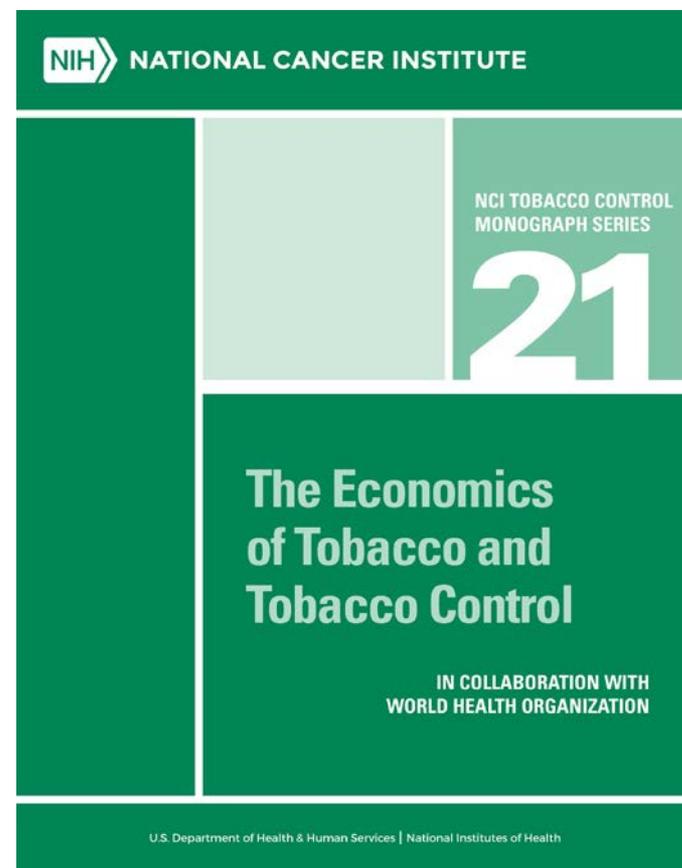
Est 1991: 21 volumes to date

- Monograph 5: Tobacco and the Clinician (1994)
- Monograph 9: Cigars: Health Effects and Trends (1998)
- Monographs 4 and 10: Secondhand Smoke (1993, 1999)
- Monograph 13: Risks Associated with Smoking Cigarettes with Low Machine-Measured Yields of Tar and Nicotine (2001)
- Monograph 18: Greater Than the Sum: Systems Thinking in Tobacco Control (2007)
- Monograph 19: The Role of the Media in Promoting and Reducing Tobacco Use (2008)



Monograph 21: The Economics of Tobacco and Tobacco Control (2016)

- Developed by the NCI in collaboration with the World Health Organization
- Scientific editors: Frank J. Chaloupka, Ph.D., Geoffrey T. Fong, Ph.D., and Ayda Aysun Yürekli, Ph.D.
- This ambitious effort included contributions from more than 60 leaders in the field and was peer-reviewed by more than 70 scientific experts.
- “Above all, the research summarized in this monograph confirms that evidence-based tobacco control interventions make sense from an economic as well as a public health standpoint.”



Monograph 21: NCI Preface

- “Cancer research funders such as the NCI can make an important contribution...by continuing to support research and research capacity building for tobacco control. We can also put forth the message that – despite the need for continued research – effective tools exist to curtail the global tobacco epidemic.
- As this monograph appropriately concludes, ‘Government fears that tobacco control will have an adverse economic impact are not justified by the evidence. The science is clear; the time for action is now.’”



Douglas R. Lowy, M.D.
Acting Director, National Cancer
Institute



Edward Trimble,
M.D., M.P.H.,
Director, NCI Center
for Global Health

Key Monograph Topics

- Patterns of tobacco use
- Economic costs of tobacco related disease and death
- Impact of tax and price on demand
- Impact of smokefree policies
- Impact of tobacco industry marketing on tobacco use
- Cost-effectiveness of tobacco dependence treatment
- Tobacco growing and tobacco product manufacturing
- Policies limiting youth access to tobacco
- Globalization of the tobacco industry and its impact on public health
- Tobacco tax avoidance and tax evasion
- Employment impact of tobacco control
- Impact of tobacco use on poverty and development

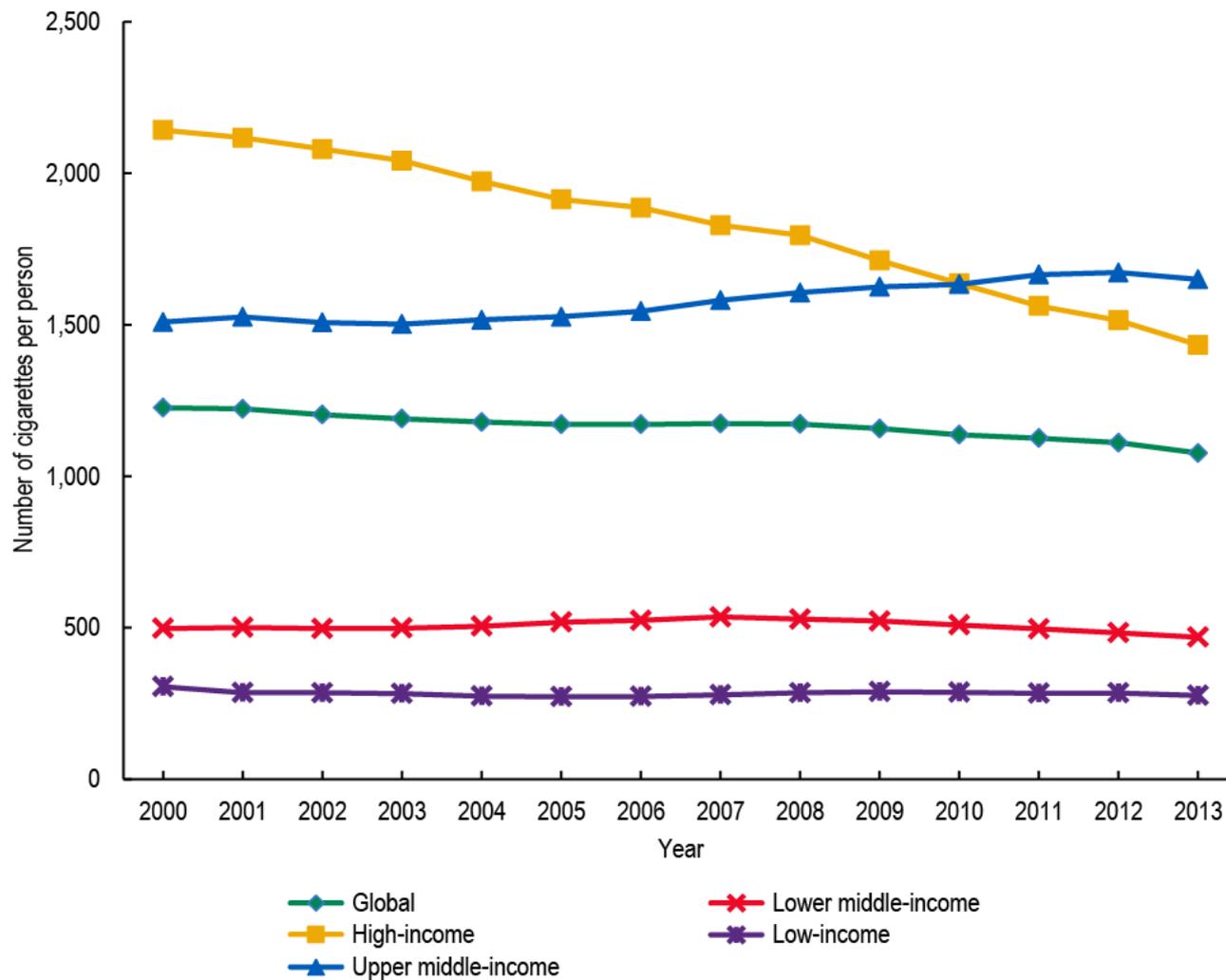
9 Major Conclusions

1. The global health and economic burden of tobacco use is enormous and is increasingly borne by LMICs.
2. Failures in the markets for tobacco products provide an economic rationale for governments to intervene in these markets.
3. Effective policy and programmatic interventions are available to reduce the demand for tobacco products and the death, disease, and economic costs that result from their use, but these interventions are underutilized.
4. Policies and programs that work to reduce the demand for tobacco products are highly cost-effective.

9 Major Conclusions (continued)

5. Control of illicit trade in tobacco products, now the subject of its own international treaty, is the key supply-side policy to reduce tobacco use and its health and economic consequences.
6. The market power of tobacco companies has increased in recent years, creating new challenges for tobacco control efforts.
7. Tobacco control does not harm economies.
8. Tobacco control reduces the disproportionate burden that tobacco use imposes on the poor.
9. Progress is now being made in controlling the global tobacco epidemic, but concerted efforts will be required to ensure that progress is maintained or accelerated.

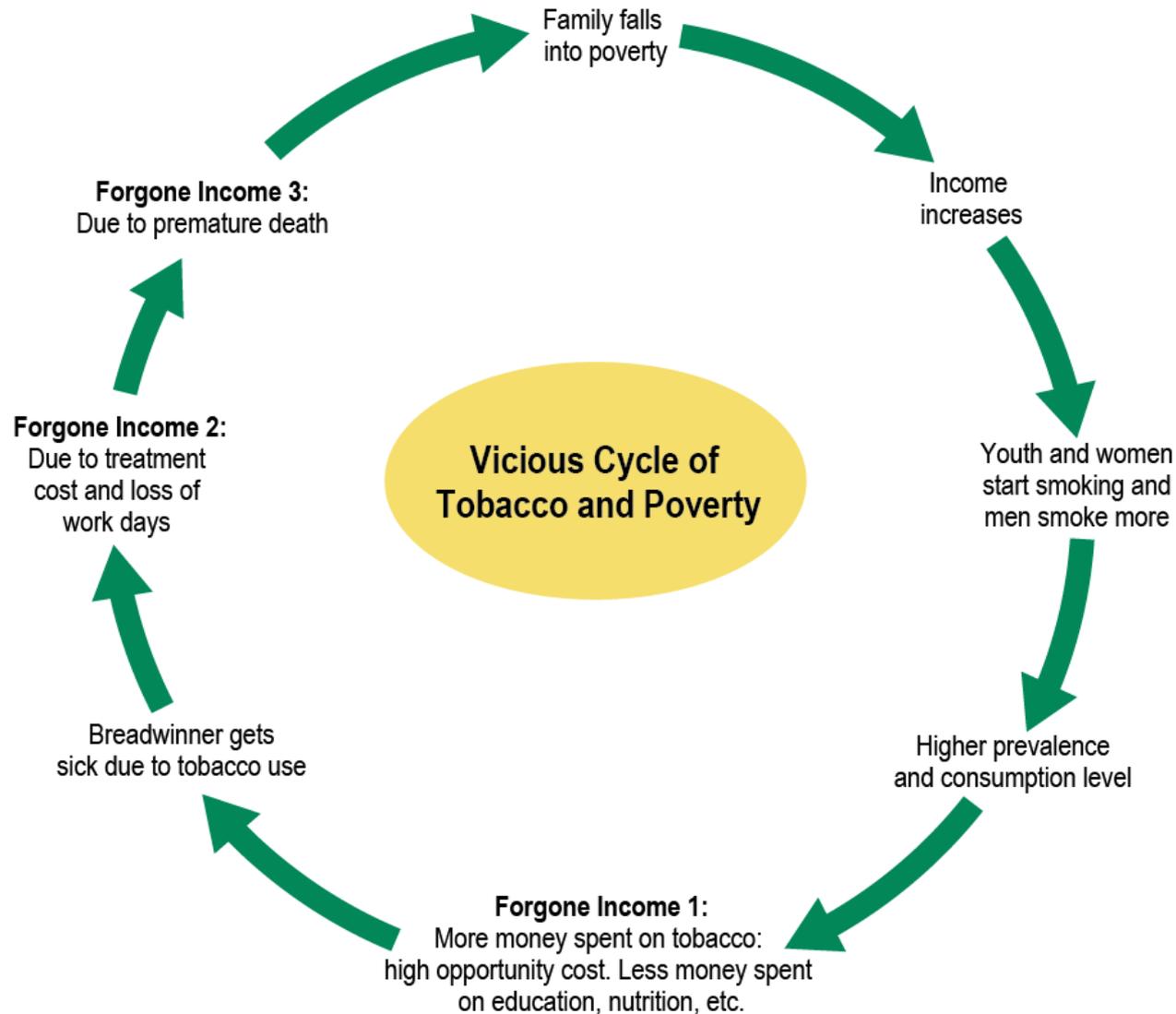
Figure 2.12. Per Capita Cigarette Consumption Among People Age 15 Years and Older, Globally and by Country Income Group, 2000–2013



Note: Country income group classification based on World Bank Analytical Classifications for 2013.

Source: Based on data from Euromonitor International 2016.

Figure 16.2. The Cycle of Tobacco Use and Poverty



Raising Tobacco Taxes: A Critical Strategy

- Significantly increasing the excise tax and price of tobacco products is the **single most effective tool for reducing tobacco use.**
- It leads some current users to quit, prevents potential users from initiating use, and reduces consumption among current users.
- In HICs, estimates of price elasticity of demand range from -0.2 to -0.6 , cluster around -0.4 . In LMICs, elasticity estimates range from -0.2 to -0.8 , clustering around -0.5 .
- Youth tend to be more responsive to price increases.

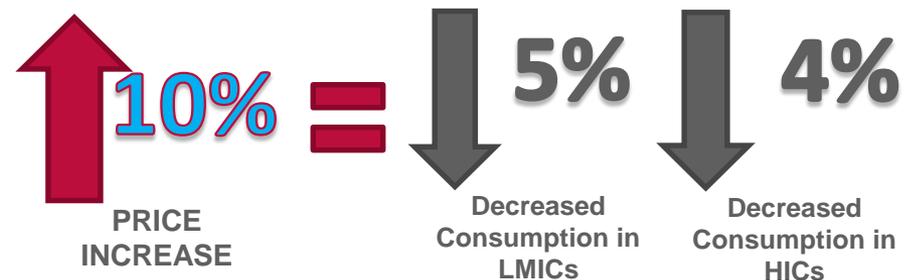
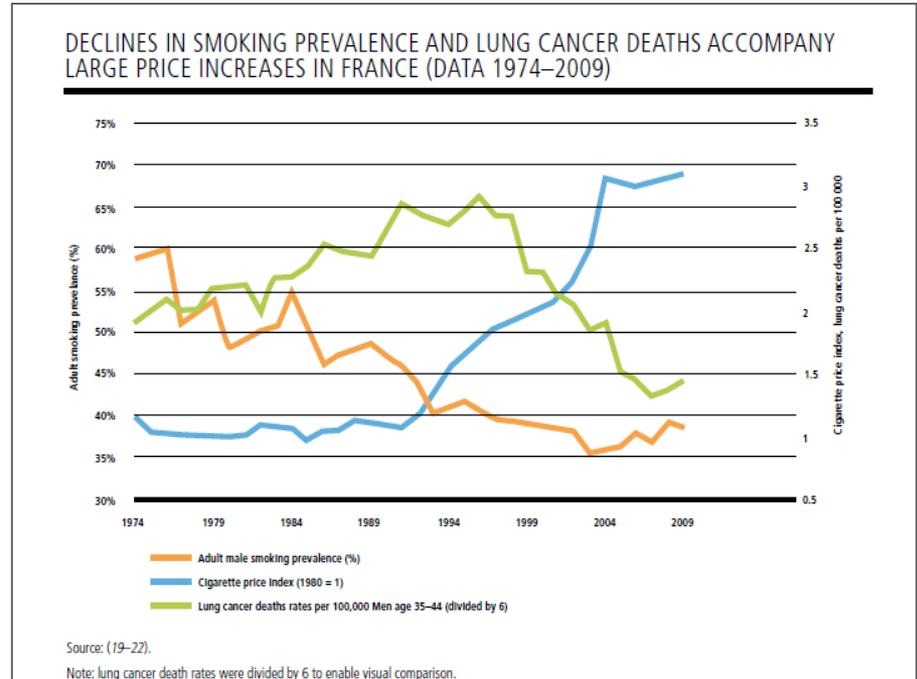
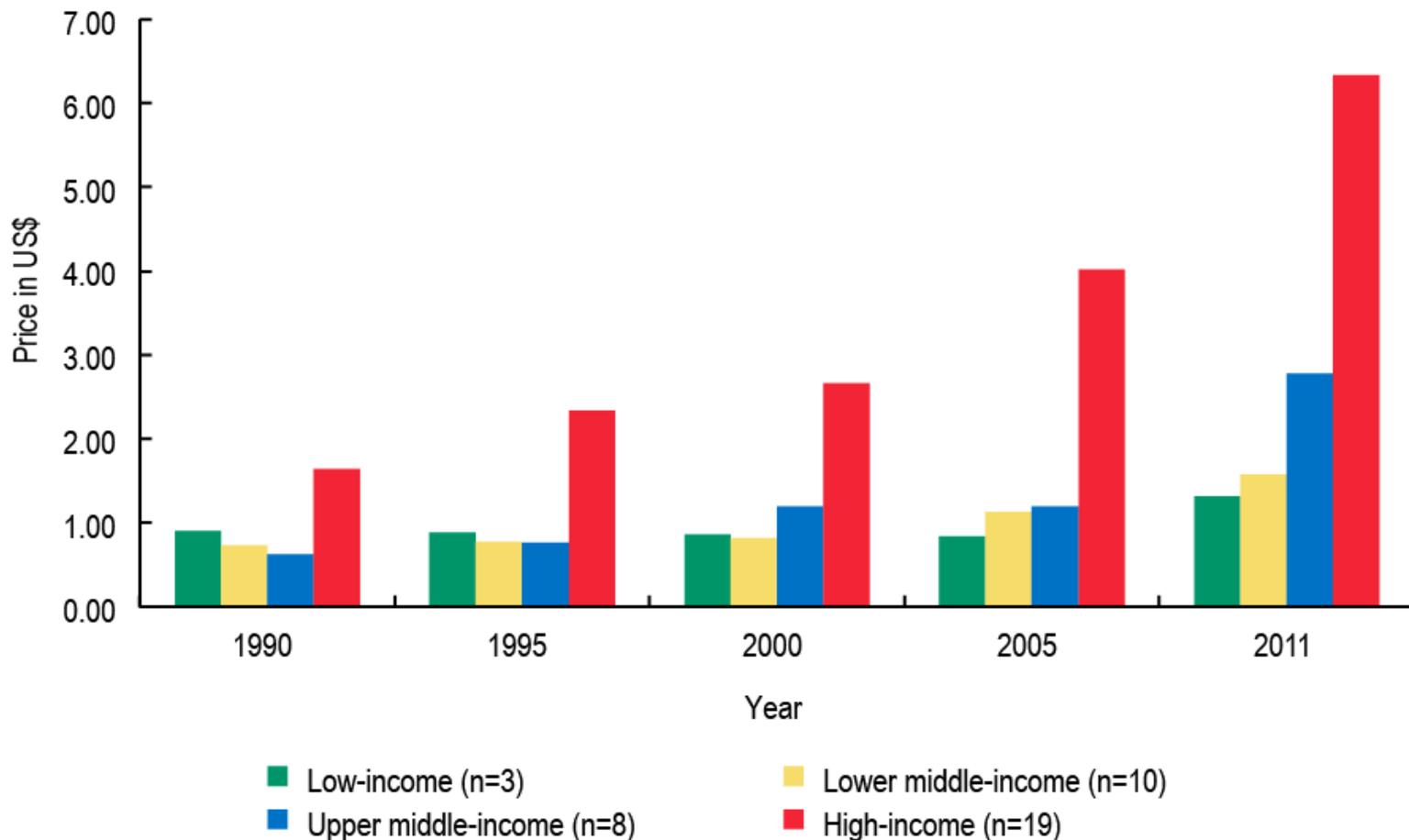


Figure 4.1. Median Price of a Pack of Cigarettes, by Country Income Group, 1990–2011



Notes: Using the official exchange rate, the prices of local brands of cigarettes, as collected by the Economist Intelligence Unit, were converted to U.S. dollars (not adjusted for inflation). Countries were discarded from the dataset if more than approximately one-third of the time series data were missing, if the country experienced a serious bout of hyperinflation or introduced a new currency, or if price data were so unstable over time that they were simply not credible. With these countries removed, the subsequent analysis was performed on 40 countries. Data were collected from large urban areas and may not reflect the full range of prices within the country.

Source: Economist Intelligence Unit 2012.

Figure 8.7 An Example of Australia's Plain Packaging, Showing Requirements for the Front and Back of the Cigarette Pack

CIGARETTE PACK – FRONT

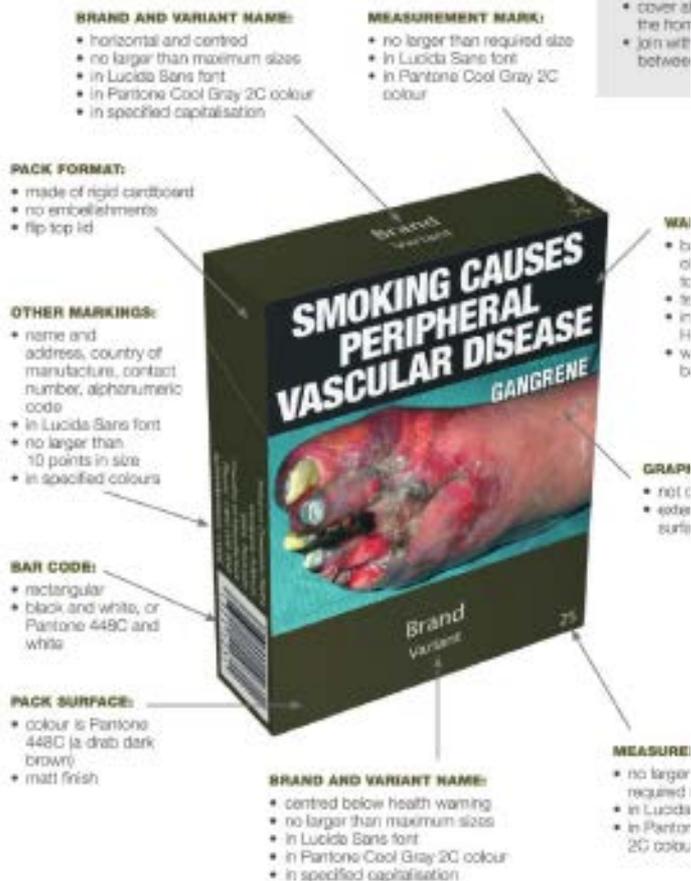


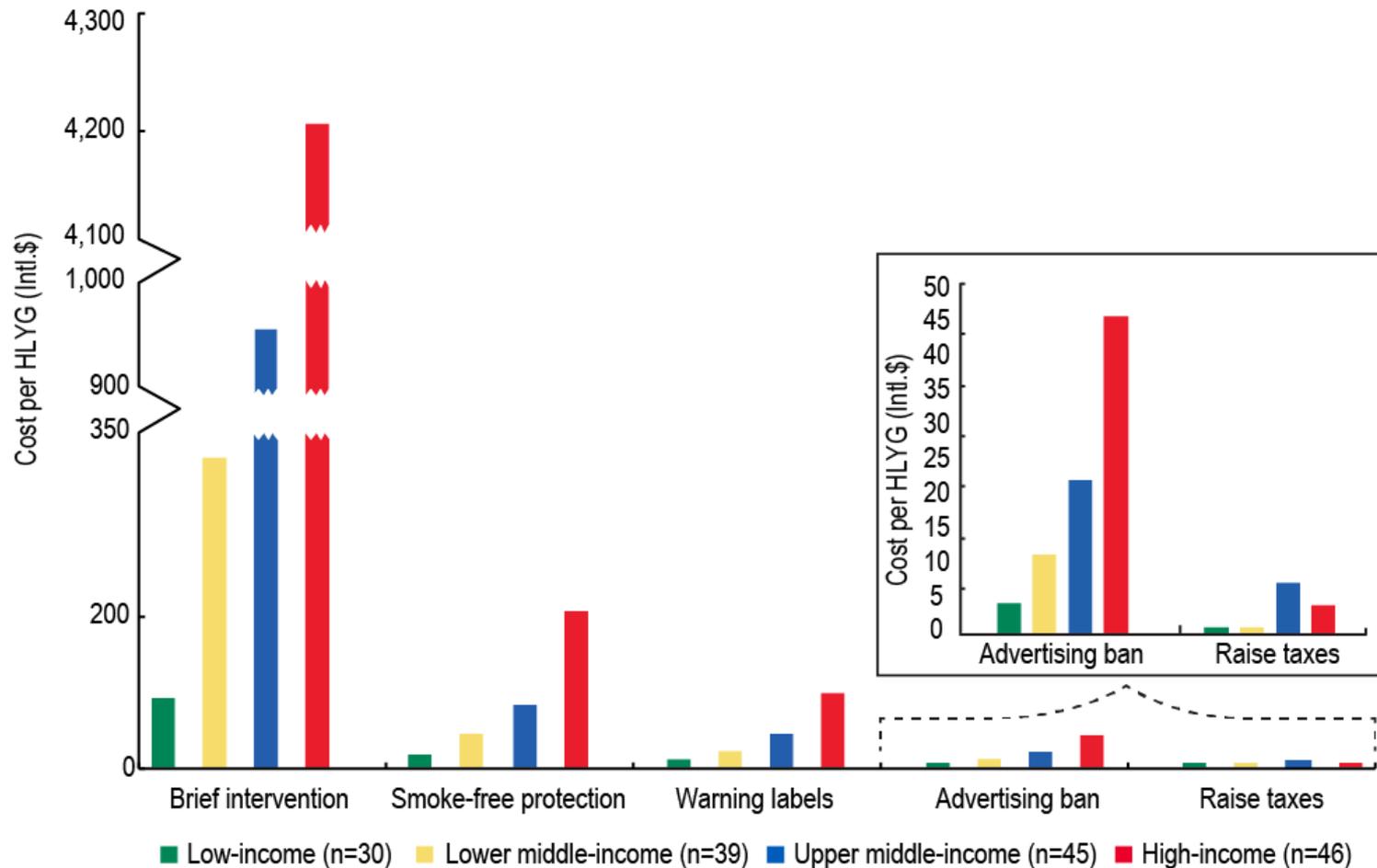
Figure 8.7 (continued)

CIGARETTE PACK – BACK



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Figure 17.2. Tobacco Control Policies and Cost Per Healthy Life-Year Gained, by Country Income Group

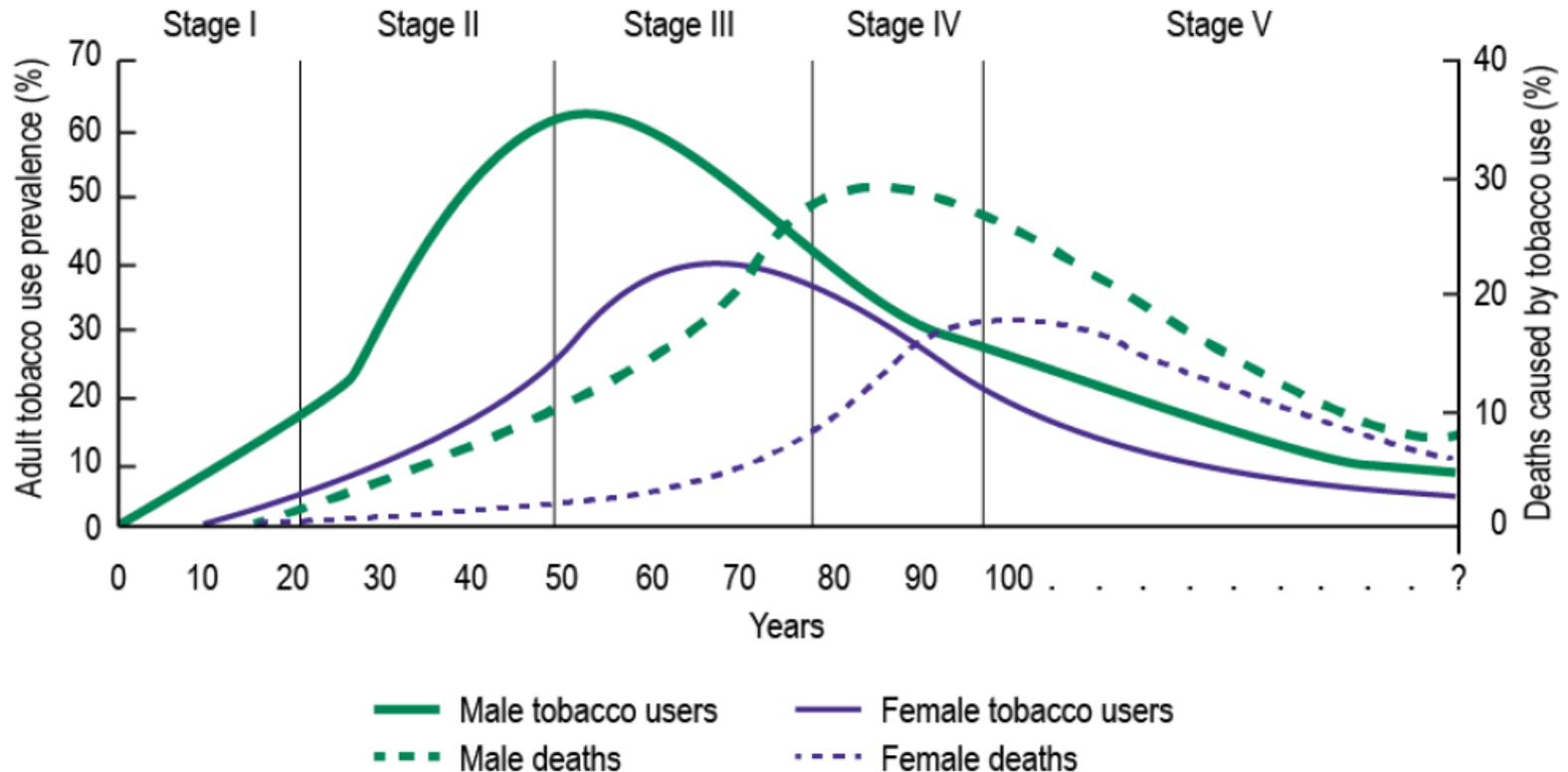


Notes: HLYG = healthy life-year gained. Country income group classification based on World Bank Analytical Classifications for 2014.

Source: Based on calculations from World Health Organization CHOICE model, 2016.

“The science is clear; the time for action is now.”

Figure 17.4 A New Model of the Tobacco Epidemic



Source: Adapted from Lopez et al. 1994.⁶¹

Adapted with permission from BMJ Publishing Group Ltd., from “A descriptive model of the cigarette epidemic in developed countries,” Lopez A, Collishaw N, Piha T, volume 3(3), p. 246.



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