

EXECUTIVE SUMMARY OF THE BOOK ACADEMIC PROOF THAT ETHICS PAYS BY JACQUES CORY

In my book "Ethics Pays", I proved that the most ethical countries in the world, according to Transparency International (TI) Corruption Perceptions Index, are also the best countries according to the most salient parameters of performance, tangible and intangible, in data and values as well. However, I was often asked how I can assess such an unequivocal conclusion according to fifty different parameters with results which are not always identical. Many unethical businessmen and politicians are trying to refute once and again that ethics does pay, as we have to live according to the laws of the jungle, to Machiavellian precepts, the survival of the fittest (the crookiest?), that sustainability is a myth, that the company has only one purpose to maximize profits, that the most profitable companies are also the most corrupt, etc.

I have therefore decided to devise an index that I have called Cory's Index, which integrates 50 of the most salient parameters and gives a common determination to the performance of countries. I calculate the average ranking of every country in all those parameters, the most salient and unequivocal, devised by the most objective organizations, in the same period, with a large number of countries in every table. As the countries with the best ranks and scores are also the most ethical and have a very strong statistical correlation it proves my thesis that Ethics Pays. I am aware that in the middle the results may vary, but my theory is assessed at least with the most ethical countries in the world. That is what I have proved with my new Cory's Index, the integral index, and I analyze in this dissertation the results that I have found.

Cory's Index comprises 50 parameters – tangible and intangible, data, values, quantitative and qualitative, with a balanced distribution between its components. To the best of my knowledge no other index comprises such a varied and large list of parameters and it gives in the most salient way the status of the country from all its angles, based on data gathered by the best sources – UN, CIA, World Economic Forum, World Bank, and well-known institutes.

The 50 parameters are: GDP Per-Capita, GDP – Gross Domestic Product, GDP Growth Rate, Industrial Production Growth Rate, Gross National Saving, Budget Surplus or Deficit, Net Government Debt, Inflation Rate, Current Account Balance, Quality of Overall Infrastructure, The Size of the Shadow Economy, Global Competitiveness, Market Value of Public Traded Shares, International Innovation, Patent Applications, Ease of Doing Business, Financial Development, Commercial Bank Prime Lending Rate, Soundness of Banks, Credit Rating, Globalization, Networked Readiness, Median Per-Capita Income, GDP Per Hour Worked, Income Inequality/Distribution of Family Income/Gini Index, Gross National Income (GNI) Per-Capita, Distribution of Wealth/Wealth Per-Capita, Unemployment Rate, Health Expenditure Per-Capita, The World's Health Systems, Education Index, Culture and Media Composite Parameter, U21 Ranking of National Higher Education, Human Capital Index, Human Development Index, Inequality Adjusted Human Development Index, Newsweek's World's Best Countries, The Economist's Where to Be Born Index, Global Wellbeing Index, Gender Inequality, Percentage of Population Living in Poverty, Ranking of Happiness, Democracy Index, Social Progress Index, Global Peace Index, Fragile States Index, Index of Economic Freedom, The Human Freedom Index, Press Freedom Index, Environmental Performance Index. In tables where the "best" countries have the lowest rank (170 or so), as for example the level of inequality, I have reversed the ranks giving the most equal countries the highest rank (1 to the lowest inequality and so on). I am systematic in this respect that I perceive as the best (a rank of 1) – a country with the most favorable parameters: highest GDP per capita, happiest, the best democracy, the most peaceful, the lowest poverty, the

highest equality, development, freedom, sustainability... I have kept academic rigor, without "extenuating circumstances", and in case of doubt I opted towards the most conservative solution. Even if some parameters were "unfair" towards ethical countries, such as growth rates, due to special circumstances, such as the Great Recession, I included them in my Index, in spite of the negative impact on the results, without any manipulation in my choices.

I compare Cory's Index to Transparency International's Corruption Perception Index in 2014. I have found in my analysis of TI' indices over the years that there are very few changes in the ranking of the most ethical countries, but as I wanted that the periods surveyed would concur as much as possible to TI's Index, I have managed to include in my Integrated Index the most recent data, mainly from the last decade, and in most of the cases for the period of 2012-2014. We have included in Cory's Index most of the parameters that were part of my book "Ethics Pays", but we have added a few additional parameters in order to render the Index as balanced as possible, and included only parameters with rankings in order to find the average ranking, as when there are no rankings we cannot analyze the data statistically as we have done.

When I started to write my book Ethics Pays and this dissertation I had no idea if I'll succeed to prove that the most ethical countries according to Transparency International's Corruption Perceptions Index have also the top ranks in the composite index of the main characteristic parameters. After choosing the parameters and analyzing them I reached the conclusion that for the first time there is an academic proof at the macro level of countries that Ethical Countries obtain the top performance in the composite index of all the parameters with a very strong correlation. I figured that if I'll find that there is a clear correlation between the two indices I'll prove my thesis, but I never figured that all the first 13 countries in TI's Index, the Top 13 ethical countries are exactly the same as the first 13 countries in Cory's Index: Denmark, New Zealand, Finland, Sweden, Norway, Switzerland, Singapore, Netherlands, Luxembourg, Canada, Australia and Germany; with one exception – the last one of TI's Top 13 Iceland is in Cory's Index ranked 23, while the country ranked in TI's 2014 Index in no. 23 Austria is in Cory's Index ranked 9. This exception is analyzed at length in my book.

The score of each country in Cory's Index is computed by finding the average ranking of each country in all the 50 parameters. The best ranks in Cory's Index are attributed to the countries with the highest average ranks, as the best countries ranked 1, 2, 3 have also the highest ranks. Cory's Index is of course not the only Index that can integrate 50 or more parameters about the performance of each country into one parameter. Other scholars may devise similar or different parameters in order to validate or refute my thesis that "Ethics Pays". The subject is so important, in view of the deterioration of ethics in today's economy and the Great Recession, that I'll be honored and welcome prominent professors, authors, politicians, businessmen, economists, prominent people, universities, newspapers and organizations to cooperate with me or devise surveys, researches, parameters and indices of their own

In TI's Index the ranking is attributed according to the highest scores that the countries obtain and Denmark ranked no. 1 (the highest rank is of course the best result with the lowest numerical value) has the highest score of 92. I was not satisfied with those results and I validated them by finding the average ranks for the best ethical countries since the first year of TI's Index – 1995 and until 2015, 21 years overall. Yet, I remained with the basis of 2014 for TI's Index, since I have chosen it as the basis of my computations in my book Ethics Pays because it concurs most with the average years of computation of the parameters that I have chosen. The first 11 countries in TI's Index in 2014, the most ethical countries with scores of 80 to 92, are exactly the same countries as in TI's average indices for 21 years, with one exception – Luxembourg is no. 9 in 2014 and no. 12 on the average and Iceland is no. 6 on the average and no. 12 in 2014. There are of course differences within the group but those differences are rather small in 4 countries (1, 2, 3, 4) and the ranks are identical in 6 countries. In the category of very ethical countries (12-20) there is 1 gap – Belgium, and in the category

of the ethical countries (21-38) there are 6, but as a rule the ranking of the 38 most/very and ethical countries in 2014 is similar or almost identical to the average ranks in most of the cases, which we wanted to validate in order to ensure that the ranking of the ethical countries in 2014 should be the basis for comparison to Cory's Index, while the ranking in 2014 is more compatible to the rankings in Cory's Index and in its 50 parameters comprised in the Index.

There are of course absolute differences between TI's Index and Cory's Index within the group of the Top 11/13, Top 20 or Top 38 most ethical, very ethical and ethical countries. In order to analyze a group which is large enough to validate statistically, we didn't calculate the differences in the subcategories of ethical countries but in all the 38 most/very and ethical countries in TI's Index in 2014 scoring 60 and more which includes all the ethical countries. There are many ways to analyze those differences in order to find if there is a correlation between the two indices. I analyzed it by finding the Spearman's rank correlation coefficient. In statistics, Spearman's rank correlation coefficient or Spearman's rho ρ , is a nonparametric measure of rank correlation (statistical dependence between the ranking of two variables). It assesses how well the relationship between two variables can be described using a monotonic function. In mathematics, a monotonic function (or monotone function) is a function between ordered sets that preserves or reverses the given order. This concept first arose in calculus, and was later generalized to the more abstract setting of order theory. The Spearman correlation between two variables will be high when observations have a similar rank, relative position label of the observations within the variable: 1st, 2nd, 3rd, etc., or identical for a correlation of 1. If the ranks in the two tables are identical the correlation is 1 and the closer the rho is to 1 the higher is the correlation, which is set according to the distance from 0.

The formula of the Spearman's rank correlation coefficient is:

$$r_s = 1 - \frac{6 \sum d_i^2}{n(n^2 - 1)}.$$

- $d_i = \text{rg}(X_i) - \text{rg}(Y_i)$ is the difference between the two ranks of each observation.
- n is the number of observations

In our case we calculated the sum of the squared differences between the ranks of each one of the 38 ethical countries in Transparency International's Index and in Cory's Index, between the ethical performance/low corruption and the qualitative/quantitative performance of those countries (20 out of the 38 have a minimal difference between 0 to 4 and 5: 5-6): 16 + 9 + 1 + 9 + 49 + 4 + 16 + 4 + 196 + 9 + 64 + 9 + 121 + 1 + 4 + 1 + 324 + 16 + 4 + 36 + 36 + 225 + 121 + 1 + 144 + 25 + 1 + 4 + 36 + 81 + 0 + 225 + 4 + 169 + 16 + 144 + 36 + 64 = 2225.

The squared number of countries is 1444 (38x38). The rho is therefore: $1 - \frac{6 \times 2225}{38 \times (1444 - 1)} = 1 - \frac{13350}{54834} = 1 - 0.243 = 0.757$, which is a very good correlation, very close to 1. Rho values from 0.75 to 1 point to very good to excellent correlation between the variables, with very strong relationship, and we have received here a Rho that is higher than 0.75.

The very high correlation is due to the fact that the difference between the ethical and prosperity rankings of almost all the ethical major economies as well as the smaller ethical countries is quite low, proving statistically for the first time that Ethics Pays in the level of countries when we compare the ethical and prosperity performance of the ethical countries, which measures qualitative and quantitative prosperity in 50 parameters of GDP, happiness, social progress, democracy, innovation, human development, peace, indebtedness, equality, employment, ecology, etc. In a nutshell – the ethical countries have the best quality of life!