

Louvain School of Management

To what extent does the institutional context in which a multinational corporation is operating influence the quality of its anti-corruption programme?

Mémoire recherche réalisé par
Sarah Deom

en vue de l'obtention du titre de
Master 120 crédits en ingénieur de gestion, à finalité spécialisée

Promoteur(s)
Professeur Carlos Desmet
Assistant Corentin Hericher

FOREWORD

The present thesis is written in the obtention of a Master degree in Business engineering at Louvain School of Management, Université Catholique de Louvain-la-Neuve.

First of all, I thank my supervisor Carlos Desmet for his relevant recommendations and his expert eye on this project. I also particularly thank Corentin Hericher for his precious advice and ideas, and for his availability to answer my questions during the redaction of this thesis.

The inspiration and deep interest in CSR, more precisely in fight against corruption shows up during my first year of master at Louvain School of Management. As well as five other students of my program, I had the opportunity to collaborate on a project with the worldwide NGO, leader in the fight against corruption, Transparency International. The project consisted in drafting the report “TRAC 2015: Assessing 30 listed Belgian companies”, which is currently published on Transparency International Belgium website (link: http://www.transparencybelgium.be/fr/home/trac_2015).

The inquiry focused on evaluating the transparency in reporting of anticorruption programmes for thirty Belgian multinational corporations publicly-listed in BEL20 and Euronext. They received a score based on the publicly available information such as annual reports, internal ethic regulation, open disclosures against corruption... The score hurts or not the reputation of companies. Finally, the conclusions and the low average score obtained have revealed that even Belgian multinationals can still make a lot of progress in defining their anti-corruption standards. The research and redaction of this report were an enriching experience, offering me the opportunity to focus on this subject that remains omnipresent in the world and has disastrous consequences on the development of countries.

Moreover, during the TRAC 2015 redaction and the confrontation with CSR managers I could realize that corruption remains a taboo and touchy question for multinationals, for which external image matters.

The Business Engineering Master program gives students the opportunity to take part to Erasmus exchange program. I decided to spend five months in Ljubljana, studying at the Faculty of Economics. During this period, I could benefit from classes directly linked this topic. First of all, I followed a class of Comparative Analysis of Business and Economic Systems, emphasizing the differences and similarities between the different National contexts. I attended a class of International Business Environment, explaining the way CSR is implemented within multinational and its multiple business environments, that was useful and relevant in order to

answer my own research question. The contents of these classes have been a significant source of knowledge and literature for the redaction of the thesis.

I hope that this thesis will give me the opportunity to go deeper into that subject in the future, since I noticed a fascination for this topic. I thank Transparency International for the passion they transmit to me.

TABLE OF CONTENTS

FOREWORD	I
TABLE OF CONTENTS	III
1. INTRODUCTION	1
1.1. Figures about the costs of corruption	3
1.2. Corruption in the world	5
1.2.1. What is corruption?	5
1.3. The role of multinational corporations in the persistence of corruption	8
1.3.1. Multinational corporations	8
1.3.2. The role of the private sector in the fight against corruption	9
1.3.3. Incentives for MNCs to comply towards anticorruption practices	10
1.4. The influence of the environment on the behaviour of economic actors	10
1.5. Reasons for writing a thesis on this subject	11
1.6. Structure of the thesis	13
2. THEORETICAL FRAMEWORK	14
2.1. Multinational Corporations	14
2.1.1. What is a Multinational Corporation?	14
2.1.2. The role of headquarters in multinational corporations.....	14
2.2. Institutional Theory	15
2.2.1. An historical perspective	15
2.2.2. Old institutionalism	16
2.2.3. New institutionalism.....	16
2.3. Institutional Theory	17
2.3.1. What are institutions?	17
2.3.2. Institutional environment.....	18
2.3.3. The importance of legitimacy in the persistence of institutions	19
2.3.4. The process of institutionalization.....	20
2.4. The Influence of institutions on anticorruption programme of multinational corporations	21
2.4.1. How does the institutional environment influence subsidiary's adoption of corrupted practices?.....	22
2.4.2. Corruption, formal and informal institutions.....	24
2.4.3. Institutional factors favouring corruption.....	26
2.5. Influence of industry on anticorruption programme of multinational corporations.....	28
2.5.1. Extractive industries (oil, gas, and energy & basic materials)	29
2.5.2. Utilities	29

2.5.3.	Health Care.....	30
2.5.4.	Financial sector.....	31
2.5.5.	Telecommunications.....	31
2.5.6.	Consumer goods and services, technologies, and industrials	32
3.	METHODOLOGY	33
3.1.	Objective	33
3.1.1.	Description of the theoretical model	33
3.2.	Dataset.....	34
3.2.1.	Description of the dataset	34
3.2.2.	Multinational Corporations	35
3.2.3.	Sector.....	35
3.2.4.	Country Headquarter	37
3.3.	Model	38
3.3.1.	Anti-corruption Programme (ACP) score.....	38
3.3.2.	CPI.....	41
3.3.3.	Ratio_HQ.....	42
3.3.4.	Ratio_HQ * CPI	42
3.3.5.	Controversy	43
4.	FINDINGS AND DISCUSSION.....	45
4.1.	Results	45
4.2.	Robustness of the model	46
4.3.	Findings and theoretical implications	47
4.3.1.	Hypothesis 1 - Institutional context.....	47
4.3.2.	Hypothesis 2 - Exposure in headquarters	49
4.3.3.	Hypothesis 3 - Sector.....	50
5.	CONCLUSION.....	54
5.1.	Summary	54
5.2.	Limits	55
5.3.	Corruption in the future research	56
6.	BIBLIOGRAPHY	58
7.	APPENDICES	63
	APPENDIX A : Multinational questionnaire.....	63
	APPENDIX B : Statistic results.....	74
	APPENDIX C : Hypothesis 2	77
	APPENDIX D: Corruption perception Indexes by year	78

1. INTRODUCTION

Corruption is a worldwide issue hitting society as a whole. It affects poor nations, as well as rich ones, local as well as national governments, small businesses as well as large multinational corporations, or private as well as public services. A place totally deprived of corruption does not exist on Earth, apart from a place unexplored by human beings.

The profound interest of scientists for corruption has risen in the last ten years, due to the publication of studies relating to the harmful effects that it has on society, and democracy (Jorgensen-Farrales, 2015). The number of studies and publications released by worldwide institutions has considerably increased over the last years.

Before the late 1990's, corruption in the private sector was ignored by governments and the political world. The first major advance took place in 1997, with the establishment of the OECD Anti-Bribery Convention. The OECD member countries and non-member countries agreed on prohibiting private-sector bribery. After this first initiative in the fight against private-corruption, the fight reached other international institutions such as the United Nations, through the United Nations Convention against Corruption for example (Runde, Hameed & Magpile, 2014).

Even with these progresses, the headline news is often grabbed with massive corruption scandals implicating leaders of worldwide companies, like sport institutions or leaders at a smaller scale. Here is an overview of recent cases of corruption that happened during the last two years 2015 and 2016. The four following examples highlight different sectors of society and show that corruption is likely to appear anytime and anywhere. This reality occurs not only in developing countries, but also close to us, even in the most developed countries.

We consider the Petrobras scandal as the first example of corruption that implies bribes between public officials and a multinational corporation. The facts were revealed in March 2014 and concern the oil multinational Petrobras and other large Brazilian construction companies, that were working on two huge projects on Brazilian territory. These companies formed a cartel in order to share the market, in exchange for bribes to the government in power to avoid being caught. This scandal implicates the actual Brazilian president who was not found guilty but has responsibility. Actually, Dilma Rousseff who was minister of Energy and president of the Executive Board, was currently aware of the fraud. Moreover, the inquiry revealed that the bribes were used to fund election campaigns of the leftist Workers' Party (PT) and to maintain it as the leader party of Brazil. The total losses to the state were estimated between R\$29 billion and R\$42 billion. (Leahy, 2016)

A second example concerns the sport world and occurred in 2015, the FIFA corruption scandal. The investigations lead by US department of justice and Swiss justice highlighted the doubt over the transparency and honesty in the process of allocating World Cup tournament, which is the most-watched sporting event in the world, but also in electing FIFA presidents and the administration of funds (Transparency International France, 2015a). Sepp Blatter, the former president of FIFA, and Michel Platini, former president of UEFA, were found guilty of breaches surrounding two million dollars of disloyal payments made to Platini in 2011. The FIFA ethics committee showed that both officials used abusive power of their positions (BBC, 2015). After this scandal hit FIFA, Transparency International suggested some measures to reform FIFA and avoid all forms of corruption from its governance (BBC, 2016).

The third example concerns Germany, which is often cited as a leader in term of fight against corruption. However, some of its industrial leaders are involved in corruption affairs. Siemens, Daimler and Rheinmetall, which contribute to the good reputation of German economy, are linked to cases of bribery in exchange of huge and lucrative contracts. Siemens is especially guilty of having paid bribes (estimated to 70 million of euros) to Greek public officials in order to obtain the renovation of the mobile phone network at the end of nineties. In 2011, the losses due to bribery were estimated at two billion for Greece. Both Daimler and Rheinmetall were found guilty for paying bribes in order to get profitable contracts in Greece. This example contrasts the reputation of Germany with the behaviour of its industrial leaders.... (Libération, 2015)

A third example hit the breaking news in 2016 and implies the former prime Minister of Malaysia. \$700 million, coming from public funds, was deposited on his private bank account in Saudi Arabia, which was not supposed to be the initial destination of this money. A report published by Wall Street Journal has linked this unknown transfer of money to a state-owned development company aimed to transform Kuala Lumpur in a flourishing financial centre of Asia (Transparency International, 2016f). This example underlines another case of grand corruption.

In the fourth example, we underline the field of fiscal fraud is wide, and many cases have been revealed to the public. We can also highlight the offshore leaks as well as Luxleaks. In this last case that concerns Luxembourg, some advantageous agreements between the Luxembourgish tax authority and international clients, such as multinational corporations among which Apple, Amazon, Ikea, ... are implied. The whistle-blowers Antoine Deltour and Raphaël Halet were both found guilty, suspended, and fined. This scandal raises the question of State governance, since Jean-Claude Juncker was Prime Minister and aware that Luxembourg was

practising tax ruling¹ at that moment, and in 2014 he has been elected as President of the European Commission (Transparency International, 2016g). This is left to the own interpretation of the reader.

Corruption is likely to occur in our daily lives. Here is a concrete and simple example of corruption, likely to happen in everyday life. It is Friday night and the night club is crowded. You really want to go inside for any reason. In order to go inside, you give a tip to the bouncer. He lets you enter and enjoy the night. In that case, you took part to corruption, even if the tip implied a little amount of money (Bardhan, 1997). The reader, without knowing it, could already have been the witness or the actor of corruption practices.

Corruption, under its different forms, has been, is and will still be present in our everyday lives, occurring in different places and implying several levels of damage. The costs of corruption will be illustrated in the next section.

1.1. Figures about the costs of corruption

Developing countries are the big losers, supporting a larger burden in the cost of corruption. The Control Risks Group, that is an independent global risk consultancy specialized in evaluating risk for complex and hostile environments (Control Risks, 2017) estimated in 2011 that developing countries lost close to \$1 trillion in fraud, corruption, and shady business transactions (Hameed, Magpile & Runde, 2014). Evaluating the cost of corruption is a difficult task since the authors of corruption want to make it remain under secrecy and so, information is difficult to obtain.

A 2015 OECD study has analysed the impact of corruption on economic growth. The results have shown that the link between corruption and GDP is hard to establish but that corruption has clearly a negative effect on key transmission channels, impacting the economic welfare and country's development potential. The study reviews the impact of corruption in four key sectors for growth and development but does not give any figures about the costs.

First, the extraction industry² is a major driver of economic growth in many countries due to a growing demand, rising prices and the geographic exploration and production. However, this sector is highly subject to corruption. Agreements between public and private agents result

¹ According to the European Parliament definition, tax ruling is defined as: « collective form of tax arrangements. It may occur in the form of an advance tax ruling, an advance pricing agreement or any other tax arrangement. There are formal and informal tax rulings.» (Directorate-General For Internal Policies, 2015, p.6)

² Activities related to the extraction of natural resources for profitable ends, such as oil, gas, mining, etc. (Campos & Pradhan, 2007)

in sub-optimal decision-making by selecting companies and planning which resources to develop. Moreover, it causes operational delays and divert generated funds from populations.

Secondly, utilities and infrastructure sectors play an important role in economic development. However, this sector is vulnerable to corruption through distorted competition, especially with frequent monopoly situations, in which those who control the entities receive large rents, at the expenses of the smaller ones. Government interventions are also quite frequent, creating opportunities for misuse of authority and demand for bribes.

The third dimension concerns health sector, whose investment is supposed to increase country's GDP growth. Six types of abuse that distort the sector have been identified: bribery in medical service delivery, corruption in procurement, improper marketing relations, misuse of high level positions, undue reimbursement claims, and fraud and embezzlement of medicine and medical devices.

And finally, the relationship between government spending on education and economic growth is positive. However, this growth is impeded by corruption that distorts capital investment, budget allocations, school construction, human resources management, and all other services supposed to meet population needs.

These system malfunctions refer to weak governance capacities, but also to well-identified corrupt practices. It has consequences on society welfare such as fewer people educated, lower levels of qualifications, decreased worker productivity, increased social inequality and difficulty to develop competitive industries. Hence, this research shows that corruption has a direct impact on the cost of projects both for the private and public sectors, as well as indirect effects such as damaging public institutions, impairing citizens trust in their government, and increasing social inequality, which impacts growth and development perspectives (OECD, 2015).

These figures illustrate the costs of corruption and how it is harmful for the global economy. Illicit financial flows such as bribery, theft, and tax evasion, are evaluated to cost US \$1,26 trillion per year for developing countries. In terms of opportunity cost, this amount of money could lift the 1,4 billion people living with less than \$1,25 a day above this threshold for at least six years (Kar & Freitas, 2011).

1.2. Corruption in the world

1.2.1. What is corruption?

The NGO (2016a) defines corruption as: “the abuse of entrusted power for private gain. It can be classified as grand, petty and political, depending on the amounts of money and the sector in which it occurs “(Transparency International, para 1, 2016). It places the principal-agent problem at the centre of all corrupted practices. (Rose-Ackerman, 1999). The abuse for private gain occurs when an official accepts, solicits, or exhorts a bribe. It is also the case when private agents actively offer bribes to circumvent public policies and processes for competitive advantage and profit. A public officer can also abuse for personal benefit even if no bribery occurs, through patronage and nepotism, the theft of state assets, or the diversion of state revenues (World Bank, 1997).

Transparency International is an international, worldwide non-governmental organization founded in 1993. It is the main association of civil society that devotes itself, both at national and international level, to the promotion of integrity and fight against corruption. Their long-term vision consists in a world free of corruption. Through its international secretariat based in Berlin and its chapters based in more than 100 countries, the NGO is leading the fight against corruption and gives voice to the victims and witnesses of corruption. Transparency international works in collaboration with governments, businesses, and citizens to stop the abuse of power, bribery, and secret deals. They often publish reports assessing corruption in the world or in more local areas, and produce some researches about this topic (Transparency International, 2016b).

Corruption in the private sector is linked to dysfunctional governance system. There exist two general types of corruption: bureaucratic or political. “The bureaucratic type refers to petty corruption and is associated with subordinate public officials using authority transferred to them by the government to extract bribes, embezzle public funds, commit fraud, and other forms of corruption. The political type, considered as grand corruption is related with the political elite designing public policies or changing laws and regulations for their own benefit at the expense of the population.” (Forgues-Puccio, 2013, p.1)

On a political front, corruption is harmful for the establishment and persistence of democracies because institutions lose their legitimacy in the presence of corruption, due to the misuse for private advantage. From an economic point of view, corruption hinders the investments supposed to benefit all the communities like health, education, food, and other social issues for which the state is supposed to intervene. Instead, the money is kept in the

pocket of corrupt politicians. It leads political institutions to intervene where their action is not needed and so, to misuse funds. Finally, it negatively impacts the trust people have in their political system, institutions, and leadership, as well as the environment that is degraded, in favour of destructive but money-making activities (Transparency International, 2016a).

This thesis focuses on the corruption as an illegitimate exchange of resources involving the use or abuse of public or collective responsibility for private ends (gains, benefits, profits, or privileges). It includes corruption between organizations and political agencies, but also between organization. In a broader sense, corruption involves role behaviour in any institution (not just government or public service) that violates formally defined role obligations in search for private gains. Corruption includes diversity of practices in the private sector such as (Luo, 2004):

- ❖ *Bribery (or kickbacks, red envelopes, gratuities, facilitation payments and expediting fees)*: payments (in money or kind) given or taken in a corrupt relationship. For organizations, bribery of public officials is the most prevalent form of a corrupt act. Private parties use it to “buy” things provided by central or local governments, or officials may seek bribes in supplying those things. It is the most common type of corruption. The following points are concrete examples on how firms can use bribery to increase their private gains: (World Bank Report, 1997)
 - Firms use bribery to influence government contracts. For example, when a firm pays the government to influence its choice of supplier of goods or services, as well as the terms of the contracts.
 - Firms may also use bribes to negotiate their tax bill with the national authority.
 - Another way is the use of bribes to obtain licences ensuring the firm the monopoly on the exploitation of a resource.
 - Bribes affect the administrative time procedures, which may be sped up or slowed down.
 - Bribery is used through the political process to ignore illegal practices or favour one party.
- ❖ *Fraud*: economic crime that involves some kinds of trickery, swindle, or deceit. (Luo, 2004)
- ❖ *Extortion*: it involves corrupt transactions where money or other resources are violently extracted by those who have the power to do so. It concerns embezzlement by a

company's own employees, corporate fraud, and insider trading. The more the size of a firm increases, the harder it becomes to control actions of all employees. (Luo, 2004)

- ❖ *Favouritism*: mechanism of power that privatizes public resources, a highly-biased distribution of state resources. The way resources were accumulated in the first place does not matter. It means favouring friends, family, and anybody close and trusted, at the expense of public interests (Forgues-Puccio, 2013).
- ❖ *Collusion*: the firms form a cartel and collude secretly, which allow companies to pocket illicit profits and reduces consumers' welfare. "Companies collusive behaviour enabled them to charge higher price than if the full forces of competition had been at play". (Belleflamme & Peitz, 2013, p.336)

Corruption implies a wide range of risks going from little gifts of wine bottles, or jewellery to the partner of an official, to the misuse of billions of dollars to gain the exclusivity of a project supply (Sutherland, 2011).

People often make confusion and amalgam between bribes and lobbying, even if they are easily distinguishable. Both are exerted by firms but there are fundamental conceptual differences. The first difference is the fact that lobbying affects all the firms of the same sector, whereas bribery concerns only an individual firm. The second difference concerns the permanence of the change, that is longer when lobbying causes the change, than when bribery is the cause. Lobbying influences laws and political decisions, whereas the actors of bribery want to make it remain hidden. A third difference, is that lobbying influences government rule making based on the trade-off between the benefits of income from lobbying and the cost of the government for changing a rule. On the other hand, the decision of making bribery is based on the private cost and benefits of public officials. And finally, in contrast to bribery that concerns the private benefit and cost of the action, lobbying involves collective problems. (Svensson, 2005)

This distinction is important since we do not consider lobbying in our study of multinationals' anti-corruption programme, even if multinationals are the main actors of lobbying practices that do not always provide the optimal solution for societies. There have been many cases of corruption in the lobby sector triggering codes of conduct and legislations.

Private and public corruption are interlinked. Private sector corruption occurs when corruption is systemic in the public sector, meaning that regulatory frameworks, laws, and arbitration are weak. Money laundering, tax evasion, illicit financial flows are other forms of corruption that are not considered in the Transparency International definition of corruption.

But they take away resources away from developing countries and contribute to increase the inequalities in developing countries (OECD, 2014).

Evaluation of corruption is a difficult task, since the information is not available or difficult to obtain. Corruption implies several opportunity costs. It creates inefficiencies in the economy, giving excessive power to public officials over regulations and the state lead. Corrupted behaviours enhance weak institutions, striving to address structural problem. It perpetuates this negative cycle of corruption and bad governance. (TI Global Corruption report, 2009)

1.3. The role of multinational corporations in the persistence of corruption

1.3.1. Multinational corporations

Major financial actors, multinational corporations are directly implicated in everyday lives of citizens, in what they daily consume, in their living environment, or still in what they are watching through the media and particularly through advertising. Everywhere we go, we see pictures of products sold or manufactured by multinationals. They play a significant role in the improvement of the well-being of societies, communities and so, in the well-being of individuals. They produce wealth, make the people consume more, increase the varieties of products for consumers. They can also generate new ideas, innovations, new ways to use resources according to the actual challenges faced by world.

On the contrary, these economic actors are likely to act in a completely opposite way and so, they fail to achieve their social goals. They manage considerable amounts of money, enriching only a minority of the populations at the expenses of the many. In an economic world lead by the power of money, they overexploit natural resources, destabilize societies or influence the behaviour of governments. Firms and multinational corporations determine whether business and markets have a contributory role for society, or in the opposite way, playing a destructive role. (TI Global Corruption Report, 2009)

As we go deeper in the theoretical framework, Bartlett and Goshal defined the multinational corporation as: “a group of geographically dispersed and goal-disparate organizations that include its headquarters and the different national subsidiaries. It is an entity conceptualized as an interorganizational network that is embedded in an external network consisting of all other organizations such as customers, suppliers, regulators, and so on, with which the different units of the multinational must interact.” (Bartlett & Goshal, 1990, p.603)

This definition shows that multinational corporations are complex organizations because they operate in many countries and have the possibility to develop close relationships with a

wide range of stakeholders, notably governments. These relationships imply significant amounts of money, with information that remains under secrecy, out of the official and public communication channels. The fact that multinational corporations operate in multiple and fragmented contexts of several countries, complicates the control over the possible corrupted practices. (Kostova, Roth & Dacin, 2008)

Finally, multinationals operate in complex and fragmented environments all around the world. They outsource their production in developing countries, where workforce is cheaper, where levels of poverty are extremely high, the population has no say and the power remains concentrated in the hands of a few. In such countries, they face diversity of culture and practices and the formal institutions are weak to regulate corruption, at the expenses of the poorest.

1.3.2. The role of the private sector in the fight against corruption

The definition of multinational corporations shows that they are particularly exposed to corruption facts because of their complex organizational structure. Acts of corruption are common in the private sector, like the payment of bribes to secure public procurement contracts or to exert pressures on institutions to influence regulations to set up favourable investment conditions. (Transparency International Global Corrupt Report, 2009)

The harmful consequences and costs of corruption on our society have been developed previously in the introduction. Because MNCs are major actors in the development of societies and that they are subject to corruption practices, they play a significant role in the fight against this worldwide societal issue.

Since private corruption has become a publicly known issue, NGOs, institutions, and governments are putting pressures on governments and MNCs to develop strong regulations or to impose the implementation of anticorruption practices within their governance. Transparency International is a worldwide major actor, exerting influence and pressures on political institutions, as well as on the economic activity. Institutions such as UN and OECD have developed conventions against corruption in the private sector. The International Organization for Standardization (ISO) develops international standards, which companies have the possibility to comply. ISO 37001 provides recommendations for establishing anti-corruption management systems within organizations (ISO 37001, 2016). The publication of anticorruption rules constitutes a fundamental step in the path to remediate corruption within private organizations and it is a way to make companies more accountable. Gradually and progressively, the pressures exerted by those organizations help to improve the worldwide control on corruption and to manage this social worldwide issue.

We also study the impact on the sector on the quality of anticorruption, since the relationships with governments or even regulators differ according to the sector to which multinational corporations belong.

1.3.3. Incentives for MNCs to comply towards anticorruption practices

Companies and businesses are facing several incentives to comply towards anticorruption practices. First of all, the ethical reason which depends on the conscious and personal values of the leaders, in providing the appropriate conditions to do business in an honest and transparent way. Above this ethical dimension, there is a self-serving reason. This aspect influences leaders' behaviour because complying towards anticorruption practices reduces the long-run costs of doing business. It helps to attract investments due to their ethically oriented behaviours, allowing a business to be a preferred partner for consumers and customers that value ethics and transparency. A higher level of transparency, added to ethical practices will help attract ethically oriented investors that give importance to these values. The morale and motivation of employees will be boosted, positively impacting their productivity. (Runde, Hameed & Magpile, 2014) Finally, in global competitive market, the reputation aspect of being ethical is also highlighted. Thus, the MNCs will gain higher benefits in the long-run. (Transparency International : Corruption Perception Index, 2015)

Since history has been marked by corruption scandals, authorities have decided to establish regulations depriving economic actors to behave in unethical ways on pain of severe sanctions such as fines or exclusion from the market. In 1999, OECD published OECD Convention on Combatting Bribery of Foreign Public Officials in international business transactions followed by United Nations Convention against corruption. (Hauser & Hogenacker, 2014). Multinational corporations must comply to these conventions due to their fragmented environments and their exposition to different levels of vulnerability to corruption. Later in 2010, UK codified UK Anti-Bribery Act. Since national and international authorities are stricter toward compliance with these laws, fines are becoming higher and higher each year. Besides this financial loss, the reputational loss is huge for companies that are found guilty (Transparency International UK, 2015).

1.4. The influence of the environment on the behaviour of economic actors

The environment in which people live affects and orients their behaviour. Different types of institutions characterize the environment. These institutions are formal such as legal institutions establishing norms, regulations, and laws, providing social actors rewards or sanctions, in case of obstruction. Some institutions are political. Some others are informal such

as the culture, which plays a role in the habits of people, in what they believe, and in the way they socially accept the formal rules. All these institutions appeared, persisted, or disappeared throughout the history.

The institutional theory provides an explanation on the process of institutional development and how this process influences the behaviour of social actors. The institutional theory helps us to answer our research question, that is “How does the institutional context in which multinational corporations are operating affects the quality of their anti-corruption programme?” This theory is our main theoretical background providing a relevant answer to the question.

1.5. Reasons for writing a thesis on this subject

The starting point of the long thinking process resulting in the research question emerges during the redaction of Transparency International TRAC report in 2015 which aims to assess the quality of anti-corruption programmes of multinational corporations. Corruption still remains a touchy and taboo subject for companies even in the most developed countries,

Transparency International has developed several indexes and publishes reports measuring corruption in the world. Corruption Perception Index reveals huge gaps between countries. For example, Russian CPI is low and corruption acts such as bribery are common practices. On the other hand, in Belgium, CPI index is higher and it is rare to find such practices. These two countries are operating with different political and legal systems, different religions, and cultural norms. Secondly, TRAC reports gather scores for multinationals in specific sectors, or in emerging economies. And again, the scores vary considerably between the multinationals. By putting these two observations together, our research question about the link between the institutional environment (laws, norms, and regulation, but also culture and habits) and the quality of anticorruption programmes established by multinational corporations emerges, and consequently raises several other interrogations and sub questions.

Corruption is a sensitive topic implying several dimensions of the society such as the political world, the public sector through public services, and the private sector. The headlines are often grabbed by controversial information involving world leaders and huge amount of money. As it becomes common knowledge, it creates controversy and revolt in the mind of the populations. It reflects how the leaders misused the money supposed to serve the majority, finally remaining in their pocket. The opportunity cost of this issue is significant and could be used to solve other global world issues such as poverty, malnutrition, slums, ... notably in developing countries.

National governments under the pressures of NGO and other institutions, firms by themselves or other institutions impose the private sector to comply with regulations about corruption. These standards push private sector firms to comply, providing them with a better reputation, improving their external image and their productivity. So, by complying and establishing anticorruption programmes, they finally improve their profitability in the long run. They put pressure on the private sector by developing and publishing indicators and reports at different levels (national like the CPI or IPI, or micro-level TRAC report) comparing the practices established within the companies. Multinational corporations are main actors in the persistence of corrupted practices. By publishing reports and documents about this problem, citizens are aware and will change their habits. Writing a thesis about this topic is an opportunity to commit ourselves in the fight against corruption and improve, little by little, unequal and unfair situations in the world by creating incentives for companies to act proactively and establish preventive measures within their operating activities and governance.

Thirty years ago, literature started to address this controversial and wide subject. Among the researches, there are topics such as the consequences of corruption on growth and productivity in the private sector, or the cost implied. The researchers computed estimations based on different criteria, concluding that corruption is hard to evaluate, due to the difficult access to information. Institutions such as World Bank or OECD have published quantitative studies reporting the costs implied by corruption at different levels. They showed that overall, for all those levels, corruption hampers either the development of developing or developed economies, or the development and growth of businesses. The authors concluded that bribes have a significant negative impact on firm-level productivity. The other aspect of our research concerns the institutional environment in which the multinational corporation is operating. We use the institutional theory to link the institutional environment to the quality of anticorruption practices. This theory is deeply exploited within the literature, with several seminal authors. Authors studies the link between the institutional environment and private corruption by focusing on a limited geographic are such as emerging countries, or in small and medium enterprises. They compare the institutional environments to determine the institutional factors implying corruption. However, they did not apply it to multinational corporations. The institutional theory applied to corruption in multinational corporations remain unexploited. In this thesis, we examine companies operating over the five continents, mixing emerging and developing countries, allowing us to confront the institutional differences.

Since it is imperative to go towards a fairer world by promoting transparency, and since the literature gathering institutional theory and corruption in multinational corporations is poor, we decided to go deeper and focus our inquiry about that topic.

1.6. Structure of the thesis

The thesis starts by the theoretical framework, followed by the methodology that explains our model and the results, then we discuss the results and finally we conclude.

The theoretical framework develops a historical perspective of the institutional theory that explains its evolution since its emergence in the forties. We develop the process of isomorphism, by which organizations institutionalize practices. Then we apply the theory to multinational corporations and we underline the relevant institutions that play a role in corrupted practices. The theory is applied to corruption in multinational corporations. The theoretical framework, we determine three hypotheses on which we base our model.

In the methodology, we develop the model, we explain how we collected our data and we compute the results through the R software. After that we discuss our results and analyse whether we accept or reject our hypotheses. Finally, we conclude the thesis by a summary of the research, the limits and possible improvement of the model, and the possible future researches.

2. THEORETICAL FRAMEWORK

The theoretical framework aims to understand the influence of the national home context in which a multinational and its subsidiaries is operating on the development of its anticorruption programme. More precisely, we analyse the institutional theory focusing on the formal and informal institutions orienting the behaviours of economic actors.

The section starts by defining what is a multinational corporation because its operating on a transnational environment. Then the theory used is the institutional theory, aiming at understanding what are the parameters leading multinational corporations to behave differently among the different national fields of action in anticorruption practices. In addition, it is necessary to understand what are institutions and the theory resulting to apprehend deeply multinational corporations and their behaviours.

2.1. Multinational Corporations

2.1.1. What is a Multinational Corporation?

Since the 60's and the occurrence of a deep interest for multinational corporations, researchers have tempted to define these complex organizations, analyse their structure and theorize the governance of such complex organizations.

A multinational corporation consists of a group of geographically dispersed and goal-disparate organizations that include its headquarters and the different subsidiaries. It is conceptualized as an interorganizational network embedded in an external network consisting of all other organizations such as customers, suppliers, regulators, and other stakeholders with which the different units of the multinational interact (Bartlett & Goshal, 1989).

Multinational corporations are physically dispersed in environmental settings corresponding to diverse economic, social, and cultural contexts. The interactions between headquarters and subsidiaries constitute a network of exchange relationships among different organizational units collectively embedded in a structured context. (Bartlett & Goshal, 1990)

2.1.2. The role of headquarters in multinational corporations

This section aims to understand what is exactly the role of the headquarter within the global organization, opposed to the role of the subsidiaries.

A multinational corporation is a complex model organization in which the business environment is becoming increasingly crucial. Moreover, the perception of the subsidiary has evolved and it is no longer considered only as the “extended arms” of the multinational corporation's mother company. Now it is perceived as a direct contributor to the overall

competitiveness of the global organization by developing their own competences and so, it owns a strategic role. (Andersson & Holm, 2010)

The first mission of the headquarter is to define the best restructuration and organizational solutions, that fit with the requirements of the business environment on which the firm is operating. Each subsidiary requires to understand and evaluate its local environment with its different parameters: the markets, competitors, technologies, regulations, and other parameters, which is essential for decision-making. Dynamic environments require explicit actions by the headquarter (Andersson & Holm, 2010). But also for Bartlett & Ghoshal, multinationals are facing increasingly dynamic environments and it is important to define a strategy that responds to several simultaneous requirements. They respond to pressures of global integration as well as local responsiveness, in their operating activities. A multinational faces a dilemma between global integration and local responsiveness. In a case of global integration, headquarters lead the strategy, without letting initiatives and independence to the subsidiaries. It implies the creation of a global product that does not consider the local specificities and sensibilities of the market. However, the local responsiveness allows the subsidiaries to become more autonomous and thus, to answer the specific needs according to the institutional and contextual differences. (Bartlett & Ghoshal, 1989)

2.2. Institutional Theory

2.2.1. An historical perspective

In the beginning of twentieth century, researchers became interested in the study of institutions to understand social actors' behaviours. Two currents of Institutional theory emerged during the history: old Institutionalism and new Institutionalism. The former one began from the forties until the seventies shaped by the apparition of the neoinstitutional approach. Both emphasize how institutions influence the organizations by considering the institutional environment (Scott, 2014). Institutional theory sheds light on the way organizations adopt and diffuse their organizational practices (Kostova & Roth, 2002).

The added value of institutional theory and its modelling consists in defining clearly how the context influences the ways organizations operate. Moreover, it defines the interplay between the rules of the game and the behaviour between institutions and social actors. Institutional constraints provide the incentive structure of the actors that support the development of nations. This theory sheds light on the history because institutions and the context in which decision-making occur are derived from the past and the historical context matters for the development of institutions. (North, 1990)

2.2.2. Old institutionalism

The pioneers of institutional theory are Merton and Selznick. The latter went deeper in the analysis of the relationship between institutions and organizations, whereas Merton, focused on the way rules oriented the behaviour of leading officials, through bureaucracy. He concluded that the symbols created by bureaucracy, such as the social status, imply different leadership attitudes. (Scott, 2014)

Selznick introduced the idea that the environment and the social characteristics of its participants influence organizations. Moreover, he introduced the concept of institutionalization as a process occurring over time, depending on the own history of the organization, on the people that are interacting in and with it. The process of institutionalization transmits values beyond the basic technical requirements and organizations define their own identities by acquiring those sets of values. The process goes beyond the instrumental vision of the organizational management. There are several degrees of institutionalization depending on the way those values are infused. Merton focused on the bureaucratic aspects of organizations that influenced the behaviours of official leaders, whereas Selznick focused on the history defining capabilities and structure of organizations. Both went over the instrumental vision that was predominant during the previous years, and emphasized the role of values. (Scott, 2014)

2.2.3. New institutionalism

This current of Institutional theory has appeared in the seventies as a continuity of old institutionalism. Both approaches highlight the interconnection between the organizations and their environments, and the influence of the culture in the determination of organizational reality. Moreover, they also both reject the organizational behaviour as the sum of individual actions. (DiMaggio & Powell, 1991)

We focus on the new perspective because it underlies more dimensions and is broader than the old institutionalism. Since the old institutional theory emphasizes the internal aspects of organization in the process of institutionalization, we will use the new approach that studies the impact of the external institutional environment on the adoption of behaviour by the organization (Scott, 2014). We consider the sociological aspect which emphasizes the relationship between organizations and institutions. (Scott, 2014)

According to Scott, pioneer of the neoinstitutional current, “institutional theory considers the processes by which structures, including schemas, rules, norms, and routines, become established as authoritative guidelines for social behaviour. It inquires how these elements are

created, diffused, adopted, and adapted over space and time; and how they fall into decline and disuse.” (Scott, 2004, p. 408)

John Meyer and Brian Rowan introduced institutions as “complexes of cultural rules”. (Scott, 2014, p.50). Moreover, they argue that “organizations are not simply the product of increasing technical sophistication, as had long been argued, or even of increasingly complex rational patterns, but result from the increasing rationalization of cultural rules that provide an independent basis for their construction” (Scott, 2014, p.50). They have underlined the importance of values in the construction of organizations and in the institutional environment at a macro level. On the contrary, Zucker in 1977 has focused on a more micro level with the cognitive beliefs that make behaviours evolve. Later in the 1980’s, there have been two couples of influential authors, DiMaggio and Powell, and Meyer and Scott, who developed a macroenvironmental perspective of institutionalization (Scott, 2014).

2.3.Institutional Theory

2.3.1. What are institutions?

“Institutions are the humanly devised constraints that shape human interaction” (North in Gregory and Stuart, 2004, p. 17). They are composed both of informal constraints and formal rules. Formal institutions are the political constraints on government behaviour enforced by legal institutions and informal institutions are the private constraints stemming from norms, culture, and customs that emerge spontaneously (Williamson, 2009). The way institutions evolve influence the incentive structure of an economy and so, it shapes the long-run economic performance. According to Douglas North, who received the Nobel Prize of Economy in 1993, institutions structure the incentives which define the way economies evolve over time. For example, the institutional framework of rules, norms, and enforcement characteristics but also the constraints imposed by institutions such as budget or technology (North, 1990).

Zucker defines institutions as “the more enduring features of social life... giving solidity to social systems across time and space. They can be transmitted across generations, maintained and reproduced.” (cited in Scott, 2014, p. 57)

Two forms of institutional structures compose society: formal institutions and informal institutions. On the one hand, formal rules function to facilitate socially desired kinds of exchange and to discourage the less desirable kinds, like laws or contracts. They are typically supplemented by codes of conduct, norms of behaviour and conventions (De Vaal & Ebben, 2009). Formal institutions define property rights, that are “the rights to use and dispose of an

economic resource.” (Misahiko, p.5, 2001), and contracts that are “agreements embedded in property rights, regarding the use or exchange of goods” (Misahiko, 2001, p.5). On the other hand, the informal institutions are endogenous, embedded in the culture of a society, and so, they change very slowly. Both the existence of formal and informal institutions is essential for the working of societies (de Vaal & Ebben, 2009).

Institutions are fundamental because they constitute a support for the relationship that firms develop with their different stakeholders. An important point is to identify what are the institutions embedded, to distinguish them in diverse environments and to understand how they influence the behaviour of those organizations.

For North, the history shapes institutions, limiting the options available to decision makers. The state plays an important role in the persistence of institutions because they define property rights. Citizens perceive political institutions as legitimate or not, based on ideologies. (DiMaggio & Powell, 1991)

To make an analogy, institutions are the rule of the games and firms, organizations, and other actors are the players of the game. But during the game, players can change the rules by themselves, which implies institutional change. The rules of the game or their non-existence determine the incentives of the players. (North in Misahiko, 2001)

2.3.2. Institutional environment

The institutional profile is defined as “the issue-specific set of regulatory, cognitive, and normative institutions in a given country” (Scott in Kostova & Roth, 2002). Institutions are responsible for defining the acceptable and non-acceptable behaviours. They define the boundaries of such behaviours by imposing legal, moral, and cultural norms. Institutions constitute either a support or a constraint for the activities of actors by providing guidelines, stimulus as well as prohibitions for action. One of the major institutions is the State, which oversees providing stability and order in a nation. But institutions imply social dimensions that go beyond the limited state property. They interact with organizations and actors at multiple levels of society from interpersonal relations to macro levels such as wars or financial crisis. The following three pillars compose the institutional profile and explain how institutions exert influence on social actors’ behaviours.

- ❖ *The regulative pillar* highlights the role of institutions to constrain the behaviour of actors and organizations by setting regulatory processes and norms. Institutions can control the behaviour of actors by establishing sanctions, as well as rewards. The regulative process is achieved through the rule systems and enforcement mechanisms.

This pillar concerns the formal rule of the game. The State and the judiciary system is the main rule maker.

- ❖ *The normative pillar* includes values and norms. “Values are conceptions of the preferred or the desirable together with the construction of standards to which existing structures or behaviours can be compared and assessed. Norms specify how things should be done; they define legitimate means to pursue valued ends. Normative systems define goals or objectives (e.g., winning the game, making profit) but also designate appropriate ways to pursue them (e.g., rules specifying how the game is to be played, conceptions of fair business practices).” (Blake and Davis in Scott, 2014, p.64)

The norms attribute roles to social actors by associating specific activities and goal to an actor according to his specific social position. Depending to his role, the actor knows the actions he can undertake or not. (Scott, 2014)

The pillar refers to the implicit guidelines and ways of behaving in the society that appeared through the common practices made by the actors. They are not formally defined by a rule maker but they appear implicitly in the society.

- ❖ *The cultural cognitive pillar*: the pillar concerns the symbols, words, signs that shape the meaning of the objects and activities. Cultural systems are operating at all levels of the society from local situation, to the organization’s culture, to the differences of cultures between the nations in political and economic systems, as well as religions. Those levels shape actors’ behaviour. (Scott, 2014)

The practices persist within an organization because they are constituted by a mix of these three pillars. The practices are embedded in the formal rules of the game, they are socially accepted as norms by the actors, and finally, they are included in the organizational culture. If the three pillars are not aligned, conflicts will emerge, leading to institutional changes because the misalignment creates different expectations from the actors compare to the present institutional arrangement. But the more they are aligned with each other, the stronger and the more persistent are the institutions. (Scott, 2014)

2.3.3. The importance of legitimacy in the persistence of institutions

The role of legitimacy is fundamental for the persistence of organizations. Without legitimacy, organizations cannot survive within their environments. As Suchman describes: “Legitimacy is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions (Suchman in Scott, 2014, p.71).” Legitimacy is the process by which organizations

and practices are accepted which is a necessary condition for social existence. The normative pillar underlines a deeper base for reaching legitimacy because it concerns moral obligations. The regulative pillar relies on the existence of relevant laws and regulations. And finally, the cultural-cognitive pillar is the deepest integrated in the society, since it concerns practices included in the traditions, unconsciousness of actors and taken-for-granted understandings. (Scott, 2014)

2.3.4. The process of institutionalization

Legitimacy is central in social life and its sources are diverse because of the complexity of the actual society. It influences the viability of the organizations. The sources of legitimacy for organizations are other organizations, whose activities, practices, or strategies are culturally admitted and receive support from normative authorities, such as for example legal bodies are more likely to survive in the institutional environment than the one lacking this legitimacy. (Scott, 2014)

The stake of companies operating in conflicting environments is to maintain their legitimacy, to survive within this environment, meaning that their practices remain socially accepted by the population, organizations, and institutions that constitute this environment. The forces of the institutional environment enforce the actors to redefine their organizational structure, it influences their internal structure, as well as their potential responses to institutional pressures. (Scott, 2014)

DiMaggio and Powell have identified three processes by which organizations acquire institutional effects. Therefore, practices become institutionalized and persist in a specific institutional environment. Institutional theory implies organizational isomorphism, that is defined as the result of imitation or independent development under similar constraints. It results in similarity or identity of form, shape, and structure of one organization to those of another (Caemmerer & Mark, 2009). The effect of institutional pressures increases the homogeneity of organizational structures in an institutional environment, through a process of isomorphism. These three types of isomorphism are the processes by which practices are transmitted and adopted by other organizations:

- ❖ *Coercive isomorphism*: it implies laws that come from non-governmental regulations, the transmission of social facts, generally from external sources. It concerns the influences coming from the organizations they are dependent upon (Zucker, 1987). The externally codified rules, norms or laws that assign legitimacy to new management practices. For example, in the case of CSR development in Europe, in the last decades, there has been a

rush of government and initiatives fostering its spread. The codes of conduct issues by bodies such as the United Nations, OECD, International Labor Organization or GRI are considered as sources of coercive isomorphism. (Matten & Moon, 2008)

- ❖ *Imitative or mimetic isomorphism*: it implies imitating the behaviour of organizations facing the same problems or adopting others' successful elements under a high level of uncertainty (Zucker, 1987). In fact, in a business climate of increased uncertainty and increasingly complex technologies, managers tend to consider practices as legitimate if they are considered as best practices in the organizational field. For example, a lot of European multinational corporations are subscribing for CSR training programs to learn and develop the best practices. (Matten & Moon, 2008)
- ❖ *Normative isomorphism*: It comes from the similar attitudes and approaches of professional groups and associations brought into the firm through hiring practices. It can be compliance by social obligations, certifications, or accreditations (Zucker, 1987). It stands for educational and professional authorities that directly or indirectly set standards for legitimate organizational practices. CSR is mandatory part of learning programs in business schools (Matten & Moon, 2008).

The institutional theory finally teaches that organizational practices require to be socially accepted and legitimated by the other actors of the institutional environment in which they behave, otherwise. Without legitimacy, they cannot survive, persist, and being diffused to other organizations through the coercive, mimetic, or normative isomorphisms.

2.4.The Influence of institutions on anticorruption programme of multinational corporations

The institutional theory suggests us that the organizations that are sharing the same environment will employ and develop new practices through the concepts of isomorphism, under three possible forms: normative, mimetic, and coercive. By acquiring legitimacy, organizations make their practices socially accepted. Therefore, they persist and are transmitted to other organizations (Di Maggio & Powell, 1983). Formal and informal institutions shape the behaviour of the organizations, institutions or individuals that are acting within their environment.

Multinational corporations are operating in multiple, fragmented, and complex national environments. Since their subsidiaries are usually in different continents, the management and consideration of these different institutional environments is necessary. Each nation or region

of the world are facing different institutional environment. For example, the culture or legal system are usually specific to each nation. The institutional complexity characterizes multinational corporations. (Kostova & Roth, 2002)

This is difficult task for multinational corporations because they are facing institutional duality (Kostova & Roth, 2002). On the one hand, they are operating in fragmented environments through their subsidiaries residing in specific institutional structures, facing varied structures of institutions. Some practices are perceived as legitimate in specific environments, whereas they could be perceived as illegitimate in another one. They want to answer and adapt their practices to local specificities. On the other hand, they face global integration with which it integrates its resources worldwide, achieving economies of scale. It brings them a competitive advantage but does not consider the institutional differences (Bartlett & Goshal, 1989). Multinationals are facing a trade-off between the need of local responsiveness and global integration.

2.4.1. How does the institutional environment influence subsidiary's adoption of corrupted practices?

Multinationals are operating in diverse, fragmented, and conflicting institutional environment with headquarters situated in the home country and the subsidiaries spread all over the world (Spencer & Gomez, 2011). Moreover, they face a dilemma between global integration and local responsiveness (Bartlett & Goshal, 1989).

Kostova and Roth (2002) determined two ways by which the national environment of a foreign subsidiary influences the adoption of organizational practices. The first way is the direct institutional pressures exerted by the nation on the subsidiary to establish a specific practice which is independent from the guidelines imposed by headquarters. They are exerted by the institutional environment in which the multinational is operating. The subsidiary acquires practices through the process of normative isomorphism, following and establishing the practices of the other companies operating within the same institutional environment (Kostova & Roth, 2002). However, the subsidiary is not completely isomorphic because the headquarters still exert a control over the adoption of practices over its subsidiaries. The second way is independent on the institutional environment itself, but arises from the employees working within the subsidiaries and whose behaviour is influenced by the institutional environment. The employees will approve or not a specific practice depending on their cognition, beliefs, and values (Kostova & Roth, 2002). The second way is an indirect influence and corresponds to the

informal institutions (culture, habits, ...) of the nations, which are captured and deeply institutionalized in the behaviours of the people.

The practices that the multinational diffuses to its subsidiaries are defined in the headquarters under the pressure of the home institutional environment. The relationship of dependence exerted by the headquarters over the subsidiary affects its compliance with institutional pressures. The more a subsidiary depends on its headquarter, the more it complies with the demands of the headquarters. If the relationship of dependence is low, the subsidiary will not comply and will manipulate the environment. Despite the dependency with headquarters, trust has a positive effect on the adoption of a practice imposed by the headquarters on the subsidiary. Moreover, the identification, that is the extent to which subsidiary employees feel belonging as attached to the company, creates this feeling of organizational membership, and increases the trust employees have in their company. The more the subsidiary employees feel identified to the parent company, the more efficient is the adoption of practices. The concept of ceremonial adoption depicts a transfer of practices to which the organization does not provide a positive attitude. For example, it is likely to happen when a practice faces a high level of uncertainty or when the members of the subsidiary does not believe in this practice but the institutional pressure of the headquarter to implement it is strong. (Kostova & Roth, 2002)

Without legitimacy, the survival and persistence of multinational corporations is endangered since its practices are not socially accepted. However, the perceptions of what is legitimate differ among institutional and headquarters should take them into account when they put pressures on their subsidiaries to adopt practices (Spencer & Gomez, 2011).

Spencer and Gomez applied the institutional theory to corruption practices in multinational corporations. They established the diverse pressures multinational corporations are facing regarding corruption. They found out that when a company is operating in a host country where corruption is institutionalized, the officials exert coercive pressures on companies to make them comply with corrupted acts. If a company has a reputation of uncorrupted behaviour, the pressures coming from the varied institutional environments that aim to make it act in corrupted way are lower than for a multinational without this reputation. Finally, the cooperation with local partners in host countries undermines corruption because of the strong pressures exerted by the officials in host countries. However, these pressures are lower when the multinational corporation comes from a country where corruption is institutionalized. (Spencer & Gomez, 2011)

Acts of corruption constitute a violation of formal institutions (Kahn, 2006). Using corrupting practices in an institutional environment in which they are not tolerated constitute a risk for the survival of the company. CSR adoption increases the legitimacy and social acceptance of multinational corporations (Palazzo, 2005). This is especially true for companies operating in controversial sectors. Since their activity is polemical and society is reluctant in accepting their practices, they have interest in developing the CSR.

2.4.2. Corruption, formal and informal institutions

The functioning of a state depends on the quality and the efficiency of its formal institutions. The interactions between the formal and informal institutions condition corporate governance. The formal institutions, comprising legislation, regulation, the transparency of governments, the market, the security of property rights, will determine the structure of the corporations' governance. The interaction between formal and informal institutions can either be beneficial, either be detrimental depending on the context. When the formal institutions of an economy are weak and inefficient, it lets the possibility for informal institutions to grow. Informal institutions are significant for emerging economies because the formal institutions are not transparent and inefficient. (Estrin & Prevezer, 2011)

Douglas North defines institutions as "Institutions are the humanly devised constraints that shape human interaction" (North in Gregory & Stuart, 2004, p. 17). They are composed both of informal constraints and formal rules. Formal institutions are the political constraints on government behaviour enforced by legal institutions, the written rules of the games. For instance, formal institutions are enforced by state bodies like courts, bureaucracy, legislatures, laws, or regulations, which are defined and established through the official channels (Estrin & Prevezer, 2011). On the contrary, informal institutions are the private constraints stemming from norms, culture, and customs that emerge spontaneously, the unwritten rules of the social game (Williamson, 2009). Helmke and Levitsky (2004) have defined informal institutions as "socially shared rules, usually unwritten, that are created, communicated, and enforced outside of officially sanctioned channels. It concerns phenomena such as personal networks, corruption, clans and mafias, a variety of legislative, judicial, and bureaucratic norms." (Helmke & Levitsky, 2004, p. 727). Formal institutions are the official rules of the game, whereas informal institutions are the unwritten rules played in the shadow of these official channels.

The comparative study of informal institutions provides an answer to understand the variation of anti-corruption programme among the different countries and world regions. In cases such as corruption, informal institutions are problematic for societies because they

weaken and undermine established formal institutions, their transparency the markets and democratic regimes (Estrin & Prevezer, 2011). In some other cases, they support inefficient formal institutions and thus, are beneficial for societies.

Helmke and Levitsky (2004) highlighted four types of informal institutions, that emerge according to the efficiency of the formal institutions. The first type is “accommodating informal institutions”, that appears in a context of effective formal institutions, whereas the goals of the formal and informal actors are conflicting. Therefore, the goal of the accommodating informal institutions is the reconciliations of the interests of both formal and informal actors. Such a case is for example the development of a shadow economy in a well-defined property rights system. The second type is “substitutive informal institutions”, occurring in a context of inefficient formal institutions, but the interests of both formal and informal actors convert. In that case, the informal institutions are an alternative to the formal institutions for reaching the common goals. The third type is “competing informal institutions” which stands where the formal institutions are ineffective and when both actors do not share the same goals. Corruption corresponds to this type. It undermines the opportunities of development, and makes weak formal institutions remain persistent. The last type is “complementary informal institutions”, whose goals suit with formal rules and appears in a context of efficient formal institutions. This is a source of efficiency for the global economy that faces this type of informal institutions. (Helmke & Levitsky, 2004)

The comparative analysis of informal institutions is necessary to understand the variations of anti-corruption programmes between multinational corporations, operating in fragmented environments. For example, countries facing natural resources dependence, cumulated with weak formal institutions tend to undermine economic performance which implies adverse effects such as the occurrence of armed conflicts, exacerbation of corruption, or delays in reforms (OECD, 2015). A OECD study (2015) highlights that countries owning numerous oil or gas reserves require strong institutions in order to allocate the revenues efficiently and to promote growth and development of the nations.

Some previous studies demonstrate a robust and negative relationship between the level of corruption and Human Development Index, implying that the more a country is corrupted, the lower is the level of human development. The same relations occur between corruption and GDP. However, there are few exceptions: some countries have high level of HDI and GDP, but also high levels of corruption, such as Italy because corruption is more destructive in some contexts than others. (Rose-Ackerman, 1999)

2.4.3. Institutional factors favouring corruption

In the previous sections, we explained why corruption appear in the society as an informal institution. To understand why corruption occurs in business practices, we need to understand the institutional factors that foster the development of corruption practices.

The drivers of unethical behaviours come from the interdependencies between economic and political spheres. Economic actors try to maximise their private gains by paying bribes to public officials that keep the money in their pockets. By accepting the bribes, politicians retain and increase their notoriety. However, money supposed to afford public expenditures is misused at the expenses of the poorest, whose basic needs (education, health care, water supply, ...) are not supported. Some institutional environments are more prone to corrupt practices characterized by the presence of systematic factors.

Firstly, ineffective or inexistent property rights constitute a cause of the emergence of corruption. Such situations occur for example in authoritarian regimes where the state uses its power arbitrarily and thus, there is weak systems of checks and balances over behaviours. Unstable and contestable property rights are present in the early stages of development of nations, and therefore ineffective property rights remain more present in developing countries (OECD,2000). The access of stable property rights requires strong institutions like a significant public infrastructure of laws, courts, and enforcement mechanisms. But this institutional structure requires expensive investments which are profitable in the long run, since providing a strong and reliable structure for the establishment of institutions. The problem of developing countries is that public money is not used to strengthen and build strong institutional structure, but to enrich the elite and therefore, property rights cannot be enforced effectively (Khan, 2006). This constitutes a chicken and egg problem. In addition, even if they are democratic, some regimes remain rooted in clientelism, patrimonialism and corporatism because the political sphere exerts pressures on administration, which favours elites at the expense of the majority (Khan, 2006).

The second factor concerns the inappropriate laws unsuitable to the evolution of society. The more rigid are legal schemes, the more informal institutions will be created to subvert the laws (OECD, 2000). Economic actors are more likely to engage in corrupted practices when the financial and legal system of their institutional infrastructure are not efficient. In transition economies, the bureaucratic burden is higher, and increases the uncertainty about operations, as well as transaction costs. Concerning the legal system, if the actor cannot predict the outcome of a corrupted act, he will think before doing it. In dysfunctional legal infrastructure, the

economic actors know that they will not be sanctioned and so, they do not hesitate to engage in corrupted acts. (Tonoyan, Strohmeyer, Habib & Perlitz, 2010)

The low probability of being caught and sentenced constitutes another factor favouring the development of corruption. It appears in developing countries, where wages of officials are low and so, they have low incentives to punish authors of corruption, which offer them bribe in counterpart of silence (Khan, 2006). OECD analyses the attractiveness of bribery in some countries. In some jurisdictions, the penalties of being caught are weak, and in some others, the penalties are strong but the probability of being caught is small. The trade-off between the penalty and the probability of being caught create incentives of economic actors to commit in corrupted practices. They conclude that companies would invest in bribes in countries where the fines are low, even if they know in advance that they would be caught (OECD, 2016). It depends on the legal system and the regulatory pillar of the institutional structure.

Another element that influences corruption in business practices is the social network. The likelihood of corrupted practices increases when the transactions are established with the close social network, such as members of the family or friends. This is observable in the South of Italy, where the family loyalty is highly valued, giving privilege to the close social network. (Tonoyan, Strohmeyer, Habib & Perlitz, 2010)

The institutional theory and its application to multinational corporations leads to our first hypothesis:

Hypothesis 1: The institutional context in which a multinational corporation is operating exerts a positive influence on the quality of its anti-corruption programme.

If a company is operating in a corrupted environment, deprived of any anti-corruption regulation considering the legal aspect or if corruption belongs to everyday life, it will adopt corrupted practices, and it will not fight against them. The company is more likely to establish measures fighting against corruption if the institutional context is averse to corrupted practices. However, the corporation is more likely to exert such practices if it is operating in an environment deprived of any regulations that let all the freedoms to social actors in their business practices.

Developing countries face higher levels of corruption because they are more incline to face the drivers that favour such acts (Khan, 2006). Drivers of corruption are more present in developing and poor countries, having weak formal institutions unable to control the use of corrupted practices between the public and private sectors.

However, as the theory suggests, a multinational is operating in a fragmented market, facing a diversity of institutional environments, with headquarters behaving in a specific institutional environment, that can be completely different of the one where subsidiaries are operating. The variation of institutional environments undermines or improves the quality of anti-corruption programmes. Subsidiaries operating in weak institutional environments are more exposed to corruption practices, on the contrary of one operating in a high regulated one. Therefore, we define our second hypothesis, concerning the exposition of the multinational in different institutional contexts which takes in to account the variation of institutional environment.

Hypothesis 2: The exposure of a multinational companies in a specific institutional environment strengthens the influence of the institutional environment over the quality of anti-corruption programme

The more a company is exposed to a country with a specific institutional environment, the more the environment influences the practices of the company. Because the more the company is exposed, the more it has to comply and adapt to the institutional rules of this country.

2.5. Influence of industry on anticorruption programme of multinational corporations

We noticed that the industries play a role in the establishment of anti-corruption programmes by multinational corporations. For example, some sectors, that are frequently interacting with governments in order to win contracts and permits such as oil, gas and corruption are more likely to be corrupted than others (Tonoyan, Strohmeier, Habib & Perlitz, 2010). Therefore, we make a third hypothesis to distinguish between the sectors of our multinational corporations.

A sector is controversial according to the goods or services that it provides, which are harmful for the society and create potential undesirable social consequences. Furthermore, a sector is controversial according to the way its members conduct the business. If industry-wide practices violate the interests of stakeholders and social expectations, such as corrupted and unethical behaviours, socially or environmental damages. (Du, Edward & Vieira, 2012)

The issue for companies belonging to controversial sectors is that their legitimacy is challenged (Palazzo, 2005). Then, as we saw in the institutionalist theory, legitimacy is

necessary for organizations to persist, since its activity and practices are socially accepted and institutionalized.

Hypothesis 3: The sector exerts a control on the quality of anticorruption programme of multinational corporations. The more controversial is a sector, the more exposed to corruption are the multinationals operating in this sector.

The quality of anti-corruption practices by sector is also linked to the institutional context in which the multinational company is operating. Some countries impose regulations and compliance for some specific sectors. The following lines explain what are the risks of exposure to corruption in each sector and therefore if we can consider them as controversial or not. We use this classification to build our model.

2.5.1. Extractive industries (oil, gas, and energy & basic materials)

Extractive industries, such as oil, gas and energy, mining, and the production of basic materials, are linked to the exploitation of natural resources. The exploitation implies variety of stakeholders and it leads a range of harmful effects like corruption, conflicts, or environmental degradation (Haufler, 2010). This sector is highly associated with political corruption and imply negative consequences for the public interest through under-selling natural resources and distorting budget decisions, i.e. public institutions neglect basic service delivery. In this sector, corruption occurs with the highest political levels. (OECD, 2015)

Oil, gas, and energy and basic materials are part of this extractive industries, that we classify as controversial. Indeed, the products they provide is natural resources, which raises environmental and ethical issues. Several scandals already occurred in these industries such as Petrobras scandal explained in the introduction. This industry entails environmental violations, human rights abuses, and detrimental impact on local communities (Du, Edward & Vieira, 2012).

The extraction of resources operates mainly in developing sectors, where the resources are mainly present and where the institutions and governance is usually weak (Haufler, 2010). They imply close relationships with governments and officials. Therefore we classify this sector as controversial.

2.5.2. Utilities

Utilities concern the supply of electricity, water, and transportation. This sector requires significant infrastructures like power plants or airports and it plays a role in the development and growth of nations, and is particularly prone to corruption due to the monopolies owned by

companies. Governments intervene to correct market failures like pollution, the supply of the poorest area or monopoly power (OECD, 2015). Monopolies frequently deprive the regulatory institutions to be effective, since politics often relate to the monopolies. Countries facing independent regulatory bodies control easier corrupted behaviour (Kenny & Søreide, 2008). Companies providing utilities are significant and influence the functioning of nations since they employ a lot of people and generate high investments (Campos & Pradhan, 2007)

Both petty and grand corruption may occur within the supply of utilities. The technical complexity and the complex financial contracting that it implies is potentially a source of corrupted acts. The role of governments is significant in their construction, supply, and regulation (Kenny & Søreide, 2008) because the contracts to obtain the supply of a utility imply huge amounts of investments and arrangements are frequent to get these contracts.

Since it requires frequent interactions between the private sector and officials, this sector is highly subjected to corruption. The decrease of quantity and quality of the good or service provided reflects the presence of corruption. The privatization of utilities is another problem, since they are sold with their monopoly power. Utility industry is also subjected to facilitation payments offered by officials to obtain the supply of specific zones by the utilities (OECD, 2015). According to our definition and the issues it raises, we classify it as controversial.

2.5.3. Health Care

In Health sector, the bribes are likely to occur when companies are willing to gain contracts for large capital projects or pharmaceuticals supplies. The health sector is characterized by the principal-agent relationship, since the patients depends on the health service provider (Ensor & Duran-Moreno, 2002). Corruption will undermine the quality of healthcare, the access, and increase the prices of medicines, usually in countries with high level of poverty. Drugs are not anymore public, but are nowadays exclusively by private manufacturers. A problematic linked to corruption in the pharmaceutical sector is the falsification and counterfeiting of medicines, which increases mortality. Pharmaceuticals have been implied in practices encouraging physicians to provide their products, in exchange of extra remunerations. (OECD, 2015)

Health sector is vulnerable to corruption due to the asymmetry of information that drugs imply (Campos & Pradhan, 2007) because the population does not have influence on the supply. Drug manufacturers and pharmaceuticals companies choose to maximize their personal interests by selling illegally counterfeit and unregistered drugs. The asymmetry of information appears stronger in developing countries, hit by HIV epidemic, where drugs are most needed.

This sector is subject to government regulations and therefore allow individual deviance from norms to achieve the personal interest of drug manufacturers. Countries with weak institutional structures are suffering from high prices, low quality, and low availability of the supply. (Campos & Pradhan, 2007)

According to our definition of controversial sectors, we classify health care sector in controversial industries, because of the products it provides. Medical products affect the health of citizens, which have no influence over it and thus, it raises ethical issues. Secondly, as we saw, citizens are facing principal-agent problem on pharmaceuticals products, which implies that they have no influence on the provision of medical treatment to treat their disease. This problem remains more present in developing countries and poor populations.

2.5.4. Financial sector

The risks faced by the financial sector are customer-related like money laundering or conduct related, i.e. linked to the improper behaviour of employees and management, which undermine the public's trust in financial institutions. Moreover, banks are short-term profits oriented, which creates incentives to take risks, implying unethical behaviour. (Transparency International, 2015b)

However, after the crisis and different scandals faced by banking sector, regulations both at regulatory and operational levels are becoming stronger, which limit the incentive of banking actors to take part to corrupt practices.

Banking industry is likely to imply unethical behaviours and is responsible of societal damage, such as financial crisis implying disastrous economic consequences. However, we classify financial sector in non-controversial industries because it is submitted to strong regulations promoting integrity, such as anti-bribery and anti-money laundering rules developed by OECD. Moreover, they establish internal mechanism aimed at incentivise employees to behave with integrity (Transparency International, 2015b).

2.5.5. Telecommunications

There are no actual anti-corruption initiative or regulations for which companies have the possibility to comply with. The risks of corruption in telecommunications industries occur with the high value of the transactions and the absence of an effective anti-corruption system (Sutherland, 2011).

The market value of telecommunications industry is evaluated at approximately \$2 trillion (Transparency International, 2015c) and raises inexorably through the diffusion of technologies, even in the poorest countries. Even if risks of corruption exist, we do not classify

telecommunications as a controversial sector. Telecommunications raise the ethical issue of the utilization of private data (Transparency International, 2015c). However, the ethical, environmental, and social damages are limited. Therefore, we classify telecommunications in non-controversial industries.

2.5.6. Consumer goods and services, technologies, and industrials

The literature about corruption in sectors such as consumer services, technologies or consumer goods remain unexplored. Since consumer goods and consumer services can create ethical issues concerning what they are selling to consumers, we consider that their impact on environment and the populations is limited compare to the other sectors. Relatively to other sectors such as health care or extractive industries, the issues raised remain limited or do not imply directly environmental, social, or ethical controversies. Therefore, we consider them as non-controversial sectors.

3. METHODOLOGY

3.1.Objective

After reviewing the literature, we have assumed three hypotheses. In order to test these three hypotheses, we create a model, which aimed at investigating or contradicting the link between the institutional context in which a multinational corporation is operating and the quality of its anti-corruption practices.

The following section describes the sources of data, their meaning and how they have been collected. Therefore, we introduce the model, presenting, and describing the results, and the discussion about the results.

3.1.1. Description of the theoretical model

The following graph describes our model:

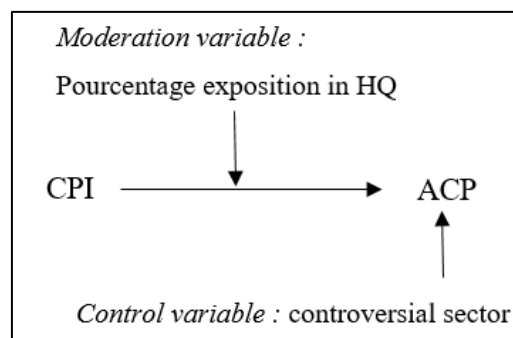


Figure 1 : Conceptual model

As developed in theory, we expect a positive relationship between the anticorruption programme represented by ACP and the institutional context which is represented by CPI, meaning that the higher is the CPI of the country in which the multinational is operating, the higher is the quality of its anticorruption practices. We introduce a moderation variable, which measure the exposition of a multinational corporation to its home country. The higher is the percentage of exposition of a multinational in its headquarters, the more CPI will positively influence the ACP score. The initial model aims to explain the link between the institutional context in which a multinational is operating and the quality of its anticorruption programme. However, the data analysis and the review of literature has highlighted the role of the sector in the establishment of anti-corruption policies within multinational corporations. Moreover, the sample demonstrates that for a given headquarter, ACP scores differ according to the sectors. Therefore, we classify the sectors in two categories: controversial sectors and non-controversial sectors, and we use this variable as control variable, underlining the impact on the sector on our relationship.

We are testing three hypotheses:

H1: *The institutional context in which multinational corporations operates (CPI) exerts a positive influence on the quality of their anticorruption practices (ACP).*

As we developed deeply in the institutional theory, formal and informal institutions affect the behaviour of social and economic players. Consequently, we assume a positive relationship of the institutional context over the anticorruption programme of multinational

H2: *The percentage of exposition (Ratio_HQ) moderates the relationship. The higher (lower) is the percentage of exposition, the stronger (weaker) is the positive relationship between ACP and CPI.*

The higher is the percentage of exposition in a country, the more important is the influence of this national institutional context over its anticorruption practices. We assume that a multinational corporation making the major part of its revenue in Germany is influenced by German environment. Therefore, since Germany has a high CPI, the multinational scores a high ACP. Since we assume a positive relationship between ACP and CPI, we assume the opposite relationship if the multinational corporation has a high exposition in a highly corrupted country.

H3: *The controversy of the sector in which a multinational operates, influences negatively the quality of its anticorruption practices. The more (less) a sector is controversial, the lower (higher) is the quality of anti-corruption programmes.*

For the reasons developed in the theoretical framework, sectors are differently exposed to corruption, that is why we assume that depending on the sector the quality of anti-corruption programmes of multinational corporations is different. We classified the sectors according to their controversy.

3.2. Dataset

3.2.1. Description of the dataset

The sample contains 300 multinational corporations characterized by six variables: the sector of activity, the country of headquarter, the ACP score, the CPI of the headquarter, the exposition of revenues made in the headquarter and a dummy variable representing the controversy of the sector. This information is secondary data collected from three sources: Transparency international TRAC reports, Transparency International Corruption Perception Index, and the figures reported by multinational corporations in Thomson-Reuters database.

The variables of each individual correspond to the year during which the ACP score of this multinational has been published.

3.2.2. Multinational Corporations

We have selected the multinational corporations from five reports of Transparency International. The NGO, worldwide leader in the fight against corruption, writes and publishes reports, making the people aware about its disastrous effects on the economy. They work in collaboration with governments, businesses, and civil societies, to find solutions to this social problem. (Transparency International TRAC, 2009b)

Reports come from the “TRAC” series, meaning Transparency in reporting on Anticorruption.

- Transparency in Corporate Reporting: Assessing the world’s largest companies (2012)
- Transparency in Corporate Reporting: Assessing emerging market multinationals (2013)
- Transparency in Corporate Reporting: Assessing the World’s Largest Companies (2014): It contains the same companies than the one of 2012
- Transparency in Corporate reporting: Assessing the World’s Largest telecommunications companies (2015)
- Transparency in Corporate Reporting: Assessing Emerging Market Multinationals (2016)

The publication started in 2008, focusing firstly on the world’s major multinationals. Then, it has been extended to emerging markets (Transparency International TRAC, 2016c). These reports provide an overview of the evolution of the practices established by companies in their fight against corruption in the long run. The NGO wants to compute again the scores of companies on short periods in order to see the evolution of the private sector, to put pressure and make the multinational corporations evolve towards better practices.

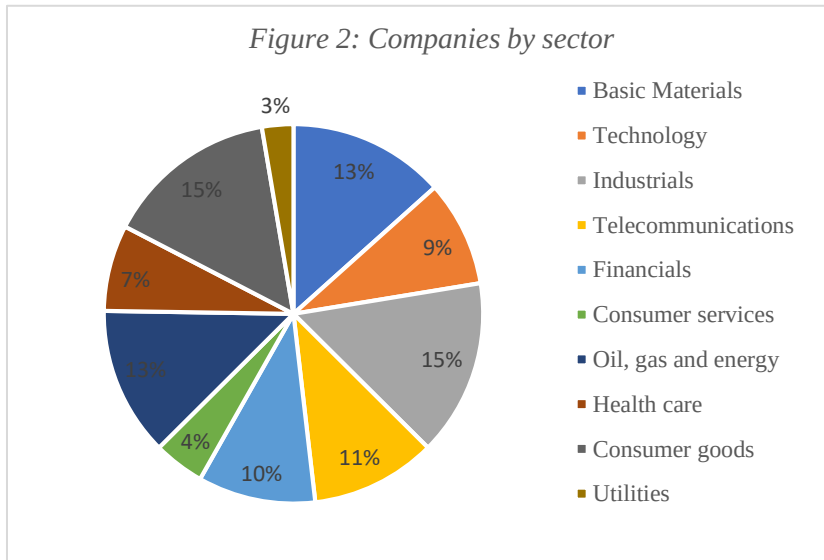
3.2.3. Sector

We distinguish between ten economic sectors according to multinationals’ core activities. Transparency has classified the companies in those ten groups.

- ❖ **Basic Materials** sector represents companies such as ArcelorMittal, Tata Steel, or China Minmetals. They extract and produce materials such as steel products, plastics, chemicals, processing of earth mineral resources, ... and other extractive and productive activities.

- ❖ **Technology** sector relates to multinationals active in the research, the development, and the supply of technological products like Google, Apple, or Oracle, mainly based in the USA, India, and China.
- ❖ **Industrials** sector contains for example Canon and 3M. In our sample, this sector is mainly present in emerging countries.
- ❖ **Telecommunications** concerns the activities related to the information and communication technologies. With the quick development of technologies, telecommunications have become predominant and critical in social life. The market value of telecommunication multinationals never stops increasing (Transparency International, 2015). It comprises Vodafone, Orange, or Deutsche Telekom.
- ❖ **Financials** implies multinationals related to banking and financial activities, like Citigroup, BNP Paribas, or Visa.
- ❖ **Consumer services** sector involves companies providing different services to the population like food services, leisure, transportation, ... Among the companies, there are Amazon, McDonalds, or Walt Disney. In the database, the headquarters of those companies are mainly situated in the USA.
- ❖ **Oil, gas, and energy** imply the use of natural resources. Nowadays, countries owning the biggest reserves of oil and gas, are paradoxically home to the poorest world's population (Transparency International, 2016e). Transactions are hidden between the national leaders and industrial groups. Furthermore, they create conflicts about the exploitation of these rare resources. In our sample, this sector is represented by companies such as BP, Gazprom, or Eni.
- ❖ **Health care** concerns the firms producing pharmaceutical products, such as GlaxoSmithKline. The risk is that corruption may cause inefficient supply of medical products to those who need, since their supply depends on the providers and governments (Transparency International UK, 2016).
- ❖ **Consumer goods** contains companies manufacturing varied products intended for consumers all over the world, from car industry with Volkswagen, to food industry with Coca-Cola, or beauty products with L'Oréal.
- ❖ **Utilities** includes electricity, transports, water, and sanitation (OECD, 2015). The sector requires big infrastructures, providing goods such as gas, water, or electricity. Companies such as E.ON, GDF Suez take part in this sector.

The following chart shows the repartition of the 300 multinational corporations between the sectors of activity.



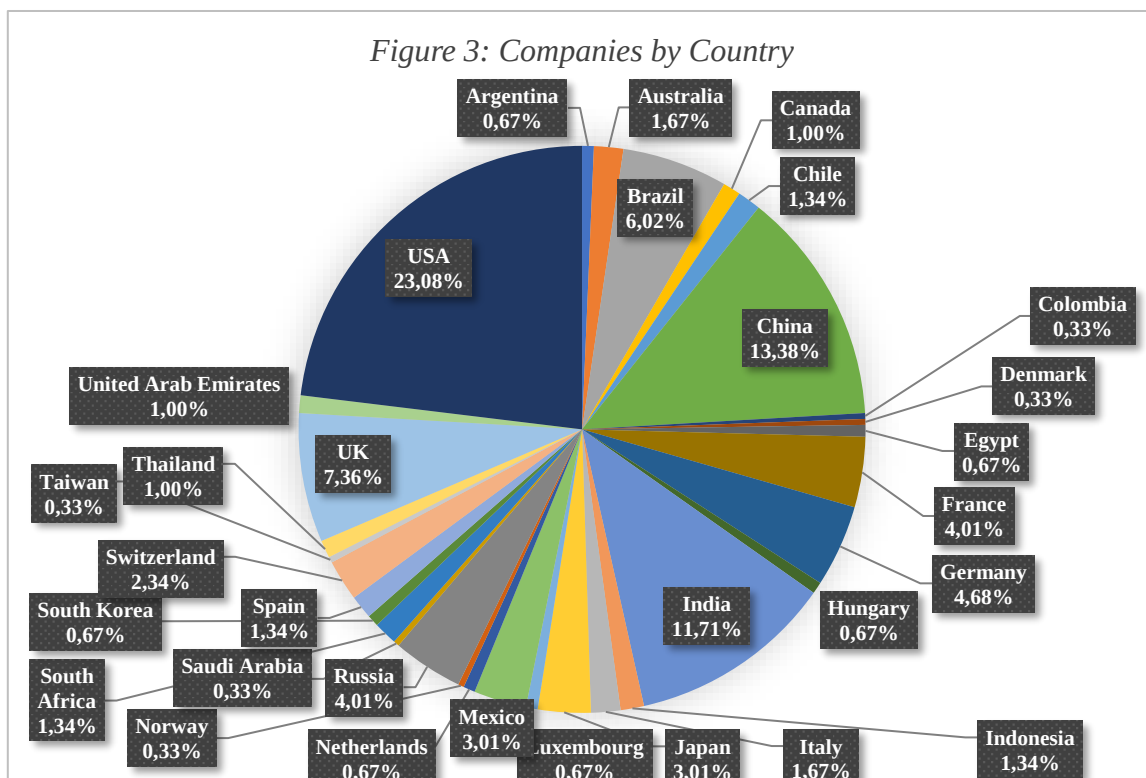
sectors of activity.

Industrials and Consumer goods are the most represented industries, both constituting 15% of the sample. On the contrary, Consumer services and Utilities are the less represented industries, containing respectively 3% and 4% of the sample.

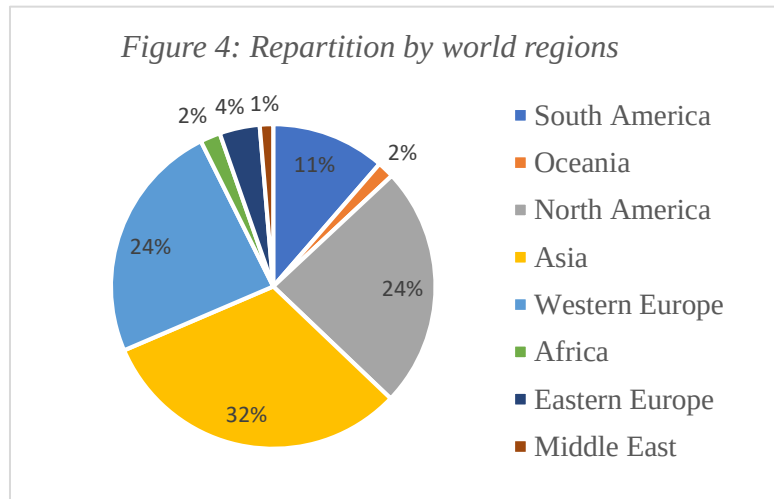
3.2.4. Country Headquarter

Multinational corporations are operating in a complex network of other organizations (Bartlett & Goshal, 1983). Their subsidiaries are spread all over the world, which makes them face a wide variety of institutional environments. The variable country Headquarter defines the country of incorporation of each company, namely the country where the headquarters are located. (Transparency International, 2016c)

The following pie chart shows the repartition of the companies among the different countries.



The 300 companies are spread between 30 countries on the five continents. The African continent is the less represented with only South Africa and Egypt, covering 2% of the multinationals. United States own 23,08% of the multinational contained in the sample, followed by China and India. Some countries like Norway, the Netherlands or Hungary are modestly represented by less than 1%.



The pie chart shows the repartition of multinational corporations by world regions. Asia is predominantly represented, containing China and India, two of the major world emerging economies. North America (USA and Canada) and Western Europe

are following Asia with both concerning 24% of the sample. South America stands for 11% of the sample, half composed of Brazilian corporations. Russian firms represent 4% and the last part comes from Africa, Middle East, and Australia.

3.3.Model

To understand the link between the institutional environment and the quality of anti-corruption programme, we run a linear model based on what the theory suggests including a moderation and a control variable. Here is the linear model we use:

$$ACP_i = \beta_0 + \beta_1 CPI_i + \beta_2 Ratio_{HQ_i} + \beta_3 Ratio_{HQ_i} * CPI_i + \beta_4 Controversy_i + \epsilon_i$$

Where i represents a generic individual company.

The dependent variable is ACP, standing for the quality of multinationals' anti-corruption practices, which is explained by four explanatory variables CPI_i , $Ratio_{HQ}$, $Ratio_{HQ} * CPI_i$ and a dummy explanatory variable, *Controversy*. The intercept of the regression is α , which measures the estimated explanatory power of variables that are not included in the model, but they are likely to explain ACP. Finally, there is the error term ϵ_i .

3.3.1. Anti-corruption Programme (ACP) score

TRAC reports provide a global score for each multinational corporation based on their reporting on anti-corruption, which is divided in three dimensions, anticorruption programme (ACP), organizational transparency (OT) and country-by-country reporting (CBC). Companies

receive a score according to the information that is publicly available about their anti-corruption programme. We consider only ACP in the database because it concerns the establishment of anticorruption programme by companies and particularly its publication. This score is based on a questionnaire (APPENDIX A).

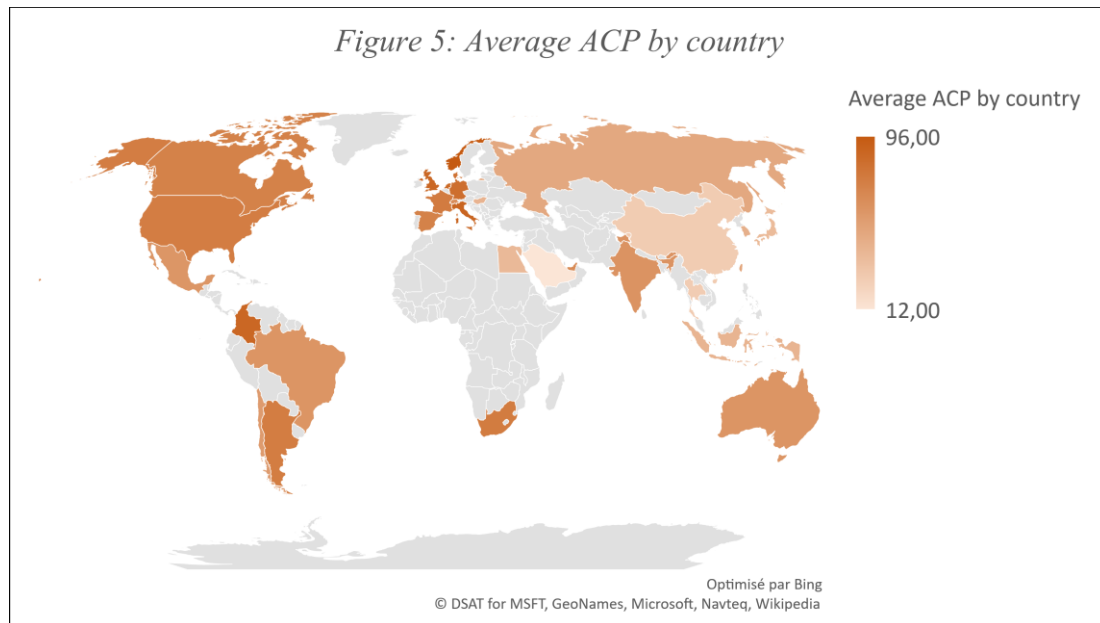
In “Reporting on Anti-Corruption programmes”, the ACP part contains 13 questions from the most general to the most specific. It is based on publicly available information about their policies aimed at avoiding corrupted practices. The questionnaire starts by asking if the company publicly commits itself against corruption whereas the 13 questions concern the policies established in terms of political contribution. Transparency International attributes the scores, according to the following methodology:

- ❖ 0 point - if the company has no explicit statement/commitment, publicly available or if there is no explicit reference published on the website and public documents of the company about the element cited in the question.
- ❖ 0,5 point - if there is a they partly explain what they are putting in place to cope the problem, but it is a weaker reference or less explicit
- ❖ 1 point – if there is an explicit statement and a low level of tolerance toward the element asked

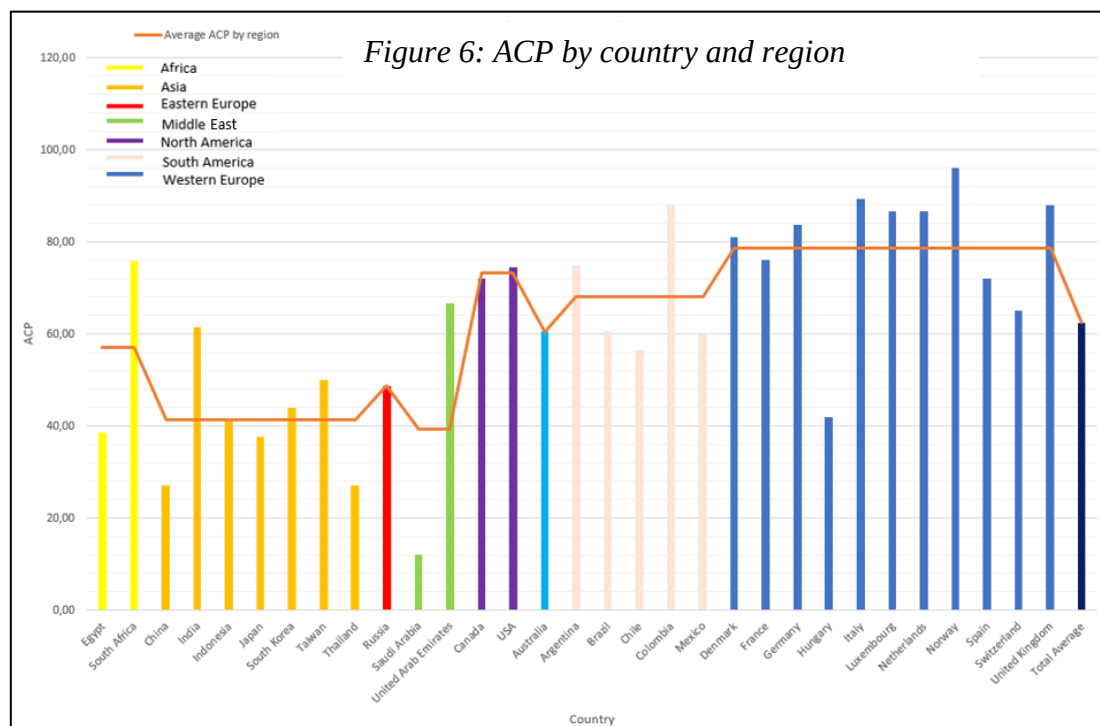
The score obtained by the company is the sum of the scores of each question. A high score means that the company works publicly against corruption, by implementing anticorruption practices. A low score means that the company does not explicitly commit itself to the fight of this social problem.

Before having officially published reports and scores, Transparency International contact the multinationals, letting them the opportunity to oppose and examine in depth their respective results. Based on the new information, the score can be modified or not. Finally, the TRAC report is officially published on the website of Transparency International.

The following map gives a geographical overview of the average ACP by country and region of the world, the darker the country is, the higher is the ACP of the multinational having their headquarters in those countries. Western Europe and North America are the region with the highest ACP, whereas Middle Orient and countries of Asia are facing lower ACP scores.



The following bar chart illustrates more precisely the variations of ACP according to geographical areas in which the multinational corporations are situated.



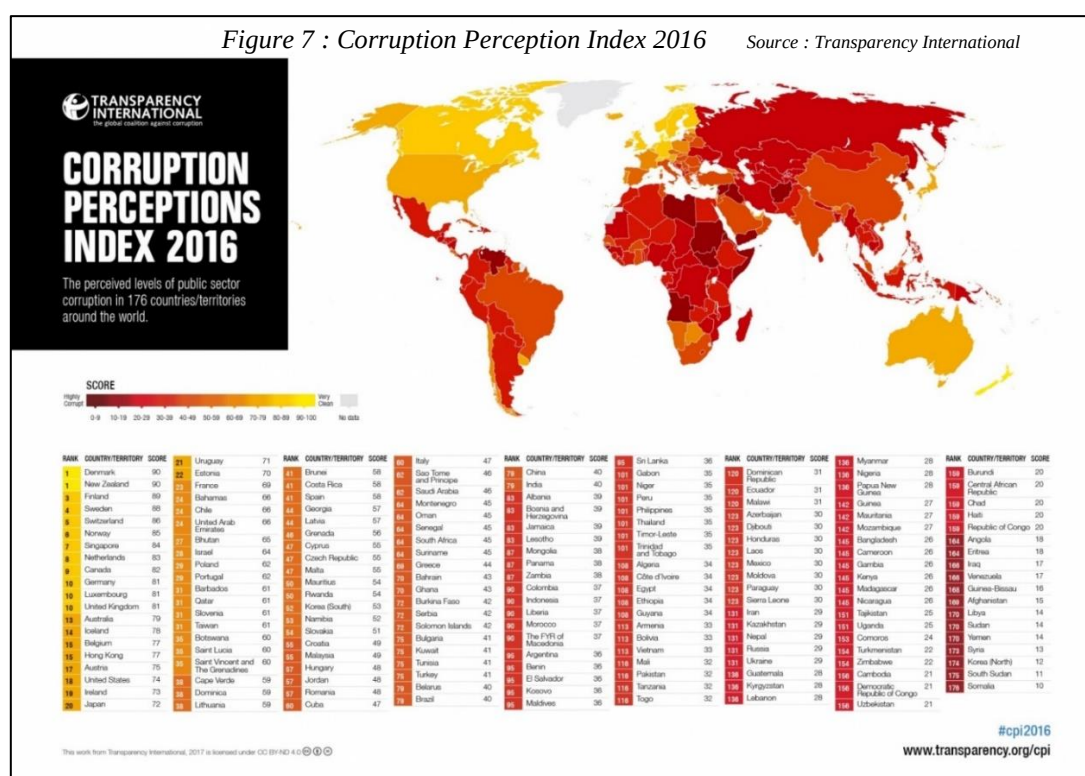
The bars are the average of ACP by countries and the orange line is the average ACP by region of the world, to which the countries belong to. As previously, the highest ACP averages have been obtained by multinationals whose headquarters are in Western Europe or North America. Companies from Asia and Middle Orient have achieved the lowest ACP scores. Moreover, this graph allows us to see the variation in the countries' ACP score among a same region. In Asia, we observe a significant difference between the ACP average of India

(61,43%), compared to the ACP average of China (27,15%) or Thailand (27%). In Western Europe, the average seems almost uniform, except for Hungary, which has reached the lowest average score of this region (42%). Middle Orient is represented only by two countries, Saudi Arabia and United Arab Emirates, whose average ACP scores are significantly different. Even inside a same region of the world, the ACP average can vary strongly by country.

3.3.2. CPI

The CPI, standing for Corruption Perception Index has been developed in 1995 by Transparency International with the goal of putting the issue of corruption on the international policy agenda. It represents the global yearly indicator of public sector corruption in the countries all over the globe. (Transparency International, 2017)

The index shows the quality and efficiency of public institutions. The situations of corruption, such as bribery or extortion, are common even at the smallest levels of society in everyday life transactions. On the contrary, countries obtaining a high (low) index are (not) exerting control over this issue. No country got a CPI equal to 100, meaning a total absence of corruption.



The map above shows the Corruption Perception Index of 2016 all over the world. The lighter is a country, the less it is corrupted, which means having a high CPI too. In 2016, Denmark reached the first position with a CPI of 90/100. Since Transparency has presented its CPI, Northern countries and the most developed countries have occupied the top ranks. The

darker it is, the lower is the CPI and the more corrupted is the country. The poorest and developing countries are occupying the lowest rankings. In 2016, Somalia has obtained the last position, with a score of 10/100. (Transparency International, 2016d)

The CPI is a composite index obtained, by computing an average of thirteen international surveys and assessments of corruption by different recognized and reputable institutions, for a given year. These institutions are independent of Transparency International and specialized in the analysis of governance and business climate analysis. Between them, there are institutions such as the Global Insight Country Risk, the World Bank, the World Justice Project, etc (Transparency International, 2017). These sources are not computed every year, meaning that some data of a same year are used to compute CPI for several years, which contributes to the persistence of CPI scores over a year (Rose-Ackerman, 1999).

3.3.3. Ratio_HQ

This ratio shows the percentage of total revenues that each multinational corporation is making in its headquarter country.

$$Ratio_HQ = \frac{Revenue\ in\ HQ}{Total\ consolidated\ Revenue}$$

It shows to what extent the company is operating at a national scale, in case of a high percentage, or if it is making most of its revenue abroad, if this ratio is low. We have obtained the figures for each company using the financial database, Thomson-Reuters.

3.3.4. Ratio_HQ * CPI

This variable corresponds to the exposition of the companies to its national environment and contains the percentage of the revenue the company makes in its country of headquarter, multiplied by the CPI of this country.

This variable aims at representing the real part of the CPI attributed to the headquarter of the company for our following model. For example, we assume that a company whose headquarter is in Denmark, which means a CPI of 90/100 in 2016 (Transparency International, 2016d). This company could be operating mainly abroad, and making 80% of its revenue in countries with high level of perceived corruption like Russia (CPI of 29/100) (Transparency International, 2016d). Attributing a CPI of 90 to this company would not represent the reality, since it is operating mainly in corrupted countries. In that case, the *Ratio_HQ*CPI* represents the real part of the CPI attributed to the company.

3.3.5. Controversy

In our hypothesis, we highlighted that the industry has an influence on the establishment of anticorruption practices. Therefore, we created the variable *Controversy* that classifies our sector in two categories: controversial or non-controversial. According to what the literature says, we consider as controversial the sectors addressing emerging or persistent environmental, social, or ethical issues, and that are vulnerable to corrupted practices.

$$Controversy = \begin{cases} 1 & \text{for controversial sector} \\ -1 & \text{for non - controversial sector} \end{cases}$$

These industries are more likely to face unethical offensive or aberrant behaviour, which imply harm to society, environment, and individuals. And they affect vulnerable social groups and local communities. (Lindgreen, Maon, Reast, & Yani-de-Soriano, 2012)

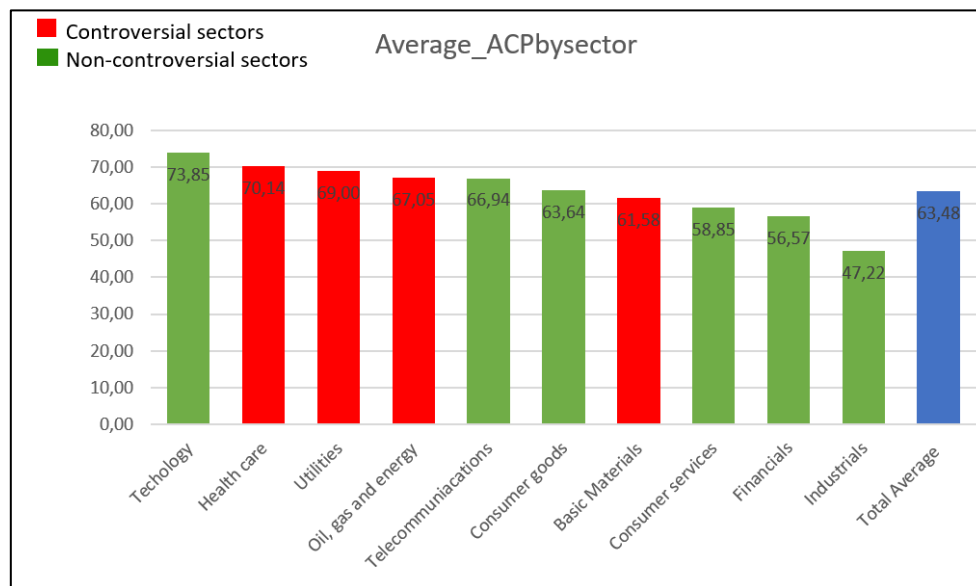
We explain deeply in the theoretical framework the risks present in each sector and why they can be qualified of controversial or not. Therefore, we classify the sectors of our sample as:

Controversial industries: Basic Materials, Health Care, Oil, gas, and Energy, Utilities.

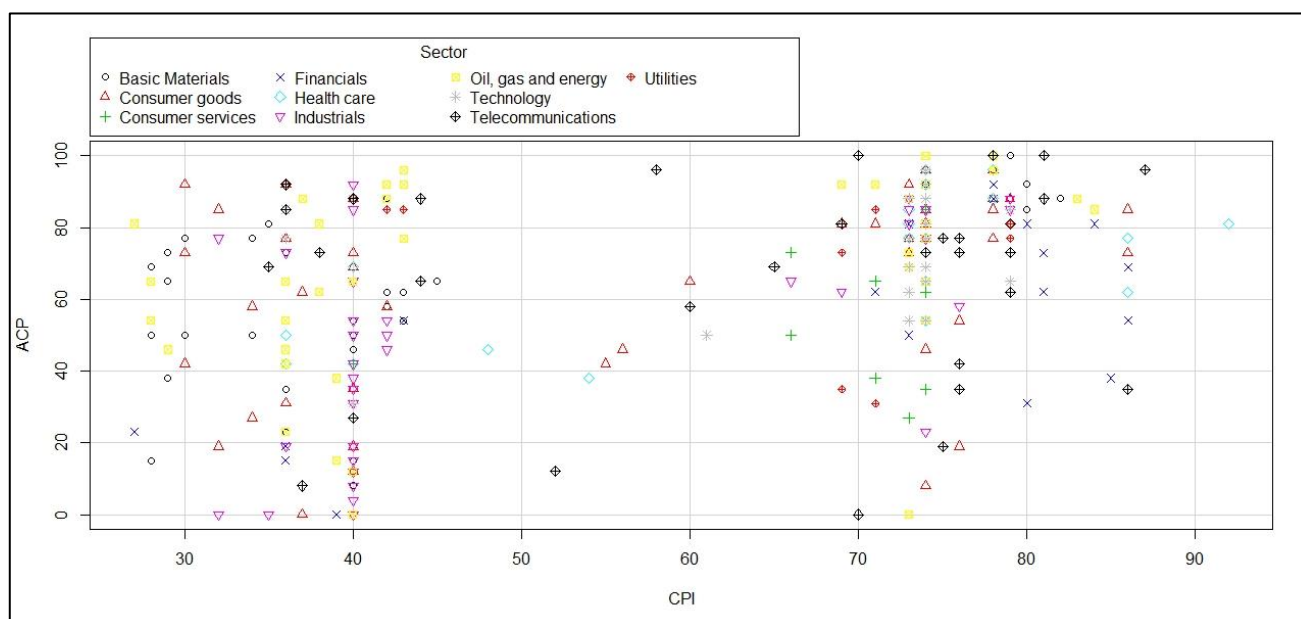
Non-controversial industries: Consumer goods, Consumer services, Financials, Industrials, Technology, Telecommunications.

The companies in the sample are spread between ten sectors. The variable *Average_ACPbysector* corresponds to the average ACP score obtained in each sector.

Figure 8: Average ACP score by sector



As this histogram shows, the companies of Technology sector scored the highest average in their anticorruption programmes. Basic Materials, Consumer services, Financials and Industrials have scored below the global average score of 63,48/100.



The scatter plot above describes the repartition of companies by sector, according to their ACP score and the CPI of their headquarters' country. Multinational of oil, gas and energy and basic materials industries are mainly operating in countries with low CPI, with few exceptions. On the contrary, financial and consumer services companies are more present in countries with high CPI. For sectors such as consumer goods or health care, the repartition is uniform. The graph allows us to distinguish the geographic repartition of the companies by sectors. Multinationals of technology sector obtain high ACP. However, the ACP scores vary considerably within the other sectors.

The following part explains and discusses the results of the model.

4. FINDINGS AND DISCUSSION

4.1. Results

We estimated our model, $ACP_i = \beta_0 + \beta_1 CPI_i + \beta_2 Ratio_{HQ_i} + \beta_3 Ratio_{HQ_i} * CPI_i + \beta_4 Controversy_i + \epsilon_i$, in R software and here we present the results:

Figure 10: results of the linear

Coefficients:					
	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	55.6554	7.6861	7.241	3.89e-12	***
CPI	0.3498	0.1237	2.829	0.00499	**
Ratio_HQ	-57.2391	13.5333	-4.230	3.13e-05	***
Controversy	3.0261	1.3954	2.169	0.03091	*
CPI:Ratio_HQ	0.5388	0.2262	2.382	0.01787	*

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1					
Residual standard error: 22.43 on 295 degrees of freedom					
Multiple R-squared: 0.3209, Adjusted R-squared: 0.3117					
F-statistic: 34.84 on 4 and 295 DF, p-value: < 2.2e-16					

Firstly, the correlation matrix (APPENDIX B) shows that explanatory variables are uncorrelated, with coefficient below 0,20. We carried out diagnostic tests on residuals and there is no trace of autocorrelation (DW test=1,7076), since it is close to 2 (APPENDIX B).

The intercept β_0 , which represents the other factors that are not included in the model and that could possibly explain ACP, is highly significant ($\beta_0=55,66$, p-value<0,001), meaning that other factors are likely to explain our regression. Moreover, the variable *CPI* is both significant and positive ($\beta_1=0,35$, p-value<0,01) whereas *Ratio_HQ* is significant and negative ($\beta_2=-57,24$, p-value<0,001). *CPI* confirms the first hypothesis that the institutional context exerts an influence on anti-corruption programme of multinational corporations. *CPI* coefficient underlines that the more a firm is operating in a country with high (low) *CPI*, the higher (low) its ACP is. The results confirm our third hypothesis. *Ratio_HQ*CPI* is positive and significant ($\beta_4=0,54$, p-value<0,05). We assumed this moderation variable to strengthen the influence of the institutional context on ACP scores. Since the variable is significant with a positive coefficient, it confirms our assumption, the higher is the exposition of a firm in a country, the stronger is the relationship between *CPI* and ACP. Finally, the theory and our third hypothesis suggest that the more a sector is controversial, weaker is the establishment of anti-corruption programme of multinational corporations. The last variable *Controversy* is both positive and significant ($\beta_3=3,03$, p-value<0,05), meaning that the more a sector is controversial, the higher

ACP will be. It contradicts our third hypothesis, since we were expecting that the multinationals of controversial sectors (non-controversial sectors) would have obtained lower (higher) ACP.

We cannot reject two hypotheses over three with a statistical significance of 5%, meaning that institutional context affects positively the quality of anticorruption programme, and the exposure is a moderation variable over the relationship between CPI and ACP. However, as we assumed, the sector exerts a control over ACP, but in the opposite direction. The results show that the more controversial a sector is, the higher is the quality of anticorruption programme of multinationals within the sector.

Breusch-Pagan test (APPENDIX B) shows that residuals are heteroskedastic, meaning that the variance of the error is not constant in the sample. However, the estimated parameters are still unbiased. The model explains the ACP scores in some sectors but not in all of them. That is what the theory suggests us. So, heteroskedasticity does not invalidate our results.

<i>Figure 11: Variance Decomposition Proportions</i>					
Associated Eigenvalue					
Variable	1	2	3	4	5
C	0.811337	0.188631	3.18E-05	2.11E-09	1.30E-09
CPI	0.746892	0.152920	2.94E-05	0.079712	0.020447
CPI_RATIO_HQ	0.862681	0.027245	0.003215	0.105481	0.001378
CONTROVERSY	0.016017	0.005904	0.978079	2.14E-07	4.52E-09
RATIO_HQ	0.983799	0.016201	8.80E-08	8.61E-09	9.96E-11

The table above represents the part of the overall variance that is explained by each variable. Thus, we see that the intercept explains 81,13% of the variance meaning that other factors that are not in the model explain the percentage of the variance. Then, CPI is explaining 15,29% of the variance. And finally, the three last variables CPI*Ratio, Ratio_HQ and Controversy explain a neglectable part of the variance, less than 0,5% of the model.

4.2. Robustness of the model

Tonoyan, Strohmeier, Habib and Perlitz (2010), through their studies about the informal and formal institutions shaping corrupted behaviour of small and medium enterprises arrived at the same conclusions, considering the geographical repartition of corrupted acts. It underlines the robustness of our results.

Moreover, to prove the robustness of the model we use another proxy to analyse the effect of the institutional environment on the anticorruption programme of multinationals. Both

indicators are the two most used for measuring corruption. World Bank “Control of Corruption” is one of the six worldwide governance indicators. They are computed by the aggregation of 30 data sources provided by institutes, NGOs, private sector, and international organizations (The World Bank, 2017).

Figure 12: results regression CPI and Control of Corruption

```

Residuals:
    Min       1Q   Median       3Q      Max
-7.0519 -1.6746 -0.2297  1.6669  9.6012

Coefficients:
              Estimate Std. Error t value Pr(>|t|)
(Intercept)  45.7664     0.4051  112.96  <2e-16 ***
CC           18.4346     0.3294   55.96  <2e-16 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 2.915 on 67 degrees of freedom
(6 observations deleted due to missingness)
Multiple R-squared:  0.9791, Adjusted R-squared:  0.9787
F-statistic: 3132 on 1 and 67 DF,  p-value: < 2.2e-16

```

Therefore, we regressed the variable CPI on the World Bank “Control of corruption” ($CPI_i = \beta_0 + \beta_1 CC_i + \epsilon_i$, where i is a country for a given year). We obtained the following results:

R^2 is high (0,979), meaning that the two proxies (CPI and World Bank “Control of corruption”) are analogous. We performed diagnostic test and there is no statistically significant sign of autocorrelation and heteroskedasticity at 10%. Moreover, residuals are normally distributed with 97,5% of confidence. Both α and β_1 are highly significant. It underlines the significance of World Bank « Corruption Control » to explain CPI.

4.3. Findings and theoretical implications

4.3.1. Hypothesis 1 - Institutional context

The results confirm our first hypothesis and show us that there is a positive relationship between ACP and CPI, meaning that in countries with higher CPI, multinational corporations have obtained higher ACP, as well as lower ACP score in countries with lower CPI.

Estrin and Prevezer (2011) studied the informal institutions that are relevant in BRIC countries, because they are more likely to appear in emerging economies, due to the weakness and inefficiency of formal institutions. Emerging economies like BRIC countries face important informal institutions like corruption, as a competitor, a substitute, or a complement to weak formal institutions. For example, the rule of law, that is the influence of the law over a nation

is weak in Russia, as well as the protection of minority shareholders. The inefficiency of the law and of the judiciary system lets a lot of freedom to enterprises managers, allowing them to enrich themselves using legitimate, as well as illegitimate means, such as criminality. Russia faces competing informal institutions, according to the typology of Helmke and Levitsky developed in the theoretical framework. Another problem derived from these weak formal institutions is the influence of the state and the personal links established between politicians and private owners. An example, in 2002, Russian state was holding 38% of shares in Gazprom, representing 8% of Russian GDP (Buck in Estrin & Prevezer, 2010). A predominant informal institution is the tradition of “blat”, a corrupted practice, comparable to gifts. The “blat” is an example of practice that is deeply integrated in the culture of Russia (Estrin & Prevezer, 2010). In ex-Sovietic countries, they have officially codified legal frameworks, close to those of Western countries, but some surveys have shown the impossibility of implementing them efficiently. The Russian environment is deprived of rule of law, and hence have low probability of being sanctioned, which gives the way to corrupted practices (Tonoyan, Strohmeier, Habib & Perlitz, 2010). The Russian citizens do not have this idea of the law governing their behaviour, they are not afraid of breaking the law, since they know that they will not be sanctioned. In case of BRIC countries, informal institutions have occurred because of weak formal institutions. However, the weakness of formal institutions does not directly imply the emergence of informal institutions (Helmke & Levitsky, 2004).

Rose-Ackerman (1999) highlighted the incentives and institutional factors favouring the occurrence of corruption acts. Weak political and legal structures, weak rule of law and a culture inclined to corruption are factors promoting the spread and the institutionalization of such practices. Moreover, low salaries, monopoly power, discretion and lack of accountability create incentives for social actors to adopt unethical behaviours (Rose-Ackerman, 1999). Countries that are facing institutional structure with such elements are more inclined to be corrupted. These characteristics of the institutional environment are highly related to higher levels of poverty.

Spencer and Gomez (2011) argued that the more corruption is institutionalized in a country, the more likely the multinational will take part to such practices. Our results underline this fact as we clearly see the significance and the positive relationship between the ACP and CPI. In countries with low CPI such as Russia or Egypt, the ACP scores are lower than in countries with high CPI like Denmark.

Nations willing to reduce their level of corruption by implementing regulations and laws face the problem of institutional transplant, that is tensions between formal rules and the indigenous one, the informal rules such as culture and customs. Formal rules are efficient only if they are deeply integrated in the informal ones. So, even if developing countries want to avoid corruption practices by imposing regulations, the new regulations require to suit informal institutions such as the culture of people, to gain legitimacy upon the social actors. Or national institutions cannot simply copy and paste the institutional structure of another state. Setting up an institutional change is a long process, which needs to suit the informal institutions, otherwise social actors will reject it.

4.3.2. Hypothesis 2 - Exposure in headquarters

Results show that the higher is the exposure of a company in its headquarters, the stronger is the relationship between the institutional context and the quality of anti-corruption programme.

Khan (2006) and other researchers underline higher level of corruption in developing countries, than in advanced economies because of the weakness of their formal institutions that foster the growth of corruption.

We divided the sample according to the degree of exposition in its headquarter to statistically show this result. The exposition of a multinational corporation corresponds to the variable $CPI * Ratio_HQ$. We computed the average of our sample, that is 25,65% of exposition. Then, we classify the companies between two subsamples, multinational companies below the average are classified as having a *low degree of exposition* and companies beyond the average are classified as having a *high degree of exposition*.

Then, for each subsample, we run a regression $ACP_i = \beta_0 + \beta_1 CPI_i + \beta_2 CPI * Ratio_HQ_i + \varepsilon_i$, expecting that the adjusted R^2 of *high degree of exposition* is higher than the one of *low degree of exposition*.

Figure 13: Statistic about the degree of exposition	Low degree of exposition	High degree of exposition
Adjusted- R^2	0,186	0,3789
VAR ($ ACP - CPI $)	268,92	230,63

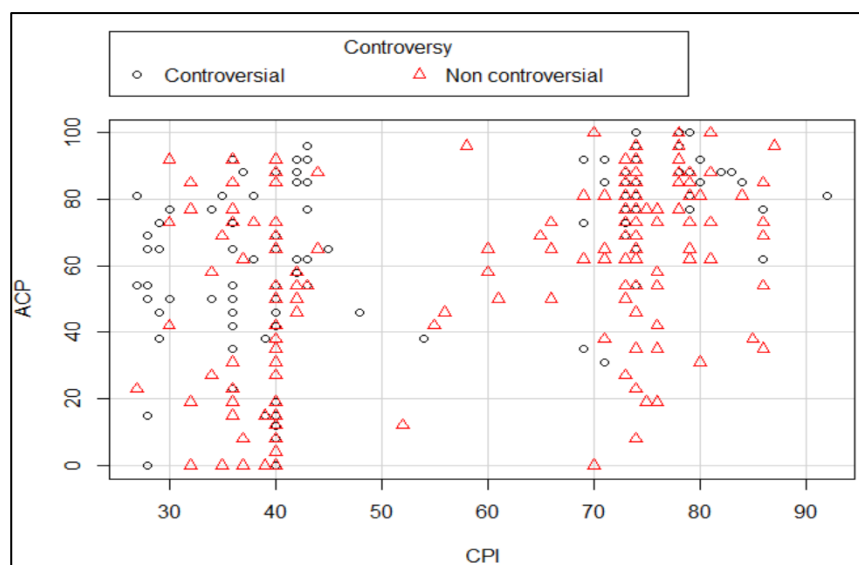
Adjusted- R^2 represents the percentage of the dependent variable that is explained by the model. We observe that the model explains 37,89% of ACP when we consider the subsample

of companies with *High degree of exposition*, whereas it explains 18,6% of ACP with the subsample of companies having *Low degree of exposition*. Moreover, we compute the variance of the absolute value of the difference between ACP and CPI. The variance is lower for the subsample with *high degree of exposition* where ACP scores converge more towards ACP than in the one with *low degree of exposition*. Therefore, we do not reject our hypothesis and it confirms that the relationship between ACP and CPI is stronger when there is a high degree of exposition.

4.3.3. Hypothesis 3 - Sector

The results show that the ACP scores of multinational corporations are higher in controversial sectors than in non-controversial sector. Three controversial sectors over four are above the ACP average of the sectors. It contradicts our expectations because we assumed that in controversial sectors subject would have been more corrupted because they imply more frequent interactions with officials due to their core activity, they face principal-agent problem and thus, they raise ethical, environmental, and social issues.

Figure 14: Repartition of sectors by controversy



The scatterplot describes the dispersion of companies according to ACP, CPI, and their belonging to a controversial sector or not. We notice that controversial companies are mainly present in countries with low CPI, that means emerging and developing countries. However, their ACP varies considerably between 0 and 100. Companies from non-controversial industries are active in all regions of the world with the same variation in ACP scores. It underlines the

that controversial industries are more present in countries with high perceived corruption index, and thus are more likely to be corrupted.

We explain these unexpected results by the fact that since the corporations know that they are operating in controversial sectors, which can impact negatively their reputation, they take part to initiative fighting ethical issues such as corruption or environmental damages and hence, keep or improve their reputation. The issue for companies that are operating in controversial sectors is the gain of legitimacy, to make their business practices socially accepted. This explains why they comply with CSR regulations and transparency standards. Investments in CSR are profitable in the long run, since they improve their public perception.

Some firms view CSR as a generator of competitive advantages providing higher financial outcomes, or a tool to control risk (Brammer, Jackson and Matten, 2012). It is a strong incentive for leaders to implement CSR policies. Nowadays, consumers pay more attention to buy products respecting the shareholders and the environment in the production process. If we do not perceive companies only as profit driven, but as an active social actor, trying to improve social conditions, we observe that for some other firms, CSR is incorporated in the main mission of the firm (Husted & Allen, 2006). Nevertheless, a study made on Nordic companies aiming at determining their motivations for implementing CSR shows that there are three main reasons for implementing CSR: reputation and brand, competitiveness, and risk management.³ Moreover, this study shows that Nordic MNCs are sceptical toward the effectiveness of voluntary CSR initiatives and soft law. They are more inclined to apply government regulations and hard law (Gjolberg, 2011). The main reasons for the implementation of CSR are the reputational and competitive advantages that it provides, since consumers take more care of social responsibility. The implementation of CSR by firms make them acquire legitimacy and social acceptance (Palazzo, 2005). This is especially more relevant for controversial sectors that have difficulties to be tolerated by citizens because of their controversial core activity.

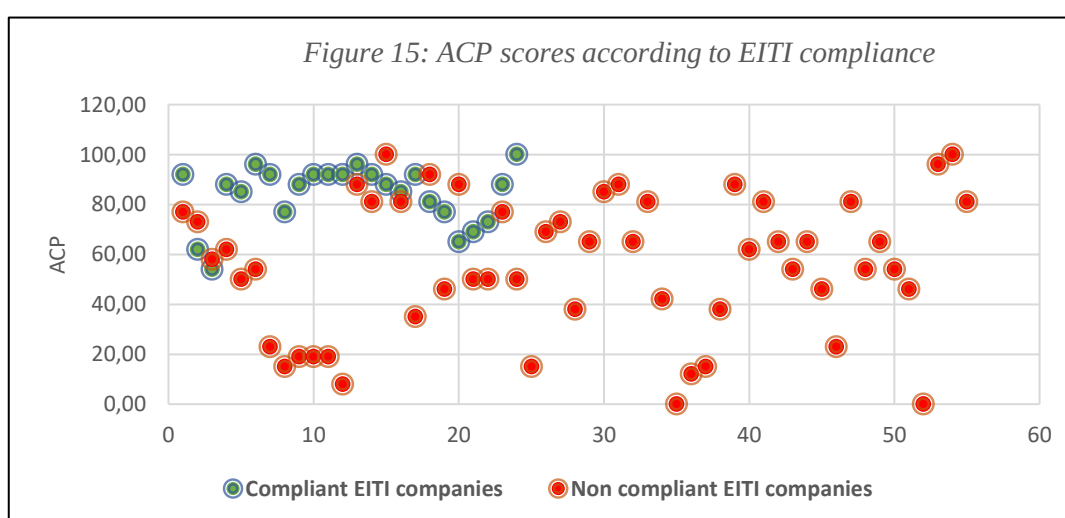
Companies from controversial sectors establish CSR practices, fitting with the institutional environments they are part of, to gain organizational legitimacy. It is a strategic means allowing them to improve their reputational capital, improve their perception by the public, which is economically profitable in the long run. (Du, Edward & Vieira, 2012)

According to the literature, we expect the extractive industries such as oil, gas and energy, basic materials, or utilities to be the most corrupted. Financials and industrials are the least

³ Reputation and brand (66,7%), competitiveness (61,1%) and risk management (57,4%). Study realized on a sample of 79 companies from Sweden, Finland, Denmark and Norway.

corrupted sectors. Empirical evidence shows that ACP scores of oil, gas and energy are above the average of our global sample. This is explained by the compliance of companies with initiatives aimed at fighting against corruption, like EITI, which makes companies and national institutions less subjected to corrupted acts and to oblige them to be publicly transparent regarding with the transactions made. Extractive Industries Transparency Initiative (EITI) is a standard that promotes transparency and accountability of firms in the extraction of oil, gas, and mineral resources, aiming to a sustainable economic growth and development in developing countries. EITI oblige compliant companies to disclose information all along the extractive industry value chain (EITI, 2017). “EITI increases the legitimacy of the institutions” (Haufler, 2010, p. 55). It makes governmental institutions stronger, reducing the likelihood of corrupted acts between the private and public sector.

Indeed in 2017, all companies supporting EITI that are present in our sample are ArcelorMittal, BHP Billiton, BP, Chevron, ConocoPhillips, Eni, ExxonMobil, Petrobras, Rio Tinto, Royal Dutch Shell, Statoil, Total, Vale (EITI, 2017). The following scatter plot shows ACP scores for multinational of basic materials and oil, gas, and energy industries, according to their compliance with EITI:



It clearly shows that the companies compliant to EITI (Average ACP=83,65/100) obtained higher ACP than non-compliant ones (Average ACP=55,67/100). Moreover, the proportion of firms of oil, gas & energy sector compliant to EITI (42,11%) is higher than the proportion of firms from basic materials industry (16,67%).

Compliance with EITI explains why oil, gas and energy sector obtains the fourth highest ACP average, whereas Basic Materials occupies is below the average. This contradicts the literature, which underlines that companies working in some sectors in which frequent

interactions with government are required such as oil, gas, and energy (Tonoyan, Strohmeier, Habib & Perlitz, 2010) or the extraction of natural resources (Haufler, 2010), are more likely to be corrupted.

5. CONCLUSION

This conclusion is the occasion to sum up and make a review of all the things we learned within the theoretical framework, as well as the concrete results of our model. Moreover, we address the issue that it raises and we conclude suggesting the direction for future research.

5.1. Summary

Our initial objective is to understand the link between the institutional context and the quality of anti-corruption practices in the case of multinational corporations. Our database contains 300 multinational corporations covering ten industries based in headquarters all over the world. All the explanatory variables of the model are significative to explain the quality of anti-corruption practices.

We use the institutional theory to link the institutional context to anticorruption practices. This theory states that the institutional environment shapes the behaviour of social actors. It is composed both of formal and informal institutions. Corruption appears when formal institutions are weak and are not able to provide basic services for the population. Therefore, they create informal institutions to substitute the inefficient formal institutions. There are three processes through which the practices become institutionalized in a society: coercive, normative, and regulatory isomorphisms. Corruption is an informal institution that appears mainly due to the interaction between national officials and other social actors. We discovered that some contexts are more prone to corruption, because of the weakness of the legal system they are facing, such as low probabilities of being caught or low sanctions. Thus, actors do not hesitate in committing such acts.

However, after the review of literature, we learnt that the sector plays an important role in the establishment of anti-corruption programme for multinationals. Therefore, we added a control variable representing the influence of the sector within our model and a moderation variable, that is the exposition of the multinational in its headquarters, since we assume that the more the company is present, the stronger is the influence of its institutional environment.

Our results show that the institutional environment that we represent by Corruption Perception Index of Transparency International exerts a significant and positive influence over the anti-corruption programme of multinational corporations obtained in the TRAC reports of Transparency International. We notice that the ACP varies considerably according to the countries. Indeed, in some countries corruption is deeply institutionalized in the informal institutions, in the culture and habits of people, whereas in some others corrupt practices are

not frequent. Corruption is mainly present in emerging and developing countries with weaker formal institutions, which inefficiently support population needs, since institutions are weak and public money is misused by officials. The results also show that the more a multinational is exposed in a country, the stronger is the positive relationship between ACP and CPI. This result is statistically robust when we use an alternative measure of perceived corruption, the Control of Corruption that is a governance indicator provided by the World Bank.

Moreover, our control variable, that is a dummy variable for representing the controversy of the sector classifies the ten sectors in two categories: controversial and non-controversial sector regarding the definition of controversial sector that implies environmental, ethical, and social issues. We expected that ACP scores were lower in controversial sectors, but the results showed the opposite. Since the companies know that they are operating in controversial sector, which is dangerous for their external image, they are compliant towards existing regulations against corruption or they take the adequate measures, for their reputation not to be hurt by corruption scandals.

Finally, all the explanatory variables of ACP are statistically significant and our model confirms two hypotheses over three: the first one that underlines that the institutional environment has a positive influence over the quality of anti-corruption programme. Secondly, the exposure of the multinational corporation in the country strengthens this positive relationship and finally, we reject the third hypothesis that ACP scores are higher in controversial sectors.

5.2.Limits

Even if our model is robust and statistically significant, it has some limitations. First, our sample contains three hundred multinationals corporations, spread in ten sectors. However, the repartition of companies within the ten sectors is unequal meaning that in basic materials, we have thirty-nine companies, whereas in utilities there are only eight. This creates problems of statistical significance for the study of corruption within the sectors that are less represented. We should have found bigger and more uniform size of samples, which raises the issue of the availability of data. ACP scores are extracted from Transparency international reports, and during the establishment of the database, we had to remove several multinational corporations due to their uncomplete country-by-country reporting.

Secondly, as we know, multinational corporations are operating with a headquarter and subsidiaries all over the world. In our model, we consider the exposition of the multinational corporation in its headquarter. Having more information about the specific features of

multinationals, such as their market shares by subsidiaries would have improved the relevance of the model. However, this raises again the availability of information because not all companies do disclose their annual reports for all the geographic segments in which they are operating. Therefore, NGO and other institutions require to put pressures on multinational corporations to be compliant with organizational transparency and all the profits made abroad.

The third limit concerns the variable controversy. We classify our ten sectors in two categories: controversial or non-controversial. This classification is made according to a definition of what is a controversial sector, which states that controversial sectors raises ethical, environmental, and social issues. This definition can be interpreted subjectively and several classifications can emerge, linked to the interpretation of the authors. However, even if this definition is subject to personal interpretation, the deep literature helped us to understand the risks faced by each sector and thus, to classify them in the most appropriate way.

Finally, we address also a general limit concerning the quantification of corruption. This limit stands for the indicators aimed to provide an overview of corruption in society such as CPI or Corruption control. Corruption is played behind the official channels and social players prefer generally to keep it secret. It implies difficulties to collect data that represent the truth, or simply to collect existing data. The problem concerns the non-availability of data, as well as the availability of false data.

5.3. Corruption in the future research

Corruption is a broad topic implying the society as a whole. For the purpose of this thesis, we limit the scope of our research to the private sector and more precisely multinational corporations. However, multinational corporations are influent economic actors, but the economic world is also represented by other economic actors. Our research can be extended to other types of economic actors, such as SMEs. Moreover, the companies of our sample are mainly publicly-listed, but it could be interesting to consider the case of state-owned or private companies. Our research question is wide and implies several dimensions: institutional context, exposition, and sectors. Further research may focus specifically on the controversial sectors to understand more deeply how the relationships between private and public spheres work.

The explanatory variables of the model do not explain completely the quality of anti-corruption programmes. Therefore, as a further research, we could go deeper in the comparative analysis of the institutional environment of each country considered and try to understand the other factors explaining corruption in private sectors that we did not consider in the model. Investigating more deeply the formal and informal institutions, the cultures, habits, legal

scheme, helps for understanding the behaviours of social actors and thus, to raise the drivers of corruption practices. As our model explains only a part of the dependent variable, future researches are necessary to understand the other drivers of corruption for multinational corporations.

Corruption is not included in the eight development goals of the millenium, that concern reducing extreme poverty, improve maternal health, or ensure environmental sustainability⁴ (United Nations, 2015). However, corruption is responsible for the misallocation and distortion of resources. Fighting corruption is a step in the achievement of these goals which require a fair and transparent use of the public money, to support the needs of populations by providing utilities, health cares, food, ... that are the duties of the State and official spheres.

However, as we underline in this thesis, corruption in both private and public sectors undermine the development of nations, since officials misuse public money. Corruption is at the root of these millennium goals and if governments do not put it at the top of their agenda, social inequalities will remain present all over the world. It is up to worldwide organizations and states to take measures that make practices change. Since officials are the first concerned, society is facing the chicken and egg problem. External actors like NGOs and Transparency International have a determinant role in the worldwide fight against corruption.

⁴ Eradicate extreme poverty and hunger, achieve primary education, promote gender equality and empower women, reduce child mortality, improve maternal health, combat HIV/AIDS, malaria and other diseases, ensure environmental sustainability and global partnership for development (United Nations, 2015).

6. BIBLIOGRAPHY

- Andersson, U., & Holm, U. (2010). *Managing the Contemporary Multinational: The role of headquarters*. New Horizons in International Business.
- Bardhan, P., (1997). Corruption and Development: A review of Issues. *Journal of Economic Literature*, 35, 1320-1346.
- Bartlett, C. A., & Ghoshal, S. (1989). *Managing across Borders: The Transnational Solution*. Harvard Business School Press.
- Bartlett, C. A., & Ghoshal, S. (1990). The Multinational Corporation as an Interorganizational Network. *The Academy of Management Review*, 15(4), 603-625.
- Brammer, S., Jackson, G. & Matten, D. (2012). Corporate Social Responsibility and institutional theory: new perspectives on private governance. *Socio-Economic Review*. 10, 3-28.
- BBC News. (2015). *Fifa corruption crisis: Key questions answered*. On line <http://www.bbc.com/news/world-europe-32897066>, consulted on 14th September 2016.
- BBC News. (2016). *Panama Papers Q&A: What is the scandal about?*. On line <http://www.bbc.com/news/world-35954224>, consulted on 14th September 2016.
- Belleflamme, P., & Peitz, M. (2013). *Industrial Organization: Markets and Strategies*. Cambridge University Press.
- Caemmerer, B., & Marck, M. (2009). The impact of Isomorphic Pressures on the Development of Organisational Service Orientation in Public Services. *Australian and New Zealand Marketing Academy*.
- Campos, J.E., & Pradhan, S. (2007). *The Many Faces of Corruption: Tracking Vulnerabilities at the Sector Level*. The World Bank.
- Control Risks. (2017). *Control Risks: Home*. On line <https://www.controlrisks.com/en>, consulted on 4th March 2017.
- Dacin, M. T., Kostova, T., & Roth, K. (2008). Institutional Theory in the Study of Multinational Corporations: a Critique and New Directions. *The Academy of Management Review*, 33(4), 994-1006.
- De Vaal, A., & Ebben, W. (2009). Institutions and Relation between Corruption and Economic Growth. *Institute for Management Research Radboud University Nijmegen*, 1-40.
- DiMaggio, P. J. (1991) & Powell, W. W. *The New institutionalism in organizational analysis*. Chicago, University of Chicago press.
- Directorate-General For Internal Policies Economic and Monetary Affairs. (2015). Tax Rulings in the EU Member States. *Study for the ECON Committee. European Parliament*. [http://www.europarl.europa.eu/RegData/etudes/IDAN/2015/563447/IPOL_IDA\(2015\)563447_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/IDAN/2015/563447/IPOL_IDA(2015)563447_EN.pdf), consulted on 15th May 2017.
- Du, S., & Vieira, E. T. (2012). Striving for legitimacy through corporate social responsibility: Insights from oil companies. *Journal of Business Ethics*, 110(4), 413-427.
- EITI. (2017). *Companies: why companies support the EITI?*. On line <https://eiti.org/supporters/companies>, consulted on 14th June 2017.
- EITI. (2017). *Who we are?* On line: <https://eiti.org/who-we-are>, consulted on 15th June 2017.
- Ensor, T., & Duran-Moreno, A. (2002). Corruption as a challenge to effective regulation in the health sector. *Regulating entrepreneurial behaviour in European health care systems*, 106.
- Estrin, S., & Prevezer, M. (2010). The role of informal institutions in corporate governance: Brazil, Russia, India, and China compared. *Asia Pacific Journal Management*, 28(41). 41-67.

- Forgues-Puccio, G. F. (2013). Corruption and the Private Sector: a review of issues. *Oxford Policy Management (Economic and private sector professional evidence and applied knowledge service)*, 1-23.
- Gjolberg, M. (2011). Explaining Regulatory Preferences: CSR, Soft Law, or Hard Law? Insights from a Survey of Nordic Pioneers in CSR, *Business and Politics*, 13(2), 1-34. **DOI:** 10.2202/1469-3569.13511
- Gregory, P. R., & Stuart, R. C. (2004). Comparing Economic Systems in the Twenty-First Century. *Houghton Mifflin Company*, 7th ed, New York, 2-35.
- Haufler, V. (2010). Disclosure as Governance: The Extractive Industries Transparency Initiative and Resource Management in the Developing World. *Global Environmental Politics*, 10(3), 53-73.
- Helmke, G. & Levitsky, S. (2004). Informal Institutions and Comparative politics: A Research Agenda. *Perspectives on Politics*, 2(4), 725-740.
- Hauser, C. & Hogenacker, J. (2014). Do firms proactively take measures to prevent prevent corruption in their international Operations?. *European Management Review*, 11, 223-237.
- Husted, B. W., & Allen, D. B. (2006). Corporate Social Responsibility in the Multinational Enterprise: Strategic and institutional Approaches. *Journal of International Business Studies*, 37(6), 838-849.
- International Organization for Standardization. (2016). *ISO 37001:2016*. On line: <https://www.iso.org/fr/standard/65034.html>, consulted on 15th July 2017.
- Jorgensen Farrales, M. (2005). *A history of Corruption Studies and the Great Definitions Debate*. University of California, 1-50.
- Kar, D., & Freitas, S. (2011). Illicit Financial Flows from Developing Countries over the Decade Ending 2009. *Global Financial Integrity*. 2-100.
- Kenny, C., & Soreide, T. (2008). Grand Corruption in Utilities. Policy Research Paper 4805. *Washington, DC: World Bank*.
- Khan, M. H. (2006). Determinants of Corruption in Developing Countries: The Conventional Economic Analysis, published in Susan Rose-Ackerman ed. (2006). *International Handbook on the Economics of Corruption*. Cheltenham: Edward Elgar.
- Kostova, T., & Roth, K. (2002). Adoption of an Organizational Practice by Subsidiaries of Multinational Corporation: Institutional and relational Effects. *The Academy of Management Journal*, 45(1), 215-233.
- Leahy, J. (2016). *What is the Petrobras scandal that is engulfing Brazil?*. On line <https://www.ft.com/content/6e8b0e28-f728-11e5-803c-d27c7117d132?mhq5j=e2>, consulted on 15th July 2017.
- Libération. (2015). *Ces entreprises allemandes mêlées à des affaires de corruption en Grèce*. On line : http://www.liberation.fr/planete/2015/08/25/ces-entreprises-allemandes-melees-a-des-affaires-de-corruption-en-grece_1369270, consulted on 15th July 2017.
- Lindgreen, A., Maon, F., Reast, J., & Yani-de-Soriano, M. (2012). Guest Editorial: Corporate Social responsibility in Controversial Industry Sectors. *Journal of Business Ethics*.
- Luo, Y. (2004). An organizational perspective of corruption. *Management and organizational review*. 1(1), 119-154.
- Matten, D., & Moon, J. (2008). “Implicit” and “Explicit” CSR: A conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review*. 33(2), 404-424.
- Masahiko, A. (2001). *Toward a comparative institutional analysis*. The MIT Press, Cambridge.
- North, D. (1990). Institutions, Institutional Change and Economic Performance. *Cambridge university Press*. 242-261.

- OECD. (2014). Illicit financial flows from developing countries: measuring OECD responses. *OECD Better policies for Better Lives*.
- OECD. (2015). Consequences of Corruption at the Sector Level and Implications for Economic Growth and Development, *OECD Publishing*, Paris. DOI:10.1787/9789264230781-en
- OECD. (2016). OECD Business and Finance Outlook 2016: Is foreign bribery an attractive investment in some countries?, *OECD publishing*, 207-220.
- Palazzo, G., & Richter, U. (2005). CSR Business as Usual? The Case of the Tobacco Industry. *Journal of Business Ethics*, 61, 387-401.
- Powell, W. W. (2007). The New Institutionalism. *The International Encyclopedia of Organization Studies*.
- Rose-Ackerman, S. (1999). *Corruption and government. Causes, consequences, and reform*. Cambridge University Press.
- Runde, D. F., Hameed, S., & Magpile, J. (2014). The Costs of corruption Strategies for Ending a Tax on Private-sector-led Growth. *Center for Strategic & International Studies*, 1-56.
- Scott, W. R. (2004). *Institutional Theory: Contributing to a Theoretical Research program*. Stanford University.
- Scott, W. R. (2004). Institutional Theory. *Encyclopedia of Social Theory*. Ed. Thousand Oaks, CA: Sage. 408-414.
- Scott, W. R. (2014). *Institutions and Organizations: Ideas, Interests, and Identities*. Ed. Sage, 4thed.
- Spencer, J., & Gomez, C. (2011). MNEs and Corruption: The impact of national institutions and subsidiary strategy. *Strategic Management Journal*, 32, 280-300.
- Sutherland, E. (2012). Corruption in telecommunications: problems and remedies. *The Journal of Policy*. 14(1), 4-19.
- Svensson, J. (2005). Eight Questions about Corruption. *Journal of Perspectives*, 19(3), 1-42.
- The World Bank Group. (1997). *Helping Countries Combat Corruption: The Role of the World Bank*. On line <http://www1.worldbank.org/publicsector/anticorrupt/corruptn/cor02.htm>, consulted on 29th August 2016.
- The World Bank Group. (2017). *Worldwide Governance Indicators*. <http://info.worldbank.org/governance/wgi/#home>, consulted on 13th June 2017.
- Tonoyan, V., Strohmeyer, R., Habib, M. & Perlitz, M. (2010). Corruption and Entrepreneurship: How Formal and Informal Institutions shape small firm behaviour in transition and Market Economies. *Entrepreneurship: Theory and Practice*, 803-831.
- Transparency International. (2009a). *Global Corruption Report 2009: Corruption and the Private Sector*. On line http://www.transparency.org/whatwedo/publication/global_corruption_report_2009, consulted on 10th March 2017.
- Transparency International (2009b). *Transparency in Reporting on Anti-Corruption A report on Corporate Practices*. On line https://www.transparency.org/whatwedo/publication/transparency_in_reporting_on_anti_corruption_a_report_on_corporate_practice, consulted on 1st June 2017.
- Transparency International. (2012). *Une étude montre que les multinationales doivent être bien plus transparentes*. http://www.transparency.org/news/pressrelease/20120610_une_etude_montre_que_les_multinationales_doivent_etre_transparent, consulted on 20th September 2016.

Transparency International. (2012). *Transparency in Corporate Reporting: Assessing the World's Largest Companies*. On line https://www.transparency.org/whatwedo/publication/transparency_in_corporate_reporting_assessing_the_worlds_largest_companies, consulted on 29th July 2017.

Transparency International. (2013). *Transparency in Corporate reporting: Assessing Emerging market multinationals*. On line: https://www.transparency.org/whatwedo/publication/transparency_in_corporate_reporting_assessing_emerging_market_multinational, consulted on 15th June 2017.

Transparency International. (2014). *Transparency in Corporate Reporting: Assessing the World's Largest Companies*. On line http://www.transparency.org/whatwedo/publication/transparency_in_corporate_reporting_assessing_worlds_largest_companies_2014, consulted on 14th February 2017.

Transparency International France. (2015a). *Transparency International propose 7 mesures pour une réforme de la FIFA*. <https://transparency-france.org/project/transparency-international-propose-7-mesures-reforme-de-fifa/>, consulted on 28th December 2016.

Transparency International. (2015b). *Working paper: Incentivising Integrity in Banks*. On line: [file:///C:/Users/Home/Downloads/2015 WorkingPaper2 Incentivising Integrity Banks EN.pdf](file:///C:/Users/Home/Downloads/2015%20WorkingPaper2%20Incentivising%20Integrity%20Banks%20EN.pdf), consulted on 15th June 2017.

Transparency International. (2015c). *Transparency in Corporate Reporting: Assessing the world's largest telecommunications companies*. On line https://www.transparency.org/whatwedo/publication/transparency_in_corporate_reporting_assessing_the_worlds_largest_telecommun, consulted on 5th June 2017.

Transparency International. (2015). *Corruption Perception Index 2015*. <http://www.transparency.org/cpi2015>, consulted on 28th August 2016.

Transparency International. (2016a). *What is corruption ?*. On line <https://www.transparency.org/what-is-corruption/>, consulted on 29th July 2017.

Transparency International (2016b). *Our organization: overview*. On line <https://www.transparency.org/whoweare/organisation/>, consulted on 29th July 2017.

Transparency International (2016c). *Transparency in Corporate Reporting: Assessing Emerging Market Multinationals*. On line https://www.transparency.org/whatwedo/publication/transparency_in_corporate_reporting_assessing_emerging_market_multinat, consulted on 15th June 2017.

Transparency International. (2016d). *Corruption Perception index: Overview*. On line <http://www.transparency.org/research/cpi/overview>, consulted on 20th September 2016.

Transparency International. (2016e). *Oil and gas*. On line https://www.transparency.org/topic/detail/oil_and_gas, consulted on 5th June 2017.

Transparency International. (2016f). *Malaysian government must stop impeding corruption investigations*. On line https://www.transparency.org/news/pressrelease/malaysian_government_must_stop_impeding_corruption_investigations, consulted on 31st July 2017.

Transparency International. (2016g). *Luxleaks whistleblowers did the right thing and should not have been convicted*. http://www.transparency.org/news/pressrelease/luxleaks_whistleblowers_did_the_right_thing_and_should_not_be_convicted, consulted on 18th March 2017.

Transparency International UK. (2016). *Pharmaceuticals & Healthcare programme*. On line <http://www.transparency.org.uk/our-work/pharmaceuticals-healthcare-programme/>, consulted on 12th June 2017.

Transparency international UK. (2015). *The Bribery Act*. On line <http://www.transparency.org.uk/our-work/business-integrity/bribery-act/>, consulted on 1st August 2017.

Transparency International Secretariat. (2017). *Explanation of how individual country scores of the corruption perceptions index are calculated*. On line [https://www.transparency.org/news/pressrelease/explanation of how individual country scores of t he corruption perceptions](https://www.transparency.org/news/pressrelease/explanation_of_how_individual_country_scores_of_the_corruption_perceptions), consulted on 8th June 2017.

United Nations. (2015). *We can end poverty: Millenium development goals and beyond 2015*. On line: <http://www.un.org/millenniumgoals/>, consulted on 20th July 2017.

Williamson, C. R. (2009). Informal institutions rule: institutional arrangements and economic performance. *Public Choice*. 139(3), 371-387. DOI: 10.1007/s11127-009-9399-x

World Bank Report. (1997). *Helping Countries Combat Corruption The Role of the World Bank*. <http://www1.worldbank.org/publicsector/anticorrupt/corruptn/corrptn.pdf>, consulted on 19th September 2016.

Zucker, L. G. (1987). Institutional theories of organization. *Annual Review of Sociology*. 13, 443-464.

7. APPENDICES

APPENDIX A : Multinational questionnaire

Reporting on anti-corruption programmes (ACP)

1) Does the company have a publicly stated commitment to anti-corruption?

1,0 point - If there is an explicit statement of “zero tolerance to corruption” or equivalent (i.e. the commitment to fight any corrupt activities)

0,5 point – If there is no general anti-corruption statement, but only reference to public sector/ governmental corruption

If there is a weaker, less direct statement

If a company is a signatory of the UNGC **and** it explicitly underscores its commitment to the 10th principle

0 points – If there is no explicit statement/ commitment, even if relevant policies are there
If a company is a signatory of the UNGC, but there is no explicit reference to its commitment to the 10th principle

2) Does the company publicly commit to be in compliance with all relevant laws, including anti-corruption laws?

1,0 point - If there is an explicit statement of such commitment for all jurisdictions in which a company operates

A reference to “all laws” shall be deemed to include anti-corruption laws, even if they are not specifically mentioned

0 points – If there is no explicit reference to compliance with laws or the reference to compliance with laws excludes or omits anti-corruption laws

3) Does the company leadership (senior member of management or board) demonstrate support for anti-corruption?

1,0 point - If the company leadership (senior member of management or board) issues a personal statement that specifically highlights the company’s commitment to anti-corruption

If the company leadership (senior member of management or board) issues a personal letter of support for company's code of conduct or equivalent and the code of conduct includes anti-corruption policies

0 points – If the statement fails to specifically refer to corruption or is not inserted in a code of conduct

If the statement is not issued by the appropriate individual

If there is no such statement

4) Does the company's code of conduct / anti-corruption policy explicitly apply to all employees and directors?

Directors = Board of Directors = Supervisory Board

1,0 point - If the policy explicitly mentions that it applies to all employees and directors, regardless of their position in corporate hierarchy. There can be no exceptions for any country of operations

0,5 point - If the policy applies to all employees, but does not explicitly mention directors

0 points – If there is no explicit statement that relevant policies apply to all employees and directors

If policies apply to a selected group of employees only, i.e., to managers

5) Does the company's anti-corruption policy explicitly apply to persons who are not employees but are authorised to **act on behalf of the company** or represent it (for example: agents, advisors, representatives or intermediaries)? 1,0 point - If such persons must comply with the policy

0 points – If such persons are only encouraged to comply with the policy

If such persons are not covered by the anti-corruption policy or they are specifically excluded from the policy.

6) Does the company's anti-corruption programme apply to non-controlled persons or entities that provide goods or services **under contract** (for example: contractors, subcontractors, suppliers)?

1,0 point - If all of the following three elements are fulfilled:

- 1) Such persons/entities are required to comply with the company's anticorruption programme, its equivalent or with a supplier code issued by the company; and
- 2) The company performs anti-corruption due diligence on such persons/entities; and
- 3) The company monitors such persons/entities.

0,5 point – If such persons/entities are only 'encouraged' to comply with the policy or if only one or two of the three elements above are present

0 points – If there is no reference to such persons/entities; or they are not specifically required to comply with the company's policy or equivalent.

7) Does the company have in place an anti-corruption training programme for its employees and directors?

Directors = Board of Directors = Supervisory Board

1,0 point - If the company states in public documents that such a programme is in place for employees and directors (the reference to the training programme may focus explicitly on training on the anti-corruption policies, but it can also refer to training on the code of conduct, if it includes anti-corruption provisions)

0,5 point – If the company states in public documents that such a training programme is in place for employees, but not for directors (or vice versa)

If there is public information about a training programme for employees and directors on all ethical/integrity issues, and from other sources, we can infer, that it includes anti-corruption policies

0 points – If there is no public reference to such a training programme

8) Does the company have a policy on gifts, hospitality and expenses?

1,0 point - If the company has a policy regulating the offer, giving and receipt of gifts, hospitality or expenses. The policy must cover the following elements:

- 1) Either offer or giving of such items,
- 2) Receipt of such items,
- 3) A definition of thresholds (descriptive or quoted as amounts) for acceptable gifts, hospitality or expenses, as well as procedures and reporting requirements.

Attention: *The exact guidance for employees does not have to be publicly available. There must be publicly available information that such guidance exists and that it includes all required elements.*

0,5 point – If some but not all of the elements enumerated above are present

0 points – If the company does not disclose that it has such policy

9) Is there a policy that explicitly prohibits facilitation payments?

‘Facilitation payments’ are payments made to expedite or to secure the performance of a *routine governmental action*, by an official, political party, or party official.

Attention: facilitation payments are illegal in most countries but they are not prohibited under the foreign bribery laws of some countries, such as the US Foreign Corrupt Practices Act. Nevertheless, we expect them to be prohibited in all countries in which a company operates.

1,0 point - If there is an *explicit prohibition* and not only simple discouragement of such payments (recognising that exceptions may be made for life or health threatening situations)

0 points - If such payments are discouraged or regulated internally (i.e. allowed after being approved by the manager)

If such payments are “allowed if permitted by local law”

If there is no reference to facilitation payments or they are specifically permitted

10) Does the programme enable employees and others to raise concerns and report violations (of the programme) without risk of reprisal?

1,0 point - If the publicly-available policy specifies that no employee will suffer demotion, penalty or other reprisals for raising concerns or reporting violations (whistleblowing)

0 points – If there is no explicit policy prohibiting such retaliation

10) Does the company provide a channel through which employees can report suspected breaches of anti-corruption policies, and does the channel allow for confidential and/or anonymous reporting (whistle-blowing)?

1,0 point - If there is public provision of such a channel in a form that assures full confidentiality and/or anonymity, and two-way communication with the whistleblower for any needed follow-up on the disclosure

0,5 point – If there is such a channel, but two-way communication with the whistle-blower is not assured

0 points – If there is no such channel or the channel allows for neither confidential, nor anonymous reporting

12) Does the company carry out regular monitoring of its anti-corruption programme to review the programme's suitability, adequacy and effectiveness, and implement improvements as appropriate?

“The enterprise should establish feedback mechanisms and other internal processes supporting the continuous improvement of the Programme. Senior management of the enterprise should monitor the Programme and periodically review the Programme's suitability, adequacy and effectiveness, and implement improvements as appropriate” (from TI's *Business Principles for Countering Bribery*).

1,0 point - If there is public information on regular or continuous monitoring of the anticorruption programme

0,5 point – If there is information on regular or continuous monitoring of all sustainability issues (without specific reference to anti-corruption policies and procedures) and additionally some implicit information that company's anti-corruption programme should be included

0 points – If there is information on some monitoring, but it is not a regular or continuous process

If there is only compliance-related monitoring in place without specific reference to the review of programme's suitability, adequacy and effectiveness

If there is only oversight or audit of the report (which mentions the programme)

If no monitoring is publicly mentioned

13) Does the company have a policy on political contributions that either prohibits such contributions or if it does not, requires such contributions to be publicly disclosed?

APPENDIX A

‘Political contributions’ refers to contributions of cash or in-kind support for a political party, cause or candidacy. Both direct and indirect contributions, i.e., through associations to which a company is a member will be considered.

Attention: TI does not require that companies prohibit political contributions, but it requires transparency in this field. Such transparency can be achieved by either publicly disclosing all contributions or by prohibiting them.

1,0 point - If a company either publicly discloses or prohibits its political contributions (in all its countries of operations)

0 points – If political contributions are regulated but not disclosed or prohibited (e.g. there is

a special internal approval procedure and internal reporting system for such contributions, but the actual payments are not made public)

If political contributions are disclosed only for certain countries, e.g. for company’s home country

If a company’s policy refers only to contributions by employees, but not to contributions by a company

If political contributions are not regulated and/or disclosed

Organisational Transparency (OT)

14) Does the company disclose **all** of its fully consolidated subsidiaries?

1,0 point - If there is a full list of such subsidiaries

0,5 point – If there is a list of material/ principal/ significant/ main subsidiaries

0 points - If there is no list of subsidiaries

If there is only a list of domestic or other incomplete list of subsidiaries

15) Does the company disclose percentages owned in each of its fully consolidated subsidiaries?

of points - See guidance for question 14

16) Does the company disclose countries of incorporation for each of its fully consolidated subsidiaries?

APPENDIX A

of points - See guidance for question 14

17) Does the company disclose countries of operations for each of its fully consolidated subsidiaries?

of points - See guidance for question 14

18) Does the company disclose all of its non-fully consolidated holdings?

For qq.18-21: “non-fully consolidated holdings” include all non-fully consolidated entities, such as associated companies, joint-ventures, entities consolidated by equity method.

1,0 point - If there is a full list of such companies

0,5 point – If there is a list of material/ principal/ significant/ main companies

0 points - If there is no list of such companies

If there is only a list of domestic entities or other incomplete information

N/A - If a company does not have any non-fully consolidated entities (the question will not be used to calculate the scores)

19) Does the company disclose percentages owned in each of its non-fully consolidated holdings?

of points - See guidance for question 18

N/A - If a company does not have any non-fully consolidated entities (the question will not be used to calculate the scores)

20) Does the company disclose countries of incorporation for each of its non-fully consolidated holdings?

of points - See guidance for question 18

N/A - If a company does not have any non-fully consolidated entities (the question will not be used to calculate the scores)

21) Does the company disclose countries of operations for each of its non-fully consolidated holdings?

of points - See guidance for question 18

N/A - If a company does not have any non-fully consolidated entities (the question will not be used to calculate the scores)

APPENDIX A

For questions 18-21: if a company does not have any non-fully consolidated entities, it scores N/A for these questions and its overall score for the section is calculated as % performance for questions 14-17 only. I.e.: if a company scores 4 points for questions 14-17 and N/A for questions 18-21, its overall score for this section is 100%.

Country-by-Country Reporting (CBC)

“Countries of operations” – a guidance:

In our study "countries of operations" are those countries, in which a company is present either directly or through its consolidated subsidiaries, or other entities, and in which it has to report to the local tax authorities.

Before answering qq.22-26, the relevant list of countries of operations has to be identified. This is necessary to calculate the final score for this section. Such a list should be based on company's own reporting.

If a company does not provide such a list, the researcher will try to find a proxy, i.e. to identify all countries, in which company subsidiaries are registered.

For the sake of score calculation, it is also enough to know only the number of such countries, without knowing all their names.

If there is absolutely no information on where, or in how many countries the company operates, the company's score for the third dimension will be zero.

For each country of the company's operations the following set of questions is asked:

22) Does the company disclose its revenues/ sales in country X?

1,0 point - If a company discloses its gross/net sales/revenues for country X

If country-split is by origin - revenues include goods/services produced in country X, both sold locally and exported

0,5 point – If there is split by subsidiary and subsidiaries' domiciles are also disclosed

If there is country-by-country split only for a certain (but considerable, i.e. generating over 50% of revenues) part of business (i.e. for oil and gas upstream production in extractive business)

APPENDIX A

If country-split is by destination - revenues include all sales to customers located in country X, both produced locally and imported

0 points – If revenues/ sales are disclosed by region, business segment, as total only, or not reported at all

23) Does the company disclose its capital expenditure in country X?

1,0 point - If a company discloses its capital expenditure for country X

0,5 point – If there is split by subsidiary and subsidiaries' domiciles are also disclosed

If there is country-by-country split only for a certain (but considerable, i.e. generating over 50% of revenues) part of business (i.e. for oil and gas upstream production in extractive business)

0 points – If capital expenditures are disclosed by region, business segment, as total only, or not reported at all

24) Does the company disclose its pre-tax income in country X?

1,0 point - If a company discloses its pre-tax income for country X

If a company discloses its net income and income tax for country X (pre-tax income can be calculated as a simple sum of the two)

0,5 point – If there is split by subsidiary and subsidiaries' domiciles are also disclosed

If there is country-by-country split only for a certain (but considerable, i.e. generating over 50% of revenues) part of business (i.e. for oil and gas upstream production in extractive business)

0 points – If pre-tax income is disclosed by region, business segment. as total only or not reported at all

25) Does the company disclose its income tax in country X?

1,0 point - If a company discloses its income tax for country X

0,5 point – If there is split by subsidiary and subsidiaries' domiciles are also disclosed

APPENDIX A

If there is country-by-country split only for a certain (but considerable, i.e. generating over 50% of revenues) part of business (i.e. for oil and gas upstream production in extractive business)

0 points – If income tax is disclosed by region, business segment, as total only, or not reported at all

26) Does the company disclose its community contribution in country X?

1,0 point - If there is both the **amount** of community contributions in country X and there is a **description** of how this money was spent (e.g. a list of beneficiaries or description of financed community projects)

0,5 point – If there is only the **amount** of community contributions in country X

0 points – If community contributions are disclosed by region, by business segment or as total spending of the company, or not disclosed at all

If there is only a description of how money was spent in country X, but no amount is disclosed

N/A - If a company declares that it makes no community contributions in a given country, such country (or countries) shall be excluded for purposes of calculating the company's score.

SCORING:

- *Scores for the first section are calculated as follows: each question can be awarded between 0 and 1 point. The sum of points awarded for this section is then divided into 13 (which is a maximum available score) and expressed as percentage.*
- *Scores for the second section are calculated as follows: each question can be awarded between 0 and 1 point. The sum of points awarded for this section is then divided into 8 (which is a maximum available score) and expressed as percentage. If questions 18-21 are scored N/A, then the final score is divided into 4 and expressed as percentage.*

Scores for the third dimension are calculated differently than scores for the first and the second dimensions.

Each piece of country level information is awarded between 0 and 1 point.

APPENDIX A

For each question, the sum of points is calculated and then divided into the number of countries of operations. Scores for q.26 are calculated after excluding all N/A from the number of countries of operations.

Example:

6 foreign countries of operations	q.22	q.23	q.24	q.25	q.26
A	1	0	1	1	0,5
B	1	0	1	1	0,5
C	1	0	0	1	N/A
D	1	0	0	0	0,5
E	1	0	0	0	N/A
F	1	0	0	0	N/A
sum of points	6,0	0,0	2,0	3,0	1,5
score for the question	1,00	0,00	0,33	0,50	0,50

Finally the scores for all five questions are added, divided into 5 (the maximum possible score) and expressed as percentage. I.e. in the above example: $2,33 / 5 = 0,466 = 46,6\%$

APPENDIX B : Statistic results

1) Linear Model

$$ACP_i = \alpha_0 + \beta_1 CPI_i + \beta_2 Ratio_{HQ_i} + \beta_3 Ratio_{HQ_i} * CPI_i + \beta_4 Controversy_i + \epsilon_i$$

Descriptive statistics

	mean	sd	IQR	0%	25%	50%	75%	100%	n
ACP	62.4066667	27.0377159	39.0000000	0	46.0000000	69.0000000	85.0000000	100.0000000	300
Controversy	-0.2733333	0.9635266	2.0000000	-1	-1.0000000	-1.0000000	1.0000000	1.0000000	300
CPI	57.6500000	19.2068698	34.0000000	27	40.0000000	69.0000000	74.0000000	92.0000000	300
Ratio_HQ	0.4657663	0.2981657	0.4449265	0	0.2337876	0.4239302	0.6787141	2.277054	300

Correlation matrix

	Controversy	CPI	Ratio_HQ
Controversy	1.0000000	-0.1564501	-0.1845632
CPI	-0.1564501	1.0000000	-0.1287238
Ratio_HQ	-0.1845632	-0.1287238	1.0000000

Correlation test

```

Pearson's product-moment correlation

data:  ACP and Controversy
t = 1.7674, df = 298, p-value = 0.07819
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
 -0.01152444  0.21263770
sample estimates:
      cor
0.1018493

```

```

Pearson's product-moment correlation

data:  ACP and CPI
t = 8.5095, df = 298, p-value = 8.66e-16
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
 0.3462346 0.5288998
sample estimates:
      cor
0.44214

```

```

Pearson's product-moment correlation

data:  ACP and Ratio_HQ
t = -6.8982, df = 298, p-value = 3.161e-11
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
 -0.4647830 -0.2691412
sample estimates:
      cor
-0.3710726

```

```

Pearson's product-moment correlation

data:  Controversy and CPI
t = -2.7344, df = 298, p-value = 0.006623
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
 -0.26499615 -0.04398862
sample estimates:
      cor
-0.1564501

```

```

Pearson's product-moment correlation

data:  Controversy and Ratio_HQ
t = -3.2417, df = 298, p-value = 0.001323
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
 -0.29170736 -0.07284486
sample estimates:
      cor
-0.1845632

```

```

Pearson's product-moment correlation

data:  CPI and Ratio_HQ
t = -2.2408, df = 298, p-value = 0.02578
alternative hypothesis: true correlation is not equal to 0
95 percent confidence interval:
 -0.23848829 -0.01571204
sample estimates:
      cor
-0.1287238

```

2) Autocorrelation

Durbin-Watson test

```

Durbin-Watson test

data:  ACP ~ CPI + Ratio_HQ + Ratio_HQ * CPI + Controversy
DW = 1.7076, p-value = 0.007513
alternative hypothesis: true autocorrelation is not 0

```

3) Heteroskedasticity

Breusch-Pagan

```
Breusch-Pagan test  
data:  ACP ~ CPI + Ratio_HQ + Ratio_HQ * CPI + Controversy  
BP = 18.716, df = 1, p-value = 1.517e-05
```

APPENDIX C : Hypothesis 2

1) Regression *Low degree of exposition*

```

Residuals:
    Min       1Q   Median       3Q      Max
-57.132 -13.606   3.103  16.971  37.540

Coefficients:
              Estimate Std. Error t value Pr(>|t|)
(Intercept)  40.19515    5.82947   6.895 1.40e-10 ***
CPI           0.56020    0.09261   6.049 1.11e-08 ***
CPI.Ratio_HQ -0.25923    0.26044  -0.995   0.321
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 22.4 on 150 degrees of freedom
Multiple R-squared:  0.1967, Adjusted R-squared:  0.186
F-statistic: 18.36 on 2 and 150 DF,  p-value: 7.368e-08

```

2) Regression *High degree of exposition*

```

Residuals:
    Min       1Q   Median       3Q      Max
-57.132 -13.606   3.103  16.971  37.540

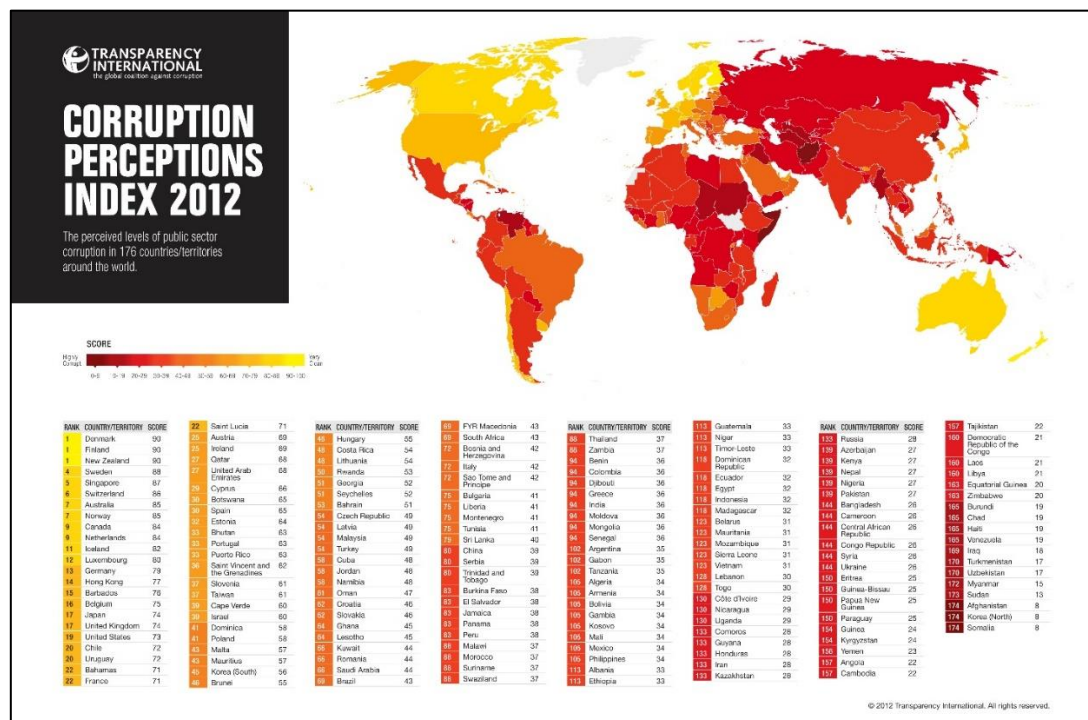
Coefficients:
              Estimate Std. Error t value Pr(>|t|)
(Intercept)  40.19515    5.82947   6.895 1.40e-10 ***
CPI           0.56020    0.09261   6.049 1.11e-08 ***
CPI.Ratio_HQ -0.25923    0.26044  -0.995   0.321
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 22.4 on 150 degrees of freedom
Multiple R-squared:  0.1967, Adjusted R-squared:  0.186
F-statistic: 18.36 on 2 and 150 DF,  p-value: 7.368e-08

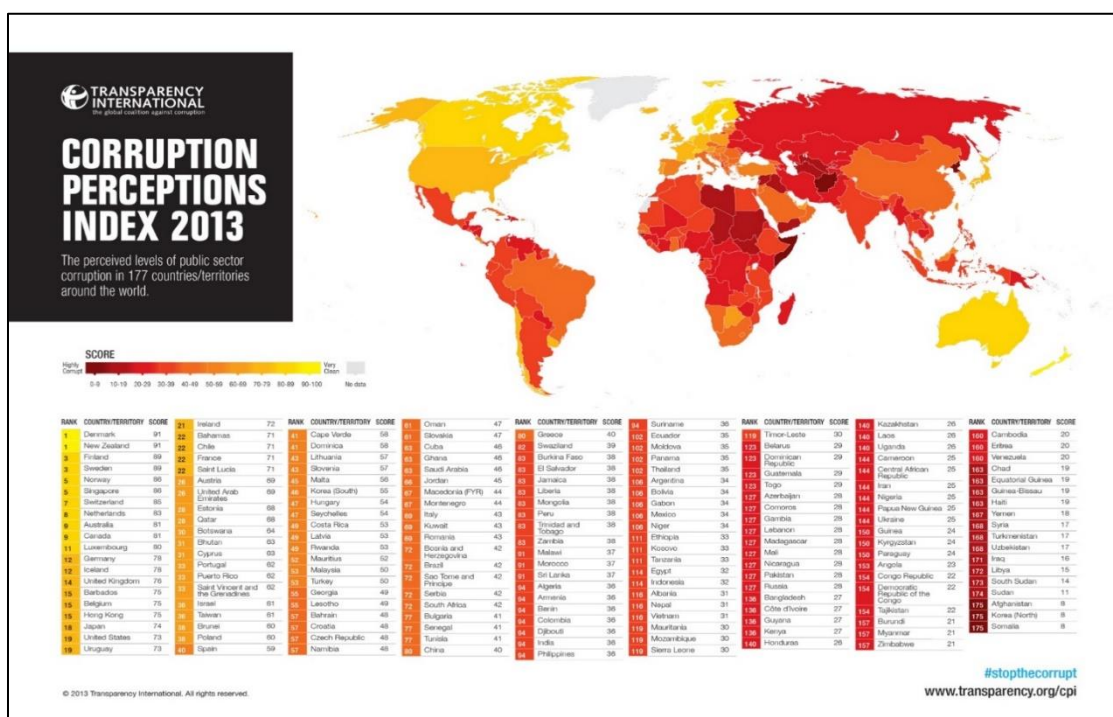
```

APPENDIX D: Corruption perception Indexes by year

2012

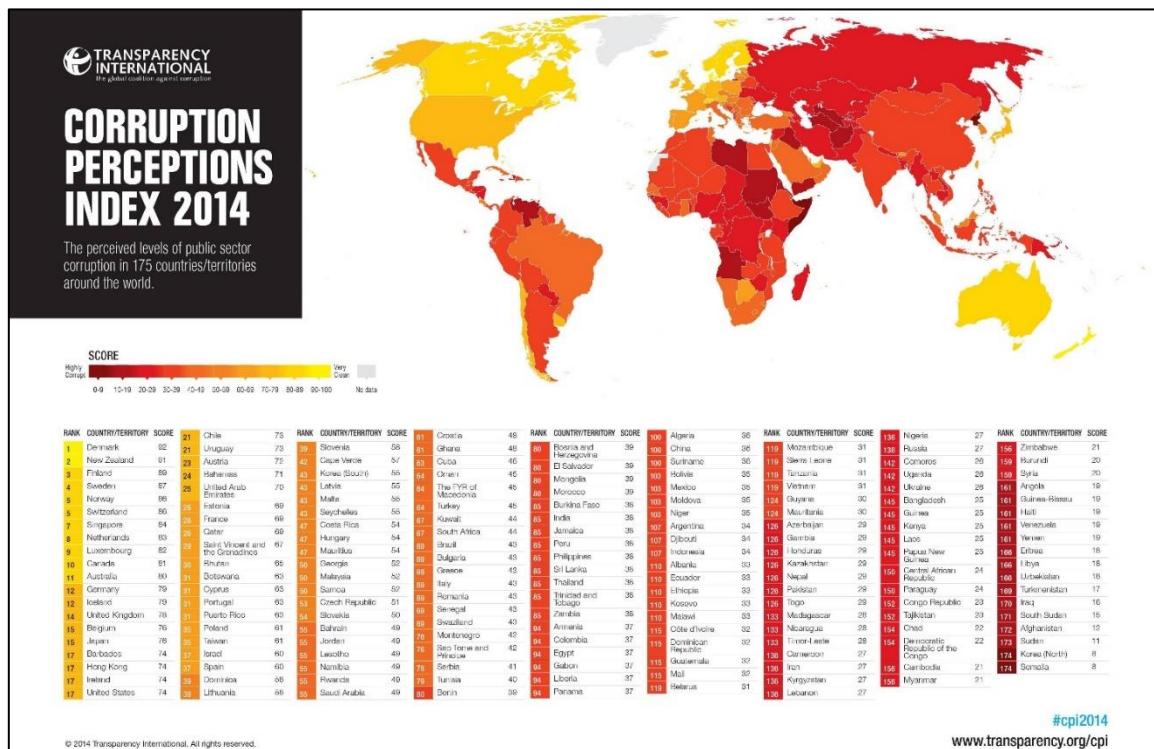


2013

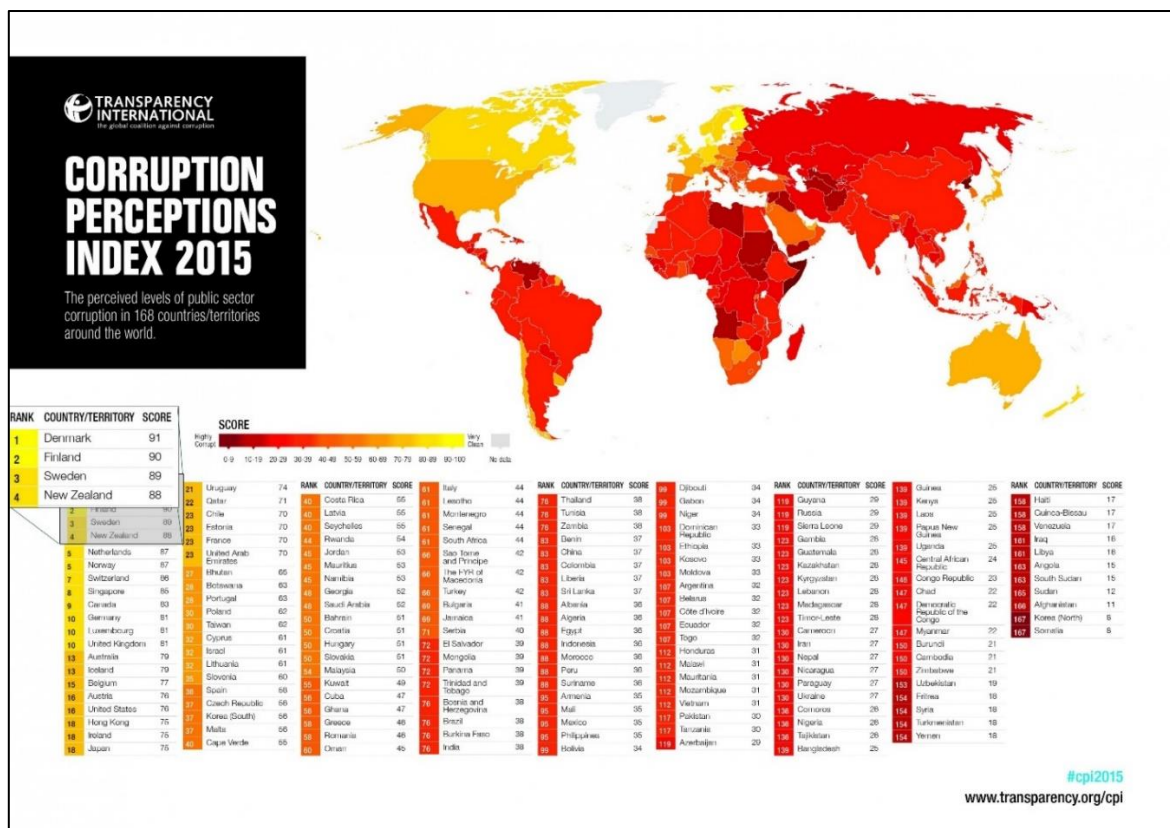


APPENDIX D

2014



2015



2016

