

# The TI-index of corruption, 1995-2010

## A description

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Note: This paper is meant as a background paper only. It only looks at the TI-data themselves, and does not try to relate them to other relevant data.

## 1. Coverage: Years and countries

The TI index is from the NGO: Transparency International: <http://www.transparency.org>. The index goes from 0 for perfect corruption to 10 for perfect honesty. The index covers the 16 years from 1995 to the latest covering 2010 launched 26/10-2010.

The number of countries and years covered are shown in Table 1. Till now 1928 observations of the index has been published. They cover 185 countries for at least one year. This gives 10.4 observations per country, and 120 countries in the average year. As Table 1 and Figure 1 shows the numbers have been going up rather strongly.

Table 1. Number of countries covered by the TI-index

Year	N	% a)	Year	N	% a)
1995	41	22.2	2003	133	71.9
1996	53	28.6	2004	146	78.9
1997	52	28.1	2005	159	85.9
1998	85	45.9	2006	163	88.1
1999	99	53.5	2007	176	95.1
2000	90	48.6	2008	180	97.3
2001	91	49.2	2009	180	97.3
2002	102	55.1	2010	178	96.2
		All	1928		

Note a. In per cent of all 185 countries covered at least 1 time

Figure 1. Number of countries covered

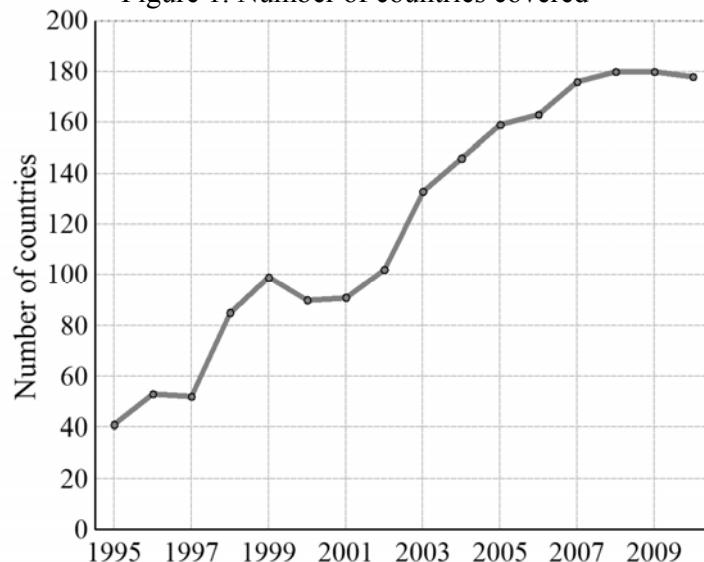


Table 2. Country groups covered

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Africa <sup>a)</sup>	1	5	2	15	16	19	15	18	25	30	38	40	47	47	47	47
East Asia	10	9	11	11	11	11	11	11	12	12	14	17	17	17	18	18
Latin America	6	8	9	17	17	11	18	21	22	25	26	28	30	31	30	27
MENA <sup>b)</sup>	1	3	1	5	5	5	4	5	19	19	20	18	17	19	19	19
Oceania <sup>c)</sup>									1	2	3	2	7	7	7	7
Post-Com	1	4	5	12	25	20	17	20	26	28	28	28	28	29	29	30
South Asia	2	3	2	2	2	1	3	4	4	5	5	5	5	5	5	5
West <sup>d)</sup>	20	21	22	23	23	23	23	23	24	25	25	25	25	25	25	25
All	41	53	52	85	99	90	91	102	133	146	159	163	176	180	180	178
Muslim <sup>e)</sup>	4	6	4	8	13	10	11	13	29	30	31	29	28	31	32	33

Notes: (a) Sub Sahara. (b) Middle East and North Africa from Morocco to Afghanistan. (c) Including Papua New Guinea. (d) West Europe and the 4 overseas: Canada, USA, Australia and New Zealand. (e) MENA and other countries with a Muslim majority/a Muslim government.

Table 2 shows that the coverage of the West has been rather good throughout. Other parts of the world have only gradually been included. Note the classification at the left hand column and the explanatory notes. This classification is used from now. As can be inferred from Table 2 the countries that are covered all years are dominated by DCs.

Table 3. The 39 countries, which are included all 16 years

West	20	<i>Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, UK, USA</i>
E. Asia	9	<i>China, Hong Kong, Japan, Malaysia, Philippines, Singapore, South Korea, Taiwan, Thailand</i>
La. Am.	6	<i>Argentina, Brazil, Chile, Colombia, Mexico, Venezuela</i>
Others	4	<i>Hungary, India, South Africa, Turkey</i>

Note: The 25 countries in italics are DCs (developed countries). The remaining 14 countries are LDCs (less developed countries by the World Bank classification).

## 2. Averages and distribution

All 1928 corruption scores have the average 4.34 as shown in Table 3. The most deviating group is the West, which is unusually honest. It is sometimes claimed that Muslim countries are either less or more corrupt. They are certainly more corrupt than the West, and they are also more corrupt than other countries, even if the West is excluded.

Table 3. Some statistics for the country groups and all observations

	Avr	Std	St er	N		Avr	Std	St er	N
Africa SS	2.906	1.081	0.053	412	South Asia	2.553	0.640	0.084	58
East Asia	4.587	2.269	0.157	210	West	7.786	1.508	0.078	377
Latin	3.667	1.455	0.081	326					Aggregates
MENA	3.807	1.350	0.101	179	All	4.344	2.280	0.052	1928
Oceania	3.197	0.935	0.156	36	Muslim	3.113	1.288	0.064	404
Post-Com	3.455	1.239	0.068	330	Non W & M <sup>a)</sup>	3.647	1.579	0.047	1147

Note: *Avr* is average, *Std* is standard deviation and *St er* is standard error. (a) Exclusive West and Muslim.

A more systematic analysis of the pattern of differences between the group averages are made in Table 4. The t-ratios given are the “unpaired t-test” from Stata. The tests show that most of the averages are different. The West differs by t-ratios in the range of 50 to 18. This is rather dramatic, but also East Asia differs substantially.

Table 4. Differences between averages in every two groups

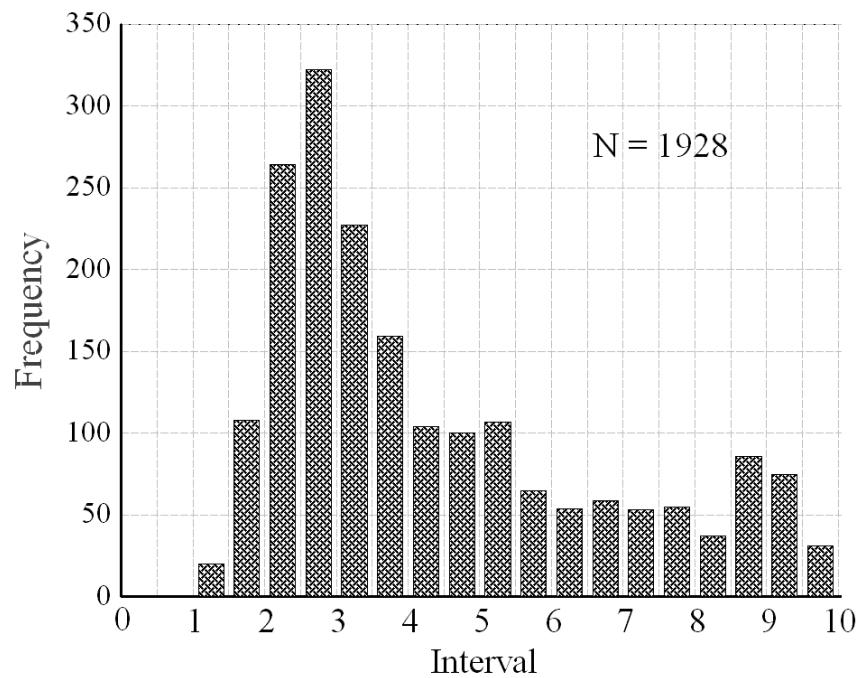
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Africa SS	East Asia	Lat. Am.	MENA	Oceania	Post-Com	South Asia	West
	dif (t-test)	dif (t-test)						
(1)		1.68 (12.5)	0.76 (8.1)	0.90 (8.6)	0.29 (1.6)	0.55 (6.4)	-0.35 (-2.4)	4.88 (52.5)
(2)	-1.68 (-12.5)		-0.92 (-5.7)	-0.78 (-4.0)	-1.39 (-3.6)	-1.13 (-7.5)	-2.03 (-6.7)	3.20 (20.4)
(3)	-0.76 (-8.1)	0.92 (5.7)		0.14 (1.1)	-0.47 (-1.9)	-0.21 (-2.0)	-1.11 (-5.7)	4.12 (36.7)
(4)	-0.90 (-8.6)	0.78 (4.0)	-0.14 (-1.1)		-0.61 (-2.6)	-0.35 (-3.0)	-1.25 (-6.8)	3.98 (30.0)
(5)	-0.29 (-1.6)	1.39 (3.6)	0.47 (1.9)	0.61 (2.6)		0.26 (1.2)	-0.64 (-3.9)	4.59 (17.9)
(6)	-0.55 (-6.4)	1.13 (7.5)	0.21 (2.0)	0.35 (3.0)	-0.26 (-1.2)		-0.90 (-5.4)	4.33 (41.3)
(7)	0.35 (2.4)	2.03 (6.7)	1.11 (5.7)	1.25 (6.8)	0.64 (3.9)	0.90 (5.4)		5.23 (26.0)
(8)	-4.88 (-52.5)	-3.20 (-20.4)	-4.12 (-36.7)	-3.98 (-30.0)	-4.59 (-17.9)	-4.33 (-41.3)	-5.23 (-26.0)	

Note: Dif is calculated from Table 4 as the difference the average in the column group minus the average in the row group. The difference is tested against zero, with a standard t-test as explained in the text.

Table 5. Normality tests of the observations from the 8 groups

	N	Normality Tests in %		
		Skewness-kurtosis	Shapiro-W	Shapiro-Francia W'
Africa	412	0.00	0.00	0.00
East Asia	210	0.01	0.00	0.00
La. Am.	326	0.00	0.00	0.00
MENA	179	0.89	0.04	0.14
Oceania	36	3.55	9.69	8.24
P-Com	330	0.01	0.00	0.00
South Asia	58	0.92	1.32	1.49
West	377	0.00	0.00	0.00

Figure 2. The distribution of all 1928 observations



The test limits for the tests in Table 4 only applies strictly if the distributions are normal. Figure 2 shows the distribution of all observations – it is obviously non-normal.

Table 5 shows that also the distribution of the observations for the eight groups are non-normal. Only the 36 observations from Oceania are normally distributed. For all other groups, with more observations, normality is rejected at the 1% probability level, often even at the 0.01% level.

### 3. Trends over time: Rising and falling corruption

The TI-index is calculated from a set of primary indices after a calibration and averaging process. It reduces the trends in the individual indices. Thus, it is problematic what a trend means in the data except as a relative measure. Figure 3 and 4 consider the observed trend in the TI-index, for all observations and for the 39 countries covered all 16 years.

Figure 3. The path for all observations

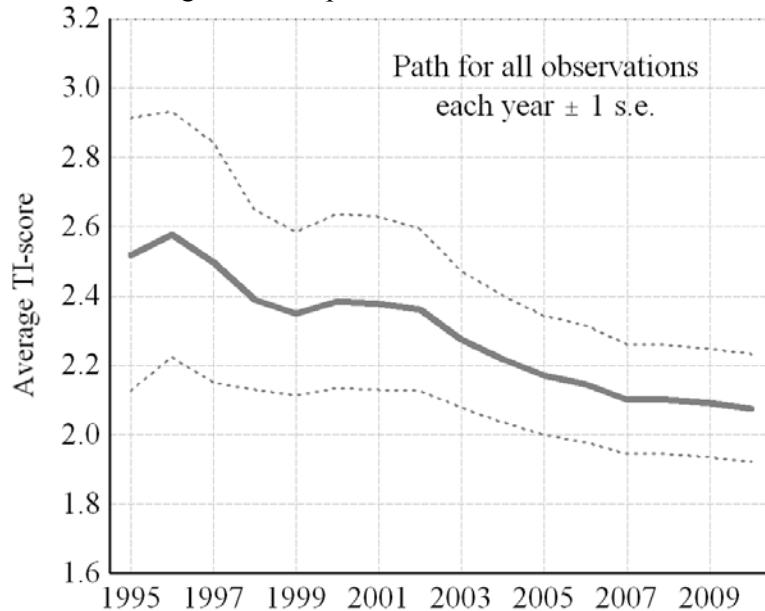
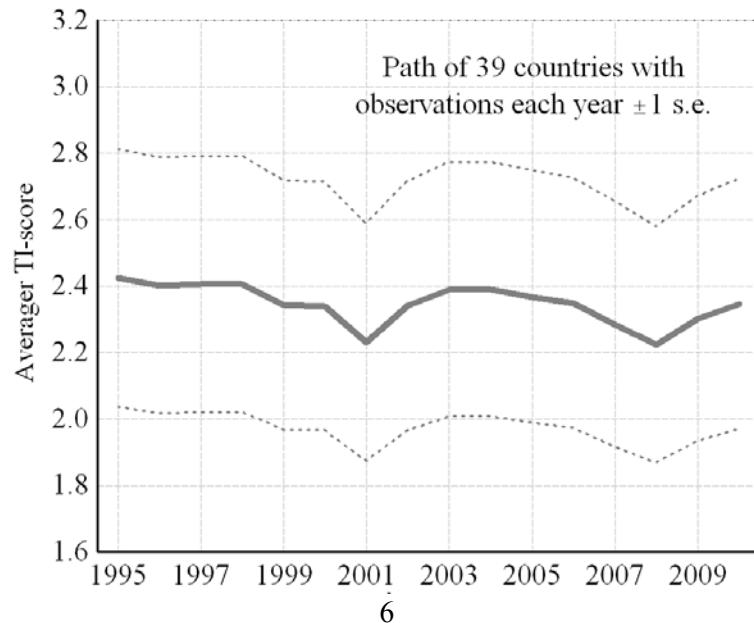


Figure 4. The path for the 39 countries with observations every year



While there is a clear trend on Figure 3 there is none on Figure 4. This suggests a *trend-hypothesis*: The trend on Figure 3 is due exclusively to selection of countries. That is, as time passes more LDCs countries with high corruption is included into the index.

If the hypothesis is accepted all trends are relative. To study the (relative) trends in the data of each country a distribution free trend score is calculated as Kendall's rank correlation coefficient  $\tau$  between the year and the available observations for the TI-index for the country. For four countries there are only one or two observations for the index, but for 181 countries a trend score can be calculated. Stata gives two  $\tau$ -values  $\tau_a$  and  $\tau_b$ , which correct for ties. For the TI-data the two  $\tau$ 's only differ marginally. The p-value uses  $\tau_a$ .

Table A2 gives a set of statistics for each country, including the two  $\tau$ 's and the p-value. Tables 6 and 7 survey the data for the countries. The average (4.00) given in Table 6 is smaller than the average (4.34) in Table 3 as the countries with missing observations are typically LDC's with high corruption. They get a higher weight in Table 6.

Table 6. The basic statistics for the 181 countries, with more than 2 observations

	Average	STD	St Er	Max	Min	Range
Average	4.00	0.35	0.11	4.56	3.44	1.13
Max	9.54	0.99	0.27	10.0	9.3	2.8
Min	1.34	0.04	0.02	1.9	0.4	0.1

Table 7. The Kendall's  $\tau$  calculations for the 181 countries

	N	Kendall's $\tau$		P( $\tau_a$ ) %	Kendall's score	
		$\tau_a$	$\tau_b$		Positive	Negative
Sum	1922					2041
Average	10.42	-0.03	-0.03	30.8		-1908
Max	16	0.91	0.93	100		133
Min	3	-1.00	-1.00	0	$\tau$	0.03

Table 7 looks at the Kendall trend scores. The important point to note is the three aggregate  $\tau$ 's calculated are all three close to zero, and they have even different signs. Thus, the trend-hypothesis based on Figures 3 and 4 above is confirmed.

From Appendix Table A2 it appears that many countries do have trends in their TI-scores. Table 8 has two panels: The left-hand side holds the 41 countries with significant increases in corruption, and the right-hand side holds the 35 countries with significant decreases.

Table 8. Countries with trends, measured by  $p(\tau)$  in % as explained in text

The 41 countries with increasing corruption						The 35 countries with falling corruption							
	Country	P( $\tau$ ) %	Avr.	St Er	Range	M	Country	P( $\tau$ ) %	Avr	St Er	Range	M	
1	Israel	0.0	6.73	0.17	2.1	15	1	Uruguay	0.0	5.71	0.27	2.8	13
2	Philippines	0.0	2.72	0.09	1.3	16	2	Hong Kong	0.0	7.89	0.11	1.4	16
3	Venezuela	0.1	2.38	0.07	0.9	16	3	Latvia	0.0	3.99	0.18	2.3	13
4	Zimbabwe	0.1	2.69	0.19	2.4	13	4	Japan	0.1	6.99	0.14	2.0	16
5	USA	0.2	7.51	0.05	0.7	16	5	Austria	0.1	7.90	0.10	1.6	16
6	Sudan	0.3	1.89	0.10	0.8	8	6	South Korea	0.2	4.68	0.14	1.8	16
7	Iran	0.3	2.54	0.14	1.2	8	7	Serbia	0.2	2.81	0.20	2.2	11
8	Peru	0.3	3.83	0.11	1.2	13	8	Thailand	0.3	3.31	0.06	1.0	16
9	Tunisia	0.5	4.80	0.10	1.1	12	9	Qatar	0.3	6.24	0.27	2.5	8
10	South Africa	0.6	4.90	0.09	1.3	16	10	Nigeria	0.3	1.78	0.14	2.0	15
11	Trinidad	0.6	4.09	0.22	2.1	9	11	Slovenia	0.4	6.12	0.13	1.5	12
12	Uzbekistan	0.6	2.13	0.12	1.3	12	12	Indonesia	0.4	2.19	0.10	1.1	15
12	Bahrain	0.6	5.48	0.15	1.2	8	12	Taiwan	0.5	5.56	0.07	0.9	16
14	Jamaica	0.7	3.52	0.10	1.0	11	14	Bangladesh	0.5	1.75	0.18	2.0	11
15	Botswana	0.8	5.88	0.07	1.0	13	15	Albania	0.5	2.76	0.12	1.1	10
16	Belize	0.9	3.57	0.22	1.6	6	16	Tanzania	0.6	2.60	0.11	1.3	13
17	Malta	1.0	6.03	0.20	1.6	7	17	Slovakia	0.6	4.15	0.13	1.5	13
18	Congo, Bra	1.1	2.39	0.26	2.4	8	18	India	0.7	2.98	0.07	0.9	16
19	Luxembourg	1.5	8.57	0.05	0.8	14	19	China	0.7	3.25	0.10	1.4	16
20	Belarus	1.9	3.12	0.27	2.8	12	20	Georgia	0.9	2.88	0.25	2.3	10
21	Macao	2.8	5.60	0.24	1.6	5	21	Ghana	1.0	3.59	0.07	0.8	13
22	Iraq	2.9	1.78	0.12	0.9	8	22	Azerbaijan	1.3	2.02	0.08	0.9	12
23	Mongolia	3.2	3.06	0.17	1.6	8	23	Macedonia	1.4	3.17	0.19	1.8	9
24	Denmark	3.3	9.54	0.06	0.7	16	24	Colombia	1.6	3.39	0.14	1.8	16
25	Côte d'Ivoire	4.0	2.31	0.10	1.2	13	25	Lithuania	2.2	4.64	0.10	1.2	12
26	Syria	4.2	2.84	0.17	1.3	8	26	Estonia	2.2	6.08	0.12	1.2	13
27	Malaysia	4.4	5.01	0.06	0.9	16	27	Paraguay	2.8	2.05	0.10	1.1	11
28	Yemen	4.6	2.43	0.07	0.6	8	28	Guyana	4.0	2.58	0.03	0.2	6
29	Sri Lanka	4.7	3.29	0.06	0.6	9	29	Singapore	4.2	9.19	0.05	0.7	16
30	Canada	4.9	8.85	0.06	0.8	16	30	Niger	4.8	2.54	0.09	0.7	7
31	Malawi	7.0	3.21	0.15	1.4	13	31	Cameroon	5.9	2.08	0.08	1.1	14
32	UK	7.2	8.38	0.09	1.1	16	32	Belgium	6.2	6.74	0.19	2.3	16
33	Namibia	7.3	4.78	0.15	1.6	13	33	Seychelles	8.5	4.41	0.16	1.2	7
34	Norway	7.9	8.73	0.07	1.2	16	34	Liberia	8.6	2.62	0.22	1.2	5
35	Kuwait	8.1	4.58	0.12	1.2	8	35	Romania	8.7	3.20	0.11	1.2	14
36	Nepal	8.5	2.50	0.07	0.6	7							
37	Mauritania	8.6	2.66	0.12	0.8	5							
38	Afghanistan	8.6	1.70	0.19	1.2	5							
39	Comoros	8.9	2.38	0.10	0.5	4							
40	Maldives	8.9	2.73	0.19	1.0	4							
41	Congo, Kin	9.5	1.98	0.05	0.5	8							

The two panels are divided in three sections by the shading: With trend scores below the 1% limit, between 1 and 5% and between 5 and 10%. Table 9 study if there is a pattern in the countries of the two panels. The main difference is in the bottom section of the Table, so the average  $P(\tau)$  differ. What is more interesting, is that the average of corruption in the two groups is the same.

Table 9. Summary statistics for the countries with rising and falling corruption

41 countries with increasing corruption					35 countries with falling corruption						
	P( $\tau$ ) %	Avr	St Er	Range	M		P( $\tau$ ) %	Avr	St Er	Range	M
Avr	3.45	4.22	0.13	1.22	10.71	Average	2.02	4.11	0.13	1.46	12.66
STD	3.25	2.22	0.06	0.53	3.93	STD	2.61	1.96	0.06	0.59	3.22
St Er	0.51	0.35	0.01	0.08	0.61	SE	0.14	0.10	0.00	0.03	0.55
Correlation matrix											
P( $\tau$ ) %	1	-0.072	-0.153	-0.375	-0.327	P( $\tau$ ) %	1	-0.092	-0.045	-0.322	-0.391
Avr	-0.072	1	-0.274	-0.075	0.559	Avr	-0.092	1	0.047	0.182	0.364
St Er	-0.153	-0.274	1	1	-0.463	St Er	-0.045	0.047	1	0.864	-0.322
Range	-0.375	-0.075	0.826	1	0.039	Range	-0.322	0.182	0.864	1	0.104
M	-0.327	0.559	-0.463	0.039	1	M	-0.391	0.364	-0.322	0.104	1

Thus the TI-data appears to have rather clear patterns. Some of these patterns are well understood already, but others are not. Notably it appears that the trends in the country scores are difficult to understand.

## Appendix: The TI-data and main statistics for all countries

Table A1.1. Data for countries 1 Afghanistan to 40 Croatia

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1 Afghanistan											2.5		1.8	1.5	1.3	1.4
2 Albania					2.3			2.5	2.5	2.5	2.4	2.6	2.9	3.4	3.2	3.3
3 Algeria								2.6	2.7		2.8	3.1	3.0	3.2	2.8	2.9
4 Angola						1.7		1.7	1.8	2.0	2.0	2.2	2.2	1.9	1.9	1.9
5 Argentina	5.2	3.4	2.8	3.0	3.0	3.5	3.5	2.8	2.5	2.5	2.8	2.9	2.9	2.9	2.9	2.9
6 Armenia						2.5	2.5		3.0	3.1	2.9	2.9	3.0	2.9	2.7	2.6
7 Australia	8.8	8.6	8.9	8.7	8.7	8.3	8.5	8.6	8.8	8.8	8.8	8.7	8.6	8.7	8.7	8.7
8 Austria	7.1	7.6	7.6	7.5	7.6	7.7	7.8	7.8	8.0	8.4	8.7	8.6	8.1	8.1	7.9	7.9
9 Azerbaijan						1.7	1.5	2.0	2.0	1.8	1.9	2.2	2.4	2.1	1.9	2.3
10 Bahrain										6.1	5.8	5.8	5.7	5.0	5.4	5.1
11 Bangladesh			2.3					0.4	1.2	1.3	1.5	1.7	2.0	2.0	2.1	2.4
12 Barbados											7.3	6.9	6.7	6.9	7.0	7.4
13 Belarus					3.9	3.4	4.1		4.8	4.2	3.3	2.6	2.1	2.1	2.0	2.4
14 Belgium	6.9	6.8	5.3	5.4	5.3	6.1	6.6	7.1	7.6	7.5	7.4	7.3	7.1	7.3	7.1	7.1
15 Belize									4.5	3.8	3.7	3.5	3.0	2.9		
16 Benin										3.2	2.9	2.5	2.7	3.1	2.9	2.8
17 Bhutan												6.0	5.0	5.2	5.0	5.7
18 Bolivia		3.4	2.1	2.8	2.5	2.7	2.0	2.2	2.3	2.2	2.5	2.7	2.9	3.0	2.7	2.8
19 Bosnia									3.3	3.1	2.9	2.9	3.3	3.2	3.0	3.2
20 Botswana				6.1	6.1	6.0	6.0	6.4	5.7	6.0	5.9	5.6	5.4	5.8	5.6	5.8
21 Brazil	2.7	3.0	3.6	4.0	4.1	3.9	4.0	4.0	3.9	3.9	3.7	3.3	3.5	3.5	3.7	3.7
22 Brunei															5.5	5.5
23 Bulgaria					2.9	3.3	3.5	3.9	4.0	3.9	4.1	4.0	4.0	4.1	3.6	3.8
24 Burkina								3.0				3.4	3.2	2.9	3.5	3.6
25 Burundi												2.3	2.4	2.5	1.9	1.8
26 Cambodia											2.3	2.1	2.0	1.8	2.0	2.1
27 Cameroon		2.5		1.4	1.5	2.0	2.0	2.2	1.8	2.1	2.2	2.3	2.4	2.3	2.2	2.2
28 Canada	8.9	9.0	9.1	9.2	9.2	9.2	8.9	9.0	8.7	8.5	8.4	8.5	8.7	8.7	8.7	8.9
29 Cap Verde													4.9	5.1	5.1	5.1
30 CAR												2.4	2.0	2.0	2.0	2.1
31 Chad										1.7	1.7	2.0	1.8	1.6	1.6	1.7
32 Chile	7.9	6.8	6.1	6.8	6.9	7.4	7.5	7.5	7.4	7.4	7.3	7.3	7.0	6.9	6.7	7.2
33 China	2.2	2.4	2.9	3.5	3.4	3.1	3.5	3.5	3.4	3.4	3.2	3.3	3.5	3.6	3.6	3.5
34 Colombia	3.4	2.7	2.2	2.2	2.9	3.2	3.8	3.6	3.7	3.8	4.0	3.9	3.8	3.8	3.7	3.5
35 Comoros														2.6	2.5	2.3
36 Congo, Bra										4.3	2.3	2.3	2.2	2.1	1.9	1.9
37 Congo, Kin										2.2	2.0	2.1	2.0	1.9	1.7	1.9
38 Costa Rica						6.5	5.6	5.1	5.4	4.5	4.5	4.9	4.2	4.1	5.0	5.3
39 Côte						3.1	2.6	2.7	2.4	2.7	2.1	2.0	1.9	2.1	2.1	2.2
40 Croatia						2.7	3.7	3.9	3.8	3.7	3.5	3.4	3.4	4.1	4.4	4.1

Table A1.2. Data for countries 41 Cuba to 40 Italy

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
41	Cuba								4.6	3.7	3.8	3.5	4.2	4.3	4.4	3.7
42	Cyprus								6.1	5.4	5.7	5.6	5.3	6.4	6.6	6.3
43	Czech R	5.4	5.2	4.8	4.6	4.3	3.9	3.7	3.9	4.2	4.3	4.8	5.2	5.2	4.9	4.6
44	Denmark	9.3	9.3	9.9	10.0	10.0	9.8	9.5	9.5	9.5	9.5	9.5	9.4	9.3	9.3	9.3
45	Djibouti											2.9	3.0	2.8	3.2	
46	Dominica										4.5	5.6	6.0	5.9	5.2	
47	Dominican R						3.1	3.5	3.3	2.9	3.0	2.8	3.0	3.0	3.0	
48	Ecuador	3.2		2.3	2.4	2.6	2.3	2.2	2.2	2.4	2.5	2.3	2.1	2.0	2.2	2.5
49	Egypt		2.8		3.3	3.1	3.6	3.4	3.3	3.2	3.4	3.3	2.9	2.8	2.8	3.1
50	El Salvador			3.6	3.9	4.1	3.6	3.4	3.7	4.2	4.2	4.0	4.0	3.9	3.4	3.6
51	Equat. Guinea										1.9	2.1	1.9	1.7	1.8	1.9
52	Eritrea								2.6		2.6	2.9	2.8	2.6	2.6	2.6
53	Estonia			5.7	5.7	5.7	5.6	5.6	5.5	6.0	6.4	6.7	6.5	6.6	6.6	6.5
54	Ethiopia					3.7		3.5	2.5	2.3	2.2	2.4	2.4	2.6	2.7	2.7
55	Fiji									4.0						
56	Finland	9.1	9.1	9.5	9.6	9.8	10.0	9.9	9.7	9.7	9.6	9.6	9.4	9.0	8.9	9.2
57	France	7.0	7.0	6.7	6.7	6.6	6.7	6.7	6.3	6.9	7.1	7.5	7.4	7.3	6.9	6.8
58	Gabon								3.3		2.9	3.0	3.3	3.1	2.9	2.8
59	Gambia							2.5	2.8		2.7	2.5	2.3	1.9	2.9	3.8
60	Georgia				2.3			2.4	1.8	2.0	2.3	2.8	3.4	3.9	4.1	3.8
61	Germany	8.1	8.3	8.2	7.9	8.0	7.6	7.4	7.3	7.7	8.2	8.2	8.0	7.8	7.9	8.0
62	Ghana				3.3	3.3	3.5	3.4	3.9	3.3	3.6	3.5	3.3	3.7	3.9	4.1
63	Greece	4.0	5.0	5.4	4.9	4.9	4.9	4.2	4.2	4.3	4.3	4.3	4.4	4.6	4.7	3.5
64	Grenada											3.5	3.4			
65	Guatemala				3.1	3.2		2.9	2.5	2.4	2.2	2.5	2.6	2.8	3.1	3.2
66	Guinea											1.9	1.9	1.6	1.8	2.0
67	Guinea-												2.2	1.9	1.9	2.1
68	Guyana											2.5	2.5	2.6	2.6	2.7
69	Haiti							2.2	1.5	1.5		1.8	1.8	1.6	1.4	2.2
70	Honduras				1.7	1.8		2.7	2.7	2.3	2.3	2.6	2.5	2.5	2.6	2.4
71	Hong Kong	7.1	7.0	7.3	7.8	7.7	7.7	7.9	8.2	8.0	8.0	8.3	8.3	8.3	8.1	8.4
72	Hungary	4.1	4.9	5.2	5.0	5.2	5.2	5.3	4.9	4.8	4.8	5.0	5.2	5.3	5.1	4.7
73	Iceland				9.3	9.2	9.1	9.2	9.4	9.6	9.5	9.7	9.6	9.2	8.9	8.7
74	India	2.8	2.6	2.8	2.9	2.9	2.8	2.7	2.7	2.8	2.8	2.9	3.3	3.5	3.4	3.3
75	Indonesia	1.9		2.7	2.0	1.7	1.7	1.9	1.9	1.9	2.0	2.2	2.4	2.3	2.6	2.8
76	Iran								3.0	2.9		2.9	2.7	2.5	2.3	1.8
77	Iraq								2.2	2.1		2.2	1.9	1.5	1.3	1.5
78	Ireland	8.6	8.5	8.3	8.2	7.7	7.2	7.5	6.9	7.5	7.5	7.4	7.4	7.5	7.7	8.0
79	Israel				7.7	8.0	7.1	6.8	6.6	7.6	7.3	7.0	6.4	6.3	5.9	6.1
80	Italy	3.0	3.4	5.0	4.6	4.7	4.6	5.5	5.2	5.3	4.8	5.0	4.9	5.2	4.8	4.3

Table A1.3. Data for countries 81 Jamaica to 120 Niger

		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
81	Jamaica				3.8	3.8			4.0	3.8	3.3	3.6	3.7	3.3	3.1	3.0	3.3
82	Japan	6.7	7.0	6.6	5.8	6.0	6.4	7.1	7.1	7.0	6.9	7.3	7.6	7.5	7.3	7.7	7.8
83	Jordan				4.9		4.7	4.4	4.6	4.9	4.5	4.6	5.3	5.7	5.3	4.7	5.0
84	Kazakhstan						2.3	3.0	2.7	2.3	2.4	2.2		2.6	2.6	2.1	2.7
85	Kenya				2.2	2.5	2.0	2.1	2.0	1.9	1.9	2.1	2.1	2.2	2.1	2.2	2.1
86	Kiribati													3.3	3.1	2.8	3.2
87	Kosovo																2.8
88	Kuwait										5.3	4.6	4.7	4.8	4.3	4.3	4.1
89	Kyrgyzstan						2.2				2.1	2.2	2.3	2.2	2.1	1.8	1.9
90	Laos												3.3	2.6	1.9	2.0	2.0
91	Latvia				2.7	3.4	3.4	3.4	3.7	3.8	4.0	4.2	4.7	4.8	5.0	4.5	4.3
92	Lebanon									3.0	2.7	3.1	3.6	3.0	3.0	2.5	2.5
93	Lesotho											3.4	3.2	3.3	3.2	3.3	3.5
94	Liberia											2.2		2.1	2.4	3.1	3.3
95	Libya										2.1	2.5	2.5	2.7	2.5	2.5	2.2
96	Lithuania					3.8	4.1	4.8	4.8	4.7	4.6	4.8	4.8	4.8	4.6	4.9	5.0
97	Luxembourg				8.6	8.7	8.8	8.6	8.7	9.0	8.7	8.4	8.5	8.6	8.4	8.3	8.2
98	Macao												6.6	5.7	5.4	5.3	5.0
99	Macedonia					3.3				2.3	2.7	2.7	2.7	2.7	3.3	3.6	3.8
100	Madagascar									1.7	2.6	3.1	2.8	3.1	3.2	3.4	3.0
101	Malawi				4.1	4.1	4.1	3.2	2.9	2.8	2.8	2.8	2.8	2.7	2.7	2.8	3.3
102	Malaysia	5.3	5.3	5.0	5.3	5.1	4.8	5.0	4.9	5.2	5.0	5.1	5.0	5.1	5.1	4.5	4.4
103	Maldives													3.3	2.8	2.5	2.3
104	Mali									3.0	3.2	2.9	2.8	2.7	3.1	2.8	2.7
105	Malta										6.8	6.6	6.4	5.8	5.8	5.2	5.6
106	Mauritania												3.1	2.6	2.8	2.5	2.3
107	Mauritius				5.0	4.9	4.7	4.5	4.5	4.4	4.1	4.2	5.1	4.7	5.5	5.4	5.4
108	Mexico	3.2	3.3	2.7	3.3	3.4	3.3	3.7	3.6	3.6	3.6	3.5	3.3	3.5	3.6	3.3	3.1
109	Moldova					2.6	2.6	3.1	2.1	2.4	2.3	2.9	3.2	2.8	2.9	3.3	2.9
110	Mongolia					4.3				3.0	3.0	2.8	3.0	3.0	2.7	2.7	
111	Montenegro					3.7	4.1	4.7		3.7	3.3	3.2	3.2	3.2	3.5	3.5	3.7
112	Morocco						3.5	2.2		2.7	2.8	2.8	2.8	2.8	2.6	2.5	2.7
113	Mozambique									1.6	1.7	1.8	1.9	1.4	1.3	1.4	
114	Myanmar																
115	Namibia				5.3	5.3	5.4	5.4	5.7	4.7	4.1	4.3	4.1	4.5	4.5	4.4	
116	Nepal										2.8	2.5	2.5	2.5	2.7	2.3	2.2
117	Netherlands	8.7	8.7	9.0	9.0	9.0	8.9	8.8	9.0	8.9	8.7	8.6	8.7	9.0	8.9	8.9	8.8
118	New Zealand	9.6	9.4	9.2	9.4	9.4	9.4	9.4	9.5	9.5	9.6	9.6	9.6	9.4	9.3	9.4	9.3
119	Nicaragua					3.0	3.1		2.4	2.5	2.6	2.7	2.6	2.6	2.6	2.5	2.5
120	Niger										2.2	2.4	2.3	2.6	2.8	2.9	2.6

Table A1.4. Data for countries 121 Nigeria to 160 Switzerland

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
121 Nigeria	0.7	1.8	1.9	1.6		1.2	1.0	1.6	1.4	1.6	1.9	2.2	2.2	2.7	2.5	2.4
122 Norway	8.6	8.9	8.9	9.0	8.9	9.1	8.6	8.5	8.8	8.9	8.9	8.8	8.7	7.9	8.6	8.6
123 Oman								6.3	6.1		6.3	5.4	4.7	5.5	5.5	5.3
124 Pakistan	2.3	1.0	2.5	2.7	2.2		2.3	2.6	2.5	2.1	2.1	2.2	2.4	2.5	2.4	2.3
125 Palestine								3.0	2.5		3.0	2.6				
126 Panama						3.7	3.0	3.4	3.7		3.5	3.1	3.2	3.4	3.4	3.6
127 Papua NG								2.1	2.6		2.3	2.4	2.0	2.0	2.1	2.1
128 Paraguay			1.5	2.0			1.7	1.6	1.9		2.1	2.6	2.4	2.4	2.1	2.2
129 Peru			4.5	4.5		4.4	4.1	4.0	3.7	3.5	3.5	3.3	3.5	3.6	3.7	3.5
130 Philippines	2.8	2.7	3.1	3.3	3.6	2.8	2.9	2.6	2.5	2.6	2.5	2.5	2.5	2.3	2.4	2.4
131 Poland		5.6	5.1	4.6	4.2	4.1	4.1	4.0	3.6	3.5	3.4	3.7	4.2	4.6	5.0	5.3
132 Portugal	5.6	6.5	7.0	6.5	6.7	6.4	6.3	6.3	6.6	6.3	6.5	6.6	6.5	6.1	5.8	6.0
133 Puerto Rico														5.8	5.8	5.0
134 Qatar								5.6	5.2		5.9	6.0	6.0	6.5	7.0	7.7
135 Romania		3.4	3.0	3.3		2.9	2.8	2.6	2.8	2.9	3.0	3.1	3.7	3.8	3.8	3.7
136 Russia	2.6	2.3	2.4	2.4		2.1	2.3	2.7	2.7	2.8	2.4	2.5	2.3	2.1	2.2	2.1
137 Rwanda											3.1	2.5	2.8	3.0	3.3	4.0
138 Saint Lucia												6.8	7.1	7.0		
139 Saint Vincent												6.1	6.5	6.4		
140 Samoa												4.5	4.4	4.5		4.1
141 Sao Tome												2.7	2.7	2.8		3.0
142 Saudi Arabia								4.5	3.4		3.4	3.3	3.4	3.5	4.3	4.7
143 Senegal		3.3	3.4			3.5	2.9	3.1	3.2	3.0	3.2	3.3	3.6	3.4	3.0	2.9
144 Serbia		3.0	2.0	1.3				2.3	2.7		2.8	3.0	3.4	3.4	3.5	3.5
145 Seychelles									4.4		4.0	3.6	4.5	4.8	4.8	4.8
146 Sierra Leone								2.2	2.3		2.4	2.2	2.1	1.9	2.2	2.4
147 Singapore	9.3	8.8	8.7	9.1	9.1	9.1	9.2	9.3	9.4	9.3	9.4	9.4	9.3	9.2	9.2	9.3
148 Slovakia			3.9	3.7		3.5	3.7	3.7	3.7	4.0	4.3	4.7	4.9	5.0	4.5	4.3
149 Slovenia				6.0		5.5	5.2	6.0	5.9	6.0	6.1	6.4	6.6	6.7	6.6	6.4
150 Solomons												2.8	2.9	2.8	2.8	
151 Somalia											2.1		1.4	1.0	1.1	1.1
152 South Africa	5.6	5.7	5.0	5.2	5.0	5.0	4.8	4.8	4.4	4.6	4.5	4.6	5.1	4.9	4.7	4.5
153 South Korea	4.3	5.0	4.3	4.2	3.8	4.0	4.2	4.5	4.3	4.5	5.0	5.1	5.1	5.6	5.5	5.4
154 Spain	4.4	4.3	5.9	6.1	6.6	7.0	7.0	7.1	6.9	7.1	7.0	6.8	6.7	6.5	6.1	6.1
155 Sri Lanka								3.7	3.4	3.5	3.2	3.1	3.2	3.2	3.1	3.2
156 Sudan								2.3	2.2		2.1	2.0	1.8	1.6	1.5	1.6
157 Suriname									4.3		3.2	3.0	3.5	3.6	3.7	
158 Swaziland											2.7	2.5	3.3	3.6	3.6	3.2
159 Sweden	8.9	9.1	9.4	9.5	9.4	9.4	9.0	9.3	9.3	9.2	9.2	9.2	9.3	9.3	9.2	9.2
160 Switzerland	8.8	8.8	8.6	8.9	8.9	8.6	8.4	8.5	8.8	9.1	9.1	9.1	9.0	9.0	9.0	8.7

Table A1.5. Data for countries 161 Syria to 40 Zimbabwe

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
161 Syria									3.4	3.4	3.4	2.9	2.4	2.1	2.6	2.5	
162 Taiwan	5.1	5.0	5.0	5.3	5.6	5.5	5.9	5.6	5.7	5.6	5.9	5.9	5.7	5.7	5.6	5.8	
163 Tajikistan									1.8	2.0	2.1	2.2	2.1	2.0	2.0	2.1	
164 Tanzania				1.9	1.9	2.5	2.2	2.7	2.5	2.8	2.9	2.9	3.2	3.0	2.6	2.7	
165 Thailand	2.8	3.3	3.1	3.0	3.2	3.2	3.2	3.2	3.3	3.6	3.8	3.6	3.3	3.5	3.4	3.5	
166 Timor-Leste												2.6	2.6	2.2	2.2	2.5	
167 Togo												2.4	2.3	2.7	2.8	2.4	
168 Tonga													1.7	2.4	3.0	3.0	
169 Trinidad									5.3	4.9	4.6	4.2	3.8	3.2	3.6	3.6	
170 Tunisia					5.0	5.0	5.2	5.3	4.8	4.9	5.0	4.9	4.6	4.4	4.2	4.3	
171 Turkey	4.1	3.5	3.2	3.4	3.6	3.8	3.6	3.2	3.1	3.2	3.5	3.8	4.6	4.4	4.4		
172 Turkmenistan										2.0	1.8	2.2	1.8	1.8	1.8	1.6	
173 UAE										5.2	6.1	6.2	6.2	5.7	5.9	6.5	6.3
174 Uganda		2.7		2.6	2.2	2.3	1.9	2.1	2.2	2.6	2.5	2.7	2.8	2.6	2.5	2.5	
175 UK	8.6	8.4	8.2	8.7	8.6	8.7	8.3	8.7	8.7	8.6	8.6	8.6	8.4	7.7	7.7	7.6	
176 Ukraine				2.8	2.6	1.5	2.1	2.4	2.3	2.2	2.6	2.8	2.7	2.5	2.2	2.4	
177 Uruguay					4.1	4.3	4.4		5.1	5.1	5.5	6.2	5.9	6.4	6.7	6.9	6.9
178 USA	7.8	7.7	7.6	7.5	7.5	7.8	7.6	7.7	7.5	7.5	7.6	7.3	7.2	7.3	7.5	7.1	
179 Uzbekistan						1.8	2.4	2.7	2.9	2.4	2.3	2.2	2.1	1.7	1.8	1.7	
180 Vanuatu														3.1	2.9	3.2	
181 Venezuela	2.7	2.5	2.8	2.3	2.6	2.7	2.8	2.5	2.4	2.3	2.3	2.3	2.0	1.9	1.9	2.0	
182 Vietnam					2.8	2.5	2.6	2.5	2.6	2.4	2.4	2.6	2.6	2.7	2.7	2.7	
183 Yemen										2.6	2.4	2.7	2.6	2.5	2.3	2.1	2.2
184 Zambia						3.5	3.5	3.4	2.6	2.6	2.5	2.6	2.6	2.6	2.8	3.0	3.0
185 Zimbabwe						4.2	4.1	3.0	2.9	2.7	2.3	2.3	2.6	2.4	2.1	1.8	2.2

Table A2.1. Main statistics for countries 1 Afghanistan to 40 Croatia

Year	Observations available				Standard statistics						Kendall's $\tau$ to trend		
	From	Missing	To	N	Avr	STD	St Er	Max	Min	Range	$\tau_a$	$\tau_b$	p %
1 Afghanistan	2005	2006	end	5	1.70	0.43	0.19	2.5	1.3	1.2	-0.80	-0.80	8.6
2 Albania	1999	2000-2001	end	10	2.76	0.39	0.12	3.4	2.3	1.1	0.71	0.74	0.5
3 Algeria	2003		end	8	2.89	0.19	0.07	3.2	2.6	0.6	0.46	0.47	13.5
4 Angola	2000	2001	end	10	1.93	0.17	0.05	2.2	1.7	0.5	0.33	0.36	19.8
5 Argentina		start	end	16	3.09	0.61	0.15	5.2	2.5	2.7	-0.25	-0.27	18.1
6 Armenia	1999	2001-2002	end	10	2.81	0.21	0.07	3.1	2.5	0.6	-0.04	-0.05	92.7
7 Australia		start	end	16	8.68	0.14	0.03	8.9	8.3	0.6	-0.03	-0.04	89.0
8 Austria		start	end	16	7.90	0.40	0.10	8.7	7.1	1.6	0.60	0.62	0.1
9 Azerbaijan	1999		end	12	2.02	0.27	0.08	2.4	1.5	0.9	0.56	0.57	1.3
10 Bahrain	2003		end	8	5.48	0.41	0.15	6.1	4.9	1.2	-0.82	-0.84	0.6
11 Bangladesh	1996	1997-2000	end	11	1.75	0.59	0.18	2.4	0.4	2	0.67	0.69	0.5
12 Barbados	2004		end	7	7.14	0.35	0.13	7.8	6.7	1.1	0.48	0.49	17.2
13 Belarus	1998	2001	end	12	3.12	0.92	0.27	4.8	2	2.8	-0.53	-0.53	1.9
14 Belgium		start	end	16	6.74	0.76	0.19	7.6	5.3	2.3	0.35	0.36	6.2
15 Belize	2003		2008	6	3.57	0.53	0.22	4.5	2.9	1.6	-1.00	-1.00	0.9
16 Benin	2004		end	7	2.87	0.22	0.08	3.2	2.5	0.7	-0.19	-0.20	64.9
17 Bhutan	2006		end	5	5.38	0.40	0.18	6	5	1	-0.10	-0.11	100.0
18 Bolivia	1996		end	15	2.59	0.37	0.10	3.4	2	1.4	0.22	0.23	27.2
19 Bosnia	2003		end	8	3.11	0.15	0.05	3.3	2.9	0.4	-0.04	-0.04	100.0
20 Botswana	1998		end	13	5.88	0.25	0.07	6.4	5.4	1	-0.56	-0.59	0.8
21 Brazil	start		end	16	3.66	0.38	0.09	4.1	2.7	1.4	-0.08	-0.09	68.2
22 Brunei	2009		end	2	5.5	-	-	5.5	5.5	0	-	-	-
23 Bulgaria	1998		end	13	3.75	0.34	0.09	4.1	2.9	1.2	0.28	0.29	19.5
24 Burkina Faso	2000	2001-2004	end	7	3.24	0.24	0.09	3.6	2.9	0.7	0.24	0.24	54.8
25 Burundi	2005		end	6	2.12	0.29	0.12	2.5	1.8	0.7	-0.53	-0.55	18.1
26 Cambodia	2005		end	6	2.05	0.15	0.06	2.3	1.8	0.5	-0.33	-0.36	43.6
27 Cameroon	1996		end	14	2.08	0.31	0.08	2.5	1.4	1.1	0.38	0.40	5.9
28 Canada		start	end	16	8.85	0.25	0.06	9.2	8.4	0.8	-0.37	-0.39	4.9
29 Cap Verde	2007		end	4	5.05	0.09	0.04	5.1	4.9	0.2	0.50	0.71	37.1
30 CAR	2006		end	5	2.10	0.15	0.07	2.4	2	0.4	-0.10	-0.12	100.0
31 Chad	2004		end	7	1.73	0.13	0.05	2	1.6	0.4	-0.24	-0.26	52.5
32 Chile	start		end	16	7.13	0.41	0.10	7.9	6.1	1.8	-0.13	-0.13	52.5
33 China	start		end	16	3.25	0.40	0.10	3.6	2.2	1.4	0.50	0.53	0.7
34 Colombia	start		end	16	3.39	0.57	0.14	4	2.2	1.8	0.45	0.47	1.6
35 Comoros	2007		end	4	2.38	0.19	0.10	2.6	2.1	0.5	-1.00	-1.00	8.9
36 Congo, Bra	2003		end	8	2.39	0.74	0.26	4.3	1.9	2.4	-0.75	-0.79	1.1
37 Congo, Kin	2003		end	8	1.98	0.14	0.05	2.2	1.7	0.5	-0.50	-0.54	9.5
38 Costa Rica	1997	2003	end	13	5.04	0.61	0.17	6.5	4.1	2.4	-0.19	-0.19	39.1
39 Côte d'Ivoire	1998		end	13	2.31	0.35	0.10	3.1	1.9	1.2	-0.44	-0.46	4.0
40 Croatia	1999		end	12	3.73	0.43	0.12	4.4	2.7	1.7	0.35	0.36	12.6

Table A2.2. Main statistics for countries 41 Cuba to 40 Italy

Year	Observations available				Standard statistics						Kendall's $\tau$ to trend		
	From	Missing	To	N	Avr	STD	St Er	Max	Min	Range	$\tau_a$	$\tau_b$	p %
41 Cuba	2003		end	8	4.03	0.37	0.13	4.6	3.5	1.1	0.04	0.04	100.0
42 Cyprus	2003		end	8	5.93	0.46	0.16	6.6	5.3	1.3	0.29	0.29	38.7
43 Czech R	1996		end	15	4.60	0.52	0.13	5.4	3.7	1.7	-0.02	-0.02	96.0
44 Denmark	start		end	16	9.54	0.24	0.06	10	9.3	0.7	-0.38	-0.43	3.3
45 Djibouti	2007		end	4	2.98	0.15	0.07	3.2	2.8	0.4	0.33	0.33	73.4
46 Dominica	2006		end	5	5.44	0.55	0.24	6	4.5	1.5	0.20	0.20	80.7
47 Dominican R	2001		end	10	3.06	0.19	0.06	3.5	2.8	0.7	-0.29	-0.33	24.9
48 Ecuador	1996	1997	end	14	2.37	0.28	0.07	3.2	2	1.2	-0.32	-0.33	12.0
49 Egypt	1996	1997	end	14	3.14	0.25	0.07	3.6	2.8	0.8	-0.13	-0.14	54.1
50 El Salvador	1998		end	13	3.82	0.27	0.08	4.2	3.4	0.8	-0.04	-0.04	90.2
51 Equ. Guinea	2005		end	6	1.88	0.12	0.05	2.1	1.7	0.4	-0.27	-0.30	54.6
52 Eritrea	2004		end	7	2.67	0.12	0.04	2.9	2.6	0.3	-0.14	-0.20	70.4
53 Estonia	1998		end	13	6.08	0.45	0.12	6.7	5.5	1.2	0.49	0.51	2.2
54 Ethiopia	2000	2001	end	10	2.70	0.48	0.15	3.7	2.2	1.5	-0.02	-0.02	100.0
55 Fiji	2005		2005	1	4.0	-	-	-	-	-	-	-	-
56 Finland	start		end	16	9.49	0.32	0.08	10	8.9	1.1	-0.23	-0.23	24.0
57 France	start		end	16	6.91	0.30	0.08	7.5	6.3	1.2	0.17	0.17	38.6
58 Gabon	2004		end	7	3.04	0.18	0.07	3.3	2.8	0.5	-0.43	-0.45	21.9
59 Gambia	2003		end	8	2.68	0.52	0.18	3.8	1.9	1.9	0.11	0.11	80.3
60 Georgia	1999	2000-2001	end	10	2.88	0.81	0.25	4.1	1.8	2.3	0.67	0.67	0.9
61 Germany	start		end	16	7.91	0.28	0.07	8.3	7.3	1	-0.16	-0.16	41.4
62 Ghana	1998		end	13	3.59	0.27	0.07	4.1	3.3	0.8	0.54	0.58	1.0
63 Greece	start		end	16	4.46	0.48	0.12	5.4	3.5	1.9	-0.31	-0.32	10.2
64 Grenada	2006		2007	2	3.45	-	-	3.5	3.4	0.1	-	-	-
65 Guatemala	1998	2001	end	12	2.83	0.37	0.11	3.4	2.2	1.2	0.20	0.20	40.7
66 Guinea	2006		end	5	1.84	0.14	0.06	2	1.6	0.4	0.10	0.11	100.0
67 Guinea-Bissau	2007		end	4	2.03	0.13	0.06	2.2	1.9	0.3	-0.17	-0.18	100.0
68 Guyana	2005		end	6	2.58	0.07	0.03	2.7	2.5	0.2	0.73	0.86	4.0
69 Haiti	2002		end	9	1.76	0.28	0.09	2.2	1.4	0.8	0.08	0.09	83.0
70 Honduras	1998	2000	end	12	2.38	0.31	0.09	2.7	1.7	1	0.15	0.16	53.1
71 Hong Kong	start		end	16	7.89	0.42	0.11	8.4	7	1.4	0.75	0.77	0.0
72 Hungary	start		end	16	4.99	0.29	0.07	5.3	4.1	1.2	0.06	0.06	78.4
73 Iceland	1998		end	13	9.22	0.34	0.10	9.7	8.5	1.2	-0.21	-0.21	35.8
74 India	start		end	16	2.98	0.29	0.07	3.5	2.6	0.9	0.50	0.54	0.7
75 Indonesia	start	1996	end	15	2.19	0.38	0.10	2.8	1.7	1.1	0.55	0.58	0.4
76 Iran	2003		end	8	2.54	0.39	0.14	3	1.8	1.2	-0.89	-0.91	0.3
77 Iraq	2003		end	8	1.78	0.34	0.12	2.2	1.3	0.9	-0.64	-0.69	2.9
78 Ireland	start		end	16	7.74	0.46	0.12	8.6	6.9	1.7	-0.24	-0.25	20.2
79 Israel	1996		end	15	6.73	0.66	0.17	8	5.9	2.1	-0.69	-0.70	0.0
80 Italy	start		end	16	4.64	0.67	0.17	5.5	3	2.5	0.10	0.10	61.9

Table A2.3. Main statistics for countries 81 Jamaica to 120 Niger

Country	Observations available				Standard statistics						Kendall's τ to trend		
	From	Missing	To	N	Avr	STD	St Er	Max	Min	Rang	τ <sub>a</sub>	τ <sub>b</sub>	p %
81 Jamaica	1998	2000-2001	end	11	3.52	0.32	0.10	4	3	1	-0.64	-0.67	0.7
82 Japan	start		end	16	6.99	0.56	0.14	7.8	5.8	2	0.64	0.65	0.1
83 Jordan	1996		end	14	4.89	0.35	0.09	5.7	4.4	1.3	0.23	0.24	27.0
84 Kazakhstan	1999		end	12	2.50	0.28	0.08	3	2.1	0.9	0.00	0.00	100.0
85 Kenya	1996		end	14	2.11	0.14	0.04	2.5	1.9	0.6	0.05	0.06	81.7
86 Kiribati	2007		end	4	3.10	0.19	0.09	3.3	2.8	0.5	-0.33	-0.33	73.4
87 Kosovo			end	1									
88 Kuwait	2003		end	8	4.58	0.35	0.12	5.3	4.1	1.2	-0.54	-0.55	8.1
89 Kyrgyzstan	1999	2000-2002	end	9	2.09	0.15	0.05	2.3	1.8	0.5	-0.44	-0.47	10.9
90 Laos	2005		end	6	2.32	0.49	0.20	3.3	1.9	1.4	-0.27	-0.28	56.6
91 Latvia	1998		end	13	3.99	0.65	0.18	5	2.7	2.3	0.78	0.80	0.0
92 Lebanon	2003		end	8	2.93	0.34	0.12	3.6	2.5	1.1	-0.36	-0.39	24.8
93 Lesotho	2005		end	6	3.32	0.11	0.04	3.5	3.2	0.3	0.20	0.21	69.7
94 Liberia	2005	2006	end	5	2.62	0.49	0.22	3.3	2.1	1.2	0.80	0.80	8.6
95 Libya	2003		end	8	2.45	0.19	0.07	2.7	2.1	0.6	0.07	0.08	89.4
96 Lithuania	1999		end	12	4.64	0.33	0.10	5	3.8	1.2	0.50	0.55	2.2
97 Luxembourg	1997		end	14	8.57	0.20	0.05	9	8.2	0.8	-0.49	-0.51	1.5
98 Macao	2006		end	5	5.60	0.55	0.24	6.6	5	1.6	-1.00	-1.00	2.8
99 Macedonia	1999	2000-2002	end	9	3.17	0.57	0.19	4.1	2.3	1.8	0.67	0.71	1.4
100 Madagascar	2002		end	9	2.83	0.47	0.16	3.4	1.7	1.7	0.33	0.34	24.6
101 Malawi	1998		end	13	3.21	0.53	0.15	4.1	2.7	1.4	-0.38	-0.41	7.0
102 Malaysia	start		end	16	5.01	0.25	0.06	5.3	4.4	0.9	-0.38	-0.40	4.4
103 Maldives	2007		end	4	2.73	0.38	0.19	3.3	2.3	1	-1.00	-1.00	8.9
104 Mali	2003		end	8	2.90	0.17	0.06	3.2	2.7	0.5	-0.50	-0.52	10.2
105 Malta	2004		end	7	6.03	0.54	0.20	6.8	5.2	1.6	-0.86	-0.88	1.0
106 Mauritania	2006		end	5	2.66	0.27	0.12	3.1	2.3	0.8	-0.80	-0.80	8.6
107 Mauritius	1998		end	13	4.80	0.44	0.12	5.5	4.1	1.4	0.17	0.17	46.2
108 Mexico	start		end	16	3.38	0.24	0.06	3.7	2.7	1	0.14	0.15	45.9
109 Moldova	1999		end	12	2.76	0.35	0.10	3.3	2.1	1.2	0.36	0.38	11.1
110 Mongolia	1999	2000-2003	end	8	3.06	0.48	0.17	4.3	2.7	1.6	-0.61	-0.70	3.2
111 Montenegro	2007		end	4	3.58	0.24	0.12	3.9	3.3	0.6	0.67	0.67	30.8
112 Morocco	1998	2002	end	12	3.57	0.43	0.12	4.7	3.2	1.5	-0.33	-0.35	14.3
113 Mozambique	1999	2001-2002	end	10	2.74	0.31	0.10	3.5	2.2	1.3	-0.22	-0.24	40.2
114 Myanmar	2003		end	8	1.56	0.21	0.07	1.9	1.3	0.6	-0.32	-0.34	30.8
115 Namibia	1998		end	13	4.78	0.53	0.15	5.7	4.1	1.6	-0.38	-0.40	7.3
116 Nepal	2004		end	7	2.50	0.19	0.07	2.8	2.2	0.6	-0.57	-0.62	8.5
117 Netherlands	start		end	16	8.85	0.13	0.03	9	8.6	0.4	-0.09	-0.10	64.3
118 New Zealand	start		end	16	9.44	0.12	0.03	9.6	9.2	0.4	-0.01	-0.01	100.0
119 Nicaragua	1998	2000	end	12	2.63	0.20	0.06	3.1	2.4	0.7	-0.33	-0.37	13.3
120 Niger	2004		end	7	2.54	0.24	0.09	2.9	2.2	0.7	0.67	0.68	4.8

Table A2.4. Main statistics for countries 121 Nigeria to 160 Switzerland

Year	Observations available				Standard statistics						Kendall's τ to trend		
	From	Missing	To	N	Avr	STD	St Er	Max	Min	Rang	τ <sub>a</sub>	τ <sub>b</sub>	p %
121 Nigeria	1996		end	15	1.78	0.55	0.14	2.7	0.7	2	0.57	0.59	0.3
122 Norway	start		end	16	8.73	0.27	0.07	9.1	7.9	1.2	-0.33	-0.35	7.9
123 Oman	2003		end	8	5.64	0.52	0.18	6.3	4.7	1.6	-0.50	-0.52	10.2
124 Pakistan	start	2000	end	15	2.27	0.38	0.10	2.7	1	1.7	0.02	0.02	96.0
125 Palestine	2003		2005	3	2.70	0.22	0.12	3	2.5	0.5	-0.33	-0.33	100.0
126 Panama	1001		end	10	3.40	0.23	0.07	3.7	3	0.7	0.02	0.02	100.0
127 Papua NG	2003		end	8	2.20	0.20	0.07	2.6	2	0.6	-0.29	-0.31	36.9
128 Paraguay	1998	2000-2001	end	11	2.05	0.33	0.10	2.6	1.5	1.1	0.53	0.54	2.8
129 Peru	1998		end	13	3.83	0.40	0.11	4.5	3.3	1.2	-0.62	-0.65	0.3
130 Philippines	start		end	16	2.72	0.34	0.09	3.6	2.3	1.3	-0.66	-0.68	0.0
131 Poland	1996		end	15	4.33	0.66	0.17	5.6	3.4	2.2	-0.15	-0.15	45.7
132 Portugal	start		end	16	6.36	0.34	0.08	7	5.6	1.4	-0.27	-0.28	15.8
133 Puerto Rico	2008		end	3	5.53	0.38	0.22	5.8	5	0.8	-0.67	-0.82	54.0
134 Qatar	2003		end	8	6.24	0.75	0.27	7.7	5.2	2.5	0.89	0.91	0.3
135 Romania	1997		end	14	3.20	0.40	0.11	3.8	2.6	1.2	0.35	0.36	8.7
136 Russia	1996		end	15	2.39	0.22	0.06	2.8	2.1	0.7	-0.24	-0.25	22.8
137 Rwanda	2005		end	6	3.12	0.47	0.19	4	2.5	1.5	0.60	0.60	13.3
138 Saint Lucia	2007		2009	3	6.97	0.12	0.07	7.1	6.8	0.3	0.33	0.33	100.0
139 Saint	2007		2009	3	6.33	0.17	0.10	6.5	6.1	0.4	0.33	0.33	100.0
140 Samoa	2007		end	4	4.38	0.16	0.08	4.5	4.1	0.4	-0.50	-0.55	47.0
141 Sao Tome	2007		end	4	2.80	0.12	0.06	3	2.7	0.3	0.83	0.91	14.9
142 Saudi	2003		end	8	3.81	0.54	0.19	4.7	3.3	1.4	0.32	0.34	30.8
143 Senegal	1998		end	13	3.22	0.22	0.06	3.6	2.9	0.7	-0.12	-0.12	62.2
144 Serbia	1998	2001-2002	end	11	2.81	0.67	0.20	3.5	1.3	2.2	0.73	0.75	0.2
145 Seychelles	2004		end	7	4.41	0.43	0.16	4.8	3.6	1.2	0.57	0.62	8.5
146 Sierra Leone	2003		end	8	2.21	0.15	0.05	2.4	1.9	0.5	-0.07	-0.08	89.8
147 Singapore	start		end	16	9.19	0.20	0.05	9.4	8.7	0.7	0.38	0.40	4.2
148 Slovakia	1998		end	13	4.15	0.49	0.13	5	3.5	1.5	0.58	0.60	0.6
149 Slovenia	1999		end	12	6.12	0.44	0.13	6.7	5.2	1.5	0.65	0.68	0.4
150 Solomons	2007		end	4	2.83	0.04	0.02	2.9	2.8	0.1	-0.17	-0.24	100.0
151 Somalia	2005	2006	end	5	1.34	0.40	0.18	2.1	1	1.1	-0.50	-0.53	31.2
152 South Africa	start		end	16	4.90	0.36	0.09	5.7	4.4	1.3	-0.52	-0.53	0.6
153 South Korea	start		end	16	4.68	0.55	0.14	5.6	3.8	1.8	0.58	0.59	0.2
154 Spain	start		end	16	6.35	0.85	0.21	7.1	4.3	2.8	0.14	0.15	46.8
155 Sri Lanka	2002		end	9	3.29	0.19	0.06	3.7	3.1	0.6	-0.53	-0.59	4.7
156 Sudan	2003		end	8	1.89	0.28	0.10	2.3	1.5	0.8	-0.89	-0.91	0.3
157 Suriname	2004		2009	6	3.55	0.41	0.17	4.3	3	1.3	0.20	0.20	70.7
158 Swaziland	2005		end	6	3.15	0.42	0.17	3.6	2.5	1.1	0.40	0.41	33.9
159 Sweden	start		end	16	9.24	0.15	0.04	9.5	8.9	0.6	-0.11	-0.12	57.8
160 Switzerland	start		end	16	8.83	0.21	0.05	9.1	8.4	0.7	0.24	0.25	20.1

Table A2.5. Main statistics for countries 161 Syria to 40 Zimbabwe

Country	Observations available				Standard statistics						Kendall's $\tau$ to trend		
	From	Missing	To	N	Avr	STD	St Er	Max	Min	Rang	$\tau_a$	$\tau_b$	p %
161 Syria	2003		end	8	2.84	0.48	0.17	3.4	2.1	1.3	-0.61	-0.64	4.2
162 Taiwan	start		end	16	5.56	0.29	0.07	5.9	5	0.9	0.53	0.56	0.5
163 Tajikistan	2003		end	8	2.04	0.11	0.04	2.2	1.8	0.4	0.21	0.24	51.2
164 Tanzania	1998		end	13	2.60	0.38	0.11	3.2	1.9	1.3	0.59	0.61	0.6
165 Thailand	start		end	16	3.31	0.24	0.06	3.8	2.8	1	0.56	0.59	0.3
166 Timor-Leste	2006		end	5	2.42	0.18	0.08	2.6	2.2	0.4	-0.40	-0.45	43.3
167 Togo	2006		end	5	2.52	0.19	0.09	2.8	2.3	0.5	0.30	0.32	61.3
168 Tonga	2007		end	4	2.53	0.54	0.27	3	1.7	1.3	0.83	0.91	14.9
169 Trinidad	2001	2007	end	9	4.09	0.67	0.22	5.3	3.2	2.1	-0.75	-0.78	0.6
170 Tunisia	1998	2007	end	12	4.80	0.34	0.10	5.3	4.2	1.1	-0.64	-0.66	0.5
171 Turkey	start	2007	end	15	3.69	0.47	0.12	4.6	3.1	1.5	0.25	0.26	21.2
172 Turkmenistan	2004	2007	end	6	1.87	0.19	0.08	2.2	1.6	0.6	-0.53	-0.60	15.9
173 UAE	2003		end	8	6.01	0.38	0.14	6.5	5.2	1.3	0.46	0.47	13.5
174 Uganda	1996		end	14	2.44	0.25	0.07	2.8	1.9	0.9	0.14	0.15	50.5
175 UK	start		end	16	8.38	0.37	0.09	8.7	7.6	1.1	-0.33	-0.36	7.2
176 Ukraine	1998		end	13	2.39	0.34	0.09	2.8	1.5	1.3	0.03	0.03	95.1
177 Uruguay	1997	2000	end	13	5.71	0.99	0.27	6.9	4.1	2.8	0.91	0.93	0.0
178 USA	start		end	16	7.51	0.20	0.05	7.8	7.1	0.7	-0.57	-0.61	0.2
179 Uzbekistan	1999		end	12	2.13	0.40	0.12	2.9	1.6	1.3	-0.62	-0.64	0.6
180 Vanuatu	2007		end	4	3.20	0.25	0.13	3.6	2.9	0.7	0.67	0.67	30.8
181 Venezuela	start		end	16	2.38	0.30	0.07	2.8	1.9	0.9	-0.64	-0.67	0.1
182 Vietnam	1997		end	14	2.59	0.11	0.03	2.8	2.4	0.4	0.30	0.34	13.3
183 Yemen	2003		end	8	2.43	0.20	0.07	2.7	2.1	0.6	-0.61	-0.62	4.6
184 Zambia	1998		end	13	2.87	0.36	0.10	3.5	2.5	1	-0.09	-0.10	69.8
185 Zimbabwe	1998		end	13	2.69	0.69	0.19	4.2	1.8	2.4	-0.69	-0.70	0.1