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Abstract

The Transparency International Corruption Perceptions Index is a composite index with a focus on cross-section information. The usage of the data in the form of time series has been discouraged in the past, due to changes in the composition of sources. Basing assessments only on sources that continuously enter the index, such time series are provided here, ranging from 1995 to 2005. Panel data regressions reveal how the sources' time series information is related to each other, suggesting a method for assembling panel data. Regressing a linear time trend on the standardized sources provides an assessment of the significance of a simple trend for each of 61 countries.

1. Motivation

Transparency International (TI) has been publishing its annual Corruption Perceptions Index (CPI) since 1995. The statistical work and coordination is carried out at the University of Passau. This index has evolved into a leading indicator in social sciences. The goal of the CPI is to provide data on extensive perceptions of corruption within countries. The CPI is a composite index, making use of surveys of businesspeople and assessments by country analysts. It consists of credible sources using diverse sampling frames and different methodologies. These perceptions enhance our understanding of real levels of corruption from one country to another.

However, as pointed out repeatedly in our annual framework document, year-to-year comparisons of a country's score do not only result from a changing perception of a country's performance but also from changes in the samples and the methodology. With differing respondents and slightly differing methodologies, a change in a country's score may also relate to the fact that different viewpoints have been collected and different questions been asked. The CPI primarily provides an annual snapshot of the views of businesspeople, with less of a focus on year-to-year trends. Such changes in methodology are primarily due to changes in the list of sources that enter into this composite index. When new sources are used and old and dated sources are deleted from the list of sources it is arduous to identify valid time series information.

While we discourage the interpretation of our data as time series, there was a growing demand for trend data. The causes and consequences of corruption as well as the success of anti-corruption measures can be better addressed and investigated when valid time series information is available.

Björnskov and Paldam [2004], for example, determine time series by processing only the ordinal changes in the data over time, i.e. whether a country improves its rank relative to others. Due to this approach, it might be possible that one-shoot changes that are of purely methodological nature play a minor role as compared to actual trend information.[1] However, it remains unclear whether this assessment is robust.

[1] Seeking explanatory variables, they find that generalized trust is about the only one with significant impact.

2. Retrospective questions

Unbiased, hard data on levels and trends of corruption are difficult to obtain and usually raise problematic questions with respect to validity. Neither police investigations, trials, convictions, nor media exposure are likely to sufficiently correlate with actual incidences of corruption. They rather seem to be influenced by public official's efforts, political will, journalistic scrutiny and the potential gains from scandalization. International surveys on perceptions therefore serve as the more credible means for determining levels and trends of corruption. When gathered by experts such perceptions are likely to represent experience rather than hearsay.

Generally, two methods are applicable for gathering survey-based trend information. Either retrospective questions are asked, relating to increases and decreases in corruption over time, or assessments of levels of corruption are gathered at different periods in time.

Both approaches have their pros and cons. In the case of retrospective questions the experience voiced may be overshadowed by distorting feelings and unrelated experiences. One question included in the 1997 World Economic Forum's Global Competitiveness Report reads: "In the past three years, the frequency and extent of additional payments or bribes … 1=has increased significantly, 7=has decreased significantly. But, anticipating that corruption is bad for the economy, a respondent might be more likely to diagnose increasing corruption if the economy deteriorated. A retrospective question on corruption may have to carry too large a burden when respondents approach the question with a predetermined sentiment about corruption's consequences. Annex 1 provides regression analyses, revealing that perceptions of decreasing corruption, as determined by WEF's question, is positively related to past growth of GDP – to an extent that appears unrealistically high. Another possible distortion arises with optimism and pessimism being differently distributed across countries. Some respondents may always think more positively about social and organizational progress, about civilization and enlightenment. If sentiments concerning long term trends in society differ across countries and if these sentiments contribute to the assessment of past trends in corruption, the resulting figures will be biased.

The aforementioned problems are ameliorated if retrospective questions are avoided and assessments of levels of corruption are gathered at different points in time. This approach is currently carried out by the various the sources contributing to the Corruption Perceptions Index. However, in this case time variation for this composite index is impaired by methodological changes. If new sources enter and old sources are deleted, the resulting inconsistency in methodology distorts the time series capacity of the results. Yet, once only those sources are used that consistently enter the index, these methodological changes are avoided or at least reduced.

3. Potential sources for panel analysis

There are five sources with sufficient data, permitting their inclusion in an assessment of trends.

- The Economist Intelligence Unit (EIU; www.eiu.com), 1996-2005. The number of countries included increased steadily from 58 to 154. EIU provides an assessment by their London-based staff, assisted by a network of correspondents.
- The Institute for Management Development, Lausanne (IMD), 1995-2005. The number of countries included increased steadily from 45 to 51. IMD surveys local executives in top and middle management of domestic and international companies.

- The World Economic Forum (WEF), 1996-2005. The number of countries included increased steadily from 41 to 117. This is a survey of senior business leaders of domestic and international companies.
- The Political and Economic Risk Consultancy (PERC) in Hong Kong, 1995-2005. The number of (largely Asian) countries ranges between 12 to 14. This is a survey carried out among expatriate business executives.
- Freedom House Nations in Transit (FH). FH asks its panel of expert to assess the implementation of anticorruption initiatives[2]. Data is available for 1998, 1999/2000, 2001-2005.

We are grateful to the sources for sharing their data with us. EIU entered the CPI in 1998, WEF in 1997. Some older data could be obtained to complement our database.

One condition for including a source is that it must measure the overall level of corruption. This is violated if aspects of corruption are mixed with issues other than corruption such as political instability or nationalism or if changes are measured instead of levels of corruption. In academic research another source sometimes featured for usage as panel data, the index "Corruption in Government" from the International Country Risk Guide (ICRG), conducted by the Political Risk Services (PRS). This index does not determine a country's level of corruption but the political risk involved in corruption. As pointed out to us by the ICRG-editor, these two issues can differ considerably, depending on whether there exists a high or low tolerance towards corruption. Corruption only leads to political instability if it is not tolerated. If intolerance towards corruption changes over time, the data by PRS-ICRG would not provide valid time series information on changing levels of corruption.[3]

4. Validity and standardization

In each year, these sources provide a ranking of nations with largely identical methodology. Minor variation in the phrasing of the questions over time must still be recognized.

- In 2002-2005 the IMD asked respondents to assess whether "bribing and corruption prevail or do not prevail in the economy." Previously the question was "bribing and corruption prevail or do not prevail in the public sphere." This seemed to have little impact on the data. In a correlation matrix (reported in the various framework documents of recent years) the correlation seemed unaffected.
- The EIU defines corruption as the misuse of public office for personal (or party political) financial gain among politicians and civil servants and aims at measuring the pervasiveness of corruption. Corruption is one of over 60 indicators used to measure "country risk" and "forecasting." Little further defining information is provided by EIU, making it impossible to test whether slight adjustments in methodology have been carried out.

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[2] This embraces the government's freedom from excessive bureaucratic regulations and other controls that increase opportunities for corruption; public perceptions of corruption; the business interests of top policy makers; laws on financial disclosure and conflict of interest; audit and investigative rules for executive and legislative bodies; protections for whistleblowers, anticorruption activists, and others who report corruption; and the media's coverage of corruption.

[3] Various researchers have used this variable for panel data regressions. These results must be questioned in light of the variable's definition. See Lambsdorff [2004] for details.

- The WEF asks in its 2002-2004 Global Competitiveness Report: 7. “In your industry, how commonly would you estimate that firms make undocumented extra payments or bribes connected with:”

  1 – exports and imports
  Common |1|2|3|4|5|6|7| Never occur
  2 - public utilities (e.g. telephone or electricity)
  Common |1|2|3|4|5|6|7| Never occur
  3 - annual tax payments
  Common |1|2|3|4|5|6|7| Never occur
  4 – public contracts
  Common |1|2|3|4|5|6|7| Never occur
  5 - loan applications
  Common |1|2|3|4|5|6|7| Never occur
  6 - influencing laws and policies, regulations, or decrees to favor selected business interests?
  Common |1|2|3|4|5|6|7| Never occur
  7 – getting favorable judicial decisions Common |1|2|3|4|5|6|7| Never occur
  From these questions the simple average has been determined. In 2000 only questions 1-5 have been included. In 2005 questions 5 and 6 were dropped. Prior to that, only one question was asked relating to whether “irreg. additional payments are common/not common”. Given that the responses to question 1-7 correlate highly with each other, the slight variation in questions seemed to have little impact on the aggregate data. In the correlation matrix (reported in the various framework documents of recent years) the correlation seemed unaffected by these slight annual adjustments.

Each of the sources uses its own scaling system, requiring that the data be standardized before each country’s mean value can be determined. We employ a matching percentiles approach. Matching percentiles is superior in combining indices that have different distributions and is therefore also used for the annual CPI. The *ranks* (and not the scores) of countries is the only information processed from our sources. For this technique the common sub-samples of each source and the 2003 CPI are determined. Then, the largest value in the CPI is taken as the standardized value for the country ranked best by the new source. The second largest value is given to the country ranked second best, etc.[4] Imagine that the IMD in 1997 would rank only four countries: UK is best, followed by Singapore, Venezuela and Argentina, respectively. In the 2003 CPI these countries obtained the scores 8.7, 9.4, 2.5 and 2.4. Matching percentiles would now assign UK the best score of 9.4, Singapore 8.7, Venezuela 2.5 and Argentina 2.4.

5. Time structure

Having put the data in common units, we must determine how the data interact with each other over time. For this purpose we run fixed effects panel data regressions, as shown in tables 1-3.

[4] In case two countries share the same rank, their standardized value is the simple mean of the two respective scores in the 2003 CPI. This approach guarantees that all values remain within the range between 10 and 0.

Table 1: Panel Data Least Square Regression Dependent Variable: EIU, 1996-2005						
Independent Variable	1.	2.	3.	4.	5.	6.
WEF, 1996-2005	-0.017					
	(-0.5)					
WEF, 1996-2005, lagged		0.082				
		(2.2)				
IMD, 1995-2005			0.266			
			(5.5)			
IMD, 1995-2005, lagged				0.305		
				(6.7)		
FH, 1998-2005					0.099	
					(0.7)	
PERC, 1995-2005						0.024
						(0.3)
Country Fixed Effects						
Panel Observations	697	599	461	456	154	127
Cross-Sections	105	99	49	49	21	14
Adjusted R^2	0.950	0.955	0.949	0.952	0.815	0.947

Taking EIU as the dependent variable one observes that the time series information inherent in EIU is well explained by IMD (regression 3), but less so by WEF (regression 1). The significance of IMD and WEF increases when using one period lagged values (regressions 2 and 4). This means that, for example, the 2004 data by either IMD or WEF explain the 2005 data by EIU.

This implies that EIU provides assessments of perceived levels corruption with a one-year lag. This may be because the local business people surveyed by the IMD and WEF gather topical information more quickly and are thus better placed to assess the current state of affairs. The strength of EIU, on the other hand, may relate to its in-depth, but more time-consuming, country analysis.[5]

The time series information provided by FH and PERC does not significantly impact on the EIU assessment, as shown in regression 5 and 6, table 1. The same results would be obtained for lagged values. This finding is clearly disappointing, revealing that for these sources time series information is not strong in explaining changes in assessments made by EIU.

Table 2, regression 1, shows that the data by WEF are well related to those by IMD. As can be seen from regression 2, the lagged values for IMD are even stronger. But again the data by FH and PERC are less significant, as shown in regressions 3 and 4.

[5] I note in passing that these results provide support for another feature of the annual Corruption Perceptions Index. This index is a three-year average. Surveys of local business people are used as long as they are no older than three years. However, only topical expert assessments have been used and older expert assessments disregarded. The reason was that these assessments are less subject to random changes; improvements or deteriorations are instead the result of a considered judgment. Given the lag identified above, this approach obtains another justification.

Table 2: Panel Data Least Square Regression Dependent Variable: WEF, 1996-2005				
Independent Variable	1.	2.	3.	4.
IMD, 1995-2005	0.172			
	(2.8)			
IMD, 1995-2005, lagged		0.233		
		(4.0)		
FH, 1998-2005			0.409	
			(1.9)	
PERC, 1995-2005				0.155
				(1.7)
Country Fixed Effects				
Panel Observations	473	469	101	127
Cross-Sections	51	51	24	14
Adjusted R^2	0.925	0.927	0.781	0.947

Table 3 reveals a significant association between PERC and IMD. But, again, FH does not significantly impact on IMD.

Table 3: Panel Data Least Square Regression Dependent Variable: IMD, 1996-2005		
Independent Variable	1.	2.
FH, 1998-2005	0.030	
	(0.1)	
PERC, 1995-2005		0.194
		(2.3)
Country Fixed Effects		
Panel Observations	52	130
Cross-Sections	8	13
Adjusted R^2	0.824	0.947

Overall, the sometimes insignificant performance of some indicators reveals that trends between 1995 and 2005 are difficult to assess. Corruption and its perception do not quickly change from one year to another. Given this consideration, the sometimes insignificant findings do not come by surprise.

The less significant finding for PERC may easily relate to the smaller sample of countries covered by this source. PERC assesses only 12 Asian countries alongside with Australia and the USA. The insignificant result for FH might be seen in light of the source's definition and quantification of corruption. FH tries to assess the government's anti-corruption efforts. Given our limited knowledge on which reform might prove successful and how long it may take to bear fruit, the time series information provided by FH may not match with the other data. Therefore, we will not use the data by FH for the subsequent regressions. If their data correlates stronger with other data in the future, FH may nonetheless be a strong candidate to contribute to a determination of trends.

6. Constructing panel data

A conclusion from the panel regressions is that EIU should enter one year ahead, that is, its 2005 data is regarded as providing time series information for 2004. Regression 2, table 2, may also suggest that IMD is ahead of WEF, but this condition is difficult to implement jointly with the adjustment for EIU. Determining, for example, the time trend between 2003 and 2004 the time trends by IMD, WEF and PERC for these years are used and those by EIU from 2004 to 2005[6].

We include a country in the analysis as soon as the 4 sources provide at least 16 observations. In order to avoid confusion with the original CPI data we set all data for 2005 equal to zero. Backward looking, for the years $i \in$ (1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004) and country j the trend information is assembled by:

$$CTI_{ij} = CTI_{i+1,,j} - 1/4 \cdot (IMD_{i+1,,j} - IMD_{i,j}) \quad - 1/4 \cdot (WEF_{i+1,,j} - WEF_{i,j})$$
$$- 1/4 \cdot (PERC_{i+1,,j} - PERC_{i,,,j}) \quad - 1/4 \cdot (EIU_{i+2,,j} - EIU_{i+1,,j})$$

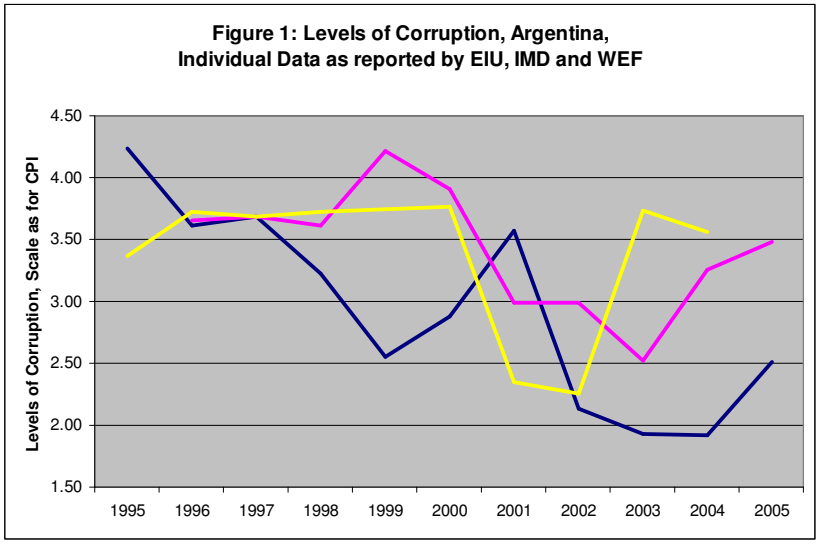
If one of the sources – IMD, WEF, PERC or EIU – is missing, the formula embraces only the remaining sources. Since for example EIU does not yet provide data for 2006, the $CTI_{2004,\,j}$ would be computed for country j only with the other available sources. The weight given to these would increase to 1/3. Similarly, when two sources do not provide the comparative information for country j the weights for the remaining sources increases to 1/2.

The data is reported in Annex 2. Countries having a negative value of -1 in 1995 would improve their score until 2004 by 1 point on a scale from 0 (very corrupt) to 10 (very clean). Bulgaria, for example, obtains -1.1 in 1995, implying an improvement to 0 in 2005. As revealed by the scores for 1996–2005, this was not an even development, but involved an initial deterioration to -2.1 before improvements were perceived.

Given the many missing data the absolute level of improvement between 1995 and 2005 is still not a sound indicator for the significance of a trend. An improvement of 0.5 might be significant if observed similarly by all sources, while an improvement by 1 may be insignificant when only few observations are available. In order to test for the significance of a linear trend between 1995 and 2005 the following test is carried out. Separately for each country, j, we seek to determine the coefficient a_j, which depicts the influence of a simple time trend ($Trend_{1995}=1$, $Trend_{1996}=2$ …) on the dependent variables, which are our source's values for country j. All four regressions are run simultaneously. We allow for our sources to differ systematically and capture this difference by help of a dummy variable for each source, for example d_{IMD}. Thus, if IMD is more positive in its assessment of country j as compared to WEF, this is captured by the dummy and its associated coefficient, $b_{j,IMD}$. A random error term is added, e_i:

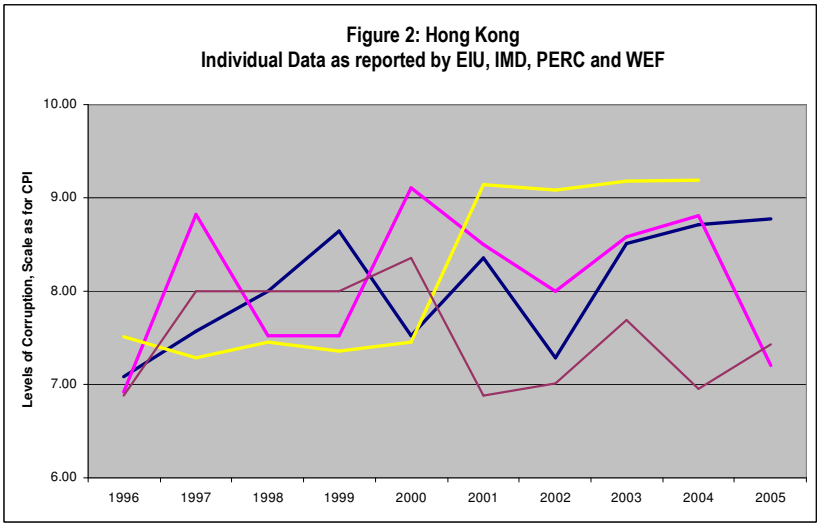
$$IMD_{ij} = a_j \cdot Trend_i + b_{j,\,IMD} \cdot d_{IMD} + e_i$$
$$WEF_{ij} = a_k \cdot Trend_i + b_{j,WEF} \cdot d_{WEF} + e_i$$
$$PERC_{ij} = a_j \cdot Trend_i + b_{j,\,PERC} \cdot d_{PERC} + e_i$$
$$EIU_{i+1,j} = a_j \cdot Trend_i + b_{j,\,EIU} \cdot d_{EIU} + e_i.$$

[6] Data for 2006 from EIU was not yet available, resulting in a missing observation for the trend between 2004 and 2005.



The intention of this system of regressions is to find a joint trend in each of the sources for a given country *j*. We employ OLS for estimating the coefficients. The method would be parallel to finding a regression line in figure 1 or in figure 2 such that the (square of the) distance to the various observations is minimized. For the case of Argentina (figure 1), the line is negatively sloped with -0.12 points decreasing per year and it is significant with a t-statistic of -3.9. The coefficient indicates that Argentina experienced an annual drop in the CPI by 0.12 and that this development was significant.

Figure 2 reveals the data for Hong Kong. A straight line would have to be sloped upward by 0.10 per year, indicating improvements. Again, a t-statistic of 3.1 indicates significance. Annex 2 reports the annual change (that is, the coefficient a_j in our regressions) the corresponding standard error and *t*-statistics.



Observing that the change over time (the value for a_j) ranges between 0.21 and -0.18 it appears plausible to assume that lowering perceived levels of corruption is a rather long-term undertaking. A decade of substantial effort might improve the score by 1 point on a scale from 0 to 10. Only in rare instances it may happen that improvements are even more pronounced.

In case of a significant trend, the t-statistics reported in Annex 2 are emphasized by either green color, in case of decreasing corruption, or red color, in case of increasing corruption. As Annex 2 reveals, in many other cases the trend was insignificant. In other cases, such as in Italy and in Spain, there was a significant trend but the panel data reveals that the positive trend has come to an end. The opposite is revealed for Belgium and partly for Argentina, where a negative linear trend was reversed in recent years. Such second order information, certainly, is not revealed by testing a simple linear trend.[7] They can be depicted from the annual trend data in annex 2.

[7] Such a second-order trend can be tested by including the squared trend variable, $Trend_i^2$. Significance was rarely achieved for this variable and it is not reported here.

Annex 1

There exists widespread, but partly inconclusive evidence, on the impact of corruption on growth, (Lambsdorff 2003). Assuming a standard negative impact of corruption on productivity, increasing (decreasing) levels of corruption will bring about new investment projects with a lower (higher) output relative to the output produced formerly. This, certainly, will have an impact on GDP growth. Yet, there exist high growth rates in corrupt countries, casting doubt on the validity of this argument, (Wedeman 1997). But high levels of growth could have resulted from decreasing levels of corruption. Assuming that corruption predominantly impacts on levels of output, it is straightforward to assume that growth of GDP is influenced by changing levels of corruption.

Table 4: Least Squares Regression[8]
Dependent Variable: Total growth of GDP between 1992 and 1997

Independent Variable	1.	2.	3.
Constant	-9.6	90.6	17.5
	(-0.4)	(2.7)	(0.8)
Decrease of Corruption in past 5 years (WEF)	6.2	17.4	15.1
	(1.3)	(3.0)	(3.6)
GDP/Head 1995, ppp., log.		-16.4	-11.1
		(-3.3)	(-3.7)
Investment to GDP Ratio, 1992-95			147.1
			(2.7)
Observations	53	50	49
R^2	0.06	0.28	0.43
Jarque-Bera of Residuals	5.1	1.4	22.7

The link between changing levels of corruption and growth of GDP can be tested empirically, using the WEF data on changing levels of corruption. As shown in table 4, there is support for the presented hypothesis: changing levels of corruption tend to have a significant impact on growth. The coefficient for "decrease of corruption" is larger than 15, a value which relates to growth rates for a five-year period. Countries which score a 5 on the scale provided by the WEF will thus exhibit annual growth rates which are approximately 3 percentage points above those countries which score only 4. Across the whole range from 1 to 7, growth would have to differ by 18 percent. Considering that corruption varies little over time, it is hardly imaginable that the small changes that can arise in three or five years are likely to have such a large effect on GDP. The results are therefore likely to be biased upwards: Respondents are likely to assign those countries improvements in integrity which exhibited high growth rates in the past.

[8] Data on growth of GDP between 1992 and 1997 were obtained from the International Monetary Fund, World Economic Outlook 1997. The data represent total growth for the five-year period until the beginning of 1997. Data on ppp-adjusted GDP per head are from the World Development Indicators 1997, referring to 1995. Data on the ratio of investment to GDP are from the International Financial Statistics Yearbook, International Monetary Fund. Earlier years have been considered for this variable, since investments may have long-term effects on growth. It should be noted that in various specifications, the residuals are not normally distributed, which is shown by a Jarque-Bera coefficient above 6.

Annex 2

Trends 1995-2005	Observations	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Annual Change	Standard Error	t-statistics
Argentina	31	0.5	0.3	0.4	0.2	0.2	0.2	-0.4	-0.8	-0.6	-0.4	0.0	-0.12	0.03	-3.9
Australia	35	-0.8	-0.9	-1.1	-0.7	-0.8	-0.7	-0.6	-1.2	-0.2	-0.1	0.0	0.05	0.02	3.0
Austria	30	-0.6	-0.7	-0.8	-0.8	-0.6	-1.0	-1.0	-0.7	-0.1	-0.2	0.0	0.10	0.04	2.5
Belgium	31	0.1	0.1	-1.2	-1.1	-1.3	-0.2	0.3	0.1	0.2	0.2	0.0	0.08	0.05	1.6
Bolivia	16		-1.5	-0.2	-0.2	-0.1	-0.8	-0.4	-0.8	-0.9	-0.2	0.0	-0.04	0.06	-0.7
Brazil	31	0.7	0.2	0.7	0.6	0.5	0.3	0.3	0.8	0.1	0.3	0.0	-0.03	0.02	-1.3
Bulgaria	17	-0.8	-1.8	-1.8	-0.5	-0.5	-0.4	0.0	0.6	0.2	0.3	0.0	0.15	0.05	3.1
Canada	31	0.7	0.7	0.5	0.6	0.6	0.4	0.6	0.4	0.0	0.1	0.0	-0.07	0.02	-2.8
Chile	31	-0.1	-0.1	-0.2	-0.2	0.5	0.4	0.1	0.0	-0.2	0.1	0.0	0.01	0.03	0.3
China	41	-0.7	-0.9	0.0	1.0	-0.2	0.2	0.2	0.4	-0.1	0.0	0.0	-0.03	0.03	-0.9
Colombia	30	-0.6	-0.4	-1.7	-1.3	-0.8	-0.6	-0.7	-0.4	-0.3	-0.4	0.0	0.11	0.03	3.4
Costa Rica	17		0.3	0.1	0.2	0.3	0.5	0.5	0.3	0.6	0.7	0.0	0.03	0.02	1.5
Czech Republic	31	-0.1	0.2	0.7	-0.2	-0.4	-0.4	-0.7	-0.4	-0.3	-0.4	0.0	-0.07	0.03	-2.1
Denmark	31	0.1	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.2	0.2	0.0	0.01	0.01	0.6
Ecuador	17	1.2	0.2	0.2	0.2	0.2	-0.1	-0.1	-0.1	-0.1	0.4	0.0	-0.03	0.04	-0.7
Egypt	16	-0.5	-0.1	-0.2	-0.1	-0.1	-0.2	-0.1	0.1	0.0	-0.1	0.0	0.00	0.01	0.3
El Salvador	16		0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.3	0.8	0.0	0.07	0.04	1.6
Estonia	19		-2.1	-1.0	-0.8	-0.7	-0.7	-0.7	-0.8	-0.6	-0.2	0.0	0.17	0.04	4.2
Finland	31	-0.4	-0.3	-0.1	-0.1	-0.1	0.0	-0.1	0.0	0.0	0.0	0.0	0.03	0.01	3.4
France	31	-0.5	-0.5	-0.5	-0.4	-0.4	-0.6	-1.0	-1.0	-0.1	-0.1	0.0	0.03	0.02	1.2
Germany	31	-0.9	-0.8	-0.9	-0.4	-0.3	-1.0	-0.9	-0.8	0.0	-0.1	0.0	0.07	0.03	2.3
Greece	31	0.3	0.2	0.8	0.8	1.1	0.0	0.4	0.0	0.2	0.1	0.0	-0.04	0.04	-1.1
Hong Kong	42	-1.3	-1.3	0.3	0.2	0.3	0.8	-0.2	-0.5	0.7	0.0	0.0	0.10	0.03	3.1
Hungary	31	-1.3	-1.3	-0.8	-0.8	-0.2	-0.2	-0.4	-0.7	-0.4	-0.4	0.0	0.06	0.04	1.5
Iceland	21	-0.8	-0.8	-2.9	-1.4	-1.6	-0.7	-0.1	-0.4	-0.1	0.0	0.0	0.21	0.08	2.6
India	42	0.0	0.6	-0.5	0.4	-0.3	-0.6	-0.2	-0.3	-0.5	-0.6	0.0	0.00	0.02	0.3
Indonesia	42	1.2	1.7	0.3	0.3	0.0	0.1	0.8	-0.2	0.0	0.1	0.0	-0.06	0.02	-2.8
Ireland	31	0.4	0.4	0.2	-0.1	-0.6	-0.7	-1.6	-0.6	-0.9	-0.5	0.0	-0.12	0.04	-2.7
Israel	31	1.7	2.1	1.5	0.3	0.8	1.4	1.7	0.7	1.1	0.5	0.0	-0.12	0.05	-2.5
Italy	31	-1.2	-1.2	-1.0	-0.8	-0.8	-0.5	-0.1	-0.4	-0.6	-0.4	0.0	0.09	0.02	3.9
Japan	42	0.1	0.1	-1.1	-1.5	-1.0	0.1	-0.4	-0.6	-0.9	0.2	0.0	0.04	0.03	1.2
Jordan	22		-0.1	-1.6	-1.3	-0.9	-1.0	-1.2	-1.3	-0.3	0.3	0.0	0.09	0.06	1.4
Luxembourg	18		0.6	0.5	0.3	0.8	1.0	0.8	0.4	-0.2	-0.2	0.0	-0.02	0.05	-0.4
Malaysia	42	0.5	1.7	1.5	1.1	-0.5	1.1	0.8	1.5	0.8	-0.7	0.0	-0.07	0.03	-2.5
Mexico	31	-0.3	-0.3	0.2	0.0	0.2	0.2	0.2	0.3	0.4	0.0	0.0	0.04	0.02	2.4
Netherlands	31	0.1	0.4	0.4	0.2	0.5	0.5	0.5	0.4	0.2	-0.1	0.0	-0.03	0.02	-1.6
New Zealand	30	-0.2	-0.4	-0.4	-0.2	-0.3	-0.2	-0.2	-0.2	-0.1	-0.1	0.0	0.02	0.01	2.3
Norway	31	0.0	0.2	0.1	0.4	0.4	-0.7	-0.3	0.5	-0.4	0.2	0.0	-0.01	0.04	-0.3
Peru	20	-1.1	0.5	0.5	0.4	0.2	-0.6	0.3	-0.2	-0.2	-0.3	0.0	-0.04	0.05	-1.0
Philippines	42	1.1	1.1	1.7	1.4	3.2	1.2	0.7	0.8	1.0	0.1	0.0	-0.07	0.02	-3.1
Poland	30	0.8	1.1	0.9	0.7	0.8	1.3	0.6	0.4	0.0	-0.4	0.0	-0.13	0.03	-4.0
Portugal	31	-0.4	-0.2	0.7	0.6	0.4	0.3	-0.1	0.4	-0.4	-0.3	0.0	-0.02	0.05	-0.5
Romania	18	0.0	0.4	-1.0	-1.0	-1.0	-1.0	0.4	0.0	-0.3	-0.3	0.0	0.06	0.06	0.9
Russia	31	0.0	0.1	0.1	0.8	0.4	0.4	0.6	0.9	0.3	0.3	0.0	0.02	0.03	0.8
Singapore	41	-0.3	-0.3	-0.3	-0.5	-0.3	-0.3	-0.4	-0.3	-0.1	-0.1	0.0	0.01	0.01	1.2
Slovakia	24	0.6	0.6	0.4	-0.2	-1.3	-0.9	-0.4	-0.8	-0.2	-0.2	0.0	-0.02	0.05	-0.4
Slovenia	21		0.7	0.5	0.7	0.6	-0.2	-0.5	-0.1	0.0	0.2	0.0	-0.18	0.08	-2.4
South Africa	31	0.4	1.0	0.5	0.8	0.2	0.4	0.4	0.4	0.4	0.9	0.0	-0.04	0.03	-1.5
South Korea	42	0.5	-0.2	-2.3	-2.0	-2.2	-1.9	-1.6	-0.4	0.4	-0.4	0.0	0.03	0.03	1.0
Spain	31	-2.5	-2.3	0.3	0.4	0.4	0.6	0.1	0.2	0.7	0.2	0.0	0.19	0.06	3.5
Sweden	31	0.4	0.1	0.3	0.3	-0.3	0.2	0.3	0.3	0.3	0.3	0.0	0.00	0.02	0.2
Switzerland	31	0.1	-0.1	0.0	0.1	-0.1	0.0	-0.6	0.0	0.2	0.2	0.0	0.02	0.02	0.7
Taiwan	42	-1.5	-2.6	-1.2	-0.1	-0.8	-0.9	-0.4	-1.8	-1.1	-0.1	0.0	0.08	0.03	3.0
Thailand	41	0.0	-0.3	-0.6	-1.4	-0.4	-0.3	-0.4	-1.4	-1.0	-0.1	0.0	0.04	0.03	1.3
Turkey	31	-0.1	-0.4	-0.3	-0.3	-0.1	-0.1	-0.5	-0.9	-0.6	-0.7	0.0	-0.04	0.03	-1.5
Ukraine	19	-0.2	0.0	0.0	-0.8	-0.7	-0.6	-0.8	-0.5	-0.7	-0.7	0.0	-0.01	0.03	-0.3
United Kingdom	31	0.1	0.1	0.0	-0.1	-0.2	0.0	-0.5	-0.4	-0.1	-0.2	0.0	-0.03	0.02	-2.1
USA	35	-1.1	-1.2	-1.0	-1.1	-1.5	-1.0	-0.5	-0.3	-0.4	-0.6	0.0	0.02	0.02	0.8
Venezuela	31	0.5	0.0	0.3	0.1	0.3	0.3	0.0	0.2	0.1	-0.1	0.0	-0.03	0.02	-1.9
Vietnam	29	-1.4	0.1	0.8	0.4	0.8	0.6	-0.4	0.7	0.5	-0.3	0.0	0.00	0.03	0.2
Zimbabwe	18		2.1	0.8	0.4	0.7	0.2	-0.3	0.1	-0.2	0.2	0.0	-0.13	0.05	-2.9

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