Table 1: Endogenous

Variable	₽TEX	Description
r	r	r
rk	rk	${ m rk}$
W	w	W
b	b	b
у	y	y
varpi	varpi	varpi
S	s	\mathbf{s}
inv	inv	inv
\mathtt{invG}	invG	invG
С	c	\mathbf{c}
CW	cw	cw
cr	cr	cr
tauw	tauw	tauw
N	N	N
stoyw	stoyw	stoyw
PiF	PiF	PiF
Tw	Tw	Tw
hw	hw	hw
Dr	Dr	Dr
Dw	Dw	Dw
ер	ep	ep
varsig	varsig	varsig
zetar	zetar	zetar
zetay	zetay	zetay
gw	gw	gw
g	g	g
gE	gE	gE
iy	iy	iy
gpc	gpc	gpc
ZZ	zz	ZZ
far	far	far
faw	faw	faw
dr	dr	dr
dw	dw	dw
mu	mu	mu
k	k	k
u	u	u
del	del	del
delprime	delprime	delprime
gM	gM	$\mathrm{g}\mathrm{M}$
V .	v	v
j	j	j
lam	lam	lam
gA	gA	gA

 $Table\ 1-Continued$

Variable	₽T _E X	Description
za	za	za
PiA	PiA	PiA
PiRD	PiRD	PiRD
fa	fa	fa
n	n	n
gn	gn	gn
gy	gy	gy
gamma	gamma	gamma
OMEGAY	OMEGAY	OMEGAY
fert	fert	fert
psi	psi	psi
tauwE	tauwE	tauwE
tauwA	tauwA	tauwA
ay	ay	ay
tpe	tpe	${ m tpe}$
Pe	Pe	Pe
he	he	he
en	en	en
ey	ey	ey
er	er	er
shockn	shockn	shockn
shocky	shocky	shocky
shockr	shockr	shockr
shareW	shareW	shareW
shareR	shareR	shareR
AUX_ENDO_LAG_24_1	AUX_ENDO_LAG_24_1	AUX_ENDO_LAG_24_1
AUX_ENDO_LAG_35_1	$AUX_ENDO_LAG_35_1$	AUX_ENDO_LAG_35_1
AUX_ENDO_LAG_44_1	$AUX_ENDO_LAG_44_1$	AUX_ENDO_LAG_44_1
AUX_ENDO_LAG_64_1	$AUX_ENDO_LAG_64_1$	AUX_ENDO_LAG_64_1
AUX_ENDO_LAG_64_2	$AUX_ENDO_LAG_64_2$	AUX_ENDO_LAG_64_2
AUX_ENDO_LAG_64_3	$AUX_ENDO_LAG_64_3$	AUX_ENDO_LAG_64_3
AUX_ENDO_LAG_64_4	$AUX_ENDO_LAG_64_4$	AUX_ENDO_LAG_64_4
AUX_ENDO_LAG_64_5	$AUX_ENDO_LAG_64_5$	AUX_ENDO_LAG_64_5
AUX_ENDO_LAG_64_6	$AUX_ENDO_LAG_64_6$	AUX_ENDO_LAG_64_6
AUX_ENDO_LAG_64_7	AUX_ENDO_LAG_64_7	AUX_ENDO_LAG_64_7
AUX_ENDO_LAG_64_8	AUX_ENDO_LAG_64_8	AUX_ENDO_LAG_64_8
AUX_ENDO_LAG_64_9	$AUX_ENDO_LAG_64_9$	AUX_ENDO_LAG_64_9
AUX_ENDO_LAG_64_10	$AUX_ENDO_LAG_64_10$	AUX_ENDO_LAG_64_10
AUX_ENDO_LAG_64_11	$AUX_ENDO_LAG_64_11$	AUX_ENDO_LAG_64_11
AUX_ENDO_LAG_64_12	$AUX_ENDO_LAG_64_12$	AUX_ENDO_LAG_64_12
AUX_ENDO_LAG_64_13	$AUX_ENDO_LAG_64_13$	AUX_ENDO_LAG_64_13
AUX_ENDO_LAG_64_14	$AUX_ENDO_LAG_64_14$	AUX_ENDO_LAG_64_14
AUX_ENDO_LAG_64_15	$AUX_ENDO_LAG_64_15$	AUX_ENDO_LAG_64_15
AUX_ENDO_LAG_64_16	AUX_ENDO_LAG_64_16	AUX_ENDO_LAG_64_16
AUX_ENDO_LAG_64_17	$AUX_ENDO_LAG_64_17$	AUX_ENDO_LAG_64_17

Variable	ETEX	Description
AUX_ENDO_LAG_64_18	$AUX_ENDO_LAG_64_18$	AUX_ENDO_LAG_64_18
AUX_ENDO_LAG_64_19	$AUX_ENDO_LAG_64_19$	AUX_ENDO_LAG_64_19
AUX_ENDO_LAG_64_20	$AUX_ENDO_LAG_64_20$	AUX_ENDO_LAG_64_20
AUX_ENDO_LAG_64_21	$AUX_ENDO_LAG_64_21$	AUX_ENDO_LAG_64_21
AUX_ENDO_LAG_64_22	$AUX_ENDO_LAG_64_22$	AUX_ENDO_LAG_64_22
AUX_ENDO_LAG_64_23	$AUX_ENDO_LAG_64_23$	AUX_ENDO_LAG_64_23
AUX_ENDO_LAG_64_24	$AUX_ENDO_LAG_64_24$	AUX_ENDO_LAG_64_24
AUX_ENDO_LAG_64_25	$AUX_ENDO_LAG_64_25$	AUX_ENDO_LAG_64_25
AUX_ENDO_LAG_64_26	$AUX_ENDO_LAG_64_26$	AUX_ENDO_LAG_64_26
AUX_ENDO_LAG_64_27	$AUX_ENDO_LAG_64_27$	AUX_ENDO_LAG_64_27
AUX_ENDO_LAG_64_28	$AUX_ENDO_LAG_64_28$	AUX_ENDO_LAG_64_28
AUX_ENDO_LAG_64_29	$AUX_ENDO_LAG_64_29$	AUX_ENDO_LAG_64_29
AUX_ENDO_LAG_64_30	$AUX_ENDO_LAG_64_30$	AUX_ENDO_LAG_64_30
AUX_ENDO_LAG_64_31	$AUX_ENDO_LAG_64_31$	AUX_ENDO_LAG_64_31
AUX_ENDO_LAG_64_32	$AUX_ENDO_LAG_64_32$	AUX_ENDO_LAG_64_32
AUX_ENDO_LAG_64_33	$AUX_ENDO_LAG_64_33$	AUX_ENDO_LAG_64_33
AUX_ENDO_LAG_64_34	AUX_ENDO_LAG_64_34	AUX_ENDO_LAG_64_34
AUX_ENDO_LAG_64_35	AUX_ENDO_LAG_64_35	AUX_ENDO_LAG_64_35
AUX_ENDO_LAG_64_36	AUX_ENDO_LAG_64_36	AUX_ENDO_LAG_64_36
AUX_ENDO_LAG_64_37	AUX_ENDO_LAG_64_37	AUX_ENDO_LAG_64_37
AUX_ENDO_LAG_64_38	AUX_ENDO_LAG_64_38	AUX_ENDO_LAG_64_38
AUX_EXO_LAG_69_0	$AUX_EXO_LAG_69_0$	AUX_EXO_LAG_69_0
AUX_EXO_LAG_69_1	$AUX_EXO_LAG_69_1$	AUX_EXO_LAG_69_1
AUX_EXO_LAG_69_2	$AUX_EXO_LAG_69_2$	AUX_EXO_LAG_69_2
AUX_EXO_LAG_69_3	$AUX_EXO_LAG_69_3$ $AUX_EXO_LAG_69_4$	AUX_EXO_LAG_69_3 AUX_EXO_LAG_69_4
AUX_EXO_LAG_69_4 AUX_EXO_LAG_69_5	$AUX_EXO_LAG_69_4$ $AUX_EXO_LAG_69_5$	AUX_EXO_LAG_69_4 AUX_EXO_LAG_69_5
AUX_EXO_LAG_69_6	$AUX_EXO_LAG_69_6$	AUX_EXO_LAG_69_6
AUX_EXO_LAG_69_7	$AUX_EXO_LAG_09_0$ $AUX_EXO_LAG_69_7$	AUX_EXO_LAG_69_7
AUX_EXO_LAG_69_8	$AUX_EXO_LAG_69_8$	AUX_EXO_LAG_69_8
AUX_EXO_LAG_69_9	$AUX_EXO_LAG_69_9$	AUX_EXO_LAG_69_9
AUX_EXO_LAG_69_10	AUX_EXO_LAG_69_10	AUX_EXO_LAG_69_10
AUX_EXO_LAG_69_11	AUX_EXO_LAG_69_11	AUX_EXO_LAG_69_11
AUX_EXO_LAG_69_12	$AUX_EXO_LAG_69_12$	AUX_EXO_LAG_69_12
AUX_EXO_LAG_69_13	$AUX_EXO_LAG_69_13$	AUX_EXO_LAG_69_13
AUX_EXO_LAG_69_14	$AUX_EXO_LAG_69_14$	AUX_EXO_LAG_69_14
AUX_EXO_LAG_69_15	$AUX_EXO_LAG_69_15$	AUX_EXO_LAG_69_15
AUX_EXO_LAG_69_16	$AUX_EXO_LAG_69_16$	AUX_EXO_LAG_69_16
AUX_EXO_LAG_69_17	$AUX_EXO_LAG_69_17$	AUX_EXO_LAG_69_17
AUX_EXO_LAG_69_18	$AUX_EXO_LAG_69_18$	AUX_EXO_LAG_69_18
AUX_EXO_LAG_69_19	$AUX_EXO_LAG_69_19$	AUX_EXO_LAG_69_19
AUX_EXO_LAG_69_20	$AUX_EXO_LAG_69_20$	AUX_EXO_LAG_69_20
AUX_EXO_LAG_69_21	$AUX_EXO_LAG_69_21$	AUX_EXO_LAG_69_21
AUX_EXO_LAG_69_22	$AUX_EXO_LAG_69_22$	AUX_EXO_LAG_69_22
AUX_EXO_LAG_69_23	$AUX_EXO_LAG_69_23$	$AUX_EXO_LAG_69_23$

Table 1 – Continued

Variable	ĿTEX	Description
AUX_EXO_LAG_69_24	$AUX_EXO_LAG_69_24$	AUX_EXO_LAG_69_24
AUX_EXO_LAG_69_25	$AUX_EXO_LAG_69_25$	AUX_EXO_LAG_69_25
AUX_EXO_LAG_69_26	$AUX_EXO_LAG_69_26$	AUX_EXO_LAG_69_26
AUX_EXO_LAG_69_27	$AUX_EXO_LAG_69_27$	AUX_EXO_LAG_69_27
AUX_EXO_LAG_69_28	$AUX_EXO_LAG_69_28$	AUX_EXO_LAG_69_28
AUX_EXO_LAG_69_29	$AUX_EXO_LAG_69_29$	AUX_EXO_LAG_69_29
AUX_EXO_LAG_69_30	$AUX_EXO_LAG_69_30$	AUX_EXO_LAG_69_30
AUX_EXO_LAG_69_31	$AUX_EXO_LAG_69_31$	AUX_EXO_LAG_69_31
AUX_EXO_LAG_69_32	$AUX_EXO_LAG_69_32$	AUX_EXO_LAG_69_32
AUX_EXO_LAG_69_33	$AUX_EXO_LAG_69_33$	AUX_EXO_LAG_69_33
AUX_EXO_LAG_69_34	$AUX_EXO_LAG_69_34$	AUX_EXO_LAG_69_34
AUX_EXO_LAG_69_35	$AUX_EXO_LAG_69_35$	AUX_EXO_LAG_69_35
AUX_EXO_LAG_69_36	$AUX_EXO_LAG_69_36$	AUX_EXO_LAG_69_36
AUX_EXO_LAG_69_37	$AUX_EXO_LAG_69_37$	AUX_EXO_LAG_69_37
AUX_EXO_LAG_69_38	$AUX_EXO_LAG_69_38$	AUX_EXO_LAG_69_38

Table 2: Exogenous

Variable	L TEX	Description
delall	delall	delall

Table 3: Parameters

Variable	ĿTEX	Description
ZETAYSS	ZETAYSS	ZETAYSS
ZETARSS	ZETARSS	ZETARSS
SHINNOVW	SHINNOVW	SHINNOVW
YINNOVSH	YINNOVSH	YINNOVSH
ETAR	ETAR	ETAR
DELTAHE	DELTAHE	DELTAHE
NP	NP	NP
FERTSS	FERTSS	FERTSS
RHOYW	RHOYW	RHOYW
LAMY	LAMY	LAMY
PSISS	PSISS	PSISS
GSS	GSS	GSS
PERS	PERS	PERS
RATIODEL	RATIODEL	RATIODEL
OMEGAR	OMEGAR	OMEGAR
RHOU	RHOU	RHOU

Table 3 – Continued

Table 3 – Continued		
Variable	ĿTEX	Description
BBETA	BBETA	BBETA
ALPHA	ALPHA	ALPHA
GAMMAI	GAMMAI	GAMMAI
VARNU	VARNU	VARNU
BMEGA	BMEGA	BMEGA
CHI	CHI	CHI
RHO	RHO	RHO
PHI	PHI	PHI
ELASMU	ELASMU	ELASMU
ELASLAM	ELASLAM	ELASLAM
DELPRIMESS	DELPRIMESS	DELPRIMESS
DELSS	DELSS	DELSS
MUSS	MUSS	MUSS
LAMSS	LAMSS	LAMSS
USS	USS	USS
VARPISS	VARPISS	VARPISS
ZASS	ZASS	ZASS
KSS	KSS	KSS
NSS	NSS	NSS
GAMMASS	GAMMASS	GAMMASS
RHOE	RHOE	RHOE
CHIE	CHIE	CHIE
$\mathtt{drs}_{\mathtt{-}}1$	drs_1	drs_1
\mathtt{drs}_2	drs_2	$\mathrm{drs}\-2$
drs_3	drs_3	drs_3
$\mathtt{drs}_{-}4$	drs_4	drs_4
\mathtt{drs}_5	drs_5	drs_5
$\mathtt{drs}_{ extsf{-}}6$	drs_6	drs_6
$\mathtt{drs}_{\mathtt{-}}7$	drs_7	$\mathrm{drs}_{ extsf{-}7}$
drs_8	drs_8	drs_{-8}
\mathtt{drs}_9	drs_9	$drs_{-}9$
$\mathtt{drs}_{-}10$	$drs_{-}10$	$drs_{-}10$
$\mathtt{drs}_{-}11$	drs_11	$drs_{-}11$
$\mathtt{drs}_{\mathtt{-}}12$	drs_12	drs_{-12}
$\mathtt{drs}_{-}13$	drs_13	$drs_{-}13$
$\mathtt{drs}_{-}14$	drs_14	$drs_{-}14$
drs_15	drs_15	$drs_{-}15$
$\mathtt{drs}_{\mathtt{-}}16$	drs_16	drs -16
drs_17	$drs_{-}17$	drs_{-17}
drs_18	$drs_{-}18$	drs_18
drs_19	$drs_{-}19$	$drs_{-}19$
drs_20	$drs_{-}20$	drs_20
drs_21	$drs_{-}21$	drs_21
drs_22	drs_22	drs_22
drs_23	drs_23	$\mathrm{drs}\-23$

Table 3 – Continued

	Table 3 – Continu	
Variable	₽TEX	Description
drs_24	drs_24	drs_24
\mathtt{drs}_25	drs_25	drs_25
\mathtt{drs}_26	drs_26	$\mathrm{drs}\-26$
\mathtt{drs}_27	drs_27	$\mathrm{drs}\-27$
$\mathtt{drs}_{-}28$	drs_28	$\mathrm{drs}\-28$
\mathtt{drs}_29	drs_29	drs_29
\mathtt{drs}_30	drs_30	drs_30
drs_31	drs_31	drs_31
drs_32	drs_32	drs_32
\mathtt{drs}_33	drs_33	drs_33
\mathtt{drs}_34	drs_34	drs_34
\mathtt{drs}_35	drs_35	drs_35
drs_36	drs_36	drs_36
\mathtt{drs}_37	drs_37	drs_37
drs_38	drs_38	drs_38
drs_39	drs_39	$drs_{-}39$
\mathtt{drs}_40	drs_40	drs_40
\mathtt{dws}_1	dws_1	$\mathrm{dws}\text{-}1$
dws_2	dws_2	dws_2
dws_3	dws_3	$dws_{-}3$
${\tt dws_4}$	dws_4	dws_4
dws_5	dws_5	$\mathrm{dws}_{ extsf{-}5}$
dws_6	dws_6	$\mathrm{dws}_{-}6$
$\mathtt{dws}_{-}7$	dws _7	$\mathrm{dws}_{ ext{-}}7$
dws_8	dws _8	$\mathrm{dws}_{-}8$
$dws_{-}9$	dws_9	$dws_{-}9$
${\tt dws_10}$	dws_10	$\mathrm{dws}_{\text{-}}10$
$\mathtt{dws}_{-}11$	dws_11	dws_11
${\tt dws_12}$	dws_12	dws_12
$dws_{-}13$	dws_13	$dws_{-}13$
${\tt dws_14}$	dws_14	dws_14
${\tt dws_15}$	dws_15	$dws_{-}15$
$\mathtt{dws}_{-}16$	dws_16	dws_16
${\tt dws_17}$	dws_17	dws_17
${ m dws}_{-}18$	dws_18	dws_18
dws_19	dws_19	dws_19
dws_20	dws_20	dws_20
dws_21	dws_21	dws_21
$dws_{-}22$	dws_22	$\mathrm{dws}\-22$
dws_23	dws_23	dws_23
${\tt dws_24}$	dws_24	$\mathrm{dws}\-24$
dws_25	dws_25	dws_25
$dws_{-}26$	dws_26	$dws_{-}26$
dws_27	dws_27	$\mathrm{dws}\-27$
$dws_{-}28$	dws_28	$dws_{-}28$

Table 3 – Continued

Table 3 – Continued		
Variable	Ŀ T _E X	Description
dws_29	dws_29	dws_29
dws_30	dws_30	dws_30
dws_31	dws_31	dws_31
dws_32	dws_32	dws_32
dws_33	dws_33	dws_33
dws_34	dws_34	dws_34
dws_35	dws_35	dws_35
dws_36	dws_36	dws_36
dws_37	dws_37	dws_37
dws_38	dws_38	dws_38
dws_39	dws_39	dws_39
dws_40	dws_40	dws_40
$gn_{-}1$	gn_1	$\mathrm{gn}_{-}1$
gn_2	gn_2	gn_2
gn_3	gn_3	gn_3
\mathtt{gn}_{-4}	gn_4	$\mathrm{gn}_{ extsf{-}4}$
gn_5	gn_5	$\mathrm{gn}_{ extsf{-}5}$
$\mathtt{gn}_{-}6$	gn_6	gn_6
$gn_{-}7$	gn_7	$\mathrm{gn}_{-}7$
gn8	gn_8	$\mathrm{gn}_{ extsf{-}8}$
gn_9	gn_9	$gn_{-}9$
${\tt gn_10}$	gn_10	$\mathrm{gn}_{\text{-}}10$
${ m gn}_{-}11$	gn_11	$\mathrm{gn}_{-}11$
${ m gn}_{-}12$	gn_12	$\mathrm{gn}_{\text{-}}12$
$gn_{-}13$	gn13	$gn_{-}13$
${ m gn}_{-}14$	gn_14	$gn_{-}14$
${ m gn}_{-}15$	gn_15	$\mathrm{gn}_{-}15$
$\mathrm{gn}16$	gn_16	$gn_{-}16$
${ m gn}_{-}17$	gn_17	$\mathrm{gn}_{ ext{-}}17$
$\mathrm{gn}18$	gn_18	$gn_{-}18$
${ m gn}_{-}19$	gn_19	$gn_{-}19$
$gn_{-}20$	gn_20	gn_20
gn_21	gn_21	gn_21
gn_22	gn_22	gn_22
gn_23	gn_23	gn_23
gn_24	gn_24	gn_24
$\mathrm{gn}25$	gn_25	gn_25
gn_26	gn_26	gn_26
${ m gn}27$	gn_27	gn_27
gn_28	gn_28	gn_28
$gn_{-}29$	gn29	$gn_{-}29$
gn_30	gn_30	gn_30
gn_31	gn_31	$gn_{-}31$
gn_32	gn_32	gn_32
gn_33	gn_33	$gn_{-}33$

Table 3 – Continued

Variable	ĿTEX	Description
gn_34	$gn_{-}34$	gn_34
gn_35	gn_35	$gn_{-}35$
$gn_{-}36$	gn_36	$gn_{-}36$
gn_37	gn_37	gn_37
gn_38	gn_38	gn_38
gn_39	gn_39	gn_39
gn_40	gn_40	gn_40

Table 4: Parameter Values

Parameter	Value
$\overline{ZETAYSS}$	0.700
ZETARSS	0.700
SHINNOVW	0.010
YINNOVSH	0.037
ETAR	0.400
DELTAHE	0.100
NP	25.000
FERTSS	0.060
RHOYW	0.457
LAMY	0.048
PSISS	0.719
GSS	1.041
PERS	0.900
RATIODEL	0.333
OMEGAR	0.975
RHOU	-3.000
BBETA	0.960
ALPHA	0.333
GAMMAI	0.500
VARNU	1.667
BMEGA	0.126
CHI	51.835
RHO	0.900
PHI	0.850
ELASMU	-1.000
ELASLAM	0.814
DELPRIMESS	0.293
DELSS	0.080
MUSS	1.100
LAMSS	0.100
USS	0.800
VARPISS	0.127
ZASS	3.060
KSS	0.672
NSS	1.010
GAMMASS	0.933
RHOE	0.900
CHIE	1708.181
drs_1	0.011
drs_2	0.011
drs_3	0.012
drs_{-4}	0.013
drs_5	0.012

Table 4 – Continued

Table 4 – Coi	ntinued
Parameter	Value
drs_6	0.013
drs_7	0.013
drs_8	0.012
drs_9	0.013
drs_10	0.011
drs_11	0.012
drs_12	0.011
drs_13	0.012
drs_14	0.012
drs_15	0.014
drs_16	0.015
drs_17	0.015
drs_18	0.014
drs_19	0.015
drs_20	0.015
drs_21	0.014
drs_22	0.014
drs_23	0.011
$drs_{-}24$	0.012
drs_25	0.010
$drs_{-}26$	0.013
drs_27	0.012
$drs_{-}28$	0.012
drs_29	0.011
drs_30	0.011
drs_31	0.008
drs_32	0.009
drs_33	$0.008 \\ 0.007$
drs_34 drs_35	0.007 0.007
drs_36	0.007 0.006
drs_37	0.006
drs_38	0.000
drs_39	0.007
drs_40	0.007
dws_1	-0.003
dws_{-2}	-0.002
dws_3	-0.004
dws_4	-0.005
$dws_{-}5$	-0.005
dws_6	-0.007
dws _7	-0.009
dws _8	-0.006
dws _9	-0.007

Table 4 – Continued

Table 4 – Con	tinued
Parameter	Value
dws_10	-0.005
dws_11	-0.006
dws_12	-0.006
dws_13	-0.006
dws_14	-0.006
dws_15	-0.008
dws_16	-0.007
dws_17	-0.008
dws_18	-0.008
$dws_{-}19$	-0.008
dws_20	-0.008
dws_21	-0.007
dws_22	-0.007
$dws_{-}23$	-0.007
$dws_{-}24$	-0.007
$dws_{-}25$	-0.007
$dws_{-}26$	-0.009
dws_27	-0.008
$dws_{-}28$	-0.008
$dws_{-}29$	-0.006
dws_30	-0.005
dws_31	-0.003
dws_32	-0.003
dws_33	-0.002
dws_34	-0.001
dws_35 dws_36	-0.002
dws_37	-0.002 -0.002
dws_38	-0.002
dws_39	-0.003
dws_40	-0.004
$gn_{-}1$	1.008
gn_{-2}	1.005
gn_{-3}	1.004
gn_4	1.005
$gn_{-}5$	1.005
gn_6	1.006
$gn_{-}7$	1.006
gn8	1.006
$gn_{-}9$	1.006
$gn_{-}10$	1.006
$gn_{-}11$	1.006
$gn_{-}12$	1.005
$gn_{-}13$	1.005
<i>J</i>	

Table 4 – Continued

Table 4	Continued
Paramete	er Value
gn_14	1.005
gn_15	1.005
gn_16	1.005
gn_17	1.005
$gn_{-}18$	1.004
$gn_{-}19$	1.004
gn_20	1.003
gn_21	1.003
gn_22	1.003
gn_23	1.002
gn_24	1.002
gn_25	1.001
gn_26	1.001
gn_27	1.001
gn_28	1.000
gn_29	1.000
gn_30	0.999
gn_31	0.999
gn_32	0.998
gn_33	0.997
gn_34	0.997
gn_35	0.996
gn_36	0.996
gn_37	0.996
gn_38	0.995
gn_39	0.995
$gn_{-}40$	0.995

$$hw_t = w_t + \frac{OMEGAR}{r_t z z_t} \frac{g_{t+1}}{g w_t} h w_{t+1} \tag{1}$$

$$Tw_t = tauw_t + \frac{OMEGAR}{r_t z z_t} \frac{g_{t+1}}{g w_t} Tw_{t+1}$$
 (2)

$$Dr_t = dr_t + \frac{g_{t+1} Dr_{t+1} gamma_t zetar_{t-1}}{gw_t r_t zetar_t}$$
(3)

$$ay_{t} = \frac{1}{NP} w_{t-1} \left(1 - OMEGAR \right) + \frac{\left(1 - \frac{1}{NP} \right) ay_{t-1} AUX_ENDO_LAG_24_1_{t-1}}{g_{t}}$$
(4)

$$tpe_t = ay_t ETAR + gamma_{t-1} \frac{gE_{t-1}}{g_t} tpe_{t-1}$$

$$\tag{5}$$

$$Pe_t = tpe_t + \frac{zetar_{t-1} g_{t+1} gamma_t Pe_{t+1}}{gw_t r_t zetar_t}$$

$$(6)$$

$$Dw_{t} = dw_{t} + \frac{OMEGAR}{r_{t}zz_{t}} \frac{g_{t+1}}{gw_{t}} Dw_{t+1} + \frac{(1 - OMEGAR) ep_{t+1}^{\frac{RHOU-1}{RHOU}}}{r_{t}zz_{t}} \frac{g_{t+1}}{gw_{t}zetar_{t}} (Dr_{t+1} + Pe_{t+1})$$
(7)

$$cw_t = varsig_t \left(Dw_t + hw_t + \frac{r_{t-1} faw_{t-1}}{g_t} - Tw_t \right)$$
(8)

$$cr_t = varsig_t ep_t \left(Pe_t + Dr_t + \frac{r_{t-1} far_{t-1}}{g_t} \right)$$
(9)

$$1 - varsig_t ep_t = \frac{gamma_t \ (r_t \ BBETA)^{\frac{1}{1 - RHOU}}}{r_t} \frac{varsig_t \ ep_t}{ep_{t+1} \ varsig_{t+1}}$$
(10)

$$1 - varsig_t = \frac{(zz_t r_t BBETA)^{\frac{1}{1-RHOU}}}{r_t zz_t} \frac{varsig_t}{varsig_{t+1}}$$

$$(11)$$

$$zz_{t} = OMEGAR + (1 - OMEGAR) e p_{t+1}^{\frac{RHOU - 1}{RHOU}}$$
(12)

$$he_t = DELTAHE \frac{zetar_{t-1}}{1 + zetar_{t-1} + zetay_{t-1}}$$
(13)

$$tauwA_t = tpe_t + he_t (14)$$

$$tauwE_t = w_t i y_t \tag{15}$$

$$tauw_t = tauwA_t + tauwE_t (16)$$

$$gw_t = OMEGAR + zetay_{t-1} (1 - OMEGAY_t)$$
(17)

$$n_t = gw_t \frac{zetay_t}{zetay_{t-1}} \tag{18}$$

$$gw_t zetar_t = 1 - OMEGAR + gamma_t zetar_{t-1}$$
(19)

$$gn_{t} = (gw_{t} zetar_{t} + gw_{t} + zetay_{t-1} n_{t}) (1 + zetar_{t-1} + zetay_{t-1})^{(-1)}$$
(20)

$$gE_t = \frac{OMEGAR + zetay_{t-1} \left(1 - OMEGAY_t\right) \left(RHOE + \frac{CHIE}{2} iy_t^2\right)}{gw_t} \tag{21}$$

$$varsig_{t}^{\frac{(-1)}{RHOU}} = \frac{g_{t+1} iy_{t} CHIE zetay_{t-1} \left(1 - OMEGAY_{t}\right) BBETA varsig_{t+1}^{\frac{(-1)}{RHOU}} w_{t+1}}{w_{t} gw_{t}}$$
(22)

$$fert_t = n_t - OMEGAY_t (23)$$

$$(1 - ALPHA) (1 - GAMMAI) = w_t m u_t$$
(24)

$$ALPHA (1 - GAMMAI) = mu_t (rk_t + del_t) \frac{k_{t-1}}{g_t}$$
(25)

$$ALPHA (1 - GAMMAI) = \frac{k_{t-1}}{g_t} mu_t delprime_t u_t$$
 (26)

$$g_t = \frac{mu_t}{mu_{t-1}} g M_t g A_{t-1}^{1-VARNU}$$
 (27)

$$g_{t} = gM_{t}^{GAMMAI} \left(gE_{t-1} gw_{t-1}\right)^{(1-ALPHA)} \frac{N_{t}^{mu_{t}-1}}{N_{t-1}^{mu_{t-1}-1}} \left(\frac{k_{t-1} u_{t} g_{t-1}}{u_{t-1} AUX_ENDO_LAG_35_1_{t-1}}\right)^{ALPHA} (1-C_{t-1})^{ALPHA} (1-C$$

$$\frac{mu_t - 1}{mu_t} N_t^{(-mu_t)} = BMEGA v_t \tag{29}$$

$$mu_t = MUSS (1 + ELASMU (N_t - 1))$$
(30)

$$del_t = DELSS + delprime_t (u_t - USS)$$
(31)

$$delprime_{t} = DELPRIMESS + \frac{(u_{t} - USS) \ DELPRIMESS \ RATIODEL}{USS}$$
 (32)

$$invG_t = g_t \frac{inv_t}{inv_{t-1}} \tag{33}$$

$$\frac{gA_t za_t}{za_{t-1}} = stoyw_t^{RHOYW} CHI \left(\frac{s_t}{psi_t}\right)^{RHO} + PHI$$
 (34)

$$stoyw_{t} = \frac{zetay_{t-1} \left(1 - OMEGAY_{t}\right) YINNOVSH}{zetar_{t-1} + 1 + zetay_{t-1}} + \frac{OMEGAR \left(1 - LAMY\right)}{gn_{t-1}} stoyw_{t-1} \quad (35)$$

$$gA_t = PHI + PHI \, lam_t \, (za_{t-1} - 1) \tag{36}$$

$$s_{t} = PHI \frac{g_{t+1}}{r_{t}} j_{t+1} \left(1 - \frac{za_{t-1}PHI}{gA_{t}za_{t}} \right)$$
 (37)

$$v_t = \frac{GAMMAI\left(1 - \frac{1}{VARNU}\right)}{mu_t} + \frac{g_{t+1}}{gA_t} \frac{PHI}{r_t} v_{t+1}$$
(38)

$$varpi_{t} = \frac{PHI}{r_{t}} \frac{g_{t+1}}{gA_{t}} za_{t-1} lam_{t} ELASLAM \left(v_{t+1} - \frac{j_{t+1}}{za_{t}}\right)$$

$$(39)$$

$$j_{t} = \frac{PHI}{r_{t}} z a_{t-1} \frac{g_{t+1}}{gA_{t}} \left(lam_{t} v_{t+1} + \frac{j_{t+1} (1 - lam_{t})}{z a_{t}} \right) - varpi_{t}$$
(40)

$$lam_{t} = LAMSS \left(1 + ELASLAM \left(\frac{varpi_{t} - VARPISS}{VARPISS} - \frac{za_{t-1} - ZASS}{ZASS} - \frac{psi_{t} - PSISS}{PSISS}\right)\right)$$

$$(41)$$

$$PiA_{t} = \frac{GAMMAI \left(1 - \frac{1}{VARNU}\right)}{mu_{t}} - PHI j_{t} \left(1 - \frac{PHIAUX_ENDO_LAG_44_1_{t-1}}{gA_{t-1} za_{t-1}}\right) - \frac{r_{t-1} varpi_{t-1} \left(1 - \frac{1}{AUX_ENDO_LAG_44_1_{t-1}}\right)}{g_{t}}$$

$$(42)$$

$$PiRD_{t} = PHI j_{t} \left(1 - \frac{PHI AUX_ENDO_LAG_44_1_{t-1}}{gA_{t-1} za_{t-1}} \right) - \frac{r_{t-1} s_{t-1}}{g_{t}}$$
(43)

$$psi_t = v_t (44)$$

$$r_t = 1 + rk_{t+1} (45)$$

$$dr_t = \frac{far_{t-1}PiF_t}{fa_{t-1}} \tag{46}$$

$$dw_t = \frac{faw_{t-1}PiF_t}{fa_{t-1}} + SHINNOVW (PiA_t + PiRD_t)$$
(47)

$$b_t = s_t + varpi_t \left(1 - \frac{1}{za_{t-1}}\right) \tag{48}$$

$$PiF_{t} = \frac{k_{t-1}}{g_{t}} (1 + rk_{t}) + \frac{r_{t-1}b_{t-1}}{g_{t}} - \frac{r_{t-1}fa_{t-1}}{g_{t}} - k_{t} - b_{t}$$

$$+ fa_{t} + (PiA_{t} + PiRD_{t}) (1 - SHINNOVW)$$

$$(49)$$

$$k_t = inv_t + \frac{k_{t-1}}{g_t} (1 - del_t)$$
 (50)

$$y_t = 1 - \frac{GAMMAI}{mu_t VARNU} - psi_t N_t BMEGA$$
 (51)

$$y_t = he_t + tauwE_t + varpi_t \left(1 - \frac{1}{za_{t-1}}\right) + s_t + inv_t + c_t$$

$$(52)$$

$$c_t = cw_t + cr_t (53)$$

$$fa_t = b_t + k_t \tag{54}$$

$$far_{t} = tpe_{t} + dr_{t} + \frac{r_{t-1} far_{t-1}}{g_{t}} - cr_{t} + (1 - OMEGAR) \left(dw_{t} + w_{t} + \frac{r_{t-1} faw_{t-1}}{g_{t}} - cw_{t} - tauw_{t} \right)$$

$$(55)$$

$$fa_t = far_t + faw_t (56)$$

$$gpc_t = \frac{g_{t-1} \frac{y_t}{y_{t-1}}}{gn_{t-1}} \tag{57}$$

$$gy_t = g_t \frac{y_t}{y_{t-1}} \tag{58}$$

$$gn_t = NSS + en_t (59)$$

$$shareW_t = \frac{1}{zetar_t + 1 + zetay_t} \tag{60}$$

$$shareR_t = \frac{zetar_t}{zetar_t + 1 + zetay_t} \tag{61}$$

$$\frac{1}{zetar_t + 1 + zetay_t} = \frac{1}{1 + ZETAYSS + ZETARSS} + ey_t \tag{62}$$

$$\frac{zetar_t}{zetar_t + 1 + zetay_t} = \frac{ZETARSS}{1 + ZETAYSS + ZETARSS} + er_t \tag{63}$$

```
en_t = shockn_t (qn_1 - NSS) + shockn_{t-1} (qn_2 - NSS)
      + (gn_3 - NSS) AUX_ENDO_LAG_64_1_{t-1} + (gn_4 - NSS) AUX_ENDO_LAG_64_2_{t-1}
      + (gn_5 - NSS) AUX_ENDO_LAG_64_3_{t-1} + (gn_6 - NSS) AUX_ENDO_LAG_64_4_{t-1}
      + (gn_{-}7 - NSS) AUX_{-}ENDO_{-}LAG_{-}64_{-}5_{t-1} + (gn_{-}8 - NSS) AUX_{-}ENDO_{-}LAG_{-}64_{-}6_{t-1}
      +(gn\_9-NSS) AUX\_ENDO\_LAG\_64\_7_{t-1}+(gn\_10-NSS) AUX\_ENDO\_LAG\_64\_8_{t-1}
      + (gn_11 - NSS) AUX_ENDO_LAG_64_9_{t-1}
      + (gn_12 - NSS) AUX_ENDO_LAG_64_10_{t-1}
      + (gn_13 - NSS) AUX_ENDO_LAG_64_11_{t-1}
      + (qn_14 - NSS) AUX_ENDO_LAG_64_12_{t-1}
      + (qn_15 - NSS) AUX_ENDO_LAG_64_13_{t-1}
      + (qn_{-}16 - NSS) AUX_{-}ENDO_{-}LAG_{-}64_{-}14_{t-1}
      + (qn_17 - NSS) AUX_ENDO_LAG_64_15_{t-1}
      + (qn_18 - NSS) AUX_ENDO_LAG_64_16_{t-1}
      + (qn_{-}19 - NSS) AUX_{-}ENDO_{-}LAG_{-}64_{-}17_{t-1}
      + (gn_{-}20 - NSS) AUX_{-}ENDO_{-}LAG_{-}64_{-}18_{t-1}
      + (qn_21 - NSS) AUX_ENDO_LAG_64_19_{t-1}
      + (qn_22 - NSS) AUX_ENDO_LAG_64_20_{t-1}
      + (qn_23 - NSS) AUX_ENDO_LAG_64_21_{t-1}
      + (qn_{-}24 - NSS) AUX_{-}ENDO_{-}LAG_{-}64_{-}22_{t-1}
      + (qn_25 - NSS) AUX_ENDO_LAG_64_23_{t-1}
      + (gn_{-}26 - NSS) AUX_{-}ENDO_{-}LAG_{-}64_{-}24_{t-1}
      + (gn_{-}27 - NSS) AUX_{-}ENDO_{-}LAG_{-}64_{-}25_{t-1}
      + (qn_28 - NSS) AUX_ENDO_LAG_64_26_{t-1}
      + (qn_29 - NSS) AUX_ENDO_LAG_64_27_{t-1}
      + (qn_{-}30 - NSS) AUX_{-}ENDO_{-}LAG_{-}64_{-}28_{t-1}
      + (qn_31 - NSS) AUX_ENDO_LAG_64_29_{t-1}
      + (qn_32 - NSS) AUX_ENDO_LAG_64_30_{t-1}
      + (gn_33 - NSS) AUX_ENDO_LAG_64_31_{t-1}
      + (gn_34 - NSS) AUX_ENDO_LAG_64_32_{t-1}
      + (gn_{-}35 - NSS) AUX_{-}ENDO_{-}LAG_{-}64_{-}33_{t-1}
      + (qn_{-}36 - NSS) AUX_{-}ENDO_{-}LAG_{-}64_{-}34_{t-1}
      + (gn_37 - NSS) AUX_ENDO_LAG_64_35_{t-1}
      + (qn_38 - NSS) AUX_ENDO_LAG_64_36_{t-1}
      + (gn_39 - NSS) AUX_ENDO_LAG_64_37_{t-1}
      + (qn_{-}40 - NSS) AUX_{-}ENDO_{-}LAG_{-}64_{-}38_{t-1}
```

$$er_t = shockr_t$$
 (65)

$$ey_t = shocky_t$$
 (66)

```
shocky_t = shocky_{t-1} + delall_t dws_1 + dws_2 AUX_EXO_LAG_69_0_{t-1}
                          + dws_3 AUX_EXO_LAG_69_1_{t-1} + dws_4 AUX_EXO_LAG_69_2_{t-1}
                          + dws_{-}5 AUX_{-}EXO_{-}LAG_{-}69_{-}3_{t-1} + dws_{-}6 AUX_{-}EXO_{-}LAG_{-}69_{-}4_{t-1}
                          + dws_{-}7 AUX_{-}EXO_{-}LAG_{-}69_{-}5_{t-1} + dws_{-}8 AUX_{-}EXO_{-}LAG_{-}69_{-}6_{t-1}
                          + dws_{-}9 AUX_{-}EXO_{-}LAG_{-}69_{-}7_{t-1} + dws_{-}10 AUX_{-}EXO_{-}LAG_{-}69_{-}8_{t-1}
                          + dws_11AUX_EXO_LAG_69_9_{t-1} + dws_12AUX_EXO_LAG_69_10_{t-1}
                          + dws_1 + dws_1 + dws_1 + dws_1 + dws_2 + dws_1 + dws_2 + dws_1 + dws_2 + dws_2 + dws_3 + dws_4 + dws_4 + dws_5 + dws_6 + dw
                          + dws_{-}15 AUX_{-}EXO_{-}LAG_{-}69_{-}13_{t-1} + dws_{-}16 AUX_{-}EXO_{-}LAG_{-}69_{-}14_{t-1}
                          + dws_17 AUX_EXO_LAG_69_15_{t-1} + dws_18 AUX_EXO_LAG_69_16_{t-1}
                          + dws_{-}19 AUX_{-}EXO_{-}LAG_{-}69_{-}17_{t-1} + dws_{-}20 AUX_{-}EXO_{-}LAG_{-}69_{-}18_{t-1}
                          + dws_21 AUX_EXO_LAG_69_19_{t-1} + dws_22 AUX_EXO_LAG_69_20_{t-1}
                          + dws_2 3 AUX_E XO_L AG_6 9_2 1_{t-1} + dws_2 4 AUX_E XO_L AG_6 9_2 2_{t-1}
                         + dws\_25 AUX\_EXO\_LAG\_69\_23_{t-1} + dws\_26 AUX\_EXO\_LAG\_69\_24_{t-1}
                          + dws\_27 AUX\_EXO\_LAG\_69\_25_{t-1} + dws\_28 AUX\_EXO\_LAG\_69\_26_{t-1}
                          + dws_29 AUX_EXO_LAG_69_27_{t-1} + dws_30 AUX_EXO_LAG_69_28_{t-1}
                          + dws\_31 AUX\_EXO\_LAG\_69\_29_{t-1} + dws\_32 AUX\_EXO\_LAG\_69\_30_{t-1}
                          + dws\_33 AUX\_EXO\_LAG\_69\_31_{t-1} + dws\_34 AUX\_EXO\_LAG\_69\_32_{t-1}
                          + dws_35 AUX_EXO_LAG_69_33_{t-1} + dws_36 AUX_EXO_LAG_69_34_{t-1}
                          + dws_37 AUX_EXO_LAG_69_35_{t-1} + dws_38 AUX_EXO_LAG_69_36_{t-1}
                          + dws_{-}39 AUX_{-}EXO_{-}LAG_{-}69_{-}37_{t-1} + dws_{-}40 AUX_{-}EXO_{-}LAG_{-}69_{-}38_{t-1}
```

```
shockr_t = delall_t dws_1 + shockr_{t-1} + drs_2 AUX_EXO_LAG_69_0_{t-1}
             + drs_{-}3 AUX_{-}EXO_{-}LAG_{-}69_{-}1_{t-1} + drs_{-}4 AUX_{-}EXO_{-}LAG_{-}69_{-}2_{t-1}
             + drs_{-}5 AUX_{-}EXO_{-}LAG_{-}69_{-}3_{t-1} + drs_{-}6 AUX_{-}EXO_{-}LAG_{-}69_{-}4_{t-1}
             + drs_{-}7 AUX_{-}EXO_{-}LAG_{-}69_{-}5_{t-1} + drs_{-}8 AUX_{-}EXO_{-}LAG_{-}69_{-}6_{t-1}
             +\,drs\_9\,AUX\_EXO\_LAG\_69\_7_{t-1}+drs\_10\,AUX\_EXO\_LAG\_69\_8_{t-1}
             + drs_{-}11 AUX_{-}EXO_{-}LAG_{-}69_{-}9_{t-1} + drs_{-}12 AUX_{-}EXO_{-}LAG_{-}69_{-}10_{t-1}
             + drs_{-}13 AUX_{-}EXO_{-}LAG_{-}69_{-}11_{t-1} + drs_{-}14 AUX_{-}EXO_{-}LAG_{-}69_{-}12_{t-1}
             + drs_{-}15 AUX_{-}EXO_{-}LAG_{-}69_{-}13_{t-1} + drs_{-}16 AUX_{-}EXO_{-}LAG_{-}69_{-}14_{t-1}
             + drs_{-}17 AUX_{-}EXO_{-}LAG_{-}69_{-}15_{t-1} + drs_{-}18 AUX_{-}EXO_{-}LAG_{-}69_{-}16_{t-1}
             + drs_{-}19 AUX_{-}EXO_{-}LAG_{-}69_{-}17_{t-1} + drs_{-}20 AUX_{-}EXO_{-}LAG_{-}69_{-}18_{t-1}
                                                                                                          (68)
             +\,drs\_21\,AUX\_EXO\_LAG\_69\_19_{t-1}+drs\_22\,AUX\_EXO\_LAG\_69\_20_{t-1}
             + drs_2 3 AUX_E XO_L AG_6 9_2 1_{t-1} + drs_2 4 AUX_E XO_L AG_6 9_2 2_{t-1}
             + drs_{-}25 AUX_{-}EXO_{-}LAG_{-}69_{-}23_{t-1} + drs_{-}26 AUX_{-}EXO_{-}LAG_{-}69_{-}24_{t-1}
             + drs_{-}27 AUX_{-}EXO_{-}LAG_{-}69_{-}25_{t-1} + drs_{-}28 AUX_{-}EXO_{-}LAG_{-}69_{-}26_{t-1}
             + drs_{-}29 AUX_{-}EXO_{-}LAG_{-}69_{-}27_{t-1} + drs_{-}30 AUX_{-}EXO_{-}LAG_{-}69_{-}28_{t-1}
             + drs_31 AUX_EXO_LAG_69_29_{t-1} + drs_32 AUX_EXO_LAG_69_30_{t-1}
             +\,drs\_33\,AUX\_EXO\_LAG\_69\_31_{t-1}+drs\_34\,AUX\_EXO\_LAG\_69\_32_{t-1}
             + drs_{-}35 AUX_{-}EXO_{-}LAG_{-}69_{-}33_{t-1} + drs_{-}36 AUX_{-}EXO_{-}LAG_{-}69_{-}34_{t-1}
             + drs_{-}37 AUX_{-}EXO_{-}LAG_{-}69_{-}35_{t-1} + drs_{-}38 AUX_{-}EXO_{-}LAG_{-}69_{-}36_{t-1}
             + drs_{-}39 AUX_{-}EXO_{-}LAG_{-}69_{-}37_{t-1} + drs_{-}40 AUX_{-}EXO_{-}LAG_{-}69_{-}38_{t-1}
```

$$shockn_{t} = delall_{t} \qquad (69)$$

$$AUX_ENDO_LAG_24_l_{t} = gw_{t-1} \qquad (70)$$

$$AUX_ENDO_LAG_35_l_{t} = k_{t-1} \qquad (71)$$

$$AUX_ENDO_LAG_64_l_{t} = shockn_{t-1} \qquad (72)$$

$$AUX_ENDO_LAG_64_l_{t} = shockn_{t-1} \qquad (73)$$

$$AUX_ENDO_LAG_64_l_{t} = AUX_ENDO_LAG_64_l_{t-1} \qquad (74)$$

$$AUX_ENDO_LAG_64_l_{t} = AUX_ENDO_LAG_64_l_{t-1} \qquad (75)$$

$$AUX_ENDO_LAG_64_l_{t} = AUX_ENDO_LAG_64_l_{t-1} \qquad (76)$$

$$AUX_ENDO_LAG_64_l_{t} = AUX_ENDO_LAG_64_l_{t-1} \qquad (77)$$

$$AUX_ENDO_LAG_64_l_{t} = AUX_ENDO_LAG_64_l_{t-1} \qquad (79)$$

$$AUX_ENDO_LAG_64_l_{t} = AUX_ENDO_LAG_64_l_{t-1} \qquad (80)$$

$$AUX_ENDO_LAG_64_l_{t} = AUX_ENDO_LAG_64_l_{t-1} \qquad (81)$$

$$AUX_ENDO_LAG_64_l_{t} = AUX_ENDO_LAG_64_l_{t-1} \qquad (82)$$

$$AUX_ENDO_LAG_64_l_{t} = AUX_ENDO_LAG_64_l_{t-1} \qquad (83)$$

$$AUX_ENDO_LAG_64_l_{t} = AUX_ENDO_LAG_64_l_{t-1} \qquad (84)$$

$$AUX_ENDO_LAG_64_l_{t} = AUX_ENDO_LAG_64_l_{t-1} \qquad (84)$$

$$AUX_ENDO_LAG_64_l_{t} = AUX_ENDO_LAG_64_l_{t-1} \qquad (85)$$

$$AUX_ENDO_LAG_64_l_{t} = AUX_ENDO_LAG_64_l_{t-1} \qquad (86)$$

$$AUX_ENDO_LAG_64_l_{t} = AUX_ENDO_LAG_64_l_{t-1} \qquad (86)$$

$$AUX_ENDO_LAG_64_l_{t} = AUX_ENDO_LAG_64_l_{t-1} \qquad (86)$$

$$AUX_ENDO_LAG_64_l_{t} = AUX_ENDO_LAG_64_l_{t-1} \qquad (87)$$

$$AUX_ENDO_LAG_64_l_{t} = AUX_ENDO_LAG_64_l_{t-1} \qquad (86)$$

$$AUX_ENDO_LAG_64_l_{t} = AUX_ENDO_LAG_64_l_{t-1} \qquad (87)$$

$$AUX_ENDO_LAG_64.17_t = AUX_ENDO_LAG_64.16_{t-1} \qquad (89)$$

$$AUX_ENDO_LAG_64.18_t = AUX_ENDO_LAG_64.17_{t-1} \qquad (90)$$

$$AUX_ENDO_LAG_64.19_t = AUX_ENDO_LAG_64.18_{t-1} \qquad (91)$$

$$AUX_ENDO_LAG_64.20_t = AUX_ENDO_LAG_64.19_{t-1} \qquad (92)$$

$$AUX_ENDO_LAG_64.21_t = AUX_ENDO_LAG_64.20_{t-1} \qquad (93)$$

$$AUX_ENDO_LAG_64.22_t = AUX_ENDO_LAG_64.21_{t-1} \qquad (94)$$

$$AUX_ENDO_LAG_64.23_t = AUX_ENDO_LAG_64.22_{t-1} \qquad (95)$$

$$AUX_ENDO_LAG_64.23_t = AUX_ENDO_LAG_64.23_{t-1} \qquad (96)$$

$$AUX_ENDO_LAG_64.25_t = AUX_ENDO_LAG_64.23_{t-1} \qquad (97)$$

$$AUX_ENDO_LAG_64.25_t = AUX_ENDO_LAG_64.24_{t-1} \qquad (97)$$

$$AUX_ENDO_LAG_64.26_t = AUX_ENDO_LAG_64.26_{t-1} \qquad (99)$$

$$AUX_ENDO_LAG_64.27_t = AUX_ENDO_LAG_64.26_{t-1} \qquad (100)$$

$$AUX_ENDO_LAG_64.28_t = AUX_ENDO_LAG_64.28_{t-1} \qquad (101)$$

$$AUX_ENDO_LAG_64.29_t = AUX_ENDO_LAG_64.28_{t-1} \qquad (101)$$

$$AUX_ENDO_LAG_64.30_t = AUX_ENDO_LAG_64.29_{t-1} \qquad (102)$$

$$AUX_ENDO_LAG_64.31_t = AUX_ENDO_LAG_64.30_{t-1} \qquad (103)$$

$$AUX_ENDO_LAG_64.31_t = AUX_ENDO_LAG_64.31_{t-1} \qquad (104)$$

$$AUX_ENDO_LAG_64.31_t = AUX_ENDO_LAG_64.31_{t-1} \qquad (104)$$

$$AUX_ENDO_LAG_64.32_t = AUX_ENDO_LAG_64.31_{t-1} \qquad (104)$$

$$AUX_ENDO_LAG_64.33_t = AUX_ENDO_LAG_64.33_{t-1} \qquad (105)$$

$$AUX_ENDO_LAG_64.34_t = AUX_ENDO_LAG_64.33_{t-1} \qquad (106)$$

$$AUX_ENDO_LAG_64.35_t = AUX_ENDO_LAG_64.35_{t-1} \qquad (106)$$

$$AUX_ENDO_LAG_64.36_t = AUX_ENDO_LAG_64.35_{t-1} \qquad (106)$$

$$AUX_ENDO_LAG_64.35_t = AUX_ENDO_LAG_64.35_{t-1} \qquad (107)$$

$$AUX_ENDO_LAG_64.36_t = AUX_ENDO_LAG_64.35_{t-1} \qquad (106)$$

$$AUX_ENDO_LAG_64.37_t = AUX_ENDO_LAG_64.36_{t-1} \qquad (109)$$

$$AUX_ENDO_LAG_64.38_t = AUX_ENDO_LAG_64.37_{t-1} \qquad (110)$$

$$AUX_EXO_LAG_69.0_t = delall_t \qquad (111)$$

$$AUX_EXO_LAG_69.1_t = AUX_EXO_LAG_69.0_{t-1} \qquad (112)$$

$$AUX_EXO_LAG_69.2_t = AUX_EXO_LAG_69.1_{t-1} \qquad (113)$$

$$AUX_EXO_LAG_69.2_t = AUX_EXO_LAG_69.2_{t-1} \qquad (114)$$

$$AUX_EXO_LAG_69.3_t = AUX_EXO_LAG_69.2_{t-1} \qquad (114)$$

$$AUX_EXO_LAG_69.4_t = AUX_EXO_LAG_69.3_{t-1} \qquad (115)$$

$$AUX_EXO_LAG_69.5_t = AUX_EXO_LAG_69.4_{t-1} \qquad (116)$$

$$AUX_EXO_LAG_69.5_t = AUX_EXO_LAG_69.5_{t-1} \qquad (117)$$

$$AUX_EXO_LAG_69.6_t = AUX_EXO_LAG_69.5_{t-1} \qquad (118)$$

$$AUX_EXO_LAG_69.7_t = AUX_EXO_LAG_69.5_{t-1} \qquad (119)$$

$$AUX_EXO_LAG_69.8_t = AUX_EXO_LAG_69.5_{t-1} \qquad (120)$$

$$AUX_EXO_LAG_69.1_t = AUX_EXO_LAG_69.8_{t-1} \qquad (120)$$

$$AUX_EXO_LAG_69.1_t = AUX_EXO_LAG_69.1_{t-1} \qquad (121)$$

$$AUX_EXO_LAG_69.1_t = AUX_EXO_LAG_69.1_{t-1} \qquad (122)$$

$$AUX_EXO_LAG_69.1_t = AUX_EXO_LAG_69.1_{t-1} \qquad (123)$$

$$AUX_EXO_LAG_69.1_t = AUX_EXO_LAG_69.1_{t-1} \qquad (124)$$

$$AUX_EXO_LAG_69.1_t = AUX_EXO_LAG_69.1_{t-1} \qquad (124)$$

$$AUX_EXO_LAG_69.1_t = AUX_EXO_LAG_69.1_t_{t-1} \qquad (124)$$

$$AUX_EXO_LAG_69.1_t = AUX_EXO_LAG_69.1_t_{t-1} \qquad (125)$$

$$AUX_EXO_LAG_69.1_t = AUX_EXO_LAG_69.1_t_{t-1} \qquad (126)$$

$$AUX_EXO_LAG_69.1_t = AUX_EXO_LAG_69.1_t_{t-1} \qquad (127)$$

$$AUX_EXO_LAG_69.1_t = AUX_EXO_LAG_69.1_t_{t-1} \qquad (126)$$

$$AUX_EXO_LAG_69.1_t = AUX_EXO_LAG_69.1_t_{t-1} \qquad (127)$$

$$AUX.EXO.LAG.69.18_t = AUX.EXO.LAG.69.17_{t-1} \qquad (129)$$

$$AUX.EXO.LAG.69.19_t = AUX.EXO.LAG.69.18_{t-1} \qquad (131)$$

$$AUX.EXO.LAG.69.20_t = AUX.EXO.LAG.69.19_{t-1} \qquad (131)$$

$$AUX.EXO.LAG.69.20_t = AUX.EXO.LAG.69.20_{t-1} \qquad (132)$$

$$AUX.EXO.LAG.69.21_t = AUX.EXO.LAG.69.20_{t-1} \qquad (133)$$

$$AUX.EXO.LAG.69.22_t = AUX.EXO.LAG.69.21_{t-1} \qquad (133)$$

$$AUX.EXO.LAG.69.23_t = AUX.EXO.LAG.69.22_{t-1} \qquad (134)$$

$$AUX.EXO.LAG.69.24_t = AUX.EXO.LAG.69.23_{t-1} \qquad (135)$$

$$AUX.EXO.LAG.69.25_t = AUX.EXO.LAG.69.24_{t-1} \qquad (136)$$

$$AUX.EXO.LAG.69.25_t = AUX.EXO.LAG.69.25_{t-1} \qquad (137)$$

$$AUX.EXO.LAG.69.26_t = AUX.EXO.LAG.69.25_{t-1} \qquad (138)$$

$$AUX.EXO.LAG.69.28_t = AUX.EXO.LAG.69.26_{t-1} \qquad (139)$$

$$AUX.EXO.LAG.69.29_t = AUX.EXO.LAG.69.28_{t-1} \qquad (140)$$

$$AUX.EXO.LAG.69.20_t = AUX.EXO.LAG.69.28_{t-1} \qquad (141)$$

$$AUX.EXO.LAG.69.30_t = AUX.EXO.LAG.69.29_{t-1} \qquad (141)$$

$$AUX.EXO.LAG.69.31_t = AUX.EXO.LAG.69.30_{t-1} \qquad (142)$$

$$AUX.EXO.LAG.69.32_t = AUX.EXO.LAG.69.31_{t-1} \qquad (143)$$

$$AUX.EXO.LAG.69.33_t = AUX.EXO.LAG.69.32_{t-1} \qquad (144)$$

$$AUX.EXO.LAG.69.33_t = AUX.EXO.LAG.69.33_{t-1} \qquad (144)$$

$$AUX.EXO.LAG.69.35_t = AUX.EXO.LAG.69.33_{t-1} \qquad (145)$$

$$AUX.EXO.LAG.69.35_t = AUX.EXO.LAG.69.35_{t-1} \qquad (146)$$

$$AUX.EXO.LAG.69.35_t = AUX.EXO.LAG.69.35_{t-1} \qquad (147)$$

$$AUX.EXO.LAG.69.37_t = AUX.EXO.LAG.69.35_{t-1} \qquad (147)$$

$$AUX.EXO.LAG.69.37_t = AUX.EXO.LAG.69.35_{t-1} \qquad (148)$$

$$AUX.EXO.LAG.69.38_t = AUX.EXO.LAG.69.35_{t-1} \qquad (148)$$

$$AUX.EXO.LAG.69.38_t = AUX.EXO.LAG.69.36_{t-1} \qquad (148)$$

$$AUX.EXO.LAG.69.38_t = AUX.EXO.LAG.69.36_{t-1} \qquad (148)$$

$$AUX.EXO.LAG.69.38_t = AUX.EXO.LAG.69.36_{t-1} \qquad (148)$$