

Networks, Information, and Technology

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“New economy” versus old economics?

- ▶ The knowledge-based economy
 - Tangible versus intangible assets
 - Manufacturing versus services
 - New organizational forms
 - New forms of competition
- ▶ Is regular (Austrian) economics still useful?
 - Information goods
 - Network effects and path dependence



Information goods

- ▶ Information as a consumer good (evaluated, subjectively, like all consumer goods)
- ▶ Information goods are nothing new (books, maps, lectures, guides, directories)
- ▶ The production process for information: high fixed cost, low variable cost
 - Increasing returns and incumbent advantages
 - Incremental competition



Network effects

- ▶ Network effects, path dependence, and inefficient lock-in: a new source of “market failure”?
- ▶ Examples: QWERTY, VHS, MS-DOS, A/C power, internal-combustion engine. . . .
- ▶ Some problems
 - Imperfect knowledge
 - Switchover costs
 - Marginal analysis
 - The political process
 - Are there any real-world examples? (Liebowitz and Margolis)



Economics of the internet

- ▶ History of the internet
- ▶ TCP/IP and path dependence
- ▶ The internet and the invisible hand
 - Related topic: open-source software, “crowdsourcing,” and other forms of distributed computing



The market and the internet

The current global computer network has been developed by scientists and researchers and users who were free of market forces. Because of the government oversight and subsidy of network development, these network pioneers were not under the time pressures or bottom-line restraints that dominate commercial ventures. Therefore, they could contribute the time and labor needed to make sure the problems were solved.

— “The Netbook,” www.columbia.edu/~hauben/netbook/

Intellectual property

- ▶ Intellectual property in practice
 - Examples
- ▶ The theory of intellectual property
 - Rothbard
 - Kinsella
- ▶ Applications to digital media



Patently Absurd: Ham Sandwich Edition

On a day when the scope of patent law is being hotly debated before the Supreme Court, there's news that McDonald's has filed a 55-page patent application in Europe and the United States claiming "intellectual property rights" on how to make a hot deli sandwich. . . .

The application discusses the "simultaneous toasting of a bread component" and inserting condiments into the sandwich with a "sandwich delivery tool." The filling is placed in the "bread component." The application explains: "Often the sandwich filling is the source of the name of the sandwich; for example, ham sandwich."

— WSJ Law Blog, December 1, 2006

Summary and conclusions

- ▶ The IT sector does have some interesting and unusual characteristics.
- ▶ Information goods and network effects are important (though not really new).
- ▶ The laws of economics still apply!

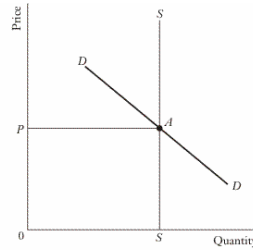


FIGURE 68. PRICE FORMATION IN A FREE MARKET