"The Notion of Capital-Output Ratio"

For 4th Semester
Economics (Major)
Paper—4.2

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Capital-output ratio :-

Introductory :- A frequently used tool that explain the relationship between the level of investment made in the economy and the Consequent increase in GDP is Capital-output ratio. The notion of Capital-output ratio expresses the relationship between the value of Capital invested and the value of output.

Meaning :- Capital-output ratio may be defined as "a given relationship between the investment that are to be made and the annual income resulting from these investments." It is the amount of Capital needed to Produce one Unit of output. For example, in an economy, investment is 32% (of GDP), and the economic growth Corresponding to this level of

investment is 8%. Here, a Rs. 32 investment produces an output of Rs. 8. Capital-output ratio is 32/8 or 4. In other words, to produce one unit of output, 4 unit of capital is needed.

Types:– Capital-output ratio is of two types — The average capital-output ratio and the marginal or the incremental capital-output ratio.

The average capital-output ratio indicates the relationship between the existing stock of capital and the resultant flow of current output. Capital is the main key to economic development.

The incremental capital-output ratio (ICOR) indicates the additional unit of capital or investment needed to produce an additional unit of output. It is a metric that assesses the marginal amount of investment capital necessary for a country or other entity to generate the next unit of production.

The higher the ICOR, the lower the Productivity of Capital or the marginal efficiency of Capital. A higher ICOR value is not Preferred because it indicates that the Country's Production is inefficient. The measure is used Predominantly in determining a Country's level of Production efficiency.

The Formula :—

$$ICOR = \frac{\text{Annual investment}}{\text{Annual increase in GDP}}$$

Factors determining Capital – Output ratio :—

The size of the Capital output ratio Can only be determined when the amount of Capital that has been used for the Production of output is known.

Other things that determine the Capital output ratio include innovation and technical Progression. If a lot of Capital is used in order to undertake some Project of technological development,

then the Capital output ratio will increase. On the other hand, the Countries that are labour intensive, i.e they employ more labour for undertaking a development Project, have a low Capital-output ratio.

Apart from the above factors, another thing that Can determine the Capital-output ratio is an investment. The more the rate of Investment is, the more will be the Capital-output ratio. Similarly, low ratio of investment means low Capital-output ratio.

Conclusion:- A lower Capital output ratio Shows that only low level of investment is needed to Produce a given growth rate in the economy. This is Considered as a desirable Situation. Lower Capital output ratio Shows that Capital is very Productive or efficient.

02.5.20