

Defining Crony Capitalism

An assessment of its determining factors

Author : Andrea Maggiulli

Thesis Director : Professor William Parienté

Thesis Reader : Professor Massimiliano Bratti

Academic Year 2022-2023

In order to obtain the joint degree:

Master 120 en Sciences économiques, Orientation générale, Finalité approfondie (UCL/UNamur)

and

Dottore magistrale in Economics and Political Science (UNIMI)

Acknowledgements

Firstly, I wish to express my heartfelt gratitude to my supervisor, Professor William Parienté, for his immense patience he showed illuminating the path towards knowledge and growth. Your guidance didn't just shape this work. I believe it shaped my journey. Your contributions were instrumental in building the foundations and refining the contours of this voyage of discovery. Thank you for navigating me through the complexities and challenges.

To my reader, Prof. Massimiliano Bratti, your thoughtful advice throughout my experience proved to be precious multiple times.

To my source of strength, my mum, I dedicate this accomplishment to you. Your faith in me ignited a spark that turned into a fire of determination and resilience, making every difficulty surmountable and challengeable. Your love, guidance, and ceaseless support have been the cornerstone of this remarkable journey. I could have never made it without you.

My journey, though personally undertaken, is a testament to the collective effort of all those who offered their support, advice, and encouragement. It is also a praise to Louvain-la-Neuve. In this tiny town in Vallonia, I found many people who still matter a great deal to me, regardless of where they are now. You were, and are, a source of inspiration, trust, and many feelings that would be impossible to express in such limited constraints. This journey is as much yours as it is mine.

To all reading this, I hope it reflects not just a scholarly achievement but also a story of determination, willingness, the courage to walk a step further, and the quest for knowledge. Thank you.

Contents

- Acknowledgements2
- 1. Introduction4
- 2. Literature Review5
 - 2.1 Corruption.....6
 - 2.2 Rent seeking.....7
 - 2.3 Exacerbation of income and wealth inequality9
 - 2.4 Relationship between businesspeople and government officials10
 - 2.5 Summary of the literature11
- 3. Data and methodology.....11
- 4. Findings13
- 5. Conclusion16
- 6. Bibliography.....17
- Annexes.....19
 - Annex 1: Evolution of the Corruption Perception Index 2002-202019
 - Annex 2: Normalized Trade Openness Index19

1. Introduction

“There is another challenge we must address—and it is the corrupting force of the vast sums of money necessary to run for office. The unending chase for money, I believe, threatens to steal our democracy itself. I’ve used the word corrupting—and I mean by it not the corruption of individuals, but a corruption of a system itself that all of us are forced to participate in against our will. The alliance of money and the interests it represents, the access it affords those who have it at the expense of those who don’t, the agenda it changes or sets by virtue of its power, is steadily silencing the voice of the vast majority of Americans who have a much harder time competing, or who can’t compete at all.”

(John Kerry, Former Secretary of State of United States of America, 2013-2017)

The current work addresses the topic of crony capitalism from multiple perspectives. As it is an economic system with unique characteristics, its definition should be straightforward, clear, and immediate. However, existing literature on the topic lacks a comprehensive definition capable of addressing each dynamic that makes capitalism “crony”. The aim of this work is to shed light on the properties and traits governing crony capitalism, moving closer to defining it in a way that includes every specificity entailed. To find the definition I will rely on the precious work of the researchers who already touched the topics, and I will contribute to the literature studying the impact of trade on corruption. The goal is to understand what the connections and the links between those two dimensions are, and how they can be used to enhance the definition of crony capitalism. Finding a definition may not seem like a significant task, or one requiring a specific paper to address. It could be perceived merely as a matter of details, misunderstandings to be discussed within a group. This is probably not far from the truth. However, I believe it is an important topic to tackle. The discipline of economics is evolving from both an internal perspective, meaning that economists are implementing new techniques and methods to achieve relevant results for the development of the discipline, and an external perspective, reflecting the growing public concern over the role of economists in our society. This involves greater, justified scrutiny of our work. If our words and ideas can have such impact, it is necessary that they be scrutinized and debated by the public. Thus, it all begins with the basics, which include finding a formal definition of an imperfect economic system. Crony capitalism does not materialize out of thin air; it is a human construct, complete with all the distinct features involving economics. As a human construct, it is not immutable. Conditions exist that enable a system to be changed by the people. This work is an attempt to elucidate the characteristics that make crony capitalism what it is: a second-best option. I will explore crony capitalism in depth, considering properties such as corruption, through the lenses of rent-seeking literature, and empirically, using different indexes and main economic indicators that will provide the support for the research. While we handle data concerning different aspects of an economy, we will conclude that each has a role to play in a crony capitalist system, and they could either be mutually reinforcing or a pre-condition for crony capitalism to exist. A comprehensive dataset of all countries in the world from 1970 to 2020 will be used. Despite some data gaps, especially for older measurements and less developed countries, this panel data will offer insightful information on crony capitalism. To derive conclusions from an empirical perspective, I will use a Feasible Generalized Least Square (FGLS) model in the context of panel data with the variables and the timeframe mentioned above. In addition, I will scrutinize the current literature on the subject, challenging and,

ideally, unifying the work of various scholars. Due to the complexity and diverse ramifications of such an intricate topic, the foundation of this work will rely on invaluable existing research. The complexity itself is limiting for every author, meaning a researcher interested in crony capitalism is likely to focus on a single aspect to produce robust, consistent results, highlighting particular characteristics, behaviours, or patterns unique to that economic system. While I do not intend to compare myself with the extremely capable scholars who studied the topic, I will be subject to the same limits, as I will mainly focus on one dimension of crony capitalism, corruption, and I will explore it comparing to another dimension of the economic system, trade. In the trade-off between depth and complexity on one side, and completeness and generalist conclusions on the other, I will lean more towards the latter, aiming to lay the foundation for a broader understanding of the phenomenon from multiple perspectives, albeit limited in scope, rather than discovering new or refining existing aspects. The goal of this work and the research question behind it is to understand crony capitalism as a phenomenon and provide a definition that encompasses each feature composing it. While I will try to define the perimeter of each property of a crony capitalist economy, it might be some overlap given the structure of the current literature, which tends to treat some of the characteristics as synonyms. To a certain extent it is true, and this paper will not be exempt from such possible overlapping. However, what truly matters as its core is the intertwining of the private industry and the government, where the economic success of firms hinges on maintaining favour with political actors. Each step taken in this work aims to cement and strengthen our knowledge of crony capitalism. The structure of the work will be as follows: the first chapter will analyse the work done by other scholars on crony capitalism and explore its peculiarities through the lens of theory. Then, theoretical milestones will be outlined, as they provide a crucial understanding of our starting point. The second chapter will discuss the data and methodologies employed in this research. The third chapter will present the findings and comments on these findings. A concluding section will mark the end of this work. We will find that embracing the forces of globalization and the markets is a powerful tool to strongly reduce corruption. Trade seems to be an effective tool to reduce corruption in all dimensions. Moreover, we conclude that a weaker State is, not surprisingly, less capable of fighting corruption. Finally, a stronger role of the government seems to be helping in increasing corruption, as established by the literature. However, it is harder to claim that public spending is the cause of corruption and that a reduction in the role of the State could solve the problem, as some literature suggests.

2. Literature Review

We started this work providing a quote from a top-level American government official worried about the link between the “political money” and corruption. He is undeniably right, as it is one of the features characterising crony capitalism. Before jumping in the literature, it would be enlightening to explore different definitions, as they represent both a starting point for our work and an interesting view of the authors on the subject. Finally, they show how fragmented the same subject would be.

“Crony capitalism is a term describing an economy in which success in business depends on close relationships between business people and government officials. It may be exhibited by favouritism in the distribution of legal permits, government grants, special tax breaks, or other forms of state interventionism.” (Olson, 1982)

“[Crony capitalism is a system] where patron-client relationships between politically-connected capitalists and corrupt bureaucrats entrench both petty corruption—the bribes in interactions between public officials and societal actors—and grand corruption—the abuse of power by political elites to further the spoils of economic elites” (Reinsberg, B. et al, 2021)

“The notion of “crony capitalism” seems paradoxically ambiguous. On one hand, it seems an intuitively clear concept conveying both a descriptive image and a normative assessment. On the other hand, its theoretical nature seems malleable up to the verge of losing any substantial content. [...] Our thesis is that crony capitalism is another type of rent-seeking society, and that its key distinguishing feature is that the prevailing rent-seeking structure is legitimized by means of a populist ideology” (Aligica, P.D. and Tarko, V., 2014)

Capitalism is not an immutable concept. And so is crony capitalism. It may seem like a new concept emerged in developed capitalist countries, but “cronyism” has a long history behind. The grant of the royal charter to the Company by Queen Victoria in 1600 giving it a monopoly over the India trade can be called the first act of ‘cronyism’ for the Asian country (Mazumdar, 2008). Moreover, Rubin (2015) argues that *“Guilds in medieval and early modern Europe offered an effective early crony capitalism mechanism whereby guild members and local political elites could collaborate in capturing a larger slice of the economic pie and redistributing it to themselves at the expense of the rest of the economy”*. What is more relevant is that it captures two relevant properties of crony capitalism: collusion between business leaders and ruling class, and the exacerbation of inequality. Finally, another historical example of crony capitalism is real socialism, particularly with respect to rent seeking, as outlined in Hillman and Schnytzer (1986). They argue that rewards were non-market determined, as they were an exclusive monopoly of the government, assigned to whoever it deemed to be worthy. To enforce this source of power, purges were means of protecting the incumbent ruler from rent seekers. This is not true anymore, but I could argue the “war on corruption” in different countries may look like a modern purge without concentration camps. After this brief historical parenthesis, we will now analyse the existing literature on the fundamental characteristics of crony capitalism and their relationship. I will follow an order that reflect the ascending difficulty of determining crony capitalism. While corruption is a clear indicator that “something is wrong with the functioning of the economy”, rent seeking and income inequality could just be perceived as a matter of social justice, which is by default mutable as social values mute. Even more complex is determining the extent to which the relationship between top executives and government officials goes beyond the unavoidability of the roles (can a large firm in our economic system avoid the government and vice versa?) and becomes a way to share a portion of the country’s wealth in a manner that is detrimental to the economy itself.

2.1 Corruption

Corruption can be defined as a *“special mean by which private agents may seek to pursue their interest in competition for preferential treatment by government officials or politicians and where the “means” are valued by the recipient”* (Aidt, 2016). It is perhaps the most critical aspect of crony capitalism due its potential impact on society and how hard it is to recover from it. The grease money theory, which states that corruption could be beneficial in a limited scope as it could speed up certain processes has been proved false, according to the results

by Kaufmann and Wei (1999). Therefore, we can argue that corruption's detrimental impact does not only lie in the exchange of money and benefits and the motives of participants, but primarily in its ability to privatizes valuable aspects of public life, bypassing processes of representation, debate, and choice (Thompson, 1993). Its damages can be lasting even if corruption could magically disappear. And it does not happen, I would add. While it is true that high levels of corruption usually accompany crony capitalism (Mauro, 1998, and Wei, 2001), the two terms can't be used as synonyms. It is only one of its faces, and, most importantly, it is not enough, as we will see. Corruption thrives in countries with a lower exposure to foreign competition, with economies in which a few firms control a significant fraction of the economy or where antitrust regulations are not effective (Ades and Di Tella, 1999). Before moving to the analysis of rent seeking, it is useful to have an overview of the literature concerning the effects of corruption on a country. Holcombe (2013) argues that crony capitalism and corruption is a direct effect of a big government. This is contrary to the belief of Gerring and Thacker (2005), who argue that big government does not necessarily imply corruption and political favours to specific groups. What is less questioned is their finding that wealthier countries are more likely to be less corrupt, and less corrupt nations generally perform better economically. Those findings are corroborated by Billger and Rajeev (2009), who add that in most corrupt countries, corruption does not decrease when increasing the size of the government. It seems that the most effective manner to counter corruption is achieving greater economic prosperity. The two authors argue that as economic development leads to higher wealth and standard of living, corruption drops systematically irrespective of the current level of corruption in a country. Against the claim of Halcombe, Tanzi and Davoodi (1997) add that public investment, used as a proxy for government intervention in the economy, is slightly correlated with corruption, but it does not reach statistical significance at usual thresholds, therefore ruling out the possibility that a bigger government is capable of better fuelling corruption. In a more general manner, Chakraborty and Dabla-Norris find that countries that suffer more from corruption and rent-seeking tend to have lower capital accumulation, productivity, and growth. This could be related to an inefficient public administration and to lack of transparency of the government because, as Morck and Yeung (2003) find, in absence of general trust in the public officials and within the society, endemic corruption and family control of large firms become mutually reinforcing factors slowing down growth. Finally, Mauro (1995) finds a significant negative association between corruption and investment, as well as growth. Moreover, he adds that corruption could be expected to be more common in countries where bureaucratic processes are slowed down by red tapes. Additionally, he also finds that corruption is strongly negatively associated with investment rate regardless of the amount of red tape. However, corruption does not act in a unilateral manner. It behaves differently according to the countries. Aligica and Tarko (2014) that find corruption is a complement to the official economy in developed countries, while in developing countries it acts a substitute, given some limitations of the institutions, the economic system, the industries, and the law enforcement. Lastly, corruption diverts resources and talents away from activities that produce real growth and that are useful to society into activities that benefits few people at the expenses of the majority, such as political lobbying, influencing judges, and currying favour with the bureaucrats.

2.2 Rent seeking

While corruption is an obscure variant of competition, rent seeking is carried out in the open with actions observable by competitors and the public (Lambsdorff, 2002). Rent seeking is one part of an economic activity, such as distribution or production, and part of the firm's resources are devoted to the activity (Krueger, 1974). Rent seeking has been defined by Gordon Tullock (1967) as the process by which interest groups seek to pursue government favours, and he sees it as the engine of crony capitalism. I would add that it is only one of the engines of crony capitalism. Buchanan (1980) distinguishes between three levels of rent-seeking: *"(1) rent seeking in order to obtain a certain privilege, (2) counter-rent-seeking in order to avoid the cost that would come associated with some possible market regulation (basically, lobbying in favour of deregulation), and (3) rent-seeking in order to obtain an official position that would allow one to benefit from the first two levels of rent-seeking"*. Strictly speaking, the value of any new right created by rent-seeking can be decomposed into net gains for gainers, and net losses for losers (Khan and Jomo, 2000). The ultimate goal of rent seekers is *"grabbing a bigger slice of the [economic] pie rather than making the pie bigger"* (Salter, 2014). Regulation has a mixed effect on the rent seeking and corruption literature. What Buchanan states is that regulation is important to counter rent seeking and activities capable of giving advantages to specific groups thanks to deregulation, but Stigler (1971) adds that while regulations are issued with the intention of furthering the public interest, the same regulatory agencies tend to be captured by the same firms they are supposed to regulate. Therefore, they will end up working for their benefit instead for a general well-being. Olson (1965) further adds that the regulated industry becomes a concentrated interest group, unified by their regulator, that is better able to organize to better enhance its interests and privileges. If money is given to politicians or public servants, this should represent a clear case of corruption. But if rent-seeking is carried out by starting political campaigns, engaging lawyers and public relation agencies, or by public advertising, most observers would not regard the decision-makers thus influenced as corrupt. Rent seeking does not have a single face. In the context of crony capitalism, we focus on the "grabbing hand" corruption literature, which emphasises rent creation: corrupt officials create rents which they extract for themselves via bribery. They do so by introducing artificial scarcity via licenses, permissions, and cumbersome procedures (Aidt, 2016). For a country to become more prone to rent seeking, it is generally required a low enforcement of the rule of law and the widespread presence of corruption (Mehlum et al, 2006). Zingales (2012) claims that one of the most important signs of cronyism is the restricted entry and lack of competition in the market. Enderwick (2005) adds that crony capitalism does not only need rent seeking behaviour to be in place. It requires at least the persistence of the rents, and ideally the expansion of rents in all the aspects of the economy. This leads to what Krueger defines as the "rent-seeking society". Rent-seeking societies are highly regulated economies in which entry in various markets is politically restricted across a wide-range of occupations and businesses (Buchanan, Tollison, and Tullock 1980; Congleton and Hillman 2015). The effect of these restrictions is to create rents for the incumbents, by protecting them from competition. How a country reaches the condition of a rent seeking society is not an easy question, and the path is not necessarily the same. Unlike simple models of political rent-seeking, in which businesses use governments to advance their own interests in exchange for electoral support, under crony capitalism politicians and regulators use businesses to advance the interests of politicians and interest groups in a symbiotic relationship: government creates rents and then distributes them to itself and favoured interests (Zywicki, 2015). I believe it would be interesting to conclude this section with two examples of rent seeking society at work.

Acknowledged the completely different historical paths, culture, and societies, Russia and United States offer interesting view on how rent seeking society works. It is important to mention that in the United States the phenomenon is less pronounced. Salter (2014) defines the American rent seeking toolkit as follows: *“(1) campaign contributions to elected officials, (2) heavy lobbying of Congress and rule-writing agencies, and (3) a revolving door between government service and the private sector”*. It is particularly interesting the third item for two reasons: the impact on society in terms of breeding public distrust and anger caused by the conflict of interest between industries and the bodies that are supposed to watch over them. Secondly, it is linked with the regulatory capture theory hypothesized by Stigler, as we saw in before in this section.

In Russia, the transition towards a rent seeking society was more traumatic and its effects even more detrimental. During the turbulent transition years from communism to capitalism, the relatively wealthy cadres of the Communist Party chose to engage in rent-seeking activities rather than engaging in entrepreneurial activities (Chakraborty and Dabla-Norris, 2006). I would add that Russia might not have had the chance to choose given their particular context, while America purposely walked that path in a more systematic way. My opinion seems to be supported by Haber, Razo, and Maurer (2003) and Aligica and Tarko (2015), who claim that *“a rent-seeking system offers a second-best solution to the problem of weak contract and property rights protections. When property rights are not protected, investment and capital accumulation (either foreign or domestic) are weak; hence, development is slow or non-existent. Crony capitalist countries, while lacking universal property rights protection, do protect the property of well-connected individuals”*. The first part of the quote applies to Russia, the second to both United States and Russia. The effect, present in Russia and to a less extent in the United States, is that the wealthy established families that economically dominate many countries are active and adept rent seekers. They fear innovation because it might erode their dominance, and they use their rent seeking skills to block the entry of innovators by undermining the financial system (Morck and Yeung, 2003). This comparison marks the end of the current section, we will now move to another relevant aspect of crony capitalism: the exacerbation of income and wealth inequality.

2.3 Exacerbation of income and wealth inequality

Income and wealth inequality is a more difficult aspect to approach because it might be perceived more as a social justice and equality issue rather than an economical one. However, the large-scale effect of the bond between corruption and rent seeking force us to examine it under a severe economical perspective. Enderwick (2005) argues in a general way that crony capitalism is likely to have a detrimental impact on the distribution of income. Morck and Yeung (2003) offers a society-wide perspective, claiming that rent seeking derived from a crony society may have the highest return investment from the perspective of the cronies, but it destroys value for the society as a whole. This is due to the movement of wealth from a sector of the society to another, as those political favours are good to redistribute existent wealth, and not to create additional wealth. What is even more hateful is the finding of the authors outlining that oligarchic family control is highly statistically correlated with higher infant mortality. Infant mortality, income inequality, and inflation remain highly significantly correlated with the incidence of great family control. In Russia, during the years of the transition, privatization exacerbated unequal distribution of wealth, which also fuelled corruption (You and Khagram, 2005). What then happened is that well-connected managers,

who were generally also high public servants and members of the Communist Party, owed their wealth to the massive privatization (Stone, 2002). Ilyin (2017) finds that as a result of this privatization process and the development of that economical system, the number of billionaires in Russia between 2007 and 2017 increased by 60%, while their average wealth increased by 50%. However, Russia is not an isolate case. More generally, all the Eastern European economies suffered from this phenomenon in different extents, because they were subject to imperfect credit markets and a fixed cost of rent seeking. As a result, wealthy individuals chose to engage in rent seeking activities to protect their assets. Chakraborty and Dabla-Norris (2006), who outlined the conditions written before, analysed a model in which rent seeking did not just enabled agents to extract as much rents as possible from the markets, but also ensured the protection of their wealth from appropriation in a context in which property right protection and rule of law enforcement was not yet well implemented. They find that as a consequence of weak property rights protection, societies will have a more unequal distribution of wealth and will be characterized by a small fraction of people who can afford entry into rent seeking, at the expense of the majority. Additionally, studies conducted by Mauro (1998), Hessami (2014) and Dimakou (2015) show that corruption distorts fiscal and monetary policy and the composition of government spending, and that increases inequality (Gupta et al. 2002). To further corroborate the hypothesis, Chakraborty and Dabla-Norris find that there is a link between rent seeking, poor economic performance, and income inequality. This section outlined in a comprehensive manner the connection between different characteristics of crony capitalism and how their effect, combined, is detrimental to the economy and the society.

2.4 Relationship between businesspeople and government officials

The relationship between industry captains and public servants poses different challenges in terms of defining crony capitalism. Salter (2014) notes that not every controversial relationship and closeness between government and business can be defined as crony capitalism. I argue that crony capitalism necessitates the maintenance of political relationship and by implication the continuation of that existing political elite. This encourages political authoritarianism, the repression of political competition and a focus on the short term, which is in most cases detrimental to the long-term growth of the economy, as Enderwick (2005) argues. It is a symbiotic relationship, and paraphrasing Krueger (1974), government benefits from the rents in the form of bribes, while the businesspeople benefits from tax breaks, subsidies, weakened regulation or particular protections from new entrants. This relates to the grabbing hand type of corruption that we saw before. The effect is to create an environment in which relatives and friends of government officials are placed in positions of power and government decision on allocation of resources and judicial judgement on commercial disputes will be likely distorted in favour of these friends and relatives (Wei, 2001). This is of course attractive to some people. It provides an easy solution without the need for the considerable investments of time and resources that are required to create a functional government and political institutions. While I do not agree with the conclusion of Holcombe (2013) who ultimately blames the government for the existence of crony capitalism, he is right in arguing that if crony capitalism can thrive is due to some people in the government who are able to target benefits to their cronies and have an incentive to act

in that direction. Moreover, he adds that when businesses can profit from government policies, then they have an incentive to pursue benefits through government favours rather than from fair competition and productive activities. To conclude this section, I believe it is enlightening that the journey through the detrimental business-government relationship ended up finding the same features and behaviours that we highlighted in the previous sections. This is another piece of evidence of the pool of properties characteristics of crony capitalism. The next section will briefly conclude this introductory part.

2.5 Summary of the literature

Macey (2014) defines cronyism as a living being, which grows feeding itself from the favourable conditions in which it develops. Crony exchanges are based on trust, loyalty, family and long-standing social networks. The most significant and consequential form of cronyism usually involves relationships among members of the upper echelons of society or between large firms and the political class. Bribery, although not absent at high political levels, is used as a term to characterize especially the relationships between the lower strata of the society or smaller firms and the lower members of the administrative apparatus (Aligica and Tarko, 2014). The question of why it exists in a way that such a restricted group could benefit so much from its application are by no means trivial. According to Haber (2002) they derive from a government's credible commitment. I partially agree with him. While it is certainly true that the government plays a major role in establishing or marching towards a crony capitalist economy, it is not always the first mover in that direction. As we saw in this chapter, when we want to delimitate the perimeter to a single property of crony capitalism, it is always the case that we find the link with another. This is because, as I believe, crony capitalism requires a mix of all the properties above to be correctly defined as such. When one of the features is missing, the detrimental impact of crony capitalism is less pronounced. Crony capitalism is a system influenced by various interconnected factors. Instead of isolating and addressing individual aspects, we must consider its broader structure to reach a satisfying conclusion. However, it is necessary to restrict the field, otherwise it will become too broad. Munger and Villareal-Diaz (2019) present a conclusion that Karl Marx would have liked: they claim that capitalism creates conditions that will inevitably lead to its own destruction. What are those conditions? Cronyism and its consequences. It might be an extreme view, but we cannot deny the harmful impact of such degenerated capitalism compared with a more equal and sustainable capitalism, in which property rights are enforced by an independent judicial arm, and in which competition is free and regulation does not benefit specific groups. Crony capitalism is, at best, not efficient, at worst, dangerous. We will now see empirically to what extent.

3. Data and methodology

To assess the single and general impact of each properties characterising crony capitalism I will use a panel data comprising observations for each country from 1970 to 2020. The panel data is large enough to capture the evolution over time for countries, such that they are not particularly influenced by a specific head of state who could have had a long term in power or a specific influence on the country, or momentum of the global economy. Among the indexes and indicators that I will use in my research, I will analyse the forces driving corruption using the Corruption Perception Index, a self-assessed indicator on the perceived corruption in a

country, that will serve as the dependent variable together with two more indexes on corruption. Using multiple indexes for different corruption models will allow us to understand the consistency of the findings. Along with the CPI, I will use a “freedom from corruption index”, which is a government integrity value and allow us to have a more objective results, as it is the results of multiple socio-economic factors. Finally, I use the “control of corruption” from the World Bank, that is, quoting from their website (which is also the source of this index), “[this indicator] measures 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”.

The focus of this analysis will be on the relationship between corruption and trade openness. I argue that a significant exposure to the forces of the market and globalization are a positive force in driving out corruption in a country. I pose that corruption is detrimental to efficiency, in line with the literature, and that this inefficiency does not allow the economy to thrive in the highly competitive world markets that the globalization made wider, broader in scope and depth, and more transparent over time. Transparency and corruption could be reasonably considered as antonyms. I expect to find that more openness in markets and towards the “global village” will lead to a lower level of corruption, establishing therefore a strong link between a ruling political elite and a close, protected, and pampered circle of businesspeople. My idea is that the “collapse” of the economic borders will make harder for those relationships to hold given the disruptive forces of the market. My goal is also to find consistency with the current literature. I will also try to identify an income inequality threshold to identify who are the actors profiting from the corruption generated by a crony capitalist state. While the direct links in the ruling elite may be restricted to a very low number of wealthy individuals, plenty must always be redistributed to a certain fraction of the population. Even the most authoritarian or even totalitarian state needs support from the population and reducing the number of beneficiaries to a circle that is too small to hold will also reduce the time until a political turmoil will end their power forever. The French Revolution is very instructive in that sense, as explained by Piketty (2013) in his bestseller “Capital in the 21st century”. To capture the extension to which a country engages in trade with foreign countries, I used a normalized version of the Trade Openness Index (See Appendix 2 for further references). This will be the main variable that will serve as benchmark to assess its impact on corruption. Considering that it includes both imports and exports, with the GDP being the denominator, it is an interesting variable to work with as it provides direct information on the general economy and its import and exports. It is unbiased in the sense that it does not favour imports or exports and does not take into account particular modifications in a country’s policy that may favour a certain behaviour towards foreign countries.

The model works as follows:

$$y_{it} = \beta_0 + \beta_{1it}X_{it} + \beta_{2it}C_{it} + \varepsilon_{it} \quad (1)$$

Where y_{it} is denoting the dependent variable. In the present study, three different indicators of corruption have been considered as dependent variables which are CPI, Freedom from Corruption and Control of Corruption.

X_{it} indicates the list of independent variables, which include to normalized trade openness, trade freedom, government spendings, government tax revenue, political stability, state fragility and economic decline index, as long with some general socio-economic indicators.

C_{it} indicate the list of control variables which are GDP per capita and income of the top 10%.

To perform the analysis, I will use a fixed effect model to assess the within-individual variations for corruption. However, it is first necessary to clean the dataset to obtain a more balanced panel data, given all the constraints we have in both timeframe and number of countries. Cleaning the database is a tough challenge, and after a few modifications, the original 9455 observations were reduced to around 900. While the reduction is substantial, there are enough data to perform a consistent analysis.

4. Findings

The output of the fixed effect model can be observed in the table below:

Dependent Variable	Corruption PI		Freedom of Corruption		Control of Corruption	
	(1)	(2)	(3)	(4)	(5)	(6)
GDP Per Capita	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Income Top 10%	-.159* (.096)		.012 (.129)		.006 (.004)	
Norm. Trade Open	-1.157 (5.145)		-10.708 (6.934)		-.406** (.202)	
Govt spending/GPD	-.047 (.103)	.128 (.111)	.211 (.139)	.107 (.127)	.001 (.004)	.013*** (.004)
Tax revenue/GPD	.004 (.055)	.104* (.054)	-.141* (.074)	.141** (.07)	.001 (.002)	.008*** (.002)
Political Stab Ind.	-.43 (.554)		.045 (.749)		.027 (.022)	
Inver. Fragile State	-.287*** (.048)		-.121* (.066)		-.003 (.002)	
Inver. Econ. Decline	-.015 (.252)		-.208 (.343)		-.011 (.01)	
Prop. Rights Ind.	.105*** (.017)	.162*** (.017)	.231*** (.023)	.256*** (.021)	.005*** (.001)	.006*** (.001)
Gini Index		-.215*** (.067)		-.185** (.079)		0 (.003)
Growth Rate		-.063 (.042)		-.212*** (.054)		.003 (.002)
cons	68.196*** (4.76)	46.929*** (3.664)	45.908*** (6.463)	39.418*** (4.176)	.185 (.188)	-.339** (.134)
Observations	866	1101	887	1274	887	1197

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 1 : Fixed Effect Model

Results are not clear; therefore, it is necessary to perform a test for heteroskedasticity and possible autocorrelation for the residuals. The diagnostics results are outlined in the following table:

Model	Heteroscedasticity	Autocorrelation
Model 1	4.6e+31 (0.000)	135.984 (0.000)
Model 2	1.9e+31 (0.000)	179.916 (0.000)

Model 3	2.8e+32 (0.000)	131.191 (0.000)
Model 4	1.6e+32 (0.000)	210.895 (0.000)
Model 5	9.6e+32 (0.000)	185.891 (0.000)
Model 6	5.8e+32 (0.000)	133.436 (0.000)

Table 2 : Diagnostics for Fixed Effect Model

The null hypothesis for the heteroskedasticity test is that there is not the problem of heteroskedasticity in the residuals of the model against the alternative that there is the problem of heteroskedasticity in the residuals. As evident from the table that P-value for the test is 0.000 for all the six models. This provides evidence to reject the null hypothesis and it can be concluded that there is problem of heteroskedasticity in the residuals of the model.

The null hypothesis for the autocorrelation test is, there is not the problem of autocorrelation in the residuals of the model against the alternative that there is the problem of autocorrelation in the residuals. As evident from the table that P-value for the test is 0.000 for all the six models. This provides evidence to reject the null hypothesis and it can be concluded that there is problem of autocorrelation in the residuals of the model.

In the presence of heteroskedasticity and autocorrelation, estimates obtained from the regression analysis are not reliable nor efficient. To get rid this result, I will estimate the models using Feasible Generalized Least Square (FGLS). The results of these models are outlined in the table below.

Dependent Variable	Corruption PI		Freedom of Corruption		Control of Corruption	
	(1)	(2)	(3)	(4)	(5)	(6)
GDP Per Capita	0*** (0)	0*** (0)	0*** (0)	0*** (0)	0*** (0)	0*** (0)
Income Top 10%	-.007 (.047)		.001 (.05)		.004 (.002)	
Norm. Trade Open	-15.82*** (2.152)		-16.128*** (2.302)		-.638*** (.11)	
Govt spending/GPD	.333*** (.069)	.661*** (.074)	.373*** (.073)	.488*** (.07)	.021*** (.003)	.031*** (.003)
Tax revenue/GPD	.126** (.05)	-.033 (.048)	.045 (.053)	-.012 (.052)	.008*** (.003)	.003 (.002)
Political Stab Ind.	3.315*** (.581)		1.646*** (.615)		.201*** (.03)	
Inver. Fragile State	-.101*** (.029)		-.117*** (.031)		-.003** (.001)	
Inver. Econ. Decline	-.859*** (.252)		-.867*** (.268)		-.034*** (.013)	
Prop. Rights Ind.	.413*** (.018)	.565*** (.017)	.468*** (.02)	.618*** (.017)	.02*** (.001)	.027*** (.001)
Gini Index		.001 (.033)		.006 (.036)		.001 (.002)
Growth Rate		.228*** (.063)		.084 (.068)		.016*** (.003)
cons	27.475*** (2.863)	1.417 (2.026)	24.561*** (3.027)	-.143 (2.147)	-1.247*** (.145)	-2.173*** (.095)
Observations	866	1101	887	1274	887	1197

Standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 3 : FGLS Model

Before outlining the results, we notice that the using different control variables in the three different models does not substantially change the results of the models. Therefore, we could argue that this model is reliable and that the results could be extrapolated to reach a satisfactory conclusion.

Results seem to be consistent with the expectations outlined above. Particularly, we find that trade openness has a strong, statistically significant (at the 1% level) impact on corruption, driving it down for all models. This corroborates the idea that a broader exposure to the forces of international competition has a profound effect on the corruption level of a country. That could be explained by the willingness to attract foreign directed investments (FDI) or simply become part of the global financial architecture, that undeniably dislikes corruption as it is not a guarantee for consistent and high returns. This is consistent with the theory of Zingales (2012).

Additionally, we find consistency with the theory that corruption tends to increase, although not much, with a higher government spending. I also find that is it positively associated with an increased tax revenue, however those measures are very likely to be correlated, since the government spends money that it gets from taxation.

An interesting finding is that the income of the top 10% of the population has no effect on corruption. There might be different explanations: the first explanation concerns the threshold I was referring above. Unlike my idea, it might be that the fraction of people benefiting and impacting on corruption is more restricted. Additionally, income might not be the best measure. It is possible that considering the wealth of the top 10% could produce different results. This is an aspect that opens the doors to further research on the impact of the rich on corruption and on the literature on crony capitalism. Gini Index has surprisingly no effect, and the same could be said about the GPD per capita. But this is straightforward: Gini Index could be considered as a proxy for the income inequality that we consider in the present work with the top 10% income. GPD per capita, on the other hand, was a control variable. Moreover, the information was already indirectly identified in the trade openness index. Therefore, an effect would have been redundant.

Two more indexes furtherly corroborate the results: as we could expect, a more fragile state has a negative effect on corruption. The same result hold for a country in economic decline. What would be interesting to study is a potential reinforcing mechanism between corruption, economic decline and increase of corruption and more economic decline, in a vicious circle. As outlined in the models, the indexes are inversed for a clearer view, so that a negative result implies a positive impact on corruption. What looks apparently less explainable is the impact of the political stability index. However, in politically stable countries, longstanding institutions can foster entrenched networks of patronage. The public's complacency and trust in such stable systems may reduce vigilance, allowing corruption to flourish under complex bureaucratic structures. Moreover, the high rewards for holding office in these stable environments can incentivize corrupt practices. Lastly, with more developed economies, there are more monetary avenues that can potentially be exploited corruptly.

Finally, the role of growth rate is ambiguous. It is statistically significant in 2 models, in both at the 1% level. However, its impact is not as large as, for instance, the trade openness. A high

growth rate can lead to an influx of capital and rapid expansion of both public and private sectors. Rapid growth can also increase competition for lucrative contracts, licenses, and land acquisitions, incentivizing entities to engage in bribery or other corrupt practices to secure advantages. Furthermore, the rapid flow of funds and the promise of newfound wealth can sometimes blur ethical lines, making corruption seem like a quick path to prosperity in the face of booming opportunities.

It is undeniable that the model could have included additional elements, particularly a vaster set of indexes to account for inequalities for income and wealth at different quantiles of the population. Moreover, it would have been extremely interesting to include a measure of the connection between political bodies and entrepreneurs. However, this seems way beyond the scope of the work and would require a huge number of resources and people. Moreover, it is a characteristic that is inherently hidden and not public, like everything that involves corruption, not-so-clear connections at the highest level of the administration. It would surprise me if that information were disclosed and available to the public!

5. Conclusion

We can summarize our results using the following shortlist: impact of trade on corruption, effect of government on corruption, inequality impact, and the general economic impact on corruption. Corruption has been the driving force of this work, and the efforts proved successful in establishing that trade openness impacts corruption, driving it down systematically. The results are strengthened as they are accompanied by the confirmation that government expenditure and revenue from taxes have a negative impact on corruption, therefore increasing it. Moreover, we highlighted how corruption “benefits” from a declining and fragile country and, more surprisingly, from a stable country. It is likely that authoritarian governments may have driven this result. Additional research on that topic could shed light on this finding. Finally, growth rate and income inequality seem not to play a relevant role in fostering corruption, but that could be due to the model specification, as outlined before. What is relevant is the strong connection between corruption and trade because it has a policy implication. If opening to the world has those effects on the internal corruption on the country, then embracing globalization and market forces could be an effective solution to fight corruption, an unfair, detrimental process that benefits so few people at the expense of so many. To come back to our initial scope, we can give our contribution to crony capitalism and how it can be defined in the light of our findings. I can define crony capitalism as follows:

“Crony capitalism is a degenerated form of capitalism where the government, major corporations, and influential people work together. In this system, the government selectively backs and champions specific industries, companies, and wealthy interest groups, protecting them from foreign competition and shielding them from the market forces of globalization”.

My small contribution is mainly related to the last sentence. I hope this work could help to foster the dialogue on crony capitalism and its consequences, allowing us to better understand the phenomenon and therefore enhancing our capabilities and improving the tools to fight it.

6. Bibliography

The quote from John Kerry can be found at the following link:

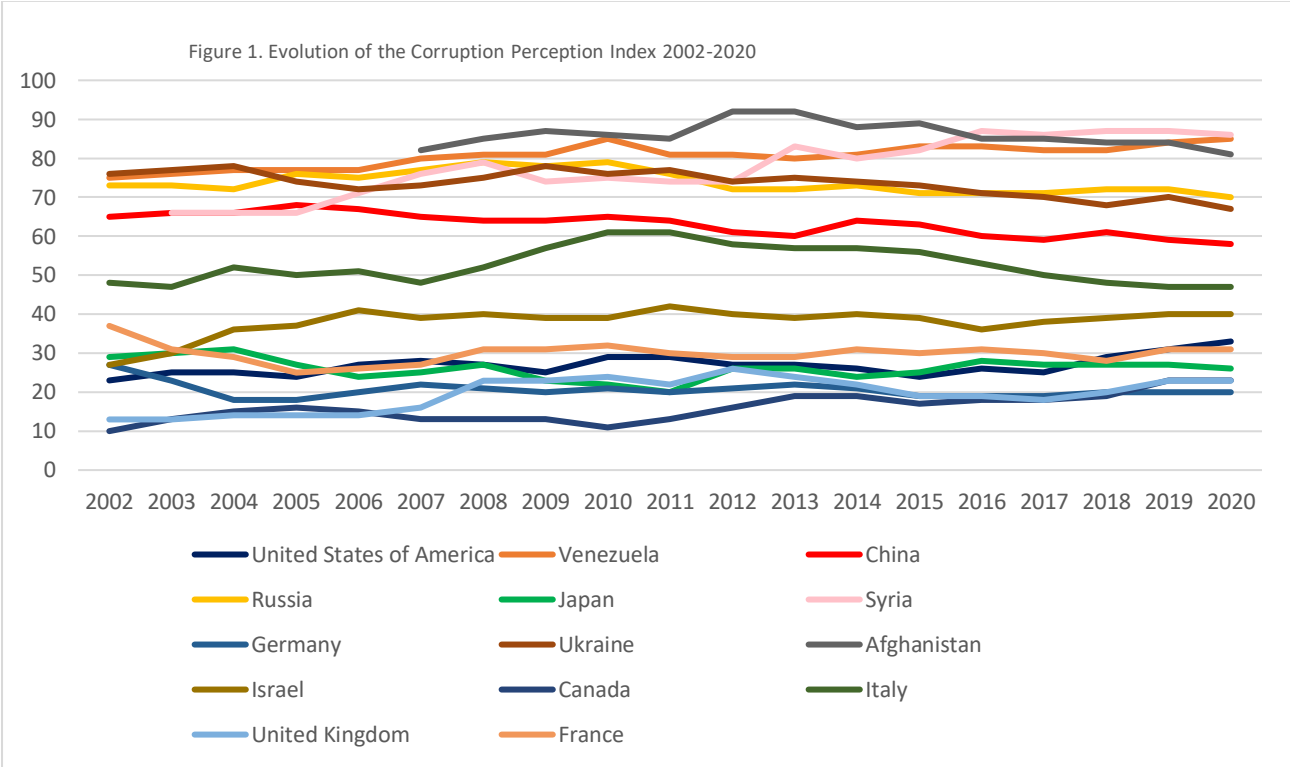
<https://www.foreign.senate.gov/press/rep/release/senator-john-kerry-delivers-senate-farewell-floor-address->

- Ades, A., & Tella, R.M. (1999). "Rents, Competition, and Corruption", *The American Economic Review*, 89, 982-993.
- Aidt, T.S. (2016), "Rent seeking and the economics of corruption", *Constitutional Political Economy*, 27, 142-157.
- Aligica, P. D., and Tarko, V. (2015), "Capitalist Alternatives: Models, Taxonomies and Scenarios", *New York: Routledge*
- Billger, S.M. and Rajeev, K. G, (2009), "Do Existing Corruption Levels Matter in Controlling Corruption?: Cross-Country Quantile Regression Estimates.", *Journal of Development Economics* 90(2): 299–305.
- Buchanan, J. M., Tollison, R.D. and Tullock, G. (1980), "Toward a Theory of the Rent Seeking Society", *College Station: Texas A & M University*.
- Dimakou, O. (2015), "Bureaucratic corruption and the dynamic interaction between monetary and fiscal policy", *European Journal of Political Economy*, 40(Part A), 57–78.
- Enderwick, P. (2005). "What's Bad About Crony Capitalism?", *Asian Business & Management*, 117-132.
- Gupta, S., Davoodi, H. R., and Alonso-Terme, R. (2002), "Does corruption affect income inequality and poverty?" *Economics of Governance*, 3, 23–45. Reprinted in G. T. Abed & S. Gupta (Eds.), *Governance, corruption, economic performance, Chapter 17* (pp. 458–486). *Washington, D.C.: The International Monetary Fund*
- Haber, S. (2002) "The political economy of crony capitalism", in "Crony Capitalism and Economic Growth in Latin America: Theory and Evidence", Stanford: Hoover Institute, pp. 10–21
- Haber, S., Razo, A., and Maurer, N. (2003), "The Politics of Property Rights: Political Instability, Credible Commitments, and Economic Growth in Mexico, 1876–1929", *New York: Cambridge University Press*
- Hessami, Z. (2014), "Political corruption, public procurement, and budget composition: Theory and evidence from OECD countries", *European Journal of Political Economy*, 34, 372–389.
- Hillman, A.L. and Schnytzer, A. (1986), "Illegal economic activities and purges in a Soviet-type economy: A rent-seeking perspective", *International Review of Law and Economics* 6, 87–99.
- Holcombe, R. G. (2013), "Crony Capitalism: By-Product of Big Government.", *The Independent Review* 17: 541.
- Kaufmann, D. and Wei, S. (1999), "Does "grease money" speed up the wheels of commerce?", NBER Working Paper 7093
- Khan, M.H. and Jomo K.S. (2000), "Rent seeking as process", in "Rents, Rent-Seeking and Economic Development: Theory and Evidence in Asia", *Cambridge University Press*
- Koch, C.G, "Corporate Cronyism Harms America: When Businesses Feed at the Federal Trough, They Threaten Public Support for Business and Free Markets", *Wall Street Journal* (Sep 9,2012).
- Krueger, A.O. (1974), "The Political Economy of the Rent-Seeking Society", *The American Economic Review*, 64, 291-303.
- Lambsdorff, J. (2002), "Corruption and rent-seeking", *Public Choice*, 113(1-2). pp 97-125
- Macey, J.R. (2014), "Crony Capitalism: Right Here, Right Now", *Harvard Journal of Law and Public Policy*, 37, 5.
- Mauro, P. (1998), "Corruption and the composition of government expenditure", *Journal of Public Economics* 69, 263–279. Reprinted in G. T. Abed & S. Gupta (Eds.), *Governance, corruption, economic performance, Chapter 9* (pp. 225–244). *Washington, D.C.: The International Monetary Fund*.
- Mauro, P. (1998), "Corruption: causes, consequences, and agenda for further research", *Finance and Development*, pp 11–14.
- Mazumdar, S. (2008), "Crony capitalism and India: Before and After Liberalization", *MPRA Paper No. 19267*
- Mehlum, H. et al (2006), "Institutions and the resource curse", *Economic Journal* 116, 1–20.

- Morck, R., Yeung, B. (2003), "Family Control and the Rent-Seeking Society", *William Davidson Institute Working Paper Number 585*
- Munger, M., and Villareal-Diaz, M. (2019), "The road to crony capitalism", *The Independent Review*, pp 379-391
- Murphy, K. M., Shleifer, A. and Vishny, R. W. (1991), "The Allocation of Talent: Implications for Growth", *Quarterly Journal of Economics*, 503-530.
- Olson, M. (1965), *"The Logic of Collective Action"*, New York: Schocken Books
- Olson, M. (1982), "The Rise and Decline of Nations: Economic Growth, Stagflation, and Social Rigidities", Yale University Press
- Piketty, T. (2013), "Capital in the XXI century", *The Belknap Press of Harvard University Press*, Cambridge, Massachusetts
- Reinsberg, B., Kentikelenis, A. and Stubbs, T. (2021), "Creating crony capitalism: neoliberal globalization and the fueling of corruption", *Socio-Economic Review*, 19(2), pp. 607-634.
- Rubin, P. (2015), "Crony capitalism", *Supreme Court review of Economics*, Volume 23
- Salter, M (2014), "Crony Capitalism, American Style: what are we talking about here?", *Edmond J. Safra Working Papers*, No. 50
- Stigler, G. J., (1971), "The Theory of Economic Regulation", *Bell Journal of Economics and Management Science*, 2 , pp 3–21
- Stone, R.W. (2002), "Lending Credibility: The International Monetary Fund and the PostCommunist Transition", *New York: Cambridge University Press*
- Tanzi, V., and Davoodi, H. (1997), "Corruption, Public Investment, and Growth", *IMF Working Paper 970139*, Washington, DC: *International Monetary Fund*
- Thompson, D.F. (1993), "Mediated corruption: The case of the Keating five", *American Political Science Review*, 87: 369–381.
- Tullock, G. (1967), "The Welfare Costs of Tariffs, Monopoly, and Theft", *Western Economic Journal*, pp 224-232
- Wei, S. (2001), "Domestic Crony Capitalism and International Fickle Capital: Is There a Connection?", *International Finance*, 4:1, pp 15-45
- You, J. and Khagram, S. (2005), "A Comparative Study of Inequality and Corruption", *American Sociological Review* 70: 136–57.
- Zingales, L. (2012), "A Capitalism for the People: Recapturing the Lost Genius of American Prosperity", *Basic Books*
- Zywicki, T.J. (2015), "Rent-Seeking, Crony Capitalism, and the Crony Constitution", *Supreme Court Economic Review*, 23, 77 - 103.

Annexes

Annex 1: Evolution of the Corruption Perception Index 2002-2020



While there are no references to this table in the main text, I believe it is interesting to see the evolution over time of the CPI in some countries, in particular G7 countries, countries that are considered “failed states” and emerging countries. Three results are evident: the “G7 group”, with the notable exception of Italy, lies in the lower part of the graph, meaning that they show a very low level of perceived corruption. Second, we notice how fast China reduced its level of perceived corruption and, on the other hand, how fast it increased for the United States in such a short time. This is certainly good news for China and a warning for the United States. The talks on the USA losing power and their influence in shaping world politics might be correlated with their poor trend in this graph. It might be oversimplifying, but it is better to act now than cure the wounds later.

Annex 2: Normalized Trade Openness Index

The Trade Openness index is an indicator used to understand to which extent a country is open to trade. It is calculated as the sum of a country's exports and imports divided by its Gross Domestic Product (GDP). The index reflects how open a country's economy is to international trade. A higher value indicates greater openness and reliance on foreign markets.

TOI is calculated as follows:

$$\text{Trade Openness Index}_{i,t} = \frac{\frac{1}{2}(x_{i,t} + m_{i,t})}{y_{i,t}}$$

Where

$x_{i,t}$ = ratio of arithmetic mean of exports

$m_{i,t}$ = ratio of arithmetic mean of imports

$y_{i,t}$ = Country's GDP

i and t are respectively the country and the year of measurement.

To normalize the TOI I used the following normalization formula:

$$\text{Normalized TOI} = \frac{x - \text{MIN}}{\text{MAX} - \text{MIN}}$$

Where MAX and MIN are respectively the maximum and minimum values found in the TOI for all countries in the dataset we are analysing.

Finding the inverse of the normalized index is straightforward:

$$\text{Inverse Normalized TOI} = 1 - \text{Normalized TOI}$$

The rationale behind the decision to normalize the index is to have a scalable index that could be more readable in an analysis. The inverse of the index is a measure, on the other side, of the closeness of an economy, so the analysis could profit not only to extent to which a country trades with foreign countries, but also to extent to it does not trade. However, this approach has some limitations. It is sensible to outliers and extreme values, which are present in dataset for countries that were either ravaged by wars (i.e Iraq) or countries that were historically founded on trade (Hong Kong). Moreover, the choice was arbitrary. I decided to adopt those numbers for the normalization because those were the numbers. If the numbers were different as minimum or maximum, I would have opted for those numbers. Finally, scale sensitivity could be relevant, because a small difference in the normalized value could represent a huge different in the original index.