CHAPTER II

Macroeconomic Models

In developing countries, the development of a well-functioning infrastructure is more important than the development of new technology.

- **Macroeconomics is concerned with the growth of the economy, and employment and income generation**
- **So, it studies the behaviour of the economy as a whole**

Macroeconomics studies:

- **Significance of total output**
- **Rates of inflation and unemployment**
- **Booms and recessions**
- **Essence of Balance of payments and**
- **Exchange rates**

Macroeconomics analyses:

- **Short-run behaviour of the economy**
- **Medium-run fluctuations of the economy, and**
- **Long-run economic growth**

Macroeconomics analyses short, medium and long run impact of policies like:

- **Consumption and investment policies**
- **Changes in wages and prices**
- **Monetary and fiscal policies**
- **Money stock, budget, interest rates, and the national debt**
- **Foreign exchange rate and the trade balance**

Objective of macroeconomic analysis are:

- To understand how the macro-economy works
- How to make the economy perform better

Great macroeconomists suggest to intervene in economy

Such economists are as for example:

- John Maynard Keynes
- Milton Friedman of the University of Chicago and the Hoover Institution
- Franco Modigliani and Robert Solow of M.I.T
- James Tobin of Yale University

Some economists are sceptical about intervene in economy and discourage intervention in economy

Such economists are:

- **Robert Barro, Martin Feldstein, and N. Gregory Mankiw of Harvard University**
- **Nobel laureate Robert Lucas and Thomas Sargent of the University of Chicago**
- **Olivier Blanchard of MIT., Robert Hall, and John Taylor of Stanford University**

2. MACROECONOMIC MODELS

Macroeconomics organised in three models

Each of these models have different time frame

The Models are:

- **Long run model**
- **Medium run model**
- **Short run model**

Long run Model

- Long run model studies long run behaviour of the economy
- Long run model discusses growth theory
- It focuses on growth of productive capacity

In the Long run model the level of productivity determines:

- Output, fluctuation in demand that determines price and inflation

In the long-run:

- **Per capita GDP is constant**
- **Per capita capital in constant, and**
- **Full employment is achieved**

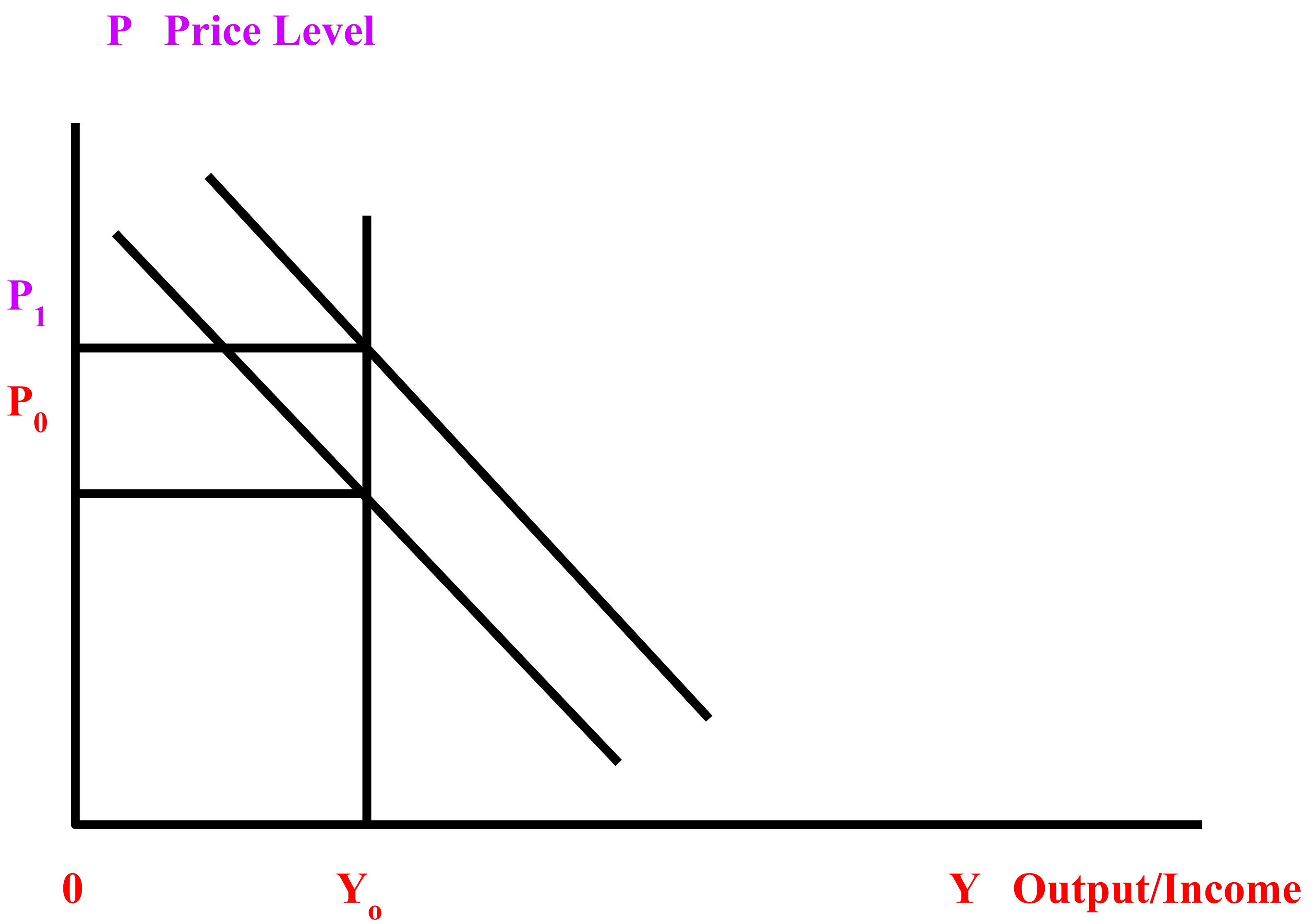
So, <u>if</u> the <u>long-run demand increases</u>:

- **Firms have <u>no possibility</u> <u>to increase supply</u> (because of full employment)**

Hence, <u>if</u> in the <u>long run demand increases</u>:

- **<u>Output remains</u> <u>unchanged</u>**
- **<u>Only price increases</u>**
- **Hence, <u>in the long run</u> <u>aggregate supply curve is Vertical</u> (Slide-9)**

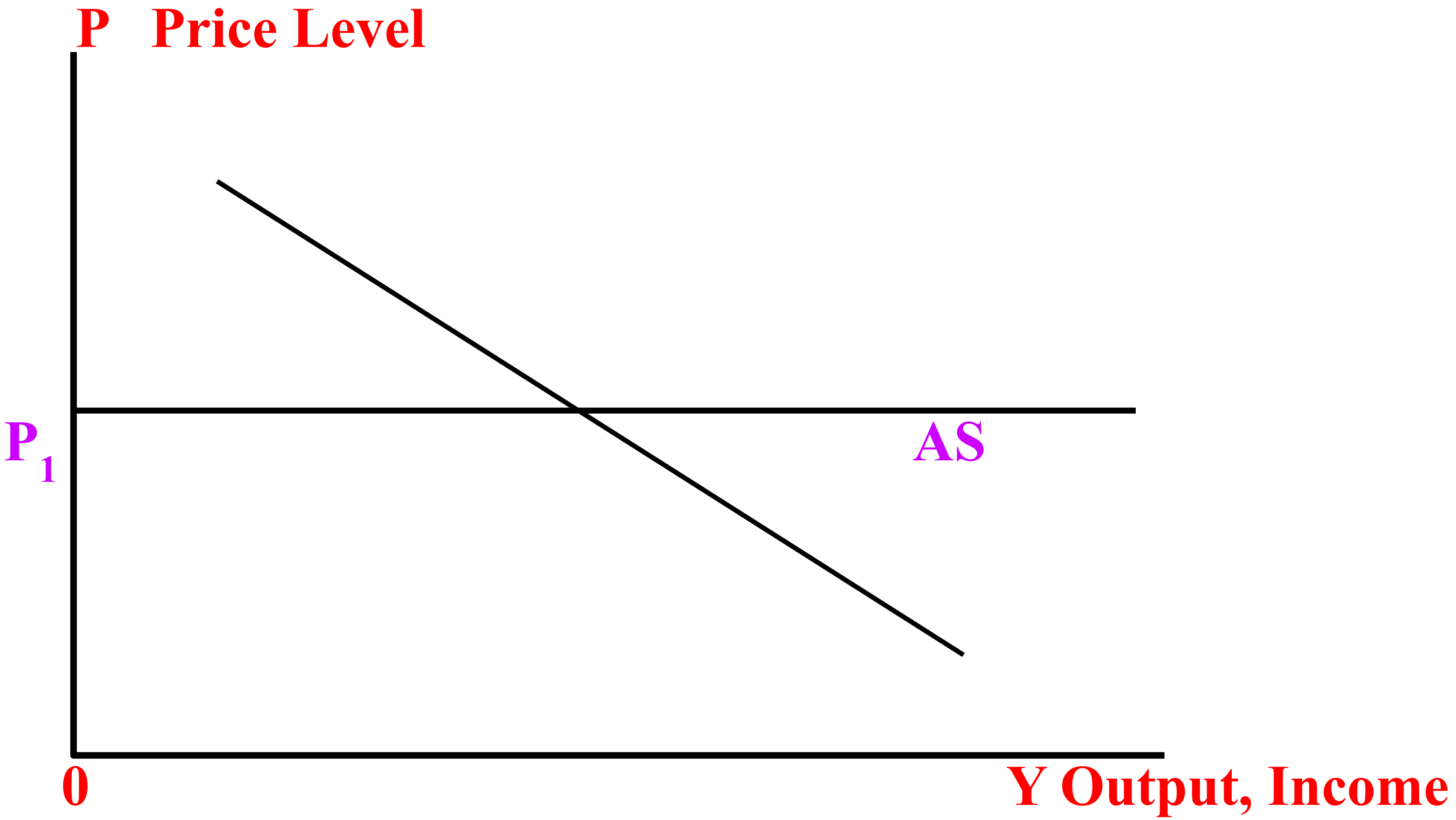
Figure-1: Supply in the Long run growth model



Short run model

- Short run model studies <u>short run behaviour</u> of the economy
- It analyses <u>level of output</u> and <u>unemployment</u>
- It analyses <u>quantity of output</u> that firms are <u>willing to supply</u> at a given price level
- If in short-run <u>demand increases</u>, firms <u>increase supply</u>
- Firms <u>use</u> this <u>opportunity</u> <u>to achieve gain</u>
- They keep <u>price unchanged</u> and <u>increase supply</u>
- So, in short-run <u>aggregate supply curve remains horizontal</u> (Slide-11)

Figure- 2: Supply in the short run growth model

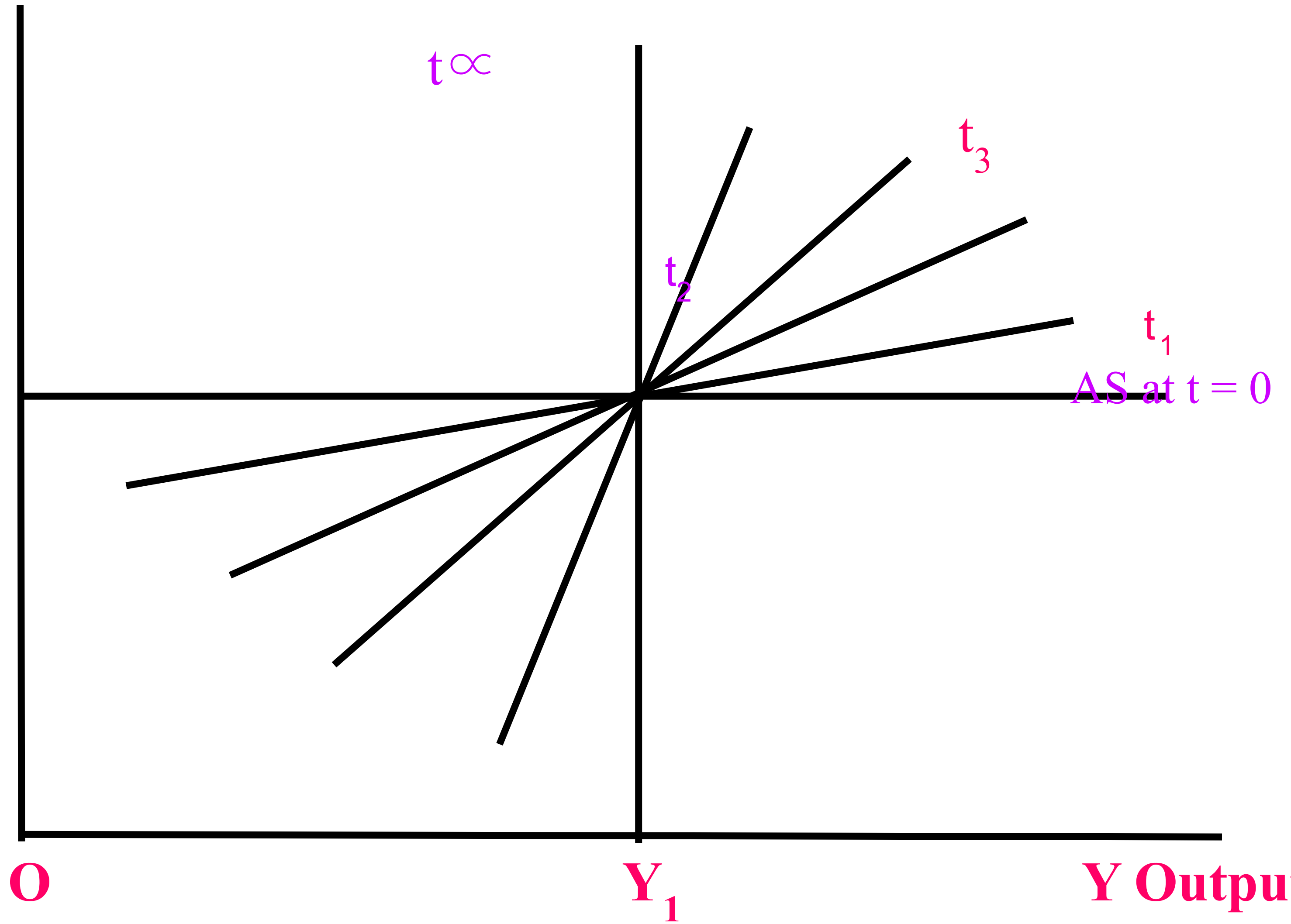


Medium run model

- Medium run model studies medium run behaviour of the economy
- It studies how economy grows from short run to long run
- In the medium run model productive capacity could be increased
- In medium run growth theory the adjustment process of the economy from the short run to the long run has been discussed.
- Medium run growth theory begins with the supply side of the economy.
- It discusses the adjustment mechanism of the aggregate supply and price

- In Figure-3 (Slide-14) illustrates the medium run supply curves
- Figure-3 shows the long run and short run aggregate supply curve.
- It has been assumed that in medium run aggregate supply curve rotates counter clockwise.
- In medium run model the aggregate supply curve transforms with the time from horizontal to vertical curve.
- During the shift the output as well as the price increase

Figure-3: Medium run growth model



Justification of the division in time frame

- Nearly all economists accept these models
- However, there is less agreement about time frame for short and medium run model
- There is different opinion in respect of time frame of models

3. LONG RUN GROWTH MODEL

- Long run growth model analyses how investment in technology leads to increase living standard
- Long run growth model ignores recessions, booms and short run fluctuation
- It is assumed that labour, capitals, raw materials and so on are fully employed in the long run

Level of output in long run model

- Level of output is determined by the supply of the production factors
- Aggregate supply and aggregate demand determine relation between price and output
- Supply curve (AS) gives quantity of output the firms are willing to supply at a price
- Position of the aggregate supply curve depends on productive capacity of economy

Demand in the long run model

- Aggregate demand curve (AD) gives level of output at which goods markets and money markets are in equilibrium at a price level
- Position of aggregate demand curve depends on monetary and fiscal policy and the level of consumer confidence
- Intersection of aggregate supply and demand determines price and quantity
- In the long run growth model, the supply curve is vertical
- Supply cannot be increased in the long run

4. THE SHORT RUN MODEL

In short run model

- **Output fluctuates**
- **Aggregate supply curve is flat**
- **Price is not affected by the level of output**
- **Output is determined by aggregate demand**

5. THE MEDIUM RUN

Medium run model describes:

- **How economy shifts from short run to long run**
- **How aggregate demand pushes output above**
- **How prices rise**
- **How aggregate supply curve to move upward**

- What are the different macroeconomic models?
- Discuss the different macroeconomic models.
- Explain graphics how different stages of economic development are explained by the macroeconomic models

End of the Chapter

Macroeconomic Models

Thank You Very Much for Patient Hearing