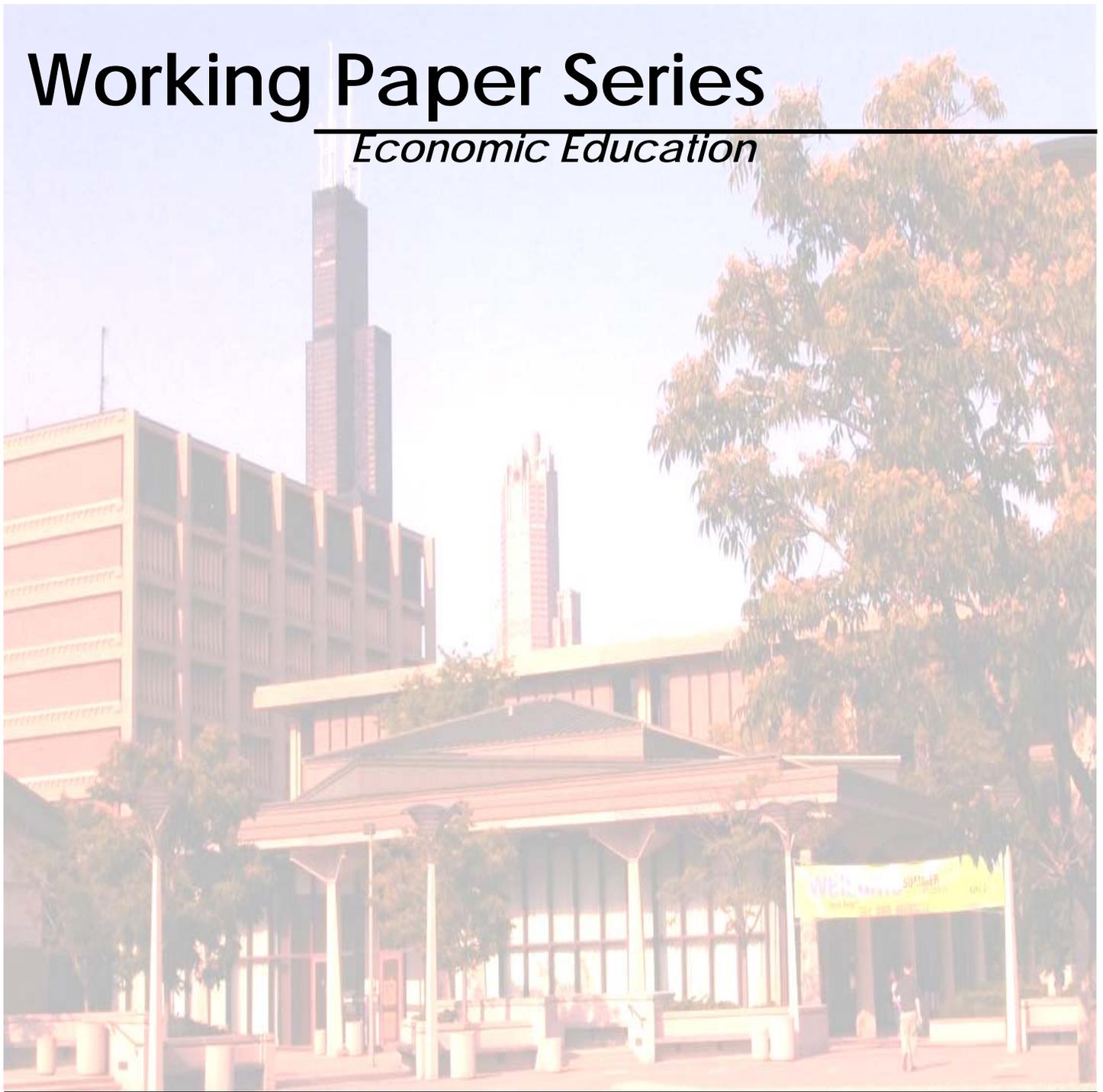


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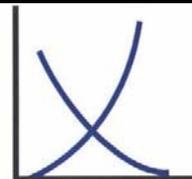


No. 002

Favorite Ways to Teach Economic Concepts

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BEES AND RATIONAL EXPECTATIONS

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Of all the assumptions in economics, the one that annoys students the most is that of rationality. The students simply do not believe that most people, including themselves, behave in a rational manner. Because they have even less faith in the rationality of non-human species, dramatic examples of rational behavior on the part of animals and insects really surprise them and cause them to give more credit to this assumption.

In this regard, I found the following real-life experiment of bees, which I read in the science section of a newspaper, to be very helpful in motivating students to understand the rational expectations assumption. The aim of the experiment was to study communication between bees. It involved placing a container of nectar in the field to be discovered by a bee from the colony being observed. When the latter occurs, the bee immediately returns to its hive to inform the others of the find through an elaborate dance which is what the scientists wanted to observe. In order to generate more observations, every morning the experimenters would move the nectar container a couple of hundred yards away. In each of the first three days, they noticed that it was taking less and less time for the first bee to find the nectar and for the others to follow. On the fourth morning, however, when they went to place the nectar container in a new position, they were shocked to find the bees already there, waiting for them.

Without realizing, the scientists must have been moving the nectar in a certain pattern. It was not important for their experiment. It was, however, important for the bees, and apparently, they learned to form rational expectations about it.

Similarly, Table 28-2 describes two points on a price-maker's up-sloping resource supply schedule. The additional cost incurred from the acquisition of the marginal (seventh) unit of the resource is \$15, which may be viewed as the sum of the price paid for it (\$9) plus the \$1 more the firm must pay for each of the six non-marginal units (compared to the \$8 per unit price it would have had to pay for each of them if the price would not have risen so as to permit the acquisition of the marginal unit.) (If the price associated with the quantity of seven units had remained the same, \$8, as it does on a horizontal supply schedule, the marginal resource cost of acquiring the seventh unit would be \$8, the price paid to acquire it.)

Table 28-2

P	Xs
8	6
9	7

RESOURCE SUBSTITUTION POSSIBILITIES

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Even though students “learn” the isoquant-isocost analysis of the behavior of the firm, they seldom apply it in their routine thinking. To bring this to the forefront and to emphasize the significance of substitution possibilities, I give my students the following exercise:

A firm produces 100 units of output using 50 hours of skilled labor and 100 hours of unskilled labor time together with its fixed inputs. If the price of unskilled labor increases by \$1 per hour (say, due to an increase in the legal minimum wage rate), the firm’s total cost of producing 100 units of output will increase by \$100. Do you agree or disagree? Explain.

Most students agree with the statement given and dismiss it as too trivial. Only after seeing on a graph how through substitution the firm can cushion itself from the full potential impact of the input price increase, they learn to appreciate the relevance of the isoquant-isocost analysis. After giving the correct answer to this exercise (the cost will increase but by less than \$100), I ask the students why do they think that the unions, whose members are usually skilled laborers earning much higher wages than the legal minimum wage rate, bother to support raising the minimum wage rate. Because by then they have a graph in front of them showing the effect of the rise of the minimum wage to be an increase in the employment of skilled labor, most of the students give the correct answer. They also show signs of pleasure in gaining a new insight into an issue they had already given some thought. Indeed, I think that this analysis of minimum wage issue is more understandable to the students than the usual treatment involving separate demand-supply analyses of skilled and unskilled labor markets.

AN EXAMPLE OF A GIFFEN GOOD

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The following example helps in explaining the idea of Giffen goods.

Suppose that you want to make a 10-quart pillow as a gift for a friend. You would really like it to be 100% down-filled, but can only spare \$40 for this pillow and down costs \$12 per quart. Polyester is an alternative filling costing only \$2 per quart. Consequently, you decide to make your pillow 20% down, and 80% polyester. What would happen if the price of polyester rose to \$4 per quart? You would have to make the pillow 100% polyester-filled. Its price, of course, need not rise to \$4. Any increase in the price of polyester filling would cause you to buy more of it, making it a Giffen good for you.

After giving this example, I say to the students, suppose it is not a pillow but your stomach that you are filling, and invite them to come up with other examples of Giffen goods.