

Codependence in Cointegrated Autoregressive Models

Additional Tables

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Appendix E: Additional tables

Table V: Cointegration Test (Johansen, 1988)

Eigenvalue Stat. $-T \ln(1 - \lambda_j)$	Trace Stat. $-T \sum_{j < i} \ln(1 - \lambda_i)$	5 Percent Critical Value	1 Percent Critical Value	H ₀ :
0.15	48.44 *	47.21	54.46	$r = 0$
0.10	22.70	29.68	35.65	$r \leq 1$
0.04	6.30	15.41	20.04	$r \leq 2$
0.00	0.31	3.76	6.65	$r \leq 3$

The test assumes a linear time trend and a constant in the cointegrating relationship.

*(**) denotes rejection of the null hypothesis at the 5 percent (1 percent) level.

Critical values are taken from Osterwald-Lenum (1992).

Table VI: VARMA(m,j) Criterion Table (Tiao and Tsay, 1989)

m	j					
	0	1	2	3	4	5
0	1.000	1.000	1.000	0.952	0.567	0.163
1	0.065	0.000	0.000	0.000	0.000	0.000
2	0.000	0.000	0.000	0.000	0.000	0.000
3	0.000	0.000	0.000	0.000	0.000	0.000
4	0.000	0.000	0.000	0.000	0.000	0.000
5	0.000	0.000	0.000	0.000	0.000	0.000

This table reports p -values for the order determination procedure proposed by Tiao and Tsay (1989). For $m = 0$ and/or $j = 0$ the test is based on their equation (36) on p. 173 and the null hypothesis is that the AR order $\leq m$ and the MA order $\leq j$. For $m > 0$ and $j > 0$ the test is based on their equation (40) on p. 175 and the null hypothesis is that the model is of order (m, j) rather than $(m - 1, j - 1)$. The results of this table suggest that at the 5% level the most parsimonious representation supported by the data is either a VARMA(2,0) or a VARMA(1,1).