Economic Analysis of Property Rights

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Abstract

Interest in studying the relationship between economic institutions and economic phenomena has been increasing. Indeed, economists point to property rights as constituting one of the most interesting fields of study. Developing countries generally have a weak property rights system, and it is thought that such a system can function like a set of shackles that cripples economic progress. In contrast, developed countries have a strong property rights system, especially in the case of intellectual property rights (IPRs), and this encourages firms to invest in research and development (R&D).

In the first two chapters, we study agents' behavior and economic performance in a developing country. The developing country shares a common capital that everyone can access, and is not secured property. The common-pool problem is widely used to analyze such an economy. It is well known that excess use of the commons can be observed in the economy. This is called the tragedy of the commons. Excess use of the commons is also a cause of the voracity effect. This is defined as a positive technology shock in the common sector that leads to an increase in appropriation, thus stagnating the economy.

In chapter 2, we explore a new interpretation of what causes voraciousness and investigate the effects of voracious behavior on a developing country. For this purpose, we introduce a new direction of capital flow. A government mandates that all groups invest their private capital in the common sector to mitigate the effects of excess use of the commons. We show that, while there is no standard voracity effect, an increase in the contribution of the private sector to the common sector causes more voracious behavior and thus slows economic growth. This implies that policies designed to preserve the commons can lead to harmful effects on the economy.

Chapter 3 relaxes the assumption imposed in the existing literature to consider situations in which each interest group can observe and take an interest in opponents' private capital stocks. Here, we find a new Markovian Nash equilibrium that shows the following: the opponents'

private capital stocks have a negative effect on the consumption of an agent, there is no voracity effect, each agent's utility is always lower than it is where each agent has no interest in the opponents' private capital, and utility is an increasing function of the number of groups.

In the subsequent two chapters, we study how technological progress affects advertising, profits, and economic welfare. Firms generally invest in R&D and obtain IPRs to improve their technology levels and quality of products. Indeed, the number of IPRs is often seen as indicative of technological progress. Firms also advertise in an effete to persuade consumers to purchase their improved goods. As a result, advertising affects firms' profits and economic welfare. To investigate this, we consider a dynamic voluntary advertising model with a duopoly. Firms can use advertising and price as competitive tools where product quality is a given; moreover advertising also plays a role as a public good.

In chapter 4, the market is assumed not to be fully covered by consumers. In this situation, we investigate how advertising, profits, and welfare respond to changes in consumer preference and product quality. We mainly find that a higher maximum preference value leads to increases in advertising, profits, and consumer surplus, but brings about a decrease in incumbent consumers' utility. We further find that technology improvement by a low-quality firm increases its profit and consumer surplus if the technology gap is relatively large. If this is not the case, however, then the innovation could have different effects on firms' profits and consumer surplus.

In chapter 5, the market is assumed to be completely covered in the sense that all consumers purchase a product from one of the two firms. Two cases are considered: an interior case and a corner case. As in chapter 4, we investigate how changes in consumer preference and firm technology level affect advertising, profits, and economic welfare, subsequently highlighting the differences between the two cases. The main results of chapter 5 may be summarized as follows. First, a high-quality firm possesses the largest market share, advertising share, and profit in both the interior and corner cases. Second, an increase in the minimum willingness to pay has different effects on the profits of the firms and economic welfare in both cases. Third, assuming a relatively small preference dispersion and relatively large technological gap, a rise in the technology level of a low-quality firm increases the advertising and profit of the firm in both cases. Finally, changes in preference dispersion and the technological gap differently affect individual utility and consumer surplus.