

Harrod-Domar Model (simplified version)

1. $\beta = K/Y$ constant capital-output ratio.
2. Therefore, $\Delta K/\Delta Y = \beta$.
3. $S = sY = I = \Delta K$ Savings s function of Y equals investment equals change in stock of capital.
4. Using (2) above $\beta \Delta Y = \Delta K = sY$.
5. Divide by Y gives $\beta \Delta Y/Y = \Delta K/Y = sY/Y = s$.
6. Solve for $\Delta Y/Y = s/\beta = g$ where g is growth rate of output.
7. So now we have $g = s/\beta$.
8. Example assume $\beta = 4$, $s = 12\%$ then $g = 3\%$. Remember in closed economy investment rate equals saving rate, s .
9. If target growth rate is 6% we have to invest 24% , remember $24\%/4$ equals 6% .
10. We have a financing gap of 12% or $24\% - 12\%$.
11. We fill that with foreign aid.
12. That's the theory. Simple and persuasive except its assumptions are unrealistic. It assumes β is constant and K/L ratio is constant. No role for technological change.