

AS – ECONOMICS (9708)

MACRO

CHAPTER 1: Basic macroeconomic ideas

Topics

1. Basic macroeconomic ideas
2. Types of Policies

TOPIC 1: BASIC MACROECONOMIC IDEAS

1. NATIONAL INCOME

Definition: It is the total income of the whole economy or is the sum of all individuals and firms' incomes of a country.

Different Concepts in National Income

Definition	Description
1. Gross Domestic Product (GDP)	<p><u>Definition:</u> It is the monetary value of all final goods and services produced within the geographical boundaries of a country irrespective of whoever is producing it, in one year. where monetary value means value of a product expressed in terms of money and it will be:</p> $\text{Monetary Value} = \text{Price} * \text{Quantity}$
2. Gross National Product (GNP)	<p><u>Definition:</u> It is the monetary value of all those goods and services which are produced by citizens of a nation irrespective of wherever they are living in the world, in one year.</p> $\text{GNP} = \text{GDP} + \text{Property Income from Abroad} - \text{Property Payments to Abroad}$ <p style="text-align: center;">OR</p> $\text{GNP} = \text{GDP} + \text{Net Property Income from Abroad}$
3. Disposable Income (Yd)	<p><u>Definition:</u> Disposable income is the income left after paying Income Tax (Direct Tax)</p> $\text{Disposable Income} = \text{National Income} - \text{National Tax}$
4. Nominal GDP	<p><u>Definition:</u> It is the GDP figure measured at current year prices and is not yet adjusted for inflation.</p> $\text{Nominal GDP} = \text{Current Year Price Index} * \text{Current Year Output}$
5. Real GDP	<p><u>Definition:</u> It is the GDP figure measured at constant or base year price level and has been adjusted for inflation</p> $\text{Real GDP} = \text{Base Year Price Index} * \text{Current Year Output}$

2. AGGREGATE DEMAND

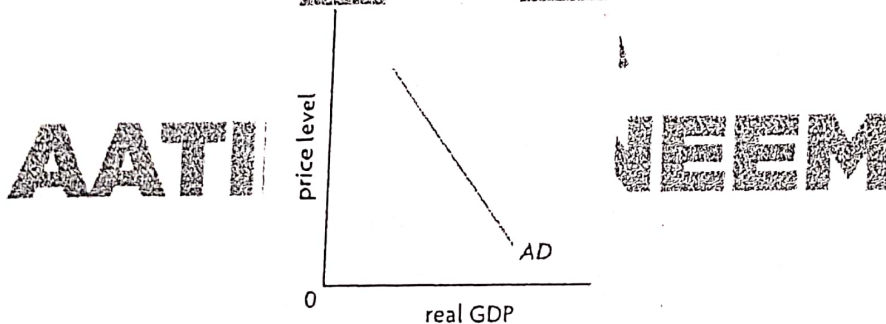
Definition: It is the total demand of all sectors in an economy. All economies consist of basic **FOUR** sectors i.e. households, firms/businesses, government, and foreign sector.

$$AD = C + I + G + (X-M)$$

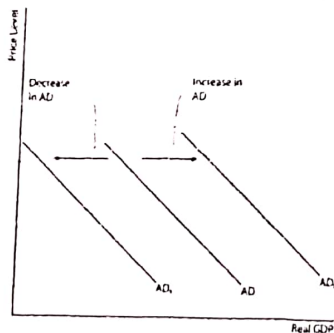
ECONOMY SECTORS			
HOUSEHOLDS	FIRMS	GOVERNMENT	FOREIGN
Those who spend on consumer goods and services for their personal satisfaction	Those who produce goods and services in the economy	The part of the economy which controls and manages all economic activities	The part of the economy involved in international trade i.e. exports and imports
↓	↓	↓	↓
Households demand	Firms demand	Government's demand	Foreign demand
↓	↓	↓	↓
Consumption	Investment	Government Spending	Net Exports
C	I	G	(X-M)

1. Aggregate Demand Curve

Definition: It is a curve that shows negative relationship between the general price level and aggregate demand or GDP. Due to a change in price level there will be a movement on the AD curve.



2. Changes in the Aggregate Demand Curve



1. Consumption and Savings (C)

Definition: It is the part of the household income which they spend on consumer goods and services to satisfy their needs and wants.

Determinants of consumption and savings

Income, Wealth, Income Tax, Indirect Tax, Age, Family Size/Population, Taste and Attitude, Range of Goods and Services, Interest Rate, Availability of Credit, Expectation of Increase in Income, Price Level

2. Investments (I)

Definition: It is the total spending by firms on capital goods (e.g. machinery, raw materials, building etc.) in a country in one year.

Determinants of Investments

Technology, Cost of Capital, Corporation (Profit) Tax, Subsidies, Profits, Infrastructure, Political Stability, Law and Order, Business Expectations, Foreign Relations, Interest Rate, Demand for Consumer Goods

3. Government Spending (G)

Definition: Expenditures made by state authorities on healthcare, education, roads, railway lines, airports, sea ports, bridges, dams, police services, national defense etc. is known as Government Spending.

Determinants of Government Spending

Need for merit goods, Need for infrastructure, Poverty, Economic Conditions, Political Reasons, Population

4. Net Exports = Exports – Imports (X-M)

Definition: Exports (X) are spending by foreigners on domestically made goods and services is known as exports.

Definition: Imports (M) are spending by local residents on foreign made goods and services is known as imports.

Definition: Net Exports (X-M) is the difference between exports and imports of a country. Net exports are also known as balance of current account.

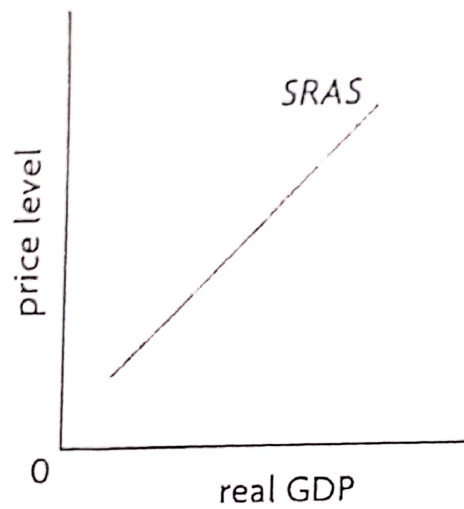
Foreign Income, Domestic Income, Taste/Fashion, Relative Quality, Tariffs/ Duties (Tax on Imports), Exchange Rate

AGGREGATE SUPPLY (AS)

Definition It is the total supply of all the producers of an economy at given price level
Aggregate supply can be distinguished between short-run aggregate supply (SRAS) and long-run aggregate supply (LRAS)

1. Short-run aggregate supply

Definition Is the output that will be supplied in a period of time when the prices of factors of production (inputs, resources) have not had time to adjust to changes in aggregate demand and the price level. The movement along the SRAS curve will be because of a change in price level.

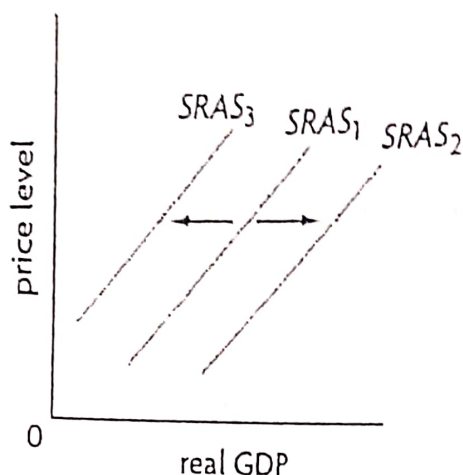


There are THREE main reasons for a positive relationship:

1. The profit effect: As the price level (that is, the price of goods and services) increases, the price of factors of production such as wages do not change. So the price level rises, the gap between output and input prices widens and the amount of profit increases.
2. The cost effect: Although the wage rates and raw material costs remain unchanged in the short run, average costs may rise as output increases. This is because, for example, overtime payments may have to be paid and costs will be involved in recruiting more members. To cover any extra costs that may be involved in producing a higher output, producers will require higher prices.
3. The misinterpretation effect: Producers may confuse changes in the price level with changes in relative prices. They may think that a rise in the price they receive for their products indicates that their own product is becoming more popular. As a result they may be encouraged to produce more.

Causes of shift in SRAS

The causes of shift of the SRAS curve are factors other than price level.



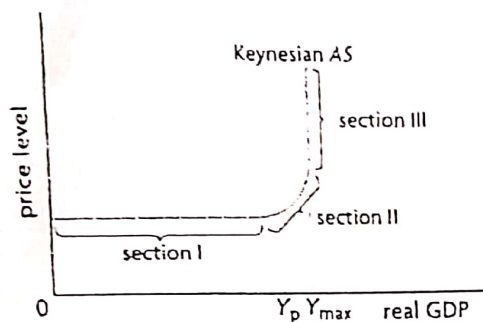
Factor	Description
1. Price of factors of production	<p>If the cost of Land, Labor or Capital increases without an increase in productivity it will result in a fall in supply.</p> <p>Cost of FOP \uparrow AS \downarrow Cost of FOP \downarrow AS \uparrow</p>
2. Taxes on firms	<p>When the tax increases it will be more expensive for a firm to produce hence they reduce the supply.</p> <p>Cost of corporation taxes \uparrow AS \downarrow Cost of corporation taxes \downarrow AS \uparrow</p>
3. Productivity/quality of resources	<p>A rise in labor productivity and/or capital productivity will cause an increase in aggregate supply both in the short and long run.</p> <p>Productivity \uparrow AS \uparrow Productivity \downarrow AS \downarrow</p>
4. Quantity of resources	<p>If an economy can import the supply will increase. However in case of a supply shock like natural disasters, wars the supply will fall.</p> <p>Quantity \uparrow AS \uparrow Quantity \downarrow AS \downarrow</p>

2. Long-run aggregate supply

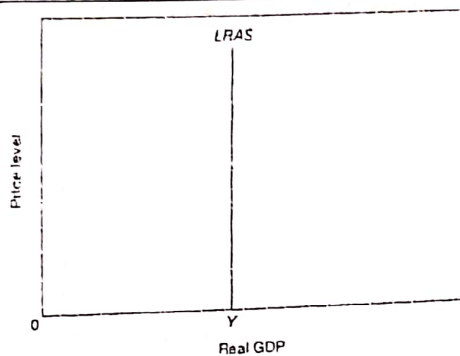
Definition: Is the output that will be supplied in the time period when the prices of factors of production have fully adjusted to changes in aggregate demand and the price level. There are **TWO** schools of thought which represent the LRAS differently:

1. Keynesian
2. New classical

Keynesian



New classical



Keynesians represent that LRAS curve as:

1. Perfectly elastic at low rates of output – As there is spare capacity in the economy.
2. Upward sloping over a range of output – The reason is that as output increases, so does employment of resources, hence only way to increase output is to charge higher prices.
3. Perfectly inelastic after that – This is because the real GDP reaches a level beyond which it cannot increase anymore; at this point, the price level rises very rapidly. Real GDP can no longer increase because firms are using the maximum amount of labor and all other resources in the economy.

It emphasizes their view that, in the long run, an economy can operate at any level of output and not necessarily at full capacity.

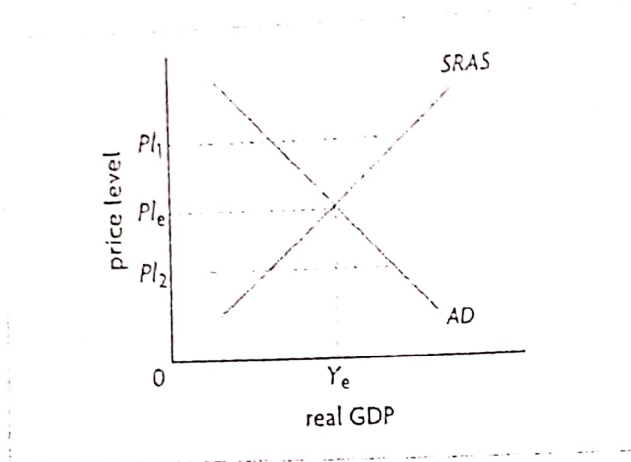
Illustrate the LRAS curve as a vertical line. This is because they think that in the long run the economy will operate at full capacity.

Determinants of LRAS

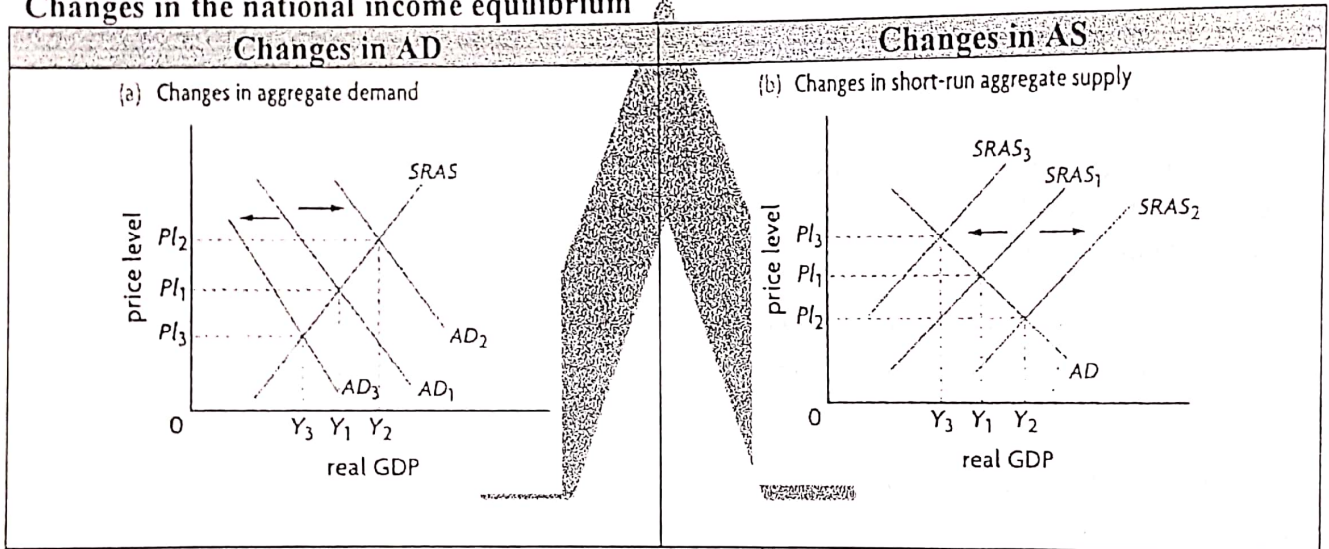
Cost of raw materials, Cost of fuel/oil, Cost of wages, Cost of corporation taxes, Subsidies, Technology, Climate, Natural Resources, Labor force, Education Skills

4. NATIONAL INCOME EQUILIBRIUM

Definition: The output and price level achieved where AD equals AS. It is a situation where AD = AS



Changes in the national income equilibrium



AATIK TASNEEM

TOPIC 2: TYPES OF POLICIES

1. GOVERNMENT MACROECONOMIC OBJECTIVES

Definition: These are objectives that the government wants to achieve through its policies. There are FIVE key macroeconomic objectives:

Objective	Description
1. Redistribution of Income	The government aims to reduce the gap between high and low-income groups by imposing taxes. This can be done using a progressive tax system in which rich pay a higher percentage on their income as compared to the poor.
2. Control Inflation (Price Stability)	Inflation is referred to as the general persistent rise in general price level. The plans to keep prices stable by keeping a check on inflation. Since high rates of inflation reduce international competitiveness and can cause a loss of trust in investors. Inflation can be either demand-pull or cost-push.
3. Full employment	The government wants that all the factors of productions are fully employed in an economy and there is wastage. This is necessary for the economy to operate on the PPC. This also helps to counter the problem of unemployment is who are able and willing to work but do not have work.
4. Economic Growth	Economic growth is regarded as the increase in country's GDP (Gross Domestic Product). Economic growth increase standard of living and can achieved by increasing factors of production or by increasing their efficiency.
5. Balance of Payment Stability	The BOP is the record of financial transactions with other nations. If the outflows are greater than the inflows the BOP is in a deficit. If the inflows are greater than the outflows BOP is in a surplus. Deficit drains the money from a country where as surplus can cause inflation in the long run hence the governments try to keep an equilibrium.

2. GOVERNMENT POLICIES

Government uses THREE types of policies to achieve its objectives:

1. Fiscal Policy
2. Monetary Policy
3. Supply Side Policies

1. FISCAL POLICY

Definition: Fiscal Policy is a government policy concerned about taxes and government spending to influence economic activity and macroeconomic objectives such as employment, economic growth, inflation etc.

Note: Government maintains a budget to provide services like education, health care etc. This is done through borrowing, privatization, and taxes.

$$\text{Govt. Budget} = \text{Expected Revenue} - \text{Expected Govt. Spending}$$

$$\text{Balanced Budget: Revenue} = \text{Spending}$$

$$\text{Budget Deficit: Revenue} < \text{Spending}$$

$$\text{Budget Surplus: Revenue} > \text{Spending}$$

Uses of Fiscal Policy

Use	Description
1. Expansionary Fiscal Policy	In this the government increases government spending or decreases taxes to increase the aggregate demand in the economy and reducing unemployment. This is applied in a recession. Government Spending ↑ OR Taxes ↓
2. Contractionary Fiscal Policy	In this the government decreases government spending or increase taxes to decrease the aggregate demand in the economy and reducing inflation. This is applied in a boom. Government Spending ↓ OR Taxes ↑
3. Relation with Supply Side policies	Can be used with the supply side policies to boost the productive capacity of the economy which can aid long term economic growth. These can be: <ol style="list-style-type: none"> 1. By cutting taxes and reducing unemployment benefits will make more people might enter the workforce 2. Lowering corporation tax might bring foreign investment 3. Increasing government expenditure on labor training programs, health care, education etc.

MONETARY POLICY

Definition: Monetary Policy is a government policy concerned about interest rate, exchange rates and the money supply to control the amount of spending and investment in the economy. Controlling money supply and the exchange rates are difficult hence the government relies on interest rates to achieve its objectives.

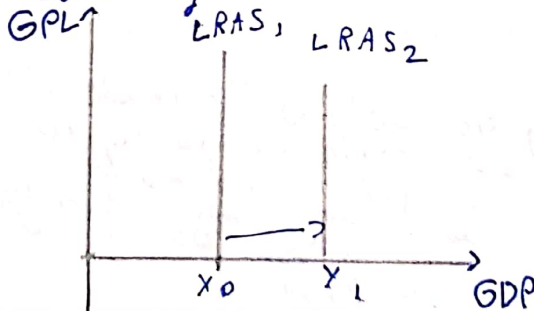
Uses of Monetary Policy

Use	Description
1. Expansionary Monetary Policy	This is when the government increases the money supply and decrease interest rates. This is done at the time of recession to boost demand. Low interest rates increase borrowing and hence more consumption. Money Supply \uparrow Interest Rates \downarrow
2. Contractionary Monetary Policy	This is when the government decrease the money supply and increases interest rate. This is done at the time of boom to lower demand and inflation. High interest rates discourage borrowing and hence lowers consumption. However lower demand causes unemployment. Money Supply \downarrow Interest Rates \uparrow

Note: Monetary policy can be counterproductive as a contractionary policy discourages foreign investment, stops economic growth and causes unemployment.

Limitation of Fiscal Policy and Monetary Policy

Limitation	Description
1. Recognition Lags	It takes time before the government can identify if the economy is booming or going into a recession. <i>Difficult for the govt to identify the actual state of the economy</i>
2. Administrative Lags	It takes time to implement the strategies. Since policies need to be discussed and alterations need to be made before the plan is executed. <i>Even if the policy is decided, it takes time for the govt to pass on and get the policy approved</i>
3. Impact Lags	It takes time for the policy to have an impact. <i>takes time before firms and consumers modify their behaviour in terms of buying and selling</i>
4. Conflict of objectives*	When trying to achieve a macroeconomic objective other might be conflicted. Example: An expansionary policy will reduce unemployment but will cause inflation. <i>The govt has to choose b/w employment and GDP v stable prices.</i>
5. Political Problems	These policies might be used for political gains. Example: Reducing taxes and increasing government spending near elections. <i>Govts can use these policies for political gains which might reduce it's efficiency.</i>



3. SUPPLY-SIDE POLICIES

Definition: These are long-term strategies that aim to increase or improve the efficiency of factors of production to ensure long term growth in the economy. Since the factors of production are efficient it results in an outward shift in the PPC. These policies can include:

- 1 Privatization
- 2 Deregulation
- 3 Capital investment
4. Training and Education programs
5. Enterprise Zones

1. Privatization

Definition: It is a government policy in which state-owned businesses are sold to the private sector. The objective is that the firms will be more efficient and can generate more profits since they will profit driven.

2. Deregulation

Definition: This policy aims to remove barriers to entry to encourage competition. These can include minimum wage rates, max price etc. This makes the market more competitive and more productive.

3. Capital investment

Definition: This policy aims to spend funds on research and development and new technologies. This helps in both product and process innovation which can give the country a competitive advantage in the international market.

4. Training and Education programs

Definition: This policy aims to increase the quantity and quality of labor in the economy by launching training and education programs. In order to encourage more workers, the government also lowers taxes to encourage individuals to join the labor force.

5. Enterprise Zones

Definition: These are areas where there is high unemployment and the government gives incentives like tax holidays, interest free loans etc. to businesses to locate there. The objective is to boost economic activity in that area and increase the standard of living of individuals.

Conclusion: Supply side policies take time to reap benefits however they are highly effective when it comes to achieving government objectives of economic growth, lower inflation, lower unemployment and improved balance of payments.

Adu
 'in supply side policies, the trade off b/w inflation vs economic growth and unemployment no longer exists as all three objectives can be achieved simultaneously.'
Disadv
 • It needs to be fuelled from taxes in the short-run.
 • It's a long-run policy and will not generate effects in the short run