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PhD Thesis

Rotten Apples or Systemic Failures?

Assessing Risk Factors for Public Corruption

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Abstract

The main purpose of this research is to develop an understanding of how some elements of the demographic, political, and economic context, as well as the institutional design of public entities, can explain variation in public corruption. In other words, the study intends to give new evidence on some factors that can affect the levels of corruption besides anti-corruption mechanisms or cultural aspects.

The dissertation is focused on the study of Spain, a country that does not have a high level of corruption from a global perspective but that stands out in this matter in relation to other European countries. This fact makes Spain a relevant case to explore why relatively high levels of corruption can persist even in democratic and developed countries.

From the methodological point of view, the thesis is centred on the use of an objective measure of corruption based on the analysis of final judgements for corruption felonies. The court cases are thoroughly analysed to build a dataset with detailed information on the corrupt activities, the convicted person, the administration where the actions happened, and the judicial sentence. Thus, the dissertation is one of the first research works on corruption in Spain using a large-N design based on the study of judicial condemnations.

The thesis is organized into three main chapters that focus on two kinds of public administrations that appear as salient considering their levels of corruption: local administrations, and public companies and foundations. Each of the chapters combines the use of different statistical techniques to get general conclusions on the relevance of the studied factors to explain corruption in those public entities.

The results are not conclusive in relation to the potential impact on local corruption of the population size and the concentration of political power in one party but, considering the

measure of corruption used in the research, they suggest a more nuanced relationship between these variables. Interestingly, the results point to the fact that smaller municipalities and those where the same party governs for long periods have more difficulties to make corruption be prosecuted and condemned. In consequence, we cannot definitively state if there is more corruption in those kinds of cities and towns but the empirical data seems to show that public integrity controls fail in those contexts.

The study also provides some evidence suggesting that the dependence of city councils on the revenues coming from the construction industry and real estate sector, likewise the relevance of tourism in a city, are factors that could increase corruption risk.

Regarding public companies and public foundations, the results indicate that, indeed, corruption is more prevalent in these kinds of public entities than in the rest of the public sector. The empirical data shows that this fact could be, at least in part, related to a lower level of effectiveness of the public activity control mechanisms in place in these entities in relation to the ones in other public bodies.

The findings of this dissertation can make several contributions to the research on corruption. From a methodological approach, they show the advantages of objective measures based on court cases that make us aware of some tendencies of corruption that do not appear in survey or experience-based methodologies. In the substantive aspect, this work extends our knowledge of some contextual and institutional factors that can explain variation in public corruption. This evidence can have relevant implications for public integrity policymaking since, on the one hand, it shows the need for some administrative reforms to overcome or mitigate the factors facilitating corruption and, on the other hand, it points to some kinds of public entities that should receive special attention in anti-corruption controls with a risk assessment strategy.

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List of Abbreviations

ANOVA	Analysis of variance
CENDOJ	<i>Centro de Documentación Judicial</i> [Judicial Documentation Centre]
CIS	<i>Centro de Investigaciones Sociológicas</i> [Centre for Sociological Research]
CPI	Corruption Perceptions Index
EQGI	European Quality of Government Index
EU	European Union
GIL	<i>Grupo Independiente Liberal</i> [Independent Liberal Group]
INE	<i>Instituto Nacional de Estadística</i> [National Institute of Statistics]
NPM	New Public Management
OECD	Organisation for Economic Co-operation and Development
PP	<i>Partido Popular</i> [Popular Party]
PSC	<i>Partit dels Socialistes de Catalunya</i> [Party of the Catalan Socialists]
PSOE	<i>Partido Socialista Obrero Español</i> [Spanish Working Socialist Party]
SSCI	Social Sciences Citation Index
TI	Transparency International
UN	United Nations
UNDP	United Nations Development Programme
UPN	<i>Unión del Pueblo Navarro</i> [Union of the Navarra People]
USA	United States of America

Chapter 1.

Introduction

Research Problem

Aristotle, when reflecting on the different kinds of political regimes, stated that it was always very important that the laws and the administration were organized to prevent people with public responsibilities to get private benefits from them (Aristotle, 350 B.C.E./1988). It was the fourth century before the Christian Era.

In 1620, Francis Bacon declared his gladness because the procedure against him for bribery and corruption in the House of the Commons would serve as an example: “Judges will fly away from any Thing in the Likeness of Corruption (though it were at a great Distance) as from a Serpent” (*A Collection of...*, n.d., p. 27).

Nowadays, seven out of ten Europeans think that corruption is widespread in their country (European Commission, 2020) and the substantial reduction of all forms of corruption is one of the targets of the United Nations (UN) Sustainable Development Goals (UN, 2022).

It would be, thus, a cliché to say that corruption is a relevant political problem. However, these few historic examples demonstrate what should be considered a political emergency: how even after centuries of unanimously detecting the problem of corruption, there is evidence, no matter what source we use (social perceptions, media scandals, or convictions), that there is still a high rate of corruption in most of the world.

Although scholars, politicians as well as common citizens have indeed been concerned about corruption from long ago, there is not so much consensus as we might think about why we should care about corruption.

There is a broad body of literature about the negative consequences of corruption on economic development (Blackburn et al., 2006; Kraay & Kaufmann, 2002; Mauro, 1995). Despite this general approach, there are a few works considering that, in some specific circumstances, corruption can facilitate economic activity in developing economies (Huntington, 2006, pp. 68–69). The increasing focus of international organizations from the nineties on the fight against corruption seems to be largely led by the interest in facilitating international commerce and global economic development (Organisation for Economic Co-operation and Development [OECD], 1997; UN, 2004).

The negative impact of corruption on democracy and political institutions is the second consequence of corruption that has received much attention in the literature. Several authors explain thoroughly how the perception of corruption undermines citizens' trust and confidence in institutions, which has negative effects on democracy (Anderson & Tverdova, 2003; della Porta & Vannucci, 1997; Villoria et al., 2012).

But there is at least a third reason to justify why the struggle against corruption should be a political priority, which has not been as developed as the previous ones. Corruption has a relevant impact in terms of social equality (Rothstein & Uslaner, 2005). It is prejudicial for the functioning of public services which has greater consequences on poor people that cannot access private services or corrupt public ones.

Thus, it is clear that human beings have been worried about corruption from almost the appearance of the first complex political systems and that economic, democratic and equality reasons to struggle against corruption have been pointed out by academia and policymaking. Nevertheless, the definition of corruption is not undisputed.

The notion of corruption has evolved during history and is not the same in the whole world, since culture and traditions can have a relevant matter in what a society understands as

a corrupt behaviour. With the aim of simplifying, considering that this debate is not part of the focus of this research, I will only comment on recent definitions of corruption.

A traditional vision of corruption was related to morality and today is less present in the literature (Heidenheimer, 1989). This view was usual among colonialist authors –and even used as a justification for imperialism–, who explained corruption as a demonstration of ethical inferiority (Klitgaard, 1988). But these kinds of notions of corruption were not only part of this colonial context, for instance, Banfield (1958) explained the incapacity of a village in Southern Italy to act against corruption due to their culture and codes.

As mentioned, literature today tends to use definitions that can be interpreted in a more homogeneous way among researchers, even if there is still a debate about the exact definition of the concept. There are, between others, legalistic definitions that focus on the violation of certain norms and the commission of behaviours considered corrupt felonies (Heidenheimer, 1989; Kurer, 2015).

There is also a broad body of researchers, mostly economists, that focus on the principal-agent theory, considering corruption as the situation when an agent does not follow the instructions or will of the principal (Rose-Ackerman, 1975). Nonetheless, some authors question the idea that the principal will always be interested in fighting corruption, for instance, a minister not interested in fighting bribery in his ministry (Mungiu-Pippidi, 2013). In this line, some authors focus on the idea of understanding corruption (or, at least, contexts of systemic corruption) as a collective-action problem (Mungiu-Pippidi, 2013; Persson et al., 2013).

It is evident that the different definitions of corruption entail a more profound debate about the approaches of each author to the causes and effects of corruption and, in

consequence, the explained definitions sometimes have overlapping boundaries and are not mutually exclusive.

One of the currently more used definitions, maybe due to its simplicity, is the one presented by Transparency International (TI), which describes corruption as “the abuse of entrusted power for private gain”¹ (Transparency International, n.d.), then including private corruption and gains that are not necessarily pecuniary, but with the problem of defining the term “abuse” (Kurer, 2015). The present research takes this definition even if I only study public corruption and the proxy I use to measure corruption is based on corruption convictions. In consequence, the researcher is conscious that she is only considering a certain kind of corruption (public one) and that the way of measuring corruption makes the study limited in its conclusions to the potential understanding of corruption behaviours that are considered felonies and condemned as such.

Apart from this scope of the kind of corruption that this research addresses, I should also briefly comment on some delimitations of the object of study that are developed in the following sections.

As already noted in the literature debates mentioned in these first paragraphs, corruption is a complex social and political phenomenon and the research about it can take many approaches. First, this work is centred on the causes that explain corruption. Therefore, the political, social, and economic consequences of corruption commented above are not part of my research problem. The anti-corruption policies are neither part of the focus of the dissertation, even if most of its conclusions are related to some public integrity strategies and have implications in that sense.

¹ I should note that this dissertation does always use the term corruption in the sense stated in this definition. The term is never used as a synonym of bribery as seen in some other works.

Within the explanatory factors of corruption, still a too broad concept, I focus on the variation of corruption in public administrations and governments and how it can be explained by some contextual elements (demographic, political, and economic) or certain specificities of its administrative design. Then, I do not study how political culture, political attitudes, or social perceptions can impact on corruption.

Finally, the research is focused on Spain, a country notable for having higher levels of corruption than other countries with consolidated democracies and developed economies.

Existing Explanations

Concerning the explanatory factors of the variation in corruption, the general literature on the field offers different broad points of view to deal with this fact. One of the most important theoretical approaches is based on culture, social norms, traditions, and history (e.g., Ensminger, 2017; Fisman & Miguel, 2008). Another of the more important theoretical approaches to the causes of corruption is the institutionalist one, which focuses on the effect of political institutions to tackle corruption (Stephenson, 2015; Thompson, 2018). There are also economic approaches centred on the influence of incentives and organizations on corrupt behaviours (Bardhan, 2006). Of course, these different approaches are not exclusive, and academia tends to find them complimentary and interrelated when researching factors that explain the corruption phenomenon.

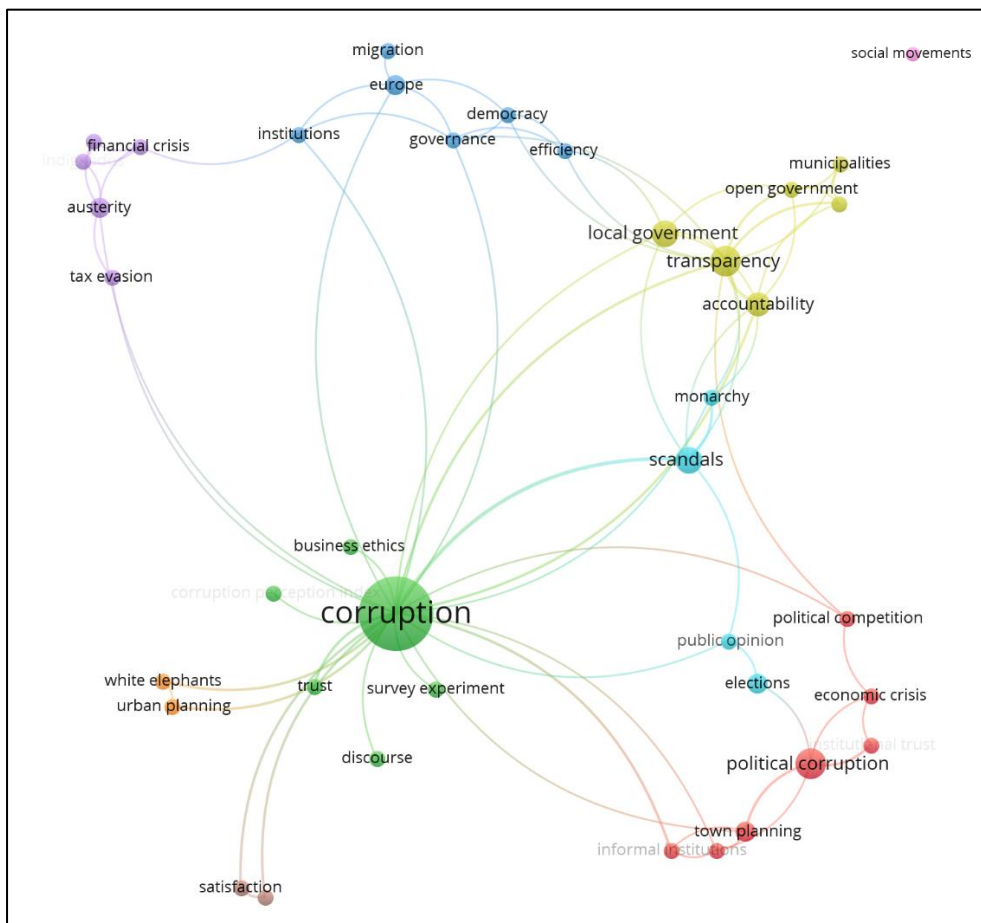
In relation to the Spanish case, for a general impression of the state of the art, I run a search limited to the Social Sciences Citation Index (SSCI) of the Web of Science and I find 93 papers that include the keywords “corruption” and “Spain” within their abstract. Then, I do a bibliometric analysis of the co-occurrence of author keywords including all the terms mentioned at least twice between the keywords of those articles on corruption in Spain. Forty

terms accomplish these conditions and the resulting bibliometric map is presented below in Figure 1.

The analysis shows nine clusters. The more relevant ones are based on the economic crisis, informal institutions, institutional trust, political competition, and town planning; another one on corruption perception, discourse, and trust; a third one is related to democracy, efficiency, Europe, and governance; and, finally, there is one based on accountability, local government, open government, participation, and transparency.

Figure 1

Keyword co-occurrence bibliometric map for articles about corruption in Spain



Note: Author's own elaboration using VOS Viewer and Web of Science.

After analysing the title and abstract of each of the articles, I classify 10 groups of topics even if some of the cases slightly overlap between different subjects (Table 1). The more usual issues are related to the consequences of corruption, especially in terms of electoral behaviour, political behaviour, or political attitudes like social trust and satisfaction. The second more relevant grouping I find consists of articles researching institutional causes of corruption in Spain or causes related to factors that directly affect institutions (city size, economic activities in a city...). This is the group of papers that I analyse in-depth together with the two papers on anti-corruption policy, since they focus on characteristics of public institutions that can affect corruption.

Table 1

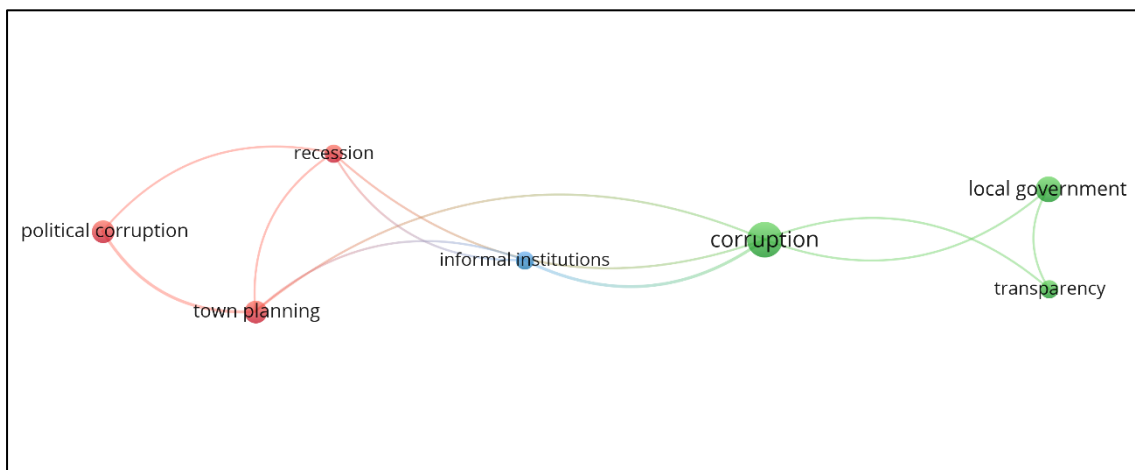
General topic of the articles about corruption in Spain

Number of articles	Topic of the articles
21	Consequences of corruption
14	Causes of corruption in Spain related to institutions and elements directly affecting institutions
9	Social movements, media and corruption
8	Political attitudes, political culture, perceptions and corruption
4	Specific kinds of corruption or causes of corruption in sectorial policy
4	Historical analysis
3	Gender and corruption
2	Anti-corruption policy
2	Corruption networks, corrupt organizations, and corrupt individuals
26	Not related to public corruption in Spain
93	

Thus, from the initial sample of 93 articles, I select 16 of them which are focused on causes of public corruption in Spain that could be broadly included in an institutional approach. The VOS Viewer bibliometric map of co-occurrence keywords (Figure 2), following the same requisites than in the previous analysis, shows three clusters of keywords within these selected papers which focus respectively on local government, town planning, and informal institutions.

Figure 2

Keyword co-occurrence bibliometric map for selected articles about institutional causes of corruption in Spain



Note: Author’s own elaboration using VOS Viewer and Web of Science.

The detailed analysis of each article indicates that, indeed, most of the authors focus on local corruption, considering this is the level of government with a higher incidence of corruption, and in the relationship of town planning and construction with corruption cases. Regarding the methodological aspects, there are mostly case studies, which sometimes include the use of some statistical tests, and there are also statistical research designs. In

relation to the measurement of corruption used in the articles, most of the case studies do not include a specific quantitative measurement. I should underline the number of works that use objective measures, a methodology that will be explained in the Methods and Data section. In this case, all the articles using an objective measurement are centred on media information or judicial data on corruption cases. Considering that this way of measuring corruption is a relatively new trend in the literature, this habitual use of the technique to research the causes of Spanish corruption is remarkable. It could be probably related to the high perceptions of corruption in the country, but the incapacity of perception data alone to explain the detailed attributes of what citizens are perceiving as a central political problem.

Table 2 shows a summary of the characteristics of the selected articles and their main findings in relation to the causes of corruption in Spain.

Table 2*Literature review on corruption in Spain*

Article	Methodology	Corruption measurement	Main findings
Benito et al. (2015)	Statistics	Objective measure Cases of urban corruption reported in online press (Jerez et al., 2012).	Higher salaries for politicians and municipal transparency are related to lower levels of local corruption. Larger municipalities are more prone to cases of corruption.
Casadesús de Mingo & Cerrillo-i-Martínez (2018)	Case study	No specific measurement	There is a need to improve legislation on public records management to prevent corruption risks through access to information, transparency, and accountability.
Charron et al. (2014)	Statistics	Perception surveys Composite index on corruption perceptions: World Bank Worldwide Governance Indicators. Survey on citizens perception: European Quality of Government Index (EQGI).	Despite the generally high development of European Union countries, it exists a significant variation in the quality of government (this is, low corruption, impartial public services, and rule of law) across and within countries. Spain is an example of a high intra-country variation in corruption.

Article	Methodology	Corruption measurement	Main findings
de la Poza et al. (2021)	Statistics	Risk indicator Risk of committing political corruption measured through the contact with public officers and the decision-making capacity of individuals.	The strategies to fight corruption in Spain should focus on a reform of the regulation on political parties to increase transparency and accountability, increasing the presence of women in leadership positions and in governments, promoting open government, improving planning and evaluation of public activity, and the increase on the judiciary system's budget.
Drápalová & Di Mascio (2020)	Qualitative comparative analysis	Perception survey EQGI.	The existence of managers in municipalities that institutionalise professional management is a key point for administrative reforms to reduce local corruption.
Fernández Muñoz & Collado Cueto (2017)	Case study	No specific measurement	Corruption is one of the factors that favoured the real estate bubble in Spain through decisions on land use and the concession of building licenses due to insufficient public controls and even the connivance of public authorities.
García-Quesada et al. (2013)	Case study	Objective measure Media information, police reports and judicial proceedings on corruption cases.	A local integrity system mostly dependent on the deterrent effect of judicial prosecutions and the ineffectiveness of administrative and preventive controls explains the widespread local corruption in Spain. A structural reform should face the problems of the high number and small size of municipalities, the role of clientelism and patronage, and the financing of political parties.
García-Quesada et al. (2015)	Case study	No specific measurement	Corruption was present in Lanzarote despite social opposition to massive urbanisation and a stricter regulatory framework than in other parts of Spain. This was due to the failure of the Spanish town planning institutional model to prevent corruption and a social environment based on informal institutions of clientelism or mistrust.

Article	Methodology	Corruption measurement	Main findings
Jiménez (2009)	Case study	No specific measurement	Town planning was a facilitator of political corruption in Spain because of the decision-making model, the deficiencies in the control mechanisms for municipalities, and the huge growth of the construction sector during the first years of the 2000s.
Jiménez et al. (2012)	Case study	No specific measurement	Spain has a high level of local corruption because of the high number and small size of municipalities, the strong-mayor system, and a failing local integrity system. There are also informal institutions that incentivise corruption as patronage networks linked to the local and political party financing system.
Jiménez et al. (2017)	Statistics	Objective measurement Corruption cases under judicial investigation (Jiménez & García, 2016).	Tourist municipalities are more prone to cases of local corruption. The effect of tourism on local corruption is small but significant, which means that tourist municipalities suffer corruption because of different factors than the rest. Probably, these factors are related to the huge investments and revenues that tourism generates.
López-Valcárcel et al. (2017)	Statistics	Objective measure Corruption cases under judicial investigation (Jiménez & García, 2016).	The probability of a municipality having cases of corruption increases by 3,1% if there is corruption in a neighbouring municipality. However, the possibility of a municipality being prosecuted for corruption increases by 6,7% if a neighbouring municipality is also prosecuted.
Parrado et al. (2018)	Qualitative comparative analysis	Objective measure Media information on corruption cases.	Corruption is less likely to happen when municipal trustees, that is, independent bureaucrats, in municipalities have practical capacities (not only formal ones) to act on behalf of the general welfare. Nonetheless, other institutions are also needed as a meritocratic human resources policy, clear rules and procedures, transparency, and independent watchdogs.

Article	Methodology	Corruption measurement	Main findings
Romero et al. (2012)	Case study	No specific measurement	Factors like the excessive dependence on the incomes from the construction sector or deficient regulations can explain corruption in town planning in Spain. Nevertheless, there is an important effect of informal institutions that led mayors and citizens to the formal acceptance of rules and principles of sustainable development, but the actual flexibility on the application or even the lack of enforcement of those norms.
Villoria Mendieta & Iglesias Alonso (2017)	Case study	No specific measurement	Spanish municipalities have progressed in transparency in recent years but there is still a lot of work to do to arrive at the full open government. They should follow the example of other countries that have implemented transparency in a way that indeed improves public services, citizen participation, avoids unnecessary costs, and reduces corruption.
Villoria & Jiménez (2012)	Case study	<p>Experience-based indicator</p> <p>TI Global Corruption Barometer.</p> <p>Perception surveys</p> <p>CIS Barometer, CPI, Eurobarometer, Special Eurobarometer 2009.</p> <p>Objective measure</p> <p>Judicial records and media information on corruption cases.</p>	Citizen corruption perception in Spain is remarkably higher than what objective data shows. Corruption in the country is mostly political, not administrative, and is focused on the local level and in town planning. More preventive measures are needed because repressive policies are insufficient and generate a vicious circle through increasing corruption perception.

Research Objectives

This research aims to shine new light on the possible explanations of corruption in Spain from a broad institutional approach that focuses on how some demographic, political, and economic characteristics of cities and towns (Chapters 2 and 3), or the design of public institutions (Chapter 4) can have an impact on the levels of public corruption.

In that sense, the study does not consider the potential effects of political culture, traditions, or informal institutions. Even if within the analysed factors the research includes the relevance of the construction and tourism sectors, it does not have strictly speaking an economic approach to the causes of corruption as the analysis does not go in-depth on the behaviour of actors in relation to the economic incentives generated, but just on the effect that the importance of these economic sectors can have on the corruption levels observed in public institutions.

From a methodological approach, the research has also the purpose of contributing to the developing field of objective measures of corruption and, specifically, to the measurement of public corruption in Spain centred on a comprehensive analysis of judicial resolutions.

Methods and Data

The Case of Study: Spain

Spain cannot be considered a highly corrupt country from a global perspective. However, it appears as a relevant case when researching corruption because of its remarkably high levels of corruption at the same time that it is a developed and democratic state (Italy could be a similar example as shown in Golden and Picci, 2005).

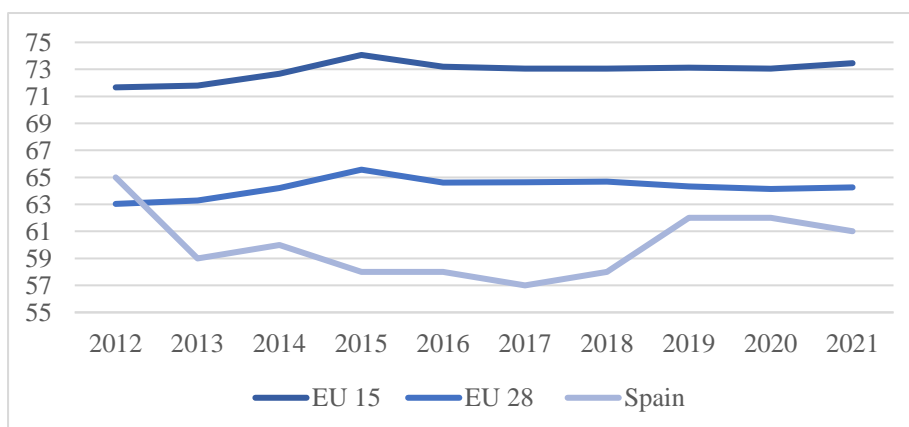
The relevance of corruption in the country compared to other developed countries with consolidated democracies seems to be clear when analysing data on corruption

perceptions. The results of the Corruption Perceptions Index of Transparency International (CPI) clearly show how in the last decade Spain has gotten lower grades on perceived public integrity in comparison to the average of the European Union (EU) countries (see Figure 3). The country has received a score in the composite index of experts and businesspeople perception surveys between 6,7 and 16,1 points below the average of the EU 15 and between 2,1 and 7,6 points below the average of the EU 28, except for 2012 when it slightly overtook this latter group.

Similarly, the special Eurobarometer of 2019 about corruption shows high levels of corruption perception among citizens, especially about the local and regional administrations (see Figures 4 and 5). People considering corruption to be widespread in the country doubled the average in the whole European Union (53,2% in Spain and 26,5% in the EU 28). The proportion is coincident when comparing the perception of local and regional corruption, with 48,9% of Spanish respondents totally agreeing on its existence while only 24,1% at the average of the EU 28.

Figure 3

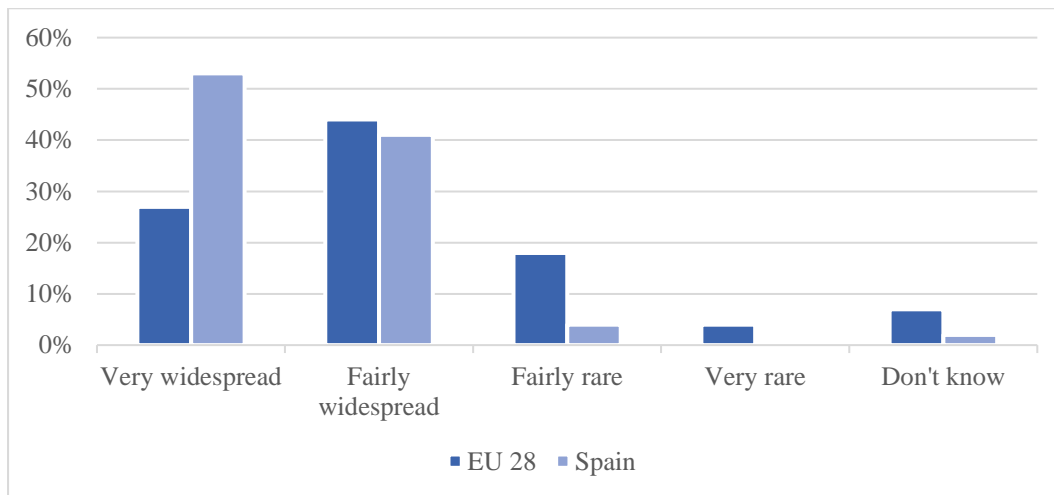
Corruption Perceptions Index evolution EU 15, EU 28 and Spain (2012-2021)



Note: Author's own elaboration with data from Transparency International, 2022.

Figure 4

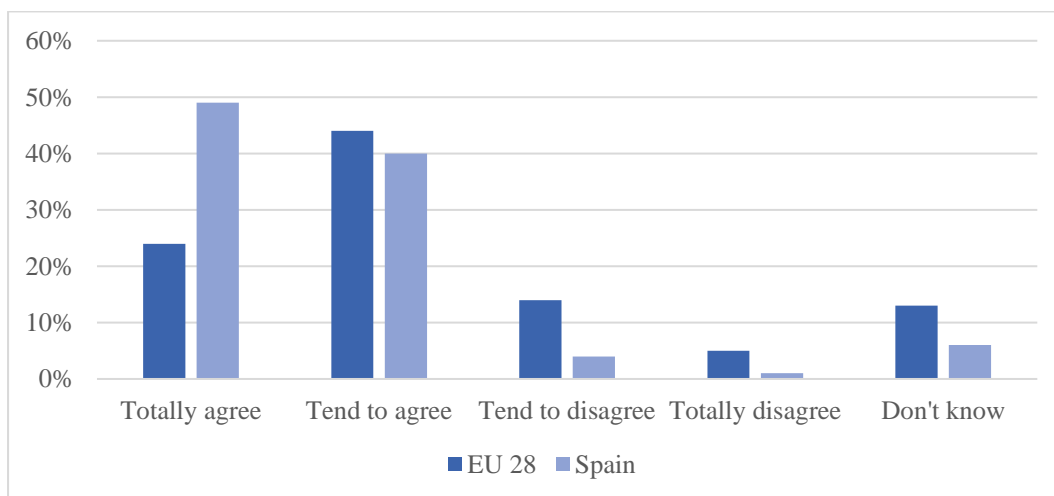
Special Eurobarometer 502, 2019. “How widespread do you think the problem of corruption is in (country)?”



Note: Author’s own elaboration with data from European Commission, 2020.

Figure 5

Special Eurobarometer 502, 2019. “Please tell me whether you agree or disagree... There is corruption in the local or regional public institutions in (country)”

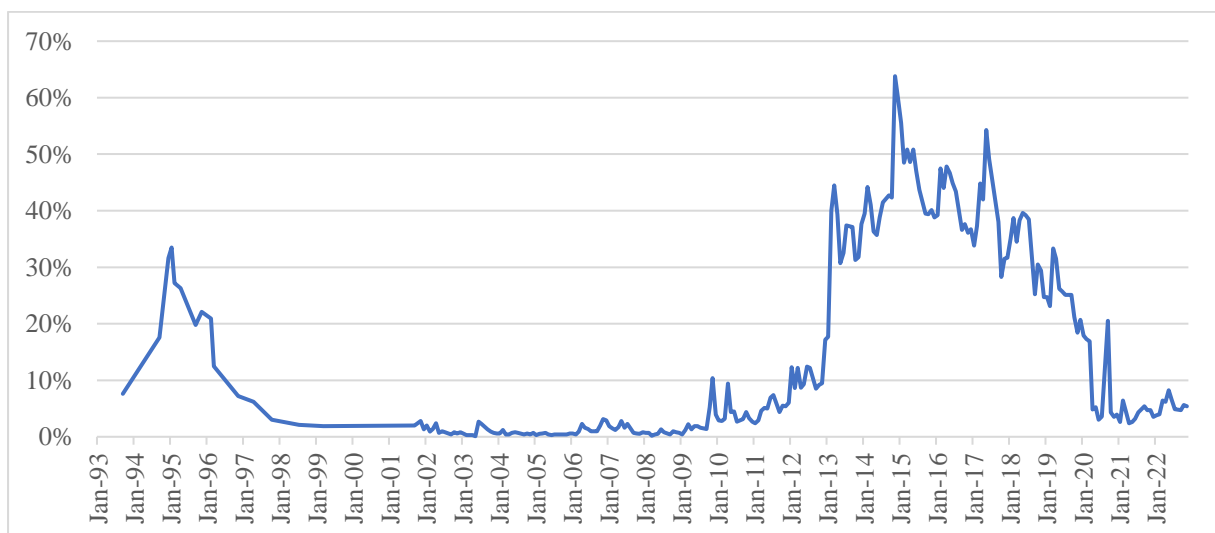


Note: Author’s own elaboration with data from European Commission, 2020.

The data of the Spanish Centre for Sociological Research (*Centro de Investigaciones Sociológicas*, CIS, in its Spanish acronym) about the perception of citizens of corruption and fraud as one of the three principal problems in the country offers a series from 1993 (Figure 6) which permits a more detailed analysis. In the period between 1995 and the first months of 1996, roughly coinciding with several corruption scandals affecting the Spanish government (El País, 1994) there were between 33,5% and 20,9% of the population who considered corruption one of the three major problems in the country. However, the data is maintained around the 1,1% average between 1997 and 2007. Then, from the beginning of the global financial crisis, the concern of Spaniards about corruption climbs with respondents that consider it a major problem arriving to a 63,8% in November 2014 and an average of 37,1% between 2013 and the struggle of the coronavirus pandemic in March 2020.

Figure 6

Citizen perception of corruption as one of the three main problems in Spain (1993-2022)



Note: Author's own elaboration with data from CIS, 2022.

This volatile evolution shows that corruption perceptions are not an ideal proxy for the actual levels of corruption in a country. Nonetheless, the high perceptions during long periods and the comparison with other countries still show that people in Spain perceive high levels of corruption in relation to what could be expected in an economically developed democracy.

For all the above said, Spain can be a relevant case to study the factors that can explain why, even in democratic and developed countries, corruption can remain. Some of the conclusions will be mostly related only to the specific characteristics of the country but others could be extrapolated always being cautious and considering the particular social, political, and economic context of each place.

Ways of Measuring Corruption: an Ongoing Discussion

Corruption, as an illegal or socially condemned activity, attempts by nature to be hidden from public knowledge. This fact had made some authors consider that corruption was impossible to measure, prove, or quantify (Heidenheimer, 1989; Leys, 1965; Wraith & Simpkins, 1963). Nevertheless, a large body of literature has made an inestimable effort to overcome the difficulties of measuring corruption with different approaches and methodologies.

A point in time that should be mentioned in this development of corruption measurements was the first edition of the Corruption Perceptions Index of Transparency International in 1995. This composite index, made of surveys to experts and businesspeople, from then one became probably the more usual tool for research on corruption (Transparency International, 2022). From the following year, 1996, the World Bank issues the Worldwide Governance Indicators, another composite index built from surveys to experts, that measures six dimensions of governance (voice and accountability, political stability and absence of

violence/terrorism, government effectiveness, regulatory quality, rule of law, and control of corruption). This tool is also one of the most usual current ways of measuring corruption (Kaufmann et al., 2011; United Nations Development Programme [UNDP], 2008).

Both mentioned well-known indexes are based on perceptions of corruption, but nowadays the literature differentiates between three general ways of measuring corruption that include also other methodologies. First, there are the perception-based indicators, as said probably the most used measurements, which are built from the opinions and perceptions about corruption of citizens, businesspeople, or experts. Second, there are experience-based indicators, which are less usual and focus on measures of citizens' or firms' actual experiences with corrupt actions, for instance, if they have paid or received bribes. Finally, recent literature has increasingly focused on objective indicators, those which are based on undisputed facts, for example, the existence of anti-corruption laws or the funding received by anti-corruption agencies (Heywood, 2015; UNDP, 2008).

All these methods have pros and cons and, thus, for a correct understanding of the corruption phenomenon it is necessary to combine different data sources, as well as both qualitative and quantitative methodologies (Heller, 2008). The traditional measurements based on perceptions are claimed to be subject to ideological or other perceptual biases and, in consequence, imperfect proxies to measure the actual level of corruption (Heywood & Rose, 2013; Kurtz & Schrank, 2007; Razafindrakoto & Roubaud, 2010). The central problem of focusing on corruption experiences is that people are not in general willing to openly talk about corruption in which they could be involved (UNDP, 2008).

Objective measures of corruption based on judicial rulings are criticized by some authors because they could be measuring the effectiveness of the judicial system rather than the presence of corruption. Nonetheless, other authors argue that it is still a relevant method

for measuring corruption, one that overcomes limitations that other tools may have, for example, the politicization of media, the effects of subjectivity on corruption perceptions, or the lack of data at the local level (Olken, 2009). In this context, objective measures appear as an additional tool to move closer to a complete understanding of corruption considering the limitations of other measures.

Before analysing previous works on objective measures, I should mention that the classification of measurements is not undisputed within the literature and some authors differentiate between proxy indicators and objective indicators (UNDP, 2008); or consider experience-based and objective measures as a whole group of non-perceptual measures (Heywood & Rose, 2013). Nevertheless, for a means of clarity in this research I classify measurements between the three groups mentioned above and consider as objective indicators those which focus on any objective signal of potential corruption, that is, not based on individual declarations on perceptions or experiences of corruption.

To explore the possibilities and gaps in the development of objective measures of corruption, I do a bibliographic search limited to the SSCI of Web of Science but this time, as the kind of articles I am looking for can be defined in many ways, the research will be more complex than the one explained in previous sections. First, I find 17 articles that include in the abstract the term “corruption” and any of the following terms: “objective measurement”, “objective measure”, “objective indicator”, or “corruption indicator”. As one usual way of objectively measuring corruption, and the one I use in this work, consists of analysing court cases, I do a second search of articles including in the abstract the word “corruption” and any of the following ones: “court cases”, “crime records”, “offences”, or “felonies”. This second search in the SSCI gives me 46 more articles to analyse.

I revise these 63 articles and 45 more articles that come from cross-references and are of the interest to my search. Then, I also include in the analysis the six papers of my bibliometric search on corruption in Spain that use objective measurements and three more relevant articles that appear in the cross-reference analysis of these last ones. Finally, I include in the analysis one paper published by the co-coordinator of the EPOCA project, in collaboration with which part of this dissertation is done, and one cross-reference from this article. Thus, I analyse 119 articles in the search, and I select 48 papers that refer to 25 different large-N datasets of objective measures of corruption.

The results of this analysis in Table 3 show the wide range of objective measures that the literature proposes. For each kind of measurement, I choose one article to describe the specific characteristics of the dataset it uses. Depending on the case, either it is the only article using this kind of measurement (e.g., Houqe et al., 2020 for the Malaysian court cases), or it is the original dataset afterwards also used in other articles (e.g., Iglesias, 2007 whose dataset is used in Costas-Pérez et al., 2012 and Estefanía, 2008). In some cases, I choose the initial or more relevant example of a dataset built from a source that later other authors also use to construct their datasets (for instance, Avelino et al., 2014 using the data of the Office of the Comptroller General of Brazil like Ferraz & Finan, 2008). In this last case, it should be noted that the characteristics described in the table refer to the dataset cited in the left column.

I classify the articles into six different types of objective measures of corruption. Firstly, there are datasets constructed through the analysis of judicial statistics on corruption cases or court case documents. Within this group, there is a remarkable number of authors using the data from the reports to the Congress of the Public Integrity Section of the US Department of Justice which permits to analyse a timeframe from 1977. However, this measure is limited in the sense that the quantitative data only offers a general list of

prosecutions for corruption by district and the state of the trial (charged, convicted, or awaiting trial). Thus, this data does not permit, for instance, to understand the different severities of each case (Heywood & Rose, 2013). Most of the other articles using court case documents have a high number of observations (except for the Gillies and Natural Resource Governance Institute dataset), but they are limited in time to between four and 14 years.

Secondly, there are also a lot of authors using information on public procurement. The most important advantage of this method is that countries are increasingly offering public websites with big data on this issue. For example, the datasets of Fazekas and Tóth (2012a, 2012b) and Transparencia Paraguay have around 50.000 observations. It seems that this could be a method of potential development in the next future due to this increasing availability of data and considering that public procurement is a relevant area of corruption risk.

Thirdly, some authors propose different innovative ways of measuring corruption through the comparison between public expenditures in a certain policy and the actual goods or services received by the population or a specific target group. In general, these studies do not show broad datasets or timeframes, but they permit to have a detailed vision of potential corruption in a specific area or public programme.

Fourthly, there are works that analyse the information on corruption cases that appears in the media, which is the more usual objective measurement used to analyse the Spanish case. The principal problem that this method could have is that not all cases of corruption receive the same media attention, with scandals of political corruption probably overrepresented in relation to other cases. Moreover, comparing to the use of judicial resolutions analysing corruption cases proved and condemned in courts, this media information is not always confirmed by the criminal prosecutions.

Fifthly, several authors use public auditing data from the random auditing program of the Office of the Comptroller General of Brazil. This could be an interesting source if other public controlling agencies would publish the data on their auditing activity permitting its statistical exploitation. However, no other similar database appears in the articles search.

Finally, two authors use other kinds of proxies. Among those measures, the analysis of assets accumulation of public representatives used by Klašnja (2015) could also be a promising field of research if governments publish data on this matter prepared for large-N analysis.

Table 3*Literature review on objective measures of corruption*

Author of the dataset	Source	Measure	Time and place	Observations	Articles using similar data
Court cases or judicial statistics					
Escresa & Picci (2017)	International anti-bribery enforcement data of the Trace International Compendium, US Department of Justice and Securities Exchange Commission data and OECD reports.	Convictions for corruption felonies or accused's concession to the payment of a fine.	128 countries, 1998-2012	979 cross-border court cases	Not found
Gillies (2020a), and Natural Resource Governance Institute project led by Sayne, George-Wagner and Gillies.	Court documents, media coverage and NGO reports.	Credible accusations of corruption.	17 African countries, 2005-2014	60 court cases	Same dataset: Gillies (2020b)
Houque et al. (2020)	Malaysian courts' archive.	Bribery and corruption offences.	Malaysia, 2006-2013	1.869 court cases	Not found
Meier & Holbrook (1992), Schlesinger & Meier (2017)	US Justice Department's <i>Report to Congress on the Activities and Operations of the Public Integrity Section</i> .	Number of officials convicted for corruption.	United States of America (USA), 1977-1995	49 USA states	Same dataset: Adserà et al., (2003)

Author of the dataset	Source	Measure	Time and place	Observations	Articles using similar data
					Same source: Alt & Lassen (2008); Apergis et al. (2010, 2012); Dincer (2008); Dincer & Gunalp (2012); Fredriksson et al. (2003); Glaeser & Saks (2006); Goel & Rich (1989); Maxwell & Winters (2004).
de Sousa & Calca (2021)	Records of the First Instance Courts in Portugal.	Felonies of corruption.	Portugal, 2004-2008	838 court cases	Not found
Public procurement data					
Bandiera et al. (2009)	Survey of the Italian Statistical Agency checked with a subsample of invoices of the purchases.	Differences in the prices of the same goods purchased by public bodies in the open market or when using agreements of the central procurement agency.	Italy, 2000-2005	500 public bodies	Not found
Coviello & Gagliarducci (2010)	Italian Authority for the Surveillance of Public Procurement.	Number of bidders, rebate over the reservation price, region of the winning firm and recurrence of winning firm in procurement auctions.	Italy, 2000-2005	3.825 municipalities	Not found

Author of the dataset	Source	Measure	Time and place	Observations	Articles using similar data
di Tella & Schargrotsky (2003)	City of Buenos Aires Health Secretariat.	Prices of basic health products purchased by public hospitals.	Buenos Aires, 1996-1997	28 hospitals	Not found
Fazekas & Tóth (2012a, 2012b)	Online Public Procurements Bulletin of Hungary.	Restricted competition and recurrent contract awards.	Hungary, 2009-2012	53.000 contracts awarded	Same dataset: Fazekas et al. (2016)
Goldman et al. (2013)	Federal Procurement Data System-Next Generation of the USA.	Value of the contracts received by each company and its subsidiaries and political connections of the board members.	USA, 1990-1998	330 S&P500 companies	Not found
Hyytinen et al. (2018)	Documents of municipal procurement of internal cleaning services (Lundberg, 2005) and database of procurement auctions.	Type of entry in the contest (free or restricted), number of bidders, type of bidders and winning firm, minimum and winning prices.	Sweden, 1990-1998 and 2009-2010	1.075 cleaning contracts	Not found
Klašnja (2015)	Information on public procurement contracts of the Agency for Digital Agenda of Romania.	Low-transparency procedures for local tenders, single-bidder local tenders, and average price for homogeneous purchases in public procurement contracts.	Romania, 2008-2012	3.000 towns and villages	Not found
Transparencia Paraguay	Data of the National Directorate of Public Procurement.	Use of exceptional non-competitive purchase mechanism and recurrence of contracting the same firm.	Paraguay, 2004-2007	47.615 public procurement operations	Same dataset: Auriol et al. (2016)

Author of the dataset	Source	Measure	Time and place	Observations	Articles using similar data
Missing public expenditure					
Golden & Picci (2005)	Ecoter report on infrastructure needs in EU countries; infrastructure public expenditure.	Index that relates existing infrastructures with the money spent on public infrastructure.	Italy, as of the mid-1990s	95 provinces and 20 regions	Same dataset: Chang & Golden (2007)
Klašnja (2015)	Romanian Statistical Office, Ministry of Finance, and Ministry of Regional Development and Public Administration.	Comparison between spending on water and sewage distribution infrastructure and cost of actual infrastructures.	Romania, 2008-2012	3.000 towns and villages	Not found
Olken (2006)	Indonesia rice distribution program <i>Operasi Pasar Khusus</i> (Special Market Operation).	Comparison of administrative data on the amount of rice distributed and survey data on the rice received.	Indonesia, 1998-1999	100 villages and 200 districts	Not found
Olken (2009)	<i>Kecamatan</i> (Subdistrict) Development Project and independent estimate of costs.	Difference between road projects' official expenditure reports and an independent estimate of the prices and quantities of inputs used in construction.	Indonesia, 2003-2004	477 villages	Not found
Reinikka & Svensson (2004)	Survey, records of the schools and data from the Uganda Computer System about the school's capitation grant.	Comparison between the government grant received by schools and what they should have received considering the number of students.	Uganda, 1991-1995	250 government public schools	Not found

Author of the dataset	Source	Measure	Time and place	Observations	Articles using similar data
Media information					
Iglesias (2007)	Media.	Corruption related stories.	Spain, 1995-2007	663 local corruption cases	Same dataset: Costas-Pérez et al. (2012) (enlarged), Estefanía (2008)
Jerez Darias et al. (2012)	Digital media.	Accusations for town planning corruption felonies or irregularities.	Spain, 2000-2010	414 local town planning corruption cases	Not found
Jiménez & García (2018)	Digital media.	Imputations or impeachments for corruption.	Spain, 1999-2011	260 municipal, provincial, and regional corruption cases	Not found
Osipian (2014)	Media.	Any mention of corruption or possible corruption in universities.	USA and Russia, 1998-2010	Not specified (1.000 media reports analysed)	Not found

Author of the dataset	Source	Measure	Time and place	Observations	Articles using similar data
Public auditing data					
Ferraz & Finan (2008)	Random auditing program of the Office of the Comptroller General of Brazil.	Irregularities in the use of transfers from the federal government.	Brazil, 2003-2005	373 municipalities	Same source: Assumpção (2012); Avelino et al. (2014); Brollo et al. (2013); Brollo & Troiano (2016); de Medeiros-Costa (2022); Ferraz et al. (2012); Ferraz & Finan (2011).
Other proxies					
Klašnja (2015)	Declarations of assets of the mayoral candidates in the Romanian National Integrity Agency.	Comparison of wealth accumulation between mayors and similar challengers.	Romania, 2008-2012	4.000 candidates	Not found
Schopf (2011)	Documents facilitated by the National Assembly Administrative Affairs Office under a freedom of information act request.	Rents suspected to be in exchange for favours during the industrial restructuring operations of the Korean dictatorial and democratic governments.	South Korea, 1985-2003	19 operations	Not found

The Dataset of this Research

This dissertation uses an objective measurement of corruption based on the analysis of judicial resolutions for felonies of corruption that took place in Spain between 1995 and 2015. I have created a dataset through the thorough analysis of the judgements available at the CENDOJ, the documentation centre of the Spanish Judicial Power (*Centro de Documentación Judicial*, in Spanish; Consejo General del Poder Judicial, n.d.), that permits me to analyse in detail the anatomy of corruption in the country.

The analysis of judicial decisions done before in research about corruption in the Spanish case has not included a systematic analysis of a large-N sample of judgements. Instead, authors have focused on studying media information about corruption cases. Thus, the conclusions of the analysis of this dataset are one of the first pieces of empirical evidence about corruption in Spain using an objective measure based on the direct analysis of court case documents.

The Definition of Corruption. As explained before, the definition of corruption is not clear at the sociological and political levels and neither at the legal one. In the Spanish Criminal Code, there does not exist an explicit area of corruption felonies, but most actions that can generally be related to corruption are included in the section on felonies against the administration.

Taking into account my definition of corruption (that is, the abuse of entrusted power for private gain), several felonies could be broadly classified as consisting of corrupt actions, but I would always need a specific analysis to discover the final aim of the perpetrator (i.e., obtaining a private gain). Nonetheless, the quantitative technique requires a general determination of the

felonies that I consider corruption, which generates a certain loss of accuracy in the analysis but, at the same time, permits a higher generalization of the results.

Considering all the above said, I define as corrupt behaviours for the object of this study the felonies against public administration included in Table 4 in page 34 when committed by people with public responsibilities, including elected, politically appointed, and administrative ones. I also include in the dataset two felonies not considered against the administration by the Spanish Criminal Code but that often appear in corruption cases: breach of official duty in town planning and forgery of official documents.

Although my operationalization of the concept includes both political and petty corruption, this differentiation can be done considering several variables included in the dataset related to the kind of position of the convicted person, the amounts of money related to the case, or the severity of the sentence.

The Construction of the Dataset. The selection of the judicial resolutions to be analysed starts with a search at CENDOJ related to the three principal corruption felonies: breach of official duty, embezzlement, and bribery (called in Spanish *prevaricación*, *malversación*, and *cohecho* respectively). However, the choice of these three felonies is only a search criterion and I include in the dataset all the felonies mentioned in the previous section that appear in the selected judgements.

I do several searches under the criteria of judgements of any Spanish criminal court (even if the CENDOJ does not include first-instance courts) from 01/01/2016 to 31/12/2018. In each search, I include as a keyword one of the three principal corruption felonies, and I repeat the

search with the felony written in the four official languages in the country (Spanish, Catalan or Valencian, Euskera, and Galician). I obtain 1.230 judicial resolutions to analyse.

Once I have the initial list of judgements downloaded, I analyse each of them and disregard the ones that are not referred to corruption felonies, the ones that consist of a not guilty sentence, or those that declare the nullity of a previous judgement. I do an additional search at CENDOJ for each selected judgment looking for judgements of the court that should resolve the appeal using as a keyword the reference of the judicial file. Through this process, I disregard the judgements that are not final. Lastly, I also disregard the judgements related to corrupt actions that happened before 1995 or after 2015.

Then, I start the in-depth reading of each selected judicial resolution, that is, final judgements of conviction for corruption felonies that took place between 1995 and 2015. For the sentences of corruption affecting public officers or politicians, I include in the dataset the codified information related to the variables and labels explained in the Appendix in relation to the corruption judgement, the convicted person, the administration where the actions took place, the corrupt actions, and the sentence. I must disregard a few judgements that do not include sufficient information to complete the variables of the dataset. For the sentences affecting individuals that do not have any political or administrative responsibility, I only include the data of the judgement and the felonies that receive a guilty sentence since I need this information to calculate the representative sample (see the explanation of this process in the next section).

When doing the stratification of the sample for each corruption felony, I find that the subsample for prohibited negotiations for civil servants is not enough. In consequence, I do a search at CENDOJ of criminal judgements of any Spanish court in 2016 using this felony as a keyword and I find 11 judgements for which I repeat the process done with the rest of the

resolutions until getting enough sentences for a correct stratification of the prohibited negotiations convictions. In addition, 61 judgements found under the search for breach of official duty in 2016 are not included in the dataset because the sample is already representative and stratified with a +/-5% margin of error.

In short, the complete construction of the dataset consists of the general analysis of 1.241 judgements among which I select 309 following the process described above. The selected final criminal judgements for corruption issued in Spain between 2016 and 2018 for actions that took place between 1995 and 2015 have been thoroughly analysed and included in the dataset.

Characteristics of the Sample. The first step for the construction of the dataset is to build a sample of 883 sentences for felonies of corruption included in the selected judgements, considering that most of the judgements include convictions for more than one felony. This is a representative sample (99% confidence, 2,5% margin of error) of the 1.158 total condemnations for corruption felonies against the administration issued in Spain between 2016 and 2018. The subsample for the three more usual corruption felonies (breach of official duty, embezzlement, and bribery), which represent 74% of all the corruption felonies condemned in these years are also representative (95% level of confidence, 5% margin of error) (see Step 1 in Table 4). Once confirmed the representativeness of the sample, I also confirm that it can be stratified by each kind of felony with a margin of error of +/-5% (see Step 2 in Table 4).

Table 4*Characteristics of the sample*

	Step 1 Representative sample		Step 2 Stratified sample			Step 3 Public positions sample		
	Pop. N	Sample 1 n	Pop. %	Sample 1 %	Dif. %	Sample 2 n	Sample 2 %	Dif. %
Breach of official duty (BOD)	349	222	30,14	31,36	1,22	197	42,73	12,60
Embezzlement	272	192	23,49	27,12	3,63	134	29,07	5,58
Bribery	236	154	20,38	21,75	1,37	68	14,75	-5,63
Prohibited negotiations for civil servants	95	24	8,20	3,39	-4,81	13	2,82	-5,38
Fraud and unlawful taxation	101	63	8,72	8,90	0,18	32	6,94	-1,78
Disloyalty in the custody of documents and disclosing secrets	76	32	6,56	4,52	-2,04	14	3,04	-3,53
Influence peddling	29	21	2,50	2,97	0,46	3	0,65	-1,85
BOD in town planning and related felonies		58				47		
Forgery of official or private document		117				68		
Total felonies against the administration	1158	708				461		
Total corruption felonies		883				576		

Note: Author's own elaboration with data from Instituto Nacional de Estadística (INE), 2022a.

There is not data about the breach of official duty in town planning and related felonies and forgery of official or private document referred only to corruption cases.

Pop. = Population; Dif. = Difference.

Finally, I select from the previous sample the 576 felonies committed by elected representatives, politically appointed people or public officials (see Step 3 in Table 4). When doing so, the stratification percentages are slightly affected in the majority of the cases, with a difference between the percentages representing each felony in the population and the sample of between -5,63% and 5,58%, except for the case of breach of official duty where the difference becomes 12,60%. The judicial statistics available do not permit to confirm whether this difference is due to an existent difference in the population or a bias in the selected cases. However, the high representativity of the sample and the rigorous stratification process applied makes me consider that the final sample of corruption felonies committed by politicians and public officials is representative enough.

Table 4 shows the characteristics of the sample organized by felonies and divided into the three steps of the construction process: first, the elaboration of a representative sample for the defined corruption felonies; then, the stratification of the sample by each kind of felony; and, finally, the selection of the cases affecting people with public positions. Sample 1 is the complete sample initially built and Sample 2 is the sample only including people with any kind of public responsibilities (elected, politically appointed or officials). There is no data referring only to corruption cases for the felonies of breach of official duty in town planning and other felonies against the territory and forgery of official or private documents, which are felonies that can be related to a broad range of criminal behaviours.

Even if the dataset is organized in corruption felonies for the aim of obtaining a representative sample, the chapters of this dissertation use different versions of the dataset that convert the units of observation into cities and towns (Chapters 2 and 3), or corruption convictions (usually including more than one felony) (Chapter 4).

Research Design

The research design of each chapter departs from a general analysis of the data in the dataset of corruption convictions in Spain. A preliminary analysis of the descriptive statistics shows several issues that stand out in the levels of corruption.

First, 62,1% of the convictions are related to activities in city councils. Added to the fact that 21,5% of the convicted people are city mayors and 19,2% are city councils or deputy mayors, the data clearly confirms, in line with the literature, that corruption in Spain is mostly political and local. Considering this statement, Chapter 2 presents an in-depth analysis with a large-N design (N=160 municipalities) of the impact of two potential explanatory factors of local corruption considered of special relevance. The prioritization of the study of those factors is due, on the one hand, to the fact that the international literature on corruption is divided on the effect that the size of a municipality has on its level of corruption. On the other hand, the literature on local corruption has not addressed sufficiently the impact of the concentration of power defined in relation to longevity in government.

Then, Chapter 3 presents an exploratory analysis with a sample of six Spanish cities considering some factors explaining local corruption that the literature focused on this country has observed. These elements, taken from the articles analysed in the literature review in Table 2 (page 10), are the population of cities and towns, the concentration of power in one party or mayor, the importance of the construction industry, and the relevance of tourism.

The second issue that rises the attention when looking at the general descriptive data is the presence of public companies in 13,4% of the convictions for corruption. Other kinds of public entities that are not part of the traditional administration but that come from the tendency to generate more autonomous and flexible public bodies, what I call in this research New Public

Management (NPM) entities, are present in 18,5% of the cases that end in conviction. Even if I cannot get any conclusions from this descriptive data, I consider it to go in line with some authors who research the potential impact of public companies and New Public Management reforms on corruption. Thus, Chapter 4 focuses its attention on the study of this fact with a large-N analysis of the dataset centred on the kind of public entities involved in corruption cases. To do so, in this chapter I use two versions of the corruption dataset, the general one having as the unit of observation the corruption felonies (N=576), and an adaptation that considers the unit of observation each conviction that usually includes more than one felony (N=390).

With a less remarkable presence, there is a third element that should be commented of the descriptive data. 8,7% of the convicted people are police officers belonging to different police or security forces. This is the most present kind of public position after the elected local representatives and could be showing a characteristic of Spanish corruption that is not much studied in the literature. This third issue is not part of this research but is commented in the final chapter as a further research field suggested by my dataset of Spanish corruption.

Methods

This dissertation uses the statistical method in relation to the different research questions and objectives presented in each of the chapters. The use of statistics comes from the objective of having a general overview of the causes of Spanish corruption through a thorough analysis of several characteristics of corruption variation related to demographic, economic and political factors affecting these institutions or the institutional design of some entities. The aim is not to understand the causal mechanism in specific cases of corruption but to arrive at general conclusions about the effect of these factors on the general corruption level in the country.

The methodological purpose of presenting a new objective measure of corruption in Spain also makes statistics the more suitable method, since the central interest of corruption measurements is to facilitate the analysis of large-N samples of corruption cases and the comparison between these cases.

Chapter 3 has a more exploratory nature and uses descriptive data and quantitative indicators of the characteristics of the cities and towns studied. Chapter 2 and Chapter 4 also use some descriptive analysis but also go more in-depth with inferential statistics to try to find correlations between the analysed factors and the levels of corruption.

All the statistical operations are done with the software IBM SPSS Statistics 26, and graphs are done with the same version of SPSS or Microsoft Excel v. 2210. In the introduction of the dissertation, I also use VOS Viewer 1.6.10 for the bibliometric analyses.

Research Ethics

Regarding the ethical principles that must be respected during the whole research process, I apply the guidance of the European Commission publication *Ethics in Social Sciences and Humanities* (European Commission, 2021).

This research does not involve human participants. The research does not include any intervention or interaction with individuals and it neither includes any identifiable private information. All the information used in the research is obtained through a public database of the Spanish Ministry of Justice made of documents with anonymized data. In consequence, the research does not need the approval of a research ethics committee. The author got written permission from the director of CENDOJ to use the database for research purposes.

Dissemination Strategy

The research process and the outputs of this dissertation have been related to the following academic presentations, research collaborations, and research stays:

Academic Conferences

- 11th Latin American Congress of Political Science, Asociación Latinoamericana de Ciencia Política, online event. Oral presentation “Why do political institutions matter? Factors that drive corruption in Spanish municipalities”. July 2022.
- 26th World Congress of Political Science, International Political Science Association, online event. Oral presentation “Institutional factors that drive corruption in Spanish cities”. July 2021.
- 5th International Conference on Public Policy, International Public Policy Association, hybrid event, Barcelona, Spain. Online oral presentation “Side effects of New Public Management reforms in corruption”. July 2021.
- 5th Interdisciplinary Corruption Research Forum, online event. Oral presentation “Corruption in Spain: Conclusions of an objective measurement”. June 2021.
- European Consortium of Political Research General Conference, online event. Oral presentation “The escape of administrative law: Consequences on corruption in the Spanish case”. August 2020.
- 4th Interdisciplinary Corruption Research Forum, National University of Kyiv-Mohyla Academy, Kyiv, Ukraine. Oral presentation “A corruption risk assessment IT tool for the Spanish local government”. June 2019.

Collaboration with Research Projects

Part of the research was done in collaboration with the research project *EPOCA*. *Corruption and economic crisis, a poisonous combination: understanding process-outcome interactions in the explanation of public support for democracy*, financed by the Fundação para a Ciência e a Tecnologia of Portugal coordinated by Dr Luis de Sousa and Dr Pedro Magalhães of the Institute of Social Sciences of the University of Lisbon.

Research Stays

Predoctoral research stays at the Institute of Social Sciences, University of Lisbon, under the supervision of Dr Luis de Sousa. June–July 2021 and June–July 2022, three months.

Structure of the Dissertation

After the introduction of the dissertation, Chapters 2 and 3 address how some demographic, political, and economic characteristics of cities and towns can affect the levels of local corruption. First, Chapter 2 analyses in detail the potential effect of the population of a municipality and the concentration of political power in one party due to longevity in power. The concentration of power is studied with different operationalizations including the presence of the same party governing both at the local and regional levels for long periods.

Then, Chapter 3 uses a sample of six cities to do an initial analysis of the results that my objective measure of corruption generates in relation to several factors that the literature has found to be related to municipal corruption in Spain.

Afterwards, Chapter 4 addresses the second main tendency observed in the preliminary analysis of the corruption dataset: the potential relationship between entities created under the

principles of New Public Management and higher levels of corruption. The chapter differentiates between autonomous entities subject to public law and those subject to private law, that is, public companies and foundations, due to the higher presence of the latter in the dataset of corruption convictions. I also study a possible causal mechanism that could explain this tendency to higher corruption levels related to the effectiveness of public activity control bodies and responsible people in the different kinds of entities.

Finally, in Chapter 5 I present the conclusions of the dissertation consisting of the substantial contributions related to the understanding of the factors that can explain public corruption, the methodological contributions in relation to the use of objective measurements of corruption based on the analysis of court cases, the limitations of the research work presented and the future lines of research that the results point to and, lastly, some final thoughts about the implications that the results of the thesis can have for public integrity academia and policy-making.

Chapter 2.

Why do Political Institutions Matter?

Factors that Drive Corruption in Spanish Municipalities

Introduction

Corruption is a significant problem in both developed and developing countries. Surveys show that corruption is a concern for citizens, and that neither democracy nor economic development suffice to eliminate corrupt behaviours.

When we think about corruption, we tend to consider it on a state-wide level. The Corruption Perceptions Index of Transparency International (Transparency International, 2022) or the World Bank Worldwide Governance Indicators (The World Bank, 2022) are well-known tools that examine corruption, but neither includes data at the subnational level.

However, the literature has found that in several countries many corruption cases occur at the local government level (Masters & Graycar, 2016). In Spain, authors have unanimously observed this tendency, and have shown that corruption takes place far more in city councils than in regional or state administrations (Estefanía, 2009). Nonetheless, research on corruption at the local level is scarce, not only in Spain but in general (Beerli & Navot, 2013).

Considering the importance of corruption at the local level observed by numerous authors, it seems important to analyse the factors that can explain why some municipalities are significantly more corrupt than others, given that anti-corruption policies are usually implemented at the state or regional level. It is however true that some cities, in general the larger ones, have developed their own public administration control measures (for instance,

transparency policies, or the possibility of sending anonymous complaints about corruption). However, most municipalities in Spain rely basically on regional and state regulations and traditional corruption control bodies.

Within the institutionalist line, the literature about Spain has pointed out different factors that can explain this higher presence of corrupt behaviours at the local level. Some of these factors have also been studied by the literature in relation to other countries, yielding some consistent findings but other contradictory ones.

After an analysis of this literature both at the Spanish and at the global level in this chapter I consider the following factors as possible explanatory variables for corruption in cities and towns. First, regarding demography, the population size of the municipality is a factor on which considerable research has been carried out. In addition to being a demographic issue, it has a direct impact on institutional characteristics such as the number of elected representatives, the resources available for curbing corruption, or the amount of public money and quantity of public contracts that are part of a city's economic activity. Consequently, I consider the following research question in relation to the population size of municipalities and its potential link to corruption:

Research Question 1 To what extent does population size explain corruption at the local government level?

Secondly, maybe one of the most common factors that institutionalists look into when trying to find explanations to corruption is the concentration of political power. This has many facets, for instance, the characteristics of presidential or parliamentary systems, the existence of government coalitions, or the role of civil society or the media in accountability. In this case,

considering the need to specify some of the manifestations of the concentration of power in city councils, I have designed the following research question that focuses on political parties in municipalities:

Research Question 2 To what extent does the concentration of political power in one political party explain corruption at the local government level?

In conclusion, considering that the literature has shown that corruption is mostly present at local government levels in a wide range of countries, an analysis should be carried out of institutional factors that can facilitate corruption at the local level. If the relationships suggested in my research questions are proved, reforms to change those factors would need to be implemented within the anti-corruption strategies in parallel with corruption monitoring policies. Thus, the conclusions of this research could form the basis for key improvements in corruption prevention policies; these are needed to tackle corruption as it cannot be tackled only with repressive approaches.

Literature Review

The literature generally states that in several countries, there are many corruption cases that occur at the local government level (Masters & Graycar, 2016; some examples of this tendency are, for Spain, Estefanía, 2009; Jiménez et al., 2012; Parrado et al., 2018; for Italy, Drápalová, 2016; and for Sweden, Andersson, 2008; Erlingsson et al., 2008). Nonetheless, as already mentioned above, research on corruption at the local level is limited (Beeri & Navot, 2013).

In relation to the previous academic work regarding my research questions, I should underline that the literature on the institutional causes that explain corruption is extensive (including the seminal books by Klitgaard, 1988 and Rothstein, 1998; other relevant texts are Mauro, 1995; Mo, 2001; Rose-Ackerman & Palifka, 2016; Shleifer & Vishny, 1993). However, similarly to the above-mentioned scarcity of literature on corruption at the local level, research on institutional factors that explain corruption in cities and towns is also in short supply.

Here I analyse works about the current situation in municipalities, but to consider more examples and thus arrive at more solid conclusions, I also include studies from the last twenty years or so. I try to find tendencies that are repeated in several countries for which I have found quantitative or qualitative research studies about corruption at the local level.

The international literature, in contrast to the Spanish one explained in Chapter 3, principally addresses the following institutional factors as possible explanatory variables regarding corruption levels in cities and towns: the size of the municipal administration, which is directly related to the size of the population of the city, and the concentration of political power. This second concept is divided into two issues, following the works of different authors. First, some of the literature analyses the concentration of political power in the mayor, or in a few elected representatives, due to the absence of strong administrative managers in the city council or a higher number of elected councillors. Second, other works emphasize the concentration of political power also appears in situations where there is a single-party majority in the city council.

The Size of the City

One element that some institutionalist literature finds to be related to corruption is the size of the public administration that, in the case of municipalities, is directly related to the size of their populations (Estefanía, 2009). Some authors suggest that, with some exceptions, corruption is positively related to smaller cities and towns (Mouritzen & Svara, 2002). García-Quesada et al. (2013) and Jiménez et al. (2012) find that the relatively small size of municipalities in Spain could be a factor that facilitates corruption. These authors argue that when councils are so small, it is difficult to have sufficient staff to monitor public activity and to ensure the independence of the public servants working in them.

Despite the conclusions of these authors, the literature does not produce conclusive results about the relationship between population size and corruption. For instance, Drápalová's (2016) comparative study of cities in Spain and Italy does not demonstrate any clear correlation between the size of the population of the cities and their levels of corruption.

Charron (2013) even reaches a conclusion that is the opposite of that of the first authors cited in this section. Using data from several European cities, he finds that corruption is more likely to happen in large cities and considers that this is due to the existence of more opportunities for obtaining bribes in urban areas than in rural ones.

Korosteleva et al. (2020) present the same results in their research about corruption in European cities. These authors do however find an exception in capital cities, which are less fragmented than other large cities and have stronger social and political mechanisms to make governments accountable.

Mocan (2008) also arrives at similar conclusions. The author analyses data from 29 countries and links the higher levels of corruption in larger cities to a more distant relationship between citizens and public officials, and to the more varied and higher-volume economic activity that exists in these cities.

In sum, I do not find conclusive results in the literature about the relationship between the population size of a city and its level of corruption. One could impute these differences to the particular cases studied, but the research work that presents one of the broadest datasets, including a large sample of 54.209 individuals living in 29 different countries (Mocan, 2008), concludes that there tends to be more corruption in larger cities. In relation to the Spanish case, the results of Drápalová (2016), García-Quesada et al. (2013) and Jiménez et al. (2012) might show that Spain is just an exception to the general tendency, in a similar way to the whole country having generally higher levels of corruption compared to other developed democracies. In any case, I prioritize the conclusions of the literature focusing specifically on the Spanish case and, thus, I hypothesize that:

Hypothesis 1 Municipalities with larger populations tend to be less prone to cases of corruption.

More in-depth comparative and large-N studies of corruption in Spanish municipalities are needed to obtain more solid conclusions. At the global level, further research should also keep working on this hypothesis and include data from cities and towns in countries in different regions and with varying levels of development to confirm the potential impact of other explanatory or conditional variables.

The Concentration of Political Power

Within the institutionalist literature on corruption, it is generally accepted that the concentration of power is a factor that facilitates corruption (Estefanía, 2009). Robert Klitgaard's major book *Controlling corruption* (1988), one of the most cited works ever about corruption, presented his corruption formula: $C = M + D - A$. The formula reflects the idea that corruption equals monopoly plus discretion minus accountability. Concentration of power means more monopolistic and discretionary decision-making, and less accountability exercised by other powerful actors. Thus, it is reasonable to assert that, from an institutionalist approach, greater concentration of power should be related to higher levels of corruption both at the state and local levels of government.

In line with this argument, Estefanía (2009) suggests some factors that could be causing high levels of corruption at the local administration level in the Spanish case: the concentration of power in a small number of public representatives and the fact that a significant number of municipalities are governed by a single political party. The authors, taking their data from Mouritzen and Svava (2002), illustrate a general tendency that consists of higher levels of corruption for countries with an average of around 20 or fewer councillors per municipality, with the exception of Portugal. At the same time, their results show that in these same countries that have higher levels of corruption, over half the municipalities are governed by a single-party majority, except for Finland.

Following a similar vein regarding avoiding a high concentration of power in one political leader, other authors study both the Spanish and the Swedish cases and underline the need for a managerial figure to counterbalance the power of elected mayors (Estefanía, 2009; Parrado et al., 2018). Estefanía (2009) observes that the presence of this administrative figure in

cities correlates with lower levels of perceived corruption in countries (remember that, in general, there is no data available about perceptions of corruption at the local level).

Nonetheless, to exercise these anti-corruption effects, this manager needs to be supported by a meritocratic system of human resources management, transparency, independent watchdogs, and clear rules and procedures (Parrado et al., 2018).

Drápalová and di Mascio (2020) present a case study of two Spanish cities where they also find strong management figures delivering positive results in the struggle against local corruption. These authors explain that building a clear dual system with an administrative structure that can monitor elected representatives is negatively correlated with corruption (the same results are also presented in more detail in Drápalová, 2016).

The comparative study between cities from Italy and Spain developed by Drápalová (2016) yields interesting results concerning the concentration of power. The two Italian cities with the highest levels of corruption (Brindisi and Siracusa) are governed by coalitions. However, the author cannot obtain solid conclusions because, conversely, Lecce shows lower levels of corruption and has an unstable coalition government. In the Spanish case, the two cities with much lower levels of corruption (Alcobendas and Sant Cugat) have stable one-party local governments, going against the hypothesis defended by Estefanía (2009). Nevertheless, in recent years some significant cases of corruption have been investigated in Sant Cugat (Rocasalva, 2020; Vallespín, 2019).

In conclusion, regarding concentration of power, even if some comparative studies find exceptions, the literature reaches similar conclusions to the ones observed at the national level: more concentration of power means more corruption. Despite this general assessment, I should remark that I have found no authors studying the effect of the concentration of power at the local

level on corruption by using the operationalizations employed in my research, that is, the years that a party has been governing the municipality, or if it has also been in government at the regional level. Thus, I propose the following hypothesis that could contribute to the literature by examining if this new approach to the local concentration of power also confirms the conclusions obtained by previous works:

Hypothesis 2 Municipalities with less concentration of political power in one political party tend to be less prone to cases of corruption.

Because of everything that has been said above, I conclude that there is a gap in the literature about the institutional factors that explain corruption in cities and towns. In the case of the population size of a municipality, the literature has not come to a definitive conclusion. As for the concentration of political power, there are very few quantitative analyses on corruption at local government level with a broad spatial focus that includes municipalities from different countries. The research available concentrates principally on case studies analysing corruption in some specific cities and do not allow us to reach general conclusions. To fill the gap, I will try to ask original research questions that have not been yet clearly resolved by the literature.

Research Methods and Data

My research relies on examining an adaptation of the general dataset of this dissertation explained in Chapter 1. With the information on corruption convictions included in the initial dataset, I construct a new dataset of 160 municipalities where there was some public servant or politician condemned for corruption felonies for actions that took place between 1995 and 2015.

Definition of Variables

In relation to the construction of my dependent variable, it has mostly been already explained in previous sections. I should only mention that here I use two operationalizations of corruption coming from the information available in the dataset. First, one that measures corruption in relation to the number of felonies for which the person is declared guilty in the conviction and, second, a measure that considers the number of imprisonment years that each convicted is sentenced to. In this way I have two proxies with different approaches to measure the severity of the sentences for corruption and, thus, an approximation to the severity of the corrupt actions.

The independent variable tested in H1 does not require any explanation, apart from the differentiation of the two operationalizations: one by number of inhabitants in the municipality and another one grouped by ranges. I have included the population in 2005, as this is the mid-point in the temporal framework of my data.

Regarding the independent variable in H2, this does need a more extensive explanation. I do not include the perspective based on the presence of an administrative manager or a higher number of elected representatives in my research. Regarding the managers, there is a significant corpus of literature on this aspect that has already discussed the issue in-depth. This leads me to consider that I cannot make any original contributions to this topic using my research design. As for the number of elected representatives, this fact is directly related to a municipality's population and consequently, it is indirectly studied in my H1. Secondly, the literature has addressed coalitions in local governments, but I do not include this factor in my research either, because Spain has a rather presidential-style local political system (the strong-mayor system) and, thus, I do not consider local coalitions to be a relevant factor in relation to the concentration

of power. To sum up, I construct another way to analyse the concentration of power in a party consisting of whether the same party has governed for a considerable number of years (longevity in power or lack of party alternation) or, in addition, if it has also governed for a long time at the regional level. I think that these operationalizations can be of interest in the Spanish case where the two traditionally majority parties have been governing for long periods in numerous administrations at the three levels of government (state, regional, and local).

In Table 5 I define the variables analysed in each municipality included in my dataset.

Table 5

Definition of the variables used in Chapter 2

Variable	Definition
Dependent variable: corruption	
<i>Operationalization 1: Number of felonies</i>	Numerical discrete variable. Number of corruption felonies committed by politicians or public officials in each municipality and recognized in firm judicial rulings.
<i>Operationalization 2: Years of imprisonment</i>	Numerical continuous variable. Number of years of imprisonment sentenced in convictions for corruption felonies committed by politicians or public officials in each municipality and recognized in firm judicial rulings.
Independent variables	
<i>City concentration of political power</i>	Numerical discrete variable. Concentration of political power in one party in the municipality, considering the number of terms within the five terms between 1995 and 2015, for which the party most usually in power in the city council has governed. Index between 0 (there has been a different party in power in each term) and 1 (the same party has been in power for all the terms).
<i>City concentration of political power (ordinal)</i>	Categorical ordinal variable. Variable of six labels that puts in order the results of the variable <i>City concentration of political</i>

Variable	Definition
	<i>power</i> from 1 (there has been a different party in power in each term) to 5 (the same party has been in power for all the terms).
<i>City predominant party (dummy)</i>	Categorical nominal variable. Dummy variable that indicates if there is a party in the municipality that has governed for at least half the five terms between 1995 and 2015.
<i>2005 Population</i>	Numerical discrete variable. Population of the municipality in 2005.
<i>2005 Population by ranges</i>	Categorical ordinal variable. Variable of nine labels that puts in order the results of the variable <i>2005 Population</i> from 0-1.000 inhabitants to over 500.000 inhabitants.
<i>Predominant party coincidence</i>	Categorical nominal variable. Variable of three labels that indicates if the same party is predominant (that is, it has governed for at least half the electoral terms between 1995-2015 ²) both in the municipality and the region, if there is a predominant party in the municipality and the region but they are not the same, or if there is no predominant party at the municipal level (all regions have a predominant party).

Descriptive Data

In Table 6 I present the descriptive data for the variables that are included in the analyses of this chapter.

² For the regional level, I consider the terms that include the period between 1995 and 2015. As the electoral system permits regional elections being brought forward, the data considers 5 or 6 terms depending on the region.

Table 6*Descriptive statistics of the variables used in Chapter 2*

Variable	Freq.	%	Mean	SD	Min.	Max.
<i>Dependent variables</i>						
<i>Number of felonies</i>	160		2,95	6,07	1,00	70,00
<i>Years of imprisonment</i>	160		2,36	3,99	0,00	28,17
<i>Independent variables</i>						
<i>City concentration of political power</i>	160		0,63	0,21	0,20	1,00
<i>City concentration of political power (ordinal)</i>	160		3,14	1,03	1	5
1	3	1,9				
2	45	28,1				
3	59	36,9				
4	33	20,6				
5	20	12,5				
<i>City predominant party (dummy)</i>	160					
No	48	30,0				
Yes	112	70,0				
<i>2005 Population</i>	160		87.903,79	299.556,83	38	3.155.359
<i>2005 Population by range</i>	160	100				
0-1.000	23	14,4				

Variable	Freq.	%	Mean	SD	Min.	Max.
1.001-5.000	31	19,4				
5.001-10.000	25	15,6				
10.001-25.000	27	16,9				
25.001-50.000	11	6,9				
50.001-100.000	17	10,6				
100.001-250.000	16	10,0				
250.001-500.000	4	2,5				
More than 500.000	6	3,8				
<i>Predominant party coincidence</i>	160	100				
No	50	31,3				
Yes	62	38,8				
No predominant party in the municipality	48	30,0				

Note: Author's own elaboration, based on data from INE, 2022a; Ministerio de Política Territorial, 2022; Senado de España, n.d.

Empirical Strategy

For the two hypotheses I have to test, I structure the statistical analysis in two sections. First, I present descriptive data of each variable, comparing the results of my dataset and the results in the whole population of cases, that is, all the Spanish cities and towns (N=8.116 considering the data for 2015).³ I have chosen this strategy because, even if I have constructed two ways of operationalizing my dependent variable, I consider that the simple fact of appearing in the dataset already means that these municipalities have higher levels of corruption than other ones and, consequently, it is still worthwhile to compare the characteristics of the cities and towns included in the dataset with the rest of municipalities in Spain. Second, I run different inferential tests depending on the kind of variables I use for each hypothesis.

In relation to my H1, I have numerical values for both the responsive and the explanatory variables. I thus run correlations to test the association between the variables (a Pearson's correlation in the cases where I have two continuous variables, and a Spearman's correlation when one of them is discrete). For the *2005 Population by ranges* variable, I use a Chi-square. If I find a significant relationship in the correlation tests, I run a regression to confirm the predictive capacity of the corresponding dependent variable.

Concerning my H2, I have one numerical and several categorical independent variables to measure the concentration of political power at the local government level. For the categorical ones, I consider that the best way to analyse if there is a relationship between these variables and the presence of corruption cases in municipalities (that is, the inclusion of some Spanish cities and towns in my dataset) is to compare the distributions of each

³ The number of municipalities does not remain the same throughout the entire timeframe (1995-2015). However, as a means of simplifying the analysis, I use the Spanish local administrations as they existed in 2015. I have tested that the values missing due to this strategy always remain below 5% of the total cases.

explanatory variable in the sample (i.e., the dataset used for this chapter) with those of the whole population (i.e., all Spanish municipalities). Therefore, I will use Chi-square tests with the aim of finding significant associations between the different operationalizations of the concentration of political power and the existence of corruption in cities and towns. I will also use a Spearman's correlation for the only discrete variable I have within this group, to test the significance of the association.

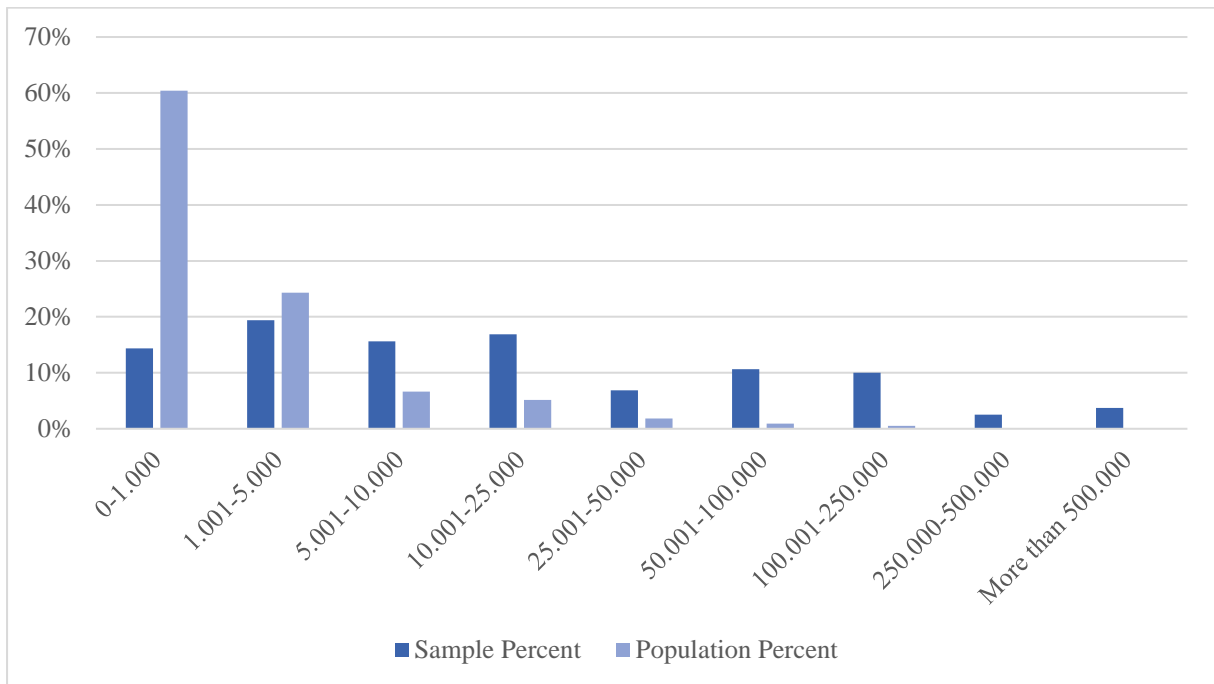
Results

The Size of the City

First, I observe that almost 50% of the municipalities included in the dataset have a population of under 10.000 inhabitants and that municipalities with more than 100.000 inhabitants account only for 16,3% of the cities analysed (Table 6). At first sight, this could be interpreted as a relevant presence of small cities and towns in my dataset of convictions for corruption. However, in Figure 7 I compare the observed frequency in the dataset of municipalities by each range of population and its expected frequency, considering the weight of each range of inhabitants compared to all the municipalities in Spain. When analysing this data, I observe that the towns which have 1.000 inhabitants or fewer clearly occupy a higher percentage within the totality of cities and towns in Spain than in my dataset of municipalities with cases of corruption. Conversely, municipalities of 5.001 inhabitants or more are overrepresented in my dataset in comparison to their weight in the totality of cities and towns in the country.

Figure 7

2005 Population by range. Distribution in the sample and the population



Note: Author's own elaboration, based on data from INE, 2022a.

I run a Chi-square test for independence (Table 7) and it shows a significant relationship between the population size of a city or town and the presence of corruption cases ($p < 0,01$). Despite this significance, I am very cautious about analysing the results of this test because 55,6% of the observed and expected frequencies are under 5, undermining the robustness of the results. Thus, I will continue my testing of H1 using the numerical *2005 Population* variable.

Table 7*Chi-square test. 2005 Population by ranges*

	Observed N	Expected N	Residual
0-1.000	23	97,0	-74,0
1.001-5.000	31	39,0	-8,0
5.001-10.000	25	11,0	14,0
10.001-25.000	27	8,0	19,0
25.001-50.000	11	3,0	8,0
50.001-100.000	17	1,0	16,0
100.001-250.000	16	1,0	15,0
250.000-500.000	4	,0	4,0
More than 500.000	6	,0	6,0
Total	160		

2005 Population by ranges	
Chi-Square	52604,031 ^a
Df	8
Asymp. Sig.	,000

Note: a. 5 cells (55,6%) have expected frequencies less than

5. The minimum expected cell frequency is ,0.

The Pearson's and Spearman's correlations show that there is a significant relationship between corruption and the population of the municipality using both operationalizations of the variable ($p < 0,01$) (Table 8). However, the relationship is stronger for the operationalization that considers the total years of imprisonment in the sentences for corruption related to the municipality.

Table 8*Coefficients of correlation. 2005 Population; Number of felonies and Years of imprisonment*

		2005 Population
Number of felonies	Spearman's rho Correlation	,233**
	Sig. (2-tailed)	,003
	N	160
Years of imprisonment	Pearson Correlation	,496**
	Sig. (2-tailed)	,000
	N	160

Note: ** means that correlation is significant at the 0,01 level (2-tailed).

Once it is confirmed that there is a significant association with my dependent variable (with both operationalizations) and this explanatory variable, I run a linear regression to test the predictive capacity of *2005 Population*. The results in Table 9 and 10 show that the relationship is still significant only for the *Years of imprisonment* operationalization, but the B coefficient has a very low value, meaning that the capacity of the *2005 Population* variable to predict changes in the corruption of a city or town operationalized as *Years of imprisonment* is very low, and that other variables have significant effects on the value of this responsive variable.

Table 9*Linear regression. 2005 Population; Number of felonies*

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2,746	,499		5,506	,000
2005 Population	2,324E-6	,000	,115	1,451	,149

Table 10*Linear regression. 2005 Population; Years of imprisonment*

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1,780	,286		6,222	,000
2005 Population	6,600E-6	,000	,496	7,180	,000

In conclusion, even if only one of the operationalizations shows a significant regression result, I consider that I can reject the null hypothesis and confirm that there is a relationship between the population of a city and its levels of corruption. Nevertheless, the results suggest that my H1 should be rejected because the association between the variables appears to be in the opposite direction. In fact, my results do not clearly resolve whether more cases of corruption tend to happen in larger cities, but they do suggest that larger cities tend to have more serious corruption cases, considering the years of imprisonment stated in the judicial sentences. This is a relevant finding that will be discussed more in-depth in the conclusions section of this research.

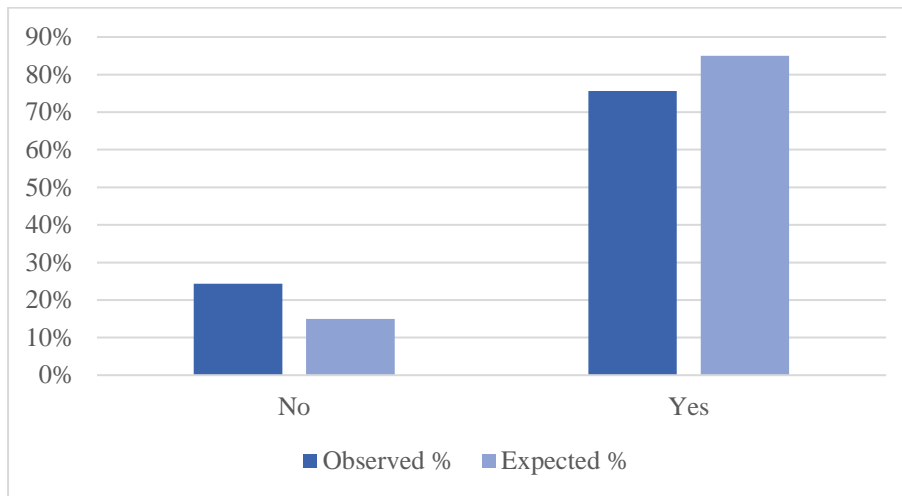
The Concentration of Political Power

The Existence of a Local Predominant Party. Concerning the concentration of political power, Table 6 in page 54 shows that in 75,6% of the municipalities included in the dataset, one political party has governed for at least three of the five terms included in the timeframe of the research (i.e., 12 of the 20 years between 1995 and 2015). That is to say that in these cities and towns, the figure for the concentration of power is 0,6 or higher and, thus, I consider that there is one predominant party at the local level.

Even if this might seem to be a high value, when I compare this data with the corresponding one for the whole population of municipalities in Spain (Figure 8), that is, the expected values, I observe that the percentage of cities and towns without a predominant party is higher in my sample of cities and towns with corruption cases than in the complete data for all Spanish municipalities. I should underline that this suggested association between the variables is in the opposite direction to the one expected in my H2 and also observed by the literature. My data, considering the variable *City predominant party (dummy)* shows that municipalities with less concentration of political power in one predominant party are more prone to corruption. This is a relevant finding and the following results will explore it more thoroughly.

Figure 8

City predominant party (dummy). Distribution in the sample and the population



Note: Author's own elaboration, with data from Ministerio de Política Territorial, 2022.

To confirm if there is a significant relationship in the direction that this descriptive data is pointing, I run a Chi-square test. The results shown in Table 11 confirm that there is a positive association between corruption in municipalities and the lack of a predominant party ($p < 0,01$).

Table 11*Chi-square test. City predominant party (dummy)*

	Observed N	Expected N	Residual
No	39	24,0	15,0
Yes	121	136,0	-15,0
Total	160		

City predominant party (dummy)	
Chi-Square	11,029 ^a
df	1
Asymp. Sig.	,001

Note: a. 0 cells (0,0%) have expected frequencies less than 5.

The minimum expected cell frequency is 24,0.

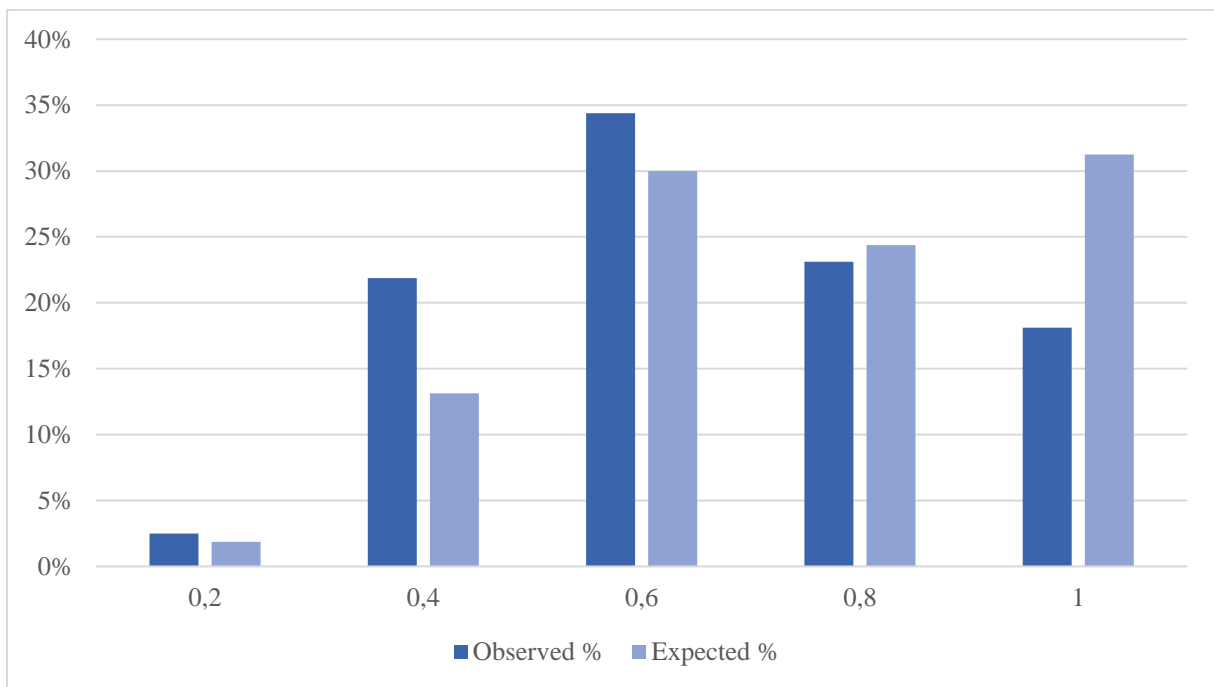
The Level of Concentration of Power in one Local Party. To continue testing my H2, I now analyse the results of the variable *City concentration of political power*, that is more precise than the previous dummy variable. The descriptive data in Table 6 in page 54 do not yield any new information in relation to the findings commented on for the previous set of tests.

However, when I compare this data with the distribution for all the Spanish municipalities (Figure 9), the graph shows a remarkable difference between the observed and expected values for the labels 0,4 and 1. Municipalities where one party has governed all through the 20 years between 1995 and 2015 (that is, when the concentration of political power label is 1), are visibly underrepresented in the sample of corruption cases. In addition, municipalities where the party that has governed for the most time over this period has led the city council for just 8 years (that is, when the concentration of political power label is 0,4) are

clearly overrepresented in the sample. This data is again suggesting that municipalities with less concentration of political power are more prone to cases of corruption.

Figure 9

City concentration of political power. Distribution in the sample and the population



Note: Author's own elaboration, based on data from Ministerio de Política Territorial, 2022.

To run a Chi-square and test this association, I convert the variable of concentration of political power into an ordinal one (*City concentration of political power (ordinal)*). The results confirm that there is a significant relationship ($p < 0,01$), with municipalities where there is less concentration of power tending to have more cases of corruption (Table 12). Nonetheless, the high value for the cells of the Chi-square table that have labels below 5 reduces the robustness of this result and I need to be careful when drawing conclusions from it.

Table 12*Chi-square test. City concentration of political power (ordinal)*

	Observed N	Expected N	Residual
1,00	4	3,0	1,0
2,00	35	20,9	14,1
3,00	55	47,7	7,3
4,00	37	38,8	-1,8
5,00	29	49,7	-20,7
Total	160		

City concentration of political power (ordinal)	
Chi-Square	19,726 ^a
df	4
Asymp. Sig.	,001

Note: a. 1 cell (20,0%) has a expected frequency less than 5.

The minimum expected cell frequency is 3,0.

In this case, as I have a discrete numerical variable, I also run a Spearman's rho test to see if it shows a significant relationship between the concentration of political power at the local level and any of the operationalizations of my dependent variable. The results of the correlations in Table 13 show that, according to this test, there is no significant relationship between the variables. In spite of that, I consider this result should not lead me to reject the previous results obtained through the tests for categorical variables.

Table 13

Spearman's rho correlation coefficients. City concentration of political power Years of imprisonment and Number of felonies

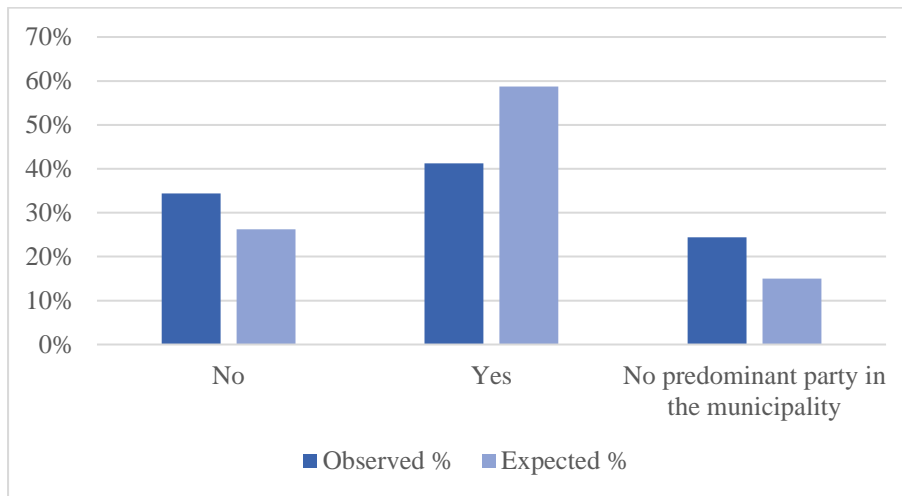
		City concentration of political power
Number of felonies	Correlation Coefficient	-,009
	Sig. (2-tailed)	,907
	N	160
Years of imprisonment	Correlation Coefficient	,081
	Sig. (2-tailed)	,307
	N	160

The same Predominant Party both at the Regional and Local Level. To study another manifestation of the concentration of political power, I analyse whether the predominant party in the local and regional governments is the same. It should be underlined that in some municipalities there is no predominant party according to the definition stated in this research. On the contrary, following the same definition, all the Spanish regions have a predominant party.

Once again, to obtain solid conclusions I compare this data with that of all local governments in Spain (Figure 10). These descriptive results show a higher percentage of municipalities where there is not the same predominant party at the local and regional level in my sample than in general. Thus, the current results one more time suggest a relationship in the opposite sense to the one stated in H2.

Figure 10

Predominant party coincidence. Distribution in the sample and the population



Note: Author's own elaboration with data from Ministerio de Política Territorial, 2022; Senado de España, n.d.

I run a Chi-square to see if these results are confirmed. The observed and expected frequencies in Table 14 suggest that in municipalities with higher levels of concentration of power in one political party, due to its predominance both in local and regional governments, there are fewer cases of corruption than in general. The results of the Chi-square test confirm this relationship at a level of significance of $p < 0,01$.

Table 14*Chi-square test. Predominant party coincidence.*

	Observed N	Expected N	Residual
No	55	42,0	13,0
Yes	66	94,0	-28,0
No predominant party in the municipality	39	24,0	15,0
Total	160		

Predominant party coincidence	
Chi-Square	21,739 ^a
df	2
Asymp. Sig.	,000

Note: a. 0 cells (0,0%) have expected frequencies less than

5. The minimum expected cell frequency is 24,0.

In conclusion, the results for the different tests run to confirm H2 allow me to reject the null hypothesis and confirm that there is a relationship between the concentration of political power and corruption at the local level. In spite of this, the statistical tests have repeatedly pointed to an association of the variables in the opposite direction to the one stated in H2. In other words, the results suggest that municipalities with lower levels of concentration of power tend to be more corrupt. At a first sight, this finding does not make sense because it is counterintuitive and goes against all the literature on corruption. Thus, in the conclusions section of this chapter I will set out a possible explanation of these results that would not contradict the previous literature on the issue.

Conclusions

The results of this chapter suggest some interesting conclusions that can be considered a relevant contribution to the current state of the academic literature on corruption at local government level.

The results obtained in relation to the first hypothesis suggest that cities with higher populations tend to be more prone to cases of corruption. Thus, H1 is rejected because although I observe a relationship between the variables, it is in the opposite direction to the one stated in the hypothesis.

However, careful thinking is required before arriving at any conclusions. This relationship could be affected by the significant impact made by other variables, ones related to the size of the city and the effectiveness to achieve convictions for corruption (it should be remembered that my objective measure considers only the firm judicial convictions for corruption felonies). For instance, the relationship could be conditioned by the political connections and resources of the internal control officials, staff in the city councils feeling protected enough to report corrupt behaviours, or the impact of closer personal relationships between members of the public activity control bodies and council officials in a small town, which could be counterproductive when reporting a case of corruption. Many other explanatory variables could be concealed behind a potentially spurious variable consisting of the population size of a municipality and, indeed, the low coefficients of the regressions make this explanation plausible.

But I would like to focus on one of these variables whose impact I consider very relevant. This lower judicial effectiveness could be explained by the fact that the Public Prosecutor's Office, which is the usual driving force behind judicial procedures for corruption in Spain, has limited resources and it is reasonable to think that it prioritizes more

serious corruption cases. One argument used by part of the literature that upholds that corruption is more likely to happen in large cities is that these cities move more economic resources and relevant political activity and, in consequence, there are more incentives for corruption there. I think that this argument could be linked to the prosecutor having less interest in investigating cases of corruption in small cities and towns: in those smaller places, in general, smaller sums of money are involved in corruption cases and more broadly, there is a less detrimental impact on the public interest. The fact that the results that appear in my tests for the variable *Years of imprisonment* are more robust than the ones for the *Number of felonies* variable is an argument that supports this possible explanation. In some sense, this argument captures a common element in the different conclusions of the literature that relate corruption with the population of cities and towns.

If my reasoning is correct, it would be impossible for me to state if there is more corruption in larger or smaller municipalities, but I would confirm that corruption in large cities is made up of more serious cases, that is to say, what is considered grand and political corruption. Further research should analyse if this explanation is correct: both the part regarding the lower effectiveness of the judicial system in prosecuting corruption in small cities and towns, and the part about confirming if cases of corruption are indeed more severe in large cities.

Concerning my second hypothesis, in this chapter I define several operationalizations for the independent variable and I run numerous statistical tests. The results repeatedly point to the fact that municipalities with lower concentrations of political power in one party, the one that usually governs the city or town, are related to higher levels of corruption. There is an absence of a significant relationship when running the correlations between the two operationalizations of corruption and the discrete concentration of power variable, but I do

not consider this to be enough to dismiss all the significant relationships that appear for the Chi-square tests of the categorical variables.

Consequently, my H2 is also rejected because although the statistical analysis suggests that there is a relationship between the variables, it is in the opposite direction to the one stated in my hypothesis: concentration of power is negatively associated with corruption at the local level. This conclusion not only goes against the most influential literature on corruption, but it is also counterintuitive. There is also the argument that some of the most serious cases of corruption in Spain in the years studied in this research took place in cities or regional councils where the same party had governed for long periods of time (for instance, the Gürtel case, all the corruption cases around Marbella, or several cases in Catalonia that ended in convictions). Thus, just as I did for the previous hypothesis, I think that I need to reflect carefully on the preliminary suggestions of these results before drawing any conclusions.

Similarly to what I observed for my H1, the relationship that the statistical tests are demonstrating could be concealing a conditional relationship where other explanatory variables might have a mediating effect between concentration of power and levels of corruption. Here, as I did for the first hypothesis, I should underline that my objective measure of corruption only includes the cases where there is a firm conviction in court.

I think that the municipalities where the parties in power change more frequently or where the regional government is not made up of the same parties as the local one have more tools to make corruption cases come to light. Different parties winning power can generate higher accountability, as there are fewer long-standing political and economic relationships between the same actors, and can motivate local governments to report potentially corrupt behaviours that did not take place during their mandates. In fact, this perfectly fits Klitgaard's

explanation of corruption, since the concentration of political power in one party that governs for long periods can generate a monopolistic power that is not submitted to accountability by other powerful political actors in the institution.

In conclusion, if the explanation that I am presenting is correct, the results are not showing less corruption in municipalities with more concentration of power, but rather, fewer possibilities in these cities and towns of prosecutions and convictions for corruption. Future research should focus on confirming if indeed the concentration of power in one political party makes it more difficult to report and investigate possible cases of corruption and to eventually achieve convictions for them.

After the presentation of this conclusions, I would like to discuss some limitations of my research that should be considered.

First, as I have already mentioned and is explained more broadly in Chapter 5, the use of an objective measure based on court cases can lead to confusion among the existence of corruption and the effectiveness of the judicial system in controlling corruption. Nonetheless, I have considered these risks when getting conclusions from the results.

Second, my different operationalizations of the concentration of political power only consider parties that govern a municipality or region, dismissing other relevant actors, such as political leaders or lobbies. Nevertheless, I include several manifestations of the concentration of the power of those parties, with the aim of obtaining more specific but also more solid results. Further research should analyse also other kind of concentration of political power in different stakeholders.

After this thorough analysis of the impact on local corruption of two especially relevant factors, in the next chapter I present an exploratory analysis in a model of six cities

of the factors explaining corruption at the local level more usually observed by literature on Spanish corruption.

Chapter 3.

Corrupt Cities or Risk Factors?

An Initial Exploration of Variation in Local Corruption

Our management model is the private company philosophy applied in public administration [...] then we can discuss how to divide the pieces of the pie, but there is a pie

Jesús Gil y Gil

Mayor of Marbella, Spain (1991-2002)

[...] some of them [mayors and councillors] were even allowed to be real estate developers. Many control mechanisms fail, and we are opening our democratic system to a gigantic business, where the outlaws win, and this fact delegitimizes the democratic system and degrades its institutions in front of the citizens

Carlos Jiménez Villarejo

General Anti-corruption Prosecutor in Spain (1995-2003)

Introduction

Corruption is most prevalent at the local level in many countries (Masters & Graycar, 2016), even if the most well-known corruption measuring tools (mainly The World Bank, 2022 and Transparency International, 2022), as well as the largest academic literature, study corruption at the country level (Beeri & Navot, 2013). Thus, while international organisations and debate forums increasingly focus on the need to tackle corruption (OECD, 2022; UN, 2022), literature has not sufficiently addressed the factors explaining local corruption.

This chapter aims to do an initial exploration of the characteristics of municipalities that could explain the variation in local corruption, given that the anti-corruption tools and general regulations (e.g., municipal competencies or the local electoral system) tend to be

established at the state or regional levels and, in consequence, to remain stable for all the cities and towns in a country or region. My objective is to find if, apart from public integrity mechanisms, there are some characteristics of municipalities that can facilitate the appearance of local corruption schemes, in other words, if we can consider these elements as risk factors for corruption that should be contemplated in anti-corruption strategies.

In this chapter I present a comparison of six Spanish cities, trying to understand how variation in local corruption can be related to some characteristics of municipalities and which could be the causal mechanisms related to these explanatory elements. I explore the characteristics of those cities focusing on some elements that the literature has found to be potentially related to higher local corruption such as the size of the city, the concentration of political power, and the importance of the construction industry, the real estate sector, and tourism.

The analysis of corruption at the local level is based on the final judgements selected for the construction of the dataset presented in Chapter 1 related to actions that happened in each of the chosen cities. I also study statistical data, public reports, and other documentation to analyse the characteristics of each city and how they can be related to the variation in local corruption.

Explanatory Factors of Local Corruption

Several authors have focused on the potential factors explaining the high levels of local corruption in Spain compared to other developed democracies. Estefanía (2009) studies the impact of the size of the administration in municipalities, finding that Spain is one of the European countries with smaller cities and towns, which could be related to higher levels of

corruption. García-Quesada et al. (2013) also point to this size problem that could explain local corruption in the country.

Other authors arrive at the same conclusion around the existence of a negative relationship between population size and local corruption comparing several European states (Mouritzen & Svava, 2002). However, the literature is divided and authors like Charron (2013), Mocan (2008) and Korosteleva et al. (2020) using data from different countries conclude that bigger cities tend to have more cases of corruption, except for capital cities that have stronger accountability mechanisms and are not as fragmented as other big cities (Korosteleva et al., 2020).

In relation to the concentration of political power, there is a consensus in the literature that it is positively related to corruption, even if authors have studied different manifestations of this concentration of power at the local level. It should be noted that, in fact, this conclusion is in close relationship with Klitgaard's (1988) well-known corruption formula ($C = M + D - A$) which asserts that corruption equals monopoly plus discretion minus accountability, factors that can be related to a high level of power concentration on the decision-making bodies.

Estefanía (2009) researches the institutional factors that can explain corruption in Spanish municipalities comparing them to other European countries regarding the concentration of political power, first, considering the number of elected officials in city councils and, second, the number of single-party majority local governments. In both cases he finds the country to be salient in terms of concentration of power. Other authors have also pointed to the concentration of power in the mayor, the strong-mayor system, as an element that can explain local corruption in the country (García-Quesada et al., 2013). Nonetheless,

Drápalová (2016) tests the effect of local coalition governments in his comparative analysis in Spain and Italy, and she does not arrive at clear conclusions.

Some authors have focused on the impact of a manager to offset the mayor's power finding it to be negatively related to corruption (Drápalová & di Mascio, 2020 studying the Spanish case; Parrado et al., 2018 for the Swedish case).

Finally, a number of research works refer to construction and real estate activity as one of the explanations for local corruption in Spain (Iglesias, 2007; Jiménez et al., 2012; Villoria & Jiménez, 2012). The academic who probably has worked more extensively on this issue is Fernando Jiménez (2009, 2014), who researches the relationship between the Spanish building boom that took place before the 2008 financial crisis and corruption at the local level. The author finds that town planning was a source of political corruption during those years due to the existing regulations on the matter, deficient control mechanisms in municipalities, and the huge size of the construction industry during the first decade of the XXI century.

Some authors also underline the fact that, at least during the years before the 2008 crisis, local administrations were remarkably dependent on the incomes coming from fees and taxes related to construction and real estate activity, mostly direct taxes (Iglesias, 2007; Jiménez, 2009). Iglesias (2007) concludes that this dependence is not related to insufficient economic resources in city councils but to a decision of getting benefits using town planning activities. However, there has been little academic analysis of this aspect.

In another work about corruption in Spain, this time not focused on the local level, Jiménez (2016) also finds that the economic incentives created around town planning and construction are one of the principal factors explaining the high levels of corruption in the

country, as well as the problems on party financing regulations (also remarked in Ramió, 2016), and deficiencies on the public procurement system.

It is relevant for the object of this research to underline the conclusions of Jiménez et al. (2017), whose study shows that the link between the construction industry and corruption is also related to a link between more tourist municipalities (i.e., especially those in islands and coastal areas) and higher levels of local corruption.

Finally, there is also an important body of literature that analyses local integrity systems or public activity controls to find solutions to the high local corruption in the country (García-Quesada et al., 2013; Jiménez et al., 2012). These authors consider a central problem the excessive dependence on ex-post controls based on judicial punishment instead of ex-ante administrative measures. As mentioned before, the control mechanism existing to struggle against corruption are not directly studied in this research although the discussion around the factors explaining local corruption is closely linked to potential solutions and improvements needed on anti-corruption controls.

Research Methods

Empirical Strategy and Case Selection

To measure the level of corruption in Spanish cities and then choose the cases to be analysed, I examine the general dataset of this dissertation in the adaptation explained in Chapter 2. Therefore, I use a dataset of cities and towns in Spain where a public servant with a political or administrative responsibility has been convicted for corruption felonies for actions that took place between 1995 and 2015.

From the sample of 160 municipalities with corruption judgements, I select six cities for an initial small-N analysis that, in general terms, can be considered contextually homogeneous, except for the potential explanatory factors that I want to study more in-depth.

Indeed, the fact that I work with an intra-state comparative design implies that several relevant institutional and political factors remain mostly the same between all the cases, for instance, the competencies and general structure of city councils, the local electoral system, or most of the public activity controls. In recent years, cities like Madrid, Barcelona, or Valencia have developed some own anti-corruption strategies like anonymous ways to report wrongdoing, but these are very specific cases and they were not in place during the majority of the timeframe I study.

Even if the size of the city is one of the explanatory factors studied, I consider that for this initial small-N analysis a huge difference in population would make the cases too different to be compared. Therefore, there are no examples of small and rural towns and all the selected cities are middle size or big cities, that is, cities with more than 100.000 inhabitants which, during the research timeframe represented only around 60 cities in the country, a 0,7% of all Spanish municipalities (INE, 2022).

I have chosen cities from six different regions in Spain to avoid an overrepresentation of the specific characteristics of each region that could confuse the interpretation of the results. Some factors can present certain variation among cities, as is the case of political culture or the local party system, but I still consider its differences are not as relevant.

Thus, I expect to find variation in corruption to be related to the differences in the four potential explanatory factors that are not homogeneous among the analysed cases, that is, the population of the city (within the margins of cities with more than 100.000 inhabitants), where I also consider if the city is the state capital; the concentration of power in one party

due to low alternation in power; the dependence of the city on the construction industry and real estate activity; and the importance of tourism. Following the criteria stated above, I analyse Alacant/Alicante, Madrid, Marbella, Las Palmas de Gran Canaria, Pamplona/Iruña, and Santa Coloma de Gramenet.⁴

I analyse the corruption cases in the six selected cities through a process tracing technique to try to do an initial analysis of causes explaining these corrupt actions. This method has elements of an inductive (or theory-generating) and deductive (theory-testing) nature (Bennet, 2008), a combination especially useful in my research due to the lack of strong literature on the factors explaining local corruption.

Description of the Local Corruption Cases

Alacant/Alicante: no Corruption in a Coastal Tourist City. Considering the measurement of corruption used in this dataset, there are no condemnations for corruption cases that happened in Alacant/Alicante between 1995 and 2015.

Madrid: State Administrative Corruption at the Capital City. Madrid has no cases of corruption in the local administration considering the measurement used in this research. However, several corruption cases at the state administration took place in Madrid. That is, even if there is no corruption in Madrid's local administration, corruption is notable in state administrations located in that city.

There are seven judgements for petty corruption actions committed in the city that involve a university, a local criminal court, the national police, and other areas of the state administration. Overall, the sentences condemn the public servants to 18,5 years in prison and 52,4 years of disqualification for public positions. All the cases involve people with

⁴ The cities are named in their official denominations what, in some cases, includes two official languages.

administrative responsibilities, not political ones. The officers are condemned to eight felonies, principally embezzlement and bribery.

Marbella: Construction Boom and Public Companies. Marbella is clearly the most corrupt city in Spain considering all the cases included in the dataset. I find 37 judicial condemnations, most of them related to corrupt actions taken by the local government committee. Only two of the convictions happened at non-local administrations, when two national police officers were condemned for embezzlement. The cases related to the local administration include 68 felonies of corruption and sentences for a total of 26,2 years of imprisonment and 250,5 years of disqualification.

Most of the convictions are related to some big political corruption cases that implied long and complex judicial procedures, the central one of them with relevant media impact: the Malaya case. The cases are related to urban reclassifications on land use and building licenses and the majority of them include local public companies used as a means for the deviance of public funds to private interests. There are also sentences related to public procurement for public works or other kinds of services.

In the case of this city's local corruption, most of the condemned people have elected political positions and there are also five cases of high-rank responsible people in public companies. Only five of the convicted people have administrative positions, among which is the municipal secretary, who is responsible for legal advising in the city council.

The felonies condemned for local corruption correspond mostly to breach of official duty, a felony included in 28 of the convictions, embezzlement in 10 of the condemnations, and with a lower presence there are also cases of fraud and forgeries of official documents.

Las Palmas de Gran Canaria: Petty Corruption in a Big Coastal City. Las Palmas de Gran Canaria is a city that I classify with a medium level of corruption following the

measurement of this research. There are four judgements for cases of petty corruption of which one corresponds to a state administration, specifically, the convicted is an administrative officer of the customs who committed two bribery felonies in his inspection capacities.

The local corruption cases include four felonies that altogether implied sentences of 2,8 years of prison and 20 years of disqualification.

The judicial resolutions for municipal corruption affect one local police officer condemned for bribery, one person with an administrative position at the local administration condemned for breach of official duty, and one manager of a municipal public company condemned for embezzlement and breach of official duty. The manager of this public company oversaw the custody of cars seized by the police for traffic breaches and he did not charge fees to local police officers.

Pamplona/Iruña: Government Longevity and Public Integrity. Pamplona/Iruña is within the cities with low levels of corruption in the dataset, with only one corruption conviction for a petty corruption case of bribery of a person from a state security force, the civil guard. Thus, there are no condemnations for corruption at the local level.

Santa Coloma de Gramenet: Political Corruption in Barcelona's Suburb. Santa Coloma de Gramenet is a city with a remarkable level of corruption following my measurement due to the seriousness of the only case condemned. The convictions are part of the Pretoria case, a network of grand political corruption linked to land use and construction that took place in three municipalities near Barcelona. The judgement condemns the mayor of Santa Coloma at that time to 5,8 years of prison and 31,3 years of disqualification for public responsibilities for having committed felonies of breach of official duty and bribery. A city councillor is also condemned for breach of official duty to 8,5 years of disqualification.

The judicial decision states that they used a municipal public company for selling public lands to private companies illegally concealing the enormous quantity of private benefits obtained. They had an agreement with the private investors and the mayor earned bribes in exchange for facilitating the operation.

Empirical Analysis: Comparing Potential Explanatory Factors

The Size of the City: Population and Capital Status

Despite all the cases studied being middle or big cities, there are still relevant differences between them in terms of population, especially in the case of Madrid which is the state capital and has more than three million inhabitants. Table 15 summarizes the information about the population size and the capital status of each analysed case. I define local corruption as high, medium, or low, considering the number of felonies, the number of years of imprisonment, and if corruption is petty or political. I classify as low corruption, instead of absence of corruption, the cases that do not appear in my dataset of corruption cases because I cannot state that there is no corruption at all in those cities. In relation to the population, I consider the citizens in 2005 since this is the middle point in the analysed timeframe.

Another element that I analyse in this section is the population growth within the twenty years of the research (1995-2015) since it can be a sign of the weight of the construction and real estate activity in the city that I analyse in the subsequent section. I should underline that this was a time of notable population growth in the overall country with a 17,4% increase (INE, 2022b).

Table 15*Level and kind of local corruption and size of the cities*

City	Corruption		Size of the city	
	Local corruption	Kind of corruption	Population	Capital status
Alacant/Alicante	Low	NA	319.380	No
Madrid	Low	NA	3.155.359	Yes
Marbella	High	Political	124.333	No
Las Palmas de Gran Canaria	Med.	Petty	378.628	No
Pamplona/Iruña	Low	NA	193.328	No
Santa Coloma de Gramenet	Med.	Political	118.129	No

Note: Author's own elaboration with data from (INE, 2022b).

Med. = Medium; NA = Not applicable.

Alacant/Alicante, with 319.380 inhabitants in 2005, was the biggest city in the Valencian region after the capital, Valencia. During the two decades of the study, the population there grew by 20,4% (INE, 2022b).

Madrid is the Spanish capital from early modern times. It had a population in 2005 of 3.155.359 inhabitants, that is, the biggest city in Spain followed by a remarkable distance by Barcelona which has around half of its population. Between 1996 and 2015 the population of the city grew by only 10,4%, clearly below the figure in the whole country (INE, 2022b).

Marbella is a coastal city that had 124.333 inhabitants in 2005, which means that it was the most populated city in its province after the capital, Málaga city. The population had a very remarkable growth between 1996 and 2015, arriving at a 42,4% increase (INE, 2022b).

In 2005 Pamplona/Iruña had 193.328 inhabitants and it was the capital and biggest city with a relevant difference in the region of Navarra. Between 1996 and 2015 the population of Pamplona/Iruña grew by 17,7%, which is not a very high proportion compared to other municipalities in the country (INE, 2022b).

Las Palmas de Gran Canaria was the eighth biggest city in Spain in 2005 and its population grew by 6,7% during the period, significantly below the country average (INE, 2022b).

The case of Santa Coloma does not follow the general population increase tendency, since the city lost 9,5% of their inhabitants during the studied timeframe, going from 123.175 to 117.153 citizens (INE, 2022b).

Before analysing the data on the size of the city to try to get some conclusions, I should remind the reader that, as there are no small and rural municipalities in the comparative model, my analysis does not permit me to get any conclusions around the general relationship between population and local corruption. Instead, the results are only related to how this relationship can be relevant to explain differences in local corruption in medium and big cities.

The results suggest that the biggest cities are not more prone to cases of corruption, even if maybe the fact of being the capital city is what makes local corruption lower in Madrid, in line with the conclusions of Korosteleva et al. (2020). Since I only have one case of a city comparable to Madrid concerning the population size, I cannot get conclusions about

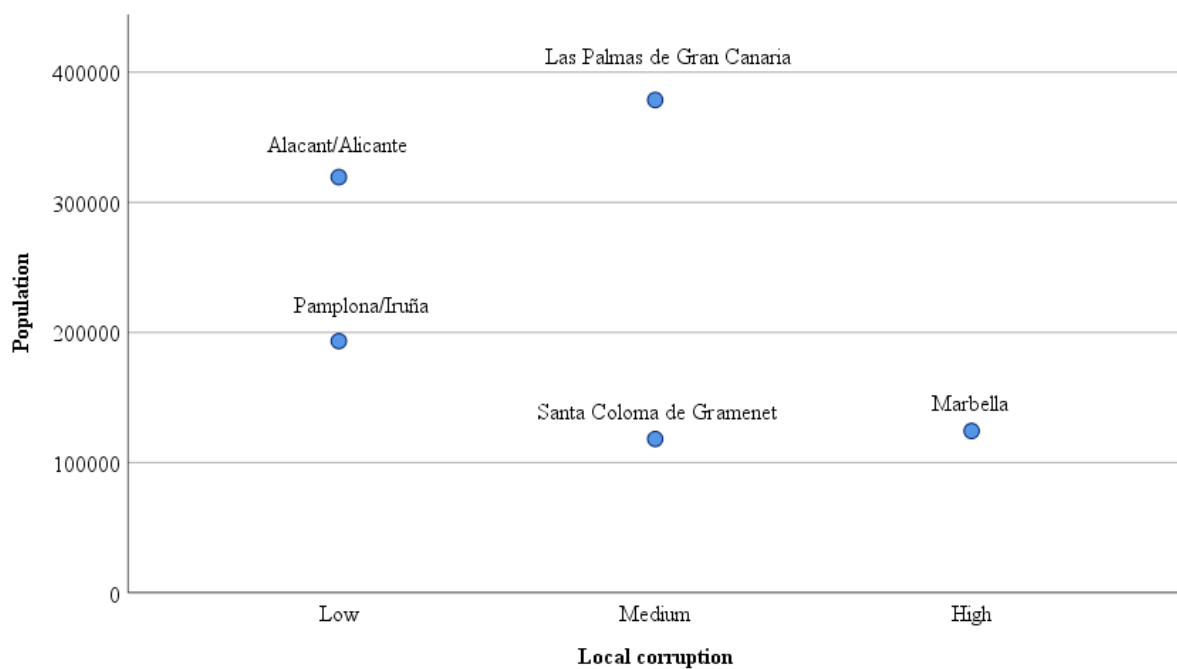
which factor is more relevant to facilitate low levels of local corruption: either the large size of the city or the capital status.

Despite it does not relate to local corruption, it is relevant to mention that the fact of being the capital city seems to make more cases of administrative petty corruption happen within the territory of Madrid, although at the state administration. The high concentration of the state administration in the capital (Pérez García & Reig Martínez, 2020) can explain why state corruption in Spain, even if it is low, is concentrated in institutions located in Madrid.

In relation to the medium size cities, the results summarized in Figure 11 suggest that other factors would be explaining the difference in the levels of corruption, considering that with similar populations there are very different corruption realities.

Figure 11

Population and levels of local corruption in medium cities



Note: Author's own elaboration.

The Concentration of Power: Longevity in Government and Strong Leadership

To study the concentration of political power in one party at the local level I focus on the elements explained in Table 16. First, I study the local concentration of power in one party by analysing the number of terms during which that party was in local government during the timeframe of the research. I consider that a high concentration appears when the same party governed for at least four terms (i.e., sixteen years), and medium when it governed for three terms (i.e., twelve years). I also state which was the party governing most of the time in each city, what I define as the city predominant party. I do the same analysis of power concentration for the region of each city and I analyse if the same party governed most of the period studied at both levels of government.

Apart from the information in Table 16, I also consider the longevity in power of the same mayor taking into account that the Spanish political system concentrates much of the local government's power on the mayor, which, as said, literature has named as a strong-mayor political system.

Table 16*Level and kind of local corruption and concentration of power*

City	Corruption		Concentration of power			
	Local corruption	Kind of corruption	Local concentration of power	City predominant party	Regional concentration of power	Coincidence of a local and regional predominant party
Alacant/Alicante	Low	NA	High	PP	High	Yes
Madrid	Low	NA	High	PP	High	Yes
Marbella	High	Political	Med.	GIL	High	No
Las Palmas de Gran Canaria	Med.	Petty	High	PP	High	No
Pamplona/Iruña	Low	NA	Med.	UPN	High	Yes
Santa Coloma de Gramenet	Med.	Political	High	PSC	Med.	No

Note: Author's own elaboration with data from Ayuntamiento de Pamplona, 2022;

Infoelectoral, n.d.; Ministerio de Política Territorial, 2022; Senado de España, n.d.

Med. = Medium; NA = Not applicable; PP = *Partido Popular* (Popular Party); GIL = *Grupo Independiente Liberal* (Independent Liberal Group); UPN = *Unión del Pueblo Navarro* (Union of the Navarra People); PSC = *Partit dels Socialistes de Catalunya* (Party of the Catalan Socialists).

Alacant/Alicante was governed by the conservative *Partido Popular* (Popular Party, PP) during the complete period studied, like the Autonomous Community of Valencia where

the city is sited. Luis Bernardo Díaz Alperi governed the city council between 1995 and 2008 (Diputación de Alicante, 2022; Senado de España, n.d.). In 2019 he was absolved of an accusation of three tax felonies and bribery for having moored his boat for free in the local port from 2008 to 2013 (La Razón, 2019).

During the timeframe of this research, Madrid was always governed by the PP, the traditional conservative party in Spain. José María Álvarez del Manzano stayed in power from 1991 to 2003 and, after him, Alberto Ruiz-Gallardón governed for two consecutive terms (Ayuntamiento de Madrid, 2018). In the same way, the Autonomous Community of Madrid had been always governed by the PP (Senado de España, n.d.).

Marbella was governed by Jesús Gil y Gil, a popular mayor who founded the party *Grupo Independiente Liberal* (GIL, Independent Liberal Group) in 1991 and governed from then until 2002, when the Spanish Supreme Court confirmed his disqualification for public positions for 28 years (El País, 2002; Sánchez, 2019; Soria, 1992). Then, the GIL continued in power until the local election of 2007 when the PP gained, as it did in the following election staying in power until 2015 (Codina, 2017). At the regional level, Andalucía's government was in the hands of the progressist *Partido Socialista Obrero Español* (PSOE, Spanish Working Socialist Party) during the overall timeframe (Senado de España, n.d.).

Between 1995 and 2015 Pamplona/Iruña was governed by three different mayors, one of them who stayed in power for twelve years, Yolanda Barcina Angulo (Ayuntamiento de Pamplona, 2022). After the election of 1995, which was won by *Unión del Pueblo Navarro* (UPN, Union of the Navarra People), the mayor was the candidate of *Convergencia de Demócratas Navarros* (Convergence of Navarra Democrats) due to an alliance with left-wing parties, but he came from UPN with which he had already been mayor between 1987 and 1991. UPN is a nationalist conservative party that had an agreement with PP to present joint

lists of candidates in elections until 2011. This party won the municipal election and had the mayor's office of the city between 1999 and 2015 (Ayuntamiento de Pamplona, 2022; Infoelectoral, n.d.; Ministerio de Política Territorial, 2022). During all this period, the regional government of Navarra was also in the hands of UPN (Senado de España, n.d.).

In Las Palmas de Gran Canaria the PP governed for the overall period studied except for the 2007-2011 term when the city council was in the hands of the PSOE. The only mayor who stayed in power for more than one term during the studied timeframe was José Manuel Soria, who governed the city between 1995 and 2003 (Gobierno de España, 2022; Infoelectoral, n.d.; Ministerio de Política Territorial, 2022). During the twenty years studied, the nationalist *Coalición Canaria* (Canarian Coalition) governed at the regional level in the Canary Islands (Senado de España, n.d.).

The progressist *Partit dels Socialistes de Catalunya* (Party of the Catalan Socialists, PSC in its Catalan acronym), governed in Santa Coloma de Gramenet for the whole period studied. At the regional level, the conservative *Convergència i Unió* (Convergence and Union) governed for most of the time, except for the terms between 2003 and 2010 when the PSC governed in a progressist coalition with ERC (*Esquerra Republicana de Catalunya*, Republican Left of Catalonia) and ICV (*Iniciativa per Catalunya Verds*, Initiative for Catalonia Greens) (Senado de España, n.d.). In Santa Coloma, Manuela de Madre was the mayor between 1991 and 2002 (Merino, 2018), when she was substituted by Bartomeu Muñoz. Muñoz had been a city councillor since 1983 and he stayed in power as the mayor until 2009, when he resigned due to the accusation in the Pretoria case (EFE, 2021; El Periódico, 2009).

The analysis of the different cases shows that in general there is a low level of party alternation in the selected city councils. The data does not clearly suggest longevity in power

in local government to be a relevant explanatory factor for corruption, since the cases of Alacant/Alicante and Madrid have high levels of local power concentration in one party and do not appear to have corruption cases condemned. Similarly, the fact of having the same party governing for long periods at the local and regional levels does not appear as related to the level of local corruption considering, on the one hand, the cases of Marbella and Santa Coloma, where with no coincidence there were cases of political corruption and, on the other hand, the cases of Alacant/Alicante, Madrid and Pamplona/Iruña with no corruption cases even if the same party governed for long periods at both levels of government.

Nonetheless, a more detailed analysis of the cases makes some evidence come to light suggesting that longevity in power of the same mayor and, even more, of mayors with strong internal leadership, can facilitate structures of grand political corruption. The case of Marbella is the clearest one but the case of Santa Coloma the Gramenet also points to that hypothesis.

The factor that seems more relevant to explain the huge scheme of political corruption in Marbella is the concentration of power in one political party that stayed in government in the city council for 16 years, eleven of them under the same mayor that seems to be a very powerful leader within its organization. Some fragments of the description of the declaration of the mayor that succeeded the mentioned one, illustrate the remarkable internal power that the latter had:

[...] his problem started with Mr. [Mayor 1] when they made him [the declarant, Mayor 2] mayor, due to his disqualification, although they kept calling him [Mayor 1] mayor and boss. The problems started with [Mayor 1] when he called him every day, and he was tired and did not answer the calls, because he was the mayor [...]

[...] there were councillors [...] that went to see [Mayor 1] every day, while he was the mayor⁵ (STS 1229/2016, p. 3).

In Santa Coloma de Gramenet the situation is not comparable to the one in Marbella although it also points to an increased discretion in the actions of the mayor within the city council structure due to his longevity in elected positions, first as a city councillor for 19 years and then as a mayor for seven more years. This description of the proven facts in the following judgement can serve as an example:

[Subject 1] had been a member of the regional parliament for the *Partido Socialista Catalán* (PSC) from 1980 to 1988 [...].

In the city of Santa Coloma de Gramenet he influenced [Mayor] [...] with whom he had a long and deep friendship [...]

Taking advantage of this close and long relationship, [Subject 1] get the mayor to present him to the municipal officers as his adviser and right-hand man and the mayor asked them to inform him and had regular meetings with him around the municipal matters [...] (SAN 2467/2018, p. 11).

In conclusion, the facts suggest that longevity in elected responsibilities by the same people combined with the strong leadership of the mayor in local politics can be considered a risk factor for local corruption.

In relation to the parties governing in each city, the only party that appears as predominant in more than one case is the PP but the levels of corruption in each case differ. However, GIL was a party created in Marbella by Jesús Gil y Gil under strong personal leadership, as can be deduced by the name of the party. Even if between 1995 and 2003 it

⁵ All translations of CENDOJ judgements are done by the author.

presented lists in several municipalities in the province (Infoelectoral, n.d.), the party was always clearly linked to Marbella and Jesús Gil. He was still the president of the party when, after leaving the mayor's office due to his sentence of disqualification, he requested the formal dissolution of the party (ABC, 2003). The short life of this political organisation and its close relationship to the structure of political corruption in Marbella could suggest that it was in fact an instrument for the private use of the elected positions and, in consequence, that there would be a relationship between this party governing and the appearance of local corruption.

Construction Industry: Local Discretionary Powers and High Revenues

In this section, I analyse the importance of the construction industry in each of the cities and the dependence of the city councils on the incomes generated by this sector. This industry is closely related to the tourism activity in cities, even if I have chosen to analyse the two factors separately as I consider they have some specificities that justify this election.

To study the importance of the construction industry at the local level, I consider if cities are near one of the Spanish biggest cities since this kind of municipality has more construction activity due to its higher economic dynamism. I consider as a big city the ten most populated municipalities in Spain in 2005, that is, those with more than 350.000 inhabitants. Then, I study two proxy variables related to the importance of construction in each municipality because there is no specific information on that matter disaggregated at the local level for the years of the research. I analyse the number of municipal construction licenses for the construction of residential buildings issued in each province in 2007, as there is no information for 2005, the middle point of the study timeframe. I also analyse the weight of direct taxes in the local budget considering that this is one of the central items of municipal incomes and is mostly related to the construction and real estate activity in the city. I state in

the table and text the figure for 2005 but I have reviewed the previous and following years to confirm there are not sharp changes. All these indicators are summarized in Table 17.

Table 17

Level and kind of local corruption and relevance of the construction industry

City	Corruption		Relevance of the construction industry		
	Local corruption	Kind of corruption	City near a big city	Construction licenses province (Total / % inhabitants)	Weight direct taxes (%)
Alacant/Alicante	Low	NA	No	7.982 / 4,39	36,86
Madrid	Low	NA	Big city	12.489 / 2,01	26,70
Marbella	High	Political	Yes	5.318 / 3,48	48,21
Las Palmas de Gran Canaria	Med.	Petty	Big city	4.171 / 4,01	25,98
Pamplona/Iruña	Low	NA	No	2.234 / 3,62	18,23
Santa Coloma de Gramenet	Med.	Political	Yes	11.132 / 2,07	35,22

Note: Author's own elaboration with data from Ministerio de Hacienda y Función Pública, 2022; Ministerio de Transportes, Movilidad y Agenda Urbana, 2022.

Med. = Medium; NA = Not applicable.

Alacant/Alicante is not near any of the Spanish ten biggest cities, as it is sited 170km from Valencia, the capital of the region, and 80km from Murcia. In 2007 the municipalities in the province of Alacant/Alicante issued 7.982 construction licenses for residential buildings, that is, 4,39‰ inhabitants, above the average in Spain which was 3,64‰ (Ministerio de Transportes, Movilidad y Agenda Urbana 2022). The weight of direct taxes in the city revenues amounted in 2005 to 36,86%, remarkably higher than the average of all the state municipalities which was 25,30% (Ministerio de Hacienda y Función Pública, 2022).

In the province of Madrid, which is coincident with the territory of the Autonomous Community, in 2007 there were 12.489 municipal licenses for the construction of residential buildings issued, which means 2,01 licenses for every 1.000 people, below the state level. In 2005 the weight of direct taxes in the city revenues arrived at 26,70%, slightly more than the average.

Marbella is 60km from Málaga, the provincial capital and the sixth biggest city in the country with more than half a million inhabitants. In 2007 the municipalities in the province of Málaga emitted 5.318 municipal licenses for housing buildings, that is, 3,48‰ inhabitants, a figure around the average at the state level. However, direct taxes represented 48,21% of Marbella's revenues in 2005, a figure that almost doubles the average of Spanish municipalities. This data suggests that the dependence of the city council on the construction industry and real estate activities was notorious.

Las Palmas de Gran Canaria is one of the Spanish ten biggest cities. In 2007 the municipalities of the province emitted 4.171 licenses for residential buildings, which means 4,01‰ inhabitants, slightly above the average for all Spanish municipalities. The city council revenues in 2005 came in a 25,98% from direct taxes, which is almost the same figure as the average one. The case of this city points to a relevant construction activity in the province,

but a city council that is not so dependent on the revenues from this activity probably due to the fact that it is a big city and, in consequence, the economic activity is more diversified than in nearby smaller municipalities.

Pamplona/Iruña is sited at 150km from Bilbao, which was the tenth biggest city in the country in 2005, but it is far from any other big city. Just 18,23% of the city's revenues came from direct taxes in 2005, a remarkably lower figure than the average. The construction licenses issued in the province of Navarra in 2007 were 3,62‰ inhabitants, which is almost the same figure as the average of Spanish provinces. This data shows a city not very dependent on the construction industry and real estate activity, especially considering that it is a regional capital and a city of almost 200.000 inhabitants so a higher number of residential constructions in the years of the building boom would be expected.

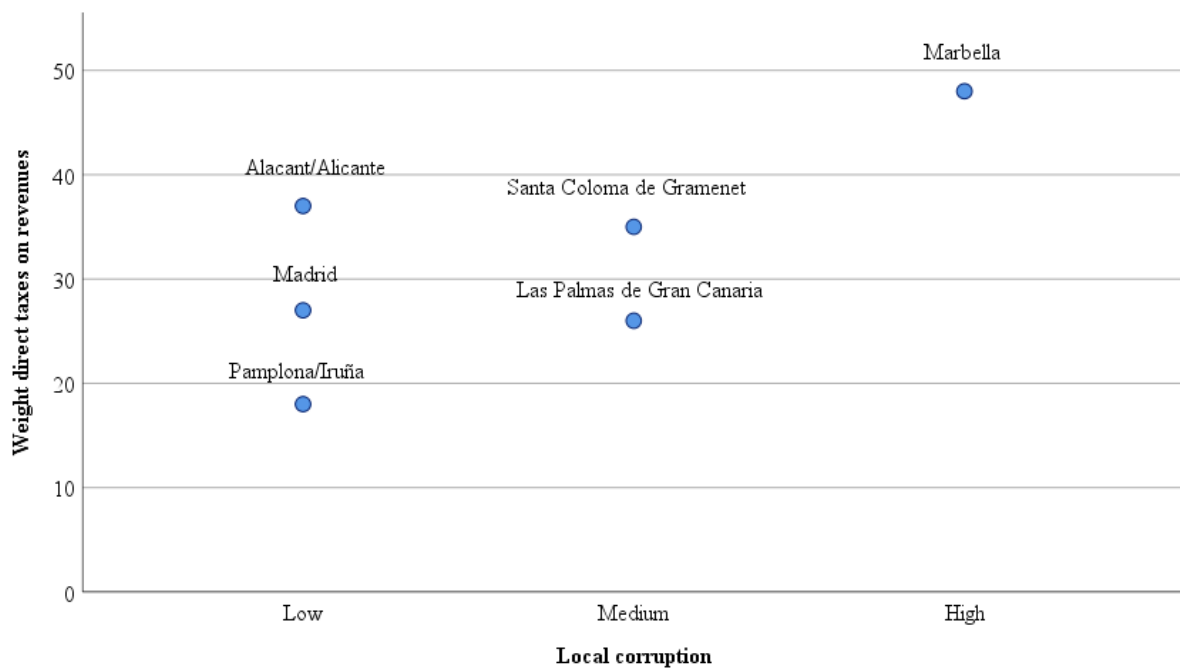
Santa Coloma de Gramenet is near Barcelona, the second city in Spain, with just the Besòs river separating the two municipalities. Similar to the case of Madrid, in Barcelona's province the figure of 11.132 construction licenses issued is high, but the proportion in relation to the large population of those cities is low compared to the figure for other provinces (2,07‰ in the case of Barcelona). Nonetheless, the percentage of incomes that came from direct taxes in Santa Coloma, 35,22% of the local budget, and the closeness to Barcelona suggest that the construction industry was quite relevant for the city council during the period studied.

The comparison between the different cases shows two groups of cities: first, one group with not much dependence on the construction industry and real estate activity and low levels of local corruption, that is, Madrid and Pamplona/Iruña; second, two cities more dependent on that kind of economic activity and with local political corruption cases, Marbella and Santa Coloma de Gramenet. Then, there are two cities which can be considered

as exceptions to the tendencies mentioned before: Alacant/Alicante, a city with an important construction industry but low levels of corruption; and Las Palmas de Gran Canaria, with a middle relevance of the construction industry and cases of petty corruption. Thus, the results, as shown in Figure 12, suggest that there is a general tendency for cities with important construction and real estate activity and financially more dependent on them to be more prone to cases of political corruption. Nonetheless, an in-depth analysis is needed to shine some light on more specific tendencies.

Figure 12

Weight of direct taxes on revenues and levels of local corruption in cities



Note: Author’s own elaboration.

Analysing the case of Marbella, the assessment of the architects from the state tax agency around the city’s urban regulations included in one of the judgements are an

illustration of the use that the city government and, specifically, the mayor did of the construction activity:

When doing a technical inquiry, we confirm that the cited land sector only appears in the 1996 PGOU [Spanish initials for the General Town Planning Regulations], which was never approved, so it never existed legally speaking. This PGOU is informally known as the PGOU of [Mayor 1] or the phantom PGOU (STS 1229/2016, p. 26)

The causal mechanism that the facts in Marbella suggest consists of the combination of a high level of autonomy of the city government to decide on land use and urbanistic licenses, while the construction industry and real estate activity generate high sums of money that can be a relevant incentive for the appearance of political corruption schemes. The comments of the Town Planning manager paraphrased in the declaration of a city councillor in one of the judgements point to this clear use of the construction activity for private benefits:

[...] [the manager of Town Planning] said that the good times of town planning had gone by and that the cow was already very squeezed, but that he promised annual economic increases for each of us (STS 1229/2016, p. 4).

I should comment that all the cases related to urban licenses and land use in Marbella are linked to public companies of the municipality, which appear as the tool used to perpetrate the corrupt actions.

Finally, I should also underline that the analysis of the corruption cases in Marbella does not suggest any causal mechanism related to the objective of increasing the city budget through the construction activity, as it does not seem to exist an interest in improving the local services or the city planning. For instance, one of the judicial decisions states that

projects of new green areas were cancelled due to illegal construction licenses given by the city council (SAP MA 9/2017, pp. 2–3).

In conclusion, the comparison between Marbella and Alacant/Alicante suggests that the money coming from the construction industry and its related activities (decisions on land use, building licenses...) do not seem to be the explanation of corruption, that is, it has not a direct effect on local corruption. Strictly speaking, these cases suggest that an important construction activity operates as an incentive or a risk factor for local corruption because of the high sums of money involved and the possibility of the city council deciding on its own in those matters.

Tourism: Coastal Cities and Construction Incentives

To study the importance of tourism in each of the cities I consider if they are on the coast and the number of tourist pernoctations per year in relation to the local population. This information is shown in Table 18. In 2005, 58 cities in Spain received a so high number of tourists that the annual number of pernoctations was more than 20 times the population of the municipality. Within those tourist centres, only Palma de Mallorca and Marbella had more than 100.000 inhabitants. Most of these kinds of municipalities are below 50.000 inhabitants, in fact, 35 of them had less than 20.000 inhabitants, and 81% of them are on the coast or on an island.

Table 18*Level and kind of local corruption and importance of tourism*

City	Corruption		Tourism	
	Local corruption	Kind of corruption	Annual tourist pernoctations/ Population	Coastal city
Alacant/Alicante	Low	NA	4,3	Yes
Madrid	Low	NA	3,9	No
Marbella	High	Political	23,0	Yes
Las Palmas de Gran Canaria	Med.	Petty	2,6	Yes
Pamplona/Iruña	Low	NA	2,5	No
Santa Coloma de Gramenet	Med.	Political	Below 0,5	No

Note: Author's own elaboration with data from INE, 2022b.

Med. = Medium; NA = Not applicable.

Alacant/Alicante is a coastal city that in 2005 had 4,3 tourist pernoctations a year per inhabitant.

Madrid has no coast, as it is in the geographical centre of Spain. However, due to the fact that it is a big city and the capital of Spain, it had quite high tourism activity with 3,9 pernoctations per inhabitant a year.

As already mentioned, Marbella was one of the more tourist cities in the country during the period studied. In 2005 it had annually 23 pernoctations of tourists per inhabitant in the city.

Pamplona/Iruña is not on the coast, but it had a medium level of tourism with 2,5 pernoctations per inhabitant and year.

Las Palmas de Gran Canaria even if it is in the Canary Islands and on the coast, had not a very high level of tourism pernoctations with 2,6 per inhabitant annually. This is probably due to the fact that it is one of the biggest cities in the country.

Last, Santa Coloma de Gramenet is not a tourist city with less than 0,5 pernoctations per inhabitant a year and it is not on the coast.

Thus, the cases of Marbella, Pamplona/Iruña and Madrid seem to follow the conclusions of some authors that relate tourism activity to higher levels of corruption because of the impact of tourism on increasing construction and real estate activities (Jiménez et al., 2017). Nonetheless, other cities do not show this tendency. Alacant/Alicante appears as an exception with high tourism activity but low levels of corruption, as happened when studying the construction sector in the city. Las Palmas de Gran Canaria shows again an intermediate case, with not very high levels of tourism stays in relation to its population and cases of petty corruption that I classify as a medium local corruption level. Finally, Santa Coloma de Gramenet would be also an exception to the relationship between tourism and local corruption, with a very low level of tourism but a case of political corruption that cannot be disregarded.

To sum up, the data on tourism suggests that there could be a relationship between this economic activity and local corruption, in line with the conclusions of some literature, even if the results of this preliminary analysis model are not conclusive on that point. The case of Marbella is the only one that clearly points out that tourism activity in a city can be considered a risk factor for corruption. The ambiguous results of this section are probably related to the fact that I only study middle and big cities and, in consequence, I have no cases

of the most important tourist centres in the country. For an in-depth analysis of the impact of tourism on corruption, it would be needed to study more cases of municipalities with higher levels of tourism that, as mentioned at the beginning of this section, are in general smaller towns.

Conclusions

This research consists of an initial exploratory design that, because of the low number of cases studied, does not permit me to reach general conclusions. Nevertheless, the results suggest the existence of some tendencies in the observed cities that could be an interesting departure point for further research on local corruption with large-N statistical methods.

In relation to the size of the city, despite Madrid being a big city where the same party governed for more than two decades, there are no condemnations for corruption cases in the city council. However, as there are no other big cities in this initial model, I cannot state if the low levels of corruption are more related to the size of its population (following, Estefanía, 2009; García-Quesada et al., 2013) or the fact of being the capital of the country (in line with Korosteleva et al., 2020). Complementing earlier findings presented by Korosteleva et al. (2020), the capital status of Madrid seems to increase the corruption cases that happen in its territory even if not at the local level but at the state one. This result could be related to the high centralisation of the Spanish government and should not be expected in cases where the state administration is more decentralised.

The comparison between the rest of the cities that have medium-sized populations does not permit me to establish any relationship between the number of citizens in a municipality and its level of corruption as with similar populations the cases analysed show quite different local corruption levels.

The conclusions of this research about how the size of the population can influence local corruption do not show evidence consistent with the literature on Spanish corruption probably because what authors underline is the problem of small towns that are not included in this research (Estefanía, 2009; García-Quesada et al., 2013). Thus, what this comparative model suggests is that we cannot establish a link between population size and corruption within middle-size cities, but it is still interesting to test the relationship with larger samples including a broader range of local populations in line with the research design in Chapter 2.

Concerning the concentration of power, the comparison between the cases suggests that longevity in power of the same party at the local level and, mostly, of the same political leader could be related to higher levels of corruption risk (not necessarily of corruption as shown by the Pamplona/Iruña case). Corruption in Marbella and Santa Coloma de Gramenet, with corruption cases linked to the mayor and the city councillors and even with the municipal secretary involved in some of them, suggests that mayors with strong leadership and longevity in elected positions can imply a high level of monopolistic power and relevant difficulties for the local accountability systems to work properly. The existence of a strong-mayor system in Spain could aggravate this risk of corruption as stated in the conclusions of several authors (Estefanía, 2009; García-Quesada et al., 2013).

I might also comment that the case of GIL in Marbella should make us be attentive to the appearance of local parties with no clear political programmes and personalistic proposals. This case suggests that it might be convenient to be careful about the risk of possible instrumental political organisations created for the private use of the powers implied in elected positions.

With regard to the construction industry, the analysis shows that the dependence of municipalities on this activity could be also related to higher levels of local corruption. In

spite of this confirmation, one more time, the results suggest that it could be more appropriate to consider this fact as a risk factor than an explanatory factor of local corruption. The difference in corruption between the cases of Marbella and Alacant/Alicante, both with a remarkable presence of the construction industry and real estate sector, supports that these economic activities can facilitate the appearance of grand political corruption but that the latter depends also on other factors.

The corruption risk generated when construction and real estate are important activities in the local economy and generate high percentages of the city council incomes seems to be explained by a combination of two elements: the high discretion of the city council to decide on the regulations related to town planning, and an economic incentive for the private exploitation of these regulatory capacities related to the high quantities of money involved in these activities.

In relation to tourism, the results do not permit to get solid conclusions. However, the case of Marbella points to the fact that tourism can promote the risk of corruption generated by a strong construction industry, especially in cases like this city that underwent a quick and high development of construction and real estate activity. As said, to get better conclusions about how tourism can impact local corruption it would be needed to include in the model small towns mostly dependent on tourism.

Finally, two more risk factors have not been part of the interest of this research but should be mentioned considering that they are present in several corruption cases in the analysed cities. On the one hand, in four of the six cities, there are petty corruption bribery cases in the police and security forces either at the local or state levels, which points to a possible problem with public activity controls in this area that should be carefully studied. On the other hand, in Marbella and Santa Coloma de Gramenet local public companies are used

as a means to commit corruption by local politicians. These two factors are not studied in this chapter, but the results suggest that they could also be risk factors to be considered in the design of corruption prevention policies.

After having summarized the conclusions of the analysis, I should remind the reader that the use of an objective indicator of corruption centred on judicial decisions should be considered when analysing the results, since the effectiveness of the judicial system in condemning corruption could sometimes act as a confounding factor.

Despite the mentioned limitation, the results suggest that some political and economic characteristics of cities are risk factors that could be considered to improve the corruption control efficiency: first, longevity in power of the same party and, even more, of the same political leader; second, the relevance of the construction industry and the dependence of the municipality from the construction and real estate activity; and, third, the importance of tourism in the city economic activity.

After these two chapters analysing local corruption, the government level that clearly outstands in corruption considering the dataset used in this dissertation, in Chapter 4 I analyse the presence in corruption cases of public entities related to the administrative reforms lead by New Public Management.

Chapter 4.

The Side Effects of New Public Management on Corruption: Deficiencies in Monitoring Public Companies

Introduction

Corruption is a phenomenon that affects all countries to various degrees. Even if the literature has observed the impacts of advances in democracy or economic development on levels of corruption, neither appear to have unidirectional or constant effects in reducing corruption. However, different elements of the institutional structure and public activity controls in place have proved effective in reducing cases of corruption.

New Public Management is a controversial concept that has generated defenders and detractors both in academia and in public management circles. Among other debates about this wave of administrative reform, several authors have researched its potential impacts on quality of government and on corruption (between the most recent studies: Bauhr et al., 2020; Erlingsson et al., 2020). Some scholars discuss if the flexibility, autonomy, and competitiveness that NPM tries to stimulate can entail a reduction in monitoring and a potential increase of corruption risks, at least in certain contexts (Brugué, 1996; Erlingsson et al., 2008; Kickert, 2011). Thus, the NPM agenda and the reforms it has generated appear as an important element in the debate about public administrative structures and controls that could lead to higher levels of corruption.

Since NPM is a broad administrative reform movement that has had very different manifestations depending on countries, time periods, and kinds of administrations, I only study public companies and public foundations, considering them as types of public entities in Spain that have appeared or, at least, have grown, in parallel to the *agencification* process.

I consider these public entities as one of the most notable demonstrations of the NPM reforms, and I justify this decision more in-depth in the following sections.

Thus, this chapter consists of an observational study that seeks potential responses to the following research question:

Research question To what extent has corruption been increased by the New Public Management administrative reforms that have created public entities subject to private law (i.e., public companies and public foundations)?

Theoretical Framework

For the purposes of this research, I consider NPM as all administrative reforms that seek to increase efficiency in public administration with measures that reject traditional Weberian administration principles and procedures (Brugué, 1996), to incorporate new ones that come from the private management sector (Lapuente & van de Walle, 2020).

The link between public integrity and New Public Management has been studied by the literature, although not always as the principal object of research but instead as an indirect element. Some of the early work on NPM already commented on the risks that this wave of reform poses to the public interest. Hood (1991) cites as one of the usual criticisms of NPM that it could be used to promote “*particularistic advantage*” (p. 9) and asserts that the reforms eliminate some of the tools to guarantee honest and neutral public administrations. However, the same author also states that empirical confirmation needs to be carried out regarding the potential effects of NPM on public integrity.

Brugué (1996), in her text about the democratic dimension of NPM, presents the egalitarian critique that considers the values and procedures of the private sector and the fragmentation tendency of NPM to be a potential source of corruption and prioritization of

private interests, caused by a weakening of responsibility. Faced with these new risks, new citizen monitoring and transparency policies are required.

In his study of Greece, Italy, Portugal and Spain, Kickert (2011) finds that due to the extremely politicized nature of the administrations, in Southern Europe the Maastricht Treaty's pressure on fiscal equilibrium and debt reduction led to some elements of NPM, such as privatisation or public-private partnerships, being used for political corruption.

These conclusions contrast with those of Knott and Miller (2006) research on public management and economic development, where they conclude that in general, privatisation processes reduce the risk of corruption if there is a system to measure quality and outcomes; they do however insist on the need of credible public agencies and a system of checks and balances.

More broadly, principal-agent theories imply that there is always some agency lost when there is delegation, that is, some degree of accountability that is sacrificed when delegating decisions to public agencies (Gailmard, 2012). This assumption does not necessarily mean that this delegation is negative for the principal but, translating it to the analysis of corruption, it can imply a higher risk of corrupt behaviours.

More recent literature goes more deeply into the issue, analysing the possible effects of different kind of reforms inspired by NPM on public integrity. Bauhr et al. (2020) focus on public procurement to study the risks of corruption involved in high-level relationships between the public and private sectors that may have been boosted by NPM. Their conclusion is that transparency and, more specifically, ex ante transparency (i.e., related to information before a resolution of the administrative process is issued) clearly reduces the risk of corrupt actions on these cases. In turn, Lapuente and van de Walle (2020) underline that the impact of

NPM reforms on the quality of public organizations depends on the administrative, political and policy context in which they are applied.

In relation to the local level of government, studies on Sweden conclude that reforms inspired by NPM have generated more opportunities for corruption and have made corrupt behaviours more lucrative (Erlingsson et al., 2008). These authors specifically find that the transfer of public activities to municipal-owned companies reduces transparency and public monitoring, thus lowering the risks of being caught for corrupt behaviours.

Another work on the Swedish case also finds that municipal-owned companies increase the risk of corruption in municipalities, since the tendency to appoint people with responsibilities in the city council as board members generates a higher concentration of political power and weak accountability systems (Bergh et al., 2019). In their study of municipal-owned companies in 290 Swedish municipalities, Bergh et al. (2022) find that these types of entities are associated with higher levels of perception of local government corruption. These authors underline that they cannot state the causal direction of this association, but that there are reasons to be cautious about the wholesale introduction of this type of entity.

Conversely, in his research on the Spanish case, Cuadrado-Ballesteros (2014), finds that decentralisation of public functions in entities subject to private law (public companies and foundations) improved transparency in municipalities.

I should also mention the literature on public service motivation. Ballart et al. (2016) argue that people that are more influenced by extrinsic motivations (e.g., money) are more prone to corruption. The kind of transactional leadership promoted by NPM is more geared to economic incentives and rewards and, thus, lessens the relative importance of other values. Therefore, this style of leadership can foster employees being more tolerant of corruption.

In sum, the literature has generally observed that certain specific administrative reforms related to New Public Management risk increasing corruption. However, this effect does not seem to be homogeneous, and authors have also pointed to several options to counterbalance the increased risk of corruption, such as improving transparency or creating other accountability mechanisms.

Considering the explained literature, in this chapter, first, I look for evidence to prove if there is a higher risk of corruption in these types of entities or not. To do so, I hypothesize that in NPM entities subject to private law, corruption cases are more prevalent (H1), and that these cases are more severe (H2) than in other types of public entities.

Hypothesis 1 In New Public Management entities subject to private law, corruption cases are more prevalent than in the rest of the public sector.

Hypothesis 2 In New Public Management entities subject to private law, corruption cases are more serious than corruption cases that happen in the rest of the public sector.

Then I research if the possible explanation for the potential increase in risks of corruption could be related to the lower effectiveness of public administration controls, and I hypothesize that corruption monitoring bodies act in fewer corruption cases that take place in this type of entities compared to corruption cases that happen in other public bodies (H3).

Hypothesis 3 Corruption monitoring bodies act in fewer corruption cases that take place in New Public Management entities subject to private law compared to corruption cases that happen in the rest of the public sector.

Methods and Data

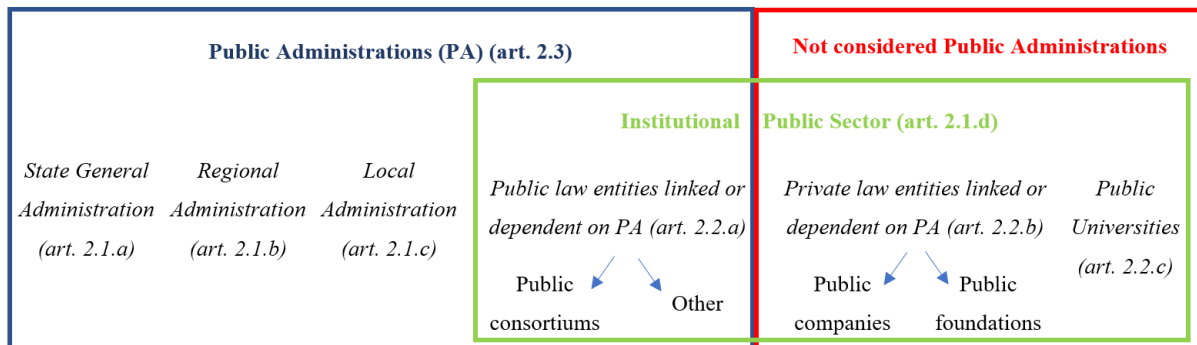
Entities Inspired by New Public Management

Just like the concept of corruption itself, the notion of New Public Management needs to be specified to operationalize it for quantitative analysis. With this aim, I class corruption cases according to the kind of administration or public body where the corrupt acts take place. In Spain, the public sector can be understood as divided into two groups: strictly public administrations, and what is known as the institutional public sector (according to Law 40/2015 of the Public Sector Legal Regime); the latter group of entities is based on the principle of functional decentralisation, i.e., the aim of facilitating more autonomy in decision-making (Sánchez Morón, 2015). Nonetheless, the two categories do overlap, since the concept of public administration includes both territorial bodies (administration at the state, regional, and local levels) and institutional ones regulated by public law. Within the institutional administration, we also find entities controlled by public administrations but subject to private law (public companies and foundations), as well as public universities. This classification is graphically explained in Figure 13.

On the one hand, in the case of the institutional bodies subject to public law, there is a vast diversity of cases that should be analysed individually to see to what extent they respond to the principles of NPM. However, underlying the creation of all these bodies is the aim of giving more autonomy and flexibility to public activities. Due to this general objective that guides their creation, institutional entities subject to public law could be considered to a certain extent as part of the NPM reforms and its *agencification* process, which can be defined as the creation of semiautonomous bodies that disaggregate previous administrations (Cingolani & Fazekas, 2020).

Figure 13

Classification of entities in the Spanish public sector



Note: Author's own elaboration, considering the classification in Law 40/2015 (*Ley 40/2015, de...*, n.d.). The articles mentioned in the figure are referred to this law.

On the other hand, the creation of entities subject to private law is undoubtedly an attempt to escape from the administrative law of the traditional public administration, which is one of the defining elements of NPM. This type of entities makes up the focus of my research since they are the clearest example in the Spanish public sector of public entities created under the principles of New Public Management.

I should mention that the Spanish public sector structure is very complex in terms of the diversity of entities within it and their legal status (Sánchez Morón, 2015). This explains why, to facilitate my research objectives, I have had to use a broader classification in some cases than the strict administrative law classification.

Definition of Variables

In Table 19 I define the variables of the dataset used in this chapter. I should note that two of the dependent variables are the same ones used in Chapter 2, but I also include their definition here to facilitate the reading of the present chapter.

Table 19*Definition of the variables used in Chapter 4*

Variable	Definition
Independent variable	
<i>Kind of entity</i>	Categorical nominal variable. Variable that divides the observations into three labels considering the kind of public administration where the corruption case takes place: an entity not related to NPM (Non-NPM entity), an NPM entity subject to public law (NPM public law entity), or an NPM entity subject to private law (NPM private law entity).
Dependent variables	
<i>Intervention control entity (dummy)</i>	Categorical nominal variable. Dummy variable that states if there had been a complaint or warning from an organ or official specifically designated to monitor public activity or that has some form of public activity monitoring function.
<i>Number of felonies</i>	Numerical discrete variable. Number of corruption felonies committed by politicians or public officials and recognized in firm judicial rulings.
<i>Number of felonies (grouped)</i>	Categorical ordinal variable. Variable defined above but grouped into three labels, depending on felonies that are recognized in the sentence: 1 or 2 felonies, 3 or 4 felonies, or 5 or more.
<i>Years of imprisonment</i>	Numerical continuous variable. Number of years of imprisonment sentenced in convictions for corruption felonies committed by politicians or public officials and recognized in firm judicial rulings.

Data

In Table 20 I present the descriptive statistics for the variables used in this chapter. As I did in the previous section, even if the data for two of the dependent variables are the same showed in Chapter 2, I also include them here to facilitate the reading of the present chapter.

Table 20*Descriptive statistics of the variables used in Chapter 4*

Variable	Freq.	%	Mean	SD	Min.	Max.
Independent variable						
<i>Kind of entity</i>	576	100,00				
Non-NPM entity	451	78,30				
NPM public law entity	32	5,56				
NPM private law entity	93	16,15				
Dependent variables						
<i>Intervention control entity (dummy)</i>	576	100				
No intervention	355	61,63				
Intervention	221	38,37				
<i>Number of felonies</i>	390		1,48	0,87	1	9
<i>Number of felonies (grouped)</i>	390	100,00				
1 or 2 felonies	353	90,51				
3 or 4 felonies	33	8,46				
5 or more felonies	4	1,03				
<i>Years of imprisonment</i>	390		1,22	1,69	0,00	11,00

Statistical Method

Firstly, in relation to H1, to obtain conclusions I need to compare the proportion of corruption cases of each type of entity in my sample with their corresponding weight in the Spanish public sector. Thus, I need to solve the problem of assessing the relative weight of NPM private law entities in the whole system of Spanish public entities.

I consider the number of staff members as the best figure to compare with the number of corruption felonies, as all corrupt behaviours are carried out by public employees or

officials. Therefore, with all other variables being equal, the more staff members there are, the higher the risk of corruption. Nonetheless, there is no complete data that disaggregates the staff of each type of public entity at the regional and local government level. I analyse the relationship between corruption felonies and the number of staff in the different kind of entities at the state level using the average figure between 1998 and 2015, as there is no complete data prior to that. For the regional level, I perform a case-by-case analysis of public companies and foundations for seven of the seventeen Autonomous Communities in Spain in 2015,⁶ as there was no prior data for the majority of regions; I use this sample data for the analysis. I cannot analyse the local level as there is not enough data available.

Using the state level data, I construct a contingency table and graphs to show the relative weight of each kind of entity considering the number of staff members, the proportion of corruption cases per 10.000 staff members, and the relative risk figures. For the regional level I only present data about relative risk since I do not have complete absolute figures.

Secondly, to test H2 I use two different strategies, but I should note here that in both cases I have had to group the corruption felonies by the individual who committed them because the judicial sentences do not always state specific sentences for each felony. Thus, I build an adaptation of the general dataset presented in Chapter 1 aggregating the units of observation (felonies) by each conviction to one person for committing those felonies.

To analyse how serious the corruption cases were, that is, if they are considered more serious or less serious in social terms, I use two proxy variables related to the severity of the judicial sentence (see the descriptions in Table 19). First, I use the number of years of

⁶ The sample includes Catalunya, Aragón, Illes Balears, Madrid, Islas Canarias, País Vasco/Euskadi, and Comunitat Valenciana. For the case of Madrid, the most recent data was 01/01/2017.

imprisonment established in the sentence. This does not mean that the behaviours are ethically more reprehensible, but I use the severity concept implicit in the criminal code punishments to obtain a quantitative indicator that can suggest the social and judicial seriousness associated with each felony. Second, I also use as a proxy variable the number of corruption felonies for which each person is convicted.

My first strategy is to run an analysis of variance (ANOVA) test to see if there is any relationship between the kind of public entity and the seriousness of the corruption cases using the proxy variable related to the length of the prison sentence (*Years of imprisonment*). I have previously analysed the three conditions that data must meet to perform an ANOVA test, and I conclude that the conditions are met even if I am not using absolutely strict criteria what may be considered when analysing the results. Considering the positive results of the ANOVA test, I run a binominal linear regression with dummy variables constructed to divide the *Kind of entity* variable into each of its labels.

My second strategy regarding H2 is to consider the number of felonies for each person sentenced. I construct a cross tabulation and run a Chi-square analysis to find differences between the groups of entities considering this second operationalization of how serious the corruption case is. Because the results obtained are significant, I run binominal ordinal regressions with the three dummy variables mentioned above.

Thirdly, in relation to H3, I construct a contingency table and a bar graph to see if an intervention carried out by a monitoring entity (*Intervention control entity (dummy)*) shows any differences between the corruption cases that take place per each kind of entity. As this descriptive analysis demonstrates some relevant differences, I run a Chi-square test to see if there is a correlation between the two variables. Due to the significant results of the test, I run binominal logistic regressions with the dummy variables for the three types of entities.

In all the cases, my criterion for statistical significance is the usual one in social sciences, that is, an alpha level of 0,05.

Results

More Corruption Cases in NPM Entities

Data from the State Administration. The comparison of the number of corruption felonies between the different types of public entities shows a relevant difference considering the weight in terms of staff of these entities in the Spanish public sector at the state level, as show the figures in Table 21.

Table 21

Weight in staff members and corruption felonies by Kind of entity (only state level)

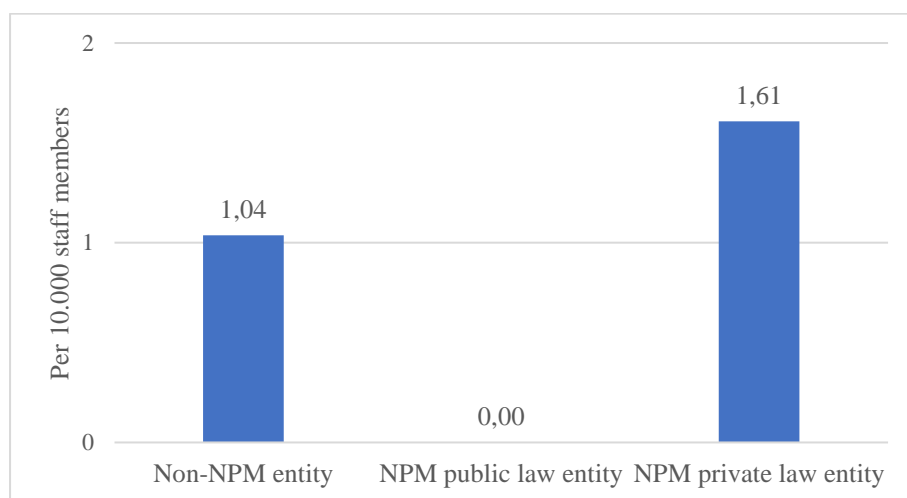
	Staff		Corruption felonies		Corruption felonies per 10.000 staff members
	%	Freq.	%	Freq.	Per 10.000
Non-NPM entity	73,25	597.843	76,54	62	1,04
NPM public law entity	12,27	100.179	0	0	0
NPM private law entity	14,48	118.157	23,46	19	1,61
Total		816.180		81	

Note: Author's own elaboration based on IGAE, n.d.

In spite of the limitations to be considered, a strong relationship is shown between the kind of entity and the number of corruption cases. This relationship is more clearly visible in the bar graph shown in Figure 14.

Figure 14

Corruption felonies per 10.000 staff members by Kind of entity (only state level)



Note: Author's own elaboration.

I should note that for this disaggregated data of corruption felonies in the state administrations, there are no corruption cases observed in public law NPM entities, and all the corruption cases in NPM private law entities happened in public companies, more specifically, the state-run postal service and the state-run company in charge of lotteries and gambling. However, this can be partly explained by the fact that these two public companies represent around 60% of all the staff in state NPM private law entities (Correos y Telégrafos, n.d.; Loterías y Apuestas del Estado, n.d.; Portal de Transparencia de Correos, 2022).⁷

NPM entities subject to private law make up 23,46 % of the subsample of corruption felonies at the state level, while their weight in terms of staff in the Spanish public sector is just 14,48 %. The proportion between the number of corruption felonies at the state level

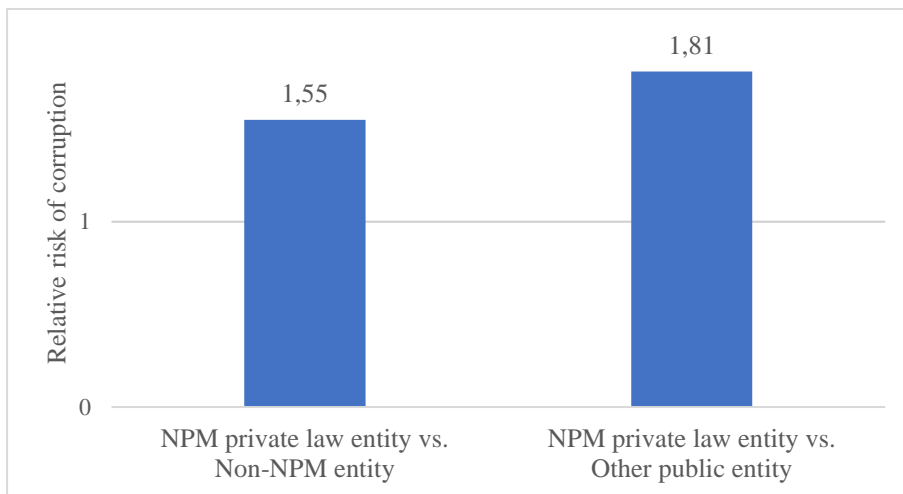
⁷ Publicly available data only exists from 2001 to 2015 in the case of the postal service, when it represented between 43% and 53% of the staff in state NPM private law entities. In the case of the lotteries and gambling company, there is data from 2002 to 2015, and it represented between 9% and 16% of the staff in state NPM private law entities.

(that is, observations in the dataset) per 10.000 staff members in each kind of entity shows a figure for non-NPM-related entities of 1,04 per 10.000 staff members, there are no cases in NPM public law entities, and for NPM private law entities the figure is 1,61 per 10.000 staff members.

Consequently, taking this unconditional distribution shown in Table 21 and in Figure 15, the type of public entity and the number of corruption felonies seem to be two variables that are not independent. These results suggest that the proportion of corruption felonies is contingent on the kind of public entity, since the proportion of corruption cases clearly differs between them.

Figure 15

Relative risk of corruption by Kind of entity (only state level)



Note: Author's own elaboration.

From the observations at the state level, when considering their relative weight in terms of staff, I find 1,81 times the risk of an event of corruption occurring in an NPM private

law entity (mostly, a public company) than in any other kind of public entity (that is, non-NPM entities and public law NPM entities). In turn, there is 1,55 times the risk of an act of corruption occurring in a public company or foundation than in a non-NPM public entity. Thus, the relative risk figures show more clearly the association commented above.

Data at the Regional Administration Level. The regional level is more complex to analyse because there is no homogeneous data on staff in each region differentiated by kind of entity, especially in the case of the NPM private law entities, for which generally the only tool available is a case-by-case analysis of each public company or foundation. As explained, here I present data from a sample of seven of the seventeen autonomous communities. The results show relevant differences between proportions of NPM public law entities (that represent between 1,68% and 50,89% of the regions public staff). Conversely, the data of staff in NPM private law entities is quite homogeneous, going from 1,61% to 6,93%.⁸

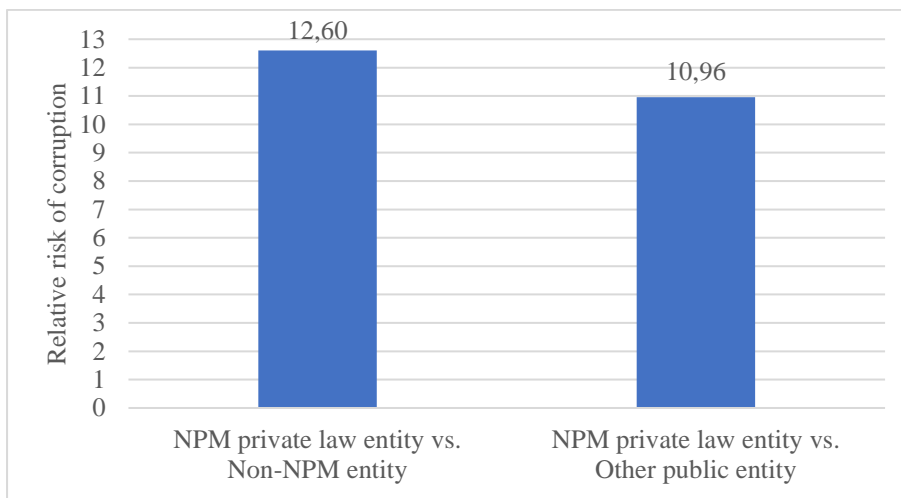
For the regional level, I only present the relative risk figures (Figure 16), because I do not have the complete data of the number of staff per type of entity for all the regions. I should underline that the data on relative risk should be analysed with caution, as there are significant differences in the proportion of NPM public law entities per region. Consequently, even if I only consider the figures as being approximate, they suggest that in NPM private law entities the risk of corruption is 10,96 times more than in other public entities at the regional level (i.e., entities that are non-NPM or NPM public law entities). At the same time, the results of the regional sample show that in NPM private law entities there is 12,6 times more risk of corruption than in non-NPM entities. In spite of the variation on NPM public law entities staff depending on the region, the high level of relative risk makes me conclude

⁸ The only exception is the País Vasco/Euskadi where the health system is made up of NPM private law entities. For my analysis, I have corrected the data eliminating this outlier.

that the results indeed point to a significantly higher risk of corruption in NPM private law entities than in other kind of public entities.

Figure 16

Relative risk of corruption by Kind of entity (only regional level)



Note: Author's own elaboration based on data from Comunidad de Madrid, 2017; Generalitat de Catalunya, n.d.; Generalitat Valenciana, 2016; Gobierno de Aragón, 2016; Gobierno de Canarias, n.d.; Gobierno Vasco, n.d.; Govern de les Illes Balears, n.d.; Ministerio de Hacienda y Función Pública, n.d.

Data at the Local Administration Level. It is not possible to perform the previous comparisons at the local level of government, as complete public data on the staff at the local level for each municipality in Spain separated by type of entity does not exist.

Nonetheless, of all the corruption cases of the dataset at the local level, I should mention one case that stands out. Of all the corruption felonies that took place in municipalities, the city of Marbella represents 14,8% of the total number of cases and 44,3%

of all the corruption felonies in this municipality are related to public companies. The case of the city of Marbella would need to be in-depth analysed individually to completely understand its salience and the role that public companies played in the corruption schemes that existed there.

No Relationship with Seriousness of Corruption Cases

As an introductory remind to this section, I should comment that from now on I do not differentiate between levels of government, thus, the number of observations for each kind of entity are not the same than in the tests of the previous section that only consider the state level.

Proxy Variable: Years of Imprisonment. First, I run an ANOVA test to examine if there are any relevant differences in the seriousness of corruption cases measured as the length of the prison sentence in years, varying by the kind of public entity where the actions take place. The data shows clearly that the relationship is statistically significant (Table 22). The graphic representation of the differences of the means (Figure 17) shows that public law NPM entities are those where corruption cases are given longer prison sentences.

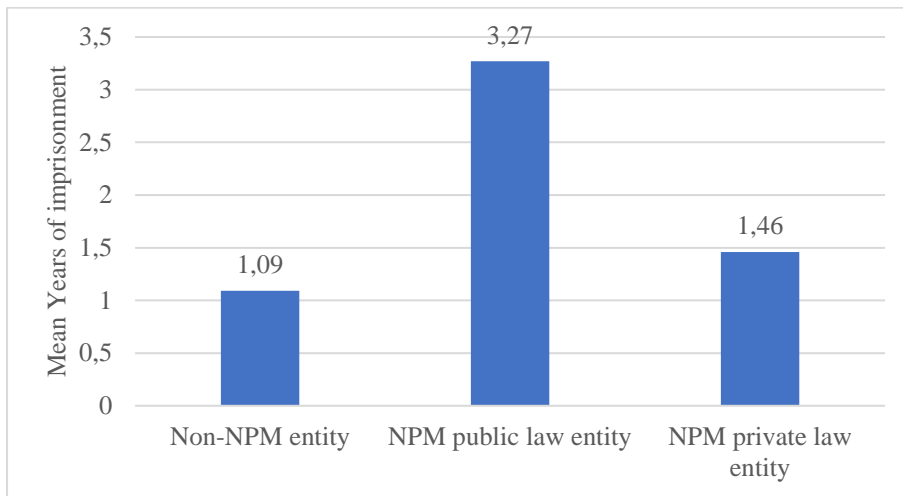
Table 22

ANOVA test. Dependent variable: Years of imprisonment. Factor: Kind of entity

	Sum of squares	Df	Mean square	F	Sig.
Between Groups	67,515	2	33,758	12,595	,000
Within Groups	1037,232	387	2,680		
Total	1104,748	389			

Figure 17

Mean Years of imprisonment by Kind of entity



Note: Author's own elaboration.

I run three binominal linear regressions, turning the independent variable (*Kind of entity*) into three different dummy variables. The results in Table 23 confirm a positive significant relationship between NPM public law entities and longer prison sentences ($p < 0,01$), a negative significant relationship with non-NPM entities ($p < 0,01$), and there is no significant relationship for NPM private law entities. I should underline that the R-square is low, meaning a low capacity of prediction for the model. This does not cause me to reject the model, however, as I consider this low prediction capability of a binominal model acceptable considering the multifactorial nature of corruption that can include a wide range of factors that are not taken into account here.

Table 23*Binominal linear regressions Kind of entity; Years of imprisonment*

	R square	Coefficients
Non-NPM entity (dummy)	0,027	-0,718 (0,217)***
NPM public law entity (dummy)	0,055	2,125 (0,446)***
NPM private law entity (dummy)	0,003	0,273 (0,240)

Note: Standard error values are in parentheses.

*p < 0,1; **p < 0,05; ***p < 0,01.

For all these results, the small number of corruption cases in NPM public law entities included in this sample makes the figures related to this category especially sensitive to outliers what makes me be careful when getting conclusions.

Proxy Variable: Number of Felonies. I use my second proxy variable to analyse the seriousness of the corruption cases. Table 24 shows a higher proportion of 3 or 4 felonies per corruption case for the NPM public law entities group, while the low figure obtained for cases with 5 or more felonies does not allow me to draw any conclusions. The Chi-square test (Table 25) shows that the relationship between the type of public entity and the number of corruption felonies is significant ($p < 0,01$). Nonetheless, I need to exercise caution when drawing conclusions from this data since there is a very high proportion of cells with expected figures under 5, causing me to question the robustness of the test results.

Table 24*Contingency table. Number of felonies (grouped) by Kind of entity*

		Number of felonies (grouped)			Total
		1 or 2 felonies	3 or 4 felonies	5 or more felonies	
Non-NPM entity	Count	293	21	4	318
	%	92,1%	6,6%	1,3%	100,0%
NPM public law entity	Count	8	6	0	14
	%	57,1%	42,9%	0,0%	100,0%
NPM private law entity	Count	52	6	0	58
	%	89,7%	10,3%	0,0%	100,0%
Total	Count	353	33	4	390
	%	90,5%	8,5%	1,0%	100,0%

Table 25*Chi-Square tests. Kind of entity; Number of felonies (grouped)*

	Value	df	Asymptotic significance (2-sided)
Pearson Chi-Square	23,840 ^a	4	,000
Likelihood Ratio	15,183	4	,004
Linear-by-Linear Association	,806	1	,369
N of Valid Cases	390		

Note: a. 5 cells (55,6%) have expected count less than 5. The minimum expected count is ,14.

I test these results with a binominal ordinal regression applied to each of the three dummy variables used for the previous proxy variable regressions, but inverting the labels to obtain results referring to the kind of entity corresponding to each variable. In this case, to reduce the number of cells with zero counts, I use the discrete variable for number of felonies, rather than the grouped one. The regression shows a significant positive relationship ($p < 0,01$) between NPM public law entities and the number of felonies, and a significant but negative relationship ($p < 0,01$) for non-NPM entities (Table 26). Just as in the previous regressions, the R-square values are very low, so this variable has a low predictability, which is understandable considering the multifactorial nature of corruption.

Table 26

Binominal ordinal regressions Kind of entity; Number of felonies

	McFadden R square	Coefficients
Non-NPM entity (dummy)	0,014	-0,829 (0,256)***
NPM public law entity (dummy)	0,018	1,857 (0,503)***
NPM private law entity (dummy)	0,004	0,458 (0,283)

Note: Standard error values are in parentheses.

* $p < 0,1$; ** $p < 0,05$; *** $p < 0,01$.

In conclusion, my evidence is suggestive rather than definitive, because the characteristics of my dataset (a low number of cases in NPM public law entities) could be affecting the results through outliers. However, the results suggest that NPM public law entities could be related to more serious corruption cases, and that in non-NPM entities there might be cases with more felonies but that are less serious in terms of length of prison

sentences. In any case, I consider that the two proxy variables used to test my H2 lead me to reject the hypothesis and assert that there is no relationship between the fact that a corruption case happens in an NPM private law entity and its seriousness.

Deficient Monitoring Mechanisms in NPM Entities

To analyse if the intervention of a control entity in the corruption cases differs between the cases that happen in NPM private law entities and in other entities, I firstly perform a descriptive analysis based on a contingency table and a bar graph. The data in Table 27 and Figure 18 shows clear differences between the three groups: there was no intervention made by a monitoring body in 60,3% of corruption cases in non-NPM entities, 46,9% in the case of NPM public law entities, and 73,1% of the corruption cases in NPM private law entities. Then, I run Chi-square tests (Table 28), which show a significant relationship between the variables ($p < 0,05$).

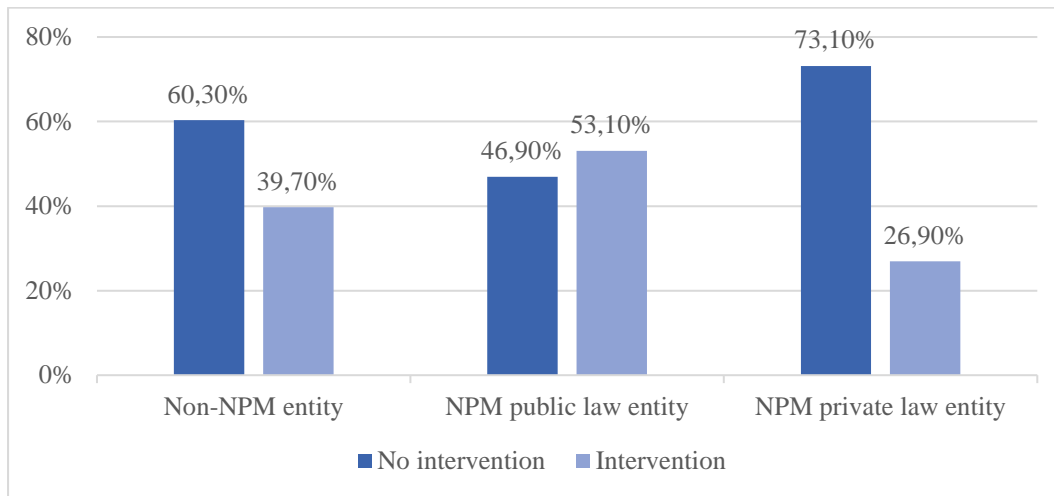
Table 27

Contingency table. Intervention control entity (dummy) by Kind of entity

		Intervention control entity (dummy)		Total
		No intervention	Intervention	
Non-NPM entity	Count	272	179	451
	%	60,3%	39,7%	100,0%
NPM public law entity	Count	15	17	32
	%	46,9%	53,1%	100,0%
NPM private law entity	Count	68	25	93
	%	73,1%	26,9%	100,0%
Total	Count	355	221	576
	%	61,6%	38,4%	100,0%

Figure 18

Intervention control entity (dummy) by Kind of entity



Note: Author's own elaboration.

Table 28

Chi-Square tests. Kind of entity; Intervention control entity (dummy)

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	8,469 ^a	2	,014
Likelihood Ratio	8,638	2	,013
Linear-by-Linear Association	3,637	1	,057
N of Valid Cases	576		

Note: a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 12,28.

I run a logistic regression with three dummy variables consisting of the different labels of the *Kind of entity* variable, similar to the previous regressions (Table 29). First, I

should underline that the R-square figures are even lower than in the previous tests. This makes me conclude that the results are suggestive of a relationship between the variables, in spite of its low level of predictability as seen in the previous tests for this hypothesis. The tests show a significant negative relationship ($p < 0,05$) between the cases that happen in an NPM private law entity and the intervention of a control body or official. The results also show a consistent positive relationship between cases of corruption in NPM public law entities and the intervention of a monitoring body, even if this relationship shows lower significance values ($p < 0,1$).

Table 29

Binominal logistic regressions. Kind of entity; Intervention control entity (dummy)

	Cox & Snell R Square	Coefficients	
		B	Exp (B)
Non-NPM entities (dummy)	0,003	0,263 (0,212)	1,301
NPM public law entities (dummy)	0,005	0,636 (0,365)*	1,889
NPM private law entities (dummy)	0,011	-0,619 (0,252)**	0,538

Note: Standard error values are in parentheses.

* $p < 0,1$; ** $p < 0,05$; *** $p < 0,01$.

Conclusions

The analysis of the frequency of observations of corruption and other related felonies by each kind of public entity compared to the weight in number of staff of these different types of entities in the public sector confirms my first hypothesis (H1). The clearest figure is that the risk of a corruption case happening in an NPM entity subject to private law (that is, a

public company or a public foundation) nearly doubles the risk of a corruption case happening in any other type of public entity at the state level; the figure increases up to over 10 times the risk at the regional level. Even if I cannot state a causal relationship when only considering the analysis made in this chapter, the data shows a clear association between the kind of public entity and the risk of corruption.

Despite this first positive conclusion, when I analyse the seriousness of the corruption cases, the results do not support my preliminary hypothesis. I observe a relationship between the kind of public entity and the seriousness of the corruption cases operationalized both as the years of imprisonment contemplated in the sentence and the number of felonies committed by the person convicted. However, the data are not robust enough to obtain solid conclusions. Because of all the aforementioned, I need to reject my H2 because I do not find a clear relationship between NPM private law entities and the seriousness of the corruption cases.

In relation to my third hypothesis, the sample for cases that involved NPM entities subject to private law shows significantly higher levels of no intervention being carried out by any monitoring entity or person, compared to the cases involving public law NPM entities, or cases with non-NPM entities involved. In consequence, the results suggest a relationship between the kind of public entity and the intervention of public activity control bodies in corruption cases. NPM private law entities are the ones where this intervention is less usual and, thus, H3 is confirmed.

In conclusion, the results of my research suggest that corruption cases are more usual in NPM entities subject to private law than in any other type of public entity. This fact could be related to the results of my H3, that is, that public activity monitoring bodies intervene less often in corruption cases that happen in NPM entities subject to private law than in other

corruption cases. More in-depth research should be performed to explore the relationship between these findings.

Despite these conclusions, the results demonstrate against my hypothesis that the corruption cases that happen in NPM private law entities are no more serious than the ones that happen in other type of public entities. Further research could try to confirm other results suggesting that NPM public law entities are the kind of entities where corruption cases are more serious.

I should also mention some limitations of the research done in this chapter that should be considered when analysing the results. First, I have already mentioned the usual criticisms regarding objective measures of corruption based on judicial sentences and this issue is commented more thoroughly in the final chapter of the dissertation. Second, New Public Management, as said in the first sections of this chapter, is a broad movement of administrative reform that cannot be limited to the creation of public companies and foundations. In consequence, it should be clear that the results of this chapter are referred only to one specific kind of entities whose extension is inspired by the NPM principles.

In all cases, the analysis included in this chapter is not complete enough or strong enough to interpret causation, but I do find clear associations between the variables. Further research is needed to confirm the possible explanations of these conclusions if indeed their reliability is confirmed. Nevertheless, the suggestions of this research point to the need to improve the controls of public activity in public companies and foundations in order to avoid the corruption cases that currently happen more usually in these types of entities than in the rest of public entities.

In relation to the Spanish case, the results of this chapter point to the need to research some areas of the public administration that appear as negative outliers in relation to their

high rate of corruption cases. In that sense, the public gambling company and the public postal service should be carefully analysed and, in relation to local governments, the use of public companies in corrupt activities in the city of Marbella should be examined to discern the deficiencies that made the corruption possible.

From a broader point of view, future works should analyse the different public activity monitoring mechanisms present in public companies and foundations and in the rest of the public administration. It may be important to find innovative methods to carry out controls on public activity capable of overcoming the inefficiencies for which bureaucratic administrations are usually blamed. The use of big data and artificial intelligence has appeared as a new way to tackle corruption that could be the solution to at least part of the dilemma between controls and efficiency in the public administration.

Once summarized the conclusions of this chapter, in the next one I present the final conclusions of the dissertation.

Chapter 5.

Conclusions

Substantive Contributions

This dissertation is centred on the analysis of the causes of public corruption related to some contextual factors (demographic, political, and economic) that affect public institutions, or to the design of those institutions. The preliminary analysis of the data on Spanish corruption led the different chapters of the thesis to focus on two different administrations that appear as salient in Spanish corruption: local administrations, and public companies and foundations.

In relation to local administrations, first in Chapter 2, departing from the most studied factors analysed by the institutional literature on corruption, I do a large-N statistical analysis on the relationship between the size of the city and the concentration of power in one party due to longevity in local government. The results of this chapter should be interpreted taking specially into account that I use a measurement based on judicial resolutions on corruption cases.

In this sense, an initial look at the results could make us think that there are more cases of corruption in bigger cities, but a more careful analysis suggests that the higher presence of big cities in the dataset is due to the higher effectiveness to condemn corruption in those municipalities. The results show that corruption in big cities tends to be more serious in the sense of involving higher sums of money and more relevant impacts on the public interests, which could explain why these cases receive also more attention from the public prosecutor and, thus, are more usually condemned. Some arguments that the literature has presented to defend that smaller towns are more prone to corruption could explain the higher

difficulties to prosecute and condemn corruption in those municipalities. For instance, the closer relationships existing in a less populated towns can imply personal links between politicians and people with public administration control responsibilities that can have a negative impact on anti-corruption activity; in turn, local media and civil society have usually fewer resources to make public representatives accountable than in bigger cities.

Something similar happens when analysing the results related to the concentration of power. At a first sight, it could be surprising that the different statistical tests repeatedly point to the fact that less concentration of power is related to higher levels of corruption. This result appears in several analyses that address different manifestations of power concentration related to longevity in government, basically, the period for which the same party governed the city council and if the same party has governed for long terms both at the local and regional levels. One more time, an in-depth analysis is needed considering that I am using an objective indicator of corruption based on judicial resolutions. In fact, the results suggest that concentration of power due to longevity in government can make it more difficult to prosecute and condemn corruption. Party alternation can stimulate accountability mechanisms and public activity controls since long-lasting political positions can generate personal and economic dependencies that difficult to report, investigate, and prosecute corruption.

The results of Chapter 2 suggest that when designing public integrity mechanisms, it should be considered that a small population size and longevity in power of the same party or political leader can be considered as risk factors for corruption and, in consequence, municipalities with these characteristics should receive special attention. However, in relation to the population size it should at the same time be considered that bigger cities tend to have more serious cases of corruption that should also be prevented.

Then, I present in Chapter 3 an exploratory analysis with a sample of six cities where I try to test some of the literature theories on the factors that could explain corruption at the local level in Spain related to demographic, political, and economic characteristics of cities and towns. Thus, Chapter 3 tests the presence in specific cities of the factors deeply analysed in the previous chapter and other factors observed by the literature on Spanish corruption.

The analysis does not permit me to get a conclusion about the relationship between the population size and the levels of local corruption, so I do not have any additional information on this relationship to the one presented in Chapter 2. In relation to the concentration of power in one political party due mostly to a lack of party alternation in local government, the results suggest that indeed these situations can boost local corruption, even more when a powerful leader remains in power for long periods. This is the second factor that I study in Chapter 2 with a broader sample of cases. Thirdly, in this exploratory chapter I study the importance of the construction industry and the dependence of the city council on it, an economic sector that the results suggest than can facilitate the appearance of political corruption due to the high sums of money it generates and the discretion of the city council on the regulations about it. Lastly, the results regarding the importance of tourism in cities do not permit me to get solid conclusions but suggest, in line with the literature, that it could be a risk factor for corruption. I should also underline that, despite this factor is not part of the research, the analysis of corruption in this initial sample of six cities shows that petty corruption cases are fairly usual in the police and security forces at all levels of government.

Finally, Chapter 4 analyses with a large-N statistical design if the aim of creating more flexible and autonomous public bodies promoted by New Public Management can have an effect on public corruption. The analysis of the dataset of corruption convictions in Spain shows that corruption cases are more usual in public companies and public foundations than in the traditional administration. Nonetheless, the results do not indicate corruption in those

kinds of bodies to have stronger impacts on the public interest considering the judicial punishment received. I do an initial study of potential causal mechanisms explaining why corruption is more salient in public companies and foundations analysing the intervention in corruption cases of public activity control bodies or officers. The results suggest that public activity monitoring systems lose effectiveness in these kinds of public bodies regulated by private law, since their interventions with any kind of warning or denounce are much fewer than in cases that happen in other kinds of entities.

Thus, the results of Chapter 4 suggest that when designing public activity monitoring mechanisms, public companies and foundations should receive special attention as public integrity systems seem to be failing in those kinds of entities. At the same time, from a corruption preventive point of view a revision of the specific norms and procedures that regulate these entities would be needed as the empirical information indicates that they facilitate corrupt activities compared to the regulations of the traditional administration.

The three chapters of the thesis point to the existence of some contextual or regulatory frameworks that can be considered risk factors for corruption. This evidence can have relevant implications for the future design of public activity control mechanisms based on risk assessment using big data and artificial intelligence. Public administrations have been growing in the last decades, hand in hand with population growth and the emergence of new needs and social risks that, at least in Spain, governments have in some way tried to face. Nonetheless, we still rely on public activity control mechanisms based on manual analysis and sample-based audits that are not efficient to face the high existing quantity of public bodies and decisions to analyse and, in some cases like the ones studied in this research, they even prove to be ineffective.

Methodological Contributions

Apart from the substantive contributions that this research does in relation to the knowledge about corruption in Spain, one of the significant findings that emerge is related to the use of objective indicators to measure corruption. Several authors have researched corruption in Spain using objective measures based on judicial prosecutions and convictions but, in general, they use media information. Thus, this research is one of the first pieces of evidence about corruption in Spain using a large-N sample of an objective indicator of corruption built from the direct analysis of final judgements.

The analysis of the dataset demonstrates both advantages and disadvantages of this way of measuring corruption, in line with the discussion existing in the literature.

A central advantage of this measurement that this research proves is the capacity to show some tendencies that do not appear in citizen perceptions nor in media data, probably because they are not easy to detect from a person outside the administration or because they do not have a mediatic interest in front, for instance, of political corruption cases involving well-known politicians. This could be the case of the higher tendency of corruption to take place in public companies and foundations, or the petty corruption cases in the police and security forces.

Another relevant advantage is that the analysis of judgements for corruption permits a level of detail in the understanding of the characteristics of corruption cases that is unprecedented in large-N designs. The use of judicial resolutions to build quantitative datasets like the one used in this research can lead to the analysis of a high number of variables that explain different elements of the anatomy of corruption that normally are only in the hands of small-N qualitative studies.

Nevertheless, there is an important disadvantage that should not be forgotten when interpreting the results of an objective measurement based on judgements: the possibility of data showing tendencies related to the effectiveness of the judicial system and not to the actual characteristics of corruption. In this sense, the careful consideration of previous literature on corruption that uses other measurements can be a way to control the possible misinterpretations of results when using this kind of objective measure.

Taken together, the results suggest that each way of measuring corruption is capable to show more accurate information on some manifestations or consequences of corruption but can be more imprecise for others, or even generate potentially erroneous interpretations. In consequence, none of the methods to measure corruption should be disregarded. On the contrary, the combination and careful analysis of the different measurements could be the best option to try to understand a complex social, administrative, and political phenomenon that is defined by its aim to be concealed.

Limitations and Future Research

The limitations of this research come mostly from the nature of the objective measurement of corruption used in it. As already mentioned, objective indicators based on judicial resolutions can generate problems of internal validity since it could be difficult to establish if the data is measuring actual corruption or the effectiveness of the judicial system in condemning certain cases of corruption. To overcome this problem, I have looked for alternative explanations considering potential misinterpretations due to the kind of measurement when the results were suggesting conclusions that were inconsistent with previous literature.

A second limitation is due to the number of cases included in this research. The general dataset consists of 576 felonies of corruption but, when I do adaptations of the dataset considering as units of observations the convicted people (N=390), or the cities and towns where corruption took place (N=160) the observations are significantly reduced. Even if the dataset is a representative sample for a period of 20 years of corruption condemnations in Spain stratified by kinds of felonies, the relatively low number of cases included can generate problems of robustness for some of the statistical tests.

After commenting on the two general limitations, I explain some lines of further research that emerge from the conclusions of this study.

On the one hand, the preliminary analysis of the dataset indicates some interesting research that has not been included in this dissertation. The exploratory analysis in Chapter 3 opens the field to large-N studies analysing the potential effects of characteristics of municipalities that can be working as risk factors for corruption and which are not addressed in Chapter 2. The sample of 160 municipalities could be applied to test the potential impact of the construction sector, tourism, and the interaction between these potential risk factors for corruption and the ones studied in Chapter 2, that is, the size of the population and the concentration of power in one political party due to a lack of party alternation in local government.

The dataset also shows a relevant presence of administrative and petty corruption in security and police forces. This fact should be deeply analysed specially because both public perceptions and the literature on corruption have not paid sufficient attention to this issue considering the potentially relevant dimension it could have.

On the other hand, the results of this work also point to questions that future research should focus on. To sum up, the different analyses carried out in this dissertation show

potential failures of public activity control mechanisms in some parts of the administration: the local level, mostly municipal governments; and public companies and foundations.

In relation to local administrations, the results of this research suggest that several characteristics of municipalities not directly related to norms and procedures can be working as risk factors for corruption. These characteristics are the size of the city, the concentration of power in some parties or local leaders, the dependence on the construction and real estate industry, and the importance of tourism. The results indicate that the public activity controls in place could be losing effectiveness in small cities and towns, when one party or local leader concentrates much political power due to longevity in local government, in municipalities economically dependent on the construction and real estate industry, or in those where tourism is a central economic activity. Further research should analyse these cases to understand which are the deficiencies not only of the public activity control entities but, with a broader view, of public integrity systems that should include, for instance, more transparency and mechanisms to facilitate accountability by citizens and civil society organisations.

Departing from the findings in Chapter 4, future research should go more in-depth on the analysis of public companies and foundations and try to understand which public activity controls are failing and how these controls could be improved.

Final Thoughts

Apart from local administration and public companies and foundations, the results of the analysis of corruption judgements in Spain show that there is a third area that also stands out in the number of corruption cases condemned that are the different security and police forces, both at the general, regional, and local levels of administration. Even if this last area is

not included in the dissertation analysis, its consideration can be interesting for these final remarks.

A common element between these three areas of Spanish administration that show higher levels of corruption is that they have also higher levels of autonomy from the general administration system for different reasons. In relation to the local governments, local autonomy, competencies, and financing are a historical claim of democratic and progressist politics, at least in Spain, under the argument that proximity is a central aspect of an administration that cares for their people and that municipalities are the best suited to understand the population needs and act in consequence. Regarding public companies, in front of traditional and bureaucratic norms and procedures seen as too rigid, complex, and slow, the creation of these entities inspired by the private sector is defended as a way to create more flexible and efficient public bodies that can gain capabilities through their separation from the general administration. Concerning the police and security forces, their unequivocal control by elected governments is a basic requirement of a democratic regime but still this intervention is sometimes seen with suspicion between parts of these corps.

These are very different arguments and each one could be discussed in several ways. However, they have in common the will of being more autonomous from the general administration in the country and, in some sense, the wish to reduce the intervention of this general administration.

This argument is not at all a claim for more centralisation, but the assertion that we have failed in the idea of improving our administrations by creating autonomous public bodies if this autonomy is in exchange for public integrity. Thus, a major challenge for administrative reform appears: the need to build more flexible administrations, closer to citizens, and capable of quick and innovative responses to new changing realities; but to do

so while also increasing public integrity, an essential point for a democratic administration that should be in the hands of their citizens and respond to their needs. As mentioned above, the digitalization of the administration and the use of big data and artificial intelligence with public activity control aims is a new field that, even with limitations and dangers that should not be disregarded, offers us the possibility of a qualitative leap on public integrity policies.

References

- A Collection of the Proceedings in the House of Commons Against the Lord Verulam, Viscount St. Albans, Lord Chancellor of England, for Corruption and Bribery.* (n.d.). <https://link.gale.com/apps/doc/Q0100151922/MMLT?u=camb55135&sid=bookmark-MMLT&xid=a43f1c0e&pg=6>
- ABC (2003, August 6). *Jesús Gil solicita formalmente la disolución del Grupo Independiente Liberal como partido político [Jesús Gil requests the dissolution as a political party of Grupo Independiente Liberal]*. https://www.abc.es/ultimas-noticias/abci-jesus-solicita-formalmente-disolucion-grupo-independiente-liberal-como-partido-politico-200308060300-199621_noticia.html?ref=https%3A%2F%2Fwww.google.com%2F
- Adserà, A., Boix, C., & Payne, M. (2003). Are You Being Served? Political Accountability and Quality of Government. *Journal of Law, Economics, and Organization*, 19(2), 445–490. <https://doi.org/10.1093/jleo/ewg017>
- Alt, J. E., & Lassen, D. D. (2008). Political and judicial checks on corruption: Evidence from American state governments. *Economics and Politics*, 20(1), 33–61. <https://doi.org/10.1111/j.1468-0343.2007.00319.x>
- Anderson, C. J., & Tverdova, Y. V. (2003). Corruption, Political Allegiances, and Attitudes Toward Government in Contemporary Democracies. *American Journal of Political Science*, 47(1), 91–109. <https://doi.org/10.1111/1540-5907.00007>
- Andersson, S. (2008). Studying the Risk of Corruption in the Least Corrupt Countries. *Public Integrity*, 10(3), 193–214. <https://doi.org/10.2753/PIN1099-9922100301>

- Apergis, N., Dincer, O. C., & Payne, J. E. (2010). The relationship between corruption and income inequality in U.S. states: evidence from a panel cointegration and error correction model. *Public Choice*, 145(1–2), 125–135.
<https://doi.org/10.1007/s11127-009-9557-1>
- Apergis, N., Dincer, O. C., & Payne, J. E. (2012). Live free or bribe: On the causal dynamics between economic freedom and corruption in U.S. states. *European Journal of Political Economy*, 28(2), 215–226.
<https://doi.org/10.1016/j.ejpoleco.2011.10.001>
- Aristotle (1988). *Politica* (García Valdés, M., Trans.). Gredos. (Original work published ca. 350 B.C.E.).
- Assumpção, A. (2012). *Estimating the Effect of Discretionary Spending on Corruption: Evidence from Brazilian Municipalities*. Fundação Getúlio Vargas.
<https://ssrn.com/abstract=2675142>
- Auriol, E., Straub, S., & Flochel, T. (2016). Public Procurement and Rent-Seeking: The Case of Paraguay. *World Development*, 77, 395–407.
<https://doi.org/10.1016/j.worlddev.2015.09.001>
- Avelino, G., Barberia, L. G., & Biderman, C. (2014). Governance in managing public health resources in Brazilian municipalities. *Health Policy and Planning*, 29(6), 694–702.
<https://doi.org/10.1093/heapol/czt003>
- Ayuntamiento de Madrid (2018). *Alcaldes de Madrid. Desde las elecciones municipales de 1979* [Mayors of Madrid. From 1979 local election].
<https://www.madrid.es/portales/munimadrid/es/Inicio/El-Ayuntamiento/El-Pleno/Composicion/Alcaldes-de-Madrid/Desde-las-elecciones-municipales-de-1979/Alcaldes-de-Madrid-Desde-las-elecciones-municipales-de-1979/Alcaldes-de-Madrid-Desde-las-elecciones-municipales-de-1979>

[1979/?vgnnextfmt=default&vgnextoid=9604404941594210VgnVCM2000000c205a0aRCRD&vgnnextchannel=a95aef0022594210VgnVCM2000000c205a0aRCRD](https://www.pamplona.es/ayuntamiento/vari...)

Ayuntamiento de Pamplona (2022). *Alcaldes de Pamplona desde 1918 hasta la actualidad* [Mayors of Pamplona from 1918].

[https://www.pamplona.es/ayuntamiento/vari...
hasta-la-actualidad](https://www.pamplona.es/ayuntamiento/vari...)

Ballart, X., Rico, G., & Ripoll, G. (2016). *La motivación en los servicios públicos: análisis empírico de sus antecedentes y de sus efectos* [Motivation in public services: an empirical analysis of its antecedents and effects]. Instituto Nacional de Administración Pública.

Bandiera, O., Prat, A., & Valletti, T. (2009). Active and passive waste in government spending: Evidence from a policy experiment. *American Economic Review*, 99(4), 1278–1308. <https://doi.org/10.1257/aer.99.4.1278>

Banfield, E. C. (1958). *The Moral Basis of a Backward Society*. The Free Press Glencoe.

Bauhr, M., Czibik, Á., Fine Licht, J., & Fazekas, M. (2020). Lights on the shadows of public procurement: Transparency as an antidote to corruption. *Governance*, 33(3), 495–523. <https://doi.org/10.1111/gove.12432>

Beeri, I., & Navot, D. (2013). Local Political Corruption: Potential structural malfunctions at the central–local, local–local and intra–local levels. *Public Management Review*, 15(5), 712–739. <https://doi.org/10.1080/14719037.2012.707682>

Bergh, A., Erlingsson, G., Gustafsson, A., & Wittberg, E. (2019). Municipally Owned Enterprises as Danger Zones for Corruption? How Politicians Having Feet in Two

- Camps May Undermine Conditions for Accountability. *Public Integrity*, 21(3), 320–352. <https://doi.org/10.1080/10999922.2018.1522182>
- Bergh, A., Erlingsson, G., & Wittberg, E. (2022). What happens when municipalities run corporations? Empirical evidence from 290 Swedish municipalities. *Local Government Studies*, 48(4), 704–727. <https://doi.org/10.1080/03003930.2021.1944857>
- Blackburn, K., Bose, N., & Haque, M. E. (2006). The incidence and persistence of corruption in economic development. *Journal of Economic Dynamics and Control*, 30(12), 2447–2467. <https://doi.org/10.1016/j.jedc.2005.07.007>
- Brollo, F., Nannicini, T., Perotti, R., & Tabellini, G. (2013). The Political Resource Curse. *American Economic Review*, 103(5), 1759–1796. <https://doi.org/10.1257/aer.103.5.1759>
- Brollo, F., & Troiano, U. (2016). What happens when a woman wins an election? Evidence from close races in Brazil. *Journal of Development Economics*, 122, 28–45. <https://doi.org/10.1016/j.jdeveco.2016.04.003>
- Brugué, Q. (1996). La dimensión democrática de la nueva gestión pública [The democratic dimension of new public management]. *Gestión y Análisis de Políticas Públicas*, 5-6, 45–58. <https://revistasonline.inap.es/index.php/GAPP/article/download/66/66>
- Centro de Investigaciones Sociológicas (CIS) (2022). *Barómetros [Barometers]*. https://www.cis.es/cis/opencm/ES/11_barometros/index.jsp
- Chang, E. C. C., & Golden, M. A. (2007). Electoral systems, district magnitude and corruption. *British Journal of Political Science*, 37(1), 115–137. <https://doi.org/10.1017/S0007123407000063>

- Charron, N. (2013). QoG at the subnational level and the EQ. In B. Rothstein, N. Charron, & V. Lapuente (Eds.), *Quality of government and corruption from a European perspective: a comparative study on the quality of government in EU regions* (pp. 70–138). Edward Elgar Publishing.
- Cingolani, L., & Fazekas, M. (2020). The role of agencification in achieving value-for-money in public spending. *Governance*, 33(3), 545–563.
<https://doi.org/10.1111/gove.12452>
- Codina, E. (2017, September 1). El PP recupera la alcaldía de Marbella tras prosperar su moción de censura [The PP recovers the mayoralty of Marbella after prospering its vote of no confidence]. *El País*.
https://elpais.com/politica/2017/08/29/actualidad/1504021292_049951.html
- Comunidad de Madrid (2017). *Boletín Estadístico del Personal al Servicio de la Comunidad de Madrid* [Statistical Bulletin of Personnel at the Service of the Community of Madrid].
https://www.comunidad.madrid/sites/default/files/boletin_digital_enero_2017_0.pdf
- Consejo General del Poder Judicial (n.d.). *Centro de Documentación Judicial (CENDOJ)* [Judicial Documentation Centre]. Retrieved September 25, 2022, from
<https://www.poderjudicial.es/search/indexAN.jsp>
- Correos y Telégrafos. (n.d.). *Informes* [Reports]. <https://www.correos.com/grupo-correos/#>
- Costas-Pérez, E., Solé-Ollé, A., & Sorribas-Navarro, P. (2012). Corruption scandals, voter information, and accountability. *European Journal of Political Economy*, 28(4), 469–484. <https://doi.org/10.1016/j.ejpoleco.2012.05.007>

- Coviello, D., & Gagliarducci, S. (2010). Building Political Collusion: Evidence from Procurement Auctions. *IZA Discussion Paper*, 4939. <https://doi.org/10.2139/ssrn.1631074>
- Cuadrado-Ballesteros, B. (2014). The impact of functional decentralization and externalization on local government transparency. *Government Information Quarterly*, 31(2), 265–277. <https://doi.org/10.1016/j.giq.2013.10.012>
- de Medeiros-Costa, C. C. (2022). The disease of corruption: Missing funds and health conditions in Brazilian municipalities. *International Public Management Journal*, 25(7), 1094–1114. <https://doi.org/10.1080/10967494.2022.2072032>
- de Sousa, L., & Calca, P. (2021). Understanding corruption through the analysis of court case content: research note. *Qualitative Research Journal*, 21(2), 135–147. <https://doi.org/10.1108/QRJ-04-2020-0029>
- della Porta, D., & Vannucci, A. (1997). The “Perverse Effects” of Political Corruption. *Political Studies*, XLV(3), 516–538. <https://doi-org.are.uab.cat/10.1111/1467-9248.00094>
- di Tella, R., & Schargrodsky, E. (2003). The Role of Wages and Auditing during a Crackdown on Corruption in the City of Buenos Aires. *The Journal of Law and Economics*, 46(1), 269–292. <https://doi.org/10.1086/345578>
- Dincer, O. C. (2008). Ethnic and religious diversity and corruption. *Economics Letters*, 99(1), 98–102. <https://doi.org/10.1016/j.econlet.2007.06.003>
- Dincer, O. C., & Gunalp, B. (2012). Corruption and income inequality in the United States. *Contemporary Economic Policy*, 30(2), 283–292. <https://doi.org/10.1111/j.1465-7287.2011.00262.x>

- Diputación de Alicante (2022). *Alcaldes de los municipios de la provincia de Alicante* [Mayors of the municipalities of the Alicante province]. Retrieved January 5, 2023, from <http://documentacion.diputacionalicante.es/alcaldes11.asp>
- Drápalová, E. (2016). *Good apples in bad trees* [Doctoral dissertation, European University Institute]. CADMUS EUI Research Repository. https://cadmus.eui.eu/bitstream/handle/1814/39058/Drapalova_2016.pdf?sequence=1&isAllowed=y
- Drápalová, E., & di Mascio, F. (2020). Islands of Good Government: Explaining Successful Corruption Control in Two Spanish Cities. *Politics and Governance*, 8(2), 128–139. <https://doi.org/10.17645/pag.v8i2.2730>
- EFE (2021, December 17). Ingresa en prisión Bartomeu Muñoz, exalcalde de Santa Coloma, por el “caso Pretoria” [Bartomeu Muñoz, former mayor of Santa Coloma, enters prison for the “Pretoria case”]. *El Periódico*. <https://www.elperiodico.com/es/santa-coloma/20211217/ingresa-prision-bartomeu-munoz-exalcalde-12997721>
- El País (1994, May 12). *Lista de escándalos* [List of scandals]. https://elpais.com/diario/1994/05/12/espana/768693602_850215.html
- El País (2002, April 6). *El Supremo confirma la condena que inhabilita a Jesús Gil para ser alcalde* [The Supreme Court confirms the sentence that disqualifies Jesús Gil from being mayor]. https://elpais.com/diario/2002/04/06/espana/1018044001_850215.html
- El Periódico (2009, October 27). *Bartomeu Muñoz, siete años como alcalde socialista* [Bartomeu Muñoz, seven years as socialist mayor]. <https://www.elperiodico.com/es/politica/20091027/bartomeu-munoz-siete-anos-alcalde-95980>

- Erlingsson, G. O., Bergh, A., & Sjölin, M. (2008). Public Corruption in Swedish Municipalities – Trouble Looming on the Horizon? *Local Government Studies*, 34(5), 595–608. <https://doi.org/10.1080/03003930802413780>
- Erlingsson, G. O., Wittberg, E., & Lindström, M. (2020). Municipally owned enterprises and heightened corruption risks, *QoG Working Paper Series*, 2. https://www.gu.se/sites/default/files/2020-05/2020_2_Erlingsson_Wittberg_Lindstrom.pdf
- Escresa, L., & Picci, L. (2017). A New Cross-National Measure of Corruption. *The World Bank Economic Review*, 31(1), 196–219. <https://doi.org/10.1093/wber/lhv031>
- Estefanía, J. (Dir.) (2008). *Informe sobre la democracia en España 2008 [Report about democracy in Spain 2008]*. Fundación Alternativas. <https://fundacionalternativas.org/publicaciones/>
- Estefanía, J. (Dir.) (2009). *Informe sobre la Democracia en España 2009 [Report about democracy in Spain 2009]*. Fundación Alternativas. <https://fundacionalternativas.org/publicaciones/>
- European Commission (2020, June 9). *Special Eurobarometer 502: Corruption*. http://data.europa.eu/euodp/en/data/dataset/S2247_92_4_502_ENG
- European Commission (2021). *Ethics in Social Science and Humanities*. https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ethics-in-social-science-and-humanities_he_en.pdf
- Fazekas, M., & Tóth, I. J. (2012a). *Hibák, javítások és előzetes eredmények - magyarországi közbeszerzések 2010-2011 [Errors, corrections and preliminary results - Hungarian*

public procurement 2010-2011]. http://www.crcb.eu/wp-content/uploads/2014/07/kb_adatok_2010_3riport_140724.pdf

Fazekas, M., & Tóth, I. J. (2012b). *Public procurement, corruption and State Capacity in Hungary – objective measures and new insights*. http://mihalyfazekas.eu/wp-content/uploads/2015/08/Fazekas-Toth_corruption_statecap_120607.pdf

Fazekas, M., Tóth, I. J., & King, L. P. (2016). An Objective Corruption Risk Index Using Public Procurement Data. *European Journal on Criminal Policy and Research*, 22(3), 369–397. <https://doi.org/10.1007/s10610-016-9308-z>

Ferraz, C., & Finan, F. (2008). Exposing Corrupt Politicians: The Effects of Brazil's Publicly Released Audits on Electoral Outcomes. *Quarterly Journal of Economics*, 123(2), 703–745. <https://doi.org/10.1162/qjec.2008.123.2.703>

Ferraz, C., & Finan, F. (2011). Electoral Accountability and Corruption: Evidence from the Audits of Local Governments. *American Economic Review*, 101(4), 1274–1311. <https://doi.org/10.1257/aer.101.4.1274>

Ferraz, C., Finan, F., & Moreira, D. B. (2012). Corrupting learning. *Journal of Public Economics*, 96(9–10), 712–726. <https://doi.org/10.1016/j.jpubeco.2012.05.012>

Fredriksson, P. G., List, J. A., & Millimet, D. L. (2003). Corruption, environmental policy, and FDI: theory and evidence from the United States. *Journal of Public Economics*, 87(7), 1407–1430. [https://doi.org/10.1016/S0047-2727\(02\)00016-6](https://doi.org/10.1016/S0047-2727(02)00016-6)

Gailmard, S. (2012). Accountability and Principal-Agent Theory. In M. Bovens, R. Goodin, & T. Schillemans (Eds.), *The Oxford Handbook of Public Accountability*. Oxford University Press.

- García-Quesada, M., Jiménez-Sánchez, F., & Villoria, M. (2013). Building Local Integrity Systems in Southern Europe: the case of urban local corruption in Spain. *International Review of Administrative Sciences*, 79(4), 618–637.
<https://doi.org/10.1177/0020852313501125>
- Generalitat de Catalunya (n.d.). *Banc de dades d'ocupació pública [Public employment data base]*. Retrieved January 5, 2023, from <http://analisiocupaciopublica.gencat.cat/>
- Generalitat Valenciana (2016). *Compte General 2015 [General Accounts 2015]*.
<https://hisenda.gva.es/auto/cuentageneral/web/2015/CG.xml?idioma=v>
- Gillies, A. (2020a). *Crude Intentions: How Oil Corruption Contaminates the World*. Oxford University Press.
- Gillies, A. (2020b). Corruption trends during Africa's oil boom, 2005 to 2014. *The Extractive Industries and Society*, 7(4), 1171–1181.
<https://doi.org/10.1016/j.exis.2020.06.006>
- Glaeser, E. L., & Saks, R. E. (2006). Corruption in America. *Journal of Public Economics*, 90(6–7), 1053–1072. <https://doi.org/10.1016/j.jpubeco.2005.08.007>
- Gobierno de Aragón (2016). *Cuenta General 2015. Comunidad Autónoma de Aragón [General Accounts 2015. Autonomous Community of Aragón]*.
<https://www.aragon.es/-/cuenta-general-2015>
- Gobierno de Canarias (n.d.). *Cuenta General 2015 [General Accounts 2015]*.
http://www.gobiernodecanarias.org/hacienda/intervencion/servicios/cuenta_general/2015/
- Gobierno de España (2022). *Portal de la Transparencia [Transparency Portal]*. Retrieved January 5, 2023, from <https://transparencia.gob.es/>

- Gobierno Vasco (n.d.). *Liquidación de los presupuestos y cuentas anuales de la Administración General de la CAE [Settlement of budgets and annual accounts of the General Administration of the CAE]*.
<https://www.euskadi.eus/liquidacion/web01-a3ogakit/es/>
- Goel, R. K., & Rich, D. P. (1989). On the economic incentives for taking bribes. *Public Choice*, 61(3), 269–275. <https://doi.org/10.1007/BF00123889>
- Golden, M. A., & Picci, L. (2005). Proposal for a New Measure of Corruption, Illustrated with Italian Data. *Economics and Politics*, 17(1), 37–75.
<https://doi.org/10.1111/j.1468-0343.2005.00146.x>
- Goldman, E., Rocholl, J., & So, J. (2013). Politically Connected Boards of Directors and The Allocation of Procurement Contracts. *Review of Finance*, 17(5), 1617–1648.
<https://doi.org/10.1093/rof/rfs039>
- Govern de les Illes Balears (n.d.). *Compte General 2015 [General Accounts 2015]*.
http://interven.caib.es/www/compte_general_2015/index.html
- Heidenheimer, A. J. (1989). Terms, Concepts, and Definitions: An Introduction. In A. J. Heidenheimer, M. Johnston, & V. T. LeVine (Eds.), *Political Corruption: A Handbook*. Transaction.
- Heller, N. (2008). Introduction. In United Nations Development Programme (UNDP) (Ed.), *A user's guide to measuring corruption*.
- Heywood, P. M. (2015). Measuring corruption: perspectives, critiques and limits. In P. M. Heywood (Ed.), *The Routledge Handbook of Political Corruption*. Routledge.
<https://www.ceu.edu/sites/default/files/attachment/event/9385/heywood-measuring-corruption.pdf>

Heywood, P. M., & Rose, J. (2013). Close but no Cigar: The measurement of corruption.

Journal of Public Policy, 34(3), 507–529.

<https://doi.org/10.1017/S0143814X14000099>

Hood, C. (1991). A Public Management for all seasons? *Public Administration*, 69(1), 3–19.

<https://doi.org/10.1111/j.1467-9299.1991.tb00779.x>

Houqe, M. N., Zahir-ul-Hassan, M. K., Idrus, M. A., & van Zijl, T. (2020). Bribery and corruption: assessing the fairness of the Malaysian judicial system. *Crime, Law and Social Change*, 74(2), 135–154. <https://doi.org/10.1007/s10611-019-09882-1>

Huntington, S. P. (2006). *Political order in changing societies*. Yale University Press.

Hyytinen, A., Lundberg, S., & Toivanen, O. (2018). Design of public procurement auctions: evidence from cleaning contracts. *The RAND Journal of Economics*, 49(2), 398–426.

<https://doi.org/10.1111/1756-2171.12232>

Iglesias, F. (Dir.) (2007). *Urbanismo y democracia. Alternativas para evitar la corrupción [Town planning and democracy. Alternatives to avoid corruption]*. Fundación

Alternativas. <https://fundacionalternativas.org/publicaciones/>

Instituto Nacional de Estadística (INE) (2022a). *Explotación del Registro Central de Penados [Exploitation of the Central Registry of Convictions]*.

<https://www.ine.es/jaxiT3/Datos.htm?t=25997>

Instituto Nacional de Estadística (INE) (2022b). *Padrón. Población por municipios [Census. Population by municipalities]*.

https://www.ine.es/dyngs/INEbase/es/categoria.htm?c=Estadistica_P&cid=1254734710990

Instituto Nacional de Estadística (INE) (2022c). *Pernoctaciones de los viajeros por puntos turísticos y país de residencia [Overnight stays of travelers by tourist destinations and country of residence]*.

<https://www.ine.es/jaxi/Datos.htm?path=/t11/e162eoh/a2005/10/&file=04de024.px>

Infoelectoral. (n.d.). *Mapa electoral [Electoral map]*.

<https://infoelectoral.interior.gob.es/opencms/es/elecciones-celebradas/resultados-electorales/>

Intervención General de la Administración del Estado (IGAE) (n.d.). *Personal al servicio del Sector Público Estatal [Personnel at the service of the State Public Sector]*.

Retrieved January 5, 2023, from <https://www.igae.pap.hacienda.gob.es/sitios/igae/es-ES/contabilidad/informacioneconomica/paginas/personalsectorpublicoestatal.aspx>

Jerez Darias, L. M., Martín Martín, V. O., & Pérez González, R. (2012). Aproximación a una geografía de la corrupción urbanística en España [Approach to a geography of corruption in town planning in Spain]. *Ería: Revista Cuatrimestral de Geografía*, 87, 5–18. <https://reunido.uniovi.es/index.php/RCG/article/view/9654>

Jiménez, F. (2009). Building boom and political corruption in Spain. *South European Society and Politics*, 14(3), 255–272. <https://doi.org/10.1080/13608740903356541>

Jiménez, F. (2014). Corrupción urbanística [Corruption in town planning]. *Eunomía. Revista en Cultura de la Legalidad*, 6, 217–223. <https://e-revistas.uc3m.es/index.php/EUNOM/issue/view/377>

Jiménez, F. (2016). La corrupción y sus dimensiones [Corruption and its dimensions]. In F. J. Llera Ramo (Ed.), *Desafección política y regeneración democrática en la España actual: diagnósticos y propuestas*. Centro de Estudios Políticos y Constitucionales.

- Jiménez, F., Villoria, M., & García-Quesada, M. (2012). Badly designed institutions, informal rules and perverse incentives: Local government corruption in Spain. *Lex Localis*, 10(4), 363–381. [https://doi.org/10.4335/10.4.363-381\(2012\)](https://doi.org/10.4335/10.4.363-381(2012))
- Jiménez, J. L., & García, C. (2018). Does local public corruption generate partisan effects on polls? *Crime, Law and Social Change*, 69(1), 3–23. <https://doi.org/10.1007/s10611-016-9671-1>
- Jiménez, J. L., Nombela, G., & Suárez-Alemán, A. (2017). Tourist municipalities and local political corruption. *International Journal of Tourism Research*, 19(5), 515–523. <https://doi.org/10.1002/jtr.2124>
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2011). The Worldwide Governance Indicators: Methodology and Analytical Issues. *Hague Journal on the Rule of Law*, 3(02), 220–246. <https://doi.org/10.1017/S1876404511200046>
- Kickert, W. (2011). Distinctiveness of administrative reform in Greece, Italy, Portugal and Spain. Common characteristics of context, administrations and reforms. *Public Administration*, 89(3), 801–818. <https://doi.org/10.1111/j.1467-9299.2010.01862.x>
- Klašnja, M. (2015). Corruption and the Incumbency Disadvantage: Theory and Evidence. *The Journal of Politics*, 77(4), 928–942. <https://doi.org/10.1086/682913>
- Klitgaard, R. E. (1988). *Controlling corruption*. University of California Press.
- Knott, J. H., & Miller, G. J. (2006). Social welfare, corruption and credibility. *Public Management Review*, 8(2), 227–252. <https://doi.org/10.1080/14719030600587455>
- Korosteleva, J., Mickiewicz, T., & Stępień-Baig, P. (2020). It takes two to tango: complementarity of bonding and bridging trust in alleviating corruption in cities. *Regional Studies*, 54(6), 851–862. <https://doi.org/10.1080/00343404.2019.1652894>

- Kraay, A., & Kaufmann, D. (2002). Growth Without Governance. *Policy Research Working Papers*, 2928. <https://doi.org/10.1596/1813-9450-2928>
- Kurer, O. (2015). Definitions of Corruption. In P. M. Heywood (Ed.), *Routledge Handbook of Political Corruption*. Routledge.
- Kurtz, M. J., & Schrank, A. (2007). Growth and Governance: Models, Measures, and Mechanisms. *The Journal of Politics*, 69(2), 538–554.
<https://doi.org/10.1111/j.1468-2508.2007.00549.x>
- La Razón (2019, July 22). *Absuelven al exalcalde de Alicante Luis Díaz Alperi de tres delitos fiscales y un delito de cohecho [The former mayor of Alicante Luis Díaz Alperi is absolved of three tax offenses and a bribery offense]*.
<https://www.larazon.es/local/comunidad-valenciana/absuelven-al-exalcalde-de-alicante-luis-diaz-alperi-de-tres-delitos-fiscales-y-un-delito-de-cohecho-JE24316609/>
- Lapuente, V., & van de Walle, S. (2020). The effects of new public management on the quality of public services. *Governance*, 33(3), 461–475.
<https://doi.org/10.1111/gove.12502>
- Ley 40/2015, de 1 de octubre, de Régimen Jurídico del Sector Público [Law 40/2015, of October 1, on the Legal Regime of the Public Sector]* (n.d.). Retrieved January 5, 2023, from <https://www.boe.es/buscar/act.php?lang=en&id=BOE-A-2015-10566&tn=&p=>
- Ley Orgánica 10/1995, de 23 de noviembre, del Código Penal Orgánico [Law 10/1995, of November 23, of the Criminal Code]*. (n.d.). Retrieved January 5, 2023, from <https://www.boe.es/buscar/act.php?id=BOE-A-1995-25444>

- Leys, C. (1965). What is The Problem About Corruption? *The Journal of Modern African Studies*, 3(2), 215–230. <https://doi.org/10.1017/S0022278X00023636>
- Loterías y Apuestas del Estado. (n.d.). *Memorias Anuales [Annual Reports]*.
<https://www.sela.es/es/web-corporativa/responsabilidad-social/memoria-anual/memoria-anual>
- Masters, A. B., & Graycar, A. (2016). Making Corruption Disappear in Local Government. *Public Integrity*, 18(1), 42–58. <https://doi.org/10.1080/10999922.2015.1093400>
- Mauro, P. (1995). Corruption and growth. *The Quarterly Journal of Economics*, 110(3), 681–712. <https://doi.org/10.2307/2946696>
- Maxwell, A., & Winters, R. F. (2004). A quarter century of (data on) political corruption. *MPSA Meetings*.
- Meier, K. J., & Holbrook, T. M. (1992). “I Seen My Opportunities and I Took 'Em:” Political Corruption in the American States. *The Journal of Politics*, 54(1), 135–155. <https://doi.org/10.2307/2131647>
- Ministerio de Hacienda y Función Pública (n.d.). *Información del sector público institucional [Information of the institutional public sector]*. Retrieved January 5, 2023, from <https://www.pap.hacienda.gob.es/invente2/PagMenuPrincipalV2.aspx?Entorno=2>
- Ministerio de Hacienda y Función Pública (2022). *Banco de datos [Database]*. Retrieved January 5, 2023, from <http://buscadorcdi.gob.es/Cifra/es/inicio>
- Ministerio de Política Territorial (2022). *Base de datos de Alcaldes y Concejales [Database of Mayors and Councillors]*. http://www.mptfp.es/portal/politica-territorial/local/sistema_de_informacion_local_-SIL-/alcaldes_y_concejales.html

- Ministerio de Transportes, Movilidad y Agenda Urbana (2022). *Publicaciones de construcción de edificios (licencias municipales de obra) [Publication of building construction (municipal building permits)]*. <https://www.mitma.gob.es/informacion-para-el-ciudadano/informacion-estadistica/construccion/construccion-de-edificios/publicaciones-de-construccion-de-edificios-licencias-municipales-de-obra>
- Mo, P. H. (2001). Corruption and Economic Growth. *Journal of Comparative Economics*, 29(1), 66–79. <https://doi.org/10.1006/jcec.2000.1703>
- Mocan, N. (2008). What determines corruption? International evidence from microdata. *Economic Inquiry*, 46(4), 493–510. <https://doi.org/10.1111/j.1465-7295.2007.00107.x>
- Mouritzen, P. E., & Svara, J. H. (2002). *Leadership at the Apex: Politicians and Administrators in Western Local Governments*. University of Pittsburgh Press.
- Mungiu-Pippidi, A. (2013). Controlling Corruption through Collective Action. *Journal of Democracy*, 24(1), 101–115. <https://www.journalofdemocracy.org/articles/controlling-corruption-through-collective-action/>
- Organization for Economic Co-operation and Development (OECD) (1997). *Convention on Combating Bribery of Foreign Public Officials in International Business Transactions*. https://www.oecd.org/daf/anti-bribery/ConvCombatBribery_ENG.pdf
- Organization for Economic Co-operation and Development (OECD) (2022). *OECD Work on Anti-corruption and Integrity*. <https://www.oecd.org/corruption-integrity/about/>

- Olken, B. A. (2006). Corruption and the costs of redistribution: Micro evidence from Indonesia. *Journal of Public Economics*, 90(4–5), 853–870.
<https://doi.org/10.1016/j.jpubeco.2005.05.004>
- Olken, B. A. (2009). Corruption perceptions vs. corruption reality. *Journal of Public Economics*, 93(7–8), 950–964. <https://doi.org/10.1016/j.jpubeco.2009.03.001>
- Osipian, A. L. (2014). Will bribery and fraud converge? Comparative corruption in higher education in Russia and the USA. *Compare: A Journal of Comparative and International Education*, 44(2), 252–273.
<https://doi.org/10.1080/03057925.2012.728374>
- Parrado, S., Dahlström, C., & Lapuente, V. (2018). Mayors and Corruption in Spain: Same Rules, Different Outcomes. *South European Society and Politics*, 23(3), 303–322.
<https://doi.org/10.1080/13608746.2018.1528692>
- Pérez García, F., & Reig Martínez, E. (2020). *Madrid: capitalidad, economía del conocimiento y competencia fiscal [Madrid: capital status, knowledge economy and tax competition]*. Instituto Valenciano de Investigaciones Económicas.
https://www.ivie.es/es_ES/ptproyecto/ivielab-madrid-capitalidad-economia-del-conocimiento-competencia-fiscal/
- Persson, A., Rothstein, B., & Teorell, J. (2013). Why Anticorruption Reforms Fail-Systemic Corruption as a Collective Action Problem. *Governance*, 26(3), 449–471.
<https://doi.org/10.1111/j.1468-0491.2012.01604.x>
- Portal de Transparencia de Correos. (2022). *Efectivos medios anuales [Annual average staff] [Unpublished report]*.

Ramió, C. (2016). *La renovación de la función pública [The renewal of the public function]*. La Catarata.

Razafindrakoto, M., & Roubaud, F. (2010). Are International Databases on Corruption Reliable? A Comparison of Expert Opinion Surveys and Household Surveys in Sub-Saharan Africa. *World Development*, 38(8), 1057–1069.
<https://doi.org/10.1016/j.worlddev.2010.02.004>

Reinikka, R., & Svensson, J. (2004). Local Capture: Evidence from a Central Government Transfer Program in Uganda. *The Quarterly Journal of Economics*, 119(2), 679–705.
<https://doi.org/10.1162/0033553041382120>

Rocasalva, A. (2020, May 27). Sant Cugat destapa irregularidades en la grúa municipal en anteriores alcaldías [Sant Cugat uncovers irregularities in the municipal crane in previous mayoralities]. *El Periódico*.
<https://www.elperiodico.com/es/sociedad/20200527/sant-cugat-entrega-a-fiscalia-documentacion-sobre-irregularidades-de-la-grua-municipal-en-tiempos-del-pdecat-7964978>

Rose-Ackerman, S. (1975). The economics of corruption. *Journal of Public Economics*, 4, 187–203.

Rose-Ackerman, S., & Palifka, and B. J. (2016). *Corruption and government: causes, consequences, and reform*. Cambridge University Press.

Rothstein, B. (1998). *Just institutions matter: the moral and political logic of the universal welfare state*. Cambridge University Press.

Rothstein, B., & Uslaner, E. M. (2005). All for All: Equality, Corruption, and Social Trust. *World Politics*, 58(1), 41–72. <https://doi.org/10.1353/wp.2006.0022>

SAN 2467/2018. Audiencia Nacional. Sala de lo Penal [SAN 2467/2018. National Court. Criminal Chamber] (2018). <https://www.poderjudicial.es/search/indexAN.jsp>

Sánchez Morón, M. (2015). La Regulación del Sector Público Institucional en el Proyecto de Ley de Régimen Jurídico del Sector Público [The Regulation of the Institutional Public Sector in the Draft Law on the Legal Regime of the Public Sector]. *Documentación Administrativa*, 2.

<https://revistasonline.inap.es/index.php/DA/article/download/10261/10757>

Sánchez, N. (2019, September 8). La herencia de Gil aún asfixia a Marbella [Gil's inheritance still suffocates Marbella]. *El País*.

https://elpais.com/politica/2019/09/07/actualidad/1567882629_483946.html

SAP MA 9/2017. Audiencia Provincial de Málaga [SAP MA 9/2017. Provincial Court of Málaga] (2017). <https://www.poderjudicial.es/search/indexAN.jsp#>

Schlesinger, T., & Meier, K. J. (2017). Variations in corruption among the American states. In A. J. Heidenheimer, & M. Johnston, *Political Corruption* (3rd ed., pp. 627–644). Routledge.

Schopf, J. C. (2011). Following the Money to Determine the Effects of Democracy on Corruption: The Case of Korea. *Journal of East Asian Studies*, 11(1), 1–39.

<https://doi.org/10.1017/S1598240800006937>

Senado de España. (n.d.). *Administración autonómica y regional. Dossier [Regional and autonomic administration]*.

https://www.senado.es/web/conocersenado/biblioteca/dossieresareastematicas/detalle_dossier/index.html?id=DOSSIER_CCAA1andparte=CCAA1_PLANES

Shleifer, A., & Vishny, R. W. (1993). Corruption. *The Quarterly Journal of Economics*, 108(3), 599–617. <https://doi.org/10.2307/2118402>

Soria, J. L. (1992, February 15). Jesús Gil presenta en Marbella el GIL, su partido político [Jesús Gil presents the GIL in Marbella, his political party]. *El País*.
https://elpais.com/diario/1992/02/15/espana/698108425_850215.html

STS 1229/2016. Tribunal Supremo. Sala de lo Penal (2016) [STS 1229/2016. Supreme Court. Criminal Chamber]. <https://www.poderjudicial.es/search/indexAN.jsp>

The World Bank (2022). *Data. CPIA transparency, accountability, and corruption in the public sector rating (1=low to 6=high)*.
<https://data.worldbank.org/indicator/IQ.CPA.TRAN.XQ>

Transparency International. (n.d.). *What is corruption?* . Retrieved January 5, 2023, from
<https://www.transparency.org/en/what-is-corruption>

Transparency International. (2022). *Corruption Perception Index 2021*.
<https://www.transparency.org/en/cpi>

United Nations Development Programme (UNDP) (2008). *A Users' Guide to Measuring Corruption*. www.undp.org/oslocentreoslo.governance.centre@undp.org

United Nations (UN) (2022). *UNCAC at 20: Uniting the World against Corruption*.
<https://www.un.org/en/observances/anti-corruption-day>

United Nations (UN) (2004). *United Nations Convention Against Corruption*.
https://www.unodc.org/documents/treaties/UNCAC/Publications/Convention/08-50026_E.pdf

United Nations (UN) (2022). *Make the SDGS a reality*. <https://sdgs.un.org/>

Vallespín, I. (2019, June 18). La sombra de la corrupción fulmina a JxCat en Sant Cugat

[The shadow of corruption strikes down JxCat in Sant Cugat]. *El País*.

https://elpais.com/ccaa/2019/06/17/catalunya/1560790507_585203.html

Villoria, M. (2018). La corrupción en España: ¿qué ha pasado durante la crisis? [Corruption

in Spain: what happened during the crisis?]. In B. de Riquer i Permanyer, J. L., Pérez

Francesch, M. G., Rubí i Casals, L. F., Toledano González, & O. Luján Feliu (Dir.),

La corrupción política en la España contemporánea. Un enfoque interdisciplinar

(pp. 459–482). Marcial Pons.

Villoria, M., & Jiménez, F. (2012). La corrupción en España (2004-2010): Datos,

percepción y efectos [Corruption in Spain (2004-2010): Data, perceptions and

effects]. *Revista Española de Investigaciones Sociológicas*, 138, 109–134.

<https://doi.org/10.5477/cis/reis.138.109>

Villoria, M., van Ryzin, G. G., & Lavena, C. F. (2012). Social and Political Consequences

of Administrative Corruption: A Study of Public Perceptions in Spain. *Public*

Administration Review, 73(1), 85–94. <https://doi.org/10.1111/j.1540->

[6210.2012.02613.x](https://doi.org/10.1111/j.1540-6210.2012.02613.x)

Wraith, R., & Simpkins, E. (1963). *Corruption in Developing Countries*. Allen & Unwin.

Appendix.

Variables of the Dataset

Variable	Kind of variable	Labels	Definition
Resolution number	Nominal		Number assigned by the CENDOJ to the judicial resolution, called Roj in the CENDOJ database. It includes the kind of resolution, the judicial body that issued the resolution, the year of the resolution and its number in relation to all the resolutions issued during that year by the corresponding judicial body.
Date	Ordinal		Date when the judgement was issued.
Case name	Nominal		Case name included only in the judicial resolution of relevant cases that received a specific name in the judicial procedure or in press coverage.
Previous judicial resolution	Nominal		Indicates for each judicial case the resolution number (defined in Resolution number) of the previous judgements to the final one, in case there is any.
Involved administration	Nominal	City council District council Grouping of municipalities	Administration or entity where the corrupt activities took place.

Variable	Kind of variable	Labels	Definition
		Insular government	
		Local criminal court	
		Provincial commercial chamber	
		Provincial government	
		Public consortium	
		Regional government	
		Regional legislative chamber	
		State government. Civil Guard	
		State government. National Police	
		State government. Other areas	
		University	
State competence	Dummy		Competence of the involved administration or entity in the whole state.
		Yes	Competence in the whole state.
		No	Only regional or local competence.
Autonomous community	Nominal		Autonomous community of the competence of the involved administration or entity or within which its territory of competence is included, only if it is not a body with state competence.

Variable	Kind of variable	Labels	Definition
Province	Nominal		Province of the competence of the involved administration or entity or within which its territory of competence is included, only if it is not a body with state or regional competence.
Municipality	Nominal		Municipality of the competence of the involved administration or entity, only if it is a body with competence just at the local level.
Involved policy area	Nominal	<p>Customs and duty control</p> <p>Gambling</p> <p>Health</p> <p>Post</p> <p>Security</p> <p>Tourism</p> <p>Town planning</p> <p>Treasury</p> <p>Other</p> <p>Missing value, unknown</p>	Involved area within the involved administration or entity grouped by general policy categories.
Kind of public activity			Kind of public activity around which the corrupt activities took place.

Variable	Kind of variable	Labels	Definition
		Economic activity or exploitation licences	
		Fines and other pecuniary sanctions	
		Inspection	
		Public appointments	
		Public procurement for goods supply	
		Public procurement for other services	
		Public procurement for public services and public works	
		Public procurement for public works	
		Public subsidies and grants	
		Urbanistic licences and urban qualifications	
		Urbanistic licences and urban qualifications and public procurement for public works	
		Others	
		Several activities	

Variable	Kind of variable	Labels	Definition
New Public Management entity	No	Public company	Involvement in the corruption case of a public entity related to the New Public Management administrative reforms (see definition in the Literature Review section of Chapter 4).
		Public company and public foundation	
		Public consortium	
		Public foundation	
		Public foundation and public consortium	
		Public institute and public foundation	
		Public institute or agency	
Intervention of control organisms or responsible person		Court of Auditors	
		Elected representatives	
		Elected representatives and municipal secretary	

Variable	Kind of variable	Labels	Definition
		Elected representatives and press	
		Inspection	
		Inspection and Court of Auditors	
		Inspection and municipal secretary	
		Inspector secretary	
		Inspection and regional judicial commission	
		Legal area	
		Municipal secretary	
		Municipal secretary and other	
		Peers of the condemned	
		Regional court of auditors and inspection	
		Superior entity	
		Superior entity and court of auditors	
		Superior entity and inspection	
		Superior responsible	
		Others	
		None	

Variable	Kind of variable	Labels	Definition
Private subjects involved	Nominal	<p>Companies and political party</p> <p>Individual and private company</p> <p>Individual subjects</p> <p>Individual, companies and political party</p> <p>Individuals and private associations</p> <p>Private company</p> <p>Several kinds of private subjects</p> <p>There are not</p>	Presence in the corruption case of any private subject.
Period, initial	Ordinal		Initial moment of the period during which the felonies committed took place as detailed as possible considering the information included in the judgement.
Period, final	Ordinal		Final moment of the period during which the felonies committed took place as detailed as possible considering the information included in the judgement.
Gender of the convicted person	Dummy	<p>Female</p> <p>Male</p>	Gender of the convicted person.
Position of the convicted person	Nominal		Position of the convicted person in the administration grouped by general categories.

Variable	Kind of variable	Labels	Definition
		City Councillor or Deputy Mayor	
		City Mayor	Includes temporary City Mayor and City Mayor of small rural towns (<i>Alcalde pedáneo</i> , in Spanish).
		District Councillor	
		District Mayor	
		Manager or executive director	
		Member of the regional Parliament	
		Municipal architect or building engineer	
		Municipal inspector	
		Municipal secretary	
		Municipal secretary-inspector	
		Police and security forces	
		Regional Minister	
		Regional President	
		Other administrative positions	
		Other political positions	
		Other	
Kind of position	Nominal		Kind of position of the convicted person in relation to its political or administrative procedures of designation.

Variable	Kind of variable	Labels	Definition
		Administrative position	Administrative positions that do not depend on the party in power in the corresponding administration but on meritocratic procedures of designation.
		Political position	Political positions that depend on the party in power in the corresponding administration.
		Unclear	Cases in which the position of the convicted person cannot be clearly determined as political nor administrative considering the information included in the judgement.
Breach of official duty	Discrete		Number of breach of official duty felonies for which the person is convicted.
Breach of official duty in town planning	Discrete		Number of breach of official duty in town planning felonies for which the person is convicted.
Embezzlement	Discrete		Number of embezzlement felonies for which the person is convicted.
Bribery	Discrete		Number of bribery felonies for which the person is convicted.
Forgery of official document	Discrete		Number of forgery of official document felonies for which the person is convicted.
Disloyalty in the custody of documents	Discrete		Number of disloyalty in the custody of documents felonies for which the person is convicted.
Disclosing secrets	Discrete		Number of disclosing secrets felonies for which the person is convicted.
Prohibited negotiations for civil servants	Discrete		Number of prohibited negotiations for civil servants felonies for which the person is convicted.

Variable	Kind of variable	Labels	Definition
Fraud and unlawful taxation	Discrete		Number of frauds of authority or public officer felonies for which the person is convicted.
Influence peddling	Discrete		Number of influence peddling felonies for which the person is convicted.
Other felonies against the territory	Discrete		Number of other felonies against the territory for which the person is convicted.
Forgery of private document	Discrete		Number of forgeries of private documents felonies for which the person is convicted.
Special disqualification	Continuous		Years of disqualification for the public responsibilities established in the sentence (as defined in art. 42 of the Spanish Criminal Code, <i>Ley Orgánica 10/1995...</i> , n.d.).
Absolute disqualification	Continuous		Years of absolute disqualification for all public responsibilities or honours established in the sentence (as defined in art. 41 of the Spanish Criminal Code, <i>Ley Orgánica 10/1995...</i> , n.d.).
Suspension	Continuous		Years of suspension from public employment and office established in the sentence.
Imprisonment	Continuous		Years of imprisonment established in the sentence.
Fine quantity	Continuous		Quantity of the fine established in the sentence.
Fine time	Continuous		Equivalent time for the calculation of the fine established in the sentence.
Seizure	Continuous		Value of the seizure of goods established in the sentence.

Variable	Kind of variable	Labels	Definition
Civil liability	Continuous		Quantity of the civil liability established in the sentence.
Other	Nominal		Other kind of punishments established in the sentence.