Consumer Economics
L.1 An Introduction

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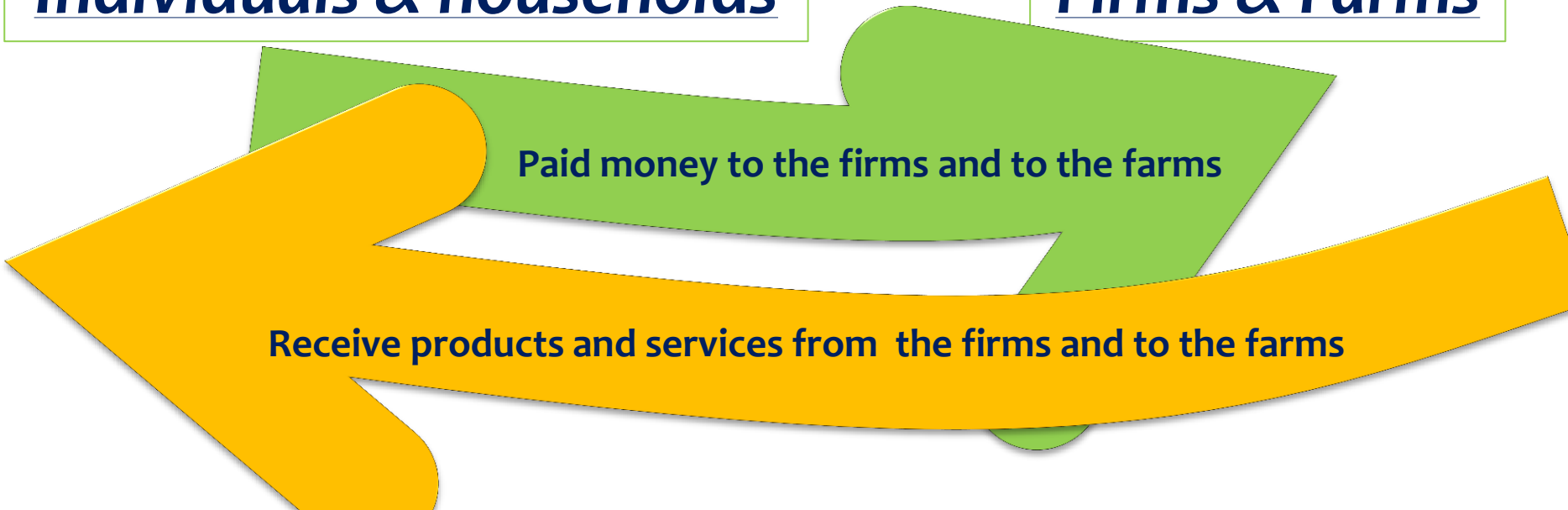
What is the consumer position in Economics?

Consumer is the engine of economics

Economic

Consumers
Individuals & households

Producers
Firms & Farms



Topics

L.1 An Introduction

L.2 Price elasticity of demand

L.3 Properties of Demand Functions

L.4 Budget Constraint

L.5.a Consumer preferences

L.6 consumer choice

L.7 Utility Function

L.8 Income and Substitution effect

L.9.a Utility maximization

L.10 advanced demand function

L.11 consumer and producer surplus

Consumer Economics

Consumer Economics = Economics of Consumer

Consumer economics is a branch of economics. It is a broad field, principally concerned with microeconomic analysis behavior in units of consumers, families, or individuals (in contrast to traditional economics, which primarily government or business units).

consumer

1. A purchaser of a good or service in retail.

2. An end user, and not necessarily a purchaser, in the distribution chain of a good or service.

customer

A party that receives or consumes products (goods or services) and has the ability to choose between different products and suppliers.

Economic

from a technical perspective, economics is the study of how various alternatives or choices are evaluated to best achieve a given objective.

Then, the domain of economics is the study of processes by which scarce resources are allocated to satisfy unlimited wants.

Economic Problem

The five basic questions that are asked in the study of the allocation problem are:

* *What to produce?*
* *How many to produce?*
* *How to produce? Technology*
* *When to produce?*
* *To Whom? Who gets it?*

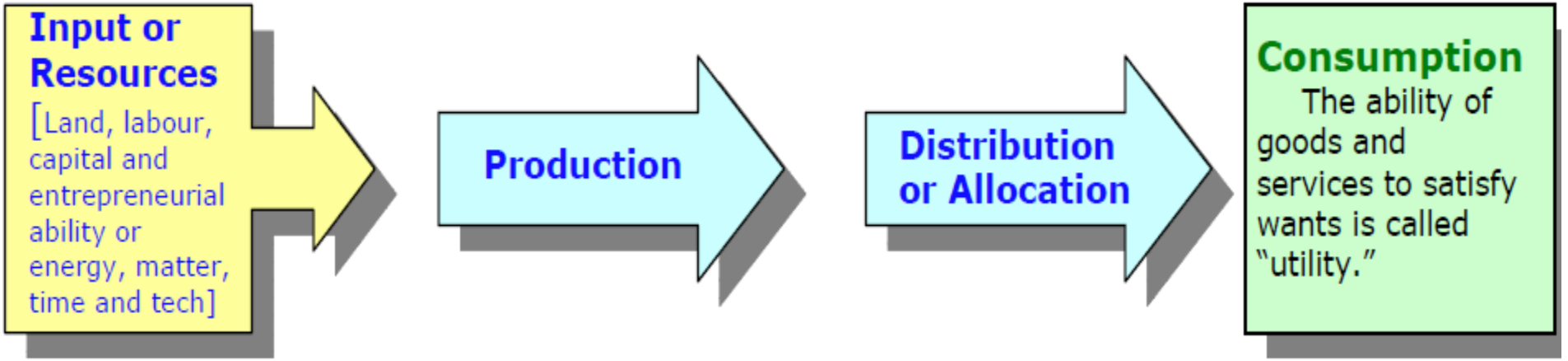
Macroeconomics & Microeconomics

Assignment#1.L.1:

in a table illustrate the differences between Macroeconomics & Microeconomics according to production, Price, Income, and labor

Economic Activities

production, distribution and consumption are clearly economic activities.



CONSUMPTION

The end purpose of economic activity is to provide for the survival and betterment of the conditions for individuals in a society.

Demand and consumer

Demand is the quantity of a good or service that People are willing and able to purchase during a specified period under a given set of conditions:

-- time frame (day, hour, etc.)

-- conditions (price of good and consumer incomes)

law of demand

law of demand:

The inverse relationship between the price of a good and the quantity demanded over a period of time, when all other factors that influence demand are held fixed.

Assumptions of the Law

1. No change in the consumer's income
2. No change in consumer's tastes and preferences
3. No changes in the prices of other goods
4. No new substitutes for the goods have been discovered
5. People do not feel that the present fall in price is a prelude to a further decline in price.

Demand Schedule

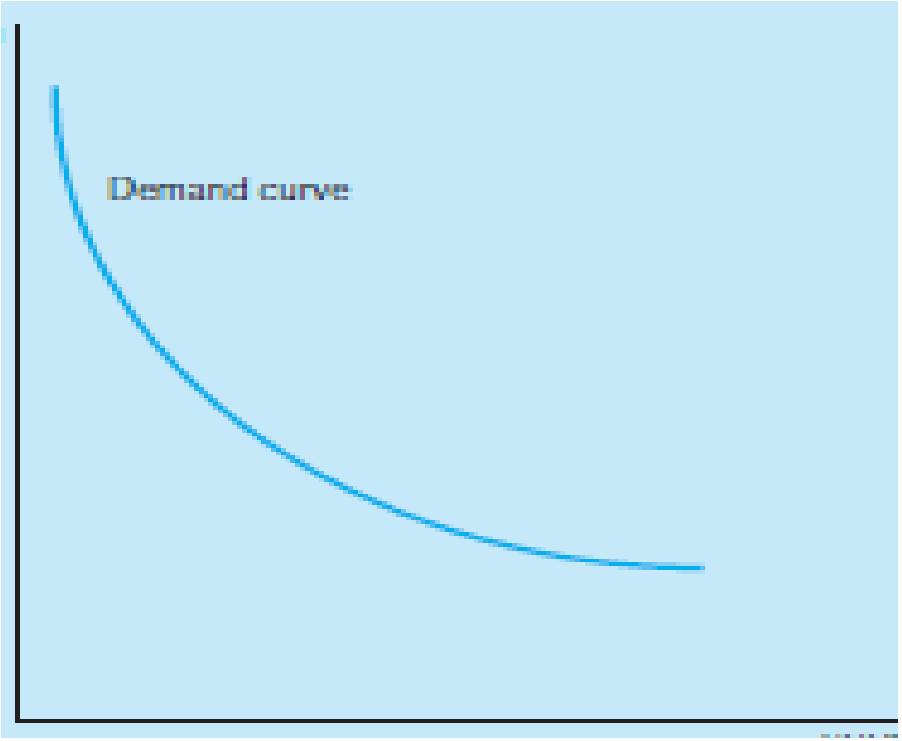
Demand schedule is a tabular statement showing how much of a commodity is demanded at different prices.

It shows a list of prices and corresponding quantities demanded by an individual consumer. This is an individual demand schedule.

Price (Rs)	Quantity Demanded (Units)
5	10
4	20
3	30
2	40
1	50

Demand Curve

The demand schedule can be converted into a demand curve by measuring price on vertical axis and quantity on horizontal axis



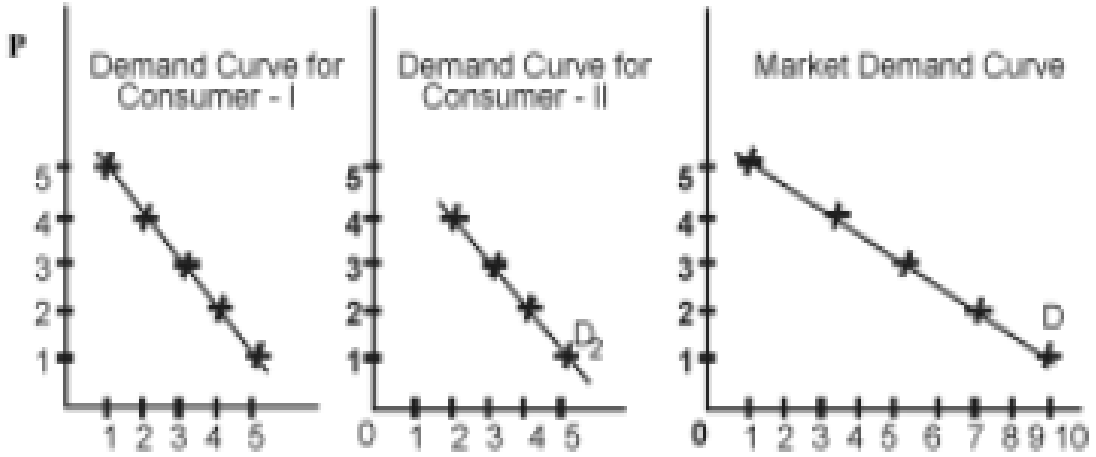
Market demand schedule

A demand schedule for a market can be constructed by adding up demand schedules of the individual consumers in the market.

Price of Oranges (in Rs)	Quantity demanded		
	Consumer I	Consumer II	Market Demand
5	1	-	1
4	2	1	3
3	3	2	5
2	4	3	7
1	5	4	9

Market demand curve

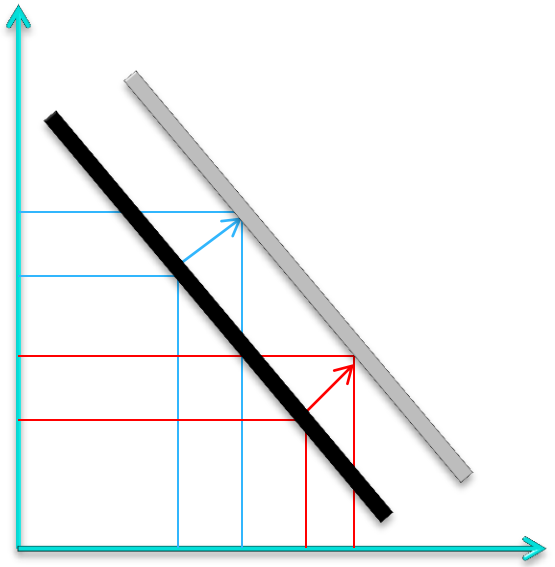
The market demand also increases with a fall in price and vice versa.



Exceptions to the Law of Demand

In this cases, more quantity will be demanded at a higher price and less will be demanded at a lower price.

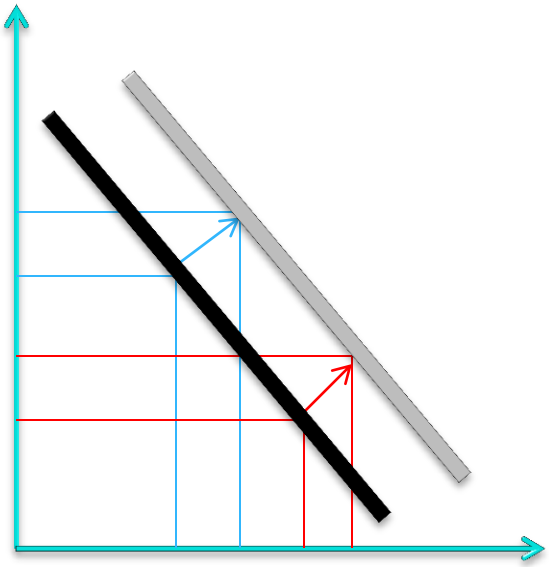
The demand curves in those cases slope upwards showing a positive relationship between price and quantity demanded



The following is the list of few exceptions to the law of demand:

(1) Veblen Effect (for Rich)

(2) Giffen Paradox (for Boor)



Veblen Effect (Fashion)

Veblen has pointed out that there are *some goods demanded by very rich people for their social prestige*. When price of such goods rise, their use becomes more attractive and they are purchased in larger quantities.

Demand for diamonds from the richer class will go up if there is increase in price. If such goods were cheaper, the rich would not even purchase.

Giffen Paradox

Sir Robert Giffen discovered that the poor people will demand more of inferior goods if their prices rise and demand less if their prices fall.

Inferior goods are those goods which people buy in large quantities when they are poor and in small quantities when they become rich.

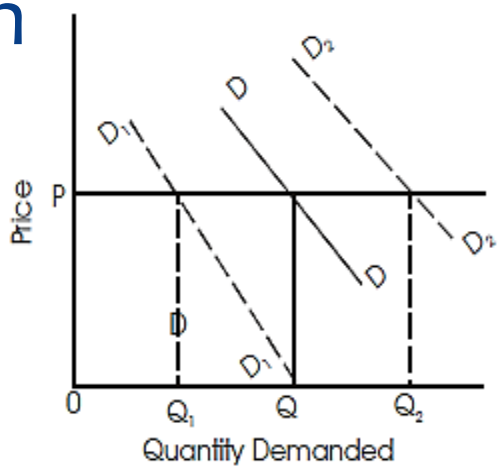
Changes in demand

When change in demand for a commodity is entirely due to a change in its price, it is called extension or contraction of demand.

The demand curve does not change its position here.

Shifts in demand

One of the basic assumptions of economic theory is that ; Change in other factors will bring about increase or decrease in demand other factors being equal. Other factors are income, tastes, population, government policy, technology, price of related goods etc.



Factors determining demand

1. Tastes and preferences of the consumer.
2. Income of the consumer
3. Price of substitutes
4. Number of consumers
5. Expectation of future price change
6. Distribution of income
7. Climate and weather conditions
8. State of business.
9. Consumer Innovativeness

1. Tastes and preferences of the consumer

Demand for a commodity may change due to a change in tastes, preferences and fashion. For example, the demand for **dhotis** has come down and demand for **trouser cloth and jeans** has gone up due to change in fashion.

2. Income of the consumer

When the income of the consumer increases, more will be demanded. Therefore, we can say that as income increases, other things being equal, the demand for a commodity also increases. Comforts and luxuries belong to this category. But we have exception here …

3. Price of other good:

a. substitutes

Some goods can be substituted for other goods. For example, tea and coffee are substitutes. If the price of coffee increases while the price of tea remains the same, there will be increase in the demand for tea and decrease in the demand for coffee. The demand for substitutes moves in the opposite direction.

3. Price of other good:

a. complementary

Some goods can be complemented for other goods. For example, tea and sugar are complementary. If the price of tea increases while the price of sugar remains the same, there will be decrease in the demand for sugar and decrease in the demand for tea. The demand for complementary moves in the same direction.

4. Number of consumers

Size of population of a country is an important determinant of demand. For instance, larger the population, more will be the demand, for certain goods like food grains, and pulses etc. When the number of consumers increases, there will be greater demand for goods.

5. Expectation of future price change

If the consumer believes that the price of a commodity will rise in the future, he may buy a larger quantity in the present. Suppose he expects the price to fall, he may defer some of his purchases to a future date.

6. Distribution of income

Distribution of income affects consumption pattern and hence the demand for various goods. If the government attempts redistribution of income to make it equitable, the demand for luxuries will decline and the demand for necessities of life will increase.

7. Climate and weather conditions

Demand for a commodity may change due to a change in climatic conditions. For example, during summer, demand for cool drinks, cotton clothes and air conditioners will increase. In winter, demand for woollen clothes increases.

8. State of business

During boom/wefare, demand will expand and during depression demand will contract.

9. Consumer Innovativeness

When the price of wheat flour or price of electricity falls, the consumer identifies new uses for the product. It creates new demand for the product.

Supply

quantity supplied is the amount of a good that firms *want* to sell at a given price, holding constant other factors that influence firms' supply decisions, such as costs and government actions.

The demand function

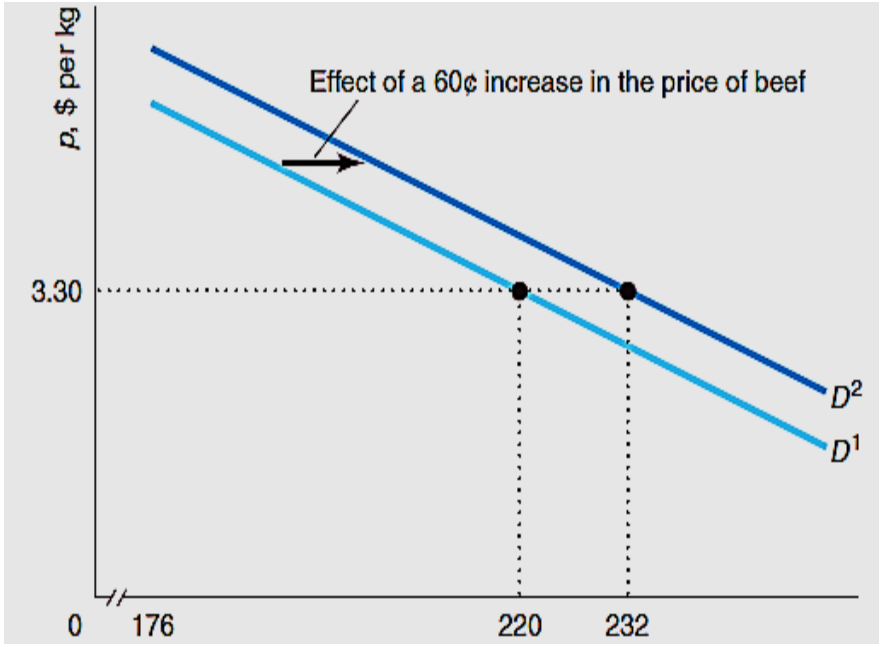
Qx = f (Px, Ax, Dx, Ox, Ic , Yc , Tc , Ec , Py, Ay, Dy, Oy, G, N, W)

Strategic Variables
Consumer-Related
Competitor-Related
Other

Qx = Quantity Demanded
Px = Price of Product x
Ax = Advertising Expenditures for Product x
Dx = Design Cost
Ox = Outlets or Distribution Channels
Ic = Incomes
Yc = Consumer Expenditures on related goods
Tc = Tastes
Ec = Expenditures
Py = Prices related goods
Ay = Advertising/Promotion of related goods
Dy = Design/Styles of related goods
Oy = Outlets of related goods
G = Government Policy
N = Number of People in the Economy
W = Weather Conditions

Beef and Fish

The demand curve for processed fish shifts to the right from D1 to D2 as the price of beef rises from $4 to $4.60. As a result of the increase in beef prices, more fish is demanded at any given price.



the demand function of fish

$$Q = D(p, pb, pc, Y),$$

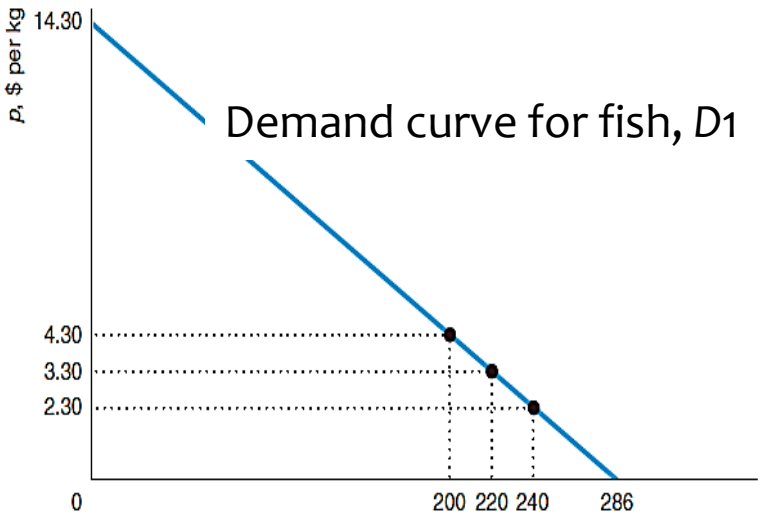
where Q is the quantity of fish demanded, p is the price of fish, pb is the price of beef, pc is the price of chicken, and Y is the income of consumers.

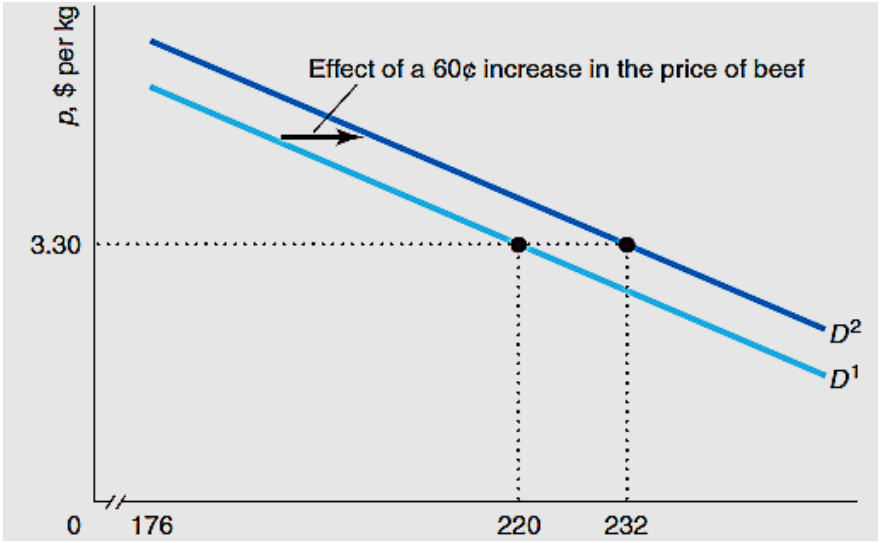
the demand function of fish

we can rewrite Equation as a specific function:

$$Q = 171 - 20p + 20pb + 3pc + 2Y.$$

Equation is the estimated demand function that corresponds to the demand curve D1 in





When we drew the demand curve, we held Pb, Pc and *Y* at their typical values during the period studied: Pb =4 (dollars per kg), Pc = 3.3 (dollars per kg), and Y = 12.5 (thousand dollars).

If we substitute these values we can rewrite the quantity demanded as a function of only the price of fish:

$$
\begin{aligned}
Q &= 171 - 20p + 20p_b + 3p_c + 2Y \\
&= 171 - 20p + (20 \times 4) + (3 \times 3\tfrac{1}{3}) + (2 \times 12.5) \\
&= 286 - 20p
\end{aligned}
$$

The constant term, 286, is the quantity demanded if the price is zero.

$$
\begin{aligned}
Q &= 171 - 20p + 20p_b + 3p_c + 2Y \\
&= 171 - 20p + (20 \times 4) + (3 \times 3\tfrac{1}{3}) + (2 \times 12.5) \\
&= 286 - 20p
\end{aligned}
$$

This equation also shows us how quantity demanded changes with a change in price: a movement *along* the demand curve. If the price increases from P1 to P2, the change in price "Delta *p=P2-P1*"

The change in the quantity demanded in response to the price change from 20 to 28 is:

$$\begin{aligned}\Delta Q &= Q_2 - Q_1 \\ &= D(p_2) - D(p_1) \\ &= (286 - 20p_2) - (286 - 20p_1) \\ &= -20(p_2 - p_1) \\ &= -20\Delta p.\end{aligned}$$

The slope of a demand curve is *delta P/Delta Q the rise divided by the run*

$$\text{Slope} = \frac{\text{rise}}{\text{run}} = \frac{\Delta p}{\Delta Q} = \frac{\$1 \text{ per kg}}{-20 \text{ million kg per year}} = -\$0.05 \text{ per million kg per year.}$$

PROBLEM

How much would the price have to fall for consumers to be willing to buy 1 million more kg of fish per year?

Supply

supply curve shows the quantity supplied at each possible price, holding constant the other factors that influence firms' supply decisions.

Effect of Price on Supply

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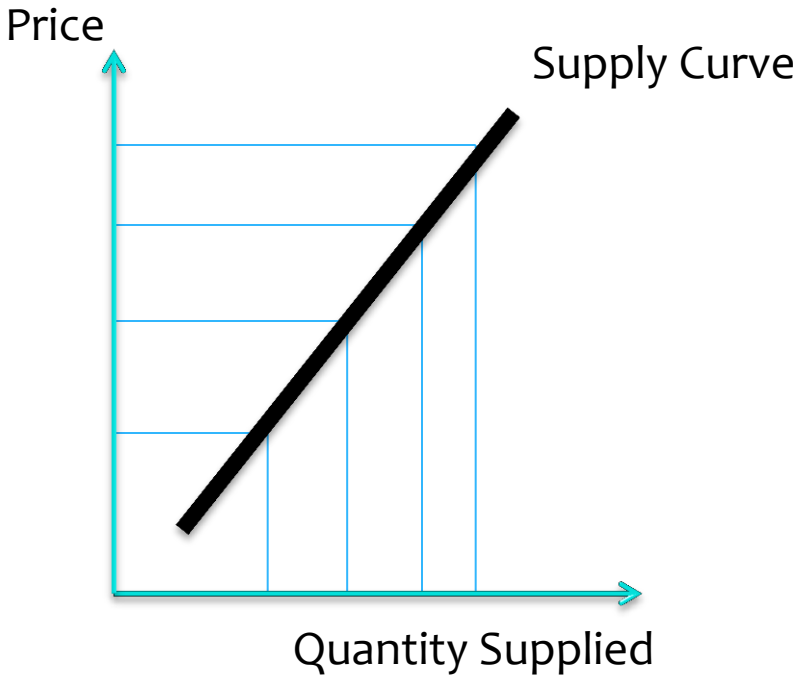


Effects of Other Variables on Supply

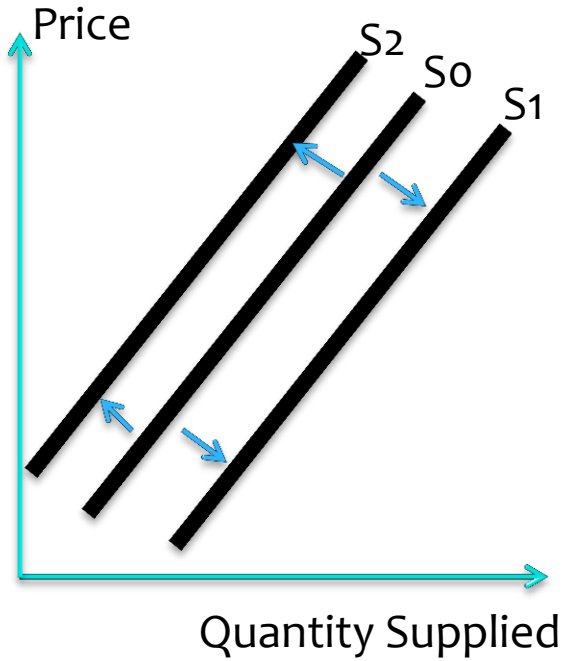
A change in a variable other than the price causes the entire *supply curve to shift*.

price of inputs (TVC).

technology

No. of Producers

government Regulation

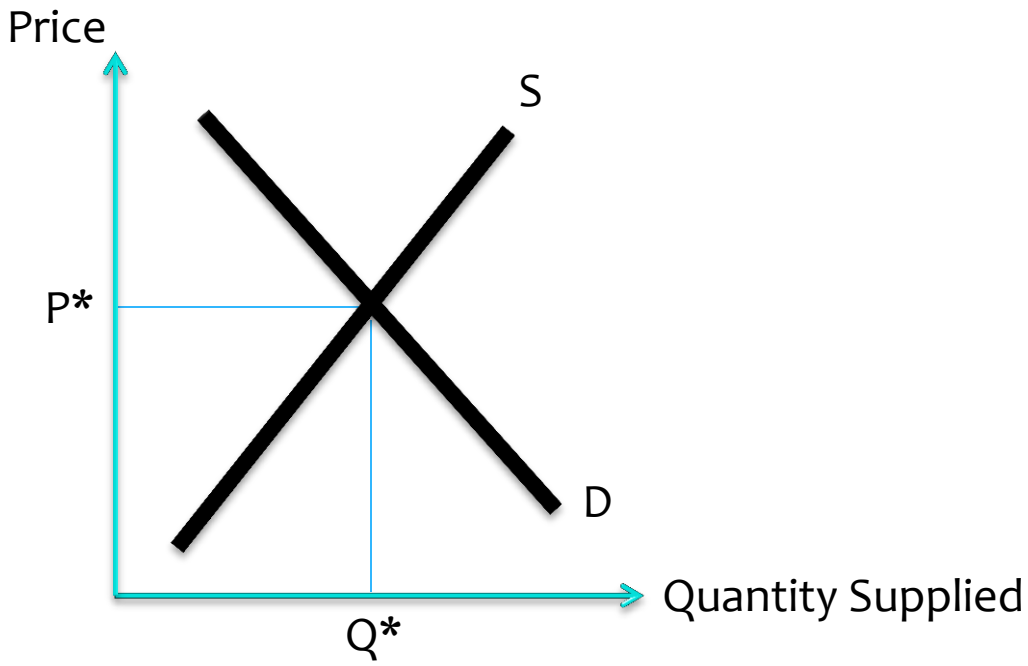


Market Equilibrium

Market Equilibrium: a situation in which no participant wants to change its behavior.

A price at which consumers can buy as much as they want and sellers can sell as much as they want is called an *equilibrium price*.

The quantity that is bought and sold at the equilibrium price is called the *equilibrium quantity*.


Price
S
P*
D
Quantity Supplied
Q*

Using Math to Determine the Equilibrium

If you have the equations:

$$Qd = 286 - 20p.$$

$$Qs = 88 + 40p.$$

Find equilibrium price and quantity?