Overview

- Why we need to know about tobacco supply
- Tobacco leaf production
- Cigarette manufacturing
- Potential consequences of tobacco control on the national economy
- Conclusion
To succeed in tobacco control, policy makers need to know the role of tobacco supply in the economy.

Also, tobacco control policy makers need to know how to provide policy options to transition from tobacco supply to other products.

Tobacco leaf is a very important cash crop in many developing countries.

Tobacco farming is often thought of as a way to relieve poverty.

Cigarettes are very profitable for tobacco companies.

The cigarette industry uses tobacco farming income and industry employment issues against tobacco control.

**Tobacco Leaf Production**

- More than 125 countries grow tobacco leaf.
- China produced the largest amount (one-third of total global production) at 2.4 million metric tons.

Source: Mackey et al. (2006).

**Tobacco Leaf Economy**

- The global tobacco crop is worth approximately $20 billion in U.S. currency but less than one percent of the value of the global agricultural sector.
- However, many governments—such as those of China, Indonesia, and Vietnam—rely on tobacco leaf as their major source of local tax revenue.
- There are about 20 million tobacco farmers globally.

Source: Mackey et al. (2006).
The China Case

- In China’s tobacco industry, the China National Tobacco Company (CNTC) is a state-owned monopoly with centralized and vertical management (from tobacco leaf production to cigarette manufacturing).

- The government has the authority to decide:
  - Tobacco leaf production quota allocation
  - Buying practices
  - Transportation and storage practices of tobacco

The government is obligated to purchase the allocated amount of tobacco leaf with a predetermined purchase price schedule based on tobacco leaf grades.

Tobacco leaf contributed between 30% and 60% of the local tax revenue to local governments in major producing provinces (Yunnan, Guizhou).

Source: Hu et al. (2006).
Tobacco Farming Situation

- During the past 20 years, production of tobacco leaf in developed countries decreased by more than one-third; whereas in developing countries it increased by two-thirds.

- In most countries, the value of tobacco leaf is less than one percent of their total value of agricultural products.


Tobacco Farming Situation

- Transnational tobacco companies (TTCs) encourage the global supply of tobacco leaf to reduce tobacco leaf prices, as it is a high value-added raw material.

- Many small tobacco farmers in developing countries face economic hardship because of tobacco leaf’s low price and lack of a market outlet.
Economic Analysis of Tobacco Supply: Teh-wei Hu, PhD

Costs and Return to Tobacco Farming

- TTCs and CNTC sets the price according to leaf grade
  - There is a wide variation of grading

- Farmers often complain about “under-grading” the selling price for their tobacco

- In some countries, returns on tobacco leaf are often lower than many other crops
  - For example, in China, India, Brazil, and Malawi

Why Do Farmers Continue to Grow Tobacco?

- Lack of information
- Lack of alternative crop
- Lack of technology
- Governments encourage or force tobacco leaf production
Environmental and Health Costs of Tobacco Production

- Pesticides and fertilizers used for tobacco farming could deforest the areas associated with the tobacco plantation and tobacco-curing
- Workers (especially women and children) suffer from pesticide poisoning and lung damage (asthma) from exposure to tobacco curing and field dust

Future Outlook for Tobacco Leaf Production

- Under the World Trade Organization (WTO), governments are not allowed to subsidize tobacco farming
  - Some farming households would receive less income
- Tobacco farming is only a modest source of income in many countries
  - Therefore, the reduction in tobacco consumption would have a minimum effect on household income
- To prepare for the consequences of tobacco control, governments would need to help with the transition to different cash crops
International Experiences of Crop Substitution

- U.S. tobacco farmers have switched to soybeans, corn, cotton, wheat, and beef cattle
- Some Chinese farmers switched to sunflowers, vegetable oil, and fruit trees
- Some Brazilian farmers switched to livestock, vegetables, and other cash crops
- Governments need to provide more information on financing and marketing to help tobacco farmers

Cigarette Manufacturing

- Each year, five trillion cigarettes are manufactured
  - China produced more than 1.7 trillion, followed by the United States
- Two-thirds of the people employed in cigarette manufacturing work in China, India, and Indonesia
- Two million people work in the manufacturing of cigarettes—less than one percent of the total manufacturing employment

### Market Share and Profit of Major Companies in 2000

#### Major Tobacco Companies’ World Market Share and Profit (2000)

<table>
<thead>
<tr>
<th>Tobacco company</th>
<th>Market share</th>
<th>Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>China National Tobacco Company (CNTC)</td>
<td>34%</td>
<td>10%</td>
</tr>
<tr>
<td>Philip Morris (PM)</td>
<td>18%</td>
<td>14%</td>
</tr>
<tr>
<td>British American Tobacco (BAT)</td>
<td>15%</td>
<td>5%</td>
</tr>
<tr>
<td>Japan Tobacco, Inc. (JTI)</td>
<td>6%</td>
<td>8%</td>
</tr>
</tbody>
</table>


### Effort to Promote Market Share

- **Introduction of new products**
  - Filter, low tar, low nicotine, and herbal flavor (in response to health concerns)

- **Sales promotion**
  - Mentions no cigarette brands in advertisements but instead the cigarette company’s name (in response to a ban on advertisements)

Image source: Institute for Global Tobacco Control.
Financial Contribution of Tobacco Tax

- Profit of the Chinese tobacco industry
  - During the 1990s, CNTC contributed about 10% to 11% of the central government’s tax revenue
  - With rapid economic growth in the automobile industry, petroleum, and other manufacturing sectors, the tax contribution has declined to between 7% and 8%
    - However, it still contributed about $20 billion, in U.S. currency, to tax revenue in 2003
    - In the last fifteen years, the CNTC has been the leading tax contributor among all tobacco companies

Source: Hu et al. (2006).

Tax Rates as a Percentage of Cigarette Retail Price

Source: Mackey et al. (2006).
Future Outlook for Cigarette Manufacturing

- Major international cigarette companies still prosper economically

- Many countries joined the WTO since 2000, allowing TTCs to gain increased access to developing countries
  - Taiwan, Korea, and Thailand: market share of foreign cigarettes has increased to more than 50%

- TTCs entered into new markets by manufacturing cigarettes locally or jointly with local tobacco companies

- With WTO, TTCs engaged in mergers globally and regional tobacco companies within China have also been consolidated to become more competitive
Globally, employment in tobacco leaf or cigarette manufacturing is a very small part of most economies—less than one percent.

Studies in the U.S., the U.K., and China have shown that income saved from “not smoking” could be used on other consumption items, such as food, clothing, education, and recreation. Therefore, the economy will be stimulated.

Successful tobacco control would reduce tobacco consumption. However, international evidence shows that the reduction shall be a gradual decline, due to the addictive nature.

In China, for example, the 1% population growth will offset the quit rate. Thus, the gradual decline in demand would have a delayed impact on cigarette production, tobacco leaf production, or related employment.
Conclusion

- Countries with major tobacco leaf production and cigarette manufacturing are more reluctant to initiate a tobacco tax because of its potential negative economic impact.

- For many tobacco leaf producing and cigarette manufacturing countries—such as China, India, Indonesia, and the U.S.—tobacco control is more of an economic issue than a public health issue.

Although tobacco control has some short-term negative economic effects, the benefits of tobacco control have a larger long-term economic benefit.

Each country is different and researchers need to provide country-specific evidence to policy makers showing that short-term minor negative economic impacts of tobacco control will be offset by the long-term economic benefits.
Additional Resources

  - http://www.tobaccoresearch.net/atlas.html


  - http://www.tobaccoacademy.org/themes