will lead to an expansionary process till the economy reaches the higher level of income $Y_2$ at point B. From B, the I and S curves gradually reach the positions shown in stage 1 of Figure , and again the cyclical process starts. Thus Kaldor's cyclical process is self generating.

According to Kaldor, the forces which bring about the lower turning point are not so certain at the higher level. "A boom left to itself, is certain to come to an end; but the depression might get into a position of stationariness, and remain there until external changes (the discovery of new inventions or of the opening up of new markets) come to the rescue."

## GOODWIN'S TRADE CYCLE MODEL



R.M Goodwin presented nonlinear model of trade cycles in an article The non- Linear Accelerator and Persistence of Business Cycles in 1951. Goodwins model of Business Cycle like is an extension of the multiplier and accelerator model of Business Cycle. Goodwin presents a non-linear model of trade cycle as against Hicks' linear model.

### Features of the Model

The main features of Goodwin's model are

- A linear consumption function $C = \alpha Y + C_0$ where $\alpha$ = consumption income ratio, $C_0$=autonomous consumption.
- Net investment (I) is equal to the rate of change in capital stock which is the result of adjustment between actual capital, K and desired capital $K$ , and $K = \beta Y + \alpha$ where $\beta$ is the accelerator.

reaches the peak and the trough, it at once takes a downturn and upturn respectively. This is empirically wrong because both recession and recovery are slow processes. As Hicks has also pointed out that the economy creeps along the upper and lower ceilings.

## Conclusion.

Despite these limitations, according to Prof. Allen, "The advantage of Goodwin's model is that the non-linear element is built in; the resulting oscillation maintains itself without any dependence on outside factors or on particular initial (or historical) conditions."

Differences between Goodwin and Hicks Models Goodwin's model is different from Hicks' model on the following points :



- ❖ The Hicksian model shows only how cycles take place. But Goodwin's model traces the time path of a realistic cycle.
- ❖ The Hicks model is linear which becomes non-linear when the ceiling and floor of a cycle meet. But Goodwin's model is throughout non-linear.
- ❖ Hicks combines growth and cycles in his model and keeps growth dependant on autonomous investment. According to Goodwin, growth depends on technological change which continuously increases the productive capacity of the economy.
- ❖ The equilibrium path EE of Hicks is based on continuous increase in autonomous investment. But Goodwin's growth path aa is based on the increase in desired capital K which is the result of continuous technological changes.