What Drives Inflation? Testing Non-nested Specifications of the New Keynesian Phillips Curve

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1 Basic Definitions

- Test TWO competing non-nested models, H_g and H_h
- Each model implies a conditional moment condition, $E_g\left[g\left(Y_t|Z_t^g;\beta_0\right)\right]=0$ and $E_h\left[h\left(Y_t|Z_t^h;\theta_0\right)\right]=0$, where Y_t is the variable of interest to model; $E_g\left[\cdot\right]$ is the expectation taken w.r.t. the unknown conditional density under H_g; Z_t^g is the information set avaliable at t; and β_0 is the unique unkwown value such that $E_g\left[g\left(Y_t|Z_t^g;\beta_0\right)\right]=0$ a.s..
- In the usual (unconditional) moment conditional form, $E_g\left[g\left(X_t;\beta_0\right)\right]=0$ and $E_h\left[h\left(X_t;\theta_0\right)\right]=0$, where $X_t, t=1,...,T$ is the entire observable data (variable of interest, regressors and instruments), $g\left(X_t;\cdot\right)$ is $\Re^{p_g}\rightarrow\Re^{m_g}$ and $h\left(X_t;\cdot\right)$ is $\Re^{p_h}\rightarrow\Re^{m_h}, m_g\geq p_g, m_h\geq p_h$.
- Sample $m_g\times 1$ and $m_h\times 1$ counterpart functions, $\widehat{g}\left(\beta\right)=\frac{1}{T}\sum_{t=1}^{T}g_t\left(\beta\right)=\frac{1}{T}\sum_{t=1}^{T}g\left(X_t;\beta\right)$ and $\widehat{h}\left(\theta\right)=\frac{1}{T}\sum_{t=1}^{T}h_t\left(\theta\right)$ where $\beta\in\Re^{p_g}$ and $\theta\in\Re^{p_h}$.

- Let under H_g, $\sqrt{T}\widehat{g}(\beta_0) \xrightarrow{d} N_{m_g}(0, V_g)$, where the $m_g \times m_g$ PD matrix $V_g = \lim_{T\to\infty} Var_g\left[\sqrt{T}\widehat{g}(\beta_0)\right]$ is estimated by $\widehat{V}_g(\beta)$ evaluated at $\beta = \widehat{\beta}$ (White (1984), Newey and West (1987), Andrews (1991), ...)

- Let the $m_g \times p_g$ matrix function $G(\beta) = E_g\left[\frac{\partial g(X_t;\beta)}{\partial \beta'}\right]$ be estimated by $\widehat{G}(\beta) = \frac{1}{T}\sum_{t=1}^{T}\frac{\partial g(X_t;\beta)}{\partial \beta'}$ and where $G = E_g\left[\frac{\partial g(X_t;\beta)}{\partial \beta'}\right]$ evaluated at $\beta = \beta_0$. Similar for $H(\theta)$

2 Estimation

- $$\widehat{\beta}_{TSGMM} = \arg\min_{\beta\in\Re^{p_g}} \widehat{g}(\beta)' \widehat{V}_g^{-1}\left(\widetilde{\beta}\right)\widehat{g}(\beta), \tag{1}$$

  where $\widetilde{\beta}$ is a first-step GMM estimator. For any metric W_g, the objective function is given by $\widehat{O}_g(\beta, W_g) = \widehat{g}(\beta)' W_g \widehat{g}(\beta)$ and the TSGMM is the efficient one if $W_g = \widehat{V}_g^{-1}\left(\widetilde{\beta}\right)$.

- $$\widehat{\beta}_{CUE} = \arg\min_{\beta\in\Re^{p_g}} \widehat{g}(\beta)' \widehat{V}_g^{-}(\beta)\widehat{g}(\beta), \tag{2}$$

  where $\widehat{V}_g^{-}(\beta)$ is a generalized inverse of $\widehat{V}_g(\beta)$.

- Using Newey and Smith (2004) typology, for a concave function $\rho(v)$ and a $m_g \times 1$ parameter vector $\lambda_g \in \Lambda_T(\beta)$, the GEL estimator solves the following saddle point problem

  $$\widehat{\beta}_{GEL} = \arg\min_{\beta\in\Re^{p_g}} \sup_{\lambda_g\in\Lambda_T} \frac{1}{T}\sum_{t=1}^{T}\rho[\lambda_g' g_t(\beta)]. \tag{3}$$

  The class of estimators defined by $\widehat{\beta}_{GEL}$ is generally inefficient when $g_t(\beta)$ is serially correlated. However, Anatolyev (2005) demonstrates that, in the presence of correlation in $g_t(\beta)$, the smoothed GEL estimator of Kitamura and Stutzer (1997) is efficient, obtained by smoothing the moment function with the truncated kernel, so that

  $$\widehat{\beta}_{SGEL} = \arg\min_{\beta\in\Re^{p_g}} \sup_{\lambda_g\in\Lambda_T}\left[\widehat{Q}_g(\beta,\lambda_g) = \frac{1}{T}\sum_{t=1}^{T}\rho[\lambda_g' g_{tT}(\beta)]\right], \tag{4}$$

  with $g_{tT}(\beta) \equiv \frac{1}{2K_T+1}\sum_{k=-K_T}^{K_T} g_{t-k}(\beta)$. Denoted the GEL probabilities as π_t^g.

- CUE: $\rho(v) = -(1+v)^2/2$; EL: $\rho(v) = \ln(1-v)$; ET: $\rho(v) = -\exp(v)$.

- Under $H_g, \sqrt{T}\left(\widehat{\beta}-\beta_0\right) \xrightarrow{d} N_{p_g}\left(0, \left(G' V_g^{-1} G\right)^{-1}\right)$
- Under $H_h, \sqrt{T}\left(\widehat{\theta}-\theta_0\right) \xrightarrow{d} N_{p_h}\left(0, \left(H' V_h^{-1} H\right)^{-1}\right)$

3 Tests

3.1 Cox-Type Tests

- Smith (1992) and Ramalho and Smith (2002) (in Singleton, 1985, $m_g = m_h$ for the GMM case).
- Test H_g against H_h by evaluating, under H_g, the (scaled) difference of the estimated GMM criterion functions.
- Smith (1992), page 975, GMM Cox C

$$C_T\left(H_g|H_h\right) = \sqrt{T}\widehat{h}\left(\widehat{\theta}\right)' \widehat{V}_h^{-1}\left(\widehat{\theta}\right) \widehat{A}_g \widehat{g}\left(\widehat{\beta}\right),$$

where $\widehat{A}_g = \frac{1}{T}\sum_{t=1}^{T} h_t\left(\widehat{\theta}\right) g_t\left(\widehat{\beta}\right)' \widehat{V}_g^{-1}\left(\widehat{\beta}\right)$. Under $H_g, C_T\left(H_g|H_h\right) \xrightarrow{d} N\left(0, \omega_g^2\right)$, where

$$\widehat{\omega}_g^2 = \widehat{h}\left(\widehat{\theta}\right)' \widehat{V}_h^{-1}\left(\widehat{\theta}\right) \widehat{A}_g \widehat{M}_g \widehat{V}_g\left(\widehat{\beta}\right) \widehat{M}_g' \widehat{A}_g' \widehat{V}_h^{-1}\left(\widehat{\theta}\right) \widehat{h}\left(\widehat{\theta}\right),$$

with $\widehat{M}_g = I_{m_g} - \widehat{G}\left(\widehat{\beta}\right)\left(\widehat{G}\left(\widehat{\beta}\right)' \widehat{V}_g^{-1}\left(\widehat{\beta}\right)\widehat{G}\left(\widehat{\beta}\right)\right)^{-1} \widehat{G}\left(\widehat{\beta}\right)' \widehat{V}_g^{-1}\left(\widehat{\beta}\right)$.

- Ramalho and Smith (2002), page 105, general form of Cox-type GC

$$GC = \sqrt{T}\left(\widehat{c}'\widehat{M}_g \widehat{V}_g\left(\widehat{\beta}\right)\widehat{M}_g'\widehat{c}\right)^{-1/2} \widehat{c}'\widehat{g}\left(\widehat{\beta}\right),$$

where $\widehat{c} = \widehat{A}_g' \widehat{V}_h^{-1}\left(\widehat{\theta}\right)\widehat{h}\left(\widehat{\theta}\right)$ or $\widehat{c} = \widehat{A}_g' \widehat{V}_h^{-1}\left(\widehat{\theta}\right)\left(\widehat{h}\left(\widehat{\theta}\right) - \widehat{A}_g \widehat{g}\left(\widehat{\beta}\right)\right)$, the latter with (possibly) improved power. Under $H_g, GC \xrightarrow{d} N(0,1)$.

- Ramalho and Smith (2002), page 108, GEL Cox-type C

$$C = \sqrt{T}\left(\widehat{\xi}'\widehat{M}_g' \widehat{V}_g^{-1}\left(\widehat{\beta}\right)\widehat{M}_g \widehat{\xi}\right)^{-1/2}\left(\widehat{Q}_h(\widehat{\theta},\widehat{\lambda}_h) - \widehat{Q}_h^*(\widetilde{\theta},\widetilde{\lambda}_h)\right),$$

where $\widehat{\xi} = \frac{1}{T}\sum_{t=1}^{T} g_{tT}(\beta)\,\rho[\lambda_h' h_{tT}(\theta)]$. Here, $\widehat{Q}_h^*(\theta,\lambda_h)$ is the objective SGEL function with $1/T$ replaced by $\widehat{\pi}_t^h$ with the corresponding estimator being $\widetilde{\theta},\widetilde{\lambda}_h$. Under $H_g, C \xrightarrow{d} N(0,1)$.

- Ramalho and Smith (2002), page 108, GEL linearized Cox-type LC

$$LC = -\sqrt{T}\left(\widehat{\xi}'\widehat{M}_g'\widehat{V}_g^{-1}\left(\widehat{\beta}\right)\widehat{M}_g\widehat{\xi}\right)^{-1/2}\widehat{\xi}'\widehat{\lambda}_g \xrightarrow{d} N\left(0,1\right), \text{ under } H_g.$$

- Ramalho and Smith (2002), page 108, GEL simplified Cox-type SC

$$SC = -\sqrt{T}\left(\widehat{\xi}'\widehat{M}_g'\widehat{V}_g^{-1}\left(\widehat{\beta}\right)\widehat{M}_g\widehat{\xi}\right)^{-1/2}\left(\widehat{Q}_h(\widehat{\theta},\widehat{\lambda}_h)-\widehat{Q}_h^*(\widehat{\theta},\widehat{\lambda}_h)\right) \xrightarrow{d} N\left(0,1\right), \text{ under } H_g.$$

3.2 Encompassing Tests

- Smith (1992) and Ramalho and Smith (2002)
- The null model H_g is capable of predicting the features of the alternative model H_h
- Parametric Encompassing (behavior of $\widehat{\theta}$ under H_g) and Moment Encompassing (behavior of $\widehat{h}\left(\beta\right)$, i.e., behavior of a functional of $\widehat{h}$ under H_g).
- Smith (1992), page 976, GMM Parametric Encompassing E

$$E_T\left(H_g|H_h\right) = T\widehat{g}\left(\widehat{\beta}\right)'\widehat{A}_g'\widehat{V}_h^{-1}\left(\widehat{\theta}\right)\widehat{H}\left(\widehat{\theta}\right)\widehat{Q}_g^{-}\widehat{H}\left(\widehat{\theta}\right)'\widehat{V}_h^{-1}\left(\widehat{\theta}\right)\widehat{A}_g\widehat{g}\left(\widehat{\beta}\right),$$

where $\widehat{Q}_g^{-}$ is the generalized inverse of

$$\widehat{Q}_g = \widehat{H}\left(\widehat{\theta}\right)'\widehat{V}_h^{-1}\left(\widehat{\theta}\right)\widehat{A}_g\widehat{M}_g\widehat{V}_g\left(\widehat{\beta}\right)\widehat{M}_g'\widehat{A}_g'\widehat{V}_h^{-1}\left(\widehat{\theta}\right)\widehat{H}\left(\widehat{\theta}\right).$$

Under $H_g, E_T\left(H_g|H_h\right) \xrightarrow{d} \chi^2_{rank(Q_g)}$ where Q_g is consistently estimated by $\widehat{Q}_g$.

- Ramalho and Smith (2002), page 105, general form of Encompassing-type GE

$$GE = T\widehat{g}\left(\widehat{\beta}\right)'\widehat{c}\widehat{\Psi}_g^{-}\widehat{c}'\widehat{g}\left(\widehat{\beta}\right) \xrightarrow{d} \chi^2_{rank(\Psi_g)},$$

under H_g, where $\widehat{\Psi}_g = \widehat{c}'\widehat{M}_g\widehat{V}_g\left(\widehat{\beta}\right)\widehat{M}_g'\widehat{c}$.

- Ramalho and Smith (2002), page 110, GEL Parametric Encompassing PE

$$PE = T\begin{pmatrix}\widehat{\theta}-\widetilde{\theta}\\ \widehat{\lambda}_h-\widetilde{\lambda}_h\end{pmatrix}'\widehat{K}_g\widehat{\Psi}_g^{-}\widehat{K}_g'\begin{pmatrix}\widehat{\theta}-\widetilde{\theta}\\ \widehat{\lambda}_h-\widetilde{\lambda}_h\end{pmatrix} \xrightarrow{d} \chi^2_{rank(\Psi_g)},$$

under H_g, where the definition of $\widehat{K}_g$ can be found in the appendix of Ramalho and Smith (2002), pages 123 and 124.

- Ramalho and Smith (2002), pages 111 and 112, GEL Moment Encompassing ME

$$ME = T\left(\widehat{m}_h - \widehat{m}_h^*\right)' \widehat{\Psi}_g^- \left(\widehat{m}_h - \widehat{m}_h^*\right) \xrightarrow{d} \chi^2_{rank(\Psi_g)},$$

under H_g, where the moment indicator function $m_h(X;\lambda_g,\beta;\lambda_h,\theta)$ can be choosen to equal $h(X;\theta)$. In this case, $\widehat{m}_h = \widehat{h}\left(\widehat{\theta}\right)$ and $\widehat{m}_h^* = \sum_{t=1}^T \widehat{\pi}_t^g h_t\left(\widehat{\theta}\right)$. If one chooses $m_h(X;\lambda_g,\beta;\lambda_h,\theta)$ to equal $g(X;\beta)$, then $\widehat{m}_h = \widehat{g}\left(\widehat{\beta}\right)$ and $\widehat{m}_h^* = 0$ which implies $PE = J$, Hansen's (1982) statistic for over-identifying moment restrictions.

- Ramalho and Smith (2002), pages 111 and 112, GEL linearized Moment Encompassing LME

$$LME = T\widehat{\lambda}_g'\widehat{\xi}\widehat{\Psi}_g^-\widehat{\xi}'\widehat{\lambda}_g \xrightarrow{d} \chi^2_{rank(\Psi_g)}, \text{ under } H_g.$$

3.3 Model Selection Tests

- Rivers and Vuong (2002) and Hall and Pelletier (2007)

- The null hypothesis is $H_g \overset{asympt.equiv.}{=} H_h$, comparing measures of goodness of fit and distance between H_g and H_h.

- If both models are correctly specified or locally misspecified the limiting distribution of the test statistic is not standard and depends on nuisance parameters under the null.

- Suppose that both models are misspecified (there is no parameter value at which the moment condition can be set equal to zero). Hall and Pelletier (2007), page 8, N_T statistic

$$N_T = \sqrt{T}\frac{\left(\widehat{O}_g\left(\widehat{\beta}, W_g\right) - \widehat{O}_h\left(\widehat{\theta}, W_h\right)\right)}{\widehat{\sigma}^2} \xrightarrow{d} N(0,1),$$

under the null hypothesis, where $\widehat{\sigma}^2$ is a consistent estimator of σ_0^2, the limiting variance of $\sqrt{T}\left(\widehat{O}_g\left(\widehat{\beta}\right) - \widehat{O}_h\left(\widehat{\theta}\right)\right)$. Hall and Pelletier (2007) derives the formulas of $\widehat{\sigma}^2$ for two cases: (1) $W_g = I_{m_g}$ and $W_h = I_{m_h}$; (2) $W_g = \left(\frac{1}{T}\sum_{t=1}^T Z_t^g Z_t^{g'}\right)^{-1}$ and $W_h = \left(\frac{1}{T}\sum_{t=1}^T Z_t^h Z_t^{h'}\right)^{-1}$.

4 Models and Instruments

GG(1999) and NN(2005)

$$\pi_t = \beta_1 s_t + \beta_2 \pi_{t+1} + \beta_3 \pi_{t-1} + \varepsilon_t$$

$$\begin{aligned} Z_2^{GG} &= (1, \pi_{t-1}, \pi_{t-2}, s_{t-1}, s_{t-2}, ygap_{t-1}, ygap_{t-2}, \triangle w_{t-1}, \triangle w_{t-2}, \triangle com_{t-1}, \triangle com_{t-2}, spread_{t-1}, spread_t \\ Z_4^{GG} &= \left(Z_2^{GG}, \pi_{t-3}, \pi_{t-4}, s_{t-3}, s_{t-4}, ygap_{t-3}, ygap_{t-4}, \triangle w_{t-3}, \triangle w_{t-4}, \triangle com_{t-3}, \triangle com_{t-4}, spread_{t-3}, spre\right. \end{aligned}$$

BG(2007)

$$\pi_t = \beta_1 \pi_{t+1} + \beta_2 \pi_{t-1} + \beta_3 U_t + \beta_4 \triangle v_t + \varepsilon_t$$

$$\begin{aligned} Z_2^{BG(07)} &= (1, \pi_{t-1}, \pi_{t-2}, U_{t-1}, U_{t-2}, \triangle v_{t-1}, \triangle v_{t-2})' \\ Z_4^{BG(07)} &= \left(Z_2^{BG(07)}, \pi_{t-3}, \pi_{t-4}, U_{t-3}, U_{t-4}, \triangle v_{t-3}, \triangle v_{t-4}\right)' \end{aligned}$$

BG(2008)

$$\pi_t = \beta_1 \pi_{t+1} + \beta_2 u_t + \beta_3 u_{t-1} + \beta_4 u_{t+1} + \beta_5 a_t + \varepsilon_t$$

$$\begin{aligned} Z_2^{BG(08)} &= (1, \pi_{t-1}, \pi_{t-2}, u_{t-1}, u_{t-2}, a_{t-1}, a_{t-2})' \\ Z_4^{BG(08)} &= \left(Z_2^{BG(08)}, \pi_{t-3}, \pi_{t-4}, u_{t-3}, u_{t-4}, a_{t-3}, a_{t-4}\right)' \end{aligned}$$

RW(2007)

$$\pi_t = \beta_1 \pi_{t+1} + \beta_2 mc_t + \beta_3 lp_t + \beta_4 q_t + \beta_5 i_t + \beta_6 q_{t+1} + \beta_7 \pi_{t-1} + \varepsilon_t$$

$$\begin{aligned} Z_{2,short}^{RW} &= (1, \pi_{t-1}, \pi_{t-2}, mc_{t-1}, mc_{t-2}, lp_{t-1}, lp_{t-2}, q_{t-1}, q_{t-2}, i_{t-1}, i_{t-2})' \\ Z_{4,short}^{RW} &= \left(Z_{2,short}^{RW}, \pi_{t-3}, \pi_{t-4}, mc_{t-3}, mc_{t-4}, lp_{t-3}, lp_{t-4}, q_{t-3}, q_{t-4}, i_{t-3}, i_{t-4}\right)' \\ Z_2^{RW} &= \left(Z_{2,short}^{RW}, ygap_{t-1}, ygap_{t-2}, \triangle com_{t-1}, \triangle com_{t-2}, U_{t-1}, U_{t-2}, spread_{t-1}, spread_{t-2}, \triangle w_{t-1}, \triangle w_{t-}\right. \\ Z_4^{RW} &= \left(Z_2^{RW}, ygap_{t-3}, ygap_{t-4}, \triangle com_{t-3}, \triangle com_{t-4}, U_{t-3}, U_{t-4}, spread_{t-3}, spread_{t-4}, \triangle w_{t-3}, \triangle w_{t-4}\right) \end{aligned}$$

5 Results

5.1 General Model

$$\pi_t = \beta_1 \pi_{t+1} + \beta_2 mc_t + \beta_3 lp_t + \beta_4 q_t + \beta_5 i_t + \beta_6 q_{t+1} + \beta_7 \pi_{t-1} + \beta_8 U_t + \beta_9 U_{t-1} + \beta_{10} U_{t+1} + \beta_{11} \triangle v_t + \varepsilon_t$$

Table 1: ...

General	1960:1	$Z_{2,short}$	$Z_{4,short}$	Z_2	Z_4
CUE	β_1	0.567 (0.209)	0.602 (0.121)	0.772 (0.163)	0.328 (0.109)
	β_2	0.166 (0.392)	0.075 (0.115)	0.032 (0.063)	-0.018 (0.042)
	β_3	-4.089 (11.690)	-0.053 (4.056)	-0.672 (4.002)	10.498 (3.356)
	β_4	0.002 (0.381)	0.153 (0.082)	0.229 (0.134)	0.223 (0.056)
	β_5	0.011 (0.121)	0.045 (0.055)	0.050 (0.055)	0.112 (0.046)
	β_6	0.007 (0.403)	-0.167 (0.089)	-0.253 (0.148)	-0.255 (0.063)
	β_7	0.304 (0.178)	0.207 (0.103)	0.156 (0.142)	0.379 (0.088)
	β_8	-1.578 (6.927)	-3.117 (1.741)	-2.449 (1.874)	-3.925 (0.832)
	β_9	0.523 (2.287)	0.353 (0.733)	0.130 (0.627)	0.517 (0.397)
	β_{10}	1.102 (4.860)	2.854 (1.158)	2.347 (1.484)	3.559 (0.613)
	β_{11}	0.220 (0.235)	0.075 (0.051)	-0.033 (0.057)	0.022 (0.026)
	J	0.810	0.696	0.998	0.581
	D_{GG}	0.286	0.000^1	0.338	0.000^1
	D_{BG1}	0.000^4	0.000^4	0.000^4	0.000^4
	D_{BG2}	0.000^3	0.000^3	0.000^3	0.000^3
	D_{RW}	0.023	0.000^2	0.000^2	0.000^2

GG(1999): $\beta_3 = ... = \beta_6 = \beta_8 = ... = \beta_{11} = 0$

BG(2007): $\beta_2 = ... = \beta_6 = \beta_9 = \beta_{10} = 0$

BG(2008): $\beta_2 = \beta_4 = ... = \beta_7 = \beta_{11} = 0$

RW(2007): $\beta_8 = ... = \beta_{11} = 0$

5.2 Estimation 1960:1...

5.3 Labour Rigidity Models 1960:1...

$*$ = 10% significant; $**$ = 5% significant; $***$ = 1% significant

Table 2: ...

General	1982:3	$Z_{2,short}$	$Z_{4,short}$	Z_2	Z_4
CUE	β_1	1.255 (2.279)	0.431 (0.351)	−0.078 (0.253)	0.026 (0.324)
	β_2	0.341 (2.006)	−0.069 (0.135)	0.155 (0.083)	0.393 (0.132)
	β_3	−11.133 (172.302)	−6.655 (11.961)	5.243 (9.844)	0.005 (18.404)
	β_4	0.644 (1.426)	0.291 (0.164)	0.072 (0.065)	0.769 (0.165)
	β_5	−0.204 (1.384)	0.251 (0.119)	0.092 (0.061)	0.452 (0.154)
	β_6	−0.691 (1.456)	−0.298 (0.174)	−0.104 (0.068)	−0.645 (0.161)
	β_7	0.175 (1.012)	0.352 (0.187)	0.311 (0.167)	0.529 (0.290)
	β_8	−6.590 (33.886)	1.329 (2.620)	−4.056 (1.964)	−6.876 (2.919)
	β_9	0.583 (13.639)	−2.103 (1.356)	1.597 (0.977)	0.919 (1.259)
	β_{10}	5.807 (19.619)	0.886 (1.667)	2.804 (1.159)	6.294 (2.005)
	β_{11}	−0.014 (0.223)	0.173 (0.075)	0.052 (0.026)	0.325 (0.058)
	J	0.540	0.611	0.417	0.120
	D_{GG}	0.000^2	0.000^2	0.000^2	0.000^2
	D_{BG1}	0.000^4	0.000^4	0.000^4	0.000^4
	D_{BG2}	0.000^1	0.000^3	0.000^1	0.000^1
	D_{RW}	0.000^3	0.000^1	0.000^3	0.000^3

Table 3: ...

GG		β_1	β_2	β_3	J
GMM	Z_2^{GG}	0.012 (0.015)	0.602 (0.057)	0.389 (0.056)	0.752
	Z_4^{GG}	0.010 (0.009)	0.577 (0.042)	0.414 (0.041)	0.470
CUE	Z_2^{GG}	0.011 (0.019)	0.731 (0.059)	0.255 (0.058)	0.732
	Z_4^{GG}	0.008 (0.015)	0.690 (0.044)	0.289 (0.043)	0.551
EL	Z_2^{GG}	0.013 (0.006)	0.711 (0.019)	0.276 (0.018)	
	Z_4^{GG}	0.042 (0.006)	0.655 (0.012)	0.316 (0.012)	
ET	Z_2^{GG}	0.010 (0.010)	0.715 (0.032)	0.272 (0.030)	
	Z_4^{GG}	0.031 (0.009)	0.660 (0.020)	0.311 (0.020)	

Table 4: ...

NNc35		β_1	β_2	β_3	J
GMM	Z_2^{GG}	0.045 (0.112)	0.617 (0.056)	0.378 (0.056)	0.489
	Z_4^{GG}	0.117 (0.084)	0.589 (0.041)	0.409 (0.042)	0.590
CUE	Z_2^{GG}	0.039 (0.108)	0.733 (0.061)	0.257 (0.061)	0.684
	Z_4^{GG}	0.080 (0.073)	0.597 (0.038)	0.391 (0.038)	0.791
EL	Z_2^{GG}	0.028 (0.037)	0.731 (0.020)	0.263 (0.020)	
	Z_4^{GG}	0.110 (0.030)	0.684 (0.013)	0.303 (0.013)	
ET	Z_2^{GG}	0.019 (0.053)	0.726 (0.034)	0.266 (0.034)	
	Z_4^{GG}	0.123 (0.052)	0.695 (0.024)	0.284 (0.025)	

Table 5: ...

NNcap		β_1	β_2	β_3	J
GMM	Z_2^{GG}	0.009 (0.013)	0.606 (0.055)	0.390 (0.056)	0.680
	Z_4^{GG}	0.010 (0.009)	0.578 (0.040)	0.419 (0.040)	0.672
CUE	Z_2^{GG}	0.005 (0.011)	0.727 (0.059)	0.263 (0.059)	0.788
	Z_4^{GG}	0.012 (0.008)	0.683 (0.043)	0.301 (0.044)	0.876
EL	Z_2^{GG}	0.011 (0.004)	0.715 (0.018)	0.285 (0.018)	
	Z_4^{GG}	0.005 (0.002)	0.796 (0.015)	0.177 (0.015)	
ET	Z_2^{GG}	0.007 (0.006)	0.704 (0.031)	0.292 (0.030)	
	Z_4^{GG}	0.007 (0.004)	0.780 (0.028)	0.191 (0.029)	

Table 6: ...

BG(2007)		β_1	β_2	β_3	β_4	Jpv
GMM	$Z_2^{BG(07)}$	0.658 (0.160)	0.338 (0.155)	0.007 (0.018)	0.101 (0.076)	0.663
	$Z_4^{BG(07)}$	0.522 (0.091)	0.488 (0.089)	−0.003 (0.012)	0.116 (0.058)	0.220
CUE	$Z_2^{BG(07)}$	0.564 (0.183)	0.429 (0.174)	0.009 (0.018)	0.147 (0.085)	0.618
	$Z_4^{BG(07)}$	0.608 (0.167)	0.438 (0.156)	−0.013 (0.030)	0.344 (0.094)	0.596
EL	$Z_2^{BG(07)}$	0.555 (0.075)	0.443 (0.072)	0.006 (0.006)	0.162 (0.031)	
	$Z_4^{BG(07)}$	0.497 (0.063)	0.538 (0.060)	−0.009 (0.011)	0.364 (0.029)	
ET	$Z_2^{BG(07)}$	0.560 (0.147)	0.437 (0.143)	0.007 (0.011)	0.156 (0.064)	
	$Z_4^{BG(07)}$	0.570 (0.121)	0.466 (0.119)	−0.009 (0.022)	0.368 (0.061)	

Table 7: ...

BG(2008)		β_1	β_2	β_3	β_4	β_5	Jpv
GMM	$Z_2^{BG(08)}$	0.998 (0.015)	-1.764 (2.195)	0.937 (1.028)	0.902 (1.291)	-3.322 (2.854)	0.714
	$Z_4^{BG(08)}$	0.994 (0.012)	-1.902 (1.506)	0.746 (0.654)	1.236 (0.941)	-2.498 (2.306)	0.825
CUE	$Z_2^{BG(08)}$	0.995 (0.014)	-2.198 (2.097)	0.985 (0.974)	1.306 (1.231)	-2.246 (2.660)	0.327
	$Z_4^{BG(08)}$	1.021 (0.031)	-9.824 (4.268)	3.898 (1.825)	6.248 (2.619)	3.330 (5.006)	0.485
EL	$Z_2^{BG(08)}$	0.994 (0.004)	-1.461 (0.699)	0.644 (0.320)	0.903 (0.409)	-2.453 (0.868)	
	$Z_4^{BG(08)}$	0.993 (0.006)	-5.312 (0.843)	2.051 (0.352)	3.485 (0.530)	2.073 (1.255)	
ET	$Z_2^{BG(08)}$	0.994 (0.007)	-1.458 (1.284)	0.646 (0.594)	0.893 (0.740)	-2.509 (1.541)	
	$Z_4^{BG(08)}$	0.993 (0.012)	-5.871 (1.685)	2.328 (0.681)	3.775 (1.083)	1.885 (2.666)	

5.4 LR versus Calvo Type Models 1960:1...

5.5 Estimation 1982:3...

5.6 Labour Rigidity Models 1982:3...

5.7 LR versus Calvo Type Models 1982:3...

Table 8: ...

RW(2007)		β_1	β_2	β_3	β_4	β_5	β_6	β_7	J
GMM	$Z^{RW}_{2,short}$	0.741 (0.159)	0.017 (0.043)	−1.372 (1.373)	−0.011 (0.053)	0.016 (0.016)	0.016 (0.062)	0.251 (0.154)	0.853
	$Z^{RW}_{4,short}$	0.553 (0.085)	0.033 (0.023)	−1.718 (1.076)	−0.005 (0.021)	0.029 (0.012)	0.009 (0.026)	0.428 (0.083)	0.275
	Z^{RW}_{2}	0.771 (0.080)	−0.006 (0.019)	−0.113 (1.026)	−0.019 (0.019)	0.021 (0.011)	0.027 (0.021)	0.226 (0.078)	0.959
	Z^{RW}_{4}	0.611 (0.037)	0.003 (0.011)	−1.180 (0.655)	−0.022 (0.010)	0.003 (0.008)	0.026 (0.012)	0.385 (0.036)	0.571
CUE	$Z^{RW}_{2,short}$	0.804 (0.174)	0.012 (0.047)	−1.252 (1.482)	−0.001 (0.053)	0.021 (0.018)	0.008 (0.063)	0.192 (0.170)	0.764
	$Z^{RW}_{4,short}$	0.725 (0.077)	−0.001 (0.022)	−1.422 (1.007)	−0.032 (0.020)	−0.007 (0.012)	0.035 (0.023)	0.264 (0.075)	0.619
	Z^{RW}_{2}	0.883 (0.090)	−0.008 (0.025)	−0.849 (1.227)	−0.014 (0.022)	0.022 (0.015)	0.023 (0.027)	0.114 (0.087)	0.949
	Z^{RW}_{4}	0.555 (0.036)	0.006 (0.012)	−0.548 (0.741)	−0.015 (0.011)	0.007 (0.008)	0.011 (0.013)	0.435 (0.034)	0.982
EL	$Z^{RW}_{2,short}$	0.770 (0.071)	0.024 (0.019)	−1.590 (0.524)	0.013 (0.022)	0.024 (0.008)	−0.009 (0.026)	0.219 (0.069)	
	$Z^{RW}_{4,short}$	0.729 (0.035)	−0.011 (0.008)	−0.579 (0.351)	−0.050 (0.007)	−0.001 (0.005)	0.059 (0.008)	0.258 (0.035)	
	Z^{RW}_{2}	0.823 (0.029)	−0.004 (0.008)	−0.827 (0.349)	−0.013 (0.006)	0.018 (0.004)	0.020 (0.007)	0.170 (0.027)	
	Z^{RW}_{4}	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
ET	$Z^{RW}_{2,short}$	0.773 (0.142)	0.022 (0.036)	−1.516 (0.921)	0.011 (0.042)	0.024 (0.014)	−0.007 (0.050)	0.217 (0.138)	
	$Z^{RW}_{4,short}$	1.009 (0.100)	−0.062 (0.036)	−3.145 (1.353)	−0.215 (0.037)	−0.094 (0.030)	0.235 (0.039)	0.001 (0.094)	
	Z^{RW}_{2}	0.828 (0.057)	−0.005 (0.012)	−0.861 (0.443)	−0.012 (0.008)	0.018 (0.007)	0.019 (0.010)	0.165 (0.055)	
	Z^{RW}_{4}	n/a	n/a	n/a	n/a	n/a	n/a	n/a	

Table 9: ...

H0:	BG(07)		BG(08)	
	2lags	4lags	2lags	4lags
C	BG(07)	BG(08)*	BG(08)	BG(08)
C_{el}	BG(07)	BG(07)	BG(08)	BG(08)
GC_1	BG(07)	BG(07)	BG(08)	BG(07)*
GC_2	BG(07)	BG(07)	BG(08)	BG(07)**
$SCEL$	BG(07)	BG(07)	BG(08)	BG(08)
$LCEL$	BG(07)	BG(07)	BG(08)	BG(08)
E	BG(07)	BG(08)**	BG(08)	BG(08)
$LMEL$	BG(07)	BG(08)***	BG(08)	BG(07)***
JEL	BG(07)	BG(07)	BG(08)	BG(08)

H0:	BG(07)=BG(08)	
	2lags	4lags
N_I	BG(07)=BG(08)	BG(07)=BG(08)
N_z	BG(07)=BG(08)	BG(07)=BG(08)

Table 10: ...

H0:	BG(07)				RW(07)			
	2lags(short)	4lags(short)	2lags	4lags	2lags(short)	4lags(short)	2lags	
C	BG(07)	RW(07)*	BG(07)	RW(07)***	RW(07)	BG(07)*	RW(07)	R
C_{el}	BG(07)	BG(07)	BG(07)	n/a	RW(07)	RW(07)	RW(07)	$n/$
GC_1	BG(07)	RW(07)*	BG(07)	BG(07)	RW(07)	BG(07)*	RW(07)	B
GC_2	BG(07)	RW(07)*	BG(07)	RW(07)*	RW(07)	RW(07)	BG(07)*	B
$SCEL$	RW(07)*	BG(07)	BG(07)	n/a	RW(07)	RW(07)	RW(07)	
$LCEL$	BG(07)	BG(07)	BG(07)	n/a	RW(07)	RW(07)	RW(07)	$n/$
E	BG(07)	BG(07)	BG(07)	RW(07)***	RW(07)	BG(07)***	RW(07)	B
$LMEL$	BG(07)	RW(07)***	BG(07)	n/a	RW(07)	BG(07)***	BG(07)***	
JEL	BG(07)	BG(07)	BG(07)	n/a	RW(07)	BG(07)***	RW(07)	

H0:	BG(07)=RW(07)			
	2lags(short)	4lags(short)	2lags	4lags
N_I	BG(07)=RW(07)	BG(07)=RW(07)	BG(07)=RW(07)	BG(07)=R
N_z	BG(07)=RW(07)	BG(07)=RW(07)	BG(07)=RW(07)	BG(07)=R

Table 11: ...

H0:	BG(08)				RW(07)		
	2lags(short)	4lags(short)	2lags	4lags	2lags(short)	4lags(short)	2lags
C	BG(08)	RW(07)***	BG(08)	RW(07)**	RW(07)	BG(08)***	RW(07)
C_{el}	BG(08)	RW(07)***	BG(08)	n/a	RW(07)	BG(08)***	RW(07)
GC_1	BG(08)	RW(07)***	BG(08)	RW(07)**	RW(07)	BG(08)***	RW(07)
GC_2	BG(08)	RW(07)**	BG(08)	RW(07)*	RW(07)	RW(07)	BG(08)***
$SCEL$	BG(08)	BG(08)	BG(08)	n/a	RW(07)	RW(07)	RW(07)
$LCEL$	BG(08)	BG(08)	BG(08)	n/a	RW(07)	BG(08)*	RW(07)
E	BG(08)	BG(08)	BG(08)	RW(07)***	RW(07)	RW(07)	RW(07)
$LMEL$	RW(07)***	RW(07)***	RW(07)***	n/a	RW(07)	BG(08)***	BG(08)***
JEL	BG(08)	RW(07)*	BG(08)	n/a	RW(07)	BG(08)***	RW(07)

H0:	BG(08)=RW(07)			
	2lags(short)	4lags(short)	2lags	4la
N_I	BG(08)=RW(07)	BG(08)=RW(07)	BG(08)=RW(07)	BG(08)=
N_z	BG(08)=RW(07)	BG(08)=RW(07)	BG(08)=RW(07)	BG(08)=

Table 12: ...

H0:	GG(99)		NN(05)c35	
	2lags	4lags	2lags	4lags
C	NN(05)c35*	GG(99)	NN(05)c35	GG(99)**
C_{el}	GG(99)	GG(99)	GG(99)*	GG(99)**
GC_1	GG(99)	NN(05)c35**	NN(05)c35	NN(05)c35
GC_2	GG(99)	GG(99)	NN(05)c35	NN(05)c35
$SCEL$	GG(99)	GG(99)	NN(05)c35	NN(05)c35
$LCEL$	GG(99)	NN(05)c35*	NN(05)c35	GG(99)***
E	GG(99)	GG(99)	NN(05)c35	NN(05)c35
$LMEL$	NN(05)c35***	NN(05)c35***	GG(99)***	GG(99)***
JEL	GG(99)	NN(05)c35***	NN(05)c35	GG(99)***

H0:	GG(99)=NN(05)c35	
	2lags	4lags
N_I	GG(99)=NN(05)c35	GG(99)=NN(05)c35
N_z	GG(99)=NN(05)c35	GG(99)=NN(05)c35

Table 13: ...

H0:	GG(99)		NN(05)cap	
	2lags	4lags	2lags	4lags
C	NN(05)c35**	GG(99)	GG(99)*	GG(99)***
C_{el}	NN(05)c35**	GG(99)	GG(99)*	NN(05)cap
GC_1	NN(05)c35*	NN(05)c35***	GG(99)**	NN(05)cap
GC_2	GG(99)	GG(99)	NN(05)cap	NN(05)cap
$SCEL$	GG(99)	GG(99)	NN(05)cap	NN(05)cap
$LCEL$	GG(99)	NN(05)c35***	NN(05)cap	GG(99)***
E	GG(99)	GG(99)	NN(05)cap	NN(05)cap
$LMEL$	NN(05)c35***	NN(05)c35***	GG(99)***	GG(99)***
JEL	GG(99)	NN(05)c35***	NN(05)cap	GG(99)***

H0:	GG(99)=NN(05)cap	
	2lags	4lags
N_I	GG(99)=NN(05)cap	GG(99)=NN(05)cap
N_z	GG(99)=NN(05)cap	GG(99)=NN(05)cap

Table 14: ...

H0:	BG(07)		GG(99)	
	2lags	4lags	2lags	4lags
C	BG(07)	GG(99)**	GG(99)	BG(07)**
C_{el}	BG(07)	BG(07)	GG(99)	GG(99)
GC_1	BG(07)	GG(99)**	GG(99)	BG(07)**
GC_2	BG(07)	GG(99)*	GG(99)	GG(99)
$SCEL$	BG(07)	BG(07)	GG(99)	GG(99)
$LCEL$	BG(07)	BG(07)	GG(99)	GG(99)
E	BG(07)	BG(07)	GG(99)	BG(07)**
$LMEL$	BG(07)	GG(99)***	BG(07)***	BG(07)***
JEL	BG(07)		GG(99)	BG(07)***

H0:	BG(07)=GG(99)	
	2lags	4lags
N_I	BG(07)=GG(99)	BG(07)=GG(99)
N_z	BG(07)=GG(99)	BG(07)=GG(99)

Table 15: ...

GG		β_1	β_2	β_3	J
GMM	Z_2^{GG}	0.004 (0.022)	0.746 (0.108)	0.256 (0.101)	0.556
	Z_4^{GG}	0.001 (0.013)	0.494 (0.056)	0.501 (0.053)	0.741
CUE	Z_2^{GG}	0.012 (0.028)	0.873 (0.072)	0.124 (0.070)	0.913
	Z_4^{GG}	0.042 (0.014)	0.569 (0.038)	0.419 (0.038)	0.974
EL	Z_2^{GG}	-0.008 (0.009)	0.923 (0.032)	0.089 (0.030)	
	Z_4^{GG}	n/a	n/a	n/a	
ET	Z_2^{GG}	-0.010 (0.013)	0.927 (0.046)	0.085 (0.041)	
	Z_4^{GG}	n/a	n/a	n/a	

Table 16: ...

NNc35		β_1	β_2	β_3	J
GMM	Z_2^{GG}	-0.039 (0.155)	0.836 (0.128)	0.168 (0.115)	0.757
	Z_4^{GG}	-0.116 (0.071)	0.497 (0.056)	0.489 (0.051)	0.640
CUE	Z_2^{GG}	0.195 (0.204)	1.073 (0.148)	-0.059 (0.139)	0.880
	Z_4^{GG}	0.245 (0.074)	0.489 (0.047)	0.535 (0.045)	0.984
EL	Z_2^{GG}	0.131 (0.049)	0.880 (0.047)	0.142 (0.043)	
	Z_4^{GG}	n/a	n/a	n/a	
ET	Z_2^{GG}	0.145 (0.070)	0.939 (0.072)	0.086 (0.066)	
	Z_4^{GG}	n/a	n/a	n/a	

Table 17: ...

NNcap		β_1	β_2	β_3	J
GMM	Z_2^{GG}	-0.003 (0.012)	0.635 (0.080)	0.358 (0.074)	0.434
	Z_4^{GG}	-0.004 (0.007)	0.488 (0.049)	0.503 (0.048)	0.736
CUE	Z_2^{GG}	0.007 (0.009)	0.638 (0.060)	0.374 (0.056)	0.661
	Z_4^{GG}	0.010 (0.006)	0.495 (0.038)	0.507 (0.037)	0.985
EL	Z_2^{GG}	0.003 (0.003)	0.746 (0.033)	0.251 (0.030)	
	Z_4^{GG}	n/a	n/a	n/a	
ET	Z_2^{GG}	0.002 (0.006)	0.751 (0.049)	0.240 (0.045)	
	Z_4^{GG}	n/a	n/a	n/a	

Table 18: ...

BG(2007)		β_1	β_2	β_3	β_4	Jpv
GMM	$Z_2^{BG(07)}$	0.681 (0.272)	0.258 (0.171)	0.029 (0.067)	0.105 (0.053)	0.828
	$Z_4^{BG(07)}$	0.229 (0.166)	0.633 (0.108)	0.056 (0.042)	0.162 (0.032)	0.893
CUE	$Z_2^{BG(07)}$	0.596 (0.258)	0.323 (0.162)	0.031 (0.061)	0.101 (0.051)	0.615
	$Z_4^{BG(07)}$	0.761 (0.598)	0.200 (0.288)	−0.001 (0.162)	−0.581 (0.160)	0.327
EL	$Z_2^{BG(07)}$	0.635 (0.107)	0.314 (0.067)	0.020 (0.020)	0.117 (0.013)	
	$Z_4^{BG(07)}$	0.067 (0.085)	0.599 (0.056)	0.123 (0.024)	0.221 (0.015)	
ET	$Z_2^{BG(07)}$	0.677 (0.214)	0.297 (0.138)	0.010 (0.036)	0.122 (0.027)	
	$Z_4^{BG(07)}$	0.035 (0.129)	0.610 (0.086)	0.131 (0.040)	0.213 (0.026)	

Table 19: ...

BG(2008)		β_1	β_2	β_3	β_4	β_5	Jpv
GMM	$Z_2^{BG(08)}$	0.974 (0.022)	−3.304 (3.115)	1.429 (1.552)	2.003 (1.665)	−6.222 (2.437)	0.803
	$Z_4^{BG(08)}$	0.893 (0.045)	−3.814 (2.028)	1.654 (0.950)	2.334 (1.134)	−18.798 (5.338)	0.096
CUE	$Z_2^{BG(08)}$	0.977 (0.023)	−3.324 (2.553)	1.445 (1.322)	2.009 (1.317)	−5.770 (2.497)	0.808
	$Z_4^{BG(08)}$	0.985 (0.027)	−7.433 (1.770)	3.264 (0.851)	4.479 (1.016)	−5.133 (2.800)	0.498
EL	$Z_2^{BG(08)}$	0.974 (0.007)	−2.591 (0.962)	1.178 (0.495)	1.481 (0.506)	−5.360 (1.124)	
	$Z_4^{BG(08)}$	0.969 (0.009)	−7.877 (0.776)	3.190 (0.352)	5.054 (0.470)	−7.173 (1.236)	
ET	$Z_2^{BG(08)}$	0.974 (0.007)	−2.624 (1.690)	1.192 (0.928)	1.502 (0.794)	−5.355 (1.106)	
	$Z_4^{BG(08)}$	0.870 (0.110)	−33.736 (7.971)	14.085 (3.512)	20.832 (4.742)	−27.505 (10.301)	

Table 20: ...

RW(2007)		β_1	β_2	β_3	β_4	β_5	β_6	β_7	J
GMM	$Z^{RW}_{2,short}$	0.848 (0.159)	0.052 (0.054)	−7.277 (5.515)	0.004 (0.054)	−0.006 (0.037)	0.005 (0.064)	0.099 (0.149)	0.312
	$Z^{RW}_{4,short}$	0.652 (0.089)	0.049 (0.039)	−6.219 (3.215)	0.042 (0.020)	−0.024 (0.028)	−0.041 (0.024)	0.294 (0.084)	0.313
	Z^{RW}_{2}	0.822 (0.106)	0.041 (0.033)	−7.309 (3.757)	0.005 (0.021)	0.009 (0.031)	0.003 (0.025)	0.111 (0.100)	0.721
	Z^{RW}_{4}	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CUE	$Z^{RW}_{2,short}$	1.076 (0.165)	−0.021 (0.059)	−6.145 (5.245)	−0.098 (0.069)	0.047 (0.042)	0.122 (0.081)	−0.104 (0.148)	0.460
	$Z^{RW}_{4,short}$	0.748 (0.056)	−0.058 (0.023)	0.404 (2.948)	−0.061 (0.018)	0.048 (0.022)	0.070 (0.020)	0.289 (0.056)	0.829
	Z^{RW}_{2}	1.028 (0.105)	−0.017 (0.037)	−3.636 (4.153)	−0.033 (0.026)	0.031 (0.030)	0.049 (0.031)	−0.058 (0.093)	0.886
	Z^{RW}_{4}	0.593 (0.032)	−0.025 (0.015)	−0.008 (1.535)	−0.038 (0.011)	0.021 (0.013)	0.041 (0.013)	0.429 (0.030)	0.999
EL	$Z^{RW}_{2,short}$	0.865 (0.065)	0.049 (0.021)	−7.180 (1.926)	−0.004 (0.019)	−0.002 (0.012)	0.008 (0.023)	0.081 (0.057)	
	$Z^{RW}_{4,short}$	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Z^{RW}_{2}	0.598 (0.028)	0.064 (0.009)	−9.487 (1.382)	0.022 (0.004)	−0.043 (0.006)	−0.025 (0.006)	0.296 (0.027)	
	Z^{RW}_{4}	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
ET	$Z^{RW}_{2,short}$	0.875 (0.120)	0.036 (0.036)	−6.309 (3.149)	−0.007 (0.037)	−0.002 (0.020)	0.012 (0.045)	0.074 (0.113)	
	$Z^{RW}_{4,short}$	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	Z^{RW}_{2}	1.226 (0.097)	−0.032 (0.021)	−4.124 (2.104)	−0.037 (0.018)	0.010 (0.012)	0.057 (0.023)	−0.258 (0.093)	
	Z^{RW}_{4}	n/a	n/a	n/a	n/a	n/a	n/a	n/a	

Table 21: ...

H0:	BG(07)		BG(08)	
	2lags	4lags	2lags	4lags
C	BG(07)	BG(07)	BG(08)	BG(07)*
C_{el}	BG(07)	BG(07)	BG(07)***	BG(07)***
GC_1	BG(07)	BG(08)*	BG(08)	BG(08)
GC_2	BG(07)	BG(07)	BG(08)	BG(08)
$SCEL$	BG(08)***	BG(07)	BG(07)***	BG(08)
$LCEL$	BG(07)	BG(07)	BG(08)	BG(08)
E	BG(07)	BG(07)	BG(08)	BG(08)
$LMEL$	BG(07)	BG(08)***	BG(08)	BG(07)***
JEL	BG(07)	BG(07)	BG(08)	BG(08)

H0:	BG(07)=BG(08)	
	2lags	4lags
N_I	BG(07)=BG(08)	BG(07)=BG(08)
N_z	BG(07)=BG(08)	BG(07)=BG(08)

Table 22: ...

H0:	BG(07)				RW(07)			
	2lags(short)	4lags(short)	2lags	4lags	2lags(short)	4lags(short)	2lags	4lags
C	BG(07)	RW(07)*	BG(07)	n/a	RW(07)	RW(07)	RW(07)	n/a
C_{el}	BG(07)	n/a	BG(07)	n/a	RW(07)	n/a	RW(07)	n/a
GC_1	BG(07)	BG(07)	BG(07)	n/a	RW(07)	RW(07)	RW(07)	n/a
GC_2	BG(07)	BG(07)	BG(07)	n/a	BG(07)*	BG(07)*	RW(07)	n/a
$SCEL$	BG(07)	n/a	BG(07)	n/a	RW(07)	n/a	RW(07)	n/a
$LCEL$	BG(07)	n/a	BG(07)	n/a	RW(07)	n/a	RW(07)	n/a
E	BG(07)	BG(07)	BG(07)	n/a	RW(07)	RW(07)	BG(07)***	n/a
$LMEL$	BG(07)	n/a	BG(07)	n/a	BG(07)***	n/a	BG(07)***	n/a
JEL	BG(07)	n/a	BG(07)	n/a	RW(07)	n/a	BG(07)*	n/a

H0:	BG(07)=RW(07)			
	2lags(short)	4lags(short)	2lags	4lags
N_I	BG(07)=RW(07)	BG(07)=RW(07)	BG(07)=RW(07)	n/a
N_z	BG(07)=RW(07)	BG(07)=RW(07)	BG(07)=RW(07)	n/a

Table 23: ...

H0:	BG(08)				RW(07)			
	2lags(short)	4lags(short)	2lags	4lags	2lags(short)	4lags(short)	2lags	4lag
C	BG(08)	RW(07)**	BG(08)	n/a	RW(07)	BG(08)***	RW(07)	n/a
C_{el}	BG(08)	n/a	BG(08)	n/a	RW(07)	n/a	RW(07)	n/a
GC_1	BG(08)	RW(07)***	BG(08)	n/a	RW(07)	BG(08)**	RW(07)	n/a
GC_2	BG(08)	RW(07)***	BG(08)	n/a	BG(08)*	RW(07)	BG(08)*	n/a
$SCEL$	BG(08)	n/a	BG(08)	n/a	RW(07)	n/a	RW(07)	n/a
$LCEL$	BG(08)	n/a	BG(08)	n/a	RW(07)	n/a	RW(07)	n/a
E	BG(08)	BG(08)	BG(08)	n/a	RW(07)	BG(08)***	BG(08)***	n/a
$LMEL$	RW(07)***	n/a	RW(07)***	n/a	BG(08)***	n/a	BG(08)***	n/a
JEL	BG(08)	n/a	BG(08)	n/a	RW(07)	n/a	BG(08)**	n/a

H0:	BG(08)=RW(07)			
	2lags(short)	4lags(short)	2lags	4lags
N_I	BG(08)=RW(07)	BG(08)=RW(07)	BG(08)=RW(07)	n/a
N_z	BG(08)=RW(07)	BG(08)=RW(07)	BG(08)=RW(07)	n/a

Table 24: ...

H0:	GG(99)		NN(05)c35	
	2lags	4lags	2lags	4lags
C	NN(05)c35*	GG(99)	NN(05)c35	NN(05)c35
C_{el}	NN(05)c35***	n/a	GG(99)**	n/a
GC_1	GG(99)	GG(99)	GG(99)*	NN(05)c35
GC_2	GG(99)	GG(99)	NN(05)c35	NN(05)c35
$SCEL$	GG(99)	n/a	NN(05)c35	n/a
$LCEL$	GG(99)	n/a	NN(05)c35	n/a
E	GG(99)	GG(99)	NN(05)c35	NN(05)c35
$LMEL$	NN(05)c35***	n/a	GG(99)***	n/a
JEL	GG(99)	n/a	NN(05)c35	n/a

H0:	GG(99)=NN(05)c35	
	2lags	4lags
N_I	GG(99)=NN(05)c35	GG(99)=NN(05)c35
N_z	GG(99)=NN(05)c35	GG(99)=NN(05)c35