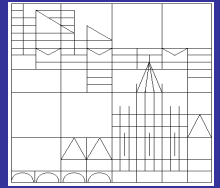




University of Konstanz
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Intelligence and Corruption

Niklas Potrafke

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Intelligence and corruption

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Abstract

This study finds that countries with high-IQ populations enjoy less corruption. I propose that this is because intelligent people have longer time horizons.

Keywords: Intelligence, corruption, institutions

JEL Classification: D73, I2

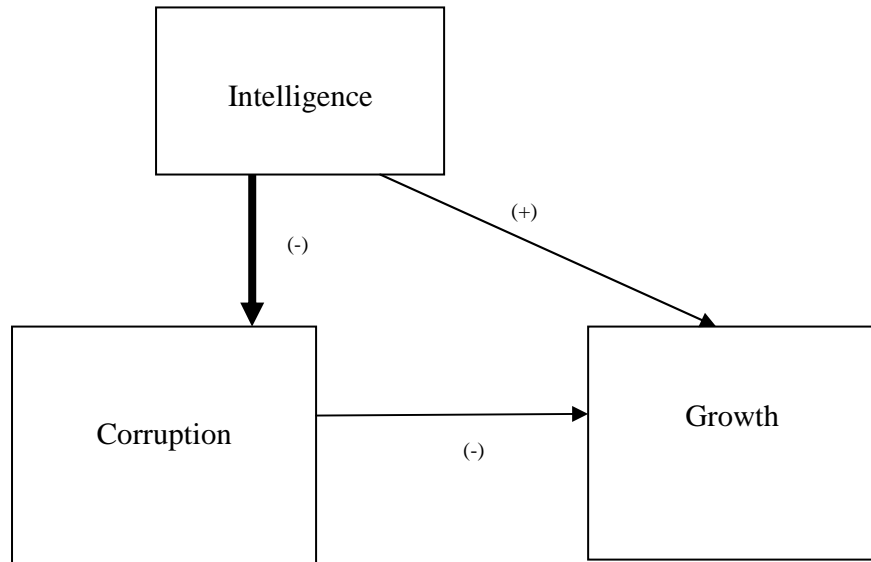
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1. Introduction

Most specialists agree that corruption reduces economic growth (Méon and Sekkat 2005). Research has recently focused on the determinants of corruption which include political institutions, global economic integration, the size of the shadow economy, business cycles, legal origin, and social trust (Dreher and Siemers 2009, Dreher and Schneider 2010, Goksecus and Suzuki 2011, Bjørnskov 2011). Using cross-sectional data for 125 countries, I show that countries with high IQ-populations enjoy less corruption.

Because corruption is individually rational, but socially inefficient, agents contemplating corrupt activities find themselves in a prisoner's dilemma. The dilemma can be overcome when the same players interact in an infinitely repeated game, but cooperation can also arise in circumstances in which different participants interact under a finite time horizon. Experimental evidence shows that cooperation is more prevalent among intelligent players (Jones 2008). Corruption of the especially inefficient roving-bandit type (Olson 2000) results under a short time-horizon. People with longer time horizons internalize the deleterious future effects of contemporary corruption. I propose that there is less corruption in societies with high-IQ populations because more intelligent people have longer time horizons, a common finding in psychology and economics (Shamosh and Gray 2008, Jones and Podemska 2010). Besides having a direct positive effect on economic growth (Jones and Schneider 2006, Weede and Kämpf 2002), intelligence also has an indirect beneficial effect on growth through less corruption (Figure 1).

Figure 1: The nexus between intelligence, corruption, and growth



2. Data and estimation strategy

To measure corruption, I use the reversed Transparency International's Perception of Corruption Index (CPI) for the year 2010. The reversed index assumes values between 0 (no corruption) and 10 (extreme corruption). The CPI has often been used in empirical research on corruption (see the studies mentioned in section 1).

I measure intelligence using the IQ data by Lynn and coauthors (2002, 2006 and 2010). In the base-line model, I use the data by Lynn and Vanhanen (2006), which has also been used by Jones and Schneider (2010). The data by Lynn and Vanhanen and Lynn and Meisenberg (2002, 2010) are used in the robustness tests section.¹ The IQ data in the sample have values between 64 and 108.

To illustrate the association between IQ and corruption, I present correlations between TI's reversed CPI and the IQ. Figure 2 shows that IQ is negatively associated with

¹ Jones and Podemska (2010) elaborate on the quality of the data by Lynn and coauthors (2002, 2006, 2010).

corruption. The correlation coefficient between CPI and IQ is -0.63. Countries with high-IQ populations and low corruption include Hong Kong, Singapore and Japan.

The base-line econometric model has the following form:

$$\text{Corruption}_i = \alpha \text{IQ}_i + \sum_k \delta_k \text{Continent}_{ik} + \sum_l \zeta_l x_{il} + \sum_m \gamma_m \text{Legal Origin}_{im} + u_i$$

$$\text{with } i = 1, \dots, 125; k=1, \dots, 4; l=1, \dots, 3; m=1, \dots, 4. \quad (1)$$

The subscript i refers to country i . IQ_i denotes the intelligence quotient. In my base-line specification, I use the IQ for the year 2006 and expect a negative influence of the IQ on corruption. Continent_{ik} are regional dummy variables assuming the value one if country i belongs to continent k and zero otherwise. I distinguish between five different continents: Africa, Asia, Europe, America and Oceania (reference category). The vector \mathbf{x}_i contains the political-economic control variables. I include the logarithm of real GDP per capita for the year 2005 (Penn World Tables 6.3), the Democracy-Dictatorship dummy variable by Cheibub et al. (2010) for the year 2005² and the KOF index of economic globalization for the year 2005 (Dreher 2006 and Dreher et al. 2008). The Legal Origin_{im} dummy variables are taken from La Porta et al. (1999). I distinguish between five different legal origins: French, German, Scandinavian, Socialist and British (reference category). I estimate the model with ordinary least squares (OLS) and robust standard errors.

² The Democracy-Dictatorship variable distinguishes between regimes in which executive and legislative offices are allocated in contested elections and those regimes in which this is not the case. The variable assumes the value one for democracies and zero otherwise. See Cheibub et al. (2010) for a more encompassing discussion on classifying democracies and dictatorships. The more traditional measures of democracy are the POLITY IV and the Freedom House indices. These indices have, however, been criticized on several grounds (Cheibub et al. 2010).

3. Results

3.1 Basic results

Table 1 shows the base-line regression results. The control variables display the expected signs and are statistically significant in several cases. Per capita income is statistically significant at the 1% level in column (3) and has the expected negative sign. Higher income is thus associated with less corruption. The democracy variable has the expected negative sign but does not turn out to be statistically significant. The KOF index of economic globalization is statistically significant at the 1% level and has the expected negative sign. Globalization thus reduces corruption. The estimates of the continent dummy variables do not turn out to be statistically significant in column (3), while the results in column (2) show that countries in Oceania have less corruption than countries in Asia; this effect is statistically significant at the 10% level. The coefficients of the French legal origin variable is statistically significant at the 5% level, the coefficients of the German and socialist legal origin variable are statistically significant at the 1% level and indicate that corruption is higher in countries with French and socialist legacies and lower in countries with a German legacy as compared to countries with a British legal origin. The Scandinavian legal origin variable does not turn out to be statistically significant.

Most importantly, the results reported in Table 1 show that intelligence has a negative influence on corruption. The coefficients of the 2006 IQ variable are statistically significant at the 1% level in columns (1) and (2) and at the 5% level in column (3) and indicate that if the IQ increases by one point, corruption as measured by the reversed CPI decreases by about 0.1 points. Against the background of the standard deviation of about 12 points of the IQ this is a numerically substantial effect: when the overall IQ increases by one standard deviation, the reversed CPI decreases by about 1.2 points, more than half a standard deviation.

3.2 Robustness checks

I have checked the robustness of the results in several ways. I have replaced the IQ data by Lynn and Vanhanen (2006) by the IQ data by Lynn and Vanhanen (2002) and (2010). When using the data by Lynn and Vanhanen (2002) I have also replaced the political economic control variables referring to the year 2005 by the political economic control variables referring to the year 2000. The results reported in Table 2 suggest that using the data by Lynn and Vanhanen and Lynn and Meisenberg (2002 and 2010) does not change the base-line estimates.

I have also included further control variables to address possible concerns on omitted variable bias: average years of schooling (Barro and Lee 2010), social trust (Bjørnskov 2011), size of the shadow economy (Dreher and Schneider 2010), an OECD dummy variable, trade openness (Penn World Tables 6.3) instead of the KOF index of economic globalization. Including these variables and also estimating the model with clustered standard errors by continent does not change the estimates regarding IQ. In particular, IQ outperforms average years of schooling (all results and descriptive statistics are shown in the working paper version).

Wicherts et al. have claimed that the African IQ scores in the Lynn/Vanhanen database are too low. I have therefore raised the lowest scores to 76 (Wicherts et al. 2010a) and 80 (Wicherts et al. 2010b). The results show that winsorizing the data at the levels suggested by Wicherts et al. increases the influence of IQ on corruption (all results are shown in the working paper version).

4. Conclusion

The results show that countries with high-IQ populations enjoy less corruption. This finding corresponds, for example, with the study by Rindermann and Thompson (2011),

who find that IQ influences economic freedom, and with the study by Jones (2011) showing that IQ influences political institutions.

The direct positive effect of intelligence on economic growth (Jones and Schneider 2006, Weede and Kämpf 2002) is thus accompanied by an indirect effect working through the reduction of corruption.

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Figure 2: Corruption (2010) and IQ (2006).



Correlation coefficient: -0.63. Source: Transparency International (2010) and Lynn and Vanhanen (2006)

Table 1: Regression Results.
 Dependent variable: Reversed CPI.
 OLS with robust standard errors.
 IQ 2006.

	(1)	(2)	(3)
IQ	-0.1140*** [9.34]	-0.1501*** [6.53]	-0.0526** [2.23]
Africa		0.3996 [0.27]	-0.0138 [0.01]
Asia		2.5606* [1.94]	1.4762 [1.35]
Europe		1.3238 [1.01]	1.0565 [0.98]
America		1.5556 [1.13]	1.385 [1.19]
log GDP per capita			-0.7479*** [3.07]
Democracy			-0.2007 [0.88]
KOF index of economic globalization			-0.0336** [2.50]
Legal Origin (french)			0.6677** [2.45]
Legal Origin (german)			-1.6493*** [4.08]
Legal Origin (scandinavian)			-0.7854 [1.44]
Legal Origin (socialist)			1.7243*** [5.07]
Constant	15.5498*** [15.96]	17.3074*** [6.49]	17.7084*** [7.30]
Observations	125	125	119
R-squared	0.40	0.49	0.8

Notes: Absolute value of t statistics in brackets; * significant at 10%; ** significant at 5%; *** significant at 1%

Table 2: Regression Results.
 Dependent variable: Reversed CPI.
 OLS with robust standard errors.
 IQ (2002) and IQ (2010).

	(1)	(2)	(3)	(4)	(5)	(6)
IQ (2002)	-0.1224*** [8.73]	-0.1558*** [6.23]	-0.0491* [1.84]			
IQ (2010)				-0.1246*** [7.13]	-0.1422*** [4.72]	-0.0531** [2.30]
Africa		0.0585 [0.05]	0.1007 [0.10]		0.725 [0.46]	0.0518 [0.04]
Asia		2.4408** [2.35]	1.4169* [1.67]		1.9912 [1.45]	1.4669 [1.48]
Europe		0.8894 [0.82]	0.8415 [0.96]		1.2457 [0.92]	1.2394 [1.29]
America		1.4639 [1.37]	1.5617* [1.72]		1.6247 [1.12]	1.2467 [1.20]
log GDP per capita			-0.8324*** [3.51]			-0.7607*** [3.01]
Democracy			-0.2496 [1.09]			-0.1702 [0.51]
KOF index of economic globalization			-0.0244** [2.20]			-0.0591*** [4.35]
Legal Origin (french)			0.3551 [1.28]			0.8841*** [2.85]
Legal Origin (german)			-2.0966*** [5.34]			-1.3906*** [3.72]
Legal Origin (scandinavian)			-1.2145*** [2.90]			-0.7661 [1.43]
Legal Origin (socialist)			1.4623*** [4.05]			1.6533*** [3.97]
Constant	16.3133*** [14.27]	18.0778*** [7.18]	17.5763*** [7.14]	16.3458*** [10.69]	16.5724*** [5.02]	19.5600*** [7.29]
Observations	118	118	112	95	95	89
R-squared	0.38	0.50	0.83	0.34	0.39	0.83

Notes: Absolute value of t statistics in brackets; * significant at 10%; ** significant at 5%;
 *** significant at 1%

Additional Tables

Table A1: Regression Results.

Dependent variable: Reversed CPI.

OLS with robust standard errors.

Avg. years of total schooling included.

	(1)	(2)	(3)	(4)	(5)	(6)
IQ (2006)	-0.0483*			-0.0478*		
	[1.82]			[1.79]		
IQ (2002)		-0.0447			-0.0448	
		[1.55]			[1.56]	
IQ (2010)			-0.0575**			-0.0574**
			[2.32]			[2.32]
Africa	-0.0584	-0.111	-0.5205	-0.0821	-0.1371	-0.5216
	[0.05]	[0.12]	[0.46]	[0.07]	[0.15]	[0.46]
Asia	1.5041	1.308	1.401	1.4722	1.2793	1.3929
	[1.36]	[1.63]	[1.55]	[1.37]	[1.61]	[1.56]
Europe	1.1453	0.8045	1.3077	1.1247	0.7808	1.3031
	[1.06]	[0.95]	[1.50]	[1.07]	[0.93]	[1.51]
America	1.3852	1.4830*	1.1671	1.3826	1.4613*	1.1638
	[1.20]	[1.73]	[1.25]	[1.22]	[1.72]	[1.26]
log GDP per capita	-0.8202***	-0.7533**	-0.7361**	-0.7820***	-0.7382**	-0.7191**
	[3.01]	[2.62]	[2.41]	[2.88]	[2.62]	[2.34]
Democracy	-0.215	-0.3169	-0.4377	-0.2057	-0.3013	-0.423
	[0.78]	[1.25]	[1.00]	[0.74]	[1.19]	[0.96]
KOF index of economic globalization	-0.0376***	-0.0256**	-0.0635***	-0.0367**	-0.0248**	-0.0630***
	[2.70]	[2.30]	[3.96]	[2.59]	[2.17]	[3.92]
Legal Origin (french)	0.6818**	0.2844	0.8952**	0.6495**	0.2782	0.8820**
	[2.09]	[0.82]	[2.41]	[2.04]	[0.81]	[2.37]
Legal Origin (german)	-1.6361***	-2.1168***	-1.3310***	-1.6336***	-2.0996***	-1.3185***
	[3.92]	[4.81]	[3.48]	[3.88]	[4.80]	[3.46]
Legal Origin (scandinavian)	-0.8207	-1.2552***	-0.6908	-0.7992	-1.2136***	-0.6739
	[1.49]	[2.81]	[1.24]	[1.44]	[2.79]	[1.22]
Legal Origin (socialist)	1.7007***	1.5281***	1.7724***	1.7464***	1.5927***	1.8047***
	[4.58]	[3.82]	[3.84]	[4.54]	[3.81]	[3.82]
Avg. years of total schooling (% of population aged 15 and over)	0.0134	-0.0853	-0.0489			
	[0.17]	[0.91]	[0.46]			
Avg. years of total schooling (% of population aged 25 and over)				-0.017	-0.0931	-0.057
				[0.22]	[1.00]	[0.56]
Constant	18.1421***	17.4097***	20.7767***	17.9476***	17.2731***	20.6218***
	[7.06]	[6.62]	[7.34]	[7.12]	[6.59]	[7.38]
Observations	109	105	82	109	105	82
R-squared	0.81	0.84	0.84	0.81	0.84	0.84

Notes: Absolute value of t statistics in brackets; * significant at 10%; ** significant at 5%;

*** significant at 1%

Table A2: Regression Results.
 Dependent variable: Reversed CPI.
 OLS with robust standard errors.
 IQ 2006.

Minimum IQ for African countries: 76.

	(1)	(2)	(3)
IQ	-0.1507*** [9.41]	-0.1781*** [6.61]	-0.0731** [2.51]
Africa		0.8835 [0.68]	0.0725 [0.06]
Asia		2.5293** [2.11]	1.4154 [1.36]
Europe		1.4247 [1.19]	0.9984 [0.96]
America		1.3143 [1.04]	1.1975 [1.06]
log GDP per capita			-0.7067*** [2.93]
Democracy			-0.174 [0.75]
KOF index of economic globalization			-0.0321** [2.37]
Legal Origin (french)			0.7156*** [2.64]
Legal Origin (german)			-1.5363*** [3.65]
Legal Origin (scandinavian)			-0.5881 [1.02]
Legal Origin (socialist)			1.8344*** [5.25]
Constant	18.9744*** [14.21]	19.9184*** [6.81]	19.1000*** [7.16]
Observations	125	125	119
R-squared	0.44	0.51	0.81

Notes: Absolute value of t statistics in brackets; * significant at 10%; ** significant at 5%;
 *** significant at 1%

Table A3: Regression Results.
 Dependent variable: Reversed CPI.
 OLS with robust standard errors.
 IQ (2002) and IQ (2010).

Minimum IQ for African countries: 76.

	(1)	(2)	(3)	(4)	(5)	(6)
IQ (2002)	-0.1585*** [9.09]	-0.1817*** [6.41]	-0.0698** [2.08]			
IQ (2010)				-0.1590*** [8.15]	-0.1765*** [5.46]	-0.0778*** [3.14]
Africa		0.5422 [0.53]	0.1232 [0.13]		0.8325 [0.60]	0.1003 [0.09]
Asia		2.4326** [2.56]	1.3600* [1.66]		1.9454 [1.58]	1.4354 [1.53]
Europe		1.0393 [1.04]	0.7843 [0.93]		1.3588 [1.13]	1.232 [1.35]
America		1.3013 [1.32]	1.3782 [1.53]		1.516 [1.16]	1.1855 [1.21]
log GDP per capita			-0.8002*** [3.47]			-0.7026*** [2.97]
Democracy			-0.2102 [0.91]			-0.0883 [0.28]
KOF index of economic globalization			-0.0221** [1.99]			-0.0577*** [4.28]
Legal Origin (french)			0.4432 [1.56]			0.8574*** [2.94]
Legal Origin (german)			-1.9982*** [4.86]			-1.3189*** [3.61]
Legal Origin (scandinavian)			-1.0098** [2.09]			-0.5882 [1.10]
Legal Origin (socialist)			1.6018*** [4.17]			1.7296*** [4.29]
Constant	19.6565*** [13.43]	20.4545*** [7.38]	18.9965*** [6.67]	19.5760*** [11.43]	19.7744*** [5.79]	21.1385*** [7.71]
Observations	118	118	112	95	95	89
R-squared	0.42	0.51	0.84	0.39	0.43	0.84

Notes: Absolute value of t statistics in brackets; * significant at 10%; ** significant at 5%;
 *** significant at 1%

Table A4: Regression Results.
 Dependent variable: Reversed CPI.
 OLS with robust standard errors.
 IQ 2006.

Minimum IQ for African countries: 80.

	(1)	(2)	(3)
IQ	-0.1719*** [9.15]	-0.1843*** [6.50]	-0.0752** [2.56]
Africa		1.3977 [1.12]	0.2877 [0.25]
Asia		2.5224** [2.15]	1.4133 [1.38]
Europe		1.4472 [1.24]	1.0241 [1.01]
America		1.2606 [1.01]	1.1935 [1.08]
log GDP per capita			-0.7335*** [3.21]
Democracy			-0.1719 [0.74]
KOF index of economic globalization			-0.0310** [2.28]
Legal Origin (french)			0.6846** [2.58]
Legal Origin (german)			-1.5385*** [3.64]
Legal Origin (scandinavian)			-0.5643 [0.97]
Legal Origin (socialist)			1.8095*** [5.34]
Constant	21.0025*** [13.10]	20.4993*** [6.76]	19.4794*** [7.03]
Observations	125	125	119
R-squared	0.46	0.51	0.81

Notes: Absolute value of t statistics in brackets; * significant at 10%; ** significant at 5%;
 *** significant at 1%

Table A5: Regression Results.
 Dependent variable: Reversed CPI.
 OLS with robust standard errors.
 IQ (2002) and IQ (2010).

Minimum IQ for African countries: 80.

	(1)	(2)	(3)	(4)	(5)	(6)
IQ (2002)	-0.1815*** [9.07]	-0.1873*** [6.37]	-0.0715** [2.14]			
IQ (2010)				-0.1819*** [8.53]	-0.1895*** [5.67]	-0.0843*** [3.30]
Africa		1.0828 [1.12]	0.3325 [0.37]		1.159 [0.90]	0.2834 [0.27]
Asia		2.4308** [2.61]	1.3613* [1.69]		1.928 [1.64]	1.4712 [1.63]
Europe		1.0715 [1.10]	0.8116 [0.98]		1.4017 [1.22]	1.3032 [1.47]
America		1.2664 [1.31]	1.3793 [1.55]		1.4748 [1.17]	1.232 [1.31]
log GDP per capita			-0.8259*** [3.79]			-0.7120*** [3.16]
Democracy			-0.2126 [0.92]			-0.0724 [0.23]
KOF index of economic globalization			-0.0211* [1.89]			-0.0569*** [4.24]
Legal Origin (french)			0.4211 [1.52]			0.7695*** [2.68]
Legal Origin (german)			-2.0058*** [4.90]			-1.3526*** [3.72]
Legal Origin (scandinavian)			-0.9945** [2.03]			-0.5817 [1.09]
Legal Origin (socialist)			1.5785*** [4.27]			1.6765*** [4.27]
Constant	21.8361*** [12.75]	20.9647*** [7.34]	19.3223*** [6.54]	21.7582*** [11.57]	20.9906*** [6.02]	21.7753*** [7.71]
Observations	118	118	112	95	95	89
R-squared	0.44	0.52	0.84	0.42	0.45	0.84

Notes: Absolute value of t statistics in brackets; * significant at 10%; ** significant at 5%;
 *** significant at 1%

Table A6: Regression Results.
 Dependent variable: Reversed CPI.
 OLS with robust standard errors.
Avg. years of total schooling included.
Minimum IQ for African countries: 76.

	(1)	(2)	(3)	(4)	(5)	(6)
IQ (2006)	-0.0659** [2.11]			-0.0655** [2.09]		
IQ (2002)		-0.0606* [1.79]			-0.0607* [1.80]	
IQ (2010)			-0.0865*** [3.36]			-0.0865*** [3.37]
Africa	0.0275 [0.02]	-0.0613 [0.07]	-0.5052 [0.49]	0.004 [0.00]	-0.0872 [0.10]	-0.5079 [0.49]
Asia	1.4608 [1.38]	1.2659 [1.63]	1.3596 [1.65]	1.4328 [1.39]	1.2369 [1.61]	1.3517 [1.66]
Europe	1.0953 [1.05]	0.7507 [0.92]	1.279 [1.59]	1.0767 [1.05]	0.7268 [0.90]	1.2756 [1.60]
America	1.2291 [1.09]	1.3416 [1.58]	1.0788 [1.27]	1.2264 [1.11]	1.3194 [1.57]	1.0755 [1.29]
log GDP per capita	-0.7823*** [2.87]	-0.7256** [2.58]	-0.6480** [2.14]	-0.7483*** [2.78]	-0.7105** [2.59]	-0.6333** [2.09]
Democracy	-0.1862 [0.66]	-0.2633 [1.04]	-0.3478 [0.85]	-0.1782 [0.63]	-0.2472 [0.98]	-0.334 [0.81]
KOF index of economic globalization	-0.0361** [2.58]	-0.0237** [2.11]	-0.0617*** [3.84]	-0.0353** [2.49]	-0.0229* [1.98]	-0.0612*** [3.80]
Legal Origin (french)	0.7147** [2.22]	0.3441 [0.97]	0.8672** [2.53]	0.6868** [2.17]	0.3382 [0.97]	0.8561** [2.50]
Legal Origin (german)	-1.5414*** [3.55]	-2.0428*** [4.50]	-1.2349*** [3.35]	-1.5389*** [3.53]	-2.0249*** [4.50]	-1.2198*** [3.33]
Legal Origin (scandinavian)	-0.6551 [1.13]	-1.1012** [2.23]	-0.4731 [0.86]	-0.636 [1.09]	-1.0583** [2.20]	-0.4534 [0.83]
Legal Origin (socialist)	1.8026*** [4.67]	1.6457*** [4.06]	1.8872*** [4.17]	1.8433*** [4.66]	1.7115*** [4.10]	1.9211*** [4.15]
Avg. years of total schooling (% of population aged 15 and over)	0.0116 [0.15]	-0.0877 [0.93]	-0.0608 [0.60]			
Avg. years of total schooling (% of population aged 25 and over)				-0.015 [0.20]	-0.0954 [1.04]	-0.0667 [0.69]
Constant	19.3230*** [6.88]	18.4757*** [6.31]	22.5621*** [7.93]	19.1516*** [6.91]	18.3387*** [6.27]	22.4090*** [7.97]
Observations	109	105	82	109	105	82
R-squared	0.81	0.85	0.85	0.81	0.85	0.85

Notes: Absolute value of t statistics in brackets; * significant at 10%; ** significant at 5%;
 *** significant at 1%

Table A7: Regression Results.

Dependent variable: Reversed CPI.

OLS with robust standard errors.

Avg. years of total schooling included.

Minimum IQ for African countries: 80.

	(1)	(2)	(3)	(4)	(5)	(6)
IQ (2006)	-0.0689** [2.24]			-0.0684** [2.21]		
IQ (2002)		-0.0629* [1.87]			-0.0629* [1.87]	
IQ (2010)			-0.0938*** [3.58]			-0.0936*** [3.59]
Africa	0.2215 [0.19]	0.1218 [0.14]	-0.3146 [0.32]	0.1991 [0.17]	0.0985 [0.12]	-0.3163 [0.32]
Asia	1.4628 [1.41]	1.2699 [1.66]	1.4007* [1.78]	1.4372 [1.42]	1.2425 [1.64]	1.3944* [1.79]
Europe	1.1203 [1.09]	0.7751 [0.97]	1.3681* [1.75]	1.1031 [1.10]	0.7527 [0.95]	1.3658* [1.77]
America	1.2172 [1.10]	1.3359 [1.59]	1.1338 [1.40]	1.2161 [1.12]	1.3157 [1.58]	1.1317 [1.41]
log GDP per capita	-0.8100*** [3.13]	-0.7508*** [2.78]	-0.6718** [2.28]	-0.7786*** [3.06]	-0.7368*** [2.81]	-0.6604** [2.25]
Democracy	-0.1725 [0.62]	-0.2566 [1.01]	-0.3446 [0.85]	-0.1656 [0.59]	-0.2411 [0.95]	-0.3332 [0.82]
KOF index of economic globalization	-0.0352** [2.50]	-0.0228** [2.01]	-0.0611*** [3.81]	-0.0344** [2.41]	-0.0221* [1.90]	-0.0606*** [3.78]
Legal Origin (french)	0.6913** [2.18]	0.3326 [0.95]	0.7755** [2.29]	0.6650** [2.14]	0.3266 [0.95]	0.7665** [2.26]
Legal Origin (german)	-1.5385*** [3.55]	-2.0429*** [4.51]	-1.2733*** [3.47]	-1.5377*** [3.52]	-2.0261*** [4.51]	-1.2606*** [3.46]
Legal Origin (scandinavian)	-0.6271 [1.07]	-1.0784** [2.14]	-0.4675 [0.85]	-0.6113 [1.04]	-1.0382** [2.12]	-0.4514 [0.83]
Legal Origin (socialist)	1.7813*** [4.79]	1.6266*** [4.18]	1.8174*** [4.11]	1.8175*** [4.77]	1.6887*** [4.21]	1.8459*** [4.09]
Avg. years of total schooling (% of population aged 15 and over)	0.0145 [0.19]	-0.0848 [0.90]	-0.0543 [0.54]			
Avg. years of total schooling (% of population aged 25 and over)				-0.0104 [0.14]	-0.0921 [1.00]	-0.0588 [0.62]
Constant	19.7546*** [6.81]	18.8312*** [6.17]	23.3503*** [7.97]	19.5918*** [6.82]	18.6922*** [6.13]	23.2122*** [8.01]
Observations	109	105	82	109	105	82
R-squared	0.81	0.85	0.85	0.81	0.85	0.85

Notes: Absolute value of t statistics in brackets; * significant at 10%; ** significant at 5%;
*** significant at 1%

Table A8: Regression Results.

Dependent variable: Reversed CPI.

OLS with robust standard errors clustered by continent.

IQ 2006.

	(1)	(2)	(3)
IQ	-0.1140*** [4.67]	-0.1501** [4.36]	-0.0526*** [4.64]
Africa		0.3996 [0.52]	-0.0138 [0.03]
Asia		2.5606*** [66.52]	1.4762*** [12.39]
Europe		1.3238*** [10.67]	1.0565*** [7.51]
America		1.5556*** [5.24]	1.3850*** [6.92]
log GDP per capita			-0.7479** [2.99]
Democracy			-0.2007 [0.79]
KOF index of economic globalization			-0.0336* [2.17]
Legal Origin (french)			0.6677** [4.42]
Legal Origin (german)			-1.6493*** [9.53]
Legal Origin (scandinavian)			-0.7854* [2.31]
Legal Origin (socialist)			1.7243*** [16.41]
Constant	15.5498*** [7.47]	17.3074*** [5.39]	17.7084*** [7.58]
Observations	125	125	119
R-squared	0.40	0.49	0.8

Notes: Absolute value of t statistics in brackets; * significant at 10%; ** significant at 5%; *** significant at 1%

Table A9: Regression Results.

Dependent variable: Reversed CPI.

OLS with robust standard errors clustered by continent.

IQ (2002) and IQ (2010).

	(1)	(2)	(3)	(4)	(5)	(6)
IQ (2002)	-0.1224**	-0.1558**	-0.0491***			
	[3.52]	[3.58]	[5.30]			
IQ (2010)				-0.1246**	-0.1422*	-0.0531
				[3.70]	[2.42]	[1.88]
Africa		0.0585	0.1007		0.725	0.0518
		[0.07]	[0.16]		[0.65]	[0.07]
Asia		2.4408***	1.4169***		1.9912***	1.4669***
		[177.94]	[5.43]		[25.37]	[7.72]
Europe		0.8894**	0.8415***		1.2457***	1.2394***
		[3.54]	[4.65]		[6.42]	[4.72]
America		1.4639***	1.5617***		1.6247***	1.2467***
		[5.37]	[6.00]		[8.72]	[5.99]
log GDP per capita			-0.8324*			-0.7607**
			[2.73]			[3.16]
Democracy			-0.2496			-0.1702
			[1.74]			[0.70]
KOF index of economic globalization			-0.0244			-0.0591**
			[1.71]			[3.48]
Legal Origin (french)			0.3551			0.8841**
			[1.62]			[3.16]
Legal Origin (german)			-2.0966***			-1.3906***
			[5.97]			[7.72]
Legal Origin (scandinavian)			-1.2145**			-0.7661**
			[2.98]			[3.99]
Legal Origin (socialist)			1.4623***			1.6533***
			[5.08]			[7.25]
Constant	16.3133***	18.0778**	17.5763***	16.3458***	16.5724**	19.5600***
	[5.51]	[4.53]	[6.06]	[5.38]	[3.02]	[5.72]
Observations	118	118	112	95	95	89
R-squared	0.38	0.5	0.83	0.34	0.39	0.83

Notes: Absolute value of t statistics in brackets; * significant at 10%; ** significant at 5%;

*** significant at 1%

Table A10: Regression Results.

Dependent variable: Reversed CPI.

OLS with robust standard errors.

KOF index replaced by trade openness, trust, size of the shadow economy, OECD dummy all together included.

Most conservative estimates.

	(1)	(2)	(3)
IQ (2006)	-0.0468*		
	[1.70]		
IQ (2002)		-0.0477*	
		[1.86]	
IQ (2010)			-0.0264
			[0.92]
Africa	0.4513	0.6984	0.6224
	[0.47]	[0.72]	[0.75]
Asia	2.3436***	2.5684***	2.0994***
	[3.77]	[4.15]	[4.04]
Europe	1.8834***	1.8288***	1.6084***
	[3.29]	[3.09]	[3.23]
America	1.9613**	2.3442***	1.5000**
	[2.37]	[2.97]	[2.48]
log GDP per capita	-0.8675***	-0.9749***	-0.8297***
	[4.38]	[5.34]	[3.32]
Democracy	-0.2483	-0.0362	-0.6712*
	[0.85]	[0.13]	[1.91]
Trade openness	-0.0057***	-0.0011	-0.0081***
	[2.96]	[0.32]	[4.34]
Legal Origin (french)	0.4006	0.0944	0.8220**
	[1.34]	[0.34]	[2.52]
Legal Origin (german)	-1.3358**	-1.6223***	-0.9474
	[2.03]	[2.74]	[1.54]
Legal Origin (scandinavian)	-0.2971	-0.6486	-0.1568
	[0.52]	[1.22]	[0.32]
Legal Origin (socialist)	1.2554***	1.1030***	1.1109**
	[3.37]	[2.99]	[2.23]
Trust	-0.0194	-0.0212**	-0.0269*
	[1.56]	[2.27]	[1.71]
Shadow economy	0.0215	0.0188*	0.0264
	[1.59]	[1.68]	[1.34]
OECD	-0.2267	-0.1502	-0.3408
	[0.50]	[0.34]	[0.74]
Constant	15.9613***	16.2734***	14.5290***
	[4.92]	[5.33]	[4.30]
Observations	98	94	82
R-squared	0.83	0.87	0.83

Notes: Absolute value of t statistics in brackets; * significant at 10%; ** significant at 5%; *** significant at 1%

Table A11. Descriptive statistics and data sources.

Variable	Observations	Mean	Std. Dev.	Min	Max	Source
reversed CPI (2010)	125	5.75	2.23	0.70	8.6	Transparency International
reversed CPI (2005)	119	5.69	2.26	0.30	8.3	Transparency International
IQ (2006)	128	85.95	12.15	64	108	Lynn and Vanhanen (2006)
IQ (2002)	127	86.09	11.76	63	107	Lynn and Vanhanen (2002)
IQ (2010)	85	90.41	10.72	60	108	Lynn and Meisenberg (2010)
IQ (2006) African minimum 76	128	87.70	9.70	67	108	Lynn and Vanhanen (2006), own calculations
IQ (2002) African minimum 76	127	87.65	9.54	72	107	Lynn and Vanhanen (2002) own calculations
IQ (2010) African minimum 76	85	91.29	8.98	76	108	Lynn and Meisenberg (2010) own calculations
IQ (2006) African minimum 80	128	88.63	8.66	67	108	Lynn and Vanhanen (2006), own calculations
IQ (2002) African minimum 80	127	88.60	8.48	72	107	Lynn and Vanhanen (2002) own calculations
IQ (2010) African minimum 80	85	91.86	8.07	79	108	Lynn and Meisenberg (2010) own calculations
GDP per capita (real) 2005	126	12284.30	12664.17	366.13	71209.27	Penn World Tables 6.3
GDP per capita (real) 2000	126	9459.83	9976.68	352.83	54108.91	Penn World Tables 6.3
KOF index of economic globalization 2005	123	63.56	16.18	30.38	96.34	Dreher (2006) and Dreher et al. (2008)
KOF index of economic globalization 2000	123	60.57	18.23	23.01	97.33	Dreher (2006) and Dreher et al. (2008)
Democracy 2005	126	0.68	0.47	0	1	Cheibub et al. (2010)
Democracy 2000	126	0.66	0.48	0	1	Cheibub et al. (2010)
Africa	128	0.28	0.45	0	1	own calculation
Asia	128	0.20	0.40	0	1	own calculation
Europe	128	0.22	0.42	0	1	own calculation
Americas	128	0.27	0.44	0	1	own calculation
Oceania	128	0.03	0.17	0	1	own calculation
Legal Origin (UK)	127	0.28	0.45	0	1	La Porta et al. (1999)
Legal Origin (french)	127	0.45	0.50	0	1	La Porta et al. (1999)
Legal Origin (german)	127	0.04	0.20	0	1	La Porta et al. (1999)
Legal Origin (scandinavian)	127	0.05	0.21	0	1	La Porta et al. (1999)
Legal Origin (socialist)	127	0.18	0.39	0	1	La Porta et al. (1999)
Avg. years of total schooling (% of population aged 15 and over) 2005	116	7.96	2.70	1.24	12.75	Barro and Lee (2010)
Avg. years of total schooling (% of population aged 15 and over) 2000	116	7.51	2.70	1.05	12.16	Barro and Lee (2010)
Avg. years of total schooling (% of population aged 25 and over) 2005	116	7.65	2.94	1.07	13.09	Barro and Lee (2010)
Avg. years of total schooling (% of population aged 15 and over) 2000	116	7.19	2.92	0.89	12.04	Barro and Lee (2010)
Social trust	101	25.88	13.61	3.79	68.08	Bjørnskov (2011)
Trade openness 2005	126	94.91	58.78	26.65	446.06	Penn World Tables 6.3
Trade openness 2000	126	86.76	52.89	13.28	377.68	Penn World Tables 6.3
Shadow Economy 2005	126	32.64	12.98	8.5	65.1	Dreher and Schneider (2010)
Shadow Economy 2000	126	33.85	13.46	8.6	67.3	Dreher and Schneider (2010)
OECD	128	0.23	0.42	0	1	own calculation