Harrod-Domar Model (Chapter 15)

$S = sY$

$\frac{\Delta K}{\Delta Y}$ $\qquad k = \frac{\Delta K}{\Delta Y} \Leftrightarrow \Delta Y = \frac{\Delta K}{k}$

$S = I$

$I = \Delta K$

Assumptions:

(1) $S = I$ "savings lead to investment"

(2) $I = \Delta K$ "investment leads to changes in capital stock"

(3) $k = \frac{\Delta K}{\Delta Y}$ "constant capital output ratio"

because $k = \frac{K}{Y}$

(3) → $\Delta Y \cdot k = \Delta K$

$\Delta Y \cdot k = I$ (by using (2))

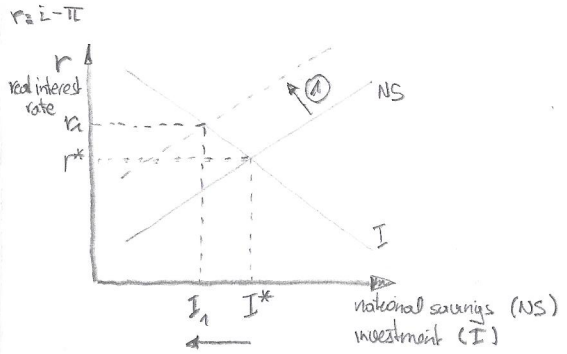
$\Delta Y = \frac{I}{k}$

$\Delta Y = \frac{S}{k}$

Using $S = sY$:

$\frac{\Delta Y}{Y} = \frac{s}{k}$

Crowding-out effect: effects interest rate



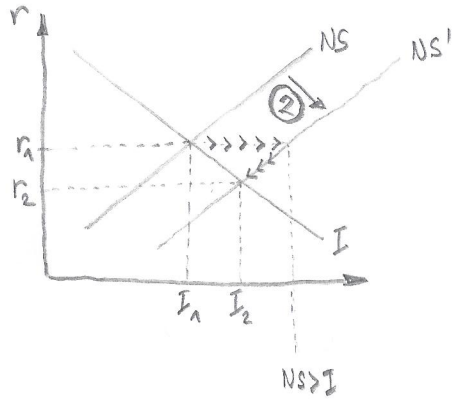
① : government borrows from private sector
→ competing with private sector for domestic savings
→ NS curve shifts to the left

$AD = C + I + G + NX$

→ public sector has borrowed from private sector

→ high interest rates discourage consumption

Crowding-in effect:



budget surplus may encourage spending (contractionary budgetary)

② : $AD = C + I + G + NX$

since $r \downarrow$

Goal is not to borrow from private sector.