Zero-Sum Game

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Economic life is often compared to a game. In many ways, this is an accurate characterization. Participants in the economy try to maximize their outcomes within a rule-based structure, much as players of a game do. As such, some economic actors are very successful, while others appear to get left in the dust.

At one time or another, most people suffer some sort of economic setback. People may invest their money poorly, lose their jobs, or find that their skills and knowledge have become obsolete. The high visibility of these negative outcomes has led some pundits, and a few economists, to argue that the economy functions as a zero-sum game.

Just what is a zero-sum game? Mathematically, a zero-sum game is one in which the sum of all the gains and losses made by all the players must be zero. This is the familiar idea that one man's loss is another man's gain. For example, poker is a classic zero-sum game. At the end of the night, the total amount of money involved in the game is the same as at the start of the game. Thus, any money made by one player must come at the expense of the others.

Is it fair to argue that a market economy works the same way as a zero-sum game? Must every economic action have losses as big as the gains? No.

The first flaw in the zero-sum argument is the implicit assumption that a fixed basket of goods has the same value to all people. But the same good may have different utilities for different people. For example, I might not value a designer dress at all since I have no use for it, but my sister might highly value the dress. Thus, with a fixed array of goods, different combinations of those goods will lead to different overall levels of utility.

More important, the total amount of wealth in the world is not fixed. Consider the example of Henry Ford and the automobile. In 1908, Ford introduced the Model T, the first mass-produced and widely affordable car in history. Through his innovative use of assembly lines, Ford was able to produce reliable cars at relatively low cost. By 1927 he had sold 15 million cars, his company employed well over 100,000 workers at wages double industry standards, and almost 7,000 Ford dealerships had been opened across the country.

Needless to say, Ford himself became extremely wealthy in the process. However, Ford also greatly increased the wealth of countless others through his innovations. He provided high-paying jobs to thousands of workers while producing a much-valued new good to the burgeoning middle class.

The Ford example demonstrates that the level of wealth in a society is not fixed. Though the supply of some raw materials is limited, technological improvements are constantly increasing the productivity, distribution, and quality of the goods produced from these materials. These changes make virtually everyone better off. Thus, most economic activity cannot be called zero-sum games.

Still, it is possible for some people to suffer losses. For example, many manufacturing jobs have moved from wealthy countries such as the United States to developing countries, leaving many U.S. workers without jobs, at least temporarily. The economic hardships that result from globalization are real, and there is justifiable interest in implementing public policies that will better prepare American workers to succeed in a changed environment.

But we also must remember that globalization increases the efficiency of the world economy by allocating resources to their maximum effect. In fact, trade is a perfect example of what is known as a positive-sum game. Some jobs are lost in the process, but overall those losses are more than offset in the long run by cheaper goods and the movement of capital into more competitive projects.

It's useful to consider the Ford example again in this context. The introduction of the Model T surely harmed other auto manufacturers that were unable to compete with Ford's new product. But many millions of people were benefited in the process, making it a positive-sum game.

Are there also examples of negative-sum games? Yes. Certain government regulations, for instance, can produce such outcomes. Consider Manhattan's housing market. The city of New York imposes rent controls on some apartments, which cap the rents that landlords are allowed to charge tenants. This regulation provides a disincentive to maintain the existing housing stock or to add to it. The result is a negative-sum game. Those who can secure a rent-controlled apartment are made better off. But the majority of New Yorkers wind up paying higher rents because there is not enough supply to meet demand.

It's important to remember that this example is unique. Zero-sum games can occur, but they are unusual and often the result of public intervention into private markets.   **RF**