

Teaching Notes for Market Failure Featured Collection

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Public goods

Public Goods Example 1: National and International standard setting agencies.

Explanation:

Having common standards for things like electrical voltage, ATM card thickness, symbols on dangerous cargoes, and accounting practices benefits companies by reducing the costs, uncertainties, and hazards of doing business. These benefits are both *nonexcludable* (once they exist, anyone can adopt them) and *nondiminishable* or *nonrival* (the use of a standard by any one company does not reduce—and, in fact, in the case of standards, increases—its usefulness to other companies). Economists call something with these two properties a *public good*.

But such standards cannot be set simply by individual companies and consumers each making their own decisions in markets. Some form of social coordination, often accomplished by a combination of industry groups, consumer and other stakeholder groups, and state agencies, is required. The more people affected by the good in question, the higher is the level of coordination that is required. Even a market economy does not build itself. Issues of power arise, as the adoption of any particular standard will tend to favor some firms and stakeholders and disadvantage others.

Cases:

*1. [Between public and private - the nature of today's standards](#). An analysis of the public (or quasi-public) nature of standards. The paper includes a case study of a UK insurance standards-setting consortium.

*2. [The Long Battle for an Instant Messaging Standard](#) (HBS)

[[The IAS 39 "Carve-Out": How the European Union Hedged Its Exposure to the International Standard on Derivatives and Hedging](#) (HBS)
[Multi-Jurisdictional Compliance in Cyberspace](#) (HBS)]

References:

*1. [Who Develops ISO Standards? A Survey of Participation in ISO's International](#)
A report on the major international standards agency, the International Organization for Standardization (ISO), and who participates in its decision-making. The report features recent ISO initiatives on water management and social responsibility.

Public Goods Example 2: A Good Legal System

For markets to function most efficiently and serve the social good, a reliable and just legal system and a tradition of trustworthiness in business dealings are generally required.

What if corruption reigns, or the system overtly or tacitly allows trafficking in dangerous products (or even in persons)? What sort of outcomes do markets lead to then?

Cases:

*1. [Corruption in International Business \(A & B\)](#) (HBS)

*2. [Women Trafficking from Thailand to Japan](#) A case study from the Trade and Environment Database on the international sex industry as it affects Thailand and Japan. The size of the industry, human rights issues, international conventions, and domestic laws are discussed.

[[The Shakedown \(HBR Case Study and Commentary\)](#) (HBS)
[Newmont in Peru](#) (HBS)]

References:

*1. [Multinational Corporations, Governance Deficits, and Corruption.](#)

A web essay from Novartis Foundation discussing corruption in both developing and developed countries. The different types of corruption are summarized. The article also mentions that ethical corporate behavior by some companies may encourage other companies to do likewise.

*2. [It's Legal but It Ain't Right: Harmful Social Consequences of Legal Industries](#)

(book) If the legal system is not adequate to assuring that market actions benefit society, market actors can cause harm without breaking any laws. The chapters in this book address topics including tobacco (Chapter 2), the arms trade (Chapter 3), and trade in antiquities (Chapter 7).

[[Microeconomics in Context](#) (book)

This introductory economics textbook presents economics "in context." Chapter 3 discusses the historical, social, and environmental context of markets.]

Externalities

Externalities Example 1: Resources and Pollution

Explanation

An *externality* is a cost (or benefit) that rebounds on someone other than the direct parties to an economic activity. The classic example is of a manufacturer who discharges industrial effluent into a river. Because the river's services do not carry a price in an unregulated market system, the manufacturer may dump freely, and may not take into account the costs in lowered health or lost productivity being imposed on people and businesses downstream. In an increasingly interdependent global environment, it is likely that all companies are "downstream" in their use of some resources, be they water, air, a stable global climate, or species diversity. It is in the interest of many parties, then, to undertake some form of social coordination to correct this case in which market prices give incorrect signals for business decision-making.

Cases:

- *1. [Aracruz Celulose S.A.](#) (HBS)
- *2. [Anatomy of a Corporate Campaign: Rainforest Action Network and Citigroup \(A\)](#) (HBS)

[[Plum Creek Timber \(B\)](#) (HBS)]

References:

- *1. [Water Scarcity Poses Threat to Global Business](#) A readable website that discusses the problems of business risk related to water resources. The website includes a link to a longer report in pdf format.
- *2. [Environmental and Natural Resource Economics: A Contemporary Approach](#) (book) This is an advanced undergraduate textbook. "Chapter 3: The Theory of Environmental Externalities" can be downloaded (without charge) from the book's website.
- *3. [A Road Map for Natural Capitalism](#) (HBR article)

[[Turning Gadflies into Allies](#) (HBR article)

. [Free Trade and the Environment: Mexico, NAFTA and Beyond](#) (book) While some argue that free trade will raise incomes in developing countries, thus encouraging governments to protect the environment, others argue that free trade simply provides an incentive for heavily-polluting firms to move to countries with lax environmental regulations. This volume shows that for Mexico neither position is correct, and concludes with a set of concrete recommendations for policies.

[A Survey of Ecological Economics](#) (book) The editors of the volume summarize ninety-five key articles that advance the field of ecological economics and represent the best thinking to date in the area. Each two-to three-page summary is far more comprehensive

than a typical abstract, and presents both the topics covered in each paper and the most important arguments made about each topic.]

Externalities Example 2: Climate Change

The changes in global climate that are arising due to the release of greenhouse gases into the atmosphere are receiving increased public attention. What risks does climate change pose for businesses? What opportunities, and what responsibilities, are involved?

Cases:

- *1. [Sleeping Tiger, Hidden Liabilities](#) A case study of how ExxonMobil is losing competitive ground because it has failed to accept the reality and implications of climate change: The company appears to be taking a “hope for the best” strategy and could suffer in the long run as climate change becomes more significant.
- *2. [What Every Executive Needs to Know About Global Warming](#) (HBS)

[[Business Responses to Climate Change: Identifying Emergent Strategies](#) (HBS)]

References:

- *1. [Earth in the Balance Sheet](#) This article by well-known economist and columnist Paul Krugman explains that the market is efficient only if it gets the prices “right.” When it comes to environmental issues, the prices are almost always wrong. Most economists favor more, not less, environmental protection in the U.S.
- *2. [The Economics of Global Climate Change](#) This teaching module discusses the scientific evidence on climate change, including recent projections on temperature and sea-level rise. It then evaluates the strengths and weaknesses of economic analysis of the issue. The (free, downloadable) student reading consists of 36 pages which includes discussion questions, references, exercises, and web links.

Externalities Example 3: Network Externalities

Network externalities arise when a consumer or company’s demand for something is increased by the fact that *others* are *also* buying the item. A company will find it more attractive to buy a particular brand of computer software, for example, if that brand is also used by companies with which it communicates, or to include alternative-fuel vehicles in its fleet if fuel and service for such vehicles are widely available. Because of this bandwagon effect (or a lack thereof), it is possible that products that are inferior in a technological or overall cost sense may become (or remain) dominant. Thus the unregulated, decentralized market outcome may not lead to the most efficient outcome. (Note that this topic shades over into the topic of standards as a public good, discussed

earlier. An agreement on common standards can be one way to combat the waste and inefficiency caused by incompatible or suboptimal networks.)

Cases:

*1. [Sun Microsystems, Inc: Solaris Strategy](#) (HBS)

Reference:

*2. [Innovation, Competition, and the Theory of Network Externalities](#) This article summarizes the issues raised for businesses by the existence of network externalities, using examples from communication and other fields, and discussing issues such as how the “wrong” technology can come to dominate an industry. While it uses some technical terms, these are explained.

Transaction costs

Transaction Costs Example 1: Medical Billing and Administration

Explanation:

Employers' health care costs are skyrocketing. One contributor to the high cost of medical insurance in the United States is the complexity of the current medical billing system. *Transaction costs* are the costs associated with setting up and executing a transaction. To get paid for their services, health care providers must deal with a variety of competing insurance companies and managed care organizations, as well as public programs such as Medicare, each of which has a different set of forms and rules. These high transaction costs get passed on to businesses and their employees in the form of higher health insurance premiums. Would some sort of socially-coordinated approach that reduces the inefficiency caused by such a complex system be advisable?

Cases:

*1. [Note on Financing of the U.S. Health Care Sector](#) (HBS)

[[Old Tex College](#) (HBS)]

References:

*1. [Centering on... The Cost of Care](#) An essay on how businesses are responding to rising health costs, and what could be done, with a mention of transaction costs.

*2. [Why the US Needs a Single Payer Health System](#) A piece written by a physicians group on the problems with a market-driven health care system, along with statistics on the burdens of medical overhead.

*3. [Is 1 the Answer?: More Calling for Single-Payer System](#) A newsy article that includes discussions of how employers are getting fed up with rising health care costs.

*4. [Economics in Context: Goals, Issues, and Behavior](#) This teaching module presents the study of economics in a broad social and environmental context and introduces the issues of externalities and transactions costs. The (free, downloadable) student reading consists of 25 pages which includes discussion questions, review questions, and exercises. Instructor notes are also included for teachers.

Transaction Costs Example 2: Public Research and the Internet

Explanation:

The internet has drastically reduced the transactions costs of many activities—research, sales, internal and external communications, and so on—for many companies. The development of the World Wide Web by the United States federal government through the National Science Foundation provided the foundation for the internet, while the private sector has now become its dominant user.

Cases:

*1. [Akamai Technologies](#) (HBS)

[[Alibris in 2004](#) (HBS)]

References:

*1. [A Brief History of NSF and the Internet](#) This National Science Foundation document describes how the Internet began with government-funded investments. It also describes how the system later became largely privatized.

*2. [Science and Innovation Policy: Key Challenges and Opportunities](#)
This OECD publication on innovation discusses the importance of public investment and research for technological innovation. Also covers intellectual property rights and how to attract more scientists and engineers.

*3. [Online Auction Markets](#) (HBS note)

Market power

Market Power Example: Microsoft

Explanation:

From the point of view of an individual business, more market share is good. Economic theory, however, predicts that the efficiency-inducing effects of competition are dulled when one or a few players gain too much market power. Antitrust regulation is important because it helps protect companies with good products from predatory and unfair business practices. The most notable recent case, of course, is that of anti-trust suits filed against Microsoft.

Cases:

- *1. [EU Verdict Against Microsoft](#) (HBS)
- *2. [A Brief History of the Browser Wars](#) (HBS)

References:

- *1. [Note on Application of the Antitrust Laws to the New Economy: An Analysis of United States vs. Microsoft Corp.](#) (HBS note)

Problems of information

Problems of Information Example 1: Food and Drug Adulteration

Explanation:

Sometimes buyers and sellers on markets have *asymmetric information*—people participating on one side of the market have secret information that they do not share with others. A classic example is food and drug adulteration. If an unscrupulous company substitutes a cheaper ingredient for a more expensive ingredient in its product, for example, consumers' health may be harmed. Moreover, more reputable companies are put at an unfair disadvantage because the adulterator can sell at a lower cost. The creation of non-market means of assuring food and drug quality may be in the interest of both consumers and producers of quality goods.

Cases:

- *1. [Beech-Nut Nutrition Corp. \(A1\)](#) (HBS)
- *2. [Managing for Integrity: Three Vignettes](#) (HBS)

References:

- *1. [History of Food and Drug Regulation in the United States](#) by Marc T. Law, University of Vermont. This readable on-line article reviews the theories related to asymmetric information and traces the history of regulation in the United States. The issue of “regulatory capture” (the use of regulations to reinforce market power) is also briefly discussed.

Problems of Information Example 2: Corporate Reporting

Explanation:

Another example of asymmetric information arises when a corporation's leaders disclose false financial information to shareholders and other stakeholders, or withhold information on internal governance, exposures to risk, and actions (or lack thereof) taken in regard to ethical, social, and environmental issues. Without complete information, outsiders cannot correctly judge the value of the firm, now and in the future. How can better ways of reporting be devised, that communicate useful information without creating undue burdens?

Cases:

- *1. [Case study: Hewlett-Packard](#) In 2004 Hewlett-Packard received a Ceres-ACCA North American Award for Sustainability Reporting. This very brief case study describes how the company designed and implemented its Global Citizenship Report.

References:

- *1. [New Wine, New Bottles: The Rise of Non-Financial Reporting](#) This business brief describes the history of, and current innovations in, non-financial reporting.
- *2. [The Evolution of Business Reporting: Make Room for Sustainability Disclosure](#) This article describes the Global Reporting Initiative's Sustainability Reporting Guidelines and their benefit for investors.
- *3. [As if the Future Mattered: Translating Social and Economic Theory into Human Behavior](#) (book) This collection of twelve essays explores what can be done to encourage the public and private sectors to translate their concern for the future into actions that will ensure the survival and well-being of the human species. The contributors include the well-known business analyst, Michael E. Porter, whose chapter can be downloaded (at no charge) from the book's website.

Problems of Expectations

Example: Market Bubbles

No one really knows what the future will bring. Hence, the way people form their expectations is an important topic in the study of market behavior. In a system that is decentralized, but in which many actors share information and take their cues from others, psychological factors such as “emotional contagion” and “herd behavior” can lead to speculative frenzies. The dot.com investment and Asian financial bubbles of the late 1990s are now famous examples, though real estate markets are frequently affected as well.

Cases:

- *1. [Hong Kong's Financial Crisis--1997-98](#)
- *2. [The Shanghai Property Market and Hong Kong Developers](#) (HBS)

References:

- *1. [Bubbles, Human Judgment, and Expert Opinion](#) by Robert J. Shiller
This academic paper surveys research in psychology and behavioral finance for evidence to what extent experts such as professional investment managers or endowment trustees may behave in such a way as to help perpetuate speculative bubbles in financial markets. This paper discusses scholarly psychological literature on the representativeness heuristic, overconfidence, attentional anomalies, self-esteem, conformity pressures, salience and justification for insights into weaknesses in expert opinion. The role of the prudent person standard and the news media in influencing experts is considered. The relevance of the literature on testing of the efficient markets theory is discussed.
- *2 [Who's to Blame for the Bubble?](#) (HBR article)

[3. [The Perils of the Imitation Age](#) (HBR article)]

Consideration of human needs and equity

Consideration of Human Needs and Equity Example 1: AIDS in Africa

Markets supply what people need when people are able and willing to pay.. But what about when people don't have the ability to pay? One of the most critical issues of contemporary times is the AIDS crisis, and the response of drug companies to the needs of those in Africa afflicted by the disease.

Cases:

- *1. [Life, Death, and Property Rights: The Pharmaceutical Industry Faces AIDS in Africa](#) (HBS)
- *2. [Phase Two: The Pharmaceutical Industry Responds to AIDS](#) (HBS)
- *3. [Anglo American \(A\)](#) (HBS)

References:

- *1. [Socially Responsible Pricing: Lessons from the Pricing of AIDS Drugs in Developing Countries](#) (HBS article)

Consideration of Human Needs and Equity Example 2: Global Poverty and Deprivation

What about when people are sick, or are working but are still poor? What about when the people are children, too young to act on their own behalf? What if the needed good or service is something like parental care, that cannot be supplied on a market? Many people in the world are suffering. Economists know that markets can fail to meet these needs, and business leaders discuss the role that business can play in meeting unmet needs.

Cases:

- *1. [Social Entrepreneurs: Correcting Market Failures \(A & B\)](#) (Stanford)
- *2. [TransFair USA](#) (Stanford)

References:

- *1. [Public Action to Remedy Hunger](#) Dr. Amartya Sen received the Prize in Economic Sciences in Memory of Alfred Nobel in 1998. In this essay, he described the causes of famine and the role of market and nonmarket institutions in addressing this problem.
- *2. [Why People Go Hungry](#) Dr. Kenneth Arrow received the Prize in Economic Sciences in Memory of Alfred Nobel in 1972, and is one of the creators of the Arrow-Debreu model (the core model of competitive markets). In the context of reviewing *Poverty and Famines* by Amartya Sen, Dr. Arrow discusses how market failures lead to hunger.

Consideration of Human Needs and Equity Example 3: Poverty and Deprivation in the United States

The same questions asked above concerning global poverty and deprivation can also be addressed within a U.S. context.

Cases:

- *1. [Inequality and the "American Model"](#)(HBS)

References

- *1. [Low-Income Working Families: Facts and Figures](#)

This brief and readable Urban Institute Report gives basic facts and figures about the working poor in the United States.

- *2. [Rhetoric and Reality: Making Sense of the Income Gap Debate](#) (HBR article)

- *3. [Environmental Justice: Income, Race, and Health](#) This teaching module presents data and case studies illustrating how minority and low-income communities often bear a disproportionate share of environmental costs. The uses and limitations of economic analysis are explored, including the topics of valuing human life and health and the difference between efficiency and equity. The module addresses issues of environmental justice both in the United States and internationally. The (free, downloadable) student reading consists of 24 pages which includes discussion questions, glossary, web links, references, and suggestions for additional readings.

[\[Inequality and Globalization](#) (HBS note)

[Human Well-Being and Economic Goals](#) (Book)

[The Political Economy of Inequality](#) (Book)

[Squaring Up: Policy Strategies to Raise Women's Incomes in the United States](#) (book)]