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1 CONSUMER

1.1 Optimisation problem

$$\max_{K_t^{\rm m}, K_t^{\rm h}, C_t^{\rm m}, C_t^{\rm h}, N_t^{\rm m}, N_t^{\rm h}, I_t^{\rm m}, I_t^{\rm h}} U_t = \beta \mathcal{E}_t \left[U_{t+1} \right] + \log \left(1 - N_t^{\rm m} - N_t^{\rm h} \right) (1 - b) + be^{-1} \log \left(a C_t^{\rm m} + (1 - a) C_t^{\rm h}^e \right)$$

$$(1.1)$$

s.t.

$$C_t^{\text{m}} + I_t^{\text{m}} + I_t^{\text{h}} = \pi_t + K_{t-1}^{\text{m}} r_t + N_t^{\text{m}} W_t \quad \left(\lambda_t^{\text{CONSUMER}^1}\right)$$
 (1.2)

$$K_t^{\mathrm{m}} = I_t^{\mathrm{m}} + K_{t-1}^{\mathrm{m}} \left(1 - \delta\right) \quad \left(\lambda_t^{\mathrm{CONSUMER}^2}\right)$$

$$\tag{1.3}$$

$$K_t^{\mathrm{h}} = I_t^{\mathrm{h}} + K_{t-1}^{\mathrm{h}} (1 - \delta) \quad \left(\lambda_t^{\mathrm{CONSUMER}^3}\right)$$

$$(1.4)$$

$$C_t^{\rm h} = \Gamma Z_t^{\rm h} K_{t-1}^{\rm h} {\theta \choose t}^{\rm h} {1-\theta \choose t} \left(\lambda_t^{\rm CONSUMER}^4 \right)$$

$$(1.5)$$

1.2 Identities

$$K_t = K_t^{\mathrm{m}} + K_t^{\mathrm{h}} \tag{1.6}$$

$$I_t = I_t^{\mathrm{m}} + I_t^{\mathrm{h}} \tag{1.7}$$

$$N_t = N_t^{\mathrm{m}} + N_t^{\mathrm{h}} \tag{1.8}$$

1.3 First order conditions

$$-\lambda_t^{\text{CONSUMER}^2} + \beta \left((1 - \delta) E_t \left[\lambda_{t+1}^{\text{CONSUMER}^2} \right] + E_t \left[\lambda_{t+1}^{\text{CONSUMER}^1} r_{t+1} \right] \right) = 0 \quad (K_t^{\text{m}})$$

$$(1.9)$$

$$-\lambda_t^{\text{CONSUMER}^3} + \beta \left((1 - \delta) E_t \left[\lambda_{t+1}^{\text{CONSUMER}^3} \right] + \theta \Gamma K_t^{\text{h}^{-1+\theta}} E_t \left[\lambda_{t+1}^{\text{CONSUMER}^4} Z_{t+1}^{\text{h}} N_{t+1}^{\text{h}^{-1-\theta}} \right] \right) = 0 \quad \left(K_t^{\text{h}} \right)$$

$$(1.10)$$

$$-\lambda_t^{\text{CONSUMER}^1} + ab \left(aC_t^{\text{m}e} + (1-a)C_t^{\text{h}e} \right)^{-1} C_t^{\text{m}-1+e} = 0 \quad (C_t^{\text{m}})$$
(1.11)

$$-\lambda_t^{\text{CONSUMER}^4} + b(1-a)\left(aC_t^{\text{m}e} + (1-a)C_t^{\text{h}e}\right)^{-1}C_t^{\text{h}-1+e} = 0 \quad (C_t^{\text{h}})$$
(1.12)

$$\lambda_t^{\text{CONSUMER}^1} W_t - (1 - b) \left(1 - N_t^{\text{m}} - N_t^{\text{h}} \right)^{-1} = 0 \quad (N_t^{\text{m}})$$
(1.13)

$$-(1-b)\left(1-N_{t}^{\rm m}-N_{t}^{\rm h}\right)^{-1}+\Gamma\lambda_{t}^{\rm CONSUMER^{4}}Z_{t}^{\rm h}\left(1-\theta\right)K_{t-1}^{\rm h}N_{t}^{\rm h-\theta}=0 \quad \left(N_{t}^{\rm h}\right)$$
(1.14)

$$-\lambda_t^{\text{CONSUMER}^1} + \lambda_t^{\text{CONSUMER}^2} = 0 \quad (I_t^{\text{m}})$$
(1.15)

$$-\lambda_t^{\text{CONSUMER}^1} + \lambda_t^{\text{CONSUMER}^3} = 0 \quad (I_t^{\text{h}})$$
(1.16)

2 FIRM

2.1 Optimisation problem

$$\max_{K_t^{\mathrm{md}}, N_t^{\mathrm{rd}}, Y_t, \pi_t} \Pi_t = \pi_t \tag{2.1}$$

s.t.:

$$\pi_t = Y_t - N_t^{\mathrm{m}^{\mathrm{d}}} W_t - r_t K_t^{\mathrm{m}^{\mathrm{d}}} \quad \left(\lambda_t^{\mathrm{FIRM}^1}\right) \tag{2.2}$$

$$Y_t = \Gamma Z_t^{\mathbf{m}} K_t^{\mathbf{m}^{\mathbf{d}}} N_t^{\mathbf{m}^{\mathbf{d}} 1 - \alpha} \quad \left(\lambda_t^{\mathbf{FIRM}^2} \right)$$
 (2.3)

2.2 First order conditions

$$-\lambda_t^{\text{FIRM}^1} r_t + \alpha \Gamma \lambda_t^{\text{FIRM}^2} Z_t^{\text{m}} K_t^{\text{m}^{\text{d}} - 1 + \alpha} N_t^{\text{m}^{\text{d}} 1 - \alpha} = 0 \quad \left(K_t^{\text{m}^{\text{d}}} \right)$$

$$(2.4)$$

$$-\lambda_t^{\text{FIRM}^1} W_t + \Gamma \lambda_t^{\text{FIRM}^2} Z_t^{\text{m}} (1 - \alpha) K_t^{\text{m}^{\text{d}}} N_t^{\text{m}^{\text{d}}} = 0 \quad \left(N_t^{\text{m}^{\text{d}}} \right)$$

$$(2.5)$$

$$\lambda_t^{\text{FIRM}^1} - \lambda_t^{\text{FIRM}^2} = 0 \quad (Y_t)$$
 (2.6)

$$1 - \lambda_t^{\text{FIRM}^1} = 0 \quad (\pi_t) \tag{2.7}$$

2.3 First order conditions after reduction

$$-r_t + \alpha \Gamma Z_t^{\mathbf{m}} K_t^{\mathbf{m}^{\mathbf{d}} - 1 + \alpha} N_t^{\mathbf{m}^{\mathbf{d}} - 1 - \alpha} = 0 \quad \left(K_t^{\mathbf{m}^{\mathbf{d}}} \right)$$

$$(2.8)$$

$$-W_t + \Gamma Z_t^{\mathrm{m}} (1 - \alpha) K_t^{\mathrm{m}^{\mathrm{d}} \alpha} N_t^{\mathrm{m}^{\mathrm{d}} - \alpha} = 0 \quad \left(N_t^{\mathrm{m}^{\mathrm{d}}} \right)$$

$$(2.9)$$

2

3 EQUILIBRIUM

3.1 Identities

$$K_t^{m^d} = K_{t-1}^m (3.1)$$

$$N_t^{\mathrm{m}^{\mathrm{d}}} = N_t^{\mathrm{m}} \tag{3.2}$$

4 EXOG

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4.1 Identities

$$Z_t^{\mathbf{h}} = e^{\epsilon_t^{\mathbf{h}} + \psi \log Z_{t-1}^{\mathbf{h}}} \tag{4.1}$$

$$Z_t^{\mathbf{m}} = e^{\epsilon_t^{\mathbf{m}} + \phi \log Z_{t-1}^{\mathbf{m}}} \tag{4.2}$$

5 Equilibrium relationships (after reduction)

$$-r_t + \alpha \Gamma Z_t^{\rm m} K_{t-1}^{\rm m}^{-1+\alpha} N_t^{\rm m}^{1-\alpha} = 0$$
 (5.1)

$$-C_t^{\rm h} + \Gamma Z_t^{\rm h} K_{t-1}^{\rm h} N_t^{\rm h}^{1-\theta} = 0$$
 (5.2)

$$-W_t + \Gamma Z_t^{\rm m} (1 - \alpha) K_{t-1}^{\rm m} {}^{\alpha} N_t^{\rm m-\alpha} = 0$$
 (5.3)

$$-Y_t + \Gamma Z_t^{m} K_{t-1}^{m} {}^{\alpha} N_t^{m} {}^{1-\alpha} = 0$$
 (5.4)

$$-Z_t^{h} + e^{\epsilon_t^{h} + \psi \log Z_{t-1}^{h}} = 0 (5.5)$$

$$-Z_t^{\mathbf{m}} + e^{\epsilon_t^{\mathbf{m}} + \phi \log Z_{t-1}^{\mathbf{m}}} = 0 \tag{5.6}$$

$$\beta \left(ab \mathcal{E}_{t} \left[r_{t+1} \left(aC_{t+1}^{\mathrm{m}}^{e} + (1-a)C_{t+1}^{\mathrm{h}}^{e} \right)^{-1} C_{t+1}^{\mathrm{m}}^{-1+e} \right] + ab \left(1-\delta \right) \mathcal{E}_{t} \left[\left(aC_{t+1}^{\mathrm{m}}^{e} + (1-a)C_{t+1}^{\mathrm{h}}^{e} \right)^{-1} C_{t+1}^{\mathrm{m}}^{-1+e} \right] \right) - ab \left(aC_{t}^{\mathrm{m}}^{e} + (1-a)C_{t}^{\mathrm{h}}^{e} \right)^{-1} C_{t}^{\mathrm{m}}^{-1+e} = 0 \quad (5.7)$$

$$\beta \left(ab \left(1 - \delta \right) E_t \left[\left(aC_{t+1}^{\text{m}}{}^e + \left(1 - a \right) C_{t+1}^{\text{h}}{}^e \right)^{-1} C_{t+1}^{\text{m}}{}^{-1+e} \right] + b\theta \Gamma \left(1 - a \right) K_t^{\text{h}}{}^{-1+\theta} E_t \left[Z_{t+1}^{\text{h}} \left(aC_{t+1}^{\text{m}}{}^e + \left(1 - a \right) C_{t+1}^{\text{h}}{}^e \right)^{-1} C_{t+1}^{\text{h}}{}^{-1+e} N_{t+1}^{\text{h}}{}^{-1-\theta} \right] \right) - ab \left(aC_t^{\text{m}}{}^e + \left(1 - a \right) C_t^{\text{h}}{}^e \right)^{-1} C_t^{\text{m}}{}^{-1+e} = (5.8)$$

$$-(1-b)\left(1-N_t^{\rm m}-N_t^{\rm h}\right)^{-1} + abW_t\left(aC_t^{\rm me} + (1-a)C_t^{\rm he}\right)^{-1}C_t^{\rm m-1+e} = 0$$
(5.9)

$$-(1-b)\left(1-N_{t}^{\mathrm{m}}-N_{t}^{\mathrm{h}}\right)^{-1}+b\Gamma Z_{t}^{\mathrm{h}}\left(1-a\right)\left(1-\theta\right)\left(aC_{t}^{\mathrm{m}e}+\left(1-a\right)C_{t}^{\mathrm{h}e}\right)^{-1}K_{t-1}^{\mathrm{h}}{}^{\theta}C_{t}^{\mathrm{h}-1+e}N_{t}^{\mathrm{h}-\theta}=0$$
(5.10)

$$-I_t + I_t^{\rm m} + I_t^{\rm h} = 0 (5.11)$$

$$I_t^{\rm m} - K_t^{\rm m} + K_{t-1}^{\rm m} (1 - \delta) = 0 (5.12)$$

$$I_t^{\rm h} - K_t^{\rm h} + K_{t-1}^{\rm h} (1 - \delta) = 0 (5.13)$$

$$-K_t + K_t^{\rm m} + K_t^{\rm h} = 0 (5.14)$$

$$-N_t + N_t^{\rm m} + N_t^{\rm h} = 0 (5.15)$$

$$-C_t^{\rm m} - I_t^{\rm m} - I_t^{\rm h} + Y_t = 0 (5.16)$$

$$U_t - \beta E_t [U_{t+1}] - \log (1 - N_t^{\text{m}} - N_t^{\text{h}}) (1 - b) - be^{-1} \log (aC_t^{\text{m}e} + (1 - a)C_t^{\text{h}e}) = 0$$
(5.17)

6 Steady state relationships (after reduction)

$$-r_{\rm ss} + \alpha \Gamma Z_{\rm ss}^{\rm m} K_{\rm ss}^{\rm m-1+\alpha} N_{\rm ss}^{\rm m1-\alpha} = 0 \tag{6.1}$$

$$-C_{\rm ss}^{\rm h} + \Gamma Z_{\rm ss}^{\rm h} K_{\rm ss}^{\rm h}^{\theta} N_{\rm ss}^{\rm h}^{1-\theta} = 0 \tag{6.2}$$

$$-W_{\rm ss} + \Gamma Z_{\rm ss}^{\rm m} (1 - \alpha) K_{\rm ss}^{\rm m\alpha} N_{\rm ss}^{\rm m-\alpha} = 0$$
 (6.3)

$$-Y_{\rm ss} + \Gamma Z_{\rm ss}^{\rm m} K_{\rm ss}^{\rm m\alpha} N_{\rm ss}^{\rm m1-\alpha} = 0 \tag{6.4}$$

$$-Z_{\rm ss}^{\rm h} + e^{\psi \log Z_{\rm ss}^{\rm h}} = 0 ag{6.5}$$

$$-Z_{\rm ss}^{\rm m} + e^{\phi \log Z_{\rm ss}^{\rm m}} = 0 \tag{6.6}$$

$$\beta \left(abr_{\rm ss} \left(aC_{\rm ss}^{\rm me} + (1-a) C_{\rm ss}^{\rm he} \right)^{-1} C_{\rm ss}^{\rm m-1+e} + ab \left(1-\delta \right) \left(aC_{\rm ss}^{\rm me} + (1-a) C_{\rm ss}^{\rm he} \right)^{-1} C_{\rm ss}^{\rm m-1+e} \right) - ab \left(aC_{\rm ss}^{\rm me} + (1-a) C_{\rm ss}^{\rm he} \right)^{-1} C_{\rm ss}^{\rm m-1+e} = 0 \tag{6.7}$$

$$\beta \left(ab \left(1 - \delta \right) \left(aC_{\rm ss}^{\rm me} + \left(1 - a \right) C_{\rm ss}^{\rm h}^{\, e} \right)^{-1} C_{\rm ss}^{\rm m-1+e} + b\theta \Gamma Z_{\rm ss}^{\rm h} \left(1 - a \right) \left(aC_{\rm ss}^{\rm me} + \left(1 - a \right) C_{\rm ss}^{\rm h}^{\, e} \right)^{-1} C_{\rm ss}^{\rm h-1+e} K_{\rm ss}^{\rm h-1+e} K_{\rm ss}^{\rm h-1+e} N_{\rm ss}^{\rm h-1-e} N_{\rm ss}^{\rm h-1-e} \right) - ab \left(aC_{\rm ss}^{\rm me} + \left(1 - a \right) C_{\rm ss}^{\rm h}^{\, e} \right)^{-1} C_{\rm ss}^{\rm m-1+e} = 0$$

$$(6.8)$$

$$-(1-b)\left(1-N_{\rm ss}^{\rm m}-N_{\rm ss}^{\rm h}\right)^{-1}+abW_{\rm ss}\left(aC_{\rm ss}^{\rm me}+(1-a)C_{\rm ss}^{\rm he}\right)^{-1}C_{\rm ss}^{\rm m-1+e}=0$$
(6.9)

$$-(1-b)\left(1-N_{\rm ss}^{\rm m}-N_{\rm ss}^{\rm h}\right)^{-1}+b\Gamma Z_{\rm ss}^{\rm h}\left(1-a\right)\left(1-\theta\right)\left(aC_{\rm ss}^{\rm m}e+(1-a)C_{\rm ss}^{\rm h}e^{\theta}\right)^{-1}C_{\rm ss}^{\rm h}^{-1+e}K_{\rm ss}^{\rm h}^{\theta}N_{\rm ss}^{\rm h}^{-\theta}=0\tag{6.10}$$

$$-I_{\rm ss} + I_{\rm ss}^{\rm m} + I_{\rm ss}^{\rm h} = 0 ag{6.11}$$

$$I_{\rm ss}^{\rm m} - K_{\rm ss}^{\rm m} + K_{\rm ss}^{\rm m} (1 - \delta) = 0 \tag{6.12}$$

$$I_{\rm ss}^{\rm h} - K_{\rm ss}^{\rm h} + K_{\rm ss}^{\rm h} (1 - \delta) = 0$$
 (6.13)

$$-K_{\rm ss} + K_{\rm ss}^{\rm m} + K_{\rm ss}^{\rm h} = 0 ag{6.14}$$

$$-N_{\rm ss} + N_{\rm ss}^{\rm m} + N_{\rm ss}^{\rm h} = 0 ag{6.15}$$

$$-C_{\rm ss}^{\rm m} - I_{\rm ss}^{\rm m} - I_{\rm ss}^{\rm h} + Y_{\rm ss} = 0 ag{6.16}$$

$$U_{\rm ss} - \beta U_{\rm ss} - \log \left(1 - N_{\rm ss}^{\rm m} - N_{\rm ss}^{\rm h} \right) (1 - b) - be^{-1} \log \left(a C_{\rm ss}^{\rm m}{}^e + (1 - a) C_{\rm ss}^{\rm h}{}^e \right) = 0$$

$$(6.17)$$

7 Parameter settings

$$a = 0.337$$
 (7.1)

$$\alpha = 0.36 \tag{7.2}$$

$$b = 0.63 \tag{7.3}$$

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 $\beta = 0.99 \tag{7.4}$

 $\delta = 0.025 \tag{7.5}$

 $e = 0.8 \tag{7.6}$

 $\phi = 0.95 \tag{7.7}$

 $\psi = 0.95 \tag{7.8}$

 $\theta = 0.08 \tag{7.9}$

 $\Gamma = 1 \tag{7.10}$

8 Steady-state values

	Steady-state value			
r	0.0351			
C^{m}	0.7224			
$C^{ m h}$	0.3805			
I	0.3143			
$I^{ m m}$	0.2658			
$I^{ m h}$	0.0485			
K	12.5726			
$K^{ m m}$	10.6329			
$K^{ m h}$	1.9397			
N	0.6102			
$N^{ m m}$	0.2799			
$N^{ m h}$	0.3303			
U	-79.6929			
W	2.3706			
Y	1.0367			
$Z^{ m h}$	1			
Z^{m}	1			

9 The solution of the 1st order perturbation

Matrix P

Matrix Q

$$\begin{array}{ccc} \epsilon^{\rm h} & \epsilon^{\rm m} \\ K^{\rm m} & & \\ K^{\rm h} & \begin{pmatrix} -0.3926 & 0.6584 \\ 2.1393 & -2.7792 \\ I & 0 \\ Z^{\rm m} & 0 & 1 \\ \end{pmatrix}$$

Matrix R

$$\begin{array}{c} K_{t-1}^{\rm m} & K_{t-1}^{\rm h} & Z_{t-1}^{\rm h} & Z_{t-1}^{\rm m} \\ r_t \\ C_t^{\rm m} \\ C_t^{\rm m} \\ C_t^{\rm h} \\ C_t^{\rm h} \\ I_t \\$$

Matrix S

	$\epsilon^{ m h}$	$\epsilon^{ m m}$
r	/ -0.6545	2.0631
C^{m}	-0.9051	0.7318
C^{h}	1.8741	-0.8908
I	-0.0785	5.1231
I^{m}	-15.7031	26.3373
$I^{ m h}$	85.5725	-111.1686
K	-0.002	0.1281
N	0.0452	0.2379
N^{m}	-1.0227	1.6612
$N^{ m h}$	0.9501	-0.9683
U	0.0719	0.0875
W	0.3682	0.402
Y	-0.6545	2.0631

10 Model statistics

10.1 Basic statistics

	Steady-state value	Std. dev.	Variance	Loglin
C^{m}	0.7224	0.9767	0.954	Y
C^{h}	0.3805	1.52	2.3104	Y
Y	1.0367	1.7868	3.1926	Y
$I^{ m m}$	0.2658	12.888	166.0993	Y
$I^{ m h}$	0.0485	57.2629	3279.0405	Y
$K^{ m m}$	10.6329	0.6337	0.4016	Y
$K^{ m h}$	1.9397	1.9051	3.6295	Y
$N^{ m m}$	0.2799	1.3761	1.8936	Y
$N^{ m h}$	0.3303	0.9286	0.8623	Y
W	2.3706	0.6601	0.4358	Y

10.2 Correlation matrix

	C^{m}	C^{h}	$I^{ m m}$	$I^{ m h}$	$K^{ m m}$	$K^{ m h}$	$N^{ m m}$	$N^{ m h}$	W	Y
C^{m}	1	-0.843	0.114	0.021	0.842	-0.704	0.781	-0.933	0.056	0.622
$C^{ m h}$		1	-0.05	0.084	-0.438	0.657	-0.575	0.833	0.421	-0.288
$I^{ m m}$			1	-0.901	0.303	-0.634	0.508	-0.332	0.409	0.542
$I^{ m h}$				1	-0.068	0.409	-0.194	0.135	-0.028	-0.16
K^{m}					1	-0.592	0.766	-0.76	0.511	0.779
$K^{ m h}$						1	-0.946	0.906	-0.271	-0.829
N^{m}							1	-0.927	0.475	0.946
$N^{ m h}$								1	-0.148	-0.768
W									1	0.735
Y										1

10.3 Cross correlations with the reference variable (Y)

	$\sigma[\cdot]$ rel. to $\sigma[Y]$	Y_{t-5}	Y_{t-4}	Y_{t-3}	Y_{t-2}	Y_{t-1}	Y_t	Y_{t+1}	Y_{t+2}	Y_{t+3}	Y_{t+4}	Y_{t+5}
C_t^{m}	0.547	-0.194	-0.098	0.033	0.204	0.42	0.622	0.68	0.584	0.483	0.383	0.287
$C_t^{ m h}$	0.851	0.044	-0.001	-0.06	-0.136	-0.229	-0.288	-0.318	-0.238	-0.168	-0.108	-0.057
$I_t^{ m m}$	7.213	0.145	0.226	0.322	0.433	0.558	0.542	-0.016	-0.08	-0.126	-0.155	-0.172
$I_t^{ m h}$	32.048	-0.124	-0.156	-0.192	-0.23	-0.27	-0.16	0.372	0.307	0.246	0.192	0.144
$K_t^{ m m}$	0.355	-0.27	-0.149	0.019	0.238	0.516	0.779	0.751	0.692	0.61	0.516	0.416
$K_t^{ m h}$	1.066	-0.12	-0.235	-0.373	-0.537	-0.727	-0.829	-0.528	-0.284	-0.092	0.054	0.161
$N_t^{ m m}$	0.77	0.026	0.157	0.322	0.522	0.76	0.946	0.75	0.493	0.281	0.11	-0.024
$N_t^{ m h}$	0.52	0.04	-0.07	-0.212	-0.387	-0.6	-0.768	-0.677	-0.484	-0.318	-0.179	-0.065
W_t	0.369	-0.032	0.068	0.197	0.356	0.547	0.735	0.568	0.415	0.281	0.166	0.071
Y_t	1	0.008	0.146	0.32	0.533	0.787	1	0.787	0.533	0.32	0.146	0.008

10.4 Autocorrelations

	Lag 1	Lag 2	Lag 3	${\rm Lag}\ 4$	Lag 5
C^{m}	0.852	0.622	0.418	0.241	0.092
C^{h}	0.771	0.512	0.298	0.124	-0.011
$I^{ m m}$	0.076	0.032	-0.003	-0.029	-0.048
$I^{ m h}$	-0.078	-0.074	-0.068	-0.061	-0.054
$K^{ m m}$	0.868	0.716	0.556	0.398	0.247
$K^{ m h}$	0.711	0.467	0.266	0.105	-0.021
$N^{ m m}$	0.803	0.537	0.316	0.136	-0.005
$N^{ m h}$	0.82	0.555	0.333	0.152	0.008
W	0.74	0.511	0.317	0.156	0.026
Y	0.787	0.533	0.32	0.146	0.008

10.5 Variance decomposition

	$\epsilon^{ m h}$	ϵ^{m}
C^{m}	0.238	0.762
C^{h}	0.616	0.384
$I^{ m m}$	0.053	0.947
$I^{ m h}$	0.015	0.985
K^{m}	0.198	0.802
$K^{ m h}$	0.023	0.977
N^{m}	0.003	0.997
$N^{ m h}$	0.106	0.894
W	0.796	0.204
Y	0.136	0.864

11 Impulse response functions

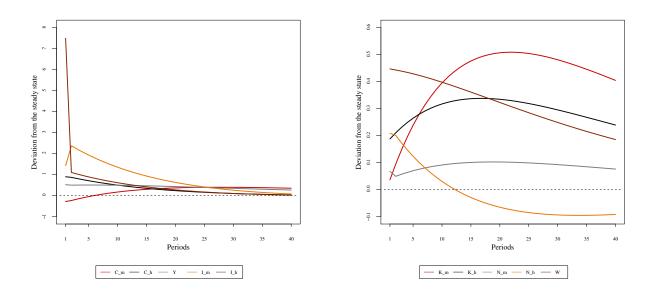


Figure 1: Impulse responses $(C^{\mathrm{m}}, C^{\mathrm{h}}, Y, I^{\mathrm{m}}, I^{\mathrm{h}})$ to ϵ^{h} Figure 2: Impulse responses $(K^{\mathrm{m}}, K^{\mathrm{h}}, N^{\mathrm{m}}, N^{\mathrm{h}}, W)$ to shock

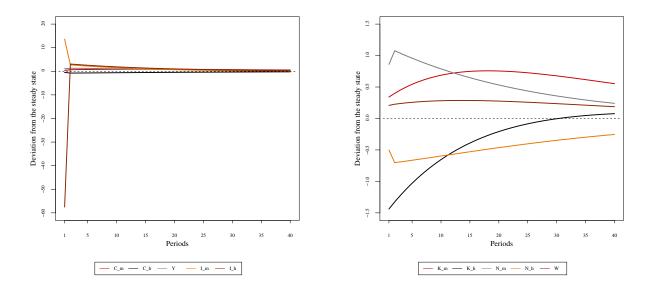


Figure 3: Impulse responses $(C^{\mathrm{m}}, C^{\mathrm{h}}, Y, I^{\mathrm{m}}, I^{\mathrm{h}})$ to ϵ^{m} Figure 4: Impulse responses $(K^{\mathrm{m}}, K^{\mathrm{h}}, N^{\mathrm{m}}, N^{\mathrm{h}}, W)$ to shock