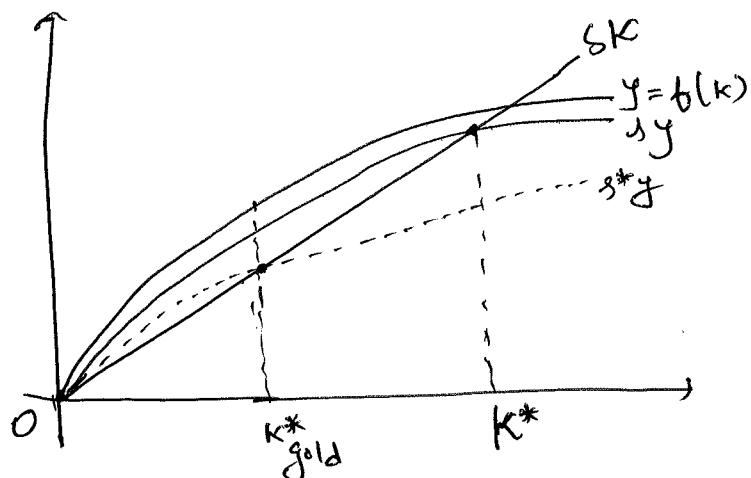


We must note that economy does not automatically attain golden rule level of capital. If we want any particular steady state such as golden rule then we need a particular saving rate to support it. Once economy attains golden rule steady state, then it will have higher level of per capita consumption than any other growth path for all time.

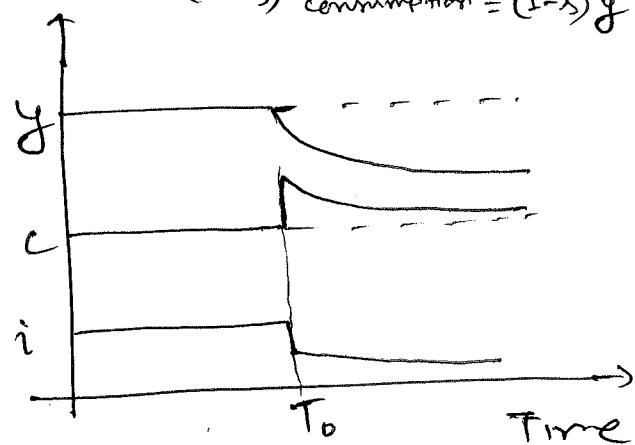
Transition path

(A) Starting with too much Capital



$$y \xrightarrow{\text{Saving}} \text{saving} = sy$$

$$\xrightarrow{(1-\delta)} \text{consumption} = (1-\delta)y$$



$\delta \downarrow \rightarrow \text{investment } i < \text{depreciation} \rightarrow k \downarrow \rightarrow y \downarrow$

Consider a case in which economy begins at a steady state with more capital as compared to golden rule steady state. In that case, government will try to reduce saving rate in order to reduce capital stock. Suppose that govt. policy succeeds in reducing saving rate at some point of time T_0 . It means savings rate decreases to a level that will lead to golden rule steady state.

The reduction in saving rate causes an immediate increase in consumption and decrease in investment. Since investment and depreciation were equal at the initial steady state. So, new investment will be less than depreciation. It means that economy is no longer in a steady state. Due to more depreciation, capital stock decreases leading to reduction in output.