How Markets Allocate Resources

Markets use prices as signals to allocate resources to their highest valued uses. Consumers will pay higher prices for goods and services that they value more highly. Producers will devote more resources to the production of goods and services that have higher prices, other things being equal. And other things being equal, workers will provide more hours of labor to jobs that pay higher salaries.

This allocation principle applies both to product markets for items such as cars, houses, and haircuts and to resource markets for items such as labor, land, and equipment. Households play two important roles in an economy—they demand goods and services and supply resources. Businesses also have dual roles—they supply goods and services and demand resources. The interaction of demand and supply in product and resource markets generates prices that serve to allocate items to their highest valued alternatives. Factors that interfere with the workings of a competitive market result in an inefficient allocation of resources, causing a reduction in society’s overall well-being.

Figures 2-1.1 and 2-1.2 illustrate how markets can be interrelated. Assume the markets are perfectly competitive and that the supply and demand model is completely applicable. The graphs show the supply and demand in each market before the assumed change occurs. Trace through the effects of the assumed change, all other things held constant. Work your way from left to right. Shift no more than one curve in each market. In each market graph, show any shift in the demand or supply curve, labeling each new curve D1 or S1. Then circle the correct symbol under each graph (↑ for increase, — for unchanged, and ↓ for decrease).

1. Assume that a new fertilizer dramatically increases the number of potatoes that can be harvested with no additional labor or machinery. Also assume that this fertilizer does not affect wheat farming and that people are satisfied to eat either potatoes or bread made from wheat flour.

Figure 2-1.1
Effects of a New Fertilizer
2. Assume new studies show that coffee is worse for people’s health than tea and that more people use cream in coffee than in tea.

**Figure 2-1.2**  
**Effects of New Health Studies**

<table>
<thead>
<tr>
<th></th>
<th>Coffee</th>
<th>Tea</th>
<th>Cream</th>
<th>Automatic coffee makers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demand:</strong></td>
<td>↑ ↓</td>
<td>↑ ▼</td>
<td>↑ ▼</td>
<td>↑ ▼</td>
</tr>
<tr>
<td><strong>Supply:</strong></td>
<td>↑ ▼</td>
<td>↑ ▼</td>
<td>↑ ▼</td>
<td>↑ ▼</td>
</tr>
<tr>
<td><strong>Equilibrium price:</strong></td>
<td>↑ ↓</td>
<td>↑ ▼</td>
<td>↑ ▼</td>
<td>↑ ▼</td>
</tr>
<tr>
<td><strong>Equilibrium quantity:</strong></td>
<td>↑ ↓</td>
<td>↑ ▼</td>
<td>↑ ▼</td>
<td>↑ ▼</td>
</tr>
</tbody>
</table>
3. Examine Figure 2-1.3, which shows an increase in demand in the housing market in the country of Pajotte.

**Figure 2-1.3**
In **crease in Housing Demand in Pajotte**

![Graph showing an increase in demand for houses](image)

(A) Which of the following factors would cause an increase in the demand for houses in Pajotte?

(1) *An increase in the annual income of many Pajottians*

(2) A reduced rate of immigration into Pajotte

(3) *Lower interest rates on loans to buy houses*

(B) The demand for lumber in Pajotte would (**increase** / **decrease**), which would result in (**higher** / **lower**) lumber prices.

(C) Employment of workers who build houses would (**increase** / **decrease**) and their wages would (**increase** / **decrease**).