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Background paper to

The spirits of capitalism and socialism

A cross-country study of ideology

Christian Bjørnskov and Martin Paldam

1. Introduction

The explained variable in all regressions in this background paper is the CS-score. The experiments concern the following five groups of variables:

(1) *Income*: The logarithm to GDP per capita, from the Maddison data set.
(2) *FEC*: Fixed effects for 6 country groups: *Africa, Mena, Asia, LaAm, PCom* and *West.*
(3) *FEW*: Fixed effects for waves; *W1990*, *W1995*, *W200* and *W2005.*
(4) *EFI*: *Economic Freedom Index* from Fraser Institute. Six variables, which are the aggregate and five components.
(5) *LR*: Two versions, *LR*5 and *LR*20, of the *LR-index* of Left/Right-political orientation.

Table 1.1. The system of the estimates done in sections 2 to 6

Sec-	Table		Esti-	N	*Income*	*LR*	*EFI*	Fixed Effects	
tion	Here	Paper	mator			Left/Right	Fraser Index	*FEC*	*FEW*
2	2.1	5	OLS	200	X			X	X
	2.2		OLS	200	X			X [a)]	X
3	3.1		OLS	141[b)]	X	X	X		
	3.2	6	B-K	141	X	X	X		
	3.3		OLS	141	X	X	X		X
4	4.1		OLS	141		X	X	X	
	4.2	7	B-K	141		X	X	X	
	4.3		OLS	141		X	X	X	X
5	5.1		OLS	175	X		X	X	
	5.2	8	B-K	175	X		X	X	
	5.3		OLS	175	X		X	X	X
6	6.1		OLS	141	X	X	X	X	
	6.2		OLS	141	X	X	X	X	X

(a) Estimates with *subgroups* included. (b) Average of *N* in regressions in table. Regressions with *LR*5 have *N* = 161 ± 1, regressions with *LR*20 have *N* = 122 ± 1, and regressions without LR-variable have *N* = 175 ± 3.

The variables in the five groups suffer from multicollinearity as explained in the paper and summarized in section 8. Hence, we systematically include and exclude these variables as shown in Table 1.1. The first four sections are testing and controlling four tables in the main paper. Sometimes a table is divided in two, where one uses *LR*5 and the other *LR*20.

One extra set of variables is used in Table 2.2. It is:

(1) *Subgroups:* Added effects for four country subgroups: *South Africa* (in *Africa*), *NonArab* (in *Mena*), *ATigers* (in *Asia*), *Convergers* (in *West*)

The variables are defined in section 5.1 of the paper, and the countries are listed in Table 1 of the Appendix to the paper.

The following terms are used: Adj R^2 is the R^2 adjusted for degrees of freedom. All regressions have F-scores below the 0.005 level. Both sets of fixed effects, FEC and FEW, sum to 1, so the constant is excluded when either is included. Parentheses hold t-tests. Significant coefficients (with t-ratios above1.9, at the 5% level) are bolded. Borderline significant coefficients (with t-ratios above1.6, at the 10% level) are in bold and italics. The Tables in sections 3 to 6 estimate the coefficients to *West* as the constant.

The data does have a panel structure, but with many gaps. Hence, all coefficients are estimated by OLS, but three of the tables use the Beck-Katz (B-K) estimator that corrects the standard errors for serial correlation due to the panel structure. As shown in section 7, this barely matters.

CONTENT

2. Controls of Table 5 from main paper

All estimates in this section are done with N = 200. The gray areas show the excluded variables in the two tables. Table 2.1 is Table 5 from paper. Table 2.2 controls the estimated by adding the four subdivisions of countries.

The tables are calculated as follows: Regressions (1a), (2a) and (3a) are the starting ones. They are modified in (2b) and (2c) by being tested down to significant coefficients only. (1c), (2c) and (3c) are tested down versions, which start with all country groups except the least significant, but with the four wave-dummies included.

Table 2.1. OLS estimate. Model: *income*, *FEC*, *FEW*. Table 5 from paper

Included	*Income* and *FEW*		*FEC* and *FEW*			*Income*, *FEC*, *and FEW*		
	(1a)	(1d)	(2a)	(2b)	(2c)	(3a)	(3b)	(3c)
Income	**8.25**	**8.25**				**3.13**	**2.94**	**5.81**
	(6.1)	(6.1)				(3.4)	(13.1)	(4.4)
Africa			7.18			-11.79		
			(1.3)			(-1.5)		
Asia			2.56			**-22.19**	**-18.23**	**-14.71**
			(0.7)			(-2.7)	(-5.3)	(-4.1)
LaAm			-2.48		**-8.88**	**-28.52**	**-24.81**	**-21.76**
			(-0.7)		(-2.6)	(-3.4)	(-6.8)	(-5.8)
Mena			-5.91		**-12.00**	**-29.27**	**-25.31**	**-20.96**
			(-1.2)		(-2.8)	(-3.5)	(-5.7)	(-4.4)
PCom			**5.67**	**6.97**		**-19.43**	**-15.69**	**-11.88**
			(2.0)	(3.0)		(-2.5)	(-5.5)	(-3.8)
West/			**24.33**	**25.70**	**18.31**	-4.29		
constant			(7.6)	(9.9)	(6.8)	(-0.5)		
W1990	**9.13**	**-54.07**	**8.48**	**7.52**	**13.99**	***5.87***		***-24.48***
	(2.4)	(-4.3)	(2.4)	(2.5)	(4.9)	(1.7)		(-1.9)
W1995		**-63.20**			**6.76**			**-30.33**
		(-5.3)			(2.7)			(-2.4)
W2000	2.69	**-60.51**	3.85		**9.16**	1.58		**-28.56**
	(0.8)	(-5.0)	(1.2)		(3.8)	(0.5)		(-2.3)
W2005	**-9.69**	**-72.89**	**-7.12**	**-7.29**		**-10.20**	**-13.33**	**-40.88**
	(-2.7)	(-6.0)	(-2.1)	(-2.9)		(-3.0)	(-4.8)	(-3.3)
Constant	**-63.20**							
	(-5.3)							
N	200	200	200	200	200	200	200	200
Adj R^2	0.250 [a)]	0.384	0.453	0.446	0.464	0.482	0.477	0.492

Table 2.2. OLS estimate. Model: *income, FEC, FEW, subgroups*

Included	*FEC, FEW, subgroups*				*Income, FEC, FEW, subgroups*			
	(2a)	(2a*)	(2b)	(2b*)	(3a)	(3a*)	(3b)	(3b*)
Income					**3.13**	2.97	**2.94**	**3.24**
					(3.4)	(1.1)	(13.1)	(13.5)
Africa	7.18	8.14		**11.42**	-11.79	-11.49	a)	**-10.43**
	(1.3)	(1.5)		(2.3)	(-1.5)	(-0.6)		(-2.0)
South Africa		**18.82**		**22.18**		-5.38		
		(2.3)		(2.8)		(-0.2)		
Asia	2.56	-3.21			**-22.19**	-25.82	**-18.23**	**-21.14**
	(0.7)	(-0.8)			(-2.7)	(-1.2)	(-5.3)	(-6.0)
ATigers		**17.02**		**16.85**		11.20		
		(2.9)		(3.6)		(1.4)		
LaAm	-2.48	-1.83			**-28.52**	-27.61	**-24.81**	**-27.74**
	(-0.7)	(-0.5)			(-3.4)	(-1.2)	(-6.8)	(-7.5)
Mena	-5.91	-5.59			**-29.27**	-28.81	**-25.31**	**-28.19**
	(-1.2)	(-0.9)			(-3.5)	(-1.3)	(-5.7)	(-6.3)
NonArab		1.42				0.07		
		(0.2)				(0.0)		
PCom	**5.67**	**6.34**	**6.97**	**9.08**	**-19.43**	-18.57	**-15.69**	**-18.36**
	(2.0)	(2.4)	(3.0)	(4.2)	(-2.5)	(-0.8)	(-5.5)	(-6.3)
West	**24.33**	**27.88**	**25.70**	**31.78**	-4.29	-0.99		
	(7.6)	(8.7)	(9.9)	(13.2)	(-0.5)	(-0.0)		
Convergers		**-17.63**		**-17.28**		**-16.33**		**-15.95**
		(-2.9)		(-2.8)		(-2.6)		(-2.6)
W1990	**8.48**	**7.11**	**7.52**		***5.87***	***6.58***		
	(2.4)	(2.1)	(2.5)		(1.7)	(1.9)		
W2000	3.85	2.97			1.58	2.48		
	(1.2)	(0.9)			(0.5)	(0.8)		
W2005	**-7.12**	**-8.22**	**-7.29**	**-11.57**	**-10.20**	**-9.29**	**-13.33**	**-12.20**
	(-2.1)	(-2.5)	(-2.9)	(-4.6)	(-3.0)	(-2.7)	(-4.8)	(-4.4)
N	200	200	200	200	200	200	200	200
Adj R^2	0.453	0.500	0.446	0.503	0.482	0.500	0.477	0.497

Table 2.2 takes estimate (2a) and includes extra fixed effects for the four subgroups mentioned above. Note that the subgroup dummies are used together with the group dummies. The 'total' effect of belonging to a subgroup is thus the coefficient to the group plus the coefficient to the subgroup. For example, the total effect from being South Africa in (2a*) is thus 8.14 + 18.82 = 36.96 pp.

Thus, it appears that *South Africa* differs from the *Africa* group, the *ATigers* differ from other *Asia*, and the *Convergers* have a lower preference for capitalism than other *West*.

However, the two *NonArab* members of the *Mena* group do not deviate from the Arab members of the group.

The subdivision of the country groups does not significantly change the results for the groups, but subgroups with significantly different average income do become significant in themselves. Note also that with all groups, subgroups and income in (3a*), very little becomes significant. The amount of multicollinearity in the estimates becomes too big. This does not affect the coefficient estimates very much, but reduces the t-ratios substantially.

3. Controls of Table 6 from main paper

The next 11 tables have the same format. They all contain parallel regressions where the results in all rows – except the first – should be the roughly the same. Multicollinearity should increase the variability of the regressions in the line and decrease the t-ratios.

Consequently, an extra column is added at the right hand side of the tables. It first gives the simple averages of the six estimates of the row. Below the average are two t-ratios: (Sig) is the average t-ratio, and (Stab) is the cross-row stability calculated as the t-ratio of the six estimates of the row. We discuss the results as the 'significance' and the 'stability' of the estimated coefficients in the row. If the average estimate is only significant or stable, it is in bold and italics. If the estimate is both significant and stable, it is in bold.

Table 3.1. OLS estimate. Model: *income, LR, EFI*

	Left-right scale for 5-year average, *LR5*						Cross-row
Fraser EFI	(C1)	(C2)	(C3)	(C4)	(C5)	(EFI)	Average
component *x*	Gov. size	Legal qualt.	Money	Free trade	No regul.	Aggregate	(Sig) (Stab)
x	**-2.27**	**6.27**	-0.01	**-3.64**	-0.42	-0.29	-0.06
	(-2.2)	(4.7)	(-0.0)	(-2.1)	(-0.3)	(-0.2)	(-0.0) (-0.1)
Income	**7.10**	-0.57	**7.99**	**11.10**	**8.31**	**8.23**	**7.03**
	(4.2)	(-0.2)	(5.3)	(5.1)	(4.6)	(3.9)	(3.8) (4.8)
LR5	2.57	1.94	0.41	0.41	0.08	0.21	***0.94***
	(1.0)	(0.9)	(0.2)	(0.2)	(0.0)	(0.1)	(0.4) (2.4)
Constant	**-39.78**	-25.29	**-60.06**	**-62.74**	**-60.30**	**-60.26**	**-51.41**
	(-2.3)	(-1.6)	(-4.0)	(-4.3)	(-4.0)	(-4.1)	(-3.4) (-9.0)
N	161	161	161	160	162	160	160.8
Adj R^2	0.145	0.229	0.119	0.144	0.119	0.120	0.146
	Left-right scale for 20-year average, *LR20*						
x	***-2.36***	**6.44**	-0.11	-2.92	1.97	1.04	0.68
	(-1.7)	(4.5)	(-0.1)	(-1.3)	(1.1)	(0.5)	(0.5) (0.5)
Income	**4.91**	-2.42	**5.98**	**8.52**	**4.84**	***5.25***	***4.51***
	(2.4)	(-0.9)	(2.7)	(3.0)	(2.2)	(2.1)	(1.9) (3.3)
LR20	5.35	2.12	2.02	1.18	0.80	1.27	***2.12***
	(1.4)	(0.7)	(0.6)	(0.3)	(0.2)	(0.4)	(0.6) (3.4)
Constant	-20.87	-11.86	**-43.23**	**-46.33**	**-46.01**	**-44.38**	**-35.45**
	(-1.0)	(-0.7)	(-2.4)	(-2.6)	(-2.6)	(-2.5)	(-2.0) (-6.3)
N	122	121	122	122	122	121	121.7
Adj R^2	0.089	0.201	0.066	0.078	0.075	0.067	0.096

Table 3.2. B-K estimate. Model: *income, LR, EFI*. Table 6 from paper

	Left-right scale for 5-year average, *LR5*						Cross-row
Fraser EFI	(C1)	(C2)	(C3)	(C4)	(C5)	(EFI)	Average
component *x*	Gov. size	Legal qualt.	Money	Free trade	No regul.	Aggregate	(Sig) (Stab)
x	**-2.27**	**6.27**	-0.01	**-3.64**	-0.42	-0.29	-0.06
	(-2.1)	(5.1)	(-0.0)	(-2.1)	(-0.3)	(-0.2)	(0.1) (-0.1)
Income	**7.10**	-0.57	**7.99**	**11.10**	**8.31**	**8.23**	**7.03**
	(3.6)	(-0.2)	(3.4)	(4.3)	(3.9)	(3.2)	(3.0) (4.8)
LR5	2.57	1.94	0.41	0.41	0.08	0.21	***0.94***
	(1.1)	(0.9)	(0.2)	(0.2)	(0.0)	(0.1)	(0.4) (2.4)
Constant	**-39.78**	-25.29	**-60.06**	**-62.74**	**-60.30**	**-60.26**	**-51.40**
	(-2.0)	(-1.3)	(-3.3)	(-3.5)	(-3.4)	(-3.4)	(-2.8) (-9.0)
N	161	161	161	160	162	160	160.8
Adj R^2	0.161	0.244	0.136	0.160	0.136	0.136	0.162
	Left-right scale for 20-year average, *LR20*						
x	***-2.36***	**6.44**	-0.11	-2.92	1.97	1.04	0.68
	(-1.7)	(5.2)	(-0.1)	(-1.2)	(1.2)	(0.4)	(0.6) (0.5)
Income	**4.91**	-2.42	**5.98**	**8.52**	***4.84***	***5.25***	***4.51***
	(2.1)	(-0.9)	(2.2)	(2.5)	(1.9)	(1.8)	(1.6) (3.3)
LR20	***5.35***	2.12	2.02	1.18	0.80	1.27	***2.12***
	(1.7)	(0.7)	(0.7)	(0.4)	(0.3)	(0.4)	(0.7) (3.4)
Constant	-20.87	-11.86	**-43.23**	**-46.33**	**-46.01**	**-44.38**	***-35.45***
	(-0.9)	(-0.6)	(-2.0)	(-2.2)	(-2.3)	(-2.2)	(-1.7) (-6.3)
N	122	121	122	122	122	121	121.7
Adj R^2	0.111	0.221	0.089	0.101	0.098	0.090	0.118

Table 3.1 is re-estimated in Table 3.2 (from main paper), with the Beck-Katz estimator. The pattern of significance is exactly the same for the two tables. Table 3.3 controls the estimated by adding fixed effects for waves.

As expected, the *x*-row shows no coefficient stability in any of the three tables. This means that the components of the economic freedom index do measure different things, precisely as claimed.

	Table 2.1	Table 2.3		Table 2.1	Table 2.3
LR5	***0.94***	0.37	*LR20*	***2.12***	***1.85***
Income	**7.03**	**5.19**	*income*	***4.51***	***4.14***

Table 3.3. OLS estimate. Model: *income, LR, EFI, FEW*

	Left-right scale for 5-year average, *LR5*						Cross-row
Fraser EFI	(C1)	(C2)	(C3)	(C4)	(C5)	(EFI)	Average
component *x*	Gov. size	Legal qualt.	Money	Free trade	No regul.	Aggregate	(Sig) (Stab)
x	-0.83	**5.97**	0.92	***-3.02***	**3.24**	***3.02***	1.55
	(-0.8)	(4.8)	(1.2)	(-1.8)	(2.2)	(1.7)	(1.2) (1.3)
Income	**6.79**	-1.16	**5.89**	**9.77**	**5.08**	**4.77**	**5.19**
	(4.2)	(-0.5)	(3.2)	(4.5)	(2.8)	(2.3)	(2.8) (3.9)
LR5	1.15	1.86	0.42	0.11	-0.90	-0.44	0.37
	(0.5)	(0.9)	(0.2)	(0.1)	(-0.4)	(-0.2)	(0.2) (1.0)
Constant	**-44.27**	-17.49	**-46.68**	**-54.18**	**-52.30**	**-49.54**	**-44.08**
	(-2.7)	(-1.2)	(-3.2)	(-3.8)	(-3.7)	(-3.5)	(-3.0) (-8.8)
W1990	***7.65***	**9.19**	***8.14***	7.15	**11.46**	**9.97**	**8.93**
	(1.7)	(2.3)	(1.9)	(1.6)	(2.6)	(2.3)	(2.1) (14.9)
W2000	1.98	1.38	0.27	2.47	0.88	0.19	***1.20***
	(0.5)	(0.4)	(0.1)	(0.6)	(0.2)	(0.1)	(0.3) (3.5)
W2005	**-10.73**	**-10.89**	**-12.93**	**-11.63**	**-13.53**	**-13.25**	**-12.16**
	(-2.6)	(-2.9)	(-3.0)	(-2.9)	(-3.3)	(-3.2)	(-3.0) (-26.5)
N	161	161	161	160	162	160	160.83
Adj R^2	0.223	0.333	0.228	0.242	0.247	0.240	0.252
	Left-right scale for 20-year average, *LR20*						
x	-1.65	**6.40**	0.46	***-4.01***	**3.94**	2.88	1.34
	(-1.2)	(4.6)	(0.5)	(-1.7)	(2.1)	(1.3)	(0.9) (0.9)
Income	**5.09**	-2.46	**5.25**	**9.38**	***3.64***	3.92	***4.14***
	(2.5)	(-1.0)	(2.4)	(3.4)	(1.7)	(1.6)	(1.8) (2.9)
LR20	4.50	2.31	2.14	1.11	0.17	0.84	***1.85***
	(1.2)	(0.7)	(0.6)	(0.3)	(0.1)	(0.2)	(0.5) (3.2)
Constant	-0.32	5.13	1.47	1.60	7.03	6.63	***3.59***
	(-0.0)	(0.5)	(0.2)	(0.2)	(0.7)	(0.6)	(0.4) (3.1)
W1990	1.29	0.17	0.19	2.45	0.16	-0.52	0.62
	(0.3)	(0.0)	(0.0)	(0.6)	(0.0)	(-0.1)	(0.1) (1.6)
W2000	**-10.22**	**-11.46**	**-12.03**	**-11.42**	**-13.46**	**-12.96**	**-11.93**
	(-2.2)	(-2.7)	(-2.5)	(-2.5)	(-2.9)	(-2.7)	(-2.6) (-27.4)
W2005	-23.86	-7.86	**-37.49**	**-43.76**	**-43.50**	**-40.77**	***-32.87***
	(-1.1)	(-0.5)	(-2.1)	(-2.5)	(-2.5)	(-2.3)	(-1.8) (-6.2)
N	122	121	122	122	122	121	121.67
Adj R^2	0.126	0.255	0.117	0.140	0.148	0.130	0.153

Most of the remaining tests for cross-row stability do confirm that the results are stable across rows. But it is clear that the fixed effects for waves make the coefficients to the LR-variables and income smaller, so these variables are correlated.

4. Controls of Table 7 from main paper

Table 4.1. Table 4.1. OLS estimate. Model: *LR, EFI, FEC*

	Left-right scale for 5-year average, *LR5*						Cross-row
Fraser EFI	(C1)	(C2)	(C3)	(C4)	(C5)	(EFI)	Average
component *x*	Gov. size	Legal qualt.	Money	Free trade	No regul.	Aggregate	(Sig) (Stab)
x	-0.17	***2.35***	**-1.44**	**-3.89**	***-2.31***	***-2.80***	-1.38
	(-0.2)	(1.9)	(-2.1)	(-2.9)	(-1.7)	(-1.8)	(-1.1) (-1.7)
LR5	3.07	2.48	3.03	***3.87***	3.40	***3.53***	***3.23***
	(1.4)	(1.2)	(1.5)	(1.9)	(1.6)	(1.7)	(1.6) (18.0)
Africa	**-14.58**)	-7.10	**-17.97**	**-22.21**	**-15.82**	**-18.49**	**-16.03**
	(-2.7)	(-1.1)	(-3.3)	(-3.9)	(-3.0)	(-3.3)	(-2.9) (-8.4)
Asia	**-24.37**	**-19.01**	**-26.54**	**-29.53**	**-26.53**	**-27.26**	**-25.54**
	(-5.9)	(-3.8)	(-6.6)	(-7.0)	(-6.4)	(-6.4)	(-6.0) (-19.0)
LaAm	**-30.68**	**-23.76**	**-35.32**	**-35.46**	**-32.81**	**-34.42**	**-32.08**
	(-6.8)	(-4.3)	(-7.9)	(-8.4)	(-7.9)	(-7.7)	(-7.2) (-19.3)
Mena	**-29.30**	**-23.40**	**-32.95**	**-35.47**	**-33.07**	**-33.27**	**-31.24**
	(-5.4)	(-3.8)	(-6.1)	(-6.5)	(-5.9)	(-5.9)	(-5.6) (-19.4)
PCom	**-18.72**	**-11.46**	**-23.68**	**-22.84**	**-21.49**	**-23.62**	**-20.30**
	(-4.7)	(-2.3)	(-5.2)	(-5.5)	(-4.8)	(-4.8)	(-4.6) (-11.6)
West	**27.46**	6.91	**39.78**	**56.60**	**41.96**	**47.23**	**36.66**
	(4.6)	(0.6)	(6.0)	(5.4)	(4.6)	(3.9)	(4.2) (5.7)
N	161	161	161	160	162	160	160.8
Adj R^2	0.333	0.337	0.351	0.367	0.336	0.345	0.345
	Left-right scale for 20-year average, *LR20*						
x	0.40	1.17	**-2.12**	**-4.40**	-2.28	**-4.23**	***-1.91***
	(0.3)	(0.7)	(-2.6)	(-2.6)	(-1.3)	(-2.0)	(-1.3) (-2.2)
LR20	***5.98***	***5.53***	**7.40**	**7.70**	**8.02**	**8.62**	**7.21**
	(1.8)	(1.7)	(2.5)	(2.5)	(2.5)	(2.7)	(2.3) (16.1)
Africa	**-13.45**	-9.44	**-18.41**	**-22.79**	**-15.00**	**-19.89**	**-16.50**
	(-2.2)	(-1.2)	(-3.0)	(-3.3)	(-2.4)	(-2.9)	(-2.5) (-9.2)
Asia	**-22.65**	**-19.56**	**-26.07**	**-28.19**	**-25.31**	**-27.53**	**-24.89**
	(-4.7)	(-3.2)	(-5.4)	(-5.5)	(-4.8)	(-5.2)	(-4.8) (-20.5)
LaAm	**-31.06**	**-26.30**	**-36.87**	**-35.88**	**-32.98**	**-36.52**	**-33.27**
	(-6.0)	(-3.6)	(-7.1)	(-7.1)	(-6.5)	(-6.6)	(-6.2) (-21.8)
Mena	**-28.04**	**-24.33**	**-32.93**	**-34.64**	**-32.23**	**-34.25**	**-31.07**
	(-4.7)	(-3.3)	(-5.4)	(-5.5)	(-4.7)	(-5.2)	(-4.8) (-20.6)
PCom	**-13.73**	-10.54	**-21.59**	**-17.98**	**-17.82**	**-21.41**	**-17.18**
	(-2.6)	(-1.6)	(-3.7)	(-3.3)	(-3.0)	(-3.3)	(-2.9) (-10.6)
West	**22.57**	14.60	**44.81**	**59.38**	**40.82**	**57.17**	**39.89**
	(2.9)	(1.0)	(5.3)	(4.3)	(3.2)	(3.5)	(3.4) (5.9)
N	122	121	122	121	122	121	121.5
Adj R^2	0.295	0.297	0.333	0.333	0.305	0.318	0.314

Table 4.2. B-K estimate. Model: *LR*, *EFI*, *FEC*. Table 7 from paper

	Left-right scale for 5-year average, *LR5*						Cross-row
Fraser EFI	(C1)	(C2)	(C3)	(C4)	(C5)	(EFI)	Average
component *x*	Gov. size	Legal qualt.	Money	Free trade	No regul.	Aggregate	(Sig) (Stab)
x	-0.17	***2.35***	**-1.44**	**-3.89**	***-2.31***	***-2.80***	-1.38
	(-0.1)	(1.8)	(-2.2)	(-3.0)	(-1.9)	(-1.8)	(-1.2) (-1.7)
LR5	3.07	2.48	3.03	***3.87***	***3.40***	***3.53***	***3.23***
	(1.5)	(1.2)	(1.5)	(1.8)	(1.7)	(1.7)	(1.6) (18.0)
Africa	**-14.58**	-7.10	**-17.97**	**-22.21**	**-15.82**	**-18.49**	**-16.03**
	(-2.6)	(-1.0)	(-3.1)	(-3.54)	(-2.9)	(-3.2)	(-2.7) (-8.4)
Asia	**-24.37**	**-19.01**	**-26.54**	**-29.53**	**-26.53**	**-27.2**6	**-25.54**
	(-6.2)	(-4.7)	(-7.0)	(-7.8)	(-7.1)	(-7.2)	(-6.7) (-19.0)
LaAm	**-30.68**	**-23.76**	**-35.32**	**-35.46**	**-32.81**	**-34.42**	**-32.08**
	(-7.1)	(-4.6)	(-9.1)	(-9.1)	(-9.2)	(-8.8)	(-8.0) (-19.3)
Mena	**-29.30**	**-23.40**	**-32.95**	**-35.47**	**-33.07**	**-33.27**	**-31.24**
	(-6.1)	(-4.3)	(-7.1)	(-7.0)	(-6.8)	(-6.8)	(-6.4) (-19.4)
PCom	**-18.72**	**-11.46**	**-23.68**	**-22.84**	**-21.49**	**-23.63**	**-20.30**
	(-4.3)	(-2.3)	(-5.1)	(-5.3)	(-4.7)	(-5.0)	(-4.5) (-11.6)
West	**27.46**	6.91	**39.78**	**56.60**	**41.96**	**47.23**	**36.66**
	(4.5)	(0.6)	(6.3)	(5.6)	(5.1)	(4.2)	(4.4) (5.7)
N	161	161	161	160	162	160	160.8
Adj R^2	0.362	0.366	0.380	0.395	0.365	0.374	0.374
	Left-right scale for 20-year average, *LR20*						
x	0.40	1.17	**-2.12**	**-4.40**	-2.28	**-4.23**	***-1.91***
	(0.3)	(0.7)	(-2.6)	(-2.4)	(-1.4)	(-2.1)	(-1.3) (-2.2)
LR20	***5.98***	***5.53***	**7.40**	**7.70**	**8.02**	**8.62**	**7.21**
	(1.9)	(1.9)	(2.6)	(2.6)	(2.7)	(2.9)	(2.4) (16.1)
Africa	**-13.45**	-9.44	**-18.41**	**-22.79**	**-15.00**	**-19.89**	**-16.50**
	(-2.4)	(-1.2)	(-3.0)	(-3.1)	(-2.7)	(-3.1)	(-2.6) (-9.2)
Asia	**-22.65**	**-19.56**	**-26.07**	**-28.19**	**-25.31**	**-27.53**	**-24.89**
	(-5.2)	(-3.8)	(-5.8)	(-6.1)	(-5.2)	(-5.7)	(-5.3) (-20.5)
LaAm	**-31.06**	**-26.30**	**-36.87**	**-35.88**	**-32.98**	**-36.52**	**-33.27**
	(-6.4)	(-3.6)	(-8.0)	(-7.6)	(-7.2)	(-7.3)	(-6.7) (-21.8)
Mena	**-28.04**	**-24.33**	**-32.93**	**-34.64**	-32.23	**-34.25**	**-31.07**
	(-5.4)	(-3.6)	(-6.4)	(-5.8)	(-5.3)	(-5.8)	(-5.4) (-20.6)
PCom	**-13.73**	-10.54	**-21.59**	**-17.98**	**-17.82**	**-21.41**	**-17.18**
	(-2.4)	(-1.5)	(-3.6)	(-3.2)	(-3.0)	(-3.5)	(-2.9) (-10.6)
West	**22.57**	14.60	**44.81**	**59.38**	**40.82**	**57.17**	**39.89**
	(2.7)	(0.9)	(5.6)	(4.0)	(3.3)	(3.6)	(3.4) (5.9)
N	122	121	122	121	122	121	121.5
Adj R^2	0.336	0.338	0.371	0.371	0.345	0.358	0.353

Table 4.3a. OLS estimate. Model: *LR*5, *EFI*, *FEC*, *FEW*

Fraser EFI component *x*	(C1) Gov. size	(C2) Legal qualt.	(C3) Money	(C4) Free trade	(C5) No regul.	(EFI) Aggregate	Average (Sig) (Stab)
x	1.48	**2.81**	-0.59	**-3.34**	0.78	0.10	0.21
	(1.3)	(2.4)	(-0.8)	(-2.5)	(0.5)	(0.1)	(0.2) (0.3)
*LR*5	1.53	2.16	2.61	3.19	1.93	2.32	***2.29***
	(0.7)	(1.1)	(1.3)	(1.6)	(1.0)	(1.2)	(1.2) (10.7)
Africa	**-10.20**	0.33	**-11.20**	**-16.56**	-8.57	-9.19	***-9.23***
	(-2.0)	(0.1)	(-2.0)	(-2.9)	(-1.6)	(-1.6)	(-1.7) (-4.5)
Asia	**-23.67**	**-15.35**	**-23.40**	**-27.13**	**-21.40**	**-22.22**	**-22.20**
	(-6.0)	(-3.2)	(-5.8)	(-6.4)	(-5.1)	(-5.1)	(-5.3) (-15.3)
LaAm	**-31.67**	**-20.11**	**-30.97**	**-33.26**	**-28.16**	**-28.91**	**-28.85**
	(-7.4)	(-3.8)	(-6.9)	(-8.0)	(-6.7)	(-6.3)	(-6.5) (-16.6)
Mena	**-27.40**	**-18.09**	**-27.79**	**-31.86**	**-24.18**	**-25.67**	**-25.83**
	(-5.4)	(-3.1)	(-5.1)	(-5.8)	(-4.1)	(-4.4)	(-4.7) (-15.1)
PCom	**-16.46**	***-9.08***	**-19.88**	**-21.57**	**-15.27**	**-16.96**	**-16.54**
	(-4.2)	(-1.9)	(-4.3)	(-5.2)	(-3.2)	(-3.2)	(-3.7) (-10.2)
West	**20.07**	3.29	**32.52**	**53.48**	**21.97**	**26.65**	**26.33**
	(3.1)	(0.3)	(4.6)	(4.9)	(2.0)	(2.0)	(2.8) (4.3)
W1990	5.09	6.05	3.91	2.50	5.66	4.60	***4.64***
	(1.3)	(1.6)	(1.0)	(0.6)	(1.4)	(1.1)	(1.2) (9.6)
W2000	-0.65	-0.03	0.76	1.09	-0.33	-0.16	0.11
	(-0.2)	(-0.0)	(0.2)	(0.3)	(-0.1)	(-0.0)	(0.0) (0.5)
W2005	**-13.05**	**-12.31**	**-11.12**	-11.66	**-12.67**	**-12.21**	**-12.17**
	(-3.5)	(-3.4)	(-2.9)	(-3.2)	(-3.3)	(-3.2)	(-3.3) (-47.1)
N	161	161	161	160	162	160	160.8
Adj R^2	0.413	0.426	0.409	0.431	0.403	0.408	0.415

The testing procedure from section 2 is now repeated for Tables 4.1 to 4.3. Table 4.2 is from paper. Table 4.1 is the same table re-estimated with OLS, Table 4.3 controls the estimated by adding fixed effects for waves. Table 4.3 is divided into two parts.

Note the pattern of stability: With fixed effects for waves, the effects of the substantial coefficients fall. This will be more significant in the next two sections.

Table 4.3b. OLS estimate. Model: *LR*20, *EFI, FEC, FEW*

Fraser EFI component x	(C1) Gov. size	(C2) Legal qualt.	(C3) Money	(C4) Free trade	(C5) No regul.	(EFI) Aggregate	Average (Sig) (Stab)
x	1.57	1.45	***-1.63***	**-4.48**	-0.32	-2.33	-0.96
	(1.2)	(0.9)	(-1.8)	(-2.6)	(-0.2)	(-1.1)	(-0.6) (-1.1)
*LR*20	4.92	***5.26***	**7.05**	**7.50**	**6.48**	**7.41**	**6.44**
	(1.6)	(1.7)	(2.4)	(2.6)	(2.0)	(2.3)	(2.1) (15.6)
Africa	***-10.52***	-5.23	**-14.67**	**-19.92**	***-10.38***	**-14.06**	***-12.46***
	(-1.8)	(-0.7)	(-2.3)	(-2.9)	(-1.7)	(-2.0)	(-1.9) (-6.7)
Asia	**-23.54**	**-19.08**	**-25.05**	**-28.13**	**-22.73**	**-25.27**	**-23.97**
	(-5.0)	(-3.2)	(-5.3)	(-5.7)	(-4.4)	(-4.8)	(-4.7) (-21.3)
LaAm	**-33.21**	**-25.46**	**-35.04**	**-35.71**	**-30.83**	**-33.70**	**-32.33**
	(-6.5)	(-3.6)	(-6.8)	(-7.4)	(-6.2)	(-6.2)	(-6.1) (-23.0)
Mena	**-27.22**	**-21.61**	**-30.48**	**-33.23**	**-26.47**	**-29.70**	**-28.12**
	(-4.7)	(-3.0)	(-5.0)	(-5.4)	(-3.8)	(-4.4)	(-4.4) (-18.9)
PCom	**-15.04**	***-11.12***	**-21.10**	**-19.42**	**-16.17**	**-19.06**	**-16.99**
	(-3.0)	(-1.7)	(-3.6)	(-3.7)	(-2.7)	(-2.9)	(-2.9) (-12.5)
West	**20.67**	15.99	**42.26**	**62.95**	**30.84**	**45.58**	**36.38**
	(2.6)	(1.1)	(5.1)	(4.6)	(2.3)	(2.7)	(3.1) (5.6)
W1990	5.73	7.59	3.59	3.74	3.40	5.80	***4.98***
	(0.7)	(0.9)	(0.5)	(0.4)	(0.4)	(0.6)	(0.6) (8.0)
W2000	-1.96	-1.31	1.11	0.60	-1.36	-0.25	-0.53
	(-0.5)	(-0.3)	(0.3)	(0.2)	(-0.4)	(-0.1)	(-0.1) (-1.2)
W2005	**-13.01**	**-12.11**	**-9.29**	**-11.36**	**-11.92**	**-10.53**	**-11.37**
	(-3.2)	(-3.0)	(-2.2)	(-2.9)	(-2.8)	(-2.5)	(-2.8) (-23.3)
N	122	121	122	121	122	121	121.5
Adj R^2	0.355	0.355	0.367	0.389	0.348	0.357	0.362

When the corresponding results for the estimates with and without fixed effects for waves are compared, the effect of the LR-variables falls a little. Africa and West change somewhat, while the other regional dummies change less.

	Table 4.1	Table 4.3a		Table 4.1	Table 4.3b
LR5	***3.23***	***2.29***	*LR20*	***7.21***	**6.44**
Africa	**-16.03**	**-9.23**	*Africa*	**-16.50**	***-12.46***
Asia	**-25.54**	**-22.20**	*Asia*	**-24.89**	**-23.97**
LaAm	**-32.08**	**-28.85**	*LaAm*	**-33.27**	**-32.33**
Mena	**-31.24**	**-25.83**	*Mena*	**-31.07**	**-28.12**
PCom	**-20.30**	**-16.54**	*PCom*	**-17.18**	**-16.99**
West	**36.66**	**26.33**	*West*	**39.89**	**36.38**

5. Controls of Table 8 from main paper

Table 5.1. OLS estimate. Model: *income, EFI, FEC*

Fraser EFI component *x*	(C1) Gov. size	(C2) Legal qualt.	(C3) Money	(C4) Free trade	(C5) No regul.	(EFI) Aggregate	Cross-row (Sig) (Stab)
x	0.94	**2.94**	***-1.12***	**-4.48**	-1.83	-1.71	-0.88
	(1.0)	(2.2)	(-1.7)	(-3.2)	(-1.5)	(-1.1)	(-0.7) (-0.9)
Income	3.31	0.57	**5.07**	**7.28**	**5.17**	***4.71***	***4.35***
	(1.5)	(0.2)	(2.3)	(3.0)	(2.2)	(1.9)	(1.9) (5.2)
Africa	-10.19	-6.52	-8.39	-8.94	-6.28	-9.01	***-8.22***
	(-1.4)	(-0.9)	(-1.2)	(-1.2)	(-0.8)	(-1.2)	(-1.1) (-14.4)
Asia	**-21.54**	**-16.88**	**-19.80**	**-20.83**	**-19.63**	**-20.29**	**-19.83**
	(-4.5)	(-3.5)	(-4.3)	(-4.6)	(-4.2)	(-4.4)	(-4.3) (-33.2)
LaAm	**-27.93**	**-20.61**	**-27.44**	**-26.84**	**-25.39**	**-26.52**	**-25.79**
	(-5.8)	(-4.1)	(-6.0)	(-6.2)	(-5.7)	(-5.9)	(-5.6) (-25.8)
Mena	**-26.01**	**-21.03**	**-24.87**	**-25.90**	**-24.88**	**-25.02**	**-24.62**
	(-4.2)	(-3.4)	(-4.1)	(-4.4)	(-4.1)	(-4.1)	(-4.1) (-36.1)
PCom	**-15.64**	**-11.47**	**-17.19**	**-16.40**	**-16.23**	**-18.03**	**-15.83**
	(-3.4)	(-2.4)	(-3.7)	(-3.7)	(-3.5)	(-3.7)	(-3.4) (-18.5)
West	-10.11	-3.18	-12.38	-9.47	-11.39	-6.45	***-8.83***
	(-0.5)	(-0.2)	(-0.6)	(-0.5)	(-0.5)	(-0.3)	(-0.4) (-6.9)
N	174	174	178	173	177	173	174.8
Adj R^2	0.319	0.330	0.322	0.355	0.316	0.320	0.327

Table 5.2. B-K estimate. Model: *income, EFI, FEC*. Table 8 from paper

Fraser EFI component *x*	(C1) Gov. size	(C2) Legal qualt.	(C3) Money	(C4) Free trade	(C5) No regul.	(EFI) Aggregate	Average (Sig) (Stab)
x	0.94	**2.94**	***-1.12***	**-4.48**	-1.83	-1.71	-0.88
	(0.9)	(2.4)	(-1.7)	(-3.4)	(-1.6)	(-1.1)	(-0.8) (-0.9)
Income	3.31	0.57	***5.07***	**7.28**	**5.17**	***4.71***	***4.35***
	(1.4)	(0.2)	(1.9)	(3.0)	(2.0)	(1.7)	(1.7) (5.2)
Africa	-10.19	-6.52)	-8.39	-8.94	-6.28	-9.01	***-8.22***
	(-1.3)	(-0.8)	(-1.1)	(-1.2)	(-0.8)	(-1.1)	(-1.1) (-14.4)
Asia	**-21.54**	**-16.88**	**-19.80**	**-20.83**	**-19.63**)	**-20.29**	**-19.83**
	(-5.4)	(-4.5)	(-5.6)	(-5.9)	(-5.6)	(-5.7)	(-5.5) (-33.2)
LaAm	**-27.93**	**-20.61**	**-27.44**	**-26.84**	**-25.39**	**-26.52**	**-25.79**
	(-5.7)	(-4.6)	(-6.6)	(-6.6)	(-6.1)	(-6.4)	(-6.0) (-25.8)
Mena	**-26.01**	**-21.03**	**-24.87**	**-25.90**	**-24.88**	**-25.02**	**-24.62**
	(-4.5)	(-3.6)	(-4.6)	(-4.6)	(-4.4)	(-4.6)	(-4.4) (-36.1)
PCom	**-15.67**	**-11.47**	**-17.19**	**-16.40**	**-16.23**	**-18.03**	**-15.83**
	(-3.4)	(-2.4)	(-3.7)	(-3.6)	(-3.5)	(-3.7)	(-3.4) (-18.6)
West	-10.11	-3.18	-12.38	-9.47	-11.39	-6.45	***-8.83***
	(-0.4)	(-0.1)	(-0.5)	(-0.4)	(-0.5)	(-0.3)	(-0.4) (-6.9)
N	174	174	178	173	177	173	174.8
Adj R^2	0.347	0.357	0.349	0.381	0.343	0.348	0.354

The testing procedure from section 2 is now repeated for Tables 5.1 to 5.3. Table 5.2 is from paper. Table 5.1 is the same table re-estimated with OLS. The two tables are used for the comparison of the Beck-Katz estimates and the OLS estimates in section 6. No coefficient changes significance between the two estimates. Table 5.3 shows what happens when the fixed effects for waves are added.

Table 5.3. OLS estimate. Model: *income, EFI, FEC, FEW*

Fraser EFI component *x*	(C1) Gov. size	(C2) Legal qualt.	(C3) Money	(C4) Free trade	(C5) No regul.	(EFI) Aggregate	Cross-row (Sig) (Stab)
x	**2.51**	**3.04**	-0.46	**-4.75**	0.97	0.93	0.37
	(2.6)	(2.4)	(-0.7)	(-3.3)	(0.7)	(0.5)	(0.4) (0.4)
Income	**4.86**	1.88	**5.52**	**8.85**	**4.55**	***4.25***	**4.99**
	(2.4)	(0.8)	(2.6)	(3.8)	(2.0)	(1.8)	(2.2) (5.9)
Africa	-2.06	1.47	-1.45	-1.98	-1.26	-1.47	***-1.12***
	(-0.3)	(0.2)	(-0.2)	(-0.3)	(-0.2)	(-0.2)	(-0.2) (-2.3)
Asia	**-18.29**	**-12.20**	**-15.88**	**-17.37**	**-15.15**	**-15.74**	**-15.77**
	(-4.0)	(-2.6)	(-3.5)	(-3.9)	(-3.3)	(-3.4)	(-3.5) (-20.2)
LaAm	**-27.42**	**-17.00**	**-23.44**	**-24.51**	**-22.22**	**-22.44**	**-22.84**
	(-6.0)	(-3.5)	(-5.3)	(-5.8)	(-5.1)	(-5.0)	(-5.1) (-17.9)
Mena	**-21.74**	**-15.39**	**-19.65**	**-21.88**	**-17.63**	**-18.63**	**-19.15**
	(-3.7)	(-2.6)	(-3.3)	(-3.8)	(-2.9)	(-3.1)	(-3.2) (-20.6)
PCom	**-10.76**	***-8.18***	**-13.61**	**-14.31**	**-10.70**	**-11.86**	**-11.57**
	(-2.4)	(-1.8)	(-3.0)	(-3.3)	(-2.3)	(-2.3)	(-2.5) (-14.0)
West	-32.94	-17.40	-23.04	-21.58	-24.33	-21.16	***-23.41***
	(-1.5)	(-0.9)	(-1.2)	(-1.1)	(-1.2)	(-1.0)	(-1.0) (-12.0)
W1990	5.66	***6.17***	4.80	1.00	6.21	4.85	***4.78***
	(1.5)	(1.7)	(1.4)	(0.3)	(1.6)	(1.2)	(1.3) (6.6)
W2000	-0.16	1.44	1.80	2.10	0.89	0.57	***1.11***
	(-0.1)	(0.4)	(0.5)	(0.6)	(0.3)	(0.2)	(0.3) (3.5)
W2005	**-12.97**	-10.52	-10.31	-11.73	-11.57	-11.62	**-11.45**
	(-3.7)	(-3.1)	(-2.8)	(-3.5)	(-3.3)	(-3.2)	(-3.5) (-32.1)
N	174	174	178	173	177	173	174.8
Adj R^2	0.4384	0.438	0.418	0.455	0.417	0.419	0.431

It is puzzling that even where the effect of income increases in significance when the fixed effects for waves are included, it does not increase much in size. But even more puzzling is the large increase in the negative coefficient to *West*, while *Africa* drops out.

6. Estimates including all variables

Tables 6.1a and b are the same as Table 5.1, but with the two LR-variables added, and Tables 6.2a and 6.2b add the fixed effects for waves.

Table 6.1a. OLS estimate. Model: *income*, *LR*5, *EFI*, *FEC*

Fraser EFI component *x*	(C1) Gov. size	(C2) Legal qualt.	(C3) Money	(C4) Free trade	(C5) No regul.	(EFI) Aggregate	Average (Sig) (Stab)
x	-0.11	***2.46***	**-1.72**	**-5.45**	**-3.00**	**-4.00**	-1.97
	(-0.1)	(1.7)	(-2.4)	(-3.7)	(-2.1)	(-2.3)	(-1.5) (-1.9)
Income	1.49	-0.38	3.19	**5.94**	3.69	4.15	***3.01***
	(0.6)	(-0.1)	(1.3)	(2.3)	(1.5)	(1.6)	(1.2) (3.7)
LR5	2.71	2.56	2.38	2.98	2.92	2.92	***2.75***
	(1.2)	(1.2)	(1.2)	(1.5)	(1.4)	(1.4)	(1.3) (30.7)
Africa	-10.96	-7.68	-10.69	-10.51	-6.97	-9.84	***-9.44***
	(-1.4)	(-1.0)	(-1.4)	(-1.4)	(-0.9)	(-1.3)	(-1.2) (-15.0)
Asia	**-22.53**	**-19.24**	**-22.81**	**-23.88**	**-22.36**	**-23.08**	**-22.32**
	(-4.4)	(-3.6)	(-4.6)	(-4.9)	(-4.5)	(-4.6)	(-4.4) (-37.5)
LaAm	**-29.23**	**-23.83**	**-32.75**	**-30.97**	**-29.46**	**-31.50**	**-29.62**
	(-5.7)	(-4.2)	(-6.7)	(-6.7)	(-6.2)	(-6.6)	(-6.0) (-25.4)
Mena	**-27.25**	**-23.67**	**-29.00**	**-29.32**	**-28.82**	**-28.91**	**-27.83**
	(-4.3)	(-3.6)	(-4.7)	(-4.9)	(-4.6)	(-4.7)	(-4.5) (-34.5)
PCom	**-16.94**	**-11.63**	**-20.92**	**-17.61**	**-18.43**	**-20.98**	**-17.75**
	(-3.4)	(-2.2)	(-4.2)	(-3.8)	(-3.7)	(-4.0)	(-3.6) (-13.9)
West	12.57	9.70	11.08	10.57	10.45	15.54	***11.65***
	(0.5)	(0.4)	(0.5)	(0.5)	(0.5)	(0.7)	(0.5) (14.7)
N	161	161	161	160	162	160	160.83
Adj R^2	0.330	0.333	0.354	0.384	0.341	0.351	0.349

In Table 6.1a both LR5 and income are borderline significant. In Table 6.2a only income is. However, in Table 6.1b only LR20 is significant, and this is also the case in Table 6.2b, though the size of the coefficient falls.

Table 6.1b. OLS estimate. Model: *income, LR*20, *EFI, FEC*

Fraser EFI component *x*	(C1) Gov. size	(C2) Legal qualt.	(C3) Money	(C4) Free trade	(C5) No regul.	(EFI) Aggregate	Average (Sig) (Stab)
x	0.21	2.08	**-2.09**	**-5.01**	-2.10	***-4.25***	-1.86
	(0.2)	(1.1)	(-2.4)	(-2.6)	(-1.1)	(-1.9)	(-1.1) (-1.9)
Income	-2.04	-3.75	-0.56	2.21	-1.28	0.09	-0.89
	(-0.7)	(-1.1)	(-0.2)	(0.7)	(-0.4)	(0.0)	(-0.3) (-1.2)
LR20	***7.25***	**7.08**	**7.68**	**6.68**	**8.58**	**8.59**	**7.64**
	(1.9)	(2.0)	(2.3)	(2.0)	(2.4)	(2.5)	(2.2) (25.8)
Africa	***-18.67***	-16.18	**-19.79**	***-18.39***	***-18.19***	**-19.70**	***-18.48***
	(-1.9)	(-1.6)	(-2.0)	(-1.9)	(-1.8)	(-2.0)	(-1.9) (-37.7)
Asia	**-25.10**	**-22.09**	**-26.72**	**-26.22**	**-26.68**	**-27.45**	**-25.71**
	(-4.1)	(-3.3)	(-4.5)	(-4.4)	(-4.3)	(-4.4)	(-4.2) (-35.6)
LaAm	**-33.02**	**-27.30**	**-37.40**	**-34.19**	**-34.20**	**-36.45**	**-33.76**
	(-5.5)	(-3.7)	(-6.3)	(-6.0)	(-5.8)	(-6.0)	(-5.5) (-25.5)
Mena	**-31.03**	**-27.63**	**-33.72**	**-32.18**	**-33.85**	**-34.15**	**-32.09**
	(-4.1)	(-3.4)	(-4.5)	(-4.4)	(-4.3)	(-4.5)	(-4.2) (-34.6)
PCom	**-15.83**	***-11.99***	**-22.02**	**-16.36**	**-18.76**	**-21.37**	**-17.72**
	(-2.6)	(-1.7)	(-3.5)	(-2.7)	(-2.9)	(-3.2)	(-2.8) (-12.6)
West	43.66	43.63	***50.03***	42.49	***52.13***	***56.49***	***48.07***
	(1.3)	(1.5)	(1.7)	(1.4)	(1.7)	(1.9)	(1.6) (22.7)
N	122	121	122	121	122	121	121.5
Adj R^2	0.292	0.298	0.327	0.329	0.299	0.312	0.309

Table 6.2a. OLS estimate. Model: *income, LR*5, *EFI, FEC, FEW*

Fraser EFI component *x*	(C1) Gov. size	(C2) Legal qualt.	(C3) Money	(C4) Free trade	(C5) No regul.	(EFI) Aggregate	Average (Sig) (Stab)
x	1.76	***2.47***	-0.91	***-5.49***	-0.02	-1.25	-0.57
	(1.6)	(1.8)	(-1.2)	(-3.7)	(-0.0)	(-0.6)	(-0.4) (-0.5)
Income	3.65	1.21	***3.84***	**7.61**	3.50	4.02	***3.97***
	(1.6)	(0.5)	(1.7)	(3.1)	(1.5)	(1.6)	(1.6) (5.2)
LR5	0.52	1.87	1.77	1.95	1.46	1.73	***1.55***
	(0.2)	(0.9)	(0.9)	(1.0)	(0.7)	(0.9)	(0.8) (7.8)
Africa	-1.03	2.26	-2.36	-1.79	-0.42	-1.26	-0.77
	(-0.1)	(0.3)	(-0.3)	(-0.2)	(-0.1)	(-0.2)	(-0.1) (-1.3)
Asia	**-19.15**	**-14.61**	**-18.93**	**-20.28**	**-17.75**	**-18.54**	**-18.21**
	(-4.0)	(-2.9)	(-3.9)	(-4.4)	(-3.6)	(-3.8)	(-3.8) (-25.1)
LaAm	**-28.27**	**-19.89**	**-27.90**	**-27.90**	**-25.31**	**-26.47**	**-25.96**
	(-5.9)	(-3.7)	(-5.8)	(-6.3)	(-5.5)	(-5.5)	(-5.5) (-21.9)
Mena	**-22.20**	**-17.19**	**-23.02**	**-24.32**	**-20.57**	**-21.94**	**-21.54**
	(-3.7)	(-2.8)	(-3.7)	(-4.1)	(-3.2)	(-3.5)	(-3.5) (-23.4)
PCom	**-11.99**	***-8.54***	**-16.60**	**-15.42**	**-12.82**	**-14.97**	**-13.39**
	(-2.5)	(-1.7)	(-3.3)	(-3.4)	(-2.6)	(-2.8)	(-2.7) (-12.3)
West	-16.61	-0.19	0.75	0.92	-0.55	-0.01	-2.61
	(-0.7)	(-0.1)	(0.2)	(0.3)	(-0.2)	(0.0)	(-0.1) (-1.02)
W1990	4.99	5.88	3.54	0.75	4.55	3.63	***3.89***
	(1.3)	(1.5)	(0.9)	(0.2)	(1.1)	(0.9)	(1.0) (5.9)
W2000	-1.21	**-12.62**	**-11.61**	**-13.41**	**-13.08**	**-12.43**	**-10.73**
	(-0.3)	(-3.4)	(-3.0)	(-3.8)	(-3.4)	(-3.2)	(-2.9) (-6.1)
W2005	**-14.20**	-5.49	-1.87	-3.21	-6.35	-2.38	***-5.59***
	(-3.8)	(-0.3)	(-0.1)	(-0.2)	(-0.3)	(-0.1)	(-0.8) (-3.3)
N	161	161	161	160	162	160	160.8
Adj R^2	0.419	0.423	0.416	0.462	0.407	0.414	0.423

Table 6.2b. OLS estimate. Model: *income*, *LR*20, *EFI*, *FEC*, *FEW*

Fraser EFI component *x*	(C1) Gov. size	(C2) Legal qualt.	(C3) Money	(C4) Free trade	(C5) No regul.	(EFI) Aggregate	Average (Sig) (Stab)
x	1.62	1.88	***-1.65***	**-5.91**	-0.26	-2.54	-1.14
	(1.2)	(1.1)	(-1.8)	(-3.0)	(-0.1)	(-1.1)	(-0.6) (-1.1)
Income	0.39	-1.77	0.45	4.86	-0.39	0.88	0.73
	(0.1)	(-0.5)	(0.2)	(1.5)	(-0.1)	(0.3)	(0.2) (0.9)
LR20	4.67	***6.01***	**6.81**	5.24	***6.66***	**7.03**	***6.07***
	(1.3)	(1.8)	(2.1)	(1.6)	(1.9)	(2.0)	(1.8) (17.2)
Africa	-9.51	-8.53	-13.55	-10.19	-11.37	-12.07	***-10.87***
	(-1.0)	(-0.9)	(-1.4)	(-1.1)	(-1.2)	(-1.2)	(-1.1) (-16.0)
Asia	**-23.08**	**-20.29**	**-24.52**	**-23.78**	**-23.16**	**-24.40**	**-23.20**
	(-3.9)	(-3.2)	(-4.1)	(-4.1)	(-3.8)	(-4.0)	(-3.8) (-40.2)
LaAm	**-32.86**	**-25.92**	**-34.61**	**-32.05**	**-31.20**	**-33.02**	**-31.61**
	(-5.7)	(-3.6)	(-5.9)	(-5.9)	(-5.4)	(-5.5)	(-5.3) (-28.2)
Mena	**-26.64**	**-23.26**	**-29.83**	**-27.85**	**-26.97**	**-28.64**	**-27.20**
	(-3.6)	(-3.0)	(-4.0)	(-3.9)	(-3.3)	(-3.7)	(-3.6) (-32.5)
PCom	**-14.65**	***-11.75***	**-20.76**	**-16.13**	**-16.45**	**-18.57**	**-16.39**
	(-2.5)	(-1.8)	(-3.3)	(-2.8)	(-2.6)	(-2.8)	(-2.6) (-14.1)
West	16.68	29.54	38.11	26.79	34.26	38.51	***30.65***
	(0.5)	(1.0)	(1.3)	(1.0)	(1.1)	(1.3)	(1.0) (10.0)
W1990	5.71	7.68	3.50	2.36	3.55	5.62	***4.74***
	(0.7)	(0.9)	(0.4)	(0.3)	(0.4)	(0.6)	(0.5) (6.5)
W2000	-2.02	-1.08	1.09	0.69	-1.33	-0.25	-0.48
	(-0.5)	(-0.3)	(0.3)	(0.2)	(-0.3)	(-0.1)	(-0.1) (-1.1)
W2005	**-13.14**	**-11.68**	**-9.37**	**-12.41**	**-11.85**	**-10.63**	**-11.51**
	(-3.1)	(-2.8)	(-2.2)	(-3.1)	(-2.8)	(-2.5)	(-2.7) (-23.1)
N	122	121	122	121	122	121	121.5
Adj R^2	0.350	0.351	0.361	0.395	0.342	0.351	0.358

7. OLS and B-K estimates of the t-ratios compared

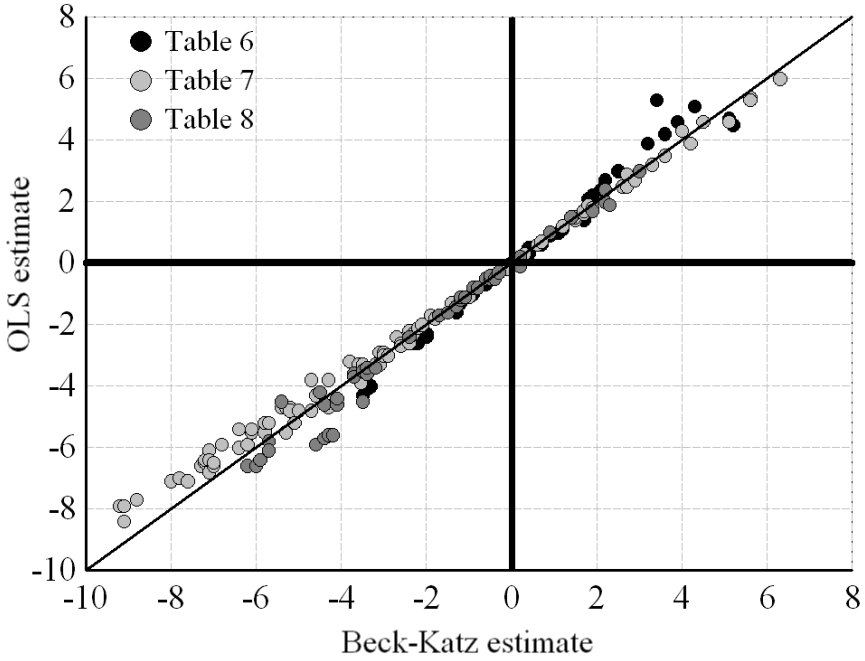
The comparison is based on Tables #.1 and #.2 in sections 3, 4 and 5. These tables are not independent, but they provide a total of 192 pairs of t-ratios, where one is estimated by the Beck-Katz estimator and the other is estimated by OLS. Table 7.1 shows that the three sets of standard errors have averages which are fairly close, and that they do not deviate systematically to one side. Figure 7.1 shows the scatter diagrams of the three sets. Clearly, the data sets used have so weak a panel structure that the B-K estimator matters only a little.

Table 7.1. Basic statistics of standard errors calculated with the two methods

From main paper	Table 6		Table 7		Table 8		Tables 6-8	
From this paper	Table 3.1	Table 3.2	Table 4.1	Table 4.2	Table 5.1	Table 5.2	All	All
	OLS	B-K	OLS	B-K	OLS	B-K	OLS	B-K
Average	0.233	0.242	-2.399	-2.607	-2.437	-2.231	-1.751	-1.801
Standard error	0.366	0.323	0.374	0.402	0.390	0.363	0.243	0.249
Median	0.15	0.15	-3.1	-3.1	-2.9	-2.8	-2.1	-2.05
N	48		96		48		192	
Deviation in %	3.7%		8.0%		-9.2%		2.8%	

Note: The deviation is the B-K average minus the OLS average over the B-K average in %.

Figure 7.1. Scatter plots of the three sets of standard errors



8. The pattern of multicollinearity

Table 8.1 compares six tables as indicated in the first row of the table. As we already know, the six x-variables do not produce the same results. This is as it should be – they are different. However, they are compared in a more meaningful way in Table 9.1.

Table 8.1. Comparing estimates – all OLS

		Table 3.1 Average	Table 3.3 Average	Table 4.1 Average	Table 4.3 Average	Table 6.1 Average	Table 6.2 Average
	n	(Sig) (Stab)	(Sig) (Stab)	(Sig) (Stab)	(Sig) (Stab)	(Sig) (Stab)	(Sig) (Stab)
x	12	0.31	1.44	***-1.64***	-0.38	***-1.92***	-0.86
		(0.2) (0.3)	(1.1) (1.6)	(-1.2) (-2.7)	(-0.2) (-0.6)	(-1.3) (-2.6)	(-0.5) (-1.1)
Income	12	**5.77**	**4.66**			1.06	***2.35***
		(2.9) (5.4)	(2.3) (4.7)			(0.5) (1.3)	(1.0) (3.2)
LR5	6	***0.94***	0.37	***3.23***	***2.29***	***2.75***	***1.55***
		(0.4) (2.4)	(0.2) (1.0)	(1.6) (18.2)	(1.2) (10.7)	(1.3) (30.7)	(0.8) (7.8)
LR20	6	***2.12***	***1.85***	**7.21**	**6.44**	**7.64**	***6.07***
		(0.6) (3.4)	(0.5) (3.2)	(2.3) (16.1)	(2.1) (15.6)	(2.2) (25.8)	(1.8) (17.2)
Africa	12			**-16.26**	***-10.85***	***-13.96***	***-5.82***
				(-2.7) (-12.4)	(-1.8) (-7.5)	(-1.6) (-10.2)	(-0.6) (-3.8)
Asia	12			**-25.21**	**-23.08**	**-24.01**	**-20.71**
				(-5.4) (-27.7)	(-5.0) (-24.2)	(-4.3) (-35.5)	(-3.8) (-24.2)
LaAm	12			**-32.67**	**-30.59**	**-31.69**	**-28.78**
				(-6.7) (-28.6)	(-6.3) (-25.0)	(-5.8) (-29.8)	(-5.4) (-25.0)
Mena	12			**-31.16**	**-26.98**	**-29.96**	**-24.37**
				(-5.2) (-28.2)	(-4.5) (-22.8)	(-4.3) (-34.4)	(-3.5) (-23.7)
PCom	12			**-18.74**	**-16.76**	**-17.74**	**-14.89**
				(-3.7) (-14.7)	(-3.3) (-15.9)	(-3.2) (-18.7)	(-2.7) (-16.4)
West	12	**-43.43**	***-20.24***	**38.27**	**31.36**	***29.86***	***14.02***
		(-2.7) (-9.4)	(-1.3) (-3.8)	(3.8) (8.1)	(2.9) (6.7)	(1.1) (5.6)	(0.5) (2.7)
W1990	12		***4.78***		***4.81***		***4.31***
			(1.1) (2.3)		(0.9) (12.1)		(0.8) (8.5)
W2000	12		***-5.37***		-0.21		***-5.61***
			(-1.1) (-2.8)		(-0.1) (-0.8)		(-1.5) (-3.2)
W2005	12		**-22.52**		**-11.77**		***-8.55***
			(-2.4) (-5.6)		(-3.0) (-39.3)		(-1.8) (-6.9)
N		141.25	141.25	141.17	141.17	141.17	141.17
Adj R^2		0.121	0.202	0.329	0.388	0.329	0.391

Table 8.2 does the same as Table 8.1, but merges all tables. Table 8.2 is the most debatable table in this background note – it simply calculates the average and the significance and stability measure for all coefficients estimated in sections 2 to 6. As the (stab) measure uses all the estimates for each coefficient, they are almost all significant.

Table 7.2. All OLS estimates except the institutional ones – see Table 9.1

	Income	Africa	Mena	W1990
Average	**3.74**	***-9.27***	**-25.76**	***3.55***
(Sig) (Stab)	(2.4) (9.4)	(-1.3) (-10.2)	(-4.1) (-37.5)	(1.1) (2.8)
Median	3.97	-10.20	-26.97	5.62
N	68	68	71	53
	LR5	Asia	PCom	W2000
Average	***1.85***	**-21.01**	**-14.45**	***-3.75***
(Sig) (Stab)	(0.9) (9.3)	(-4.3) (-29.3)	(-2.7) (-16.3)	(-0.6) (-2.6)
Median	1.95	-22.21	-16.23	-0.16
N	36	70	71	51
	LR20	LaAm	West/Constant	W2005
Average	***5.22***	**-27.83**	**18.10**	**-14.53**
(Sig) (Stab)	(1.6) (12.0)	(-5.6) (-31.4)	(2.0) (6.3)	(-2.8) (-8.9)
Median	6.00	-28.52	20.37	-11.65
N	36	71	72	56

Table 8.3. The distribution of the coefficients

Variable	N	Probability in %			Form of probit diagram
		Skewness rejected	Kurtosis rejected	Normality accepted	
Income	68	55.5	50.4	66.45	OK see Figure 8.1
LR5	36	16.4	44.4	25.66	OK (one jump)
LR20	36	11.5	4.2	4.65	One jump
Africa	68	6	75.8	15.01	OK
Asia	70	0	0	0	Bend as Figure 8.2
LaAm	71	0	0	0	Bend see Figure 8.2
Mena	71	0	1.7	0.05	Bend see Figure 8.2
PCom	71	0	0.2	0	Bend as Figure 8.2
West	72	67.4	0.5	2.54	Looks OK
W1990	53	0	0	0	Avoid extremes
W2000	51	0	0	0	One large jump
W2005	56	0	0	0	One large jump

Note that the most medians are numerically bigger than the corresponding average in Table 8.2. In the first three columns of the table the difference is small. However, the fixed effects

for waves have fairly different medians and averages. Table 8.3 shows that the distribution of more than half of the regression coefficients suffers from skewness, kurtosis and general non-normality, so some of the averages are a bit dubious. Three examples of the way the probit diagrams look are presented as Figures 8.1 and 8.2.

Figure 8.1. The distribution of the 68 estimates of the effect of income

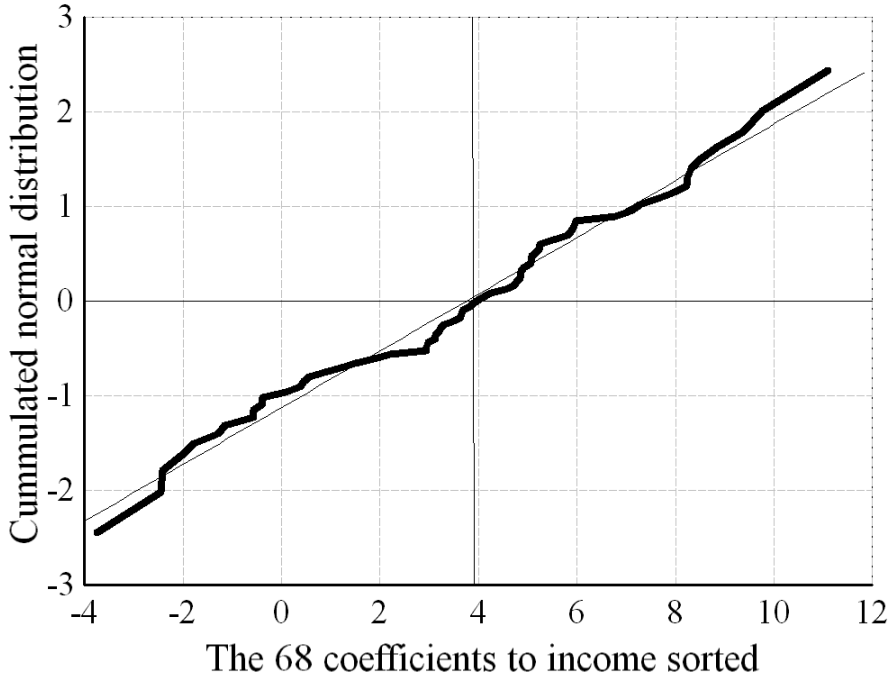
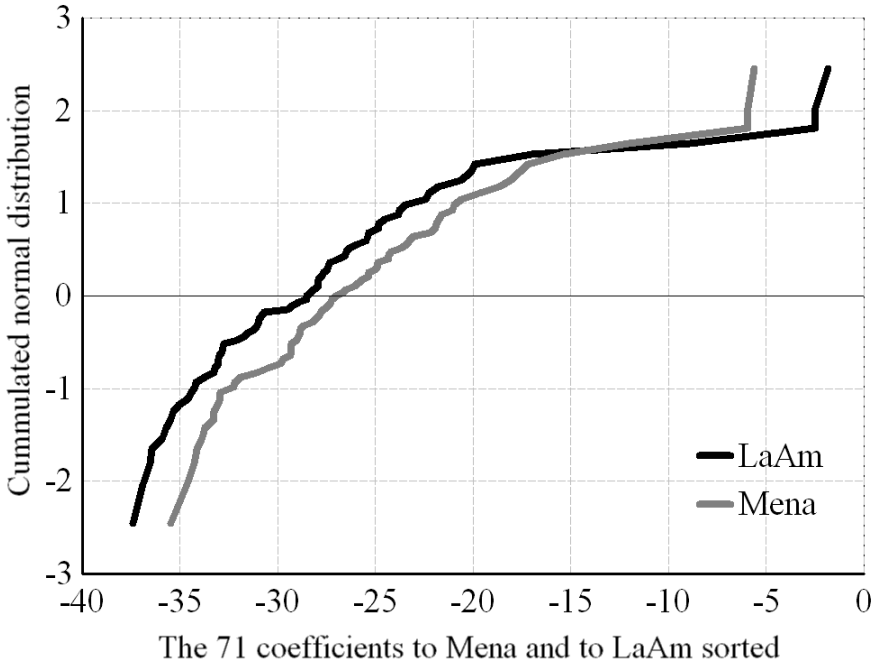


Figure 8.2. The 2 *x* 71 estimates of the effect of LaAm and Mena



As the reader can see, it is clear what the average estimated effect of *income* is – it is certainly positive. However, the average effect of being a Mena or a LaAm country is less clear – though it is obviously very negative. The LaAm and Mena countries are for socialism.

On the basis of this summary, we make the following conclusions:

Income and the *LR*-variables*:*

Income is stable and often significant. However, it is correlated with both LR20 and the two sets of fixed effects. From Table 4 in the main paper it is known that income has a substantial effect in the long run, so we have to conclude that the estimates between 4 and 7 for the coefficient to income are the most reliable. The estimates to LR20 are thus due to correlation, not causality, as argued in the paper.

LR5 is inferior to *LR20*. Though some of the tables give stable estimates to *LR5*, they are rarely significant. The coefficients react to both the wave dummies and to income.

LR20 is stable and often significant. It is a less significant variable than *income*, and gives a coefficient that has a less reliable distribution. It is strongly dependent upon the fixed effects for country groups, income and the fixed effects for waves. So, the precise size of the effect is hard to determine.

The fixed effects to country groups: Four are significant and stable – two are not.

The coefficients to *Asia*, *LaAm*, *Mena* and *PCom* are significant and stable. All are negative. The populations in all these country-groups prefer socialism.

The coefficient to *Africa* is variable, and it disappears if income has a large coefficient and fixed effects for waves are included. See also the two tables in section 1. We conclude that the effect of *Africa* is likely to be (mostly) due to *income*.

The coefficient to *West* is variable as well and less stable. It turns zero when income gets a large coefficient. We conclude that (most of) this effect of *West* is due to *income*. Note the large interaction with the fixed effects to waves.

The fixed effects to waves: The first two of these variables are dubious.

W1990 is positive and the least significant of the entire 12 variable.

W2000 is only marginally more significant and stable

W2005 is negative but interacts strongly with the fixed effects for country groups

9. The effects of the institutional variables, *EFI*

The tables bring 14 rows of estimates of the effects of the components of the Fraser Economic Freedom Index. Table 3.1 has two estimates of each effect; one including FR5 and one including LR20. They are presented in two lines. The same applies to most tables, except Tables 5.1 and 5.3 that do not include LR-variables.

Table 9.1. The estimates of the effects of the institutional variables

Table	Var.	C1 Gov. size	C2 Legal qualt.	C3 Money	C4 Free trade	C5 No regul.	Aggregate Index
3.1	LR5	**-2.27** (-2.2)	**6.27** (4.7)	-0.01 (0.0)	**-3.64** (-2.1)	-0.42 (-0.3)	-0.29 (-0.2)
	LR20	***-2.36*** (-1.7)	**6.44** (4.5)	-0.11 (-0.1)	-2.92 (-1.3)	1.97 (1.1)	1.04 (0.5)
3.3	LR5	-0.83 (-0.8)	**5.97** (4.8)	0.92 (1.2)	***-3.02*** (-1.8)	3.24 (2.2)	3.02 (1.7)
	LR20	-1.65 (-1.2)	**6.40** (4.6)	0.46 (0.5)	***-4.01*** (-1.7)	3.94 (2.1)	2.88 (1.3)
4.1	LR5	-0.17 (-0.2)	***2.35*** (1.9)	**-1.44** (-2.1)	**-3.89** (-2.9)	-2.31 (-1.7)	-2.80 (-1.8)
	LR20	0.40 (0.3)	1.17 (0.7)	**-2.12** (-2.6)	**-4.4** (-2.6)	-2.28 (-1.3)	-4.23 (-2.0)
4.3	LR5	1.48 (1.3)	***2.81*** (2.4)	-0.59 (-0.8)	**-3.34** (-2.5)	0.78 (0.5)	0.10 (0.1)
	LR20	1.57 (1.2)	1.45 (0.9)	***-1.63*** (-1.8)	**-4.48** (-2.6)	-0.32 (-0.2)	-2.33 (-1.1)
5.1		0.94 (1.0)	**2.94** (2.2)	***-1.12*** (-1.7)	**-4.48** (-3.2)	-1.83 (-1.5)	-1.71 (-1.1)
5.3		**2.51** (2.4)	**3.04** (2.7)	-0.46 (-07)	**-4.75** (-3.6)	0.97 (0.7)	0.93 (0.5)
5.1	LR5	-0.11 (-0.1)	***2.46*** (1.7)	**-1.72** (-2.4)	**-5.45** (-3.7)	-3.00 (-2.1)	-4.00 (-2.3)
	LR20	0.21 (0.2)	2.08 (1.1)	**-2.09** (-2.4)	**-5.01** (-2.6)	-2.10 (-1.1)	-4.25 (-1.9)
6.2	LR5	1.76 (1.6)	***2.47*** (1.8)	-0.91 (-1.2)	**-5.49** (-3.7)	-0.02 (0.0)	-1.25 (-0.6)
	LR20	1.62 (1.2)	1.88 (1.1)	***-1.65*** (-1.8)	**-5.91** (-3.0)	-0.26 (-0.1)	-2.54 (-1.1)
Average		0.22	**3.41**	***-0.89***	**-4.34**	-0.12	-1.10
(Sig) (Stab)		(0.2) (0.6)	(2.5) (6.8)	(-1.1) (-3.6)	(-2.7) (-18.1)	(-0.1) (-0.2)	(-0.6) (-1.7)

Two of the variables are both significant and stable; one is stable but mostly insignificant. The remaining three are neither significant nor stable:

C1 Government size; it has no effect. It is neither significant nor stable.

C2 Legal quality; it has a positive effect. It is both significant and stable.

C3 Stable money; it has a negative effect. It is of dubious significance, but it is stable.

C4 Globalization, it has a negative effect. It is both significant and stable.

C5 Freedom from regulation; it has no effect. It is neither significant nor stable.

Agg The aggregate index; it has no effect. It is not significant and has a dubious stability.