

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 is constant, and
- ◆ Full employment is achieved

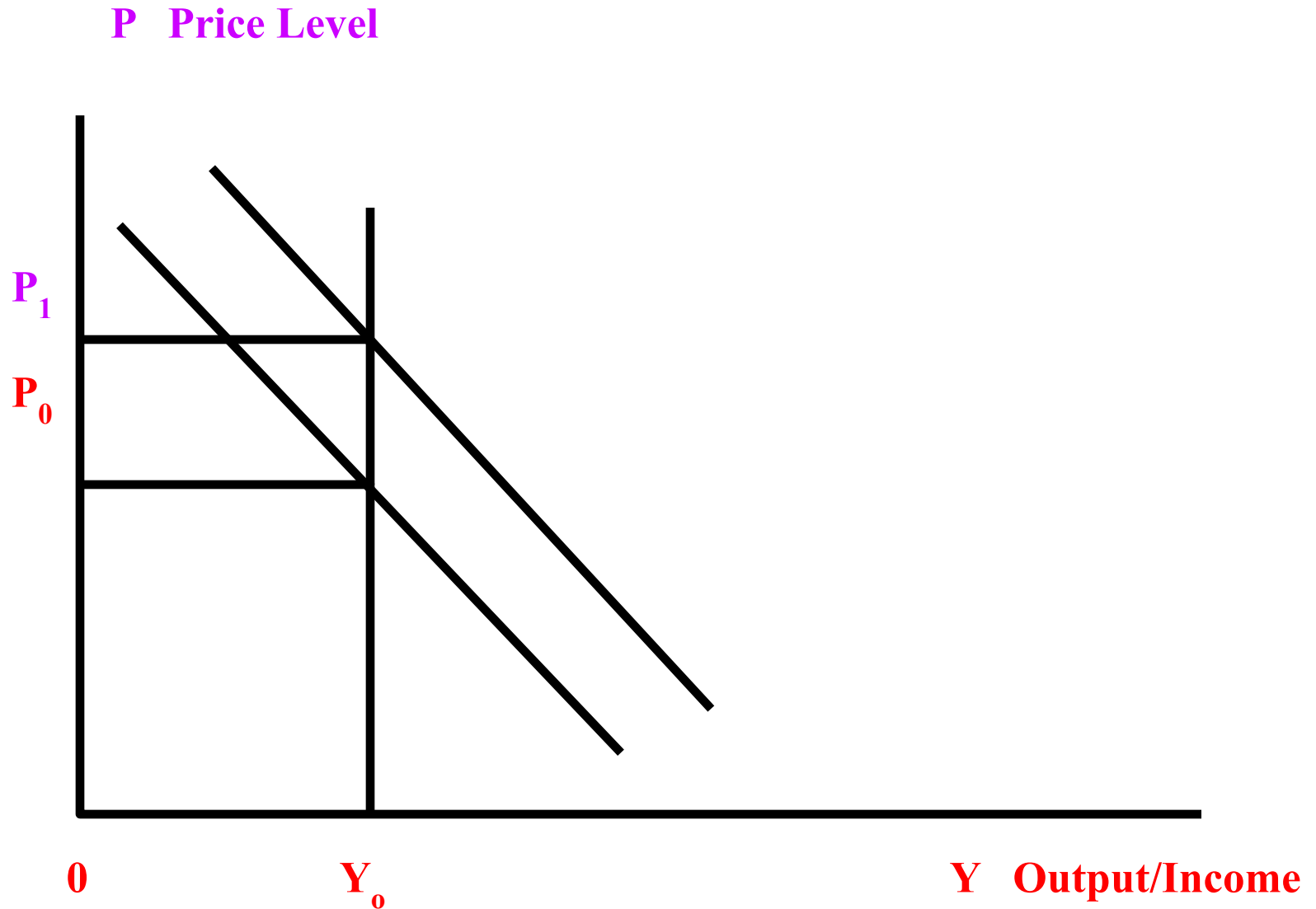
So, if the long-run demand increases:

- ◆ Firms have no possibility to increase supply (because of full employment)

Hence, if in the long run demand increases:

- ◆ Output remains unchanged
- ◆ Only price increases
- ◆ Hence, in the long run aggregate supply curve is Vertical (Slide-9)

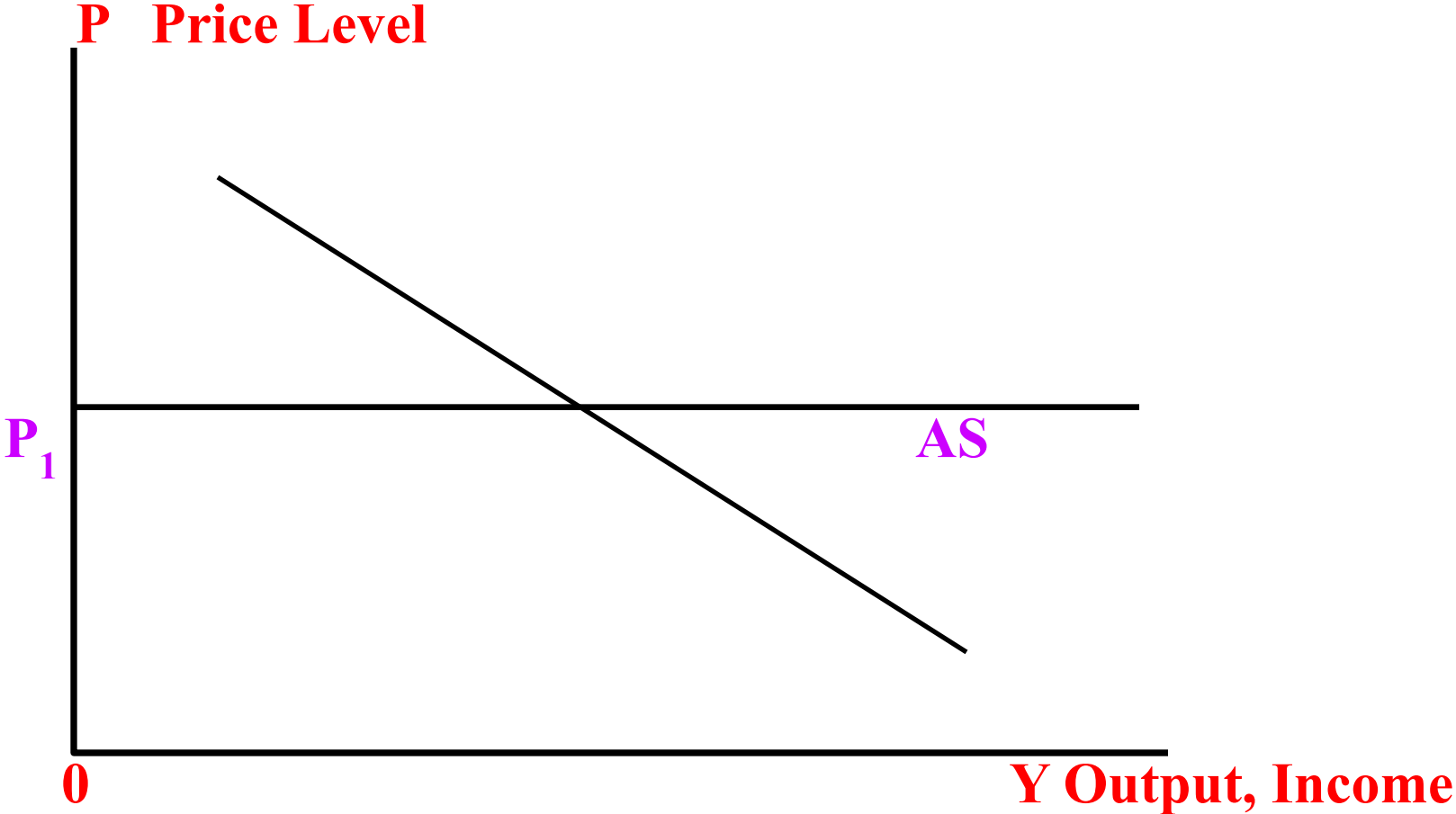
Figure-1: Supply in the Long run growth model



Short run model

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

Figure- 2: Supply in the short run growth model

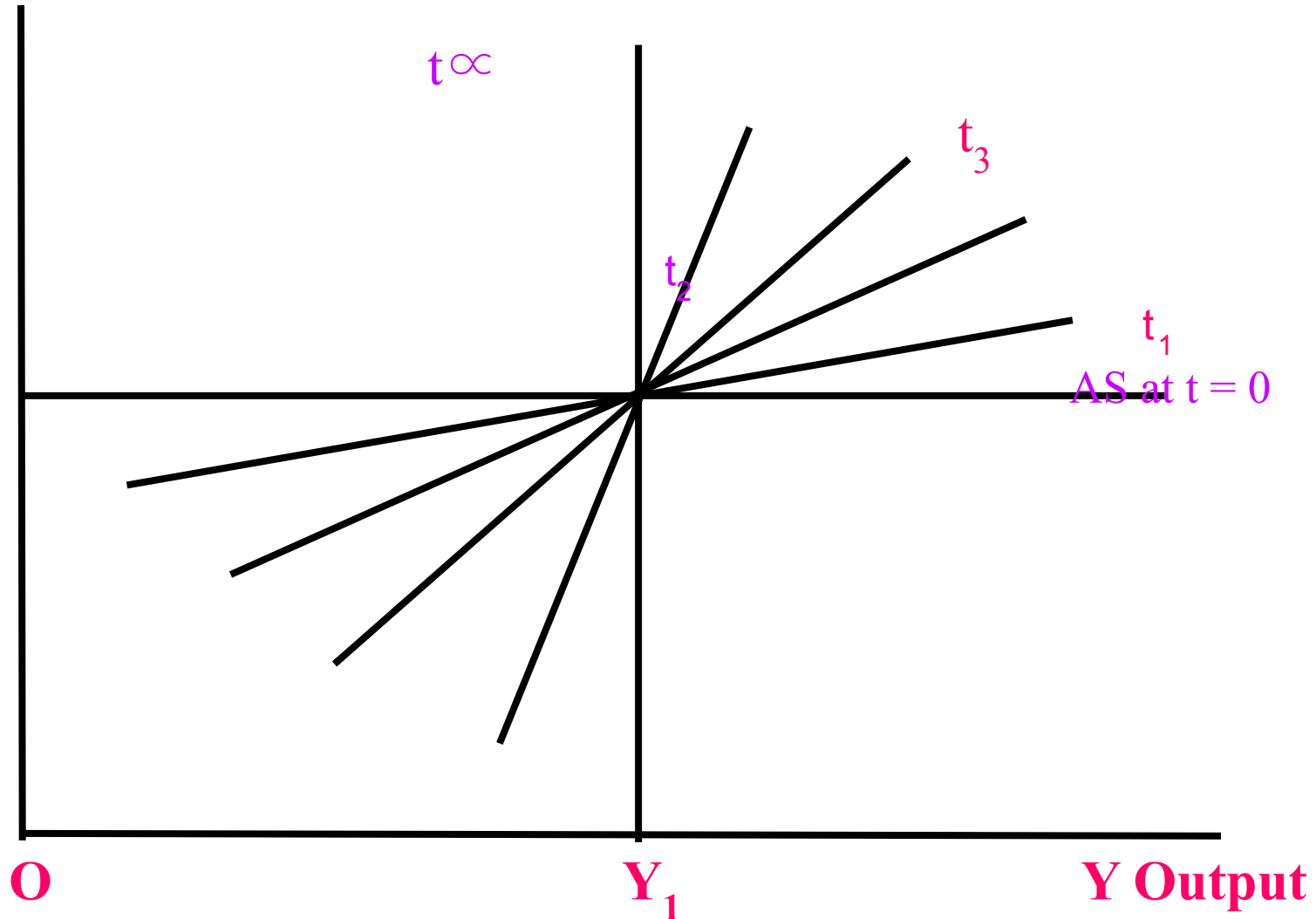


Medium run model

- ❖ 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**