



# **Undergraduate Seminar: Environmental Political and Global Governance**

2021 Fall

Reference: 'Transforming structures: markets and politics' (Ch.7)

Topic: Market, policy  
and environment



# Learning points

- How does market interplay with environmental issues? (zero-sum always?)
- What roles can private sector (eg. business, investors..) play to improve environmental conditions? (EMS, innovation, green investment...)
- When and how much is government's intervention in market required? (role of public policy)

# Stakeholders in environmental management

- Firms (managers, employees...)
- Multi-national Corporations
- Business association
- Investors and banks
- Consulting firms
- Research organizations
- General public (citizens/consumers)
- NGOs
- Government (policy makers and Administration)
- International organizations=coordinating national interests

# Business and the natural world

- Economy depends on natural resources. (All products came from something mined or grown.) → essential element of business strategy
- Businesses to deal with the real problems of pollution and natural resource management
- Mis-managing can drain value out of a company and damage brand reputations

# Food scandal in China (8.2014)



- More than 30,000 tons of chicken feet laced with hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>)

***‘a colorless liquid often used for disinfection and processing food, causes vomiting, mouth irritations, throat and stomach problems’***

- 35 business operators involved, selling the goods
- Found soaking in hydrogen peroxide to keep the chicken feet white and fresh-looking
- Sold to more than 10 provinces including Shandong, Hunan, Zhejiang, Hubei and Liaoning

# Taiwan's gutter oil scandal

- Feb-Sep. 2014, Chang Guann, purchased 243 tonnes of tainted oil **(collected from cookers, fryers and grease traps)** from an unlicensed factory and mixed it with lard oil for sales
- Produced a total of 782 tonnes of such oils
- Chang Guann, fined HK\$12.9 million by the authorities for illegally selling poor-quality lard oil

*(More than 1,000 restaurants, bakeries and food plants had used the tainted oil)*





## The chief of Taiwanese firm **Chang Guann**

Chang Guann is accused of blending industrial lard oil with edible cooking oil and “gutter oil”, a banned substance **made from recycled kitchen waste**. It has been ordered to pull all of its “Chuan Tung” lard oil products from shop shelves, even if they passed food safety tests. (Sep. 2014)



# Taiwan gutter oil scandal

## Consequences and measures:

- Premier Jiang Yi-huah, apologised to the public and promised to enhance food safety controls
- **The food safety scare** spread to Hong Kong and Macau (21 bakeries and food manufacturers had bought oil from Chang Guann through a local importer)
- 8 people (including bosses), formally charged with supplying cooking oil contaminated with "gutter oil"
- Taiwanese Health Minister, Chiu Wen-ta, resigned over 'gutter oil' scandal' (4 Oct 2014)

# Limits of market <1> (pp.286-287)

- First, markets treat as equal worth (without value judgments) all dollar values, regardless of whether they are generated by clear-cutting a forest; producing toxic wastes or nuclear missiles; or by producing housing, food, or humanly enriching art. Whether a product was made by well-trained workers in a safe environment or by the underpaid labor of unhealthy workers or unhealthy children carries no weight and often misrepresents societal preferences by making the less appropriately produced item less expensive. Markets don't care about these things, but people do.

# Limits of market <2> (pp.286-287)

- *Second*, goods that are valued by nonparticipants in formal markets are systematically underpriced. What is the dollar value of a living tree? Usually it is the price at which dead timber can be sold in a market. But what of its value to the person who relies on that tree for protecting his or her nearby land from being flooded? Or the person who values it because he or she just likes to look at its beauty, or enjoys its shade? The combined net worth of the tree for all these people may be well above its market price as lumber. But, barring some cooperative arrangement that incorporates the needs of all those who value the tree, cutting the tree and selling it on the market means that the market will have operated in a way that did not optimally represent its value to all those who valued it.

# Limits of market <3> (pp.286-287)

- *Third*, markets gauge the real value of resources or products only in present actual exchanges. All other attempts to internalize prices or create quasimarkets from common property resources are *shadow prices*, which are speculative administered prices determined by an expert, planner, administrator, or bureaucrat. Take, for instance, the common practice of discounting future values—prices. Because of inflation and technological innovation, future values are discounted by some percentage for every year that a resource is conserved. This process conflicts with long-term sustainability and reduces the rights of future generations to near zero (Stern et al., 1992: 86).

# Limits of market <4> (pp.286-287)

- A *fourth* limitation of markets has often been noted by those on the political left. Markets may create economic efficiency, narrowly defined, but as they operate over time without some sort of nonmarket restraints, they generate *vast* systems of social inequality that represent significant (but normally externalized) *social costs that affect human welfare and even markets themselves*. The evidence for this effect is overwhelming both within and between nations, as documented in Chapter Six. Some opposition to the creation of quasimarkets of tradable emission permits from common-pool resources is on exactly these grounds. Rich firms or nations would have the resources to pay surcharges or buy emission permits from poorer firms or nations (who would be under routine pressure to sell them cheaply). Either way, the rich could still afford to pollute, and real reduction would be accomplished on the backs of the poor. In sum, these problems with markets mean that for all their virtues, they do not price all things effectively and do not price many things that people care about.

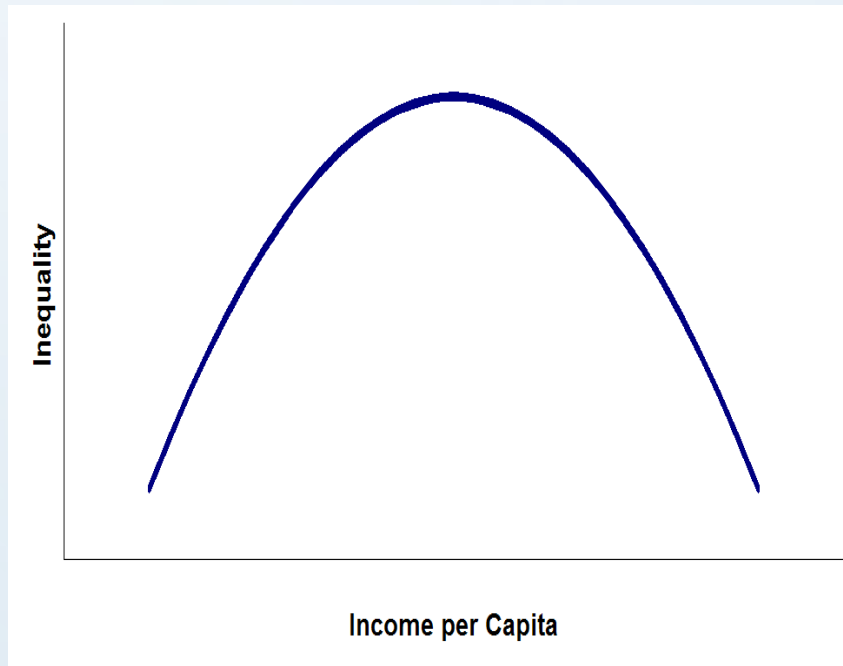


# E-Kuznets

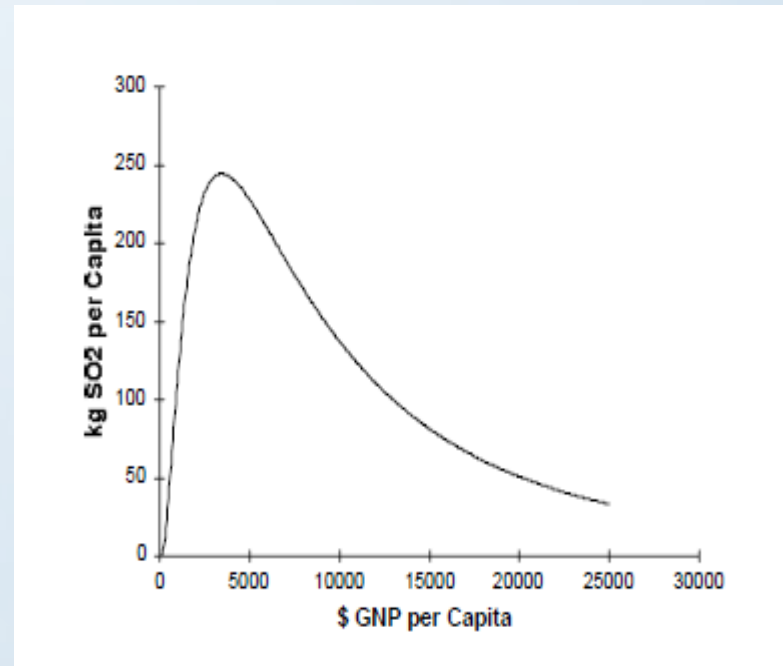
Supplementary notes

# E-Kuznetz

Kuznets curve (Simon Kuznets)



E-Kuznets curve (ENV Economics)



# E-Kuznets

◆ Kuznet, mis-interpreted / mis-adopted

- Rise in GDP → automatically will improve environmental quality (laissez-faire type of technological optimism)?

≠

◆ A developed economy → better position to improve environmental quality **(Economic growth is one of the many contributing factors to environmental improvement.)**



# E-Kuznets

- E-Kuznets curve: built on the premise that low priority will be **(or even should be)** put on the environment in the early stages of development



***“Pollute now and clean up later.”***

- But, rapid growth in developing economies will continue, and will increase the level of environmental degradation



***“Action should be taken.”***

# E-Kuznets

## ■ Criticism on E-Kuznets:

(1) Most of the **infrastructure**, if ignoring environmental issues, will lock-in outdated polluting technologies.

(2) The nature of environmental **irreversibility** – e.g. biodiversity : once being destroyed, cannot be restored

(3) Without enhancing **awareness**, people in the developing Cs will not necessarily know that 'a clean environment will result in **other benefits** (eg. health benefits – not immediately linked with growth)

*(See, for example, inter alia, OECD (2012) Green Growth and Developing Countries Report, consultation report for input to the Rio+20, pp.32-33)*

# E-Kuznets

## **(4) Methodological fallacies:**

- (i) Limit to a few pollutants → not an integrated approach
- (ii) Unclear time-span (until when 'pollute' to wait for improvement?) cf. from reversed U-shape to N-shape
- (iii) Global-scale impact should also be considered (unavoidable global ecological inter-connectedness of certain issues)

# E-Kuznets

## ■ Any opportunities for developing Cs?

- **Assumption I:** 'The developed world has gone through a desirable economic path?' → Then, *path dependency legitimized.*
- **Assumption II:** 'If not, particularly in terms of environmental externalities' → Need to pursue leap-frog the E-Kuznets curve

*HOW? E.g. new construction, infrastructure, environmentally friendly farming techniques, halting the progression of deforestation and land degradation etc.*

# E-Kuznetz

## ■ Conclusion:

- Economic growth '**could**' be '**one of the many**' **contributing factors** to environmental improvement
  - An economy can keep growing without environmental improvements. = Economic growth (GDP) can be achieved without '**sustainable development**'.
- Thus, decoupling is not automatic consequence of economic growth
- Other conditions should be met at the same time e.g. government's role through various timely policy, civil society, participation, social and political system, science and technology, education.