An economic analysis of social welfare

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Welfare economics may be defined as the branch of study which formu lates propositions by which we can say that the social welfare in one economic situation is higher or lower than in another (Ng 2004, 2015(1)). Briefly, it is the economic analysis of social welfare.

As a society consists of individuals in that society, social welfare is just the welfare of individuals in that society. Here, welfare is defined as the happiness of the individual. Though some authors since Aristotle require some ethical/eudemonic elements in the definition of welfare in addition to happiness, I argue (Ng 2022, Ch.1) that it is most simple to separate the subjective/hedonic element from the eudemonic element; the latter element being regarded as an issue in morality, not in the concept of welfare or happiness.

The first welfare theorem

Perhaps the most important result in welfare theorem is the first welfare theorem. This theorem says that, under certain conditions, a general equilibrium of a market economy under perfect competition results in a most efficient allocation both in resources, inputs, or factors of production, and in final goods (taken to include services). Efficiency here is defined in the sense of Pareto optimality where no one can be made better off without making any other worse off. Perfect competition requires that all sellers and buyers have no influence on prices and take market prices as given. Apart from this (and the implied absence, at equilibrium, of increasing returns), the main additional conditions are perfect relevant information and the absence of real external effects. A consumer needs to know that she can buy the various goods at the given market prices and her preference for them; a producer of a certain good needs to know the best available method (least costly at the market prices of inputs) of production. In contrast to real external effects like pollution (to be discussed in a future piece), the presence of pecuniary external effects does not cause inefficiency, at least not under the classical conditions of perfect competition (and the absence of distortions).

Pecuniary external effects are effects of some individuals (consumers or producers) on others through affecting the market prices. For example, the higher demand for good X by consumer A may increase its price and hence makes B (who also consume X) worse off. This does not cause inefficiency under perfect competition as the loss in consumer surplus by B is offset by the gain in producer surplus for the supplier of X. If conditions for the first theorem are satisfied, the situation is Pareto optimal both before and after the change in preference by A.

Certain government regulations can protect the quality of goods

The condition of perfect relevant information may be significantly violated for certain goods where many consumers are ignorant of the quality of goods. Thus, it may be desirable to have certain government regulations, such as on food safety. This is partly because the undesirable effects may not be clear and immediate and are difficult to be attributed to which particular goods. On the other hand, there is no need for the government to regulate the delicious tastes for restaurants as consumers will easily find out.

The first welfare theorem is the most important result in economics. On the one hand, it allows us to focus on the essence of the price mechanism or market coordination in achieving efficiency in resource allocation, production, and distribution of products. On the other hand, it serves as a benchmark for us to identify the possible sources of inefficiency (e.g. monopoly, pollution, consumer ignorance) and hence derives possible corrective measures (e.g. eliminating administrative monopoly, taxing pollution, appropriate food safety regulations) to supplement the market.

The first theorem refers only to efficiency, it does not say anything about equality. A Pareto-optimal situation (i.e. allocation of resources and goods) may involve the existence of extreme richness with extreme poverty. Could an efficient situation with higher equality be possible? The second theorem says that any feasible Pareto-optimal situation could be sustained as a perfectly competitive general equilibrium with some appropriate initial distribution of endowments (of resources, assets and earning abilities, possibly including power and connections in a wider analysis). If we want an outcome of more equality, we need a more equal distribution of endowments. Michael Jackson ends up with a huge income/wealth level because he was endowed with a sexy voice and other talents, allowing him, with some learning/training, to attract thousands/millions of fans willing to pay highly to watch his performance. Kwang ends up with only a small fraction of that wealth because when he sings, people run away!

Unequal endowments, equality, and efficiency

If we start with very unequal endowments, we may still improve upon the unequal outcomes to achieve higher equality. However, under traditional analysis, we typically must sacrifice some efficiency. We may tax the rich more and help the poor. This does not only involve administrative, compliance (on the part of the taxpayers), and policing costs, but also disincentive effects, as it may make both the rich and the poor have fewer incentives to earn higher incomes. We may also add the costs of generating more rent-seeking activities, not to mention outright corruption. Thus, the second theorem has limited significance, but it does show us that the unequal outcome may largely be traceable to unequal endowments rather than the functioning of the market as such. Some recent studies also show that some improvements in equality may actually be beneficial to efficiency. With the increase in within-country inequality over the past few decades, there have been significant increases in public support for more redistribution (IMF 2014).

1. On which parts of the present piece are based.

References

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