

USEFUL EQUATIONS

(1) SOLow MODEL (ORIGINAL VARIABLES)

$$Y = A k^{\alpha} L^{1-\alpha}$$

(2) $\dot{k} = \alpha Y - \delta k$
OR (2') $\hat{k} = \alpha Y/k - \delta$

(3) $\hat{L} = n$

(4) $C = (1-\alpha) Y$

WHERE THE CONSTANTS

ARE: $A > 0$

$$0 < \alpha < 1$$

$$0 < \alpha < 1$$

$$0 < \delta < 1$$

$$n > 0$$

SOLow MODEL (MODIFIED VARIABLES) PER CAPITA / WORKER

(5) $y = A h^{\alpha}$

(6) $\dot{h} = \alpha A h^{\alpha} - (\delta + n)h$

OR
(7) $\hat{h} = \alpha A h^{\alpha-1} - (\delta + n)$

(8) $C = (1-\alpha) y$

WHERE:

$$h = \frac{k}{L}, \quad y = \frac{Y}{L}$$

$$c = \frac{C}{L}$$

REMARK:

PARAMETERS: $A, \alpha, \alpha, \delta, n$

VARIABLES: ALL ARE FUNCTIONS OF TIME:

$$Y(t), k(t), L(t)$$