

Lecture 22: Growth

- As some of the world's most open economies, Asian countries are likely to be early beneficiaries of a rebound. Indeed, countries like Korea, Taiwan and Singapore are so tightly tethered to the US IT spending cycle that when spending in that sector declined, Asia's exporters felt it first, going into the doldrums before the slowdown in overall US GDP growth materialised.
- Review
- Solow's model
- Technological Progress

Growth

- Facts: Figure 10-1 / table 10-1 / fig 10-2
- Sources of growth (per/capita): Capital accumulation / Technological progress
- $Y = F(K, NA)$ h.d. 1
- $y = (Y/NA) = F(K/NA, 1) = f(k)$
- figure 10-5

Solow's Growth Model

$$A = 1, N = ct$$

$$y = f(k)$$

$$S = sY$$

$$I = S$$

$$K(t+1) = (1-d) K(t) + I(t)$$

\Rightarrow

$$k(t+1) - k(t) = s f(k(t)) - d k(t)$$

Figures 11-2, 11-3

Technological Progress

A growth, $N = ct$

$$y = f(k)$$

$$S = sY$$

$$I = S$$

$$K(t+1) = (1-d) K(t) + I(t)$$

\Rightarrow

$$k(t+1) - k(t) = s f(k(t)) - (d+g_A) k(t)$$

Figures 12-2; Table 12-2