VAR tables for post-war quarterly data

	OLS		MLE		UMLE		Rest MLE		Rest UMLE	
	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate
Coefficients										
Constant	0.72	-0.06	0.72	-0.06	0.72	-0.06	0.72	-0.06	0.72	-0.06
	(0.117)	(0.028)	(0.119)	(0.028)	(0.116)	(0.027)	(0.134)	(0.026)	(0.125)	(0.022)
LR Mean	1.57	1.19	1.57	1.19	1.54	1.15	1.84	1.87	1.84	1.87
	(0.197)	(0.437)	(0.2)	(0.444)	(0.173)	(0.37)	(0.563)	(1.412)	(0.338)	(0.85)
Growth (-1)	0.43	0.09	0.43	0.09	0.43	0.09	0.43	0.09	0.43	0.09
	(0.062)	(0.015)	(0.063)	(0.015)	(0.064)	(0.015)	(0.07)	(0.014)	(0.07)	(0.014)
Int. rate (-1)	0.15	0.94	0.15	0.94	0.15	0.93	0.18	0.95	0.18	0.95
	(0.069)	(0.016)	(0.07)	(0.016)	(0.069)	(0.016)	(0.085)	(0.027)	(0.07)	(0.02)
Innov. covar.										
Growth	0.7		0.69		0.7		0.69		0.69	
			(0.066)		(0.067)		(0.109)		(0.107)	
Int. rate	0.05	0.04	0.05	0.04	0.05	0.04	0.05	0.04	0.05	0.04
			(0.011)	(0.004)	(0.012)	(0.004)	(0.022)	(0.01)	(0.022)	(0.01)
Log likelihood	220.4		220.4		223.5		221.2		224.9	

Table 1: 1-lag test VAR for USA. In restricted MLEs, mean difference is 0.0275

	OLS		MLE		UMLE		Rest MLE		Rest UMLE	
	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate
Coefficients										
Constant	0.39	-0.07	0.39	-0.07	0.37	-0.07	0.37	-0.08	0.37	-0.08
	(0.138)	(0.033)	(0.143)	(0.034)	(0.139)	(0.033)	(0.149)	(0.033)	(0.135)	(0.032)
LR Mean	1.62	1.27	1.62	1.27	1.54	1.14	1.95	2	1.95	2
	(0.219)	(0.376)	(0.227)	(0.39)	(0.213)	(0.36)	(0.63)	(1.392)	(0.358)	(0.825)
Growth (-1)	0.33	0.07	0.33	0.07	0.33	0.07	0.33	0.08	0.33	0.08
	(0.068)	(0.016)	(0.071)	(0.017)	(0.07)	(0.017)	(0.078)	(0.024)	(0.078)	(0.024)
Int. rate (-1)	0.31	1.14	0.31	1.14	0.31	1.14	0.33	1.14	0.33	1.14
	(0.281)	(0.067)	(0.292)	(0.07)	(0.291)	(0.07)	(0.334)	(0.125)	(0.339)	(0.127)
Growth (-2)	0.23	0.04	0.23	0.04	0.23	0.04	0.24	0.04	0.24	0.04
	(0.069)	(0.017)	(0.072)	(0.017)	(0.072)	(0.017)	(0.085)	(0.027)	(0.083)	(0.027)
Int. rate (-2)	-1.6	-0.49	-1.6	-0.49	-1.6	-0.49	-1.6	-0.49	-1.6	-0.49
	(0.413)	(0.099)	(0.429)	(0.102)	(0.428)	(0.102)	(0.409)	(0.189)	(0.407)	(0.189)
Growth (-3)	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0
	(0.071)	(0.017)	(0.074)	(0.018)	(0.073)	(0.018)	(0.078)	(0.019)	(0.08)	(0.019)
Int. rate (-3)	1.47	0.49	1.47	0.49	1.46	0.49	1.47	0.49	1.47	0.49
	(0.424)	(0.101)	(0.44)	(0.105)	(0.439)	(0.105)	(0.403)	(0.24)	(0.4)	(0.24)
Growth (-4)	0.14	-0.01	0.14	-0.01	0.14	-0.01	0.14	-0.01	0.14	-0.01
	(0.067)	(0.016)	(0.069)	(0.017)	(0.069)	(0.017)	(0.083)	(0.022)	(0.083)	(0.022)
Int. rate (-4)	-0.17	-0.22	-0.17	-0.22	-0.17	-0.22	-0.15	-0.21	-0.15	-0.21
	(0.28)	(0.067)	(0.291)	(0.069)	(0.29)	(0.069)	(0.267)	(0.119)	(0.266)	(0.12)
Innov. covar.										
Growth	0.58		0.58		0.58		0.58		0.58	
			(0.057)		(0.057)		(0.1)		(0.099)	
Int. rate	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
			(0.01)	(0.003)	(0.01)	(0.003)	(0.021)	(0.01)	(0.02)	(0.01)
Log likelihood	187		187		189		188.2		191	

Table 2: 4-lag test VAR for USA. In restricted MLEs, mean difference is 0.0475

	OLS		MLE		UMLE		Rest MLE		Rest UMLE	
	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate
Coefficients										
Constant	0.55	0.01	0.55	0.01	0.57	0.02	0.54	0	0.54	0
	(0.165)	(0.031)	(0.168)	(0.032)	(0.164)	(0.029)	(0.21)	(0.025)	(0.197)	(0.015)
LR Mean	1.67	1.32	1.67	1.32	1.65	1.28	2.49	2.51	2.49	2.51
	(0.44)	(0.573)	(0.447)	(0.583)	(0.356)	(0.458)	(2.729)	(3.956)	(0.873)	(1.306)
Growth (-1)	0.32	0.03	0.32	0.03	0.32	0.03	0.32	0.03	0.32	0.03
	(0.065)	(0.012)	(0.066)	(0.013)	(0.066)	(0.013)	(0.183)	(0.017)	(0.185)	(0.018)
Int. rate (-1)	0.44	0.95	0.44	0.95	0.43	0.94	0.46	0.97	0.46	0.97
	(0.102)	(0.019)	(0.103)	(0.02)	(0.103)	(0.019)	(0.147)	(0.03)	(0.158)	(0.015)
Innov. covar.										
Growth	1.56		1.55		1.55		1.55		1.55	
			(0.151)		(0.151)		(0.603)		(0.6)	
Int. rate	0.05	0.06	0.05	0.06	0.05	0.06	0.05	0.06	0.05	0.06
			(0.021)	(0.005)	(0.021)	(0.005)	(0.029)	(0.018)	(0.03)	(0.017)
Log likelihood	351.7		351.7		354.5		352.8		356.5	

Table 3: 1-lag test VAR for FRA. In restricted MLEs, mean difference is 0.025

	OLS		MLE		UMLE		Rest MLE		Rest UMLE	
	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate
Coefficients										
Constant	0.31	0	0.31	0	0.33	0	0.31	0.01	0.31	0.01
	(0.156)	(0.033)	(0.162)	(0.035)	(0.154)	(0.033)	(0.162)	(0.025)	(0.15)	(0.023)
LR Mean	1.69	1.36	1.69	1.36	1.67	1.3	1.87	1.95	1.87	1.95
	(0.431)	(0.469)	(0.448)	(0.488)	(0.39)	(0.416)	(0.576)	(1.083)	(0.427)	(0.773)
Growth (-1)	0.1	0.02	0.1	0.02	0.09	0.02	0.1	0.02	0.1	0.02
	(0.068)	(0.015)	(0.071)	(0.015)	(0.07)	(0.015)	(0.237)	(0.02)	(0.236)	(0.02)
Int. rate (-1)	0.72	0.97	0.72	0.97	0.72	0.97	0.72	0.99	0.72	0.99
	(0.319)	(0.068)	(0.332)	(0.071)	(0.33)	(0.071)	(0.345)	(0.123)	(0.344)	(0.12)
Growth (-2)	0.36	0.03	0.36	0.03	0.36	0.03	0.36	0.03	0.36	0.03
	(0.068)	(0.014)	(0.07)	(0.015)	(0.07)	(0.015)	(0.127)	(0.017)	(0.126)	(0.016)
Int. rate (-2)	-0.78	-0.01	-0.78	-0.01	-0.78	-0.01	-0.78	-0.01	-0.78	-0.01
	(0.444)	(0.095)	(0.461)	(0.099)	(0.46)	(0.099)	(0.481)	(0.165)	(0.481)	(0.165)
Growth (-3)	0.17	0.01	0.17	0.01	0.17	0.01	0.17	0.01	0.17	0.01
	(0.068)	(0.015)	(0.071)	(0.015)	(0.071)	(0.015)	(0.079)	(0.013)	(0.079)	(0.013)
Int. rate (-3)	0.15	-0.09	0.15	-0.09	0.15	-0.09	0.15	-0.09	0.15	-0.09
	(0.446)	(0.096)	(0.464)	(0.099)	(0.463)	(0.099)	(0.447)	(0.14)	(0.447)	(0.139)
Growth (-4)	0.13	-0.01	0.13	-0.01	0.13	-0.01	0.13	-0.02	0.13	-0.02
	(0.069)	(0.015)	(0.072)	(0.015)	(0.071)	(0.015)	(0.092)	(0.01)	(0.092)	(0.01)
Int. rate (-4)	-0.02	0.06	-0.02	0.06	-0.02	0.06	-0.02	0.06	-0.02	0.06
	(0.313)	(0.067)	(0.326)	(0.07)	(0.324)	(0.07)	(0.265)	(0.09)	(0.264)	(0.089)
Innov. covar.										
Growth	1.21		1.2		1.2		1.2		1.2	
			(0.12)		(0.12)		(0.44)		(0.441)	
Int. rate	0.03	0.06	0.03	0.06	0.03	0.05	0.03	0.06	0.03	0.06
			(0.018)	(0.006)	(0.018)	(0.006)	(0.023)	(0.018)	(0.023)	(0.018)
Log likelihood	318.3		318.3		320.8		319.8		322.8	

Table 4: 4-lag test VAR for FRA. In restricted MLEs, mean difference is 0.0852

	OLS		MLE		UMLE		Rest MLE		Rest UMLE	
	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate
Coefficients										
Constant	0.51	0.02	0.51	0.02	0.51	0.02	0.48	0	0.48	0
	(0.189)	(0.03)	(0.192)	(0.031)	(0.189)	(0.027)	(0.163)	(0.024)	(0.154)	(0.014)
LR Mean	1.78	1.48	1.78	1.48	1.76	1.46	3.1	3.2	3.1	3.2
	(0.577)	(0.714)	(0.586)	(0.725)	(0.428)	(0.518)	(7.473)	(9.717)	(0.97)	(1.247)
Growth (-1)	0.29	0.02	0.29	0.02	0.28	0.02	0.28	0.02	0.28	0.02
	(0.066)	(0.011)	(0.067)	(0.011)	(0.067)	(0.011)	(0.098)	(0.014)	(0.1)	(0.016)
Int. rate (-1)	0.52	0.96	0.52	0.96	0.51	0.96	0.54	0.98	0.54	0.98
	(0.108)	(0.017)	(0.11)	(0.018)	(0.109)	(0.016)	(0.123)	(0.017)	(0.142)	(0.011)
Innov. covar.										
Growth	1.8		1.79		1.78		1.79		1.79	
			(0.172)		(0.171)		(0.248)		(0.249)	
Int. rate	0.06	0.05	0.06	0.05	0.06	0.05	0.06	0.05	0.06	0.05
			(0.02)	(0.004)	(0.02)	(0.004)	(0.024)	(0.008)	(0.024)	(0.008)
Log likelihood	349.7		349.7		352		350.6		354.1	

Table 5: 1-lag test VAR for GBR. In restricted MLEs, mean difference is 0.1

	OLS		MLE		UMLE		Rest MLE		Rest UMLE	
	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate
Coefficients										
Constant	0.29	0.01	0.29	0.01	0.32	0.01	0.01	-0.01	0.01	-0.01
	(0.181)	(0.031)	(0.188)	(0.032)	(0.178)	(0.031)	(0.168)	(0.024)	(0.063)	(0.016)
LR Mean	1.82	1.55	1.82	1.55	1.8	1.51	-3.85	-3.77	-3.85	-3.77
	(0.536)	(0.542)	(0.557)	(0.563)	(0.458)	(0.454)	(59.946)	(56.496)	(1.204)	(1.181)
Growth (-1)	0.12	0	0.12	0	0.12	0	0.13	0	0.13	0
	(0.068)	(0.012)	(0.07)	(0.012)	(0.07)	(0.012)	(0.101)	(0.017)	(0.094)	(0.017)
Int. rate (-1)	0.9	1.12	0.9	1.12	0.89	1.11	0.94	1.12	0.94	1.12
	(0.399)	(0.068)	(0.414)	(0.07)	(0.412)	(0.07)	(0.424)	(0.114)	(0.419)	(0.112)
Growth (-2)	0.25	0.03	0.25	0.03	0.25	0.03	0.26	0.03	0.26	0.03
	(0.065)	(0.011)	(0.068)	(0.011)	(0.067)	(0.011)	(0.085)	(0.014)	(0.082)	(0.013)
Int. rate (-2)	-1.45	-0.16	-1.45	-0.16	-1.44	-0.16	-1.46	-0.16	-1.46	-0.16
	(0.593)	(0.101)	(0.616)	(0.105)	(0.614)	(0.105)	(0.546)	(0.183)	(0.543)	(0.183)
Growth (-3)	0.3	0.03	0.3	0.03	0.29	0.03	0.3	0.03	0.3	0.03
	(0.066)	(0.011)	(0.069)	(0.012)	(0.068)	(0.012)	(0.082)	(0.014)	(0.087)	(0.014)
Int. rate (-3)	0.95	-0.09	0.95	-0.09	0.94	-0.09	0.94	-0.09	0.94	-0.09
	(0.598)	(0.102)	(0.621)	(0.106)	(0.619)	(0.106)	(0.696)	(0.137)	(0.699)	(0.137)
Growth (-4)	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0
	(0.069)	(0.012)	(0.072)	(0.012)	(0.071)	(0.012)	(0.098)	(0.015)	(0.095)	(0.015)
Int. rate (-4)	-0.24	0.07	-0.24	0.07	-0.24	0.07	-0.13	0.07	-0.13	0.07
	(0.391)	(0.067)	(0.406)	(0.069)	(0.404)	(0.069)	(0.521)	(0.085)	(0.525)	(0.085)
Innov. covar.										
Growth	1.46		1.46		1.45		1.47		1.47	
			(0.144)		(0.143)		(0.212)		(0.205)	
Int. rate	0.03	0.04	0.03	0.04	0.03	0.04	0.03	0.04	0.03	0.04
			(0.018)	(0.004)	(0.017)	(0.004)	(0.019)	(0.008)	(0.018)	(0.008)
Log likelihood	315.8		315.7		318.1		317.2		321.8	

Table 6: 4-lag test VAR for GBR. In restricted MLEs, mean difference is 0.086

	OLS		MLE		UMLE		Rest MLE		Rest UMLE	
	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate
Coefficients										
Constant	0.59	0	0.59	0	0.57	0	0.54	-0.02	0.54	-0.02
	(0.158)	(0.026)	(0.161)	(0.027)	(0.162)	(0.025)	(0.147)	(0.022)	(0.136)	(0.014)
LR Mean	1.02	0.82	1.02	0.82	1.19	1.11	1.54	1.91	1.54	1.91
	(0.209)	(0.375)	(0.213)	(0.383)	(0.222)	(0.373)	(1.508)	(3.263)	(0.35)	(0.779)
Growth (-1)	0.21	0.05	0.21	0.05	0.23	0.05	0.21	0.05	0.21	0.05
	(0.073)	(0.012)	(0.074)	(0.012)	(0.078)	(0.012)	(0.097)	(0.019)	(0.1)	(0.019)
Int. rate (-1)	0.27	0.94	0.27	0.94	0.31	0.94	0.35	0.97	0.35	0.97
	(0.12)	(0.02)	(0.123)	(0.02)	(0.124)	(0.019)	(0.098)	(0.021)	(0.098)	(0.009)
Innov. covar.										
Growth	1.13		1.12		1.18		1.13		1.13	
			(0.121)		(0.128)		(0.172)		(0.154)	
Int. rate	0.04	0.03	0.04	0.03	0.04	0.03	0.04	0.03	0.04	0.03
			(0.014)	(0.003)	(0.015)	(0.003)	(0.016)	(0.007)	(0.015)	(0.007)
Log likelihood	201.2		201.2		208.9		203.5		210.6	

Table 7: 1-lag test VAR for DEU. In restricted MLEs, mean difference is 0.375

	OLS		MLE		UMLE		Rest MLE		Rest UMLE	
	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate
Coefficients										
Constant	0.34	0.01	0.34	0.01	0.36	0.02	0.32	0.04	0.32	0.04
	(0.161)	(0.027)	(0.169)	(0.028)	(0.164)	(0.028)	(0.164)	(0.032)	(0.148)	(0.031)
LR Mean	1.02	0.98	1.02	0.98	1.12	1.09	0.9	1.17	0.9	1.17
	(0.225)	(0.251)	(0.236)	(0.264)	(0.226)	(0.246)	(0.279)	(0.286)	(0.248)	(0.262)
Growth (-1)	0.09	0.05	0.09	0.05	0.09	0.05	0.09	0.05	0.09	0.05
	(0.073)	(0.012)	(0.076)	(0.013)	(0.077)	(0.013)	(0.092)	(0.02)	(0.092)	(0.019)
Int. rate (-1)	0.26	1.03	0.26	1.03	0.27	1.03	0.23	1.06	0.23	1.06
	(0.457)	(0.077)	(0.479)	(0.08)	(0.483)	(0.08)	(0.49)	(0.13)	(0.487)	(0.13)
Growth (-2)	0.13	0.03	0.13	0.03	0.13	0.03	0.13	0.03	0.13	0.03
	(0.075)	(0.013)	(0.078)	(0.013)	(0.079)	(0.013)	(0.071)	(0.016)	(0.072)	(0.016)
Int. rate (-2)	-0.82	0.03	-0.82	0.03	-0.81	0.03	-0.81	0.03	-0.81	0.03
	(0.658)	(0.11)	(0.69)	(0.116)	(0.694)	(0.116)	(0.828)	(0.203)	(0.834)	(0.203)
Growth (-3)	0.16	0	0.16	0	0.16	0	0.16	-0.01	0.16	-0.01
	(0.075)	(0.013)	(0.078)	(0.013)	(0.079)	(0.013)	(0.088)	(0.014)	(0.088)	(0.014)
Int. rate (-3)	-0.29	-0.02	-0.29	-0.02	-0.29	-0.02	-0.28	-0.03	-0.28	-0.03
	(0.655)	(0.11)	(0.687)	(0.115)	(0.691)	(0.115)	(0.756)	(0.22)	(0.763)	(0.221)
Growth (-4)	0.34	-0.01	0.34	-0.01	0.34	-0.01	0.35	-0.02	0.35	-0.02
	(0.073)	(0.012)	(0.077)	(0.013)	(0.077)	(0.013)	(0.077)	(0.018)	(0.077)	(0.018)
Int. rate (-4)	0.79	-0.13	0.79	-0.13	0.78	-0.13	0.8	-0.14	0.8	-0.14
	(0.429)	(0.072)	(0.45)	(0.075)	(0.453)	(0.075)	(0.534)	(0.138)	(0.541)	(0.138)
Innov. covar.										
Growth	0.93		0.93		0.94		0.93		0.93	
			(0.104)		(0.105)		(0.153)		(0.15)	
Int. rate	0.04	0.03	0.04	0.03	0.04	0.03	0.04	0.03	0.04	0.03
			(0.013)	(0.003)	(0.013)	(0.003)	(0.013)	(0.006)	(0.013)	(0.006)
Log likelihood	165.5		165.5		168.5		167.4		170.6	

Table 8: 4-lag test VAR for DEU. In restricted MLEs, mean difference is 0.27

	OLS		MLE		UMLE		Rest MLE		Rest UMLE	
	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate
Coefficients										
Constant	0.57	-0.05	0.57	-0.05	0.58	-0.05	0.57	-0.05	0.57	-0.05
	(0.155)	(0.028)	(0.158)	(0.029)	(0.15)	(0.027)	(0.181)	(0.028)	(0.163)	(0.024)
LR Mean	1.76	1.39	1.76	1.39	1.73	1.28	2.02	2.09	2.02	2.09
	(0.259)	(0.526)	(0.263)	(0.535)	(0.23)	(0.448)	(0.441)	(1.212)	(0.272)	(0.711)
Growth (-1)	0.63	0.06	0.63	0.06	0.63	0.06	0.63	0.06	0.63	0.06
	(0.055)	(0.01)	(0.056)	(0.01)	(0.055)	(0.01)	(0.063)	(0.01)	(0.063)	(0.01)
Int. rate (-1)	0.06	0.95	0.06	0.95	0.05	0.95	0.08	0.96	0.08	0.96
	(0.08)	(0.015)	(0.082)	(0.015)	(0.079)	(0.014)	(0.077)	(0.023)	(0.068)	(0.019)
Innov. covar.										
Growth	1.04		1.03		1.03		1.04		1.04	
			(0.102)		(0.101)		(0.174)		(0.174)	
Int. rate	0.02	0.03	0.02	0.03	0.02	0.03	0.02	0.03	0.02	0.03
			(0.013)	(0.003)	(0.013)	(0.003)	(0.014)	(0.006)	(0.014)	(0.006)
Log likelihood	248.7		248.7		251.2		249.5		252.6	

Table 9: 1-lag test VAR for CAN. In restricted MLEs, mean difference is 0.0728

	OLS		MLE		UMLE		Rest MLE		Rest UMLE	
	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate
Coefficients										
Constant	0.4	-0.05	0.4	-0.05	0.42	-0.05	0.39	-0.05	0.39	-0.05
	(0.176)	(0.031)	(0.183)	(0.033)	(0.17)	(0.031)	(0.187)	(0.032)	(0.156)	(0.029)
LR Mean	1.72	1.35	1.72	1.35	1.7	1.28	2.05	2.1	2.05	2.1
	(0.33)	(0.555)	(0.343)	(0.577)	(0.289)	(0.471)	(0.545)	(1.217)	(0.312)	(0.678)
Growth (-1)	0.61	0.06	0.61	0.06	0.6	0.06	0.61	0.06	0.61	0.06
	(0.069)	(0.012)	(0.072)	(0.013)	(0.071)	(0.013)	(0.091)	(0.013)	(0.09)	(0.013)
Int. rate (-1)	0.2	1.14	0.2	1.14	0.19	1.14	0.22	1.15	0.22	1.15
	(0.387)	(0.069)	(0.403)	(0.072)	(0.401)	(0.072)	(0.327)	(0.119)	(0.329)	(0.118)
Growth (-2)	-0.02	0.01	-0.02	0.01	-0.03	0.01	-0.02	0.01	-0.02	0.01
	(0.083)	(0.015)	(0.086)	(0.015)	(0.086)	(0.015)	(0.098)	(0.014)	(0.098)	(0.014)
Int. rate (-2)	-0.74	-0.36	-0.74	-0.36	-0.74	-0.36	-0.74	-0.36	-0.74	-0.36
	(0.581)	(0.103)	(0.604)	(0.108)	(0.603)	(0.107)	(0.458)	(0.143)	(0.458)	(0.143)
Growth (-3)	0.09	-0.01	0.09	-0.01	0.08	-0.01	0.08	-0.01	0.08	-0.01
	(0.082)	(0.015)	(0.085)	(0.015)	(0.085)	(0.015)	(0.086)	(0.013)	(0.086)	(0.013)
Int. rate (-3)	0.11	0.21	0.11	0.21	0.11	0.21	0.11	0.21	0.11	0.21
	(0.582)	(0.104)	(0.605)	(0.108)	(0.603)	(0.108)	(0.498)	(0.136)	(0.498)	(0.136)
Growth (-4)	0.08	0.01	0.08	0.01	0.08	0.01	0.08	0.01	0.08	0.01
	(0.073)	(0.013)	(0.075)	(0.013)	(0.075)	(0.013)	(0.08)	(0.011)	(0.081)	(0.011)
Int. rate (-4)	0.45	-0.04	0.45	-0.04	0.45	-0.04	0.47	-0.04	0.47	-0.04
	(0.379)	(0.067)	(0.394)	(0.07)	(0.392)	(0.07)	(0.354)	(0.096)	(0.352)	(0.096)
Innov. covar.										
Growth	1.02		1.01		1.01		1.01		1.01	
			(0.102)		(0.102)		(0.186)		(0.186)	
Int. rate	0.02	0.03	0.02	0.03	0.02	0.03	0.02	0.03	0.02	0.03
			(0.013)	(0.003)	(0.013)	(0.003)	(0.014)	(0.006)	(0.014)	(0.006)
Log likelihood	237.2		237.2		239.7		238		241.1	

Table 10: 4-lag test VAR for CAN. In restricted MLEs, mean difference is 0.047

	USA		France		United Kingdom		Germany		Canada	
	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate
Coefficients										
Constant	0.72	-0.06	0.57	0.02	0.51	0.02	0.57	0	0.58	-0.05
	(0.116)	(0.027)	(0.164)	(0.029)	(0.189)	(0.027)	(0.162)	(0.025)	(0.15)	(0.027)
LR Mean	1.54	1.15	1.65	1.28	1.76	1.46	1.19	1.11	1.73	1.28
	(0.173)	(0.37)	(0.356)	(0.458)	(0.428)	(0.518)	(0.222)	(0.373)	(0.23)	(0.448)
Growth (-1)	0.43	0.09	0.32	0.03	0.28	0.02	0.23	0.05	0.63	0.06
	(0.064)	(0.015)	(0.066)	(0.013)	(0.067)	(0.011)	(0.078)	(0.012)	(0.055)	(0.01)
Int. rate (-1)	0.15	0.93	0.43	0.94	0.51	0.96	0.31	0.94	0.05	0.95
	(0.069)	(0.016)	(0.103)	(0.019)	(0.109)	(0.016)	(0.124)	(0.019)	(0.079)	(0.014)
Innov. covar.										
Growth	0.7		1.55		1.78		1.18		1.03	
	(0.067)		(0.151)		(0.171)		(0.128)		(0.101)	
Int. rate	0.05	0.04	0.05	0.06	0.06	0.05	0.04	0.03	0.02	0.03
	(0.012)	(0.004)	(0.021)	(0.005)	(0.02)	(0.004)	(0.015)	(0.003)	(0.013)	(0.003)
Log likelihood	223.5		354.5		352		208.9		251.2	

Table 11: 1-lag VAR for sample of countries. Quarterly data 1966Q1-2016Q4 (from 1970Q1 for Germany). Robust likelihood-based standard errors in parentheses.

	USA		France		United Kingdom		Germany			
	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate
Coefficients										
Constant	0.37	-0.07	0.33	0	0.32	0.01	0.36	0.02	0.42	-0.05
	(0.139)	(0.033)	(0.154)	(0.033)	(0.178)	(0.031)	(0.164)	(0.028)	(0.17)	(0.031)
LR Mean	1.54	1.14	1.67	1.3	1.8	1.51	1.12	1.09	1.7	1.28
	(0.213)	(0.36)	(0.39)	(0.416)	(0.458)	(0.454)	(0.226)	(0.246)	(0.289)	(0.471)
Growth (-1)	0.33	0.07	0.09	0.02	0.12	0	0.09	0.05	0.6	0.06
	(0.07)	(0.017)	(0.07)	(0.015)	(0.07)	(0.012)	(0.077)	(0.013)	(0.071)	(0.013)
Int. rate (-1)	0.31	1.14	0.72	0.97	0.89	1.11	0.27	1.03	0.19	1.14
	(0.291)	(0.07)	(0.33)	(0.071)	(0.412)	(0.07)	(0.483)	(0.08)	(0.401)	(0.072)
Growth (-2)	0.23	0.04	0.36	0.03	0.25	0.03	0.13	0.03	-0.03	0.01
	(0.072)	(0.017)	(0.07)	(0.015)	(0.067)	(0.011)	(0.079)	(0.013)	(0.086)	(0.015)
Int. rate (-2)	-1.6	-0.49	-0.78	-0.01	-1.44	-0.16	-0.81	0.03	-0.74	-0.36
	(0.428)	(0.102)	(0.46)	(0.099)	(0.614)	(0.105)	(0.694)	(0.116)	(0.603)	(0.107)
Growth (-3)	0.05	0	0.17	0.01	0.29	0.03	0.16	0	0.08	-0.01
	(0.073)	(0.018)	(0.071)	(0.015)	(0.068)	(0.012)	(0.079)	(0.013)	(0.085)	(0.015)
Int. rate (-3)	1.46	0.49	0.15	-0.09	0.94	-0.09	-0.29	-0.02	0.11	0.21
	(0.439)	(0.105)	(0.463)	(0.099)	(0.619)	(0.106)	(0.691)	(0.115)	(0.603)	(0.108)
Growth (-4)	0.14	-0.01	0.13	-0.01	0.03	0	0.34	-0.01	0.08	0.01
	(0.069)	(0.017)	(0.071)	(0.015)	(0.071)	(0.012)	(0.077)	(0.013)	(0.075)	(0.013)
Int. rate (-4)	-0.17	-0.22	-0.02	0.06	-0.24	0.07	0.78	-0.13	0.45	-0.04
	(0.29)	(0.069)	(0.324)	(0.07)	(0.404)	(0.069)	(0.453)	(0.075)	(0.392)	(0.07)
Innov. covar.										
Growth	0.58		1.2		1.45		0.94		1.01	
	(0.057)		(0.12)		(0.143)		(0.105)		(0.102)	
Int. rate	0.03	0.03	0.03	0.05	0.03	0.04	0.04	0.03	0.02	0.03
	(0.01)	(0.003)	(0.018)	(0.006)	(0.017)	(0.004)	(0.013)	(0.003)	(0.013)	(0.003)
Log likelihood	189		320.8		318.1		168.5		239.7	

Table 12: 4-lag VAR for sample of countries. Quarterly data 1966Q1-2016Q4 (from 1970Q1 for Germany). Robust likelihood-based standard errors in parentheses.

	USA		France		United Kingdom		Germany			
	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate	Growth	Int. rate
Coefficients										
Constant	0.37	-0.08	0.31	0.01	0.01	-0.01	0.32	0.04	0.39	-0.05
	(0.135)	(0.032)	(0.15)	(0.023)	(0.063)	(0.016)	(0.148)	(0.031)	(0.156)	(0.029)
LR Mean	1.95	2	1.87	1.95	-3.85	-3.77	0.9	1.17	2.05	2.1
	(0.358)	(0.825)	(0.427)	(0.773)	(1.204)	(1.181)	(0.248)	(0.262)	(0.312)	(0.678)
Growth (-1)	0.33	0.08	0.1	0.02	0.13	0	0.09	0.05	0.61	0.06
	(0.078)	(0.024)	(0.236)	(0.02)	(0.094)	(0.017)	(0.092)	(0.019)	(0.09)	(0.013)
Int. rate (-1)	0.33	1.14	0.72	0.99	0.94	1.12	0.23	1.06	0.22	1.15
	(0.339)	(0.127)	(0.344)	(0.12)	(0.419)	(0.112)	(0.487)	(0.13)	(0.329)	(0.118)
Growth (-2)	0.24	0.04	0.36	0.03	0.26	0.03	0.13	0.03	-0.02	0.01
	(0.083)	(0.027)	(0.126)	(0.016)	(0.082)	(0.013)	(0.072)	(0.016)	(0.098)	(0.014)
Int. rate (-2)	-1.6	-0.49	-0.78	-0.01	-1.46	-0.16	-0.81	0.03	-0.74	-0.36
	(0.407)	(0.189)	(0.481)	(0.165)	(0.543)	(0.183)	(0.834)	(0.203)	(0.458)	(0.143)
Growth (-3)	0.05	0	0.17	0.01	0.3	0.03	0.16	-0.01	0.08	-0.01
	(0.08)	(0.019)	(0.079)	(0.013)	(0.087)	(0.014)	(0.088)	(0.014)	(0.086)	(0.013)
Int. rate (-3)	1.47	0.49	0.15	-0.09	0.94	-0.09	-0.28	-0.03	0.11	0.21
	(0.4)	(0.24)	(0.447)	(0.139)	(0.699)	(0.137)	(0.763)	(0.221)	(0.498)	(0.136)
Growth (-4)	0.14	-0.01	0.13	-0.02	0.03	0	0.35	-0.02	0.08	0.01
	(0.083)	(0.022)	(0.092)	(0.01)	(0.095)	(0.015)	(0.077)	(0.018)	(0.081)	(0.011)
Int. rate (-4)	-0.15	-0.21	-0.02	0.06	-0.13	0.07	0.8	-0.14	0.47	-0.04
	(0.266)	(0.12)	(0.264)	(0.089)	(0.525)	(0.085)	(0.541)	(0.138)	(0.352)	(0.096)
Innov. covar.										
Growth	0.58		1.2		1.47		0.93		1.01	
	(0.099)		(0.441)		(0.205)		(0.15)		(0.186)	
Int. rate	0.03	0.03	0.03	0.06	0.03	0.04	0.04	0.03	0.02	0.03
	(0.02)	(0.01)	(0.023)	(0.018)	(0.018)	(0.008)	(0.013)	(0.006)	(0.014)	(0.006)
Log likelihood	191		322.8		321.8		170.6		241.1	

Table 13: 4-lag restricted VAR for sample of countries. Lon-run means are restricted to be at the 5% critical value under the unconditional LR test. Quarterly data 1966Q1-2016Q4 (from 1970Q1 for Germany). Robust likelihood-based standard errors in parentheses.

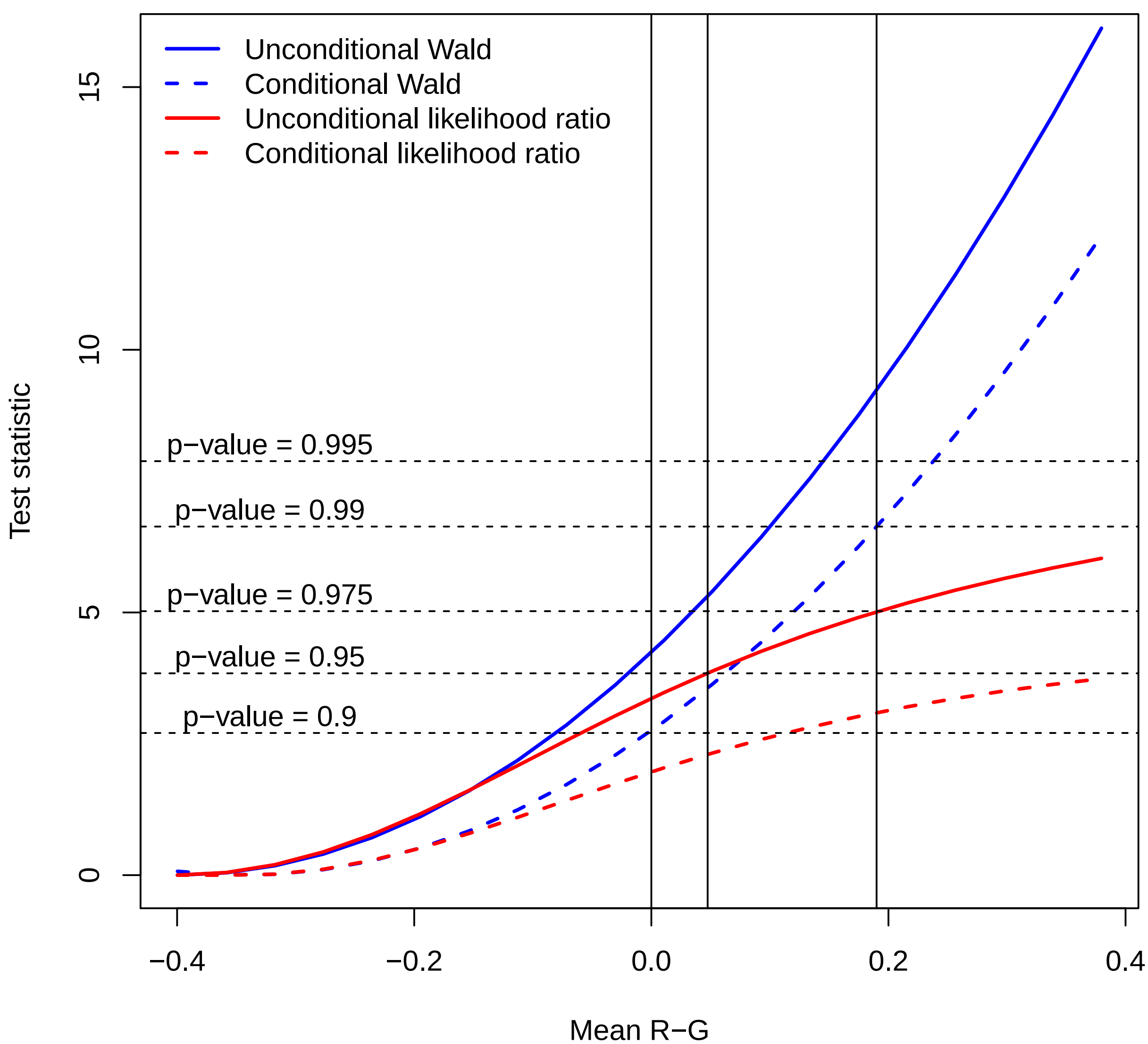

Figure 1: Four-lag hypothesis tests for USA

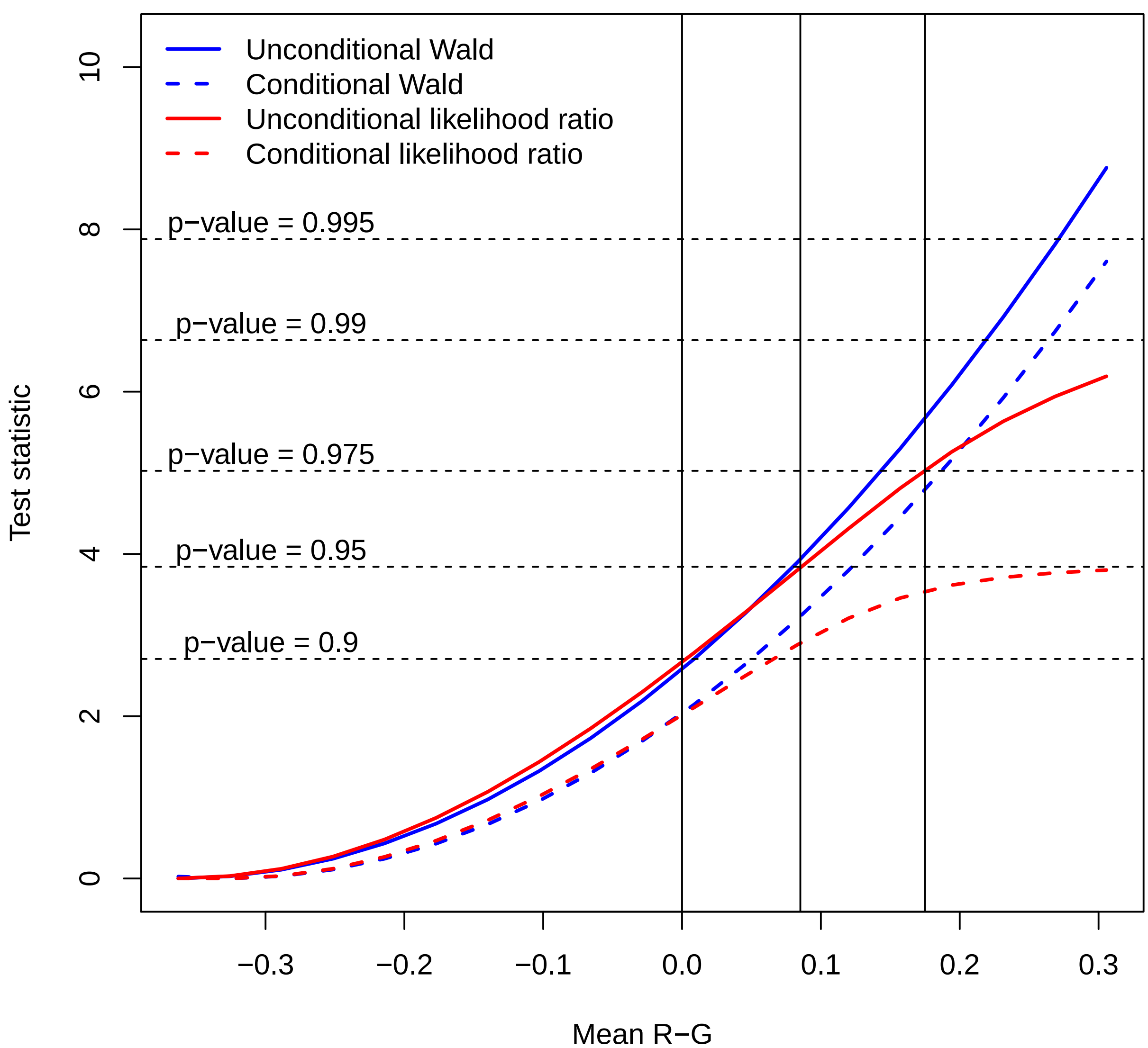

Figure 2: Four-lag hypothesis tests for France

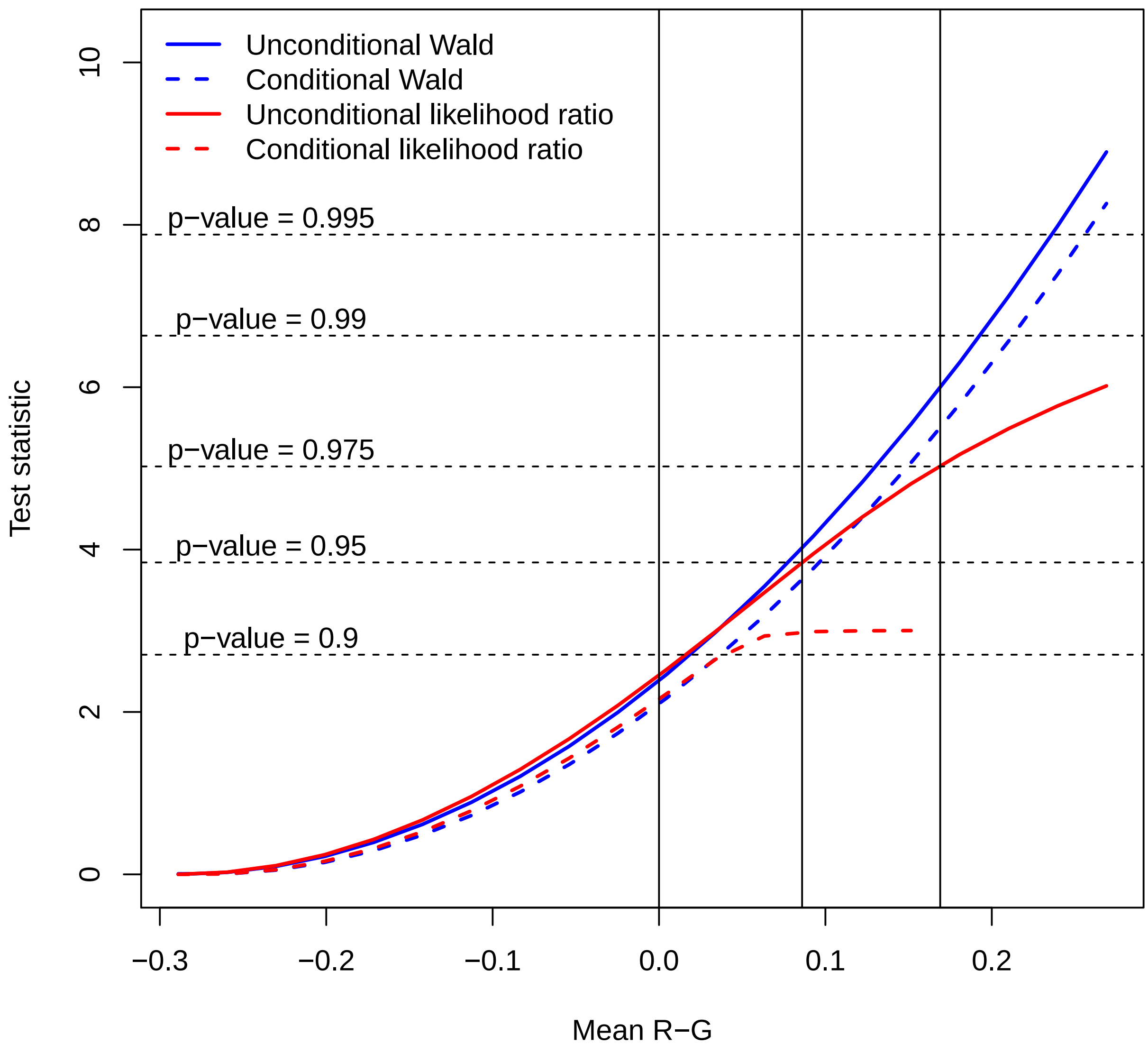

Figure 3: Four-lag hypothesis tests for UK

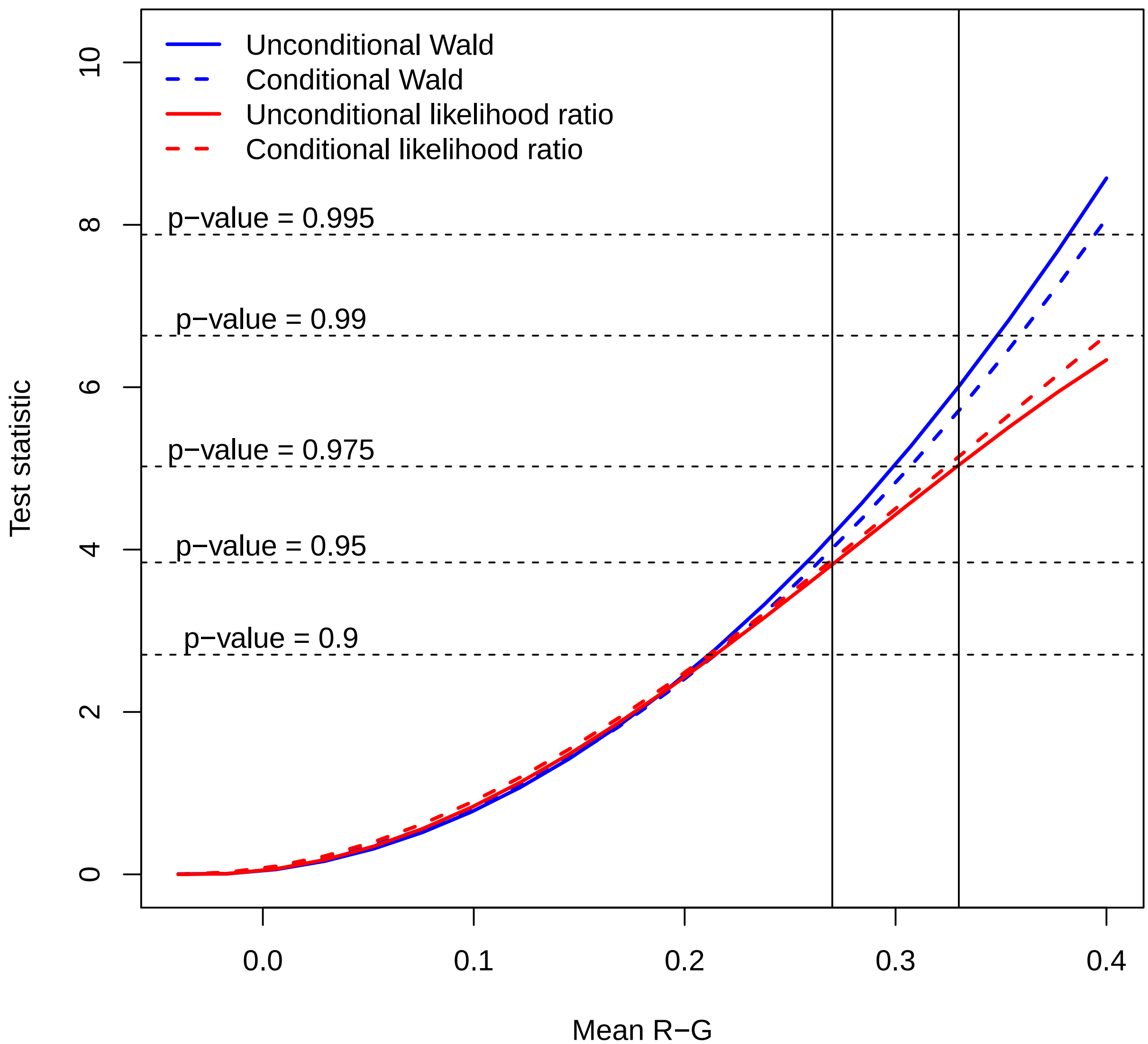

Figure 4: Four-lag hypothesis tests for Germany

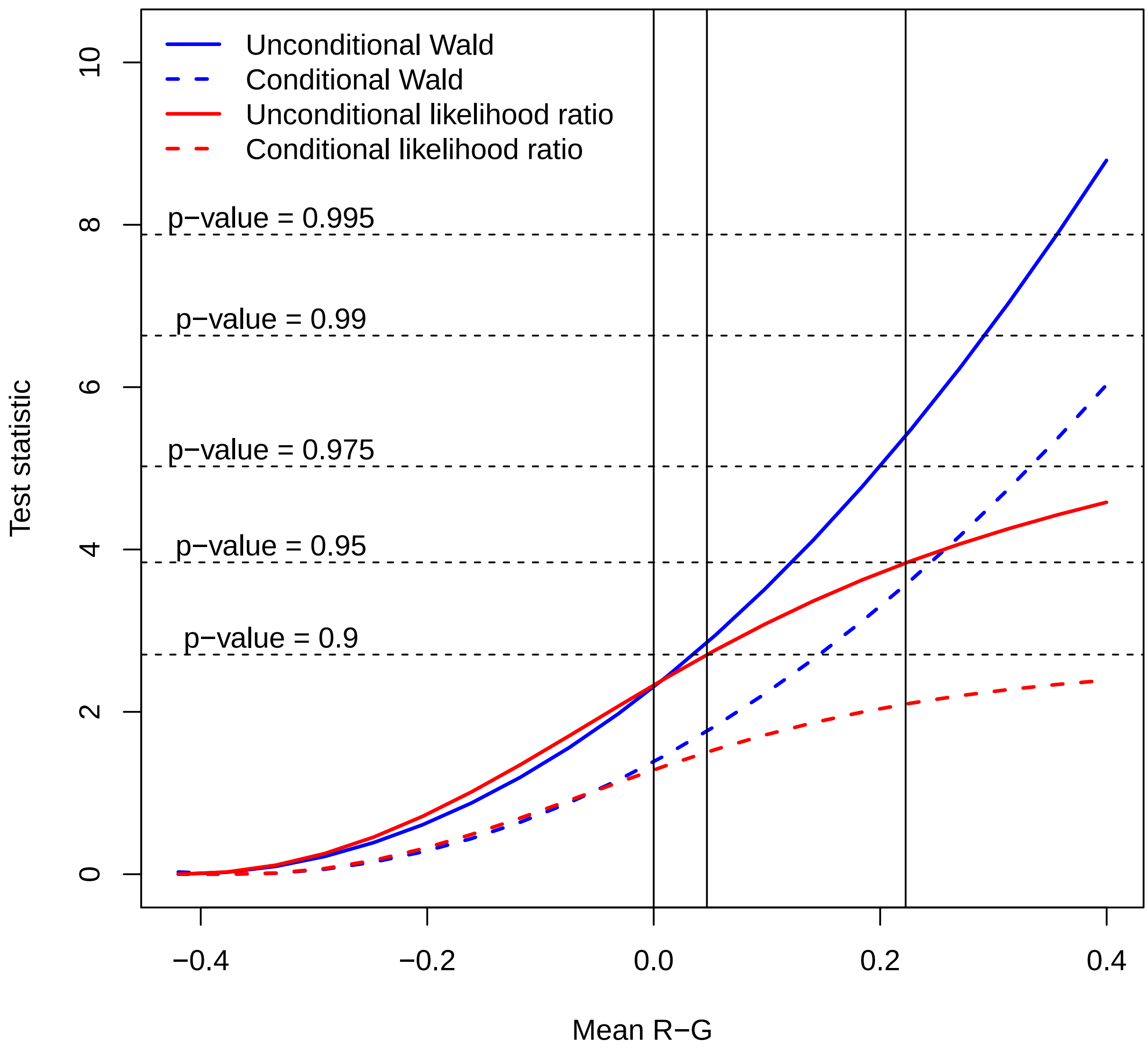

Figure 5: Four-lag hypothesis tests for Canada