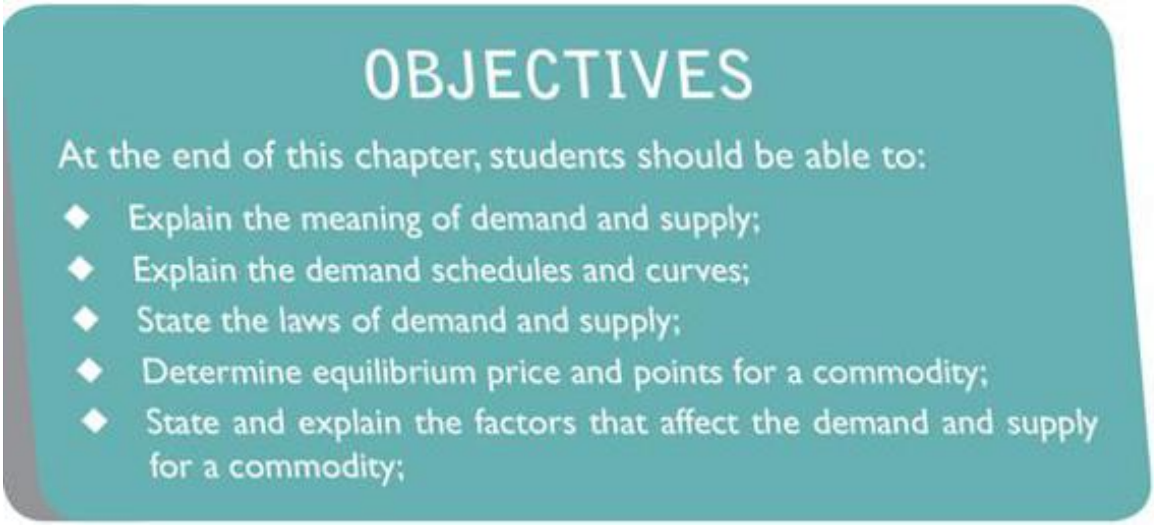
Chapter 3

CHINTRODUCTION

The concepts of demand and supply are very important in the study of economics. The forces of demand and supply govern a country's economy. Human wants are numerous and cannot be completely satisfied. The more the demand for an item, the more is the supply of such an item to meet the requisite needs of the consumers, other things being equal. This chapter examines the basic concepts of demand and supply, laws of demand and supply, demand and supply schedules, factors affecting demand and supply, and the determination of equilibrium price.



OBJECTIVES

At the end of this chapter, students should be able to:

- Explain the meaning of demand and supply;
- Explain the demand schedules and curves;
- State the laws of demand and supply;
- Determine equilibrium price and points for a commodity;
- State and explain the factors that affect the demand and supply for a commodity;

3.1 Demand

Demand is the amount or quantity of goods and services that a consumer is willing and is able to buy at a given price and at a particular time. In economics, demand is different from want or desire. Economists have divided demand into: effective and ineffective demands. Demand is said to be effective when the willingness is backed up with the ability to pay (money). Ineffective demand is mere want or desire that is not backed up by the required money to pay for the goods and services. The market prices of the commodities play a great role in determining whether the demand will be effective or ineffective. If the market prices of the commodities are high, the effective demand of many people may change to ineffective demand due to the consumer's inability to effect payment.

3.2 Law of Demand

The law of demand states that the lower the price of a commodity *ceteris paribus* (other things being equal) the greater the quantity demanded (bought); while the higher the price, the lower the quantity that will be demanded of a commodity.

3.3 Demand Schedule

A demand schedule is a table that shows the various quantities of a commodity which would be bought at different prices, at a given time. A demand schedule indicates that less item is bought at higher prices than at lower prices. Consider Table 3.1 below.

TABLE 3.1 Demand Schedule for Sugar

Price Per Packet (₦)	Quantity Bought Per Week (Packets)
15.00	5
12.00	8
10.00	12
7.00	18
5.00	24
3.00	30

From Table 3.1, at N15.00 only 5 packets of sugar were demanded.
When the price fell to N12.00, the quantity of sugar demanded increased to 8 packets and when the price was N3.00, 30 packets of sugar were bought.

3.4 Demand Curves

This is a graphical representation of the demand schedule. It is a diagrammatic way of illustrating the relationship between the price of a commodity and the quantity bought at each price level. The demand schedule in Table 3.1 can be translated into a demand curve as shown in Fig. 3.1. It is downward sloping from left to right, indicating that the higher the price the lower the quantity demanded.

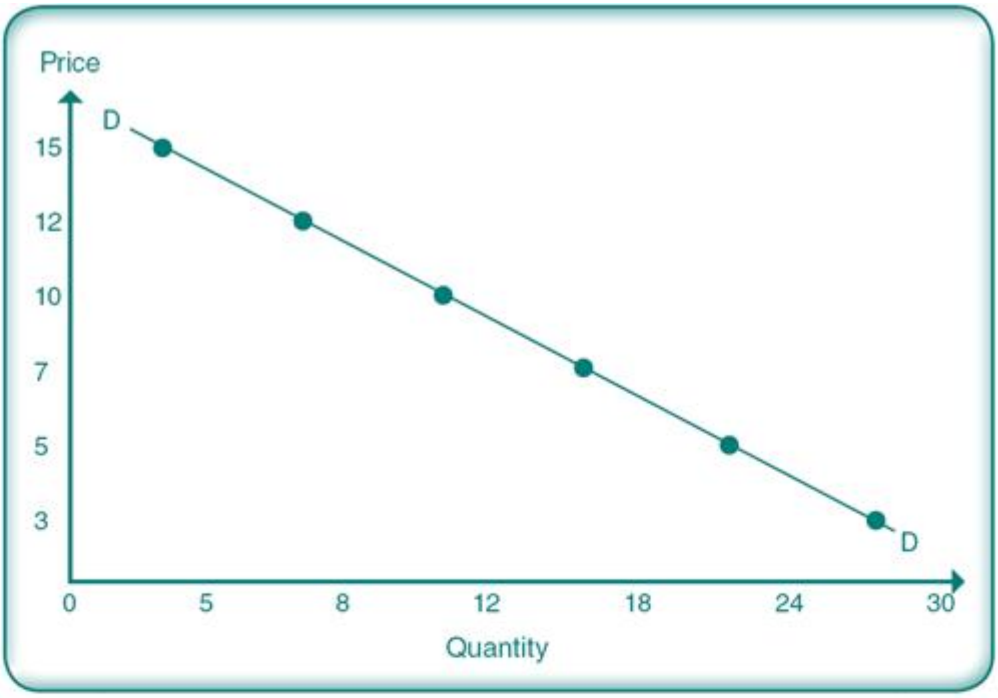


FIG. 3.1 Demand curve for a packet of sugar.

3.5 Determinants of Demand

(a) Price of the commodity: Th e price of a commodity determines the quantity of such item to be demanded by the consumers. Larger quantities of goods will be bought when their prices are lower, than when the prices are higher.
(b) Prices of other commodities: Prices of the compliments or substitutes of a commodity affect the demand for it. If the price of its compliment falls, more of the commodity would be bought. For example, if there is a decrease in the prices of cars, there would be increase in the demand for petrol. On the other hand, if the price of its substitutes fall, less of the commodity would be bought. For example, if the price of *Blue Band* falls, the demand for Margarine also falls.
(c) Income of the consumer: An increase in the income of a consumer, other things being equal, would make him to buy more of a commodity.

(d) Population size: An increase in the size of the population would increase the number of consumers and subsequently increases the aggregate demand of goods and services. A decrease in the population would have a reverse effect.
(e) Taste and fashion: A consumer would buy more of a commodity for which he has a stronger taste and less of those for which he does not like.
(f) Government taxation policy: An increase in commodity tax would increase the price of such commodities. Consumers will react negatively to such price increase by reducing their demand for the item.

3.6 Supply

Definition of Supply

Supply is the quantity of a given commodity or service that a producer is willing, able and ready to offer for sale over a period of time at a particular market price.
Supply does not mean the total production of a commodity, but the quantity the producer brought to the market for sale at a given period of time. Like demand, the quantity offered for sale in the market is known as effective supply. For example, if a farmer produces 300 tubers of yam and offers 250 to the market for sale, the producer's eff ective supply is those 250 tubers of yam he offered for sale in the market. Unlike demand, supply moves in the same direction as price. More goods and services are supplied to the market when their prices are high than when the prices are low.

3.7 Law of Supply

The law of supply states that the higher the price of a commodity, the higher the quantity supplied, while the lower the price, the lower the quantity supplied.

3.8 Supply Schedule

A supply schedule is a table that shows the various quantities of a commodity that would be offered for sale at various prices at a particular time. The individual supply schedule shows the magnitude of supply at various prices for a seller / producer while the market supply schedule shows the total quantities of goods offered for sale by all sellers / producers.

TABLE 3.2 Supply Schedule for Sugar in a Given Market

Price Per Packet (₦)	Quantity Sold Per Week (Packets)
15.00	40
12.00	32
10.00	26
8.00	18
5.00	9
3.00	4

From Table 3.2, it could be observed that at price N15.00, 40 packets of sugar were supplied to the market. However, when the price decreased to N3.00, only four packets of sugar were supplied to the market.

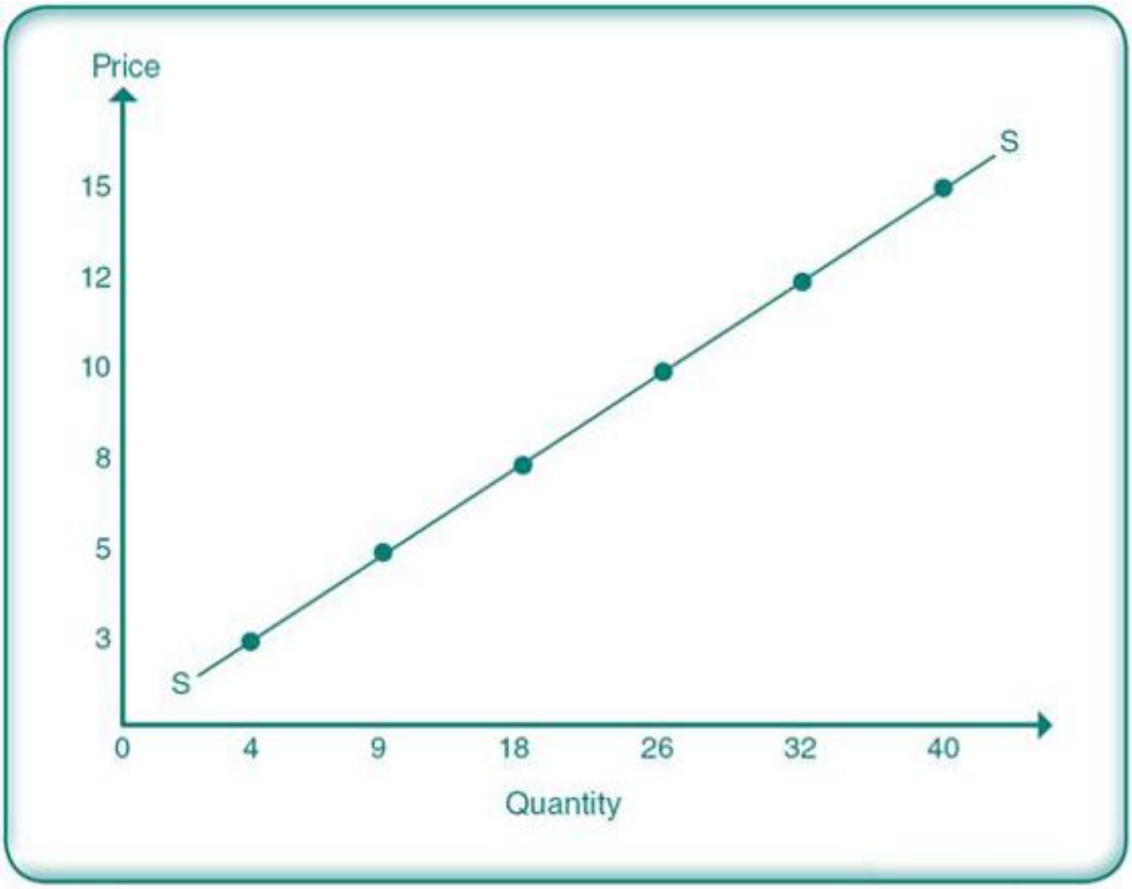


FIG. 3.2 A typical supply curve for sugar.

3.9 Supply Curve

A supply curve is a graphical illustration of a supply schedule. It shows the relationship between the price of a commodity and the quantity supplied at each price. Th e supply schedule described in Table 3.2 can be translated into a supply curve as shown in Fig. 3.2.

3.10 Determinants of Supply

(a) Price of the commodity: If there is an increase in the price of a commodity, suppliers would be willing and be ready to supply more compared to when there is a decrease in the price of the commodity.

(b) The cost of production: If the prices of the factors of production increase, less of the factors would be demanded by the producer; hence both output and supply would fall. Lower cost of production would increase supply.

(c) Prices of other commodities: If a commodity has a joint supply with another commodity, an increase in its price would lead to an increase in the supply of the other commodity. For example, an increase in the price of palm oil would lead to an increase in the supply of palm kernel and vice versa. Th is effect depends on the relationship between the commodities.

(d) Number of producers: Th e greater the number of producers, the larger the market supply of goods and services other things being equal. For example, the number of producers of sachet water is high, so there is large number of supply of sachet water in the economy.

(e) Natural phenomena: Weather, flood, earthquakes, and so on affect production and supply. In situations where we have natural disasters as mentioned, the supply of goods will fall.

(f) Government policy: An increase in tax would increase the producers' cost of production and thereby lead to high production cost and a lower supply. On the other hand increased government subsidy would reduce the cost of production and encourage producers to supply more goods to the market.

(g) Improvement in technology: Better production techniques would lower the cost of production. It also leads to an increase in both output and supply.

3.11 Determination of Equilibrium Price

Th e equilibrium price is the price at which both the quantity of a commodity demanded and supplied are equal. At this price level there is neither a surplus nor a shortage of the commodity in the market. When the quantity of goods demanded is equal to the quantity supplied the price that equates the two is known as the equilibrium price. From Table 3.3, it can be observed that while demand moves in the opposite direction as price, that is, the higher the price, the lower the demand, supply on the other hand moves in the same direction as price.

TABLE 3.3 Demand and Supply Schedule of Tubers of Yam

Price (₦)	Quantity Demanded	Quantity Supplied
6.00	100	700
5.00	200	600
4.00	300	500
3.00	400	400
2.00	500	500
1.00	600	300
0.50k	700	100

The price that equates quantity of goods demanded and supplied in the above schedule is N3.00. At that price 400 quantities of yam were demanded and supplied. This can also be translated into a curve as shown in Fig. 3.3.

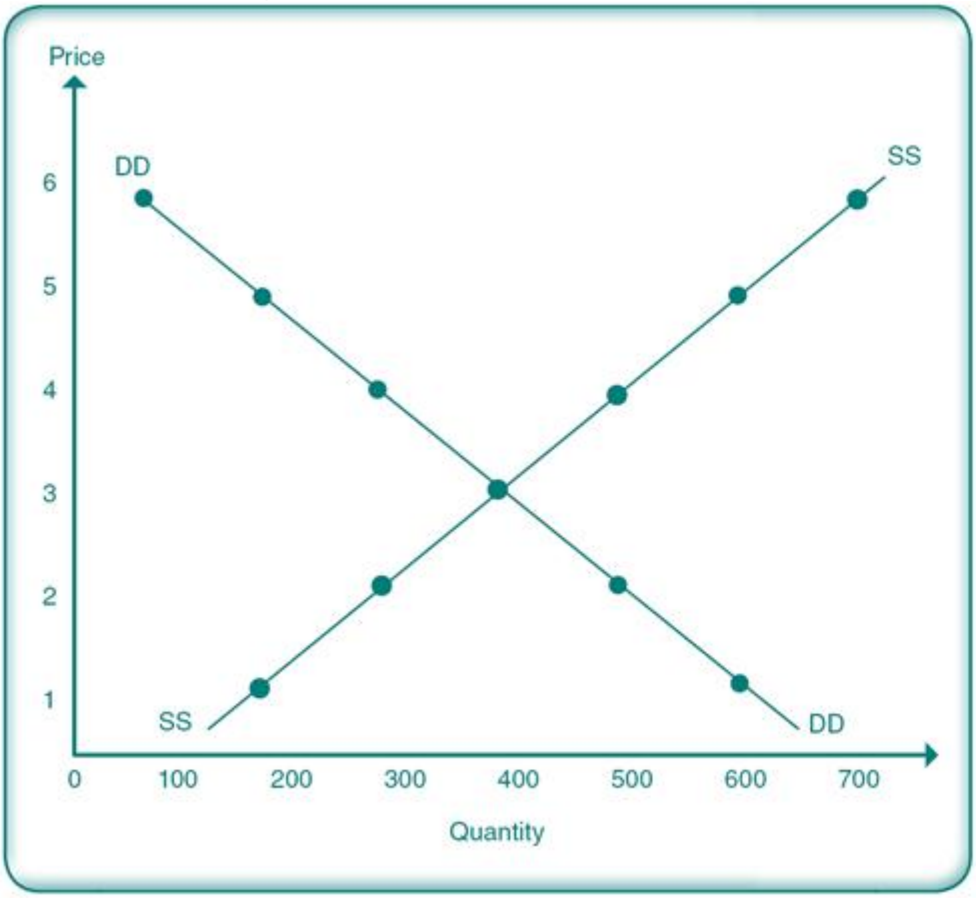


FIG. 3.3 Graph showing the equilibrium price of yam.

From Fig. 3.3, it could be observed that when the price was above the equilibrium price the quantity supplied or off ered for sale increased because the suppliers were willing to supply more of the goods due to higher price that assured them of more profi ts. Th e quantity demanded decreased because consumers were not ready to buy due to higher prices. Prices above the equilibrium point lead to excess supply of the commodity by the producers. When the price is below the equilibrium price there is excess demand as quantity demanded will exceed quantity supplied.

Summary

◆ **Demand:** Th is is the quantity of goods and services that consumers request for at a given price and at a particular period of time.

◆ **Effective demand:** Effective demand is willingness backed up by an ability to pay for the goods or services at a particular price and at a particular time.

◆ **Demand schedule:** It is a table showing the different quantities of a commodity purchased by consumers at different prices.

◆ **Supply:** This is defined as the quantity of goods or services that producers are willing to make available at a given price and at a given period of time.

◆ **Supply schedule:** It is the table showing the quantity of goods the producers / suppliers are willing to make available to the market at a given price.

Class Activities

The teacher should organise excursion to shops and markets.

Revision Questions

Objective Questions

1. The price of a commodity is determined by the:
(a) Supplier
(b) Consumer
(c) Quantity of goods demanded
(d) Quantity of goods supplied
(e) Interaction of demand and supply

2. Demand in economics is synonymous with:
(a) Needs
(b) Wants of the consumers
(c) All goods demanded in the market
(d) Wants supported with the ability to pay **(SSCE 1990)**

3. Supply in economics means:
(a) Goods and services available to consumers
(b) Goods available to the market at a given price and at a given period
(c) Available goods and services which consumers require **(SSCE 1993)**

4. If price falls below the equilibrium:
(a) Demand will be equal to supply
(b) Demand will be greater than supply
(c) Supply will be greater than demand
(d) Price will become indeterminate
(e) Quantity supplied will be zero **(SSCE, 1993)**

5. Th e law of demand states that:
(a) As price increases quantity demanded remains constant
(b) Demand increases as price increases
(c) As price falls, quantity demanded also falls
(d) As price falls, quantity demanded increases
(e) Demand and supply remain constant whether price falls or increases **(SSCE 1995)**

Essay Questions

1. (a) Distinguish between wants and demand.
(b) With the aid of diagrams, show the effect on demand when:
(i) there is a reduction in the number of consumers and
(ii) there is a decrease in the price of the commodity. **(SSCE 2006)**

2. (a) What is supply?
(b) Describe any fi ve determinants of supply. **(SSCE 2008)**

3. With the aid of diagrams, explain what is meant by a change in
(a) the quantity demanded
(b) demand.

4. (a) State the laws of demand and supply.
(b) With the aid of a diagram, explain the implications of a change in the quantity demanded of a

commodity. **(SSCE 2000)**

Glossary

Demand: Quantity of goods and services that a consumer is willing and able to buy at a given price and at a particular time.

Demand Schedule: Table showing various quantities of commodities bought by consumers at different prices.

Supply: Quantity of a commodity that a producer is willing, able and ready to offer for sale in the market at given price.

Supply Schedule: It is a table that shows the quantities of commodity that will be offered for sale at given prices.

Equilibrium Price: It is the price at which quantity of goods demanded and supplied are equal.