**2021 Notes – Central Problem Economics**

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**What is Economics?**

* Economics is a social science. It deals with how the society allocates scarce resources to produce goods and services to maximize human wants.
* Economics is studied on a normative and positive approach.

normative economics – economics based on judgement – should we have 50% of population at middle income level. positive economics – economics on reality - we have 50% of the population in the middle group

* It is divided into two main areas: Microeconomics or Macroeconomics.

Microeconomics – individual, firm and society – maximization of satisfaction, profit and welfare

Macroeconomics – aggregate of economic activities – economic growth, price stability, low unemployment, external equilibrium – exchange rate stability

**Concept of scarcity and allocation of resources**

Since resources are limited and human wants are unlimited, the problem of scarcity of resources will surface. Thus, resources must be utilized properly and to do so, the economy must solve the problems of choice. In doing so, the process is known as resource allocation whereby the economic system is used to solve the fundamental economic problems.

**Concept**

**limited resource**

**unlimited wants**

**Scarcity**

**problems of choice**

**Resource allocation**

**What to produce, how to produce and for whom to produce?**

**1) Main Functions of an Economic System**

**a) Allocation of resources**

- to decide what goods and services to produce

- how much of each to produce at any given time

**b) Organization of production**

- to choose the best technique of production

**c) Distribution of Commodities**

- how to apportionate the results of production among the individuals and organization in an economy

**2) Concept of Production Possibility Curves (PPC) and Opportunity Cost**

**a) Concept**

Opportunity cost is defined as the cost of using resources for a certain purpose, measured in terms of the next best benefit it can derive when use for another alternative.

Building a hospital – net gain of 10m / building a school – net gain of 7m

decision – build the hospital – opp cost of building hospital is 7m.

The concept of opportunity cost can be illustrated through the production possibility curve. The production possibility curve shows all combinations of 2 goods that an economy can produce, with a certain level of technology and resources which are utilized efficiently.

**b) Main characteristics of the PPC**

* The PPC can be used to show scarcity where the attainable and unattainable production are shown.
* It shows the alternative combination of production.
* It will also show the existence of opportunity and the degree of opportunity cost.

**c) Basic assumptions of the PPC**

* The economy is at a specific state of technology.
* The economy can fully utilize all of its available resources.
* Only 2 goods are analyzed.
* Resources are fixed.

Diagram – PPC and the concept of Opportunity Cost



As seen from the diagram, the various combinations on the production possibility curve represent full utilization of resources. When the economy wishes to increase its production of guns, it can do so by decreasing its production of butter. The increase of G0G1 amount of guns is achieved at the reduction of B0B1 of butter. Therefore, the opportunity cost of G0G1 of guns is equal to B0B1 amount of butter.

**d) The relationship between the slope of PPC and Opportunity Cost**

When the PPC is a straight line, there is constant opportunity cost. This implies that the increase in production of gun will lead to a proportional reduction in butter.

When the PPC is concave to the origin, the opportunity score is increasing, Thus, the increase in production of gun will lead to a more than proportional reduction in butter. (resource are more suited to the production of the other good than the existing one).

When the PPC is convex to the origin, the opportunity cost is decreasing which means that an increase in production of gun will lead to a less than proportional decrease in butter (resource are less suited to the production of the other good than the existing one).

**- the degree of opportunity cost - determine the nature of the economy in terms of the efficiency of production**

**e) Shift in the PPC**

**Outward shift PPC** represents an increase in the production of both goods. This is due to:

* Increase in labour supply
* Improvement in technology
* Increase in capital employment

**Inward shift of PPC** represent a decrease in the production of both goods. This is due to:

* Decrease in labour supply
* Decrease in capital employment

**3) PPC and the concept of actual economic growth and potential growth**

Actual economic growth refers to the actualization or utilization of resources into products, contributing to the growth of production capacity. This means that the level of national income has increased and this is represented by the movement of the production level within the PPC to the production level on the PPC.

Potential growth refers to the expansion of the availability of the resources, implying that there are more resources for production in the economy. This means that the potential production capacity has expanded and this is represented by the outward shift of the PPC.

**Impact of the adjustment of the resources and goods and services**

* Import of resources
* Import of goods and services
* Increase the production of capital goods and reduction of consumer goods

**4) Basis of decision-making in Economics**

Decision-making made by the government, firms and individuals can be done on a marginal basis by considering whether the additional consumption or production of one extra unit will provide more satisfaction. This is done by examining whether there is net marginal gain to be gained from the additional consumption or production.

As long there is positive net marginal benefit (MB-MC) to be gained, the total benefit derived from additional consumption or production will increase and the decision is to continue the consumption or production.

* Marginal benefits are the additional benefits gained by undertaking an incremental increase or decrease in consumption or production.
* Marginal cost refers to the additional cost incurred by undertaking an increase or decrease in consumption or production.

Equilibrium level of consumption or production is attained at the level where the MB = MC. At this level of equilibrium, the total net benefit derived will be the greatest.

When MB>MC, the net benefit is positive, total benefit is rising. Therefore, consumption and production can be increased to the level where the equilibrium is attained when MB=MC.

When MB<MC, the net benefit is negative, total benefit is falling. Therefore, consumption and production can be reduced to the level where the equilibrium is attained when MB=MC.

**5) The application of Marginal Principle in cost and benefit analysis**

By attaining market equilibrium, the society will be able to attain social maximization whereby it maximizes economic surplus in terms of greater net social benefit gain.

**6) Applications of the concept of Opportunity Cost in economic decision**

The concept of opportunity cost can be seen in the process of economic decision whereby the decision to select one choice will lead to the forgone of the next best alternative which is the value of opportunity cost.

**a) The consumption decision**

The selection of consumption of one good will lead to the rise of opportunity cost which is ‘the value of the next best alternative forgone’ (the next best choice of consumption).

**b) The employment decision**

The selection of one job will lead to forgone of the next best alternative employment. Since the worker will choose the job with highest earning, the opportunity cost will be seen as the job with the next highest earning. This amount is known as the transfer earning which is the minimum reward required for a worker to remain in the employment.

**c) The investment decision**

The investment of fund in a particular project will mean the firm has to forgo the next best alternative earning of other investments. This is known as the implicit cost which includes the interest earning forgone and the potential earnings the individuals can earn in other employment.

**d) The social decision**

The allocation of government expenditure will also give rise to opportunity cost seen in term of alternative usage of resource. In the allocation of more resources for operating expenditure (day-to day expenditure), there will be lost of potential growth which can be attained from development expenditure. It can also be seen in term of the loss of net benefit from the next best alternative of production of one public good due to the selection of the public good which gives highest level of net benefits. Lastly, the opportunity cost of unemployment includes the loss of domestic output and the cost of subsidies given to the unemployed.

**e) The international specialization decision**

The notion of opportunity cost can be used to demonstrate how countries can specialize in the areas of relative advantage and then trade within the acceptable level of trading prices.

This concept is applied in David Ricardo’s theory of comparative advantage. In this theory, there will be mutual benefits to be gained by the respective participating countries when they specialize in the production which they have comparative advantage in it. This C.A. is seen in term of the opportunity cost which must be the lowest in comparison to other countries. The opportunity cost will also help to derive the trading price that will determine how the trade can be made more beneficial for the participating countries.

**7) Concept of economic efficiency (Pareto Optimality)**

In the conduct of economic activity of consumption and production, it is imperative to play emphasis on economic efficiency (pareto optimality). The economy will seek for efficient resource allocation.

The notion of economic efficiency – it means to attain the maximum yield or gain out of the resources used for the economic activity.

This is attained when the two conditions are satisfied:

1. All resources are fully utilized in production and no potential output is lost. This implies that the economy is at full employment.
2. There is also optimization of consumption whereby the preference of consumption is attained, maxizing the satisfaction.

When economic efficiency is attained, the economy has attained productive efficiency (production is at minimum level for the production level) and allocative efficiency (Price is equal to marginal cost)

Meaning of **production efficiency**

a) unit cost of production is at minimum level at various level of output

1. firms are producing at the greatest number of unit of output for that production level.

Meaning of **allocative efficiency**

1. allocation of resources whereby the gain of one party cannot be attained without the loss of another.
2. The increase of one unit of the production of a good cannot be attained without the reduction of another good. (full employment level)
3. It also occur when the price of the good is equal to the cost of producing one additional unit of output. (P=MC)

How would the presence of externalities affect the condition of Pareto Optimality?

**Meaning of externality**

A spillover effect (positive or negative), which will affect the third party, although he has not engaged in the direct production and consumption of the good. If it is a positive externality (education), it will generate external benefit and if it is a negative externality, it will generate external cost. This will raise the social marginal cost and benefit and thus distort the social market equilibrium (SMC = SMB). When this happens, market failures occur, and the society experiences welfare loss. (Deadweight Loss)

**8) Characteristics of the three Economic Systems**

The task of resource allocation requires an economic system to perform. Since the economic development of civilization, there are three prominent economic systems and they are namely:

1. Free market system (capitalist economy of free enterprise economy)
2. Centrally planned economy/command economy
3. Mixed economy

**Three types of economic system vary due to these grounds:**

1. the ownership of resources (factors of production)
2. the mechanisms for resources allocation
3. the values of the economic systems

**8a) Free Market Economy**

* Resources are privately owned
* Free enterprise and free choice
* Guided by self-interest -
* The adoption of the price mechanism (relies on market forces of demand and supply)

**Strengths of the Free Market Economy**

* + provides incentive for greater effort as it rewards the individuals
	+ swift adjustment of resources allocation – reduce the cost of resource allocation

**Weaknesses of the Free Market Economy**

* may contribute to market failures – welfare loss to the society
* may lead to unequal distribution of income and resources

**8b) The Command Economy**

* Resources are owned by the state
* Decision making is centralized and decided by the government
* Guided by collective interest for the society

**Strengths of the Command Economy**

* Can adjust resources to the need of the state
* Can avoid uneven distribution of resources

**Weaknesses of the Command Economy**

* no inducement for effort and investment
* experience time lag in the implementation of policies

**8c) The Mixed Economy**

* resources are both owned by the state and the individuals
* decision-making can be by the state and the enterprises
* the degree of its mix depends on the level of government and enterprise participation

**Strengths of the Mixed Economy**

* Reap the benefit of the operations of the market forces and government regulations
* Provide the impetus for individual to excel and at the same time, can eliminate the undesirable effects of income inequalities.
* Combine the benefit of competition and co-operation
* Strive to meet the needs of the individuals and society
* May achieve short and long term aims of the government
* Consumers’ interest is guarded while the private sector can strive for greater growth and development.

**Weaknesses of the Mixed Economy**

* Difficult to reconcile the interest of the states and the society
* Difficult to draw a clear line on the scope of areas for the private sector and government sector to operate
* Inherent economic problems in the country may undermine the directions of the economic development
* Problems encountered during the transition of the economy towards market reforms

# 9) Problems encountered during the transition

1. **Lack of understanding of the function of the price mechanism**

Price was previously set by the government - may not understand the price changes may be temporary and excessive production will occur or may not respond to price changes quick enough to lead to shortages – absence of business knowledge – may have excessive consumer exploitation – failure to proliferate information on price system.

1. **Lack of entrepreneurship**

No experience in guiding economic activities – may lead to wastage and inefficient method of production – poor skills in collecting information, decision-making, managing resources and price setting

1. **Absence of infrastructure and institutional support**

The economy may not have the adequate facilities that will help the economy to introduce market reform – eg business registration bodies or coordinating bodies or infrastructure to help the businesses build up external economies of scale to reap greater efficiency.

1. **Rise of corruption and other forms of unfair political power to corrupt the function of fair and efficient market reform.**
2. **Unable to deal with the extensive economic fluctuation that may occur due to change in the decision-making system**
3. **The society may not be able to adapt to the reform of self-**dependency – lesser welfare blanket to take care of the people – social inequality and unequal distribution of resources will occur – creates greater social unrest and instability.
4. **Obsolete machineries** - meaning low productivity to compete in global market – may not be able to compete well with other economies.

**10) Categorization of Goods**

**a) Concept**

Goods produced in an economy includes all forms of physical production and services. It is imperative to take note that goods have two notable dimensions. First, goods can be rival or non-rival in consumption. Second, there is the issue of exclusively where the owner possesses the right to exclude others from consuming the good.

**b) Definition**

**i) A Public Good (pure)**

A good that is non-rival in consumption and non-payers cannot be excluded from consumption.

**ii) A Private Good**

A good that is rival in consumption and non-payers can be excluded from consumption.

**ii) Quasi Public Good**

A good that is non-rival in consumption but non-payers can be excluded from consumption

**c) The Free Rider Problem**

This occurs when a person consumes a public good without contributing to the costs of production.

**GOODS**

**ECONOMIC GOOD -** i.e. Goods that incur opportunity cost

**Private Good**

**Excludable**

**Rivalry**

Profitable

Private producer willing to produce the good

**Public Good**

**Non-excludable**

🡪 free-rider problem

🡪 loss of revenue

 No willingness to pay as

 others don’t pay 🡪 no

 price 🡪

**Non-rivalry**

Therefore, MC=0 🡪 at allocative efficiency level 🡪 P=MC=0 🡪 therefore P=0 🡪 profit=0

Produced by govt

**WITH EXTERNALITIES**

**EXTERNAL BENEFIT**

i.e benefits gained by a 3rd party

PB + EB = SB

social optimum level is SB=SB. But firms only aim for PB = PC. Since PB<SB 🡪 underproduction of the

**MERIT GOOD**

**EXTERNAL COST**

i.e Cost incurred by a 3rd party

PC + EC = SC

Social optimum level is SB=SB. But firms only aim for PB=PC. Since PC<SC 🡪 overproduction

**DEMERIT GOOD**

**NO EXTERNALITIES**

Most goods

Free good – no opt cost