

Figure 1: Capital Stock per worker and Output per worker

1. Illustrate how *output per worker* ( $y$ ) increases with *capital stock per worker* ( $k$ ).
2. Is there a relation between growth rate of *capital stock per worker* ( $\frac{\Delta k}{k}$ ) and *output per worker* ( $\frac{\Delta y}{y}$ )?
3. What happens to the *output per capital stock* ( $\frac{y}{k}$ ) as *capital stock per worker* ( $k$ ) increases?

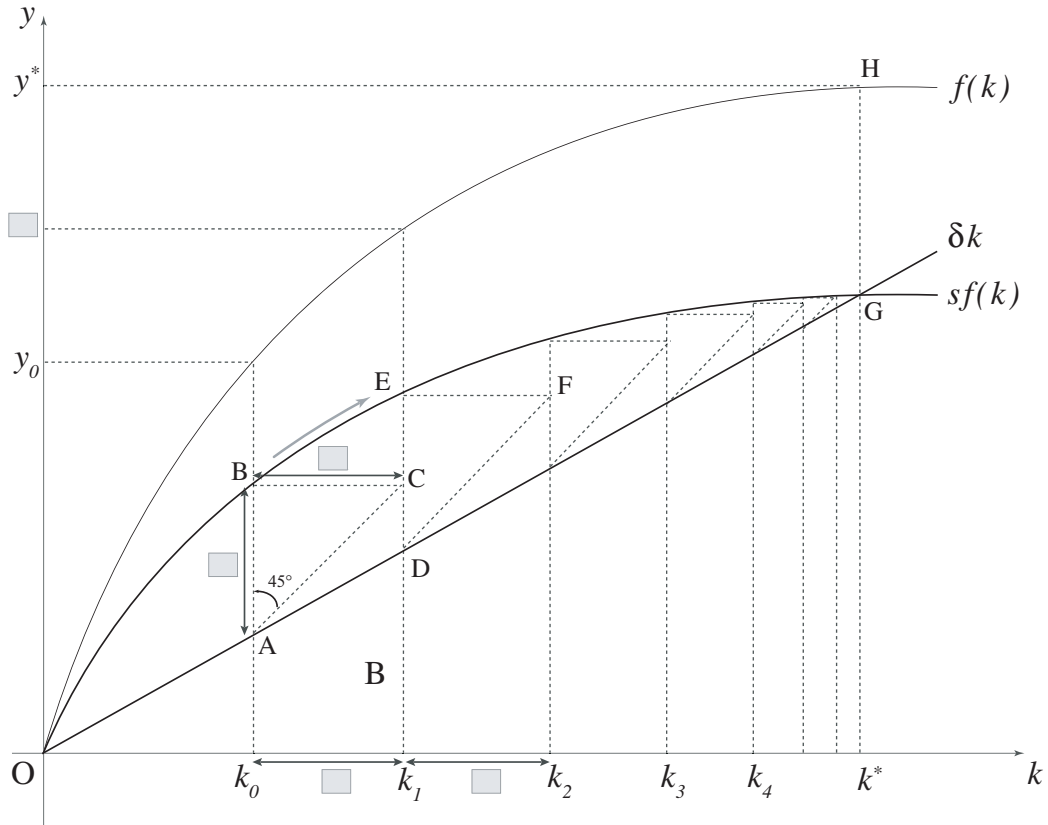


Figure 2: Capital Stock per worker and Output per worker

1. Illustrate how *capital stock per worker* increases from  $k_0$  to  $k^*$ .
2. Illustrate how *output per worker* increases from  $y_0$  to  $y^*$ .
3. Why does *capital stock per worker* not increase beyond  $k^*$ ?
4. Draw yourself another diagram and show what would happen if we start from a situation where *capital stock per worker* of the economy is greater than  $k^*$  to start with.