# Market Demand and Supply tarr 3-The Market Imeractions) 

Guam Cooperative Extension

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The price of a product is determined by supply and demand interacting in the market for the product. The market price is simply the dollar cost of a unit of the product in the market. It is generally assumed that there is only one price for a product in any single market. Often, one store will be selling cucumbers for sixty cents while another store is selling them for seventy-five cents per pound. These differences are due to differences between the stores and are usually ignored.

If the quantity supplied is the same as the quantity demanded at the market price, the market for that product is said to be in equilibrium. Equilibrium in a market means that there is no reason for producers or consumers to change their behavior and there is no reason for the market price of the product to change. At the market price, the producers are able to sell all of their quantity supplied. They may not be happy with the market price, but they are on their supply schedule and have no reason to change the quantity that they bring into the market. Consumers may not be happy with the price, but they are on their demand schedule, and they also have no reason to change the quantity that they purchase. Since the quantity supplied equal the quantity demanded, there is no reason for the market price to change.

If the quantity supplied at a market price exceeds the quantity demanded at that
price, then there is said to be an excess supply. Producers are willing to supply more than consumers are willing to buy. Since the producers cannot force the consumers to buy more of the product, there will be unsold product in the market and market is said to be in disequilibrium. Some producers will be willing to sell their leftover product at a lower price. This lower price will lead consumers to buy more of the product. The quantity demanded will be larger. The lower price will also producers to bring less of the product into the market. The quantity supplied will be smaller. Both of these actions will make the quantity of excess supply smaller. Price will continue to fall as long as there is an excess supply. Once the excess supply has been eliminated, the market price will stop falling and the market will be back in equilibrium. Producers will be selling their quantity supplied at the market price and consumers will be buying their quantity demanded at the market price and both will be equal.

If the quantity demanded exceeds the quantity supplied at the market price, then there is said to be an excess demand. Consumers are willing to buy more than producers are willing to supply at the market price. Since consumers are unable to force producers to sell more, some consumers will want more of the product than they can buy at the market price. These consumers will raise the price in an effort to obtain all of the product that they want. Price tends to rise will excess demand. The increased market price forces some consumers to buy less and encourages producers to sell more of the product. Both of these actions reduces the excess demand. Price will continue to rise as long as there is an
excess demand. Once the price increases have eliminated the excess demand, the market will return to equilibrium and the price will stop rising.

If the prices of substitutes or incomes rise, the quantity demanded at the market will increase. This is said to be an increase in demand. It will put the market into a condition of excess demand and prices will rise. Producers will increase their quantity supplied and consumers will decrease their quantity demanded until equilibrium is restored. The opposite process occurs with a decrease in demand due to a decrease in the price of substitutes or incomes.

If the production function increases or the costs of inputs or the opportunity costs decreases, then the quantity supplied to the market at any price increases. This is said to be an increase in supply. It will put the market into a condition of excess supply and prices will start to fall. Producers will decrease their quantity supplied and consumers will increase their quantity demanded until equilibrium is restored in the market. The opposite process occurs with a decrease in supply due to a decrease in the production function or increases in input prices or opportunity costs. Price changes always act to bring a market back into equilibrium.

Please refer to the examples on the following page...

A hypothetical market for cucumbers on Guam

| Price | Quantity demanded <br> in pounds per week | Quantity supplied <br> in pounds per week | Equilibrium or <br> excess demand or <br> supply | Price will tend to |
| :---: | :---: | :---: | :---: | :---: |
| $\$ 1.00$ | 1,000 | 2,000 | excess supply | decrease |
| $\$ 0.75$ | 1,500 | 1,500 | equilibrium | not change |
| $\$ 0.50$ | 2,000 | 1,000 | excess demand | increase |

Example 7. Market conditions for cucumbers on Guam.

A hypothetical market for cucumbers on Guam

| Price | Quantity demanded <br> in pounds per week | Quantity supplied <br> in pounds per week | Equilibrium or <br> excess demand or <br> supply | Price will tend to |
| :---: | :---: | :---: | :---: | :---: |
| $\$ 1.00$ | 1,000 | 1,000 | equilibrium | not change |
| $\$ 0.75$ | 1,500 | 750 | excess demand | increase |
| $\$ 0.50$ | 2,000 | 500 | excess demand | increase |

Example 8. Market conditions for cucumbers on Guam after the cost of labor has increased from $\$ 6.00$ per hour to $\$ 10.00$ per hour.

A hypothetical market for cucumbers on Guam

| Price | Quantity demanded <br> in pounds per week | Quantity supplied <br> in pounds per week | Equilibrium or <br> excess demand or <br> supply | Price will tend to |
| :---: | :---: | :---: | :---: | :---: |
| $\$ 1.00$ | 2,000 | 2,000 | equilibrium | not change |
| $\$ 0.75$ | 3,500 | 1,500 | excess demand | increase |
| $\$ 0.50$ | 5,000 | 1,000 | excess demand | increase |

Example 9. Market conditions for cucumbers on Guam with the labor at $\$ 6.00$ per hour, but when the prices of other fresh vegetables has increased drastically.

