

Simon Johnson: One Page Summary

15.223, class #7: Intellectual Property Protection

Since the beginning of industrialization, around 1800, the importance of private property rights has been repeatedly demonstrated. Entrepreneurs need to feel that they will benefit from their efforts – the prospect of confiscation, by government or powerful elites, does not encourage productive investment.

The same logic applies to inventors. Patent systems developed as a way to help ensure that inventors benefit from their creativity – at the same time as ensuring that the technology will be shared more broadly with society. Patent protection trades time-limited exclusive rights for full disclosure.

Most pharmaceutical innovation has, in the past, taken place in relatively few countries – including the US, parts of Western Europe, and Japan. These countries have developed large drug companies with a great deal of political clout. Much of their innovation has been focused on diseases that were prevalent in those countries or otherwise have a big “market”.

In the Uruguay Round, concluded in 1995, the pharmaceutical industry (together with media/entertainment) worked for further “trade liberalization” – access to rich countries’ markets was opened up for some goods (like apparel and textiles), in return for developing countries agreeing to respect patents.

In Porter’s diamond for the pharmaceutical industry, the government plays a critical role. In addition to protecting intellectual property (or not), public policy shapes the health care delivery system and how much drug companies get paid (e.g., Medicare Part D). The rise of the modern state, at the end of the 19th century, was very much shaped by the need to address infectious diseases in industrializing societies. New medical technologies – including vaccines and anti-bacterial drugs – created the opportunity to make everyone healthier and to reduce “contagion” effects.

Governments remain engaged with monitoring disease outbreaks and determining where resources should be concentrated (e.g., look at <http://www.cdc.gov/flu/weekly/>).

When poor people can spread infectious disease to rich people, there is often more focus on government-provided health solutions being free-of-charge. A healthy population is also sometimes regarded as a national security issue, at least it was in the days of mass conscript armies (e.g., before 1914 in Britain).

In and after World War II, the American military carried improved medical technologies with it around the world, including treatments for malaria and cholera (rehydration treatment). At the same time, globalization – including through all increases in the physical movement of people – changes the dynamics of disease and may lead to new pathogens (think about the spread of plague in medieval Europe, the emergence of cholera pandemics in the nineteenth century, “Spanish flu” in 1918-1919, or worries about SARS, avian flu, and the like today).

Penicillin, anti-mosquito chemicals, and public health programs had a transformative effect after 1945, particularly in poorer countries with low life expectancy at that time. Many of them experienced a surge in population and life expectancy has converged towards the levels in rich countries. Income per capita, in contrast, has not converged.

We are better at improving health than at improving economies.

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