Investment Models

(i) Harrod-Domar Model

(ii) Wage-Goods Model

Harrod - Domar Model

This model highlights the role of investment in maintaining or increasing the growth rate.

According to this model, If the growth rate is to maintained at a particular level, then, the investment must be maintained at the level which is associated with that growth rate.

Similarly, if the growth rate is to be increased, then, the level of investment must increase.

Since, savings provide resources for the investment, therefore, this model emphasises the role of savings in the following manner -

$$g = \frac{S}{Cr} \quad \Big| \quad g = S \times \frac{1}{Cr}$$

Here -

g = growth rate

S = Saving Rate (% of GDP)

Cr = Capital-Output Ratio

<u>Note</u> - The Capital-Output Ratio

is an important indicator showing the productivity/efficiency of capital. Its formulae is the following –

$$\frac{C}{Y}$$

Here –

C = Number of capital units
Y = GDP

There is inverse relationship between this ratio and the productivity of capital.

$\downarrow$

Example –

$$\frac{\cancel{C}^{\,4}}{\cancel{Y}_{\,1}}$$

4

ICOR

$$\frac{\Delta C}{\Delta Y}$$

4 : 1

3 : 1

2 : 1

$$\frac{C}{Y}$$

Assuming that a country's Saving rate is 20% and the capital-output ratio is 4:1, then, the growth rate of that country will be –

$$g = \frac{20\%}{4} = 5\%$$

or

$$20\% \times \left|\frac{1}{4}\right| = 5\%$$

From the above, it can be said that the growth rate of a country is critically dependent on its saving rate at a given level of capital-output ratio.

Many a times, the saving rate of a country happens to be quite higher but the growth rate is found not to be accordingly higher. Apart from other things, it happens due to higher capital-output ratio.

Relevance for India

Various economists maintain

limited relevance

why :

(i) Inaccurate estimation of COR, GDP, saving rate etc.

The unorganised sector dominate.

(ii) Doesn't focus

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Consumer goods

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Nature: Inflationary

(Static Price Model)

(iii) Adjustment in the saving rate is not easier in countries like India.

(iv) India's unemployment can't be removed only by industrialisation.

Inspite of the above, this model can not be rejected altogether in Indian context.

It highlights the role of savings in the growth rate. It was implemented in the First Five Year Plan. And even now, we see its influence on the govt. policies.

In India, saving is promoted

by concessions in income tax etc.
by the govt.

The Eco. Survey also writes extensively about the trends in saving & investment rates.

The Wage-Goods Model

- Given by - P.R. Brahmanand & C.N. Vakil

- Message or Focus — Wage Goods must be produced adequately.

  Why: So that their prices are lower & the worker class is not required to be paid higher wages

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  ↑ Capital Surplus

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  Reinvestment

  ↓

  Higher economic growth.

- what are wage-good? — Goods to be consumed mostly by the worker class.

- Activities of focus : Agriculture
  Cottage Industries
  Village Industries
  Animal rearing
  Micro & small Enterprises
  etc.

└ Benefits : (i) More emp. creation

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Almost all activities are labour-intensive.

(ii) Inclusive dev.

(iii) Growth with equity.

(iv) Development based on local resources.

(v) No requirement of FDI & foreign technology.

(vi) Food-security.

Note -

According to Dani Rodrik, China followed the similar policy in the initial stage of development under which it promoted agriculture & TVEs (Town & Village Enterprises).

Through this, China not only could ensure employment for its large population but also gud food security for it.

$$S \longrightarrow I \longrightarrow C \xrightarrow[4]{1} y$$

S ⟶ I ⟶ Machine

↓

growth

C ⟶ Utility

आनन्द