Unit D: Applying Basic Macroeconomic Principles in Agribusiness

Lesson 1: Understanding Supply and Demand Principles

Terms

- Complement
- Deflation
- Economics
- Equilibrium
- Gross Domestic Product
- In-Season
- Inflation
- Law of Demand
- Law of Supply
- Macroeconomics
- Microeconomics
- Resource Scarcity
- Substitute

Sand

http://media.artdiamondblog.com/images2/ChinaSeaOfSand.jpg

Sand

http://www.chromasia.com/iblog/archives/0703152049.php

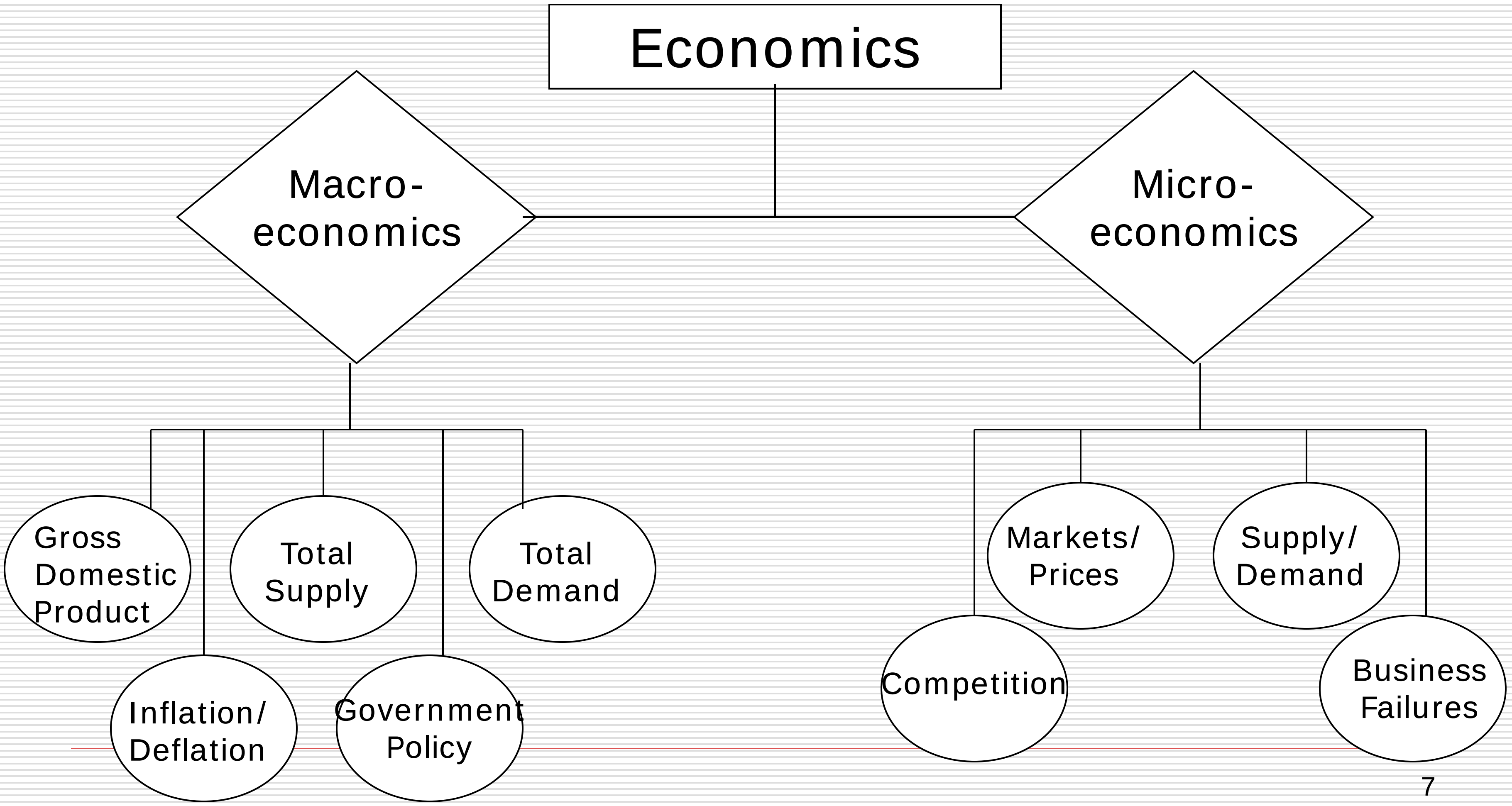
Sand

http://picasaweb.google.com/d4ngrboi/ATaleOfTwoSandcastles/photo#5122855392118087794

Macroeconomics and Microeconomics

I. ***Economics*** is the science of allocating scarce resources among different and competing choices and utilizing them to best satisfy human wants. It is a study of how to get the most satisfaction for a given amount of money or to spend the least money for a given want or need. The study of economics is based upon the principle of scarcity of resources. ***Resource scarcity*** states that the inputs needed to make products are not available in unlimited supply.

Macroeconomics and Microeconomics



Macroeconomics and Microeconomics

A. ***Macroeconomics*** is the study of the economy as a whole. It is comprised of all the choices made at the microeconomic level.

1. Macroeconomics looks at the effects of changes in the production of goods and services and employment and how they interact to influence economic performance on a broad scale. The actions of individuals, businesses and government entities all influence macroeconomics.

Macroeconomics and Microeconomics

2. Concepts related to macroeconomics include:
   a. ***Gross Domestic Product (GDP)*** is the market value of all goods and services produced within a country in one year.
   b. Total Supply is the total amount of goods and services produced during a defined period of time.
   c. Total Demand is the total amount of spending on goods and services during a defined period of time.

Macroeconomics and Microeconomics

d. ***Inflation*** is a sustained increase in the average price of goods and services within the entire economy. ***Deflation*** is a sustained decrease in the average price of goods and services within the entire economy.

e. Governmental policy that relates to the amount of money (cash) available in the economy and policy that relates to taxes and government spending.

Macroeconomics and Microeconomics

B. ***Microeconomics*** is the study of individual economic choices.

1. Every person makes choices about how to spend his or her money. They decide on how to allocate a scarce resource (money) in return for a perceived benefit that the allocation will bring.
2. The common denominator that individuals use in making these choices is price. Any economic system must have a method of establishing prices. Once these prices are established, individuals are able to make choices about how to allocate their resources.

Macroeconomics and Microeconomics

3. Concepts related to microeconomics include:
    a. Markets and prices give individuals the opportunity to buy and sell goods. Markets are the locations where this interaction occurs. Prices are the amounts of money that people pay for a good or service.
    b. Supply and demand is affected by business organizations and consumers. Governmental policies can sometimes affect supply and demand.
    c. Competition is determined by the number of buyers and sellers in particular markets.
    d. Business failures occur due to inadequate competition, lack of access to reliable information, not enough demand for goods, and other reasons.

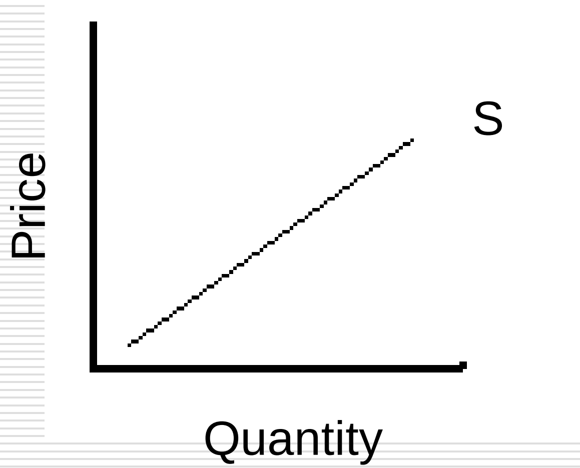
Law of Supply

II. The ***law of supply*** states that when the price of a product is lowered, with no change in other factors, less of the product will be supplied.

A. Supply is the quantity of a product or commodity that sellers are willing to provide to the market at a given price.

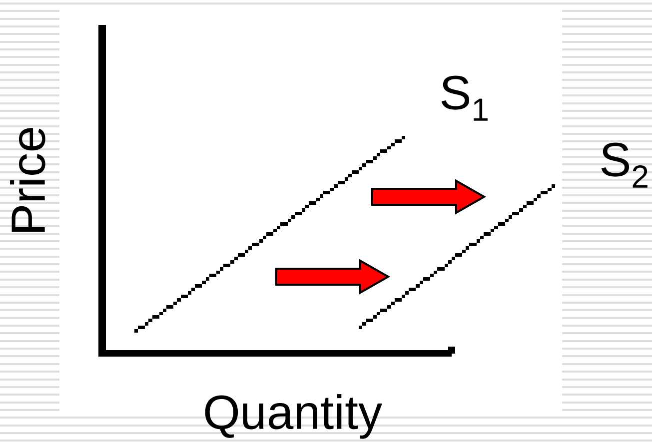
Law of Supply

1. The law of supply principle can be illustrated on a graphic.
   a. As the law of supply states, when price is raised, supply (the quantity of products or commodities) will increase.
   b. In the same way, when price is lowered, supply (the quantity of products or commodities) will decrease.



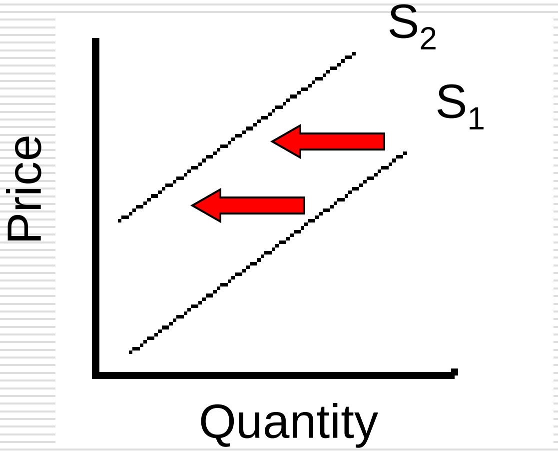
Law of Supply

2. When supply increases or decreases, the trend illustrated on the graphic shifts.
   a. When supply increases, the supply curve shifts to the right on the graphic.



Law of Supply

b. When supply decreases, the supply curve shifts to the left on the graphic.



Law of Supply

B. Several factors influence supply and can cause an increase or decrease in supply.

   1. Technology affects supply.

      a. Generally, technology decreases the cost of production, making it cheaper to produce the product.

Law of Supply

2. Costs of production affects supply.
   a. When prices of inputs change, the level of production often changes.
   b. Generally, producers try to sell products for at least as much as the total cost of all the inputs.

Law of Supply

3. Price of other products affects supply.
   a. If a farm or agribusiness can produce a different product that is priced higher, it may change production to capitalize on higher profits. For example, if the price of apple butter increased greatly, an applesauce producer might stop producing applesauce in order to start producing apple butter.
   b. Sometimes it is unfeasible to shift fixed assets to produce different products. For example, it would be too expensive and difficult to remove a grape vineyard to plant wheat and take advantage of higher wheat prices.

Law of Supply

4. Seasonal and cyclical production affects supply.
   a. Some cycles of production are uncontrollable such as the time required for livestock to reproduce or the time needed for plants to bear fruit.
   b. Certain nuts, fruits and vegetables are considerably cheaper when "***in-season***". A food is considered "in-season" during the time that it is ripe and being harvested.

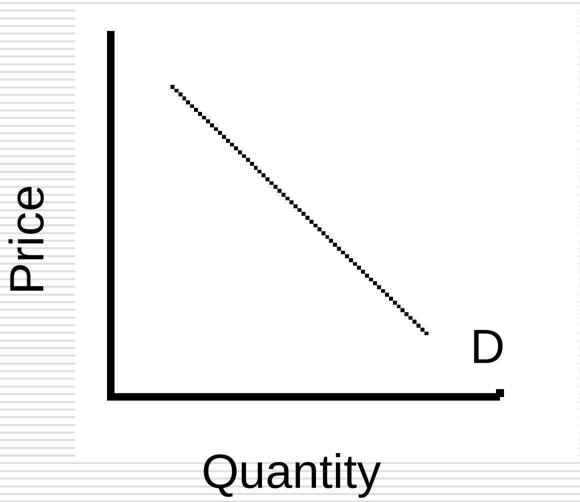
Law of Demand

III. The ***law of demand*** states that when the price of a product or commodity is increased with no change in other factors, less product will be purchased.

A. Demand is the quantity of a product or commodity buyers are willing to purchase from the market at a given price.

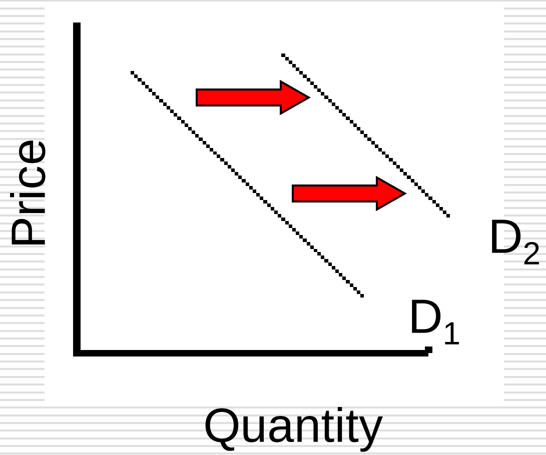
Law of Demand

1. The law of demand principle can be illustrated on a graphic.
   a. As the law of demand states, when price is raised, demand (the quantity of products or commodities) will decrease.
   b. In the same way, when price is lowered, demand (the quantity of products or commodities) will increase.



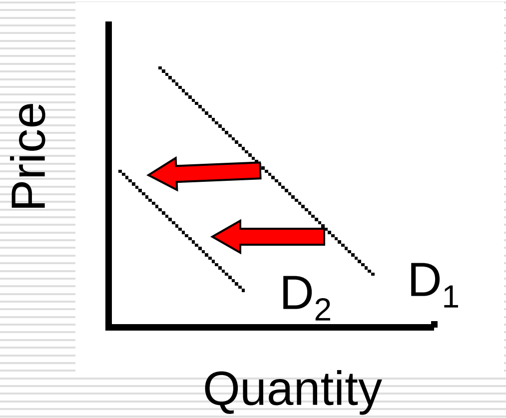
Law of Demand

2. When demand increases or decreases, the trend illustrated on the graphic shifts.
   a. When demand increases, the demand curve shifts to the right on the graphic.



Law of Demand

b. When demand decreases, the demand curve shifts to the left on the graphic.



Law of Demand

B. Several factors influence demand and can cause demand for a product or commodity to increase or decrease.

1. Size of population affects demand.
   a. With higher population, more product will be needed.
   b. All other things constant, demand is increased as population increases.

Law of Demand

2. Tastes and preferences of consumers affects demand.
   a. Tastes and preferences change with time and other factors.
   b. Weather and climate affects preferences. For example, soups and stews may be more desired in cold climates while cool drinks may be more desired in hot climates.

Law of Demand

3. Income and distribution of wealth affects demand.
   a. Generally, higher income results in more products being purchased.
   b. More expensive and luxury items are purchased as incomes increase.

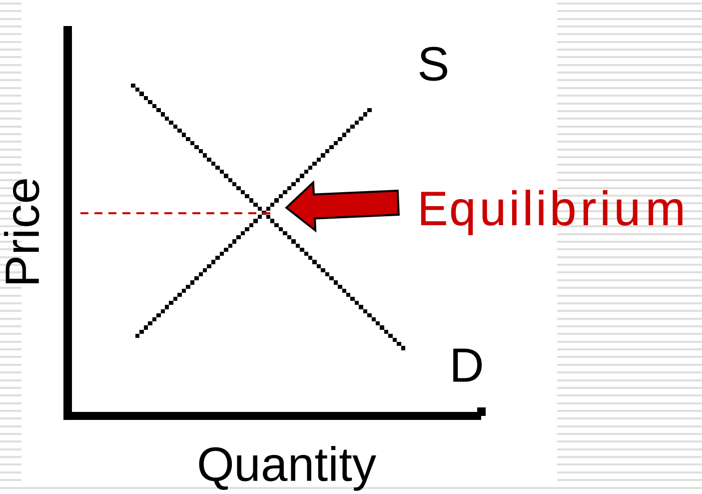
Law of Demand

4. Relative prices of all goods and services affects demand.
   a. With a limited budget, decisions to buy an item directly affects the amount of another item that can be purchased.
   b. When the price of a substitute item decreases, consumers will purchase more of the ***substitute***.
      i. A substitute is a product that is similar to and can replace another product.
      ii. For example, a substitute for pistachios would be almonds.
   c. When the price of a ***complement*** decreases, more of the item will be purchased.
      i. A complement is a product that is used together with another product.

Relationship of Supply and Demand

IV. The interaction of supply and demand determines price.

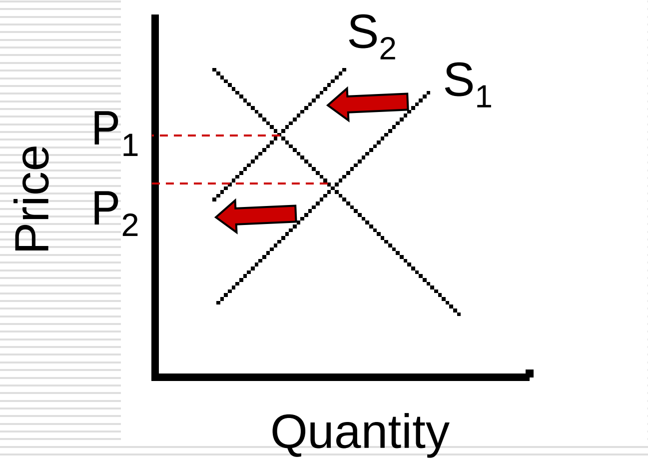
A. Price is found at ***equilibrium***, where the supply and demand curves intersect.

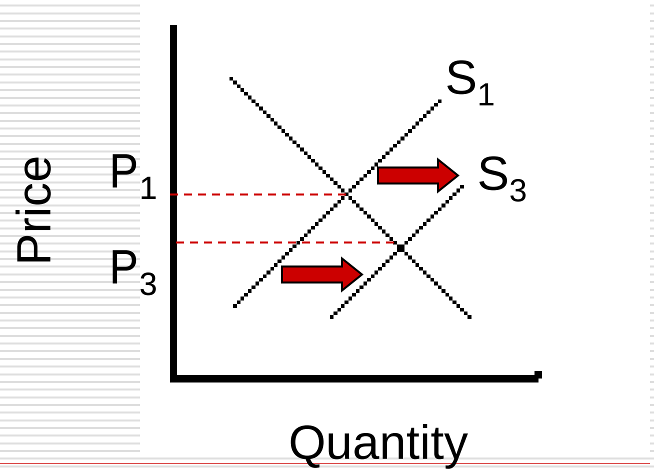


Relationship of Supply and Demand

B. As supply or demand changes, the equilibrium price also changes.

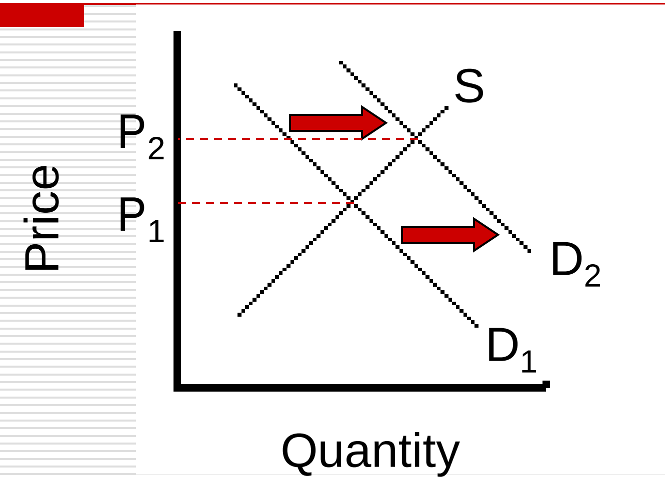
1. If the supply curve shifts left (supply decreases), the price increases.
2. If the supply curve shifts right (supply increases), the price decreases.



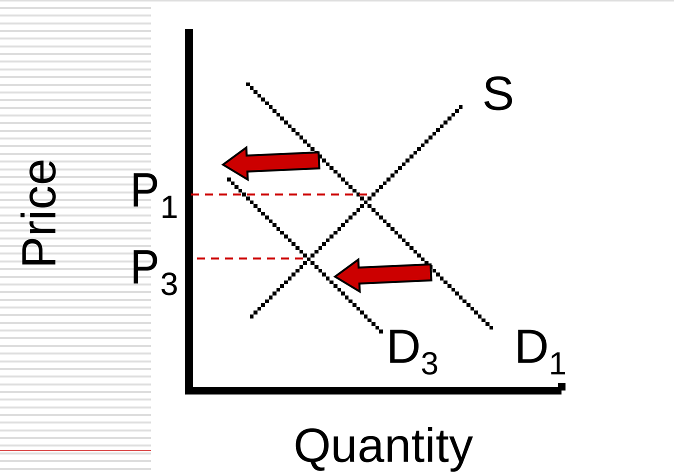


Relationship of Supply and Demand

3. If the demand curve shifts right (demand increases), the price increases.



4. If the demand curve shifts left (demand decreases), the price decreases.



Review

- What is macroeconomics?
- What is the law of supply?
- What is the law of demand?
- What is the relationship between supply and demand?