

$$uc = \gamma C_t^{(-1)}$$

$$ucp = \gamma C_{t+1}^{(-1)}$$

$$ul = (-\psi) (1 - L_t)^{(-1)}$$

$$fk = \frac{\alpha Y_t}{K_{t-1}}$$

$$fl = \frac{Y_t (1 - \alpha)}{L_t}$$

$$uc_t = \beta ucp_t (1 - \delta + R_{t+1}) \tag{1}$$

$$W_t = \frac{(-ul_t)}{uc_t} \tag{2}$$

$$K_t = K_{t-1} (1 - \delta) + I_t \tag{3}$$

$$Y_t = C_t + I_t \tag{4}$$

$$Y_t = A_t K_{t-1}^\alpha L_t^{1-\alpha} \tag{5}$$

$$MC_t = 1 \tag{6}$$

$$W_t = MC_t fl_t \tag{7}$$

$$R_t = MC_t fk_t \tag{8}$$

$$\log(A_t) = \rho^A \log(A_{t-1}) + \varepsilon^A_t \tag{9}$$

Table 1: Endogenous

Variable	\LaTeX	Description
y	Y	output
c	C	consumption
k	K	capital
l	L	labor
a	A	productivity
r	R	interest Rate
w	W	wage
iv	I	investment
mc	MC	marginal Costs

Table 2: Exogenous

Variable	\LaTeX	Description
epsa	ε^A	Productivity Shock

Table 3: Parameters

Variable	\LaTeX	Description
BETA	β	Discount Factor
DELTA	δ	Depreciation Rate
GAMMA	γ	Consumption Utility Weight
PSI	ψ	Labor Disutility Weight
ALPHA	α	Output Elasticity of Capital
RHOA	ρ^A	Discount Factor

Table 4: Parameter Values

Parameter	Value	Description
β	0.990	Discount Factor
δ	0.025	Depreciation Rate
γ	1.000	Consumption Utility Weight
ψ	1.600	Labor Disutility Weight
α	0.350	Output Elasticity of Capital
ρ^A	0.900	Discount Factor

$$uc = \gamma C_t^{(-1)}$$

$$ucp = \gamma C_{t+1}^{(-1)}$$

$$ul = (-\psi) (1 - L_t)^{(-1)}$$

$$fk = \frac{\alpha Y_t}{K_{t-1}}$$

$$fl = \frac{Y_t (1 - \alpha)}{L_t}$$

$$uc_t = \beta ucp_t (1 - \delta + R_{t+1}) \quad (10)$$

$$W_t = \frac{(-ul_t)}{uc_t} \quad (11)$$

$$K_t = K_{t-1} (1 - \delta) + I_t \quad (12)$$

$$Y_t = C_t + I_t \quad (13)$$

$$Y_t = A_t K_{t-1}^\alpha L_t^{1-\alpha} \quad (14)$$

$$MC_t = 1 \quad (15)$$

$$W_t = MC_t fl_t \quad (16)$$

$$R_t = MC_t fk_t \quad (17)$$

$$\log(A_t) = \rho^A \log(A_{t-1}) + \varepsilon_t^A \quad (18)$$

$$uc = \gamma C^{(-1)}$$

$$ucp = \gamma C^{(-1)}$$

$$ul = (-\psi) (1 - L)^{(-1)}$$

$$fk = \frac{\alpha Y}{K}$$

$$fl = \frac{Y (1 - \alpha)}{L}$$

$$uc = \beta ucp (1 - \delta + R) \tag{19}$$

$$W = \frac{(-ul)}{uc} \tag{20}$$

$$K = K (1 - \delta) + I \tag{21}$$

$$Y = C + I \tag{22}$$

$$Y = A K^\alpha L^{1-\alpha} \tag{23}$$

$$MC = 1 \tag{24}$$

$$W = MC fl \tag{25}$$

$$R = MC fk \tag{26}$$

$$\log (A) = \log (A) \rho^A + \varepsilon^A \tag{27}$$