

## Module 1

### **1.1 Ten Principles of Economics**

Economics is the study of how society manages its scarce resources. In most societies, resources are allocated not by an all-powerful dictator but through the combined actions of millions of households and firms. Economists therefore study how people make decisions: how much they work, what they buy, how much they save, and how they invest their savings. Economists also study how people interact with one another. For instance, they examine how the multitude of buyers and sellers of a good together determine the price at which the good is sold and the quantity that is sold. Finally, economists analyze forces and trends that affect the economy as a whole, including the growth in average income, the fraction of the population that cannot find work, and the rate at which prices are rising.

#### **How People Make Decisions**

Principle 1: People Face Trade-offs

Principle 2: The Cost of Something Is What You Give Up to Get It

Principle 3: Rational People Think at the Margin

Principle 4: People Respond to Incentives

#### **How People Interact**

Principle 5: Trade Can Make Everyone Better Off

Principle 6: Markets Are Usually a Good Way to Organize Economic Activity

Principle 7: Governments Can Sometimes Improve Market Outcomes

#### **How the Economy as a Whole Works**

Principle 8: A Country's Standard of Living Depends on Its Ability to Produce Goods and Services

Principle 9: Prices Rise When the Government Prints Too Much Money

Principle 10: Society Faces a Short-Run Trade-off between Inflation and Unemployment

Principle 1: PEOPLE FACE TRADEOFFS: To get something one has to sacrifice other thing. For example, a country can spend its maximum resources for its defence but at the same time, it has to sacrifice the maximum spending for the country welfare. A society also faces tradeoffs between the Efficiency and Equity. The government generally tax rich people so that it can get the money from them and use it for the welfare of the poor people; this brings the equity but reduced the efficiency.

Principles 2: THE COST OF SOMETHING IS WHAT YOU GIVE UP TO GET IT: Since we do tradeoffs, the people generally find out the cost and benefits that their action going to incur. For an action, one has to sacrifice something. For example: I have come here to do post-graduation but I had to sacrifice my server administrator job. A cost that given up to get something known as the opportunity cost. My opportunity cost is server administrator job, money, and time, which I had given up for the post-graduation.

Principle 3: RATIONAL PEOPLE THINK AT THE MARGIN: One always does small changes in their plan of action to achieve maximum benefits from the process. This small change

known as the marginal changes as it take place around edges. For example: A student who is enrolled for 1 year of education, if he/she add one more year to its study, they will be able to apply for permanent residency which incur as additional benefits but with this come the additional costs of college fees, time etc. Comparison of marginal benefits and marginal cost will be able to help you in taking the decision.

Principle 4: PEOPLE RESPOND TO INCENTIVES: Behaviour of any person or firm changes according to the environmental variables like benefits or cost changes. For example: If the cost of the orange increases then the consumer will shift towards apples, as cost of orange is high.

Principle 5: TRADE CAN MAKE EVERYONE BETTER OFF: Trade is taking place between the products that countries own not between the countries. Trading between parties makes goods cheaper. For example: Trade between country A and country B will help both the countries to get goods of one another and help them to expertise in what they are good at producing.

Principle 6: MARKETS ARE USUALLY A GOOD WAY TO ORGANIZE ECONOMIC ACTIVITY: Market Economy is the concept where a centralise judgment planner is substituted by judgement of millions of households and firms. The place where the households and firm can communicate with each other for services and goods is known as market and it is taken place under the influence of the price and self-interest, which helps them to take decision. For example: Taxes that impose by the government always change the goods price and decision of producer and consumers.

Principle 7: GOVERNMENTS CAN SOMETIMES IMPROVE MARKET OUTCOMES: When a market fails to distribute the resources efficiently, it is known as market failure, which decreases efficiency. Government impose some rules to improve the market. (Mankiw,2003,p.11) For example: When the Australian government, impose carbon tax on the emission of the carbon, which will makes the firm to emit less carbon, which results in less pollution.

Principle 8: A COUNTRY'S STANDARD OF LIVING DEPENDS ON ITS ABILITY TO PRODUCE GOODS AND SERVICES: The living standard in the country is depends upon the country producing capacity. In country where, more goods and service are produced in a unit time there standard of living is high as compared to the people with less productivity. For example: Living standard of a U.S. citizen is better than living standard of Mexican and Nigerian citizen as a U.S. citizen earn more than those two citizen.

Principle 9: PRICES RISE WHEN THE GOVERNMENT PRINTS TOO MUCH MONEY: Inflation is the state in which the price level increases in the economy. Inflation occurs when the supply of the money, which is under the hood of government, increased drastically in compare to the accessibility of services and goods in the markets. When the government produce high quantity of nation's money, than it has lose its value. For example: When in Germany the average price of the commodity is tripling every month so the production of money is also tripling every month.

**Principle 10: SOCIETY FACES A SHORT-RUN TRADEOFF BETWEEN INFLATION AND UNEMPLOYMENT:**

Policy that are making, to reduce the inflation led to increase in unemployment and policy to reduce unemployment led to increase in inflation this properly describe in Philip curve. This concept ends in 1970 when inflation and unemployment co-existed at their maximum peak. The relationship between the inflation and unemployment is temporary.

**1.2 Production Possibility Curve (PPC) /Production Possibility Frontier (PPF)**

The production possibility curve represents graphically alternative production possibilities open to an economy. The productive resources of the community can be used for the production of various alternative goods.

But since they are scarce, a choice has to be made between the alternative goods that can be produced. In other words, the economy has to choose which goods to produce and in what quantities. If it is decided to produce more of certain goods, the production of certain other goods has to be curtailed.

Let us suppose that the economy can produce two commodities, cotton and wheat. We suppose that the productive resources are being fully utilized and there is no change in technology. The following table gives the various production possibilities.

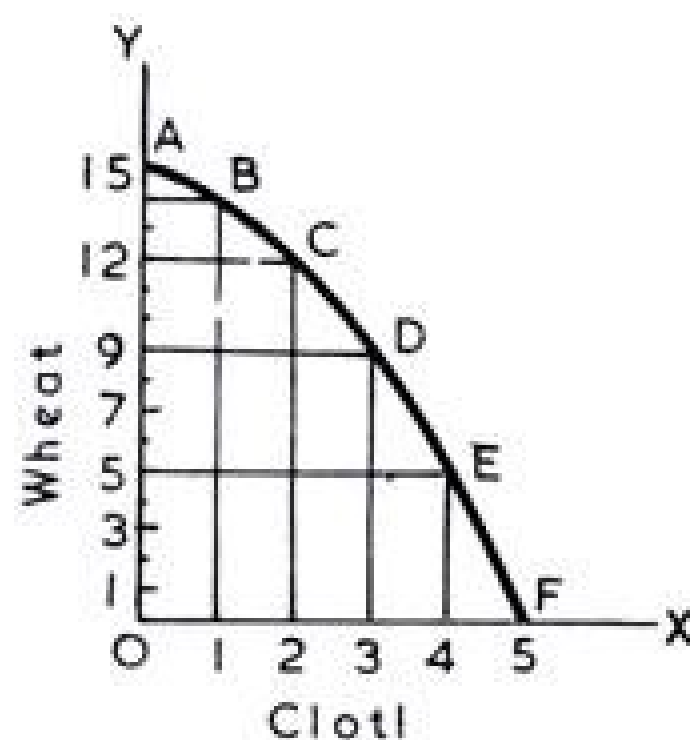
**Alternative Production Possibilities**

<i>Production Possibilities</i>	<i>Cotton (in *000 quintals)</i>	<i>Wheat (in 000 quintals)</i>
A	0	15
B	1	14
C	2	12
D	3	9
E	4	5
F	5	0

It all available resources are employed for the production of wheat, 15,000 quintals of it can be produced. If, on the other hand, all available resources are utilized for the production of cotton, 5000 quintals are produced. These are the two extremes represented by A and F and in between them are the situations represented by B, C, D and E. At B, the economy can produce 14,000 quintals of wheat and 1000 quintals of cotton. At C the production possibilities are 12,000 quintals of wheat and 200u quintals of cotton, as we move from A to F, we give up some units of wheat for some units of cotton For instance, moving from A to B, we sacrifice 1000 quintals of wheat to produce 1000 quintals of cotton, and so on. As we move from A to F, we sacrifice increasing amounts of cotton.

This means that, in a full-employment economy, more and more of one good can be obtained only by reducing the production of another good. This is due to the basic fact that the economy's resources are limited.

The following diagram (21.2) illustrates the production possibilities set out in the above table.

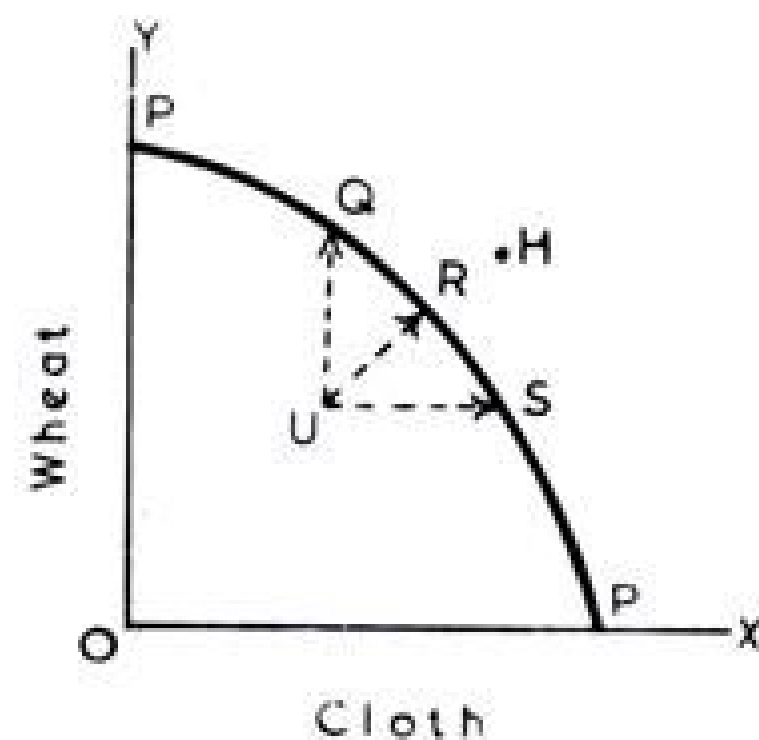


**Production Possibility Curve**

Fig. 21.2

In this diagram AF is the production possibility curve, also called or the production possibility frontier, which shows the various combinations of the two goods which the economy can produce with a given amount of resources. The production possibility curve is also called transformation curve, because when we move from one position to another, we are really transforming one good into another by shifting resources from one use to another.

It is to be remembered that all the points representing the various reduction possibilities must lie on the production possibility curve AF and not inside or outside of it. For example, the combined output of the two goods can neither be at U nor H. (See Fig. 21.3) This is so because at U the economy will be under-employing its resources and H is beyond the resources available.



**Problem of Under-Utilisation of Resources**

Fig. 21.3

### 1.3 Market Failure and Role of the Government What is Market Failure?

Market failure refers to the inefficient distribution of goods and services in the free market. In a typical free market, the prices of goods and services are determined by the forces of supply and demand, and any change in one of the forces results in a price change and a corresponding change in the other force. The changes lead to a price equilibrium.

Market failure occurs when there is a state of disequilibrium in the market due to market distortion. For example, it may take place when the quantity of goods or services supplied is not equal to the quantity of goods or services demanded. Some of the distortions that may affect the free market may include monopoly power, price limits, minimum wage requirements, and government regulations.

### **Causes of market failures**

Market failure may occur in the market for several reasons, including:

**1. Externality:** An externality refers to a cost or benefit resulting from a transaction, and that affects a third party that did not decide to be associated with the benefit or cost. It can be positive or negative. A positive externality provides a positive effect on the third party. For example, providing good public education mainly benefits the students, but the benefits of the public good will spill over to the whole society.

On the other hand, a negative externality is a negative effect resulting from the consumption of a product, and that results in a negative impact on a third party. For example, even though cigarette smoking is harmful to a smoker, it also causes a negative health impact on people around the smoker.

**2. Public goods:** Public goods are goods that are consumed by a large number of the population, and their cost does not increase with the increase in the number of consumers. Public goods are both non-rival as well as non-excludable. Non-rival consumption means that the goods are allocated efficiently to the whole population if provided at zero cost, while non-excludable consumption means that the public goods cannot exclude non-payers from its consumption.

Public goods create market failures if a section of the population that consumes the goods fail to pay but continue using the good as actual payers. For example, police service is a public good that every citizen is entitled to enjoy, regardless of whether or not they pay taxes to the government.

**3. Market control:** Market control occurs when either the buyer or the seller possesses the power to determine the price of goods or services in a market. The power prevents the natural forces of demand and supply from setting the prices of goods in the market. On the supply side, the sellers may control the prices of goods and services if there are only a few large sellers (oligopoly) or a single large seller (monopoly). The sellers may collude to set higher prices to maximize their returns. The sellers may also control the quantity of goods produced in the market and may collude to create scarcity and increase the prices of commodities.

On the demand side, the buyers possess the power to control the prices of goods if the market only comprises a single large buyer (monopsony) or a few large buyers (oligopsony). If there is only a single or a handful of large buyers, the buyers may exercise their dominance by colluding to set the price at which they are willing to buy the products from the producers. The practice prevents the market from equating the supply of goods and services to their demand.

**4. Imperfect information in the market:** Market failure may also result from the lack of appropriate information among the buyers or sellers. It means that the price of demand or supply does not reflect all the benefits or opportunity cost of a good. The lack of information on the buyer's side may mean that the buyer may be willing to pay a higher or lower price for the product because they don't know its actual benefits.

On the other hand, inadequate information on the seller's side may mean that they may be willing to accept a higher or lower price for the product than the actual opportunity cost of producing it.

#### **Solutions to market failures**

In order to eliminate market failures, several remedies can be implemented. They include:

**1. Use of legislation:** One of the ways that governments can manage market failures is by implementing legislation that changes behavior. For example, the government can ban cars from operating in city centers, or impose high penalties to businesses that sell alcohol to underage children, since the measures control unwanted behaviors.

**2. Price mechanism:** Price mechanisms are designed to change the behavior of both the consumers and producers. For products that cause harm to consumers, the government can discourage their consumption by increasing taxes. For example, taxes on cigarettes and alcohol are periodically increased to discourage their consumption and reduce their harmful effect to unrelated third parties.

#### **Role of the Government in a Market Economy**

The classical economists like Adam Smith, J.S. Say and other advocated the doctrine of laissez faire which means non-intervention of the government in economic matters.

Adam Smith introduced the concept of the invisible hand, which refers to the free functioning of the price (market) system in the absence of government intervention.

And, in the 19th century, the western capitalist economics achieved spectacular growth by following the policy of laissez faire. As Paul Samuelson has put it, "An ideal market economy is one where all goods and services are voluntarily exchanged for money at market prices. Such a system squeezes the maximum benefits out a society's available resources without government intervention".

To quote Samuelson again, "in the real world, no economy actually conforms totally to the idealised world of the smoothly functioning invisible hand. Rather, every market economy suffers from imperfections which lead to such ills as excessive pollution, unemployment and extremes of wealth and poverty".

For all these reasons, any government anywhere in the world, whether conservative or liberal, intervenes in economic affairs. In a modern economy like our own, the government has to perform various roles mainly to correct the flaws (defects) of the market mechanism. The military, police, most schools and colleges, health centres and hospitals and highway and bridge construction are all government activities, research and space exploration require government funding.

Governments may regulate some businesses (such as banking and insurance), while subsidising others (such as agriculture and small-scale and cottage industries). And last, but not the least governments tax their citizens and redistribute the revenues to the poor as also the elderly (retired) people.

Four Main Functions of Government in a Market Economy:

However, according to Samuelson and other modern economists, governments have four main functions in a market economy – to increase efficiency, to provide infrastructure, to promote equity, and to foster macroeconomic stability and growth.

**1. Efficiency:** First, the government should attempt to correct market failures like monopoly and excessive pollution to ensure efficient functioning of the economic system.

Externalities (or social costs) occur when firms or people impose costs or benefits on others outside the marketplace.

**2. Infrastructure:** Secondly, the government should provide an integrated infrastructure. Infrastructure (or social overhead capital) refers to those activities that enhance, directly or indirectly, output levels or efficiency in production.

Essential elements are systems of transportation, power generation, communication and banking, educational and health facilities, and a well-ordered government and political structure. Since the cost of providing these essential services are very high and benefits accrue to numerous diverse groups, such activities are to be financed by the government.

**3. Equity:** Markets do not necessarily produce a distribution of income that is regarded as socially fair or equitable. As market economy may produce unacceptably high levels of inequality of income and wealth. Government programmes to promote equity use taxes and spending to redistribute income toward particular groups.

**4. Economic Growth or Stability:** Fourthly, governments rely upon taxes, expenditures and monetary regulation to foster macroeconomic growth and stability to reduce unemployment and inflation while encouraging economic growth.

Macroeconomic policies for stabilization and economic growth includes fiscal policies (of taxing and spending) along with monetary policies (which affect interest rates and credit conditions). Since the development of macroeconomics in the 1930s governments have succeeded in bringing inflation and unemployment under control.