

Research on corruption

The impact of corruption on public administration and
the lives of people around the world

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February 2023

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Understanding Corruption

The decisive role of the state is reflected in most definitions of corruption, which will define corruption as a particular (and, one could say, perverted) state-society relation.

Corruption is conventionally understood and referred to as the private wealth-seeking behavior of someone representing the state and the public authority. It is the misuse of public resources by public officials for private gains. The encyclopedic and working definition used by the World Bank, Transparency International, and others is that *“corruption is the abuse of public power for personal benefit (or profit)”*. Another widely used description is that *“corruption is a transaction between private and public sector actors through which collective goods are illegitimately converted into private-regarding payoffs”* (Heidenheimer et al., 1989, p. 6).

This point is also emphasized by Rose-Ackerman, who says corruption exists at the interface of the public and private sectors (Rose-Ackerman, 1978), and stressed by researchers who point to the Weberian distinction between public and personal as the foundation of non-corrupt politics and administration (Médard 1986, 1991).

In Colin Nye’s classical definition, corruption is *“behavior that deviates from the formal duties of a public role (elective or appointive) because of private-regarding (personal, close family, private clique) wealth or status gains”* (Nye, 1967, p. 416). An updated version with the same elements is the definition by Mushtaq Khan, who says corruption is *“behavior that deviates from the formal rules of conduct governing the actions of someone in a position of public authority because of private-regarding motives such as wealth, power, or status”* (Khan, 1996, p. 12). Samuel Huntington noted that where political opportunities are scarce, corruption occurs as people use wealth to buy power. Where economic opportunities are few, corruption occurs when political power is used to pursue wealth (Huntington, 1968).

Looking at the different kinds of resources transferred, a distinction has been made between economic and social corruption. Financial corruption occurs in a market-like situation and entails an exchange of cash or material goods,

which is essential to corruption. This is a strict definition of corruption, reflected in the regulations that stipulate limits to what amounts can be “*given*” before it is considered a bribe. Transfers are not only in cash or other tangibles; the exchange takes place in a social setting with several cultural and moral meanings.

Corruption understood in these broader terms has been called “*social exchange*” and social corruption. Social corruption is conventionally understood as an integrated element of clientelism. Clientelism often implies exchanging material benefits but cannot be reduced to this because clientelism has broader cultural and social implications. Clientelism, nepotism, ethnicity, and other favoritism are all variants of corruption in social terms (Médard, 1998, p. 308).¹

Factors that promote Corruption

Corruption is generally connected with the activities of the state and especially with the monopoly and discretionary power of the state. How Gary Becker, Nobel Laureate in economics, pointed out in his Business Week column, if we abolish the state, we abolish corruption. However, a civilized society cannot function without a state, and in current times, the state must have many functions. The Becker argument collides with the reality that some of the least corrupt countries in the world, such as Canada, Denmark, Finland, the Netherlands, and Sweden, have some of the largest public sectors, measured as shares of tax revenue of public spending in gross domestic product. The solution to the problem of corruption may not be as simple as just reducing the size of the state. The way the state operates and carries out its functions is far more important than the size of public sector activity. Aspects of governmental activities create a fertile ground for corruption.²

Regulations and authorizations

In many countries and especially in developing countries, the role of the state is often carried out using many rules or regulations. In these countries’ licenses, permits, and authorizations of various sorts are required to engage, or to continue to be engaged, in many activities. Opening a shop and keeping it open, borrowing money, investing, driving a car, owning a car, building a house, engaging in foreign trade, obtaining foreign exchange, getting a passport, going abroad and so on require specific documents or authorizations. Often several

government offices must authorize the activity and several servants must be contacted.

The existence of these regulations and authorizations gives a sort of monopoly power the officials who must authorize or inspect the activities. Officials may refuse the authorizations or may hold the decision for month. They can use their refuse of their public power to extract bribes from those who need the decision. In some countries, some individuals become middlemen or facilitators for obtaining these decisions. The fact that, in some cases, the regulations are nontransparent or are not even publicly available means authorization can be obtained only from a specific office or individual.

The existence of these regulations requires frequent contacts between citizens and bureaucrats. They also require an enormous amount of time spent by citizens in acquiring permits and in dealing with public officials. Survey from different countries, and especially from developing and transition countries, indicate that very large proportions of the time of the managers of enterprises, and especially of small enterprises, is spent dealing with bureaucracies. This time which is taken away from managing the enterprises can be reduced through the payment of bribes.²

Control of Corruption and The Corruptions Perceptions Index

There are two main studies of corruption in the world: World Bank “Control of Corruption: Estimate” (CC.EST) and Transparency International “The Corruptions Perceptions Index” (CPI). Both studies are based on surveys of various international and local sources.

Particularly the World Bank captures data from *the World Economic Forum’s Global Competitiveness Report*, *the Institute for Management Development’s World Competitiveness Yearbook*, *the World Bank / EBRD’s Business Environment and Enterprise Performance surveys*, *the Gallup World Poll*, *Latinobarometro*, *Afrobarometro*, and *the AmericasBarometer*.

They also capture the views of country analysts from significant multilateral development agencies (*the European Bank for Reconstruction and Development*, *the African Development Bank*, *the Asian Development Bank*, and *the World Bank*), reflecting these individuals’ in-depth experience working on the countries they assess. Together with some expert assessments provided by *the United*

States 7 Department of State and France's Ministry of Finance, Industry and Employment. World Bank classifies these as "Public Sector Data Providers".³

Similar to the World Bank, Transparency International calculates the CPI based on the data of various sources, such as *World Justice Project Rule of Law Index Expert Survey*, *World Economic Forum Executive Opinion Survey*, *The PRS Group International Country Risk Guide* and more.⁴

Due to the fact that both of these studies use data from the same sources, for the purity of the study, data from the World Bank and their Control of Corruption indicator will be used.

Control of Corruption

Control of Corruption captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests. Estimate gives the country's score on the aggregate indicator, in units of a standard normal distribution, i.e. ranging from approximately -2.5 to 2.5.

CC. EST

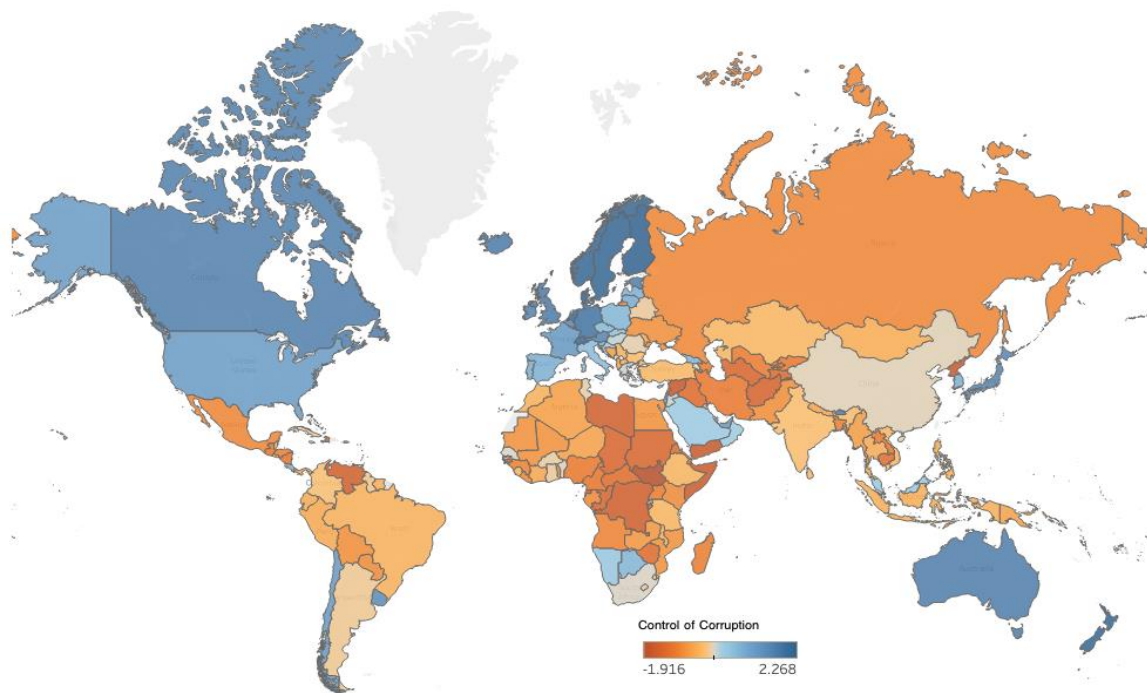


Figure 1

The Corruptions Perceptions Index

Each country's score is a combination of at least 3 data sources drawn from 13 different corruption surveys and assessments. A country/territory's score indicates the perceived level of public sector corruption on a scale of 0-100, where 0 means that a country is perceived as highly corrupt and a 100 means that a country is perceived as very clean. A country's rank indicates its position relative to the other countries/territories included in the index. Ranks can change merely if the number of countries included in the index changes or if other countries improve or decline on the index.

Corruption Perceptions Index 2021

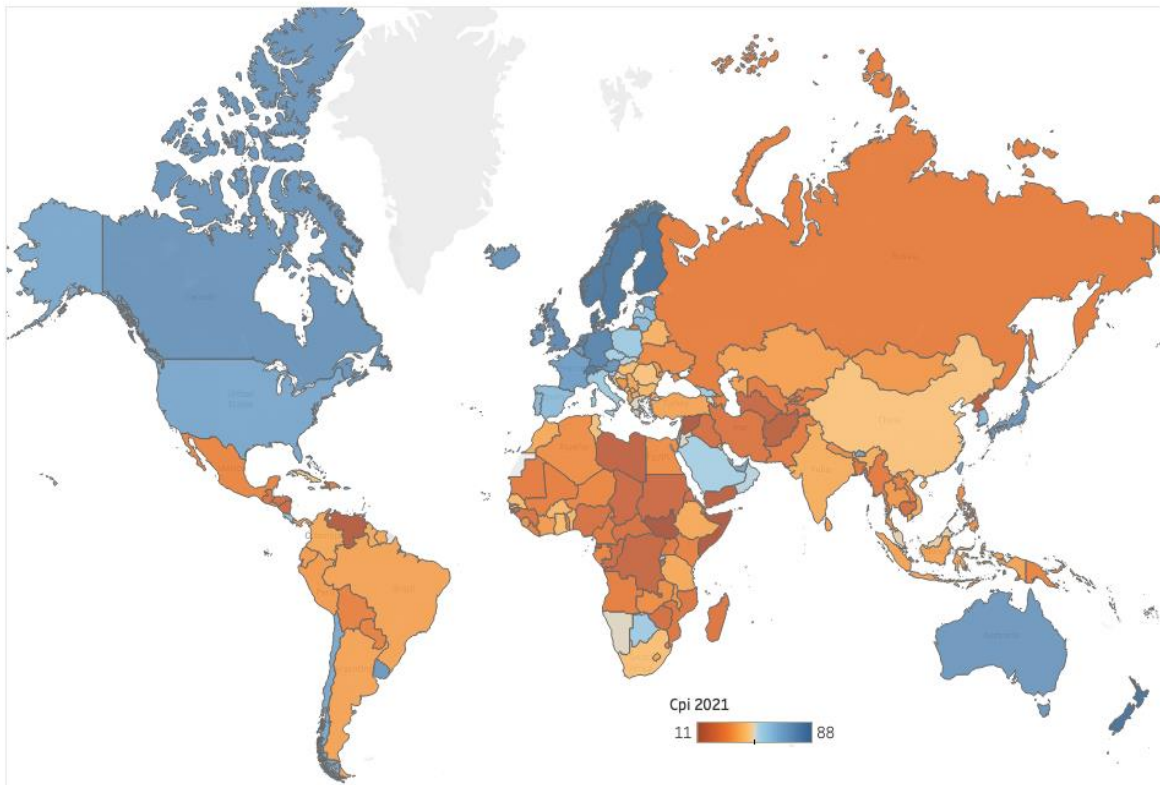


Figure 2

Control of Corruption and Government Effectiveness

Government Effectiveness captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Estimate gives the country's score on the aggregate indicator, in units of a standard normal distribution, i.e. ranging from approximately -2.5 to 2.5.

There are no surprises here: in countries with effective public administration and with people's trust in public institutions, corruption is lower than in countries with low confidence in public institutions and low quality of public administration.

Countries such as Finland, Denmark, Singapore, and New Zealand are on the top lines of the list of countries with low corruption and also show high results in the efficiency of public administration. At the same time, countries with weak state institutions: South Sudan, Somalia, and Venezuela are highly corrupt.

The model shows that there is a strong, positive linear association with $R^2 = 0.822535$ and Standard Error = 0.423085 between Control of Corruption and Government Effectiveness (Figure 3).

Trend Lines Model

A linear trend model is computed for Corruption given Government Effectiveness. The model may be significant at $p \leq 0.05$.

Model formula: (Government Effectiveness + intercept)

Number of modeled observations:	191
Number of filtered observations:	0
Model degrees of freedom:	2
Residual degrees of freedom (DF):	189
SSE (sum squared error):	33.8312
MSE (mean squared error):	0.179001
R-Squared:	0.822535
Standard error:	0.423085
p-value (significance):	< 0.0001

control of corruption and government effectiveness

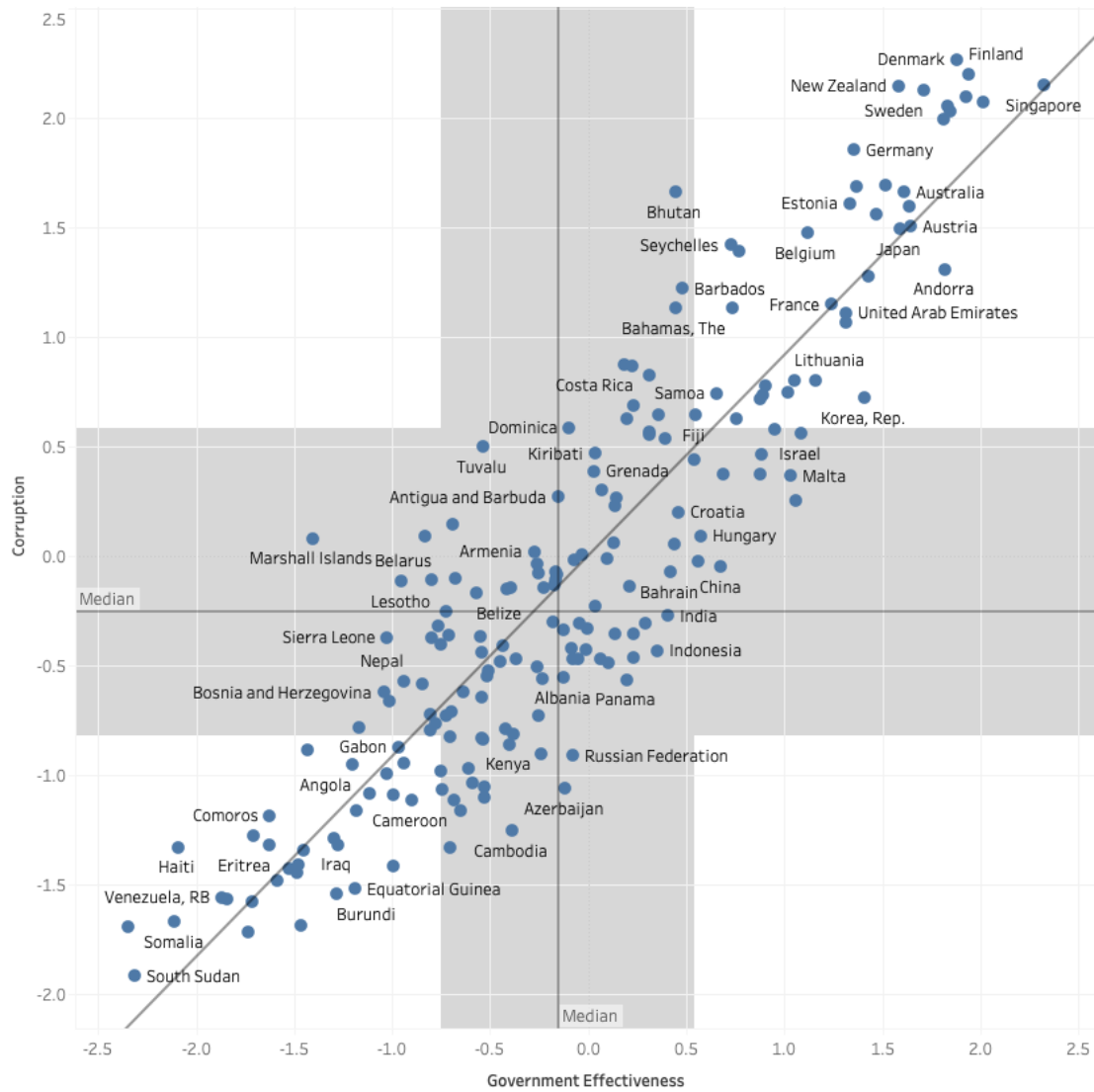


Figure 3

Control of Corruption and Easy of doing business rank

Ease of doing business ranks economies from 1 to 190, with first place being the best. The ranking of economies is determined by sorting the aggregate ease of doing business scores. A high ranking (a low numerical rank) means that the regulatory environment is conducive to business operation.

In this model, it is necessary to note the Russian Federation and Azerbaijan. While doing very well in the Ease of Doing Business rankings, these countries are corrupt. This situation may explain the state structure of these countries. It is also worth noting that many post-Soviet countries, such as Moldova, Uzbekistan, Kazakhstan, and Ukraine, found themselves in a similar situation (lower right sector on the graph).

The model shows a moderate, positive linear association with $R^2 = 0.44818$ and Standard Error = 0.737839 between Control of Corruption and Easy of doing business rank (Figure 4).

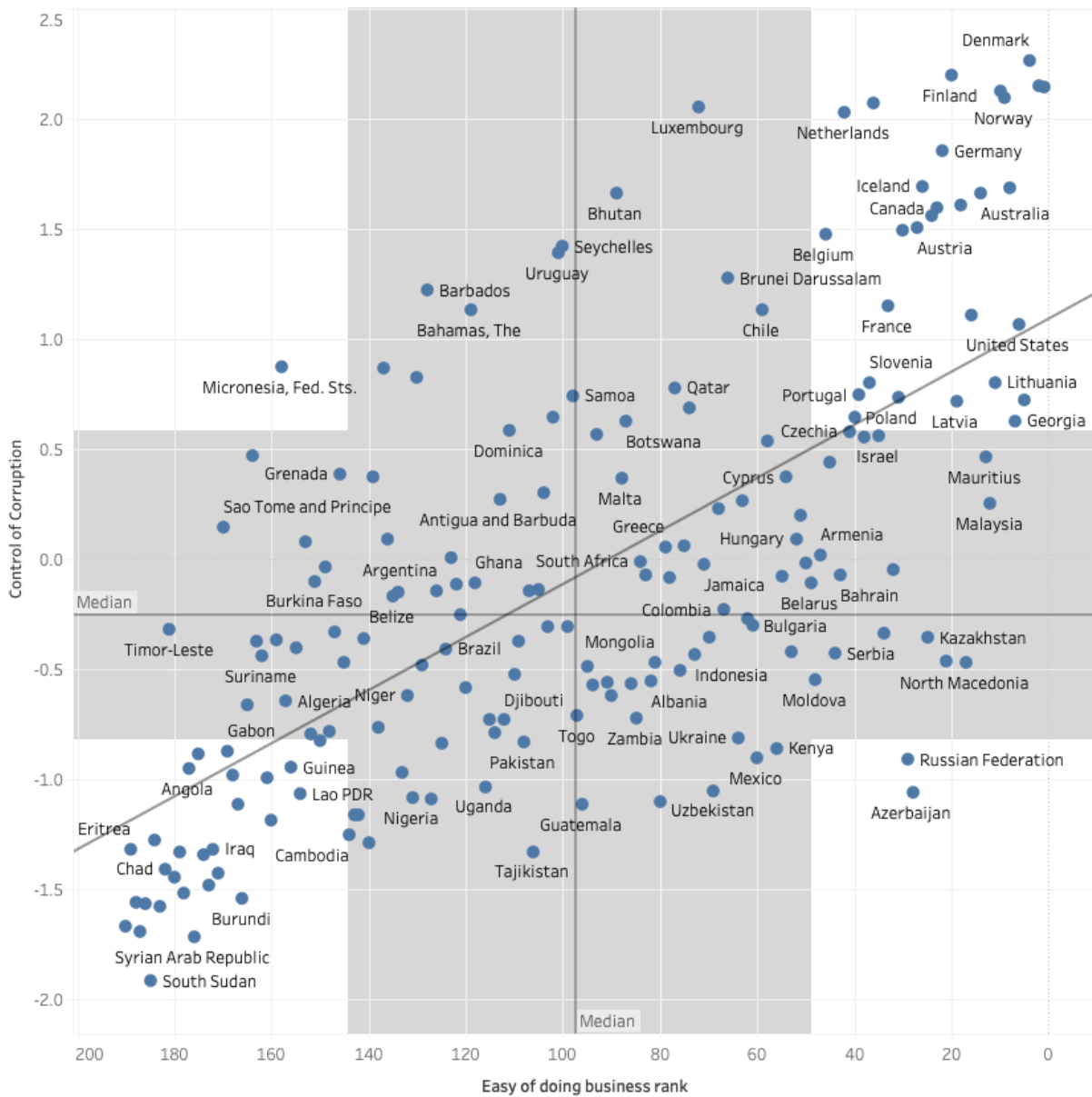
Trend Lines Model

A linear trend model is computed for corruption (CC. EST IC.BUS.EASY.XQ) given Easy of doing business Business. The model may be significant at $p \leq 0.05$.

Model formula: (Easy of doing Business + intercept)

Number of modeled observations:	184
Number of filtered observations:	7
Model degrees of freedom:	2
Residual degrees of freedom (DF):	182
SSE (sum squared error):	99.082
MSE (mean squared error):	0.544407
R-Squared:	0.44818
Standard error:	0.737839
p-value (significance):	< 0.0001

Control of Corruption and Easy of doing business rank



Control of Corruption and Rule of Law

Rule of Law captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. Estimate gives the country's score on the aggregate indicator, in units of a standard normal distribution, i.e. ranging from approximately -2.5 to 2.5.

This model is similar to the "Corruption Control and Government Effectiveness" model. In countries with high trust in the police, courts, and legal institutions of the state, corruption is low, while in countries with a lack of trust in justice, corruption flourishes.

The model shows a very strong, positive linear association with $R^2 = 0.881541$ and Standard Error = 0.345666 between Control of Corruption and Rule of Law (Figure 5).

Trend Lines Model

A linear trend model is computed for corruption (CC.EST RL.EST) given Rule Of Law. The model may be significant at $p \leq 0.05$.

Model formula: (Rule Of Law + intercept)

Number of modeled observations:	191
Number of filtered observations:	0
Model degrees of freedom:	2
Residual degrees of freedom (DF):	189
SSE (sum squared error):	22.5826
MSE (mean squared error):	0.119485
R-Squared:	0.881541
Standard error:	0.345666
p-value (significance):	< 0.0001

Control of Corruption and Rules of Law

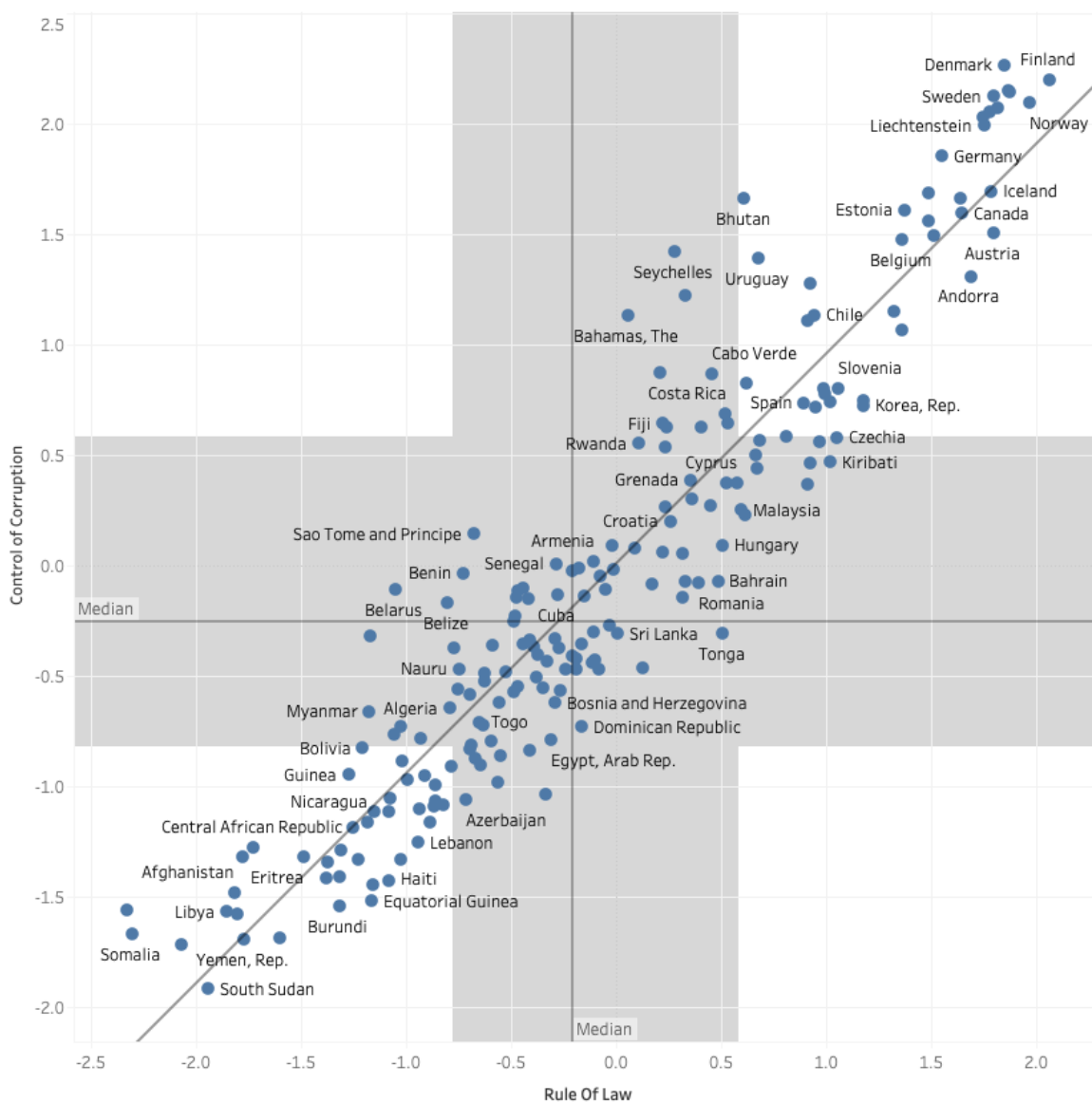


Figure 5

The impact of corruption on human lives.

Speaking about the impact of corruption on human lives, more is needed to talk about the impact of corruption on the bureaucracy, the judiciary, and the quality of public administration. In addition, it is necessary to pay attention to how corruption affects citizens' quality of life and economic performance.

This study uses data for 2020. Here raise some difficulties with economic indicators. With the onset of the COVID-19 pandemic in 2019, indicators such as GDP and GDP per capita decreased in most countries, and the reduction in these indicators directly depended on the degree of state intervention in the economy, the duration and severity of the lockdown, and the amount of budget money spent on supporting businesses and citizens. For example, US GDP in 2019 grew by 2.3%, and in 2020 it sank by 2.8% (World Bank). At the same time, Ireland's GDP in 2019 showed an increase of 5.5% and continued to grow by 6.2% in 2020 (World Bank). As a result of a significant injection of funds into the economy in 2020-2021, many economies are experiencing inflationary pressure, although they show recovery growth. Given all of the above, it would not be correct to use GDP data older than 2018.

One of the strongest indicators describing the quality of life of people is Human Capital Index.

Human Capital Index

Human capital—the knowledge, skills, and health that people accumulate over their lives—is a central driver of sustainable growth and poverty reduction. More human capital is associated with higher earnings for people, higher income for countries, and stronger cohesion in societies.⁶

The HCI calculates the contributions of health and education to worker productivity. The final index score ranges from zero to one and measures the productivity as a future worker of a child born today relative to the benchmark of full health and complete education.

The model shows a moderate, positive linear association with $R^2 = 0.514887$ and Standard Error = 0.685371 between Control of Corruption and HCI (Figure 6).

Trend Lines Model

A linear trend model is computed for Control of Corruption 2020 given Human Capital Index 2020. The model may be significant at $p \leq 0.05$.

Model formula: (Human Capital Index 2020 + intercept)

Number of modeled observations:	145
Number of filtered observations:	47
Model degrees of freedom:	2
Residual degrees of freedom (DF):	143
SSE (sum squared error):	67.1719
MSE (mean squared error):	0.469733
R-Squared:	0.514887
Standard error:	0.685371
p-value (significance):	< 0.0001

Control of Corruption and Human Capital Index

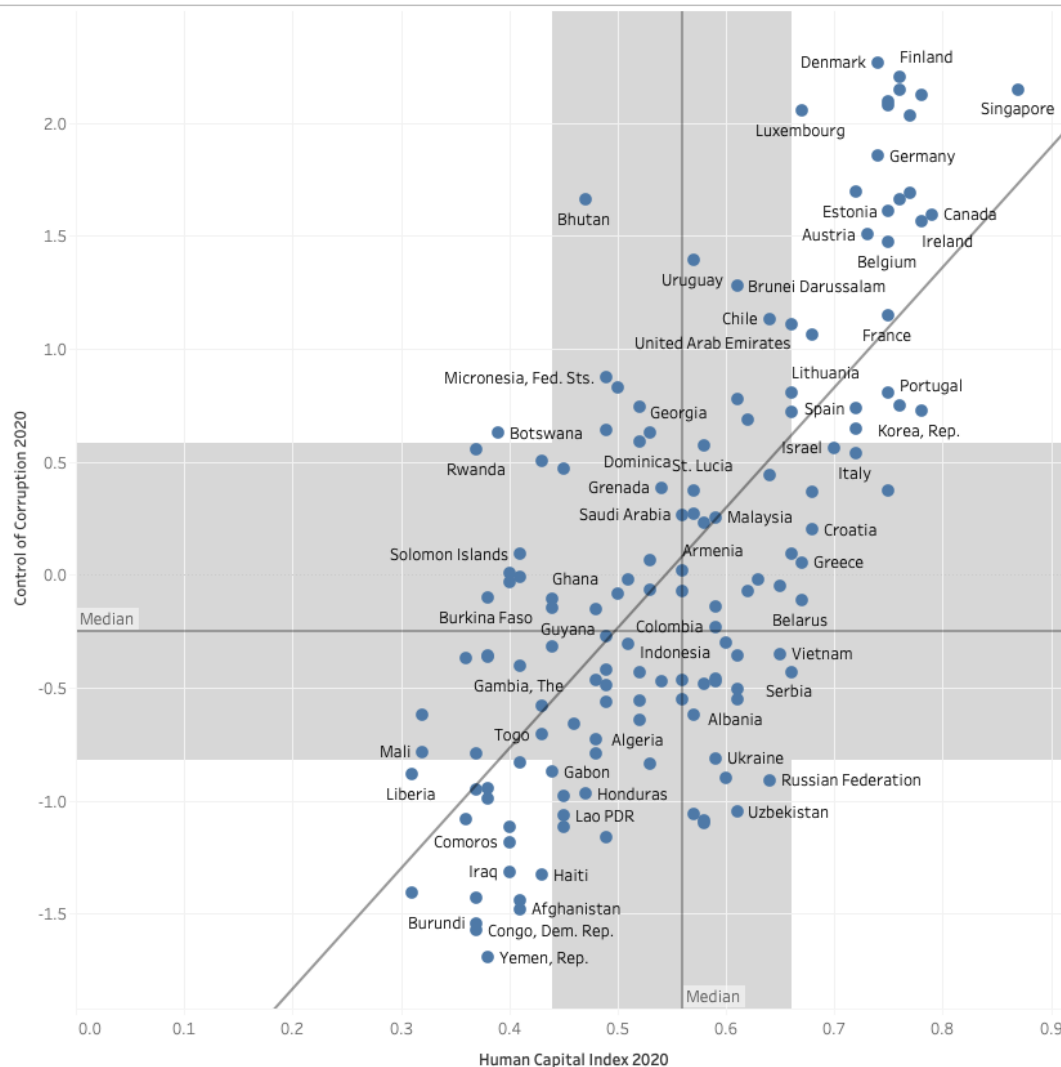


Figure 6

Other indicators and conclusions

Corruption directly affects people's lives. It affects whether there are roads in a state or a particular region, whether a new hospital or seaport will be built, how easy it is to find a job or get a driver's license, whether there will be an opportunity for children to get an education, whether a business will develop and how much it is possible to build a career.

It is often difficult to assess the direct impact of corruption. Furthermore, there are several reasons for this. First, it is only sometimes possible to collect the necessary data. Also, many countries do not publish such data due to various internal reasons. For example, the World Bank publishes data on the "Income share held by lower 20%" indicator for only 21 countries out of 206, for Index Gini only 20 out of 206, and so on. It is impossible to build a working model using 10% of the data. Secondly, it is not always possible to trace the direct impact of corruption on the quantity of medical care only by the number of hospital beds per 1000 people (SH.MED.BEDS.ZS). For example, in Belarus SH.MED.BEDS.ZS = 11.83 and CC.EST = - 0.11. In the US, SH.MED.BEDS.ZS = 2.83 and CC.EST = 1.065. It is necessary to consider many factors, such as public spending on health care, life expectancy, and survival rate, to identify the impact of corruption on health care.

For example, consider the "Control of Corruption and Access to Electricity" model (Figure 7). The model shows a fragile, positive linear association with $R^2 = 0.2074$ and Standard Error = 0.894125. Access to Electricity Median = 100. Half countries (104 out of 208) have 100% access to electricity. Lower Quartile = 74.57. In other words, the model describes the relationships of only half of the data.

Trend Lines Model

A linear trend model is computed for Control of Corruption given Access To Electricity. The model may be significant at $p \leq 0.05$.

Model formula: (Access To Electricity + intercept)

Number of modeled observations:	191
Number of filtered observations:	0
Model degrees of freedom:	2
Residual degrees of freedom (DF):	189
SSE (sum squared error):	151.098
MSE (mean squared error):	0.799459
R-Squared:	0.2074
Standard error:	0.894125
p-value (significance):	< 0.0001

Control of corruption and Access to Electricity

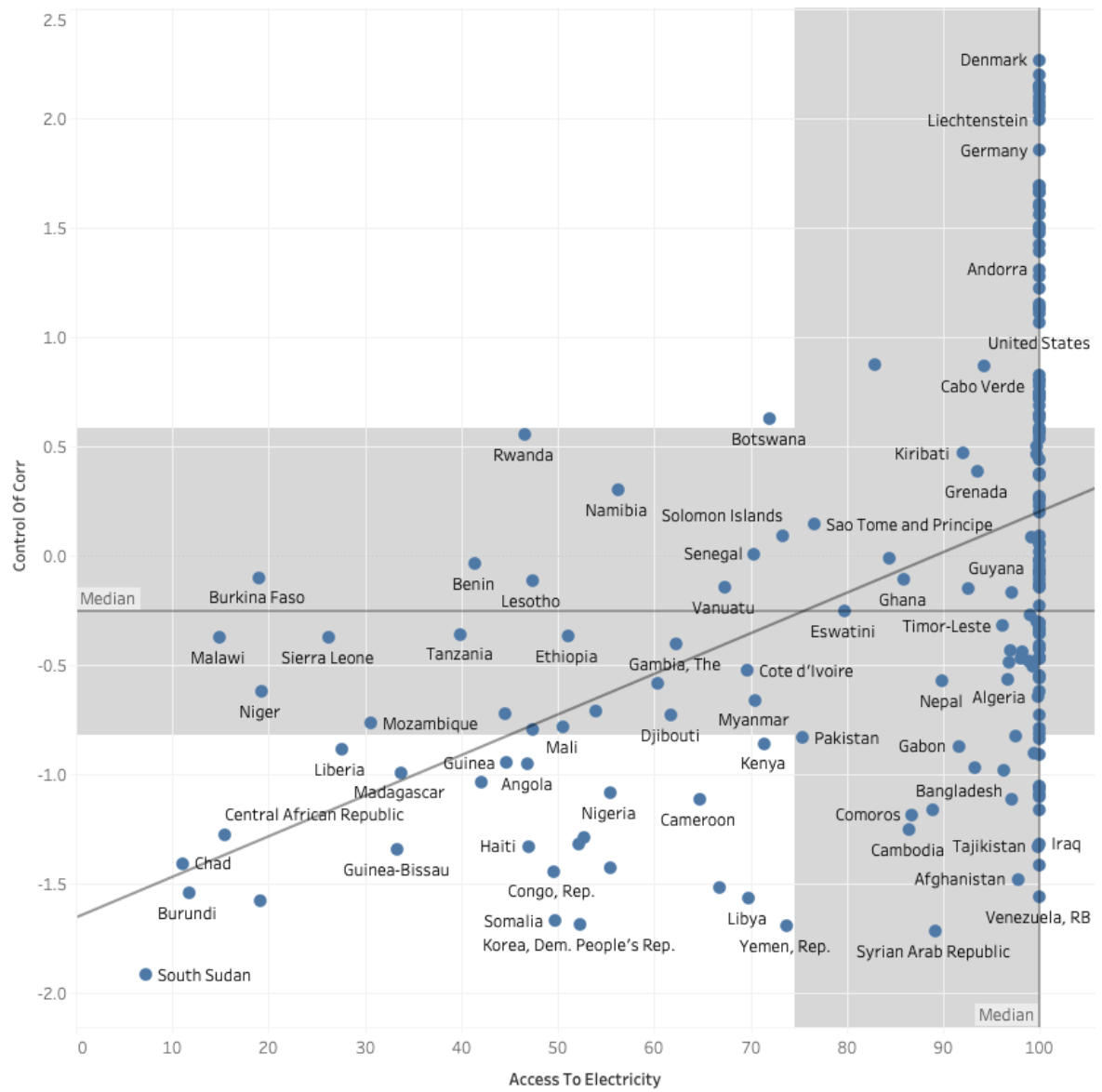


Figure 7

SOURCES

1. Jens Chr. Andvig, Odd-Helge Fjeldstad, Inge Amundsen, Tone Sissener, Tina Søreide "Research on Corruption A policy oriented survey" 2000. Chr. Michelsen Institute (CMI) & Norwegian Institute of International Affairs (NUPI)
2. Vito Tanzi "Corruption Around the World: Causes, Consequences, Scope, and Cures" 1998. International Money Fund
3. Detailed documentation of the WGI, interactive tools for exploring the data, and full access to the underlying source data available at www.govindicators.org. The WGI are produced by Daniel Kaufmann (Natural Resource Governance Institute and Brookings Institution) and Aart Kraay (World Bank Development Research Group). Please cite Kaufmann, Daniel, Aart Kraay and Massimo Mastruzzi (2010). "The Worldwide Governance Indicators: Methodology and Analytical Issues". World Bank Policy Research Working Paper No. 5430 (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1682130). The WGI do not reflect the official views of the Natural Resource Governance Institute, the Brookings Institution, the World Bank, its Executive Directors, or the countries they represent. <https://openknowledge.worldbank.org/bitstream/handle/10986/3913/WPS5430.pdf?sequence=1&isAllowed=y>
4. The CPI scores and ranks countries/territories based on how corrupt a country's public sector is perceived to be by experts and business executives. It is a composite index, a combination of 13 surveys and assessments of corruption, collected by a variety of reputable institutions. The CPI is the most widely used indicator of corruption worldwide. https://images.transparencycdn.org/images/CPI2021_SourceDescriptionEN.pdf
5. The Worldwide Governance Indicators Methodology and Analytical Issues <https://openknowledge.worldbank.org/bitstream/handle/10986/3913/WPS5430.pdf?sequence=1&isAllowed=y>
6. The Human Capital Index 2020 Update : Human Capital in the Time of COVID-19 https://openknowledge.worldbank.org/handle/10986/34432?cid=GGH_e_hcpexternal_en_ext