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Rethinking Corruption in the Czech Republic: A Mixed-Methods Approach to a Systemic Problem

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Abstract

Systemic corruption is a common term amongst scholars and practitioners, yet there is sparse conceptual agreement and substantive analysis within the discourse. Regardless of the current deficit, there is considerable pioneering space and advantages to contrast against the overwhelming emphasis on individuals. This paper aims to broaden the conceptual scope of systemic corruption research through a pattern-to-process mixedmethods design. The design combines empirical data from the public procurement sector analyzing the spatiotemporal patterns of network behavior with a descriptive account of processes from in-depth interviews. The empirical approach statistically distinguishes the performance differentials of public procurement awards amongst firms that exhibit the characteristics of political influence from those that do not. This paper operationalizes that political influence is corruption when a public official would not have made the same decision without the special consideration of political affiliation, contribution, or network connection. After stripping away explanatory factors for firm competence, the data reveals that firms with influence characteristics win substantially more and more often performing similar work. The usage of geospatial cluster analysis, in conjunction with field interviews, reveals that influence networks forge preferential advantages through political officials and secure repeat wins by engaging with smaller government office sizes outside of densely populated regions. The reoccurring patterns, independent of one specific time or place, suggests characteristics more suitable for the concept of systemic corruption. This framework will be of utility for policymakers to improve their vantage point perspective beyond case-by-case individual instances for sustainable intervention strategies.

Abstrakt: Systemická korupce je běžný vědecký pojem, nicméně chybí shoda ohledně významu tohoto termínu stejně jako důsledná analýza tohoto tématu. Tento nedostatek ve výzkumu představuje prostor pro analýzu tohoto tématu systemické korupce, jež stojí proti směru, který se zaměřuje na jednotlivce. Cílem této práce je rozšíření koncepčního rozsahu výzkumu systemické korupce s využitím "pattern-to-process" smíšených metod. Jádrem metodologie tohoto výzkumu je kombinování empirických dat ze sektoru veřejných zakázek umožňujících analýzu tzv. "spatio-temporal" vzorů síťového chování s popisem procesu díky hloubkovým pohovorům. Výsledky empirického výzkumu dokazují statisticky významný rozdíl mezi výhrami ve veřejných zakázkách firem, které vykazují znaky politického vlivu od těch, jež nikoliv. Tato práce operacionalizuje termín politického vlivu jako korupci, kdy by veřejní úředníci nevykonali stejné rozhodnutí bez speciálního zvážení politického přičlenění, příspěvku nebo síťového napojení. Po izolování vysvětlujících faktorů firemní kompetence data odhalují, že firmy s charakteristikami vlivu vyhrávají významně častěji, stejně tak tyto firmy častěji shodují v typu vykonávané produkce. Užití "geospatial cluster" analýzy ve spojení s výsledky šetření odhaluje vlivové skupiny jako takové, jež upevňují přednostní výhody skrz politické úředníky a zajišťují opakované vyhrávání napojováním se na menší vládní úřady mimo hustě obydlené regiony. Opakující se vzory v analýze nezávislé na specifickém čase či místě poukazují na existenci charakteristik, které jsou vice vhodné pro koncept systemické korupce. Výsledky tohoto výzkumu mohou sloužit k tvořbě udržitelné intervenční strategie a být využitelné pro politiky, kteří se snaží správně pochopit typ současné korupce nad rámec řešení jednotlivých případů.

Keywords

systemic corruption, public procurement, systems theory, mixed-methods

Klíčová slova

systemicka korupce, verejne zakazky, systemova teorie, smisene metody

Length of the work: 123,958 characters

Declaration

- 1. I hereby declare that I have compiled this thesis using the listed literature and resources only.
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In Prague on

Steven Gawthorpe

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Chapter 1: Introduction

Academic researchers emphasize public policy as a multi-disciplinary and problem-solving discipline. Within the problem space of corruption, both policymakers and practitioners exhibit marginal interdisciplinary perspective as well as narrow scope of problem criteria. Social science theories suggest explanations for why various approaches may or may not be causal features of corruption.

A common argument amongst scholars

purports that corruption results only in the public and private spheres (See Lennerfors 2009). Some contend that the state behaves as a predatory agent through the creation of rent-generating schemes (See Acemoglu and Verdier 2000; Krueger 1974; Tanzi and Davoodi 1997; Treisman 2000; Tullock 1996). Others contend that instances of state capture transpire from predatory behavior of private firms (Hellman, Jones, & Kaufmann, 2000). The Business Environment and Enterprise Performance Survey (BEEPS), developed by the European Bank for Reconstruction and Development and the World Bank, produced indicators aimed at instances of state capture with samples that included the Czech Republic. Another tradition of thinking about the causes of corruption explains a state trapped amongst corrupt networks as a result of exceedingly strong and predatory behavior of political parties who decide on filling all major positions in government

(Pizorno, 1971). A bulk of the research on corruption treats the nature of public and private organizations as something clearly divisible, delineated, and static in the ways corrupt transactions transpire.

The road to hell is however paved with good intentions, and the ubiquitous usage of 'best practices' in anti-corruption programs overlooks the premise that problems are ambiguous, problem criterion are volatile change and thus policy strategies might be ineffective or have even reverse effects. There is an underdevelopment of empirical testing for new conceptualizations of corruption. "Virtually all definitions of corruption contrast the abuse of public position for private advantage" (Sampson, 2010) but very view sources outline the challenge of systemic corruption. As a policy problem, corruption suffers from overt saturation of standardized problem definitions leading to error of the third type: we are attempting to solve the wrong problem.

To push this debate forward, it is important to examine alternative perspectives beyond ones treating public-private bounds as mutually exclusive. A good body of literature moves beyond organizations as culpable for corruption throughout society and focuses instead on the prevailing systemic problems (see Caiden and Caiden, 1977; Johnston, 1998; Alam, 1989; Persson, Rothstein, and Teorell, 2013; della Porta and Vannucci, 2012; Stefes, 2007; Frič, 2012; Stefes, 2012). Particular states with a widespread level of dysfunctional institutions give rise to instances where repetitive acts of corruption are the narrative of state and social behavior. Predatory activity by colluding networks frequently extracts state resources at the expense of the public majority. Policy and administrative processes are kept in stasis to prevent alternative

participatory outlets with the government. This restriction cultivates a discordant relationship between state and society to which Caiden and Caiden (1977) refer to as an enveloping standard of "social anomie" in the population.

It is important to find out who in this corrupt triangle of bureaucrats, politicians, and private firms is in control. In the Czech Republic, it is obvious that the individual at the peak of corruption triangles create different coalitions and corruption chains. Research based on social elites finds that the power center of the Czech Republic is in conjunction with politicians and officials (Frič and Nekola 2010), who decide which businesses will gain market entry. Andrei Yakovlev (2006) further elaborates that the situation of non-formal submission to private business interests of the state is called "captive business". Business opportunities with the state are secured only through bribing representatives. However, what is true at the national level may not apply at the regional and local. Michal Klima (2013) discusses the concept of clientelist parties at the regional level, in full knowledge of a regional bosses (godparents), who are also both entrepreneurs and leaders of the party.

1.1 Motivation and Research Questions

The aim of this project seeks to determine whether there is a "systemic corruption" phenomenon in the Czech Republic, how big it is, the particular character, and what configuration of forces in a corrupt triangle operate at different levels of the government. Are they open or closed and what other players are drawn into the protection of corrupt transactions performing acts of corruption with impunity? This analysis places the role of political influence and firm performance at the forefront. Political parties in the Czech

Republic today publicly admitted that corruption scandals for their members are a general problem from political party financing. I ask what role political influence—and its various manifestations—plays in a corrupt system and what motivates them to participate within such a system. By researching some of the patterns of behavior within the sector, I hope to identify opportunities for specific forms of intervention (policy alternatives) or identifying some weaknesses with current policies and processes. The fundamental questions I seek to answer for this research endeavor are the following:

- 1. What are the conceptual differences between individual corruption and systemic corruption? How will this improve problem identification for policymakers?
- 2. To what extent and by which characteristics is there evidence of systemic corruption in the Czech Republic? What are the patterns and what are the processes?
- 3. Does adverse political influence create preferential advantages for some groups over others and are these patterns consistent with the conceptual attributes of a systemic problem?

Corruption is a multifaceted problem so its measurement should take a multifaceted approach. In the first phase, a quantitative statistical analysis will two statistical tests to identify instances within a proposed theory of systemic corruption and assess to what patterns will reveal new variables for appropriate identification for a systemic problem. In the second, qualitative phase of the study, semi-structured interviews will be collected from 17 participants with direct involvement in the public procurement sector of the Czech Republic aid in saturating the findings from the quantitative analysis. In this

exploratory qualitative follow-up, I seek to saturate the statistical findings for the systemic patterns of corruption with key figures that have vested interests in the public procurement sector of the Czech Republic.

According to all available resources, there is no research that has conducted a mixed-methods approach for systemic corruption. There is a need to refine how and what systems-level affects are present in public procurement as a policy sector and corruption as a policy problem. This problem of accurately defining the problem can be personified by the adage: "Better the devil you know than the devil you don't." Thus, illuminating the extent of the problem will provide additional insight to the literature on corruption in public policy and would progress the exploration of the problem in new directions.

1.2 Public Procurement as a Case

The public procurement sector is the epicenter of multiple stakeholders jockeying for a stake in political objectives, budgetary decision, and so forth. While public procurement cannot encapsulate the representative nature of all social life, from a research standpoint, however, there are very few areas with the rapidity of inter-actor exchange between politicians, entrepreneurs, NGOs, lobbyists, international organizations, informal interest groups, and local community initiatives.

For better or for worse, the private sector produces a staggering level of public goods and services on behalf of the government. As a thought experiment, visualize your current surrounding and consider all the evidence of public goods and services surrounding physical location. The buttons on the street walk, the paint and reflectors in the road, the light bulbs and wiring in the street lamps are examples of contracting out. If

you are in a non-urban area then the satellite navigation services and mobile tower relays or digital reception areas are present. The dominating presence of public procurement represents more than just commercial items or services, it represents our health and safety, the capacity to mitigate diseases, maintain the security and future well-being of ourselves and families. Public procurement is the manifestation of what we demand from our government and the tangible outcomes of public policy. Worldwide, societies increasingly demand more from their governments at a pace by which government cannot produce on its own. Our contemporary strategies in governance to effectively respond to these demands is as much extraordinary as it is bewildering. It is beyond any one individual to possess a comprehension of all the interactions and processes involved for procuring all the public goods and services within any society. Our current governance framework is historically without precedent. For all the sophistication of the modern governance processes there are deeply concerning elements at play regarding accountability measures together with competently identifying responsible stakeholders in the landscape.

1.3 Research Overview

The rest of this paper is organized as follows: Chapter two discusses some background information for the public procurement sector and Czech Republic as a case of analysis. Chapter three covers the literature on systemic corruption and a conceptual framework for the theory is developed. Chapter four outlines the mixed-methods strategy as well as the independent stages of analysis for the quantitative section and qualitative stage. Chapter five provides a summary of the research findings from the methodology

and how these findings sufficiently answer the research questions motivating this paper.

Chapter six concludes with important aspects for future policy research and investigation into the systemic corruption phenomenon.

Chapter 2: The Institutional Landscape of Public Procurement

One might ask what merits specific attention to public procurement sector when seeking explanations into the nature of corruption? The public procurement sector is the crossroads of a superhighway of interacting forces with a multitude of diverging interests and agendas operating from the highest national level down to the smallest municipal level. Modern forms of governance continue to change at rates without precedence crosscutting far ranging aspects of the state. Public procurement serves as the epicenter of multiple stakeholders jockeying for a stake in political objectives, budgetary decisions, and access to state resources. Government expenditures world-wide represent roughly 29% of all government expenditures through public procurement, while the Czech Republic spent 34% of government expenditures and 14.4% of its GDP in 2013 (OECD, 2013).

With the growing ideological demand for increased privatization along and decentralization, there is a constraint to maintain quality provisioning of public goods and services. Keeping up with this trend requires constant improvements in administrative capacity, contracting architecture, and accountability measures. Improved methods of public-private collaboration offer a number of advantages: knowledge specializations, access to resources, and innovative organizational processes (Minow, 2003). The sector of public procurement is a distinctive area within modern governance and provides a useful framework to examine a larger share of the reconfigurations amongst state and non-state organizations. The United Nations Commission on International Trade Law (UNCITRAL) defines public procurement as, "the acquisition of any means of goods,

construction, and services by a procuring entity" (p.5, 2011). It is a process following the entire budget cycle and reflects the tangible choices from policy on what is to be spent, the locality of the purchases, and the delivery by whom.

Collaborative governance rests on the presumption that multiple sectors can contribute an array of technical knowledge towards that would otherwise be impossible if left alone to the state. Oftentimes group members must compromise particular interests for the public objective, but they can leverage formal institutional settings to ensure they are fairly compensated for their participation.

Although history shows that collaboration between the government and private sector is nothing remarkably new (see Hodge & Greve 2007) the scale and scope of reconfigurations through collaborative arrangements challenge the conventional experience of participation between 'public' and 'private' sectors. One could say we still historically lack the relative experience to deal with these changes. The technological and organizational changes offer little historical reference for comparison. Moreover, the velocity of interactor exchange in the public procurement sector is an ongoing challenge. Both the technocratic manifestations and rate of contracting out constrain the identity of problems at stake and press the need for greater research attention. For example, data on effective governance does not exist prior to the 1980s (see Hughes, Joshi, Moyer, Sisk, & Solorzano, 2014) which is in stark contrast to the collection of economic data and worldwide demographic indicators existing for over than a century. With relatively little resources or reference points to inform us it is critical to conceptualize the risks society face. It is critical to emphasize that public procurement is far more complex that the

simple purchasing of goods and services by the government. Moreover, it is equally critical to convey the ways by which political parties and officials change the trajectory of government purchasing. The acquisition of goods and services does not take place within a vacuum, it is part of the prevailing political and institutional environment no different to any other aspect of public policy. Therefore, one cannot explain the logic of government purchasing through technical description of supply-chain management or competitive acquisition strategies but must consider which political forces are at play when judging the final outcome of the process.

The space of public procurement is exceedingly complex and there are a vast number of risk-prone instances within the sector to corruption. To provide clarity into the mechanics of this complex system, the bulk of this chapter concentrates on three conceptual dimensions as problem areas within the sector. An overview of these conceptual areas will be important to understand why corruption can manifest into a systemic problem beyond the fault of any one firm or political official. These conceptual areas will also assist towards explaining how political influence forges network connections to consolidate preferential advantages.

The first section will discuss the garden-variety of problems within the public procurement both in general and within the Czech Republic. The second section will elucidate the means by which inter-exchange between businesses and public officials obscures the organizational roles and boundaries which constrains effective accountability for corrupt instances; The third second highlights the importance to consider that the rules, regulations, and procedures of public procurement are vastly

complex which exacerbates the problem of accountability and constrains identifying the policy areas producing malfeasant behavior. The fourth section emphasizes that all public procurement regimes take place within a political and institutional setting, yet the informal institutional arrangements which abound between the large number of stakeholders and close proximity of public and private interaction are often overlooked. These four areas paint the backdrop for this paper to demonstrate that a distinctive system is at play, one that corruption definitions often misrepresent within the scope of a social system.

2.1 What are the Costs of Corruption in Public Procurement?

Perhaps one of the most obvious consequences of corruption in the procurement sector is the waste of public resources. "Pork-Barrel" projects are the common terminology to describe wasted appropriations to curry voting favor with local politicians. The examples of such abuse abound with bridges, highways, and industrial parks. One can determine evidence for the disinterest to produce long-term public value in these larger physical works projects by examining which specific public financial areas produce these works. Tanzi and Davoodi (1997) empirically demonstrate that corruption increases public investment but reduces productivity and lowers expenditures directed at operations and maintenance of projects. The intention is producing the façade of public value to a constituency with the underlying interest to create the opportunity where corrupt officials can siphon public resources through short-cuts on quality materials or technical oversight and engineering procedures in an effort to secure private payments. Common examples of wasted projects are the many "bridges to nowhere" whereby

construction of bridges exists in areas with low strategic value or population density. Many of these bridges exist in a derelict state violating safety standards. These capital-intensive projects are usually attractive to private vendors as the project's magnitude allows for limited competition and greater economic rent and the value of a public project or service does not achieve its intended social benefit when vital resources are mismanaged, substituted, or even stolen. The Construction Sector Transparency Initiative (COST, 2012) estimates that the public's investment for public procurement incur losses of between 10-30% through mismanagement and corruption.

Corruption in public procurement has a significant impact on the distribution of public expenditures due to the ease for theft in capital-intensive public works projects. Effective public financial distribution is critical for both correcting negative externalities and maintaining quality social program and policy efforts. Mauro (1998) concludes that increases in corruption correspond with decreases in health and education spending as a percentage of GDP. Delavallade (2006) empirically shows that corruption reduces expenditures to areas of social protection and increases expenditures to military defense purchasing and energy extraction. In countries with weak institutional oversight mechanisms and auditing prescriptions, highly influential elite officials use their elevated position to secure high-profile contracted public works projects and bypass preestablished budgetary program goals. It is not uncommon for elites to justify the misdirection of budgets by inflating national instances of "emergency" or "security" circumstances.

Public procurement in the Czech Republic is highly susceptible to abuses in capital-intensive works projects relative to other European Union countries. There is a deficit in comparable public infrastructure quality with the EU due to the legacy of central planning resulting in greater external production, through private contracting out, over in-house production through public sector production (Pavel, 2012). The privatization process for post-communist states sought to use tendering to 'loosen' its grip on key state-owned industries (Carayannis & Popescu, 2005). This directly influences the overall volume and type of expenditures for private contracting. Public works expenditures in the Czech Republic have shifted to close the infrastructure gap with the rest of Western Europe, approximately 4.6% of GDP compared with 2.6% on average EU (ibid, 2012).

High-profile construction projects possess a gravity for corruption. In recent years, the largest municipal project of Prague, the Blanka Tunnel, is emblematic of the general characteristics with corruption in construction (Gawthorpe, 2014). Facing allegations of bid rigging and collusion, the tunnel collapsed several times from neglecting resources to ensure engineering safeguards and the city of Prague mismanaged the budgetary projections by 100% resulting in a 503 million USD bill to tax payers (Radio Prague, 2011).

Corruption in procurement produces significant waste in public financial resources but the ramifications to market efficiency are equally severe. A lack of participation amongst businesses can have a detrimental effect on price stability. As of 2012, the average bid number was 3.7 with the EU average averaging 5.4 (Pavel, 2012).

A study conducted by Pavel and Sičáková-Beblavá (2013), demonstrated that having as little as one additional contract per bid may yield a 33% improvement in price and that improving procurement efficiency by 10% and would reduce the structural finance debt by 50%. The opportunity for improvement is high given the low number of bidders. Electronic tendering is supposed to encourage participation by off-setting the financial costs of submitting bids and finding government opportunities. Yet, participation is comparatively low compared to other OECD countries.

2.2 Obscure Boundaries in Organizational Roles

Within the need to accommodate governance objectives, there are a vast number of manifestations for public and private organizational overlap. The modes of interaction within public procurement abound: public-private partnerships, state-owned and municipal owned enterprises, co-operative management, joint-entrepreneurial ventures, franchising, vertical integration, leasing, and government contracting (Baru & Nunde, 2008). A number of authors cite that structural complexity in the arrangements of modern governance create a problem where public and private sector activity intersects making each specific organizational contribution "blurry" (see Stoker, 1998; Baru & Nundy, 2008; Ansell & Gash, 2008). Since collaborative governance requires the public sector to forgo a portion of its discretion to produce public goods, non-state actors are assuming organizational responsibilities that are not conventionally found in a "traditional" market. The acquisition of goods and services through public procurement, in contrast, derive from a central authority which distances the conventional relationship between buyer and seller, since the state is the primary purchaser not individuals.

2.2.1 Risks to Corruption

This conceptual area of organizational blur within public procurement is important for a number of reasons for corruption risk. First, the multiple overlap of interests presents a major challenge for civil society and regulatory authorities to effectively scrutinize malfeasance. The basis of corruption definitions rests on the clarity of distinctive public and private organizational or individual spheres. Within the Czech Republic, there is a serious lack of legal capacity to address beneficial ownership within the state. This prevents a hazard for attenuating the conflict of interests with political persons holding financial stake in a private firm fulfilling a public procurement tender. A report by Bouda, Deščíková, Fadrný and Filipcová (2013) calculated the net advantage for anonymous companies from 2008-2013 competing on public procurement contracts and EU subsidies to more than CZK 200 billion (or 9 billion USD). Even more problematic is the area of state-owned enterprises where business practices do not require direct supervision of ministries to the same capacity of other government bodies, yet are eligible for procurement competition the same as any other private business and routinely exert influence to evade legislative regulation and sanction from prosecuting authorities (ibid, 2013). From the research in this paper, there is no clear evidence as to the exact number of municipal-owned enterprises, thus compounding the dilemma of organizational blur.

Second, as the government increases the delegation of authority to the private sector it correspondently increases its dependence on the technical expertise of the private sector. A lack of technical competence places the civil servant in a precarious position,

one that may be at odds with producing the best public value, as their decisions may be acting on behalf of the private firm's agenda. Classic political science literature portrays the government as an archetypical sage mediator between competing interests within society (see Dahl, 2005). However, civil servants are increasingly reliant on subject-matter expertise in the fields of information technology, medical innovations, and cutting-edge engineering. A regional report by the EU finds that the Czech Republic does not have a certification or accreditation requirement for civil servants in public procurement. As the state delegates authority, it forfeits technical competence. According to research by Ansell & Gash (2008) members outside the public sector are eager to collaborate because the government does not unilaterally dictate decision-making. The lack of competence makes civil servants prone to abuses in adverse influence from the private sector.

The means by which the losses occur represent a systematic change in the devolution of power between actors. Some categorize this shift as a "hollowing out" of the state, whereby the process of decentralization allots government authority on the production and management of public goods and services to non-state actors (Klijn, 2010; Milward & Provan, 2003). The international community additionally participated in the "hollowing out" process as public procurement legislation and public procurement derived almost exclusively from abroad (Grødeland & Aasland, 2011).

As arrangements—outside of traditional contracting—becomes more and more strenuous, the multitude of overlapping roles the level of ambiguity of membership roles becomes blurred. The active participants may actually be different from those that are

formally part of the organization which address the design specifications and technical details for a planned procurement project. Outside consultants, for instance, may not be a part of formal membership, but may have a monumental influence on the technical direction of a collaborative process. In extreme cases, some members may not even themselves be able to map out the exact membership list (Huxham et al., 2000). There may be as many variations in the description as there are members.

The level of influence does not necessarily stem from an organization but may come from a single individual subject-matter expert. One of the advantages of individuals is that they can maintain direct influence on the decision of the group without official membership on a collaborative arrangement. Individuals may have involvement in multiple partnerships that may cause difficulty to interpret their motives and how they are accountable in any particular one (ibid, 2000). Some individuals operate on a consulting basis to which they offer advice to the steering committee on matters such as infrastructure development or agricultural expansion. The need for guidance makes the objectives vulnerable to predatory behavior. This may 'coincidentally' serve as an advantage for an individual with a vested interest in a specific sector. Individuals can move in and out of these arrangements as non-formal members while maintaining the veneer of impartiality for purposes of the collaboration. Such individuals do so under the guise of governance, under the presumption of best practices, and at the expense of the public at-large. Current anti-corruption strategies are ill-equipped to contend with the rapid cross-cutting nature of these relationships without adequate information to reveal conflicts of interest.

2.2.2 One Face Many Guises

When organizations or individuals transverse multiple organizational space, one may attribute this blur as one face with many guises. Hopkin (1999) describes the growing emergence of political parties in Eastern Europe resembling the role of the "business-firm" party, which produces particularistic public goods for quick access for election as a political party. This type of political party resembles the characteristics more of a "firm" than traditional party as it seeks to minimize its bureaucratic components and market itself as a brand to capitalize on trends in public opinion (ibid, 1999). The ANO political party, developed in recent years by Czech billionaire Andrej Babiš, capitalized on current political trends in the Czech Republic. In addition to the political parties, he operated simultaneous roles as a media conglomerate, politician, finance minister, and entrepreneur (Economist, 2013). The line of conflict of interest is difficult to identify when one individual can assume so many roles. Complexity aids in deflecting scrutiny. Multiple guises provide individuals with the capability to artfully coincide individual prosperity with policy initiatives—appearing as spontaneously acts of serendipity. A distrustful public may only have speculation as determining a direct breach of conflict of interest is difficult to identify.

A shift in the specificity of organization membership, coupled by the blurring of boundaries, provides the opportunity for 'scapegoating' (Stoker 1998, p.22). Though joint-ventures, private individuals may afford the opportunity to redirect the blame for policy failures onto the public sector or competing elite officials. Anti-corruption platforms are a major source of this redirection. A political party may incorporate anti-

corruption rhetoric to support its policy platform that pegs opposition parties as proponents of corruption itself. This creates a dilemma where opponents may not agree with corruption yet disagree with anti-corruption practices, a situation Kennedy (1999) describes as "anti-anti-corruption" (p.459). Scapegoating can be strategically used to redirect the public's attention to an easily identifiable sector or organization. This type of strategy is easily deployed when the intentions and members of the network are indeterminable. Opaque organizational roles engender plausible deniability.

2.3 Structural Complexity

The vast regulatory measures and technocratic procedures inherent within procurement make for a complex environment to pinpoint areas adverse to the public interest. A contracting officer must take into consideration national technical specifications of the work in compatibility with EU directives, specify detailed performance objectives of the work (Bovis, 2013) while considering the prevailing environmental circumstances for the place of performance and general market conditions for works, supplies and service categories. A benchmarking report by the World Bank (2017) on public procurement finds that Czech procurement purchasing authorities do not use internal market analysis guidelines for the early market research phase in the procurement cycle and there are no standardized clauses used when awarding a contract. Without the instruments for market analysis, these purchasing authorities do not possess a barometer to discriminate between a competent and incompetent bidder. Of course, there are certainly civil servants with experience to make judgements of competency. However, the World Bank report additionally finds that the Czech Republic does not

require a supplier to post a bond guaranteeing performance the performance to fulfill the contract (ibid, 2017). Firms can potentially go bankrupt halfway through a project leaving the public without a completed works project and the purchasing authority receiving a share of the burden of accountability in the process. Moreover, the Supreme Audit Office (SAO) (one of the primary authorities responsible for addressing regulatory compliance within public procurement) has no enforcement capacity and has limited oversight to range of municipal procuring authorities (Beke & Cardona, 2013). The rules and regulations become even more complex in face of emergency circumstances such as natural disasters, when goods and service delivery cannot wait on lengthy procurement procedures. Not only does this area constrict accountability measures but the limitations to promote transparency hinder authorities to enforce conflicts of interest.

An additional important feature is that relatively few civil servants are in charge of orchestrating an entire market for delivering goods and services. The rate by which state and private entities interact can make for a great challenge to identify potential conflicts of interest through the entanglement of varying actors with diverse interests. Unlike organizations in typical governance scenarios, complexity provides an additional layer to networks for exploitative opportunities.

Finding this "needle in a haystack" requires the assurance of quality information for investigative journalists or various watchdog organizations. A report from Mendes and Fazekas (2017) examines the quality of data EU-wide from 2009-2015 and places the Czech Republic amongst the bottom tier of countries that fail to repair missing values in

the tender data. They argue that complexity in the procurement processes produce challenges to data transparency.

New shifts in governance require a change in the standardization of vocabulary to identify the nature of its participants (Wedel, 2004). Many state-firm affairs are made without public attention or the opportunity for the public to participate. When the rules become obscure and the relationships are so complex that holding one actor responsible becomes untenable then deniability becomes a major advantage under systemic conditions. Conditions pertaining to the manipulation of state-private boundaries insulate networks from sources of conflict of interest and illicit transactions. The collaborative arrangements cater to the complex environments needed by corrupt officials to abuse public resources. Perhaps the most critical factor to consider is how structural complexity contributes to ambiguity.

2.4 Looking Beyond Formal Institutions: the role of informal processes

"I do not know a method to distinguish dirty money and clean money in practice; to do so would mean to cast doubts about the process of small privatization, I think it would not be a good decision"

Václav Klaus Czech Press Agency (CTK) September 27, 1991.

All procurement procedures take place within unique institutional and political contexts. Regardless of all the best practices in procurement regulations and EU directives, all of these rules take on an entirely life of its own when they intermix with the institutional setting of the Czech Republic. If the structural complexity of formal

institutions offers concealment, then the informal system offers sustained coordination. Weakened institutional and regulatory capacity came as a side effect to early privatization. Post-communist states had limited effectiveness at orchestrating the boundaries, expectations, and responsibilities of the public sector and private sector. Informal institutional arrangements filled the void for constraining individual behavior, distributing resources, and sources of information (Grzymala-Busse, 2004, p.6). These dimensions are important means for collusive parties to operate outside the formal system. Public sector officials may decide the fate of positions within particular agencies as well as how power will be distributed. As noted by Sajó (1998), the formally existing decision-making procedures in post-communist countries have been largely replaced by backstage agreements within unofficially operating power networks.

Informal institutional arrangements depend on acts of patronage. Oftentimes loyalty is placed within the network not the organization. Actors cultivate trust within a network by forfeiting a degree of autonomy. Organizational prosperity, within a larger network, may come as an expense for the overall success of the network as a whole. Transaction costs are mitigated under informal institutional settings. This is a critical difference from between organizational behavior in non-systemically corrupt environments.

Political and social arenas can restrict and manipulate areas that are important contexts for collaborative governance. The means of sustained relationships can attribute clientalistic networks as a common thread of restriction. Such networks include political influence in exchange for patronage (Frič, 2011; Krastev, 2002) and are the

administrative means to secure the execution of discretion into the hands of the private sector.

There are a number of authors that empirically identify the relationship between political influence and access to public resources (see Fisman 2001; Faccio 2006; Faccio, Voth & Ferguson, 2008). Kroszner & Stratmann (1998) find that campaign contributions may represent an excellent replacement for bribery as it may allow for legislative access to special interest groups. Firms can circumvent competitive pressure by seeking out political cooperation.

Political parties have typically relied on state subsidies to fuel party financing but multiple changes over the last 10-15 years increasingly strain Czech political parties to diversify their funding resources from sources outside the state and have long historical linkages to industry-specific preferential policies in construction and technology (Simral, 2016). When comparing other countries such as Poland and Slovakia, which distinctly rely on state subsidies, the Czechs are far more prosperous in their ability to garner resources from areas apart from the state and largely with the private sector (ibid, 2016). Political parties have a great deal of power over the direction of budgetary direction for infrastructure works, regulation, and legislative preference. They have overt linkages between the sponsors of political contributions and legislation directly serving their interests. These reciprocal relationships exist independent of economic downturns or market fluctuations and transpire across varying organizational boundaries: trade unions, lobbying firms, industry-specific business, and political parties.

Elite officials often rely on relationships to secure a position or a stake in opportunities. Maintaining such a network overcomes the collective action problems of participating individuals in a group and helps secure returns for larger networks that would otherwise be impossible. This also explains how networks are secured across divergent and unrelated sectors of society.

Within the Czech context, one might ask how influence determines access and exclusion to public resources. Research by (Frič et al., 2010) find social elites at the core of influence coordinating political and private official interests to decide which businesses will gain preferential market access. Securing business opportunities do not primarily rely on bribing as one might expect and what is true for corruption at the national level may not apply at the regional and municipal. Michal Klima (2013) discusses the concept of 'godfathers' (kmotři) serving clientalistic interests of coordinating various actors within society for the purpose of exploiting state resources and often simultaneously fulfilling the entrepreneurial and political party roles. There are 6,249 municipalities (Czech Statistical Office, 2017) which have certain degrees of delegated authority combined with a wide-ranging number of competing political parties. Many 'godfathers' coordinate access at these sub-national levels and the Supreme Auditing Office (SAO) has restricted access to information regarding the financial management of many municipalities (Beke & Cardona, 2013).

2.5 Political and Institutional Landscape: Who is Capturing Whom?

Despite more than twenty years after the early implementation of neo-liberal policies, we continue to see the residual effects of flawed institutional development and

pervasive manifestations of corruption in Czech society. The market-exuberance inspired by political rhetoric has been replaced with deep pessimism after a string of broken promises and lip service from politicians to combat corruption. Corruption has not been a significant social priority until the late stages of economic transformation in 1990's. Evidence strongly suggests that the prevailing animosity towards government and feeling of disenfranchisement is a remnant of the privatization process. A report by Sonnenschein & Ray (2013) finds that 94% of Czech citizens believe there is widespread corruption in government and as of 2012 it was considered to be the highest social priority–even over unemployment.

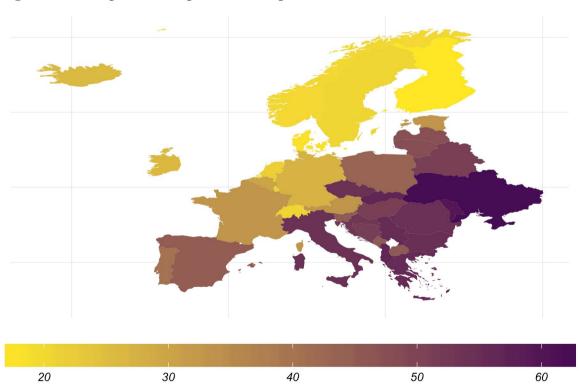


Figure 1: Corruption Perception in Europe

Notes 1: The Bayesian corruption perception index found in the Quality of Governance Basic Data Set

The BPI shows the likelihood that corruption perception will change for the countries in Figure three. The Czech Republic falls into the darker shaded countries that survey respondents perceive that corruption is not likely to change. Perception, alone, cannot articulate the advanced mechanisms of a country. What this figure does provide, however, is the social landscape where citizens expect corruption to transpire.

It is difficult to discern exactly which entity is responsible for the prevailing conditions of corruption. There have been a number of corruption-wide indicators to quantify the problem. Amongst the various indicators, the data on levels of bureaucratic impartiality are an expedient resource for cross-country comparison that is sensitive to the prevailing climate on corruption in the Czech Republic. To gain an understanding about the prevailing levels of impartiality in the Czech Republic we can refer to Figure 2 for an illustrative comparison within Europe. The data used in Figure 2 comes from the Quality of Governance Institute (QoG), which surveys experts within public administration (Dahlström, C., et. al, 2015). I organized the data into quantiles ranging from most partial to most impartial. The impartiality percentile for the Czech Republic ranges amongst the most partial (albeit not the lowest) in the treatment of access to public resources when compared to other countries across Europe. For purposes of analysis, impartiality places a specific role in determining which firm receives the lion's share of award value and success within the public procurement sector.

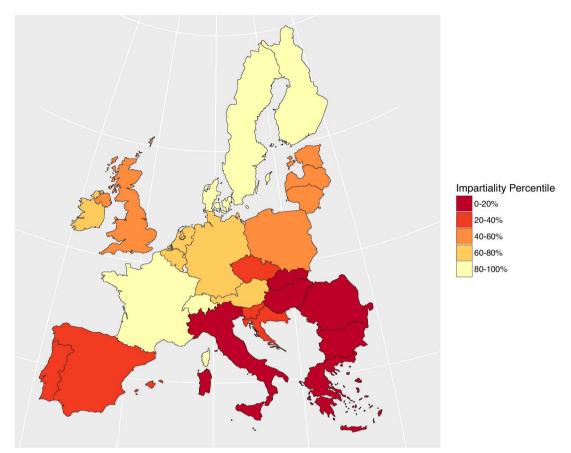
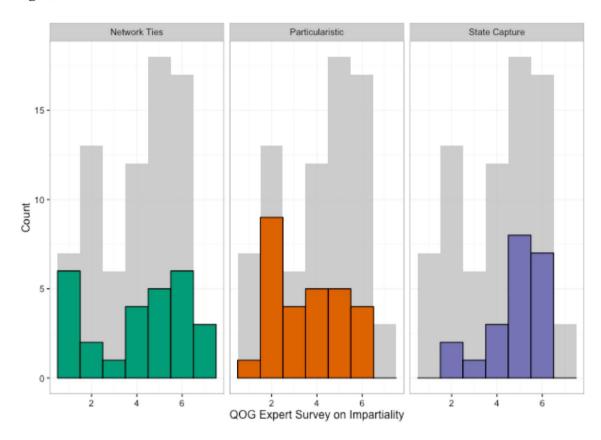


Figure 2: Levels of Impartial Treatment in Europe

Further analysis into the Quality of Governance data illustrates the particular nature of impartiality with respect to the Czech Republic.

- Network ties: civil servants' preferential treatment to personal connections in the private sector
- 2. Particularistic: the intentional favorability of specific groups at the detriment of other social groups
- 3. State Capture: the measure by which private firms' predatory behavior traps public officials into preferential treatment for the private sector

Figure 3



The state capture category holds the lion's share of the respondent's level of abuses with the mean of 4.8 and median of 5. The network ties category is the second most important category with a mean of 4.11 and median of 5. The grey area in the background is the aggregated sum of all the responses from the three categorical question areas, which serves a contrasting summary. The sample is indeed quite low with only 28 observations in 2012. Despite the small sample, the survey provides insight into the prevailing nature of impartiality in the region. The data, albeit, small in terms of sample sizes does not pinpoint one particular area as a driver for corruption. Is it conspiring networks, greedy corporate firms seeking to circumvent the state, or perhaps individuals

forging small kinship ties at the expense of the state? The data alone is sufficient but serves as an example to explain that no one particular area of social life is a driver.

2.6 Conclusion

This section is important to highlight the problems arising when public and private spheres coordinate the delivery of public goods and services. It challenges our understanding of the boundaries between public and private spheres. The international community in the problem space of corruption operates on the assumption that these boundaries are distinctive. When these boundaries prove otherwise, policymakers must go back to the drawing board and assess the nuts and bolts of the organizational, individual, and network behavior which bypass conventional corruption definitions. The following section will highlight that corruption is certainly a predominant problem but in need of refinement as to what type of corruption problem characterizes the public procurement sector in the Czech Republic.

Chapter 3. Literature Review and Conceptual Framework

This section outlines a compilation of the major theoretical contributions on systemic corruption and introduces the conceptual framework used for empirical analysis. First, I will provide an outline of the major theoretical works on systemic corruption. Additional focus will highlight the theoretical works together with the empirical testing of systemic corruption theory. A table will supplement an overview of all the perspectives of the problem. The second part of this chapter discusses consolidates all facets of systems theory with some of the common features within literature on systemic corruption. The final part of this chapter will outline the five propositions of the conceptual model for use within the empirical analysis of this paper.

The problem of systemic corruption is not one of *instance* but of *persistence*. The issue is not that a social violation took place as much as it continues to take place. The fundamental basis as to why persistence is so detrimental is how the problem itself feeds back into society reshaping the rules and structural ways individuals interact with one another. It constrains normative choices by individuals which reinforces a departure away from ideal objectives for state and society. One may consider the problem "systemic" by in the way it manifests as a resilient force against external change.

But what is a system? A system is a set of interrelated component parts. The system is greater than the sum of its parts (Imboden, 2012). Although specific systemic corruption literature is limited in face of other research in the field, systems theory in public policy is quite extensive. Stewart et. al (2001) defines the use of systems analysis for public policy as follows:

"Systemic models imply understandings of process based on interlinkages between system components. These links take the form of flows

(of money, people, or products) which affect levels of key policyrelevant variables. The structure of the system implies the kinds of links
involved - whether they are hierarchical or network-based, or involve
market-type transactions across system boundaries. Systems vary in
their structural characteristics from relatively simple, closed forms, to
more open, complex and dynamic systems" (p.81).

Systems comprise of feedback loops (Meadows, 1998) and perhaps one of the most critical elements of a system is they are purposeful and goal-oriented (Parsons 1965). The next question remains as to where literature on systemic corruption overlaps with the basic premise of systems thinking.

3.1 Literature Review on Systemic Corruption

What do experts mean when they say corruption is systemic? Caiden and Caiden (1977) sought to distinguish systemic corruption from individual corruption by developing a nine-point propositional plan to further the development of hypotheses about the characteristics of systemic corruption. Johnston (2005) diverged away from individual emphasis placing the patterns of interaction between wealth and power at the forefront. He developed one of the few empirical explorations to identify four "syndromes" to capture a general set of characteristics of countries suffer from due to systemic corruption. Stefes (2007) examined systemic corruption in the region of Central

and Eastern European countries. He contextually identified some institutional vulnerability that is indicative to the region from the liberalization process, communist legacy, and prevailing cultural norms. Wedel (2012) discusses the variety of means that public and private overlap involved in systemic corruption which is an essential attribute of its institutionalized and reoccurring behavior. She critiques mainstream approaches to addressing the problem is predicated on the overemphasis of single transaction component of corruption as isolated instances or loopholes in the system. There are comparatively very few definitions for this concept, but Beyerle (2014) possesses perhaps one of the best definitions from the firsthand field-work with civil society defining systemic corruption as,

"a system of abuse of entrusted power for private, collective, or political gain—often involving a complex, intertwined set of relationships, some obvious, others hidden, with established vested interests, that can operate vertically within an institution or horizontally across political, economic, and social spheres in a society or transnationally" (p.25).

Below is a table summary table of the main thematic areas of systemic corruption. Before outlining my conceptual model, I will explicate some of the theoretical concepts from corruption literature. Amongst the prevailing literature on systemic corruption we can conceptually reduce systemic corruption to three distinct points: (i.) the problem core of systemic corruption is one of frequency and reoccurrence; (ii.) networks comprising of individuals and varying organizations are the primary unit of analysis; (iii.) the normative

drivers of partiality reinforce the expectations of access and exclusionary treatment within society.

Author	Partiality of Norms	Networks	Frequency-Duration
Johnston (2005)	Institutions take on many forms	Contextual on various forms of participation in society	NA
Stefes (2012)	Formal/Informal differences in rules	State-Private overlap	NA
Wedel (2012)	Legal corruption serves few at expense of many	Blurry boundaries of expansive networks	Perpetual
Persson, Rothstein (2010) Rothstein (2011)	Importance of informal and formal institutions that inform mutual expectations	Social collective; society at large	Conceptualized systemic corruption as collective action problem. Repeat gam circumstances
Scott (1972)	Gap between formal norms and public values	Network of influence within a Political System	Repetition access and exclusion
Della Porta & Vannucci (2012)	Enforcement; internal sanction; third part enforcement of informal norms	Brokerage; typology of third party enforcers. Partial organizational overlap; diversity of tasks	Repeat experiences of exchange in the "game"
Caiden & Caiden (1977)	Orgs profess a formal code of behavior but adhere to another. Transposes the expected purposes of the org.	The point to be stressed above all is that few corrupt practices can be conducted without collusion.	Reoccurring. One major act insufficient to characterize problem
Alam (1989)	Structural and attitudinal. A principal-agent problem	Particularistic and patronage factors between private and public	Pervasive

Table 1: Contributing Authors to Systemic Corruption Research

3.2 Frequency & Rate of Occurrence

An act within a system is an individual bound by degrees of freedom and capacity to

mediate between individual incentives and external influences of the system. The system is an agency reducer. The social act is to be restricted to:

"the class of acts which involve the co-operation of more than one individual, and whose object...is a social object...The objective of the acts is then found in the life-process of the group, and not in those of the separate individuals alone (Buckley, 1967, p.95)

Many of the authors discuss the notion of recurrence or frequency of corruption in their conceptual framework of the problem to some extent; however, Della Porta and Vannucci (2012) featured this concept front-in-center as part of their foundation for systemic corruption requiring, "the frequency and duration of a corrupt exchange among the actors involved" (p.38). Their view argues that repetition of corrupt actions reduces transaction costs. It enables networks to engage in more complex cooperative processes since actors within a network have trust that corrupt activity will likely transpire. Bardhan (1997) summarizes the relationship with the following expression,

'corruption represents an example of what are called frequency-dependent equilibria, and our expected gain from corruption depends crucially on the number of other people we expect to be corrupt' (p.1331).

This conceptual framework differs from others in number of different ways but most importantly by enlarging corrupt acts beyond that of instances of illicit behavior. Bribery alone, for example, is insufficient to characterize systemic corruption because of the embeddedness of norms and purposeful nature of systems. Systems are purposeful and are conditioned to exhaust all potential acts of exploitation available within the normative conditions of society and structural capacity of networks. As a thought exercise one could

imagine if one could eradicate instances of bribery, would systemic corruption come to an end? No. There is a myriad of means to produce exchange that do not rely on fixed agreement of monetary reward. The schemes of criminal enterprise are many but the system is one.

The frequency of corruption is the core of the problem since the normative drivers that shape institutions, acceptable and unacceptable behavior, and qualification reinforce and are reinforced by regular activity. One may state that the problem is not so much that it happens as much as it continues to happen. Systemic corruption fits the necessary criteria when the role of agency has little to no impact on the overarching social dynamics. Additional criteria require that acts of corrupt exchange are not based exclusively on incidental accounts but regularly occurring patterns of behavior. When social processes accommodate the access for few and exclusion of many, then analyzing corruption at the individual level is no longer sufficient for analysis. This notion entails greater insight into the broader normative and structural drivers that perpetuate the problem.

Once in place, the dynamic of this model blurs causal factors relating to corrupt acts. The aim of this conceptual framework is to describe the dynamic of systemic corruption once established as a system. How this system comes to fruition is a separate task in need of research attention. For purposes of analysis, one may theoretically insist that reoccurring corrupt acts persisting over time have a particular threshold nature which is required to fully develop as a full-fledged systemic problem.

3.3 Partiality of norms

Norms are cultural products including values, customs and traditions that shape an individual's basic knowledge of what others do and what others think they should do. They dictate the extent to which individuals engage, and expect others to engage in corruption (Sandholtz and Taagepera, 2005; Banuri and Eckel, 2012). They work as an informal institution generating incentives and constraints for actors and also shape institutional outcomes (Fjelde and Hegre, 2014). The primary purpose of partiality norms is to maintain control over the access and exclusion of public sources.

While institutions and formal rules are important in understanding constraints on behavior, they represent a sense of permanence (Cairney, 2012) that is at odds with how social behavior reacts within the systemic conditions. Johnston (2012) argues that our myopic understanding of corruption leads to the excessive and continued use of crime-prevention approaches that rely on penalties and law enforcement as the primary mechanisms for reform and contends that "we do not pay sufficient attention to "embeddedness"—to the ways the social, political and economic contexts shape corrupt dealings" (p.476-477). Prevailing partiality of normative behavior depicts a better categorical area of systemic corruption since they may bypass codified restrictions on behavior and may be a driver in "creating their own perception of what they want and how to behave in the landscape they are in" (Teisman and Klijn, 2008, p. 289). Mungiu-Pippidi argues that the root of systemic corruption is a particularistic political culture, which is defined as a system in which the government's treatment of citizens "depends on their status or position in society, and people do not even expect to be treated fairly by the

state; what they expect is similar treatment to everybody with the same status" (2006, p. 82). Normative drivers within society determine who gets what and in which ways. North (2007) discusses the concept of limited access orders where organizational forms and contract enforcement cater to elites that "limited access orders use rents to maintain order and to hold the social order together...[limited access orders] manipulation functions as a as a kind of social equilibrium: all the parts interact to sustain the social order." (p.8).

3.4 Networks as the unit of analysis

Under systemic corruption, agency has comparatively little role in determining the trajectory of a system. Individual actors are indeed crucial within a system; however, the role of agency is less critical. This observation entails that sanction and reward structures targeting individual behavior are likely to have little consequence unless coupled with an auxiliary policy intervention strategy. This explains why prosecuting a key central figure results in another to fulfill the previous role. Individuals cannot guarantee a system of corruption. Agency invokes the notion of control, which is unrealistic when occurring through a system. Moreover, individual incentives are a poor indicator of anticipating corruption in systemic circumstances (Rothstein, 2012) since their behavior is predicated on expectations of what others will do.

Individual corruption is the capacity to initiate corrupt transactions in the absence of the constraints of a system. The bribe is perhaps the crudest mode of exchange in corrupt transactions. The conditions are dependent on instance of time and place within the payout from the opportunistic endeavor. It is a sterile mode of exchange that rarely persists in the absence of prevailing social conditions.

Granovetter (2005) found individuals' economic agency embedded in networks of strong personal relations. In processes of clientelization, the cultivation of personal relationships between traders and customers assumes an equal or higher importance than the economic transactions involved. Economic exchange does not carry forth between strangers but rather by individuals involved in long-term continuing relationships. Frequent exchange forge these relational strengths by which preferential treatment lends itself to the familiar face.

Composition of the network is the appropriate unit of analysis. It is important to understand who should be contacted in order to get things done. One could summarize the relationship with frequency as an instance of organizational and structural boundary spanning and maintenance. The ways by which networks coordinate to circumvent the system depends on the extent the structural areas are suitable to allow for exploitation.

Another distinguishing factor between individual corruption and systemic corruption surround the understanding of the capacity and *control* over corrupt instances. Systems theory argues that individuals cannot control a system only influence a system (See Cairney, 2012; Meadows, 1998). From a more substantive perspective, one cannot rightfully suggest that individuals cannot be part and parcel of a social system if individuals themselves are a primary solution to the problem. If removing an individual permanently ends corruption, then a system of corruption never existed in the first place. If sanction concludes corruption then, the individual was simply part of the system and not the other way around. However, if similar recurring instances of corruption despite sanction there is cause for concern about the existence of a corrupt system.

Configuration of social ties between actors ensures that expectations are secured and that the manifestations of access and exclusion are materialized. Self-organizing networks (Rhodes, 1997) extend the importance beyond individuals or strict divisions of public-private organizations. Relying on influence is important for organizational survival and the government is not the only obstacle (Bozeman, 2004). Firms must also face the ways in which influence materializes through interest groups, political parties, informal networks, and cadres of contractors with established connections and insider knowledge. Sustaining preferential treatment requires cooperation with multiple stakeholders across varying organizational types. Understanding the ways in which networks develop and sustain themselves is often unique to the system. Analyzing the clusters of groups is an important way to understand how networks form to exploit public resources.

3.5 Conceptual Model for Systemic Corruption

The objective of this framework is to consider what the minimal elements are necessary for sustaining a reoccurring pattern of corruption. As a thought exercise one might question if corruption can repeat and reinforce such a pattern if one were to remove one or more of the component parts. The minimalistic framework seeks to define what the most requisite elements are necessary for repeat circumstances that define the systemic nature of corruption. The classification of a 'corrupt system' describes these three major components, their reinforcing interlinkages, and the general dynamic which fulfills the systems' overarching objective. This conceptual framework is the most basic framework necessary for observing cases which are suspected of being systemically

corrupt. Prior to defining the concepts and their interlinkages, I review all of the major literature on systemic corruption and develop a table to align a summary of the arguments and perspectives made on the social problem. Most of the prevailing arguments in the literature supports the requisite framework to capture the essence of what constitutes systemic corruption.

Caiden and Caiden (1977) argue how little the importance is of constraining corruption as an individual problem. Rothstein professes that principal-agent models are riddled with problems of establishing individual incentives when agents must face choices in collective action circumstances. Della Porta et. al (2012) identifies the importance of frequency and duration of corruption acts as a driver for various typologies of corruption. Wedel (2012) contends that legal formulations of corruption are poor institutional solutions to a prevailing problem where organizations use the legal system for abuses and agents can navigate through and in between various organizational contexts to evade accountability. Stefes (2007) argues that post-communist countries crisscross state-society divide to maintain a system of corrupt behavior. Scott (1972) demonstrates how deleterious influence can be within a system and how acts of bribery pale in comparison to how influence exacerbates access and exclusion to individuals within society. Alam (1989) discusses that bribery is not the form of craft in developing societies with systemic corruption, instead patronage kinship ties are the important resource for influence.

With all the authors perspectives on the conceptual nature of systemic corruption there is little theoretical structure to inform empirical testing. To account for this

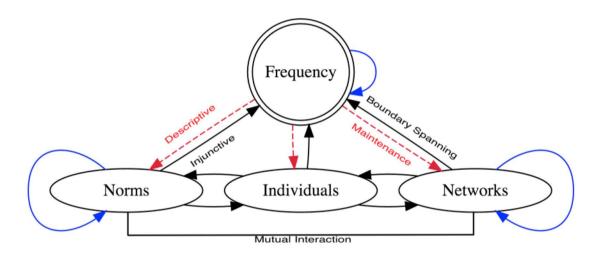
limitation, I develop propositions to test for a system of corruption. Such a model will be useful for two particular reasons: (1) identifying which type of problem corruption indicates within the societal context; (2) diagnostic tests for monitoring and evaluating ongoing policy initiatives; (3) developing and implementing future policy interventions that distinctly differ from those connected with individual cases. No conceptualization of corruption is sufficient to account for every instance or context. The aim is to hone in on what the system actually is, its sources, and how those sources are interconnected. I contend that this conceptualization captures the minimum of categorical areas to sufficiently describe a system of corruption.

The subsequent section of systemic corruption literature details the common elements of a system and the inter-linkages between them. A detailed outline observes what makes systemic corruption different from other forms of corruption commonly defined. This section of the paper provides a more general overview of the concept and a summary of the mechanisms for the system.

- 1. All instances of corruption take place within a system, but not all instances of corruption are systemic.
- 2. The existence of systemic corruption requires the persistent pattern of corrupt actions to reoccur over an extended period of time. The extent to which society and individual experiences are exposed to such actions is what reinforces the self-sustaining capacity of systemic corruption.
- Systemic corruption is a purposeful pattern of behavior seeking to maintain the boundaries of access and exclusion to public resources.

- 4. The prevailing social behavior depends on norms of partiality to inform participants the rules within the system.
- 5. Systemic corruption limits the role of agency and structurally transpires by individuals through networks.

Figure 4



The model above outlines the process an individual may encounter when operating in an instance of systemic corruption. As described by the predominant authors on systems analysis, all systems comprise of interrelated component parts. All of the component parts are indivisible for purposeful systems, each relying on one another for adaptation and its self-reinforcing characteristics. The frequency component sits at the top of the diagram to denote its chief role as "engine" for the other parts of the system. The directional arrows with the colors: red, blue, and black denote the direction of the feedback loops interacting between the system parts. The black arrows are the inputs into the system and the red arrows are the corresponding output reaction as feedback loops from the system. Most of the feedbacks from the red arrows are negative feedback loops,

which are the tendency for a system to obtain equilibrium and boundary maintenance. However, positive feedbacks, which tend to stress a departure from equilibrium, may also occur. The stress is contingent on additional social forces, either exogenous or endogenous, to compete with or fundamentally alter the interacting process between the interrelating component parts. In nature, negative feedback loops are quite useful such as instances of an increase in body temperature and the corresponding mechanisms of perspiration to readjust balance. For systemic corruption, the negative feedback loops are quite pernicious as policymakers fail to prescribe interventions to counter the perpetuation of corruption.

The blue lines of the diagram illustrate the reflexive characteristics of the component parts as they complete an interaction from the input and output. From the reflexive process networks may expand, the frequency of corrupt activity may beget more corrupt activity, and partiality norms may achieve greater outreach within society. Another outcome from the reflexive process can account for what Freeman et. al (1988) refer as an increase in "social intelligence" whereby, "the ability to discern social groups and boundaries, evolves over time as participants gain experience in the social group." (p.234). Networks may adapt and economize collaborative efforts by identifying which actors are necessary for corrupt actions, the actions most feasible or commonly abused, and which norms violations are predominantly tolerable within the social context. Here, frequency reinforces the strength of individuals within a network as a continuation of circumventing state resources.

All of the conditions depend entirely on the configuration of the nuances of the context. It should also be mentioned that the components a system of corruption has the purpose to maintain boundaries of access and exclusion to resources so an ever-expanding scenario, according to systems theory, is likely to diminish and hold a tendency back towards equilibrium.

The last line in the diagram is the mutual interaction between partiality norms and networks. Norms either by way of formal rules or informal may serve as beneficial for the network. Formal norms have the advantage for some over others (see Scott, 1972; Wedel, 2004). The mutual interaction between norms and networks demonstrates how some formal and informal rules may be of use or in need of circumvention.

The final part of the diagram in need of description is the individual's perspective by interacting with the inter-linkage of component parts. This part is useful for demonstrating the constraints on the agency/structure dichotomy. Under a system of corruption an individual may base an action on an injunctive norm as the appropriate mode of behavior only to find out through time that others often departure from ideal behavior, or may find that getting things done in daily life is incompatible with injunctive behavior. Caiden and Caiden (1977) state that corruption is a functional dysfunction, which occurs when norms replace outmoded norms and when the system itself cannot accommodate change. The individual interacting with the network side of the diagram may inform the need to be part of a social group to mobilize resources. Through frequency the individual may learn that certain networks dominate specific areas of

public resources forcing decisions as to whether or not one should join a group or proactively avoid them altogether.

Chapter 4. Research Methodology

The project is an exploratory analysis with a sequential design. In the first stage, the analysis includes a large-N quantitative analysis using longitudinal GIS data in the Czech public procurement sector. The analysis will identify clusters of recipients of public contracts. This stage mainly involves the analysis of the first pillar of the proposed theoretical framework, i.e., the frequency of exchanges in the system; secondly, quantitative methods are also used for the analysis of networks of individuals and organizations. Increased attention is given to the role of political party financing (donations to political parties from winners of public tenders) and the sector specific capture of public procurement by private firms.

In the second stage, the analysis includes in-depth semi-structured interviews with selected actors. This stage focuses on the third pillar of the theoretical model, the normative drivers and processes for illicit behavior. The information gathered in the interviews will add an additional layer of credibility to the empirical findings. The results of the analysis in the first stage will thus be triangulated with. Interpretation of the interviews will correspond with the theoretical areas covered in the previous chapter.

The mixed method project will incorporate an exploratory design and will be sequential starting with the quantitative statistical analysis followed by qualitative interviews to saturate the findings in the statistical analysis. The emphasis will be partial-weighted with more emphasis on the quantitative findings than qualitative ones. Most methods used to identify corruption have relied on mono-method strategies without the aim to utilize complementary practices of mixed strategies.

A number of researchers have incorporated mixed-methods research strategies for deeper understanding of social phenomena. Bazeley (2006) suggests two main ways: (a) combination of data types within an analysis, for example, using categorical or continuous variables both for statistical analysis and to compare coded qualitative data and (b) conversion of data, such as converting qualitative codes to codes used in a statistical analysis. Nigel Fielding (2012) suggests a statistical technique, often used in policy analysis, to utilize content analysis from in-depth interviews that takes key words and combines them into categorical dimensions which are appropriate for statistical analysis. Fielding (2012) continues to add that a systematic approach for mixed-methods allows for precision about the assumptions on generalized findings. He states that it puts the findings into "a dialogue" (ibid). Weaver-Hightower (2014) states that, " [for studying policy influence]. . . qualitative methods have difficulty establishing the extent of influence while quantitative methods can have difficulty providing the whys, hows, and so whats." (P.120).

4.1 Description of Mixed Methods Procedures

The differing conditions of the mixed-method strategy, used in this paper, qualify for what Leech and Onwuegbuzie (2006) typify as a fully mixed sequential dominant status design (F4). The notation for the design is as follows: QUAN -> Qual.

The mixed-method protocol proceeds in the following stages and a graphical illustration summarizes the mixed-methods strategy for this research endeavor:

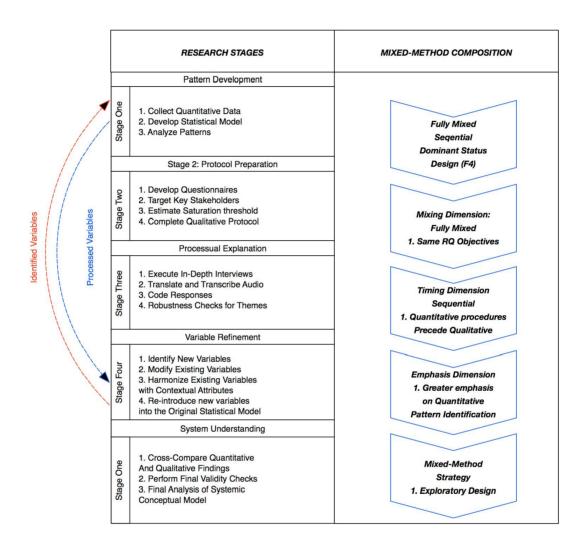
 Quantify relationship characteristics in the procurement sector to identify key systemic-related variables

- 2. Conduct interviews from those within the procurement sector to either confirm, reject, or identify new systemic-related variables to saturate quantitative findings with descriptive characteristics of process and expert intuition about the nature of corruption in the sector
- 3. Code thematic patterns and corruption-related attributes from the in-depth interviews and reify them into the initial quantitative analysis
- 4. Saturate the quantitative patterns with descriptive accounts from interviews to the sufficiently answer the fundamental research questions about systemic corruption. The quantitative analysis and the qualitative analysis were analyzed separately. However, in stage four if data as part of the existing collection in stage one could use refinement or sub-setting, then variables would undergo refinement into the existing model if it could

produce more robust results or outcomes with greater contextual harmonization for the

sector and case.

Figure 5: Mixed-Methods Strategy



4.2.1 Fully mixed.

The model is fully mixed because both the quantitative and qualitative components of the model seek to answer whether or not systemic attributes of corruption exist within the Czech public procurement sector. Leech and Onwuegbuzie (2006)

purport that fully mixed designs qualify if the research objectives are the same for both strategies. Both are the same as they seek to answer the same research questions.

4.2.2 Timing emphasis

The timing emphasis for this model is sequential which in mixed-methodological terminology means that one methodological type receives analysis subsequently before the other. Within the design of this paper the quantitative analysis required attention to appropriately identify all the patterns within the case before receiving explanations as to the driving procedures and processes stemming from the qualitative component.

4.2.3 Dominant Status:

The design places greater emphasis on the quantitative portion of the study over the qualitative portion qualifying for a dominant status classification in mixed-methods archetypes. There are a number of reasons for this emphasis. First, the quantitative portion holds data sampling sizes with the capacity to explain a larger phenomenon since the procurement data possesses greater representativeness of the case of interest. Without issues of clerical errors and availability of key variables the data set could potentially answer all of the research questions sufficiently.

4.3 Quantitative Section

The empirical analysis of this paper uses influence as a narrowly specific dimension of measuring corruption. Hellman, Jones, & Kaufmann (2000) examine how influence shapes the "rules of the game" without direct recourse to direct bribery (p.2). Concerning the legitimacy of influence as a corruption proxy, this paper will establish the ramifications of influence discerning those with influential advantages from those without, to support the theoretical assumption that systemic corruption perpetuates access and exclusion to public resources. I operationalize James Scott's (1972) definition of influence as corruption that, "without the special consideration of kinship, bribery, or friendship the public official could not have made the same decision". It is important to add that within this definition that political connections are a source of influence to sway the impartiality of decision-making by the public official.

4.4 Data

The data to identify existence of partial and impartial treatment in public procurement tenders is the political contributions made by the firms within the sector. The data set comes from politickyfinance.cz (2017) which provides the amount of the contribution to each specific political party, the year it was made, and the company identification number (IČO identifikačné číslo organizácie). Previous work by Palansky (2015) highlights the importance of political connections but finds that the variation of contribution bears little significance to the corresponding contract value and exerts that the category of political contributions serves as a functional proxy measure for 'connectedness.' He finds that it is impossible to identify all the variables to proximate

distinct levels of connections. As such, the political contribution primarily serves to separate two distinctive groups: those which made a political contribution and those that did not. Firms that have a gap in contributions more than three years are filtered from the analysis as "influence" firms. The data serves as a dummy variable to test corresponding relationships and changes in patterns for receiving procurement contracts. The data is also useful for identifying the geospatial win locations relative to the incumbency districts held by the political party in parliament.

The data for the public procurement sector covers above-threshold procurement construction awarded tenders from 2006-2012. To control for specific work type, only construction contracts with the common procurement vocabulary (CPV) industrial classification was used. The main construction categories were architectural, engineering, and general construction and material works. To control for the specific work types, I performed PERL regular coding expressions to extract each classification code that was relevant for analysis.

To control for the size of the private contractors I use data from the Czech Ministry of Finance Administrative Register of Economic Subjects (ARES) for the number of employees, the address of registered location, legal type, registration date, and operating economic sector. The data set also includes the same criteria for offices of the government issuing the tenders. I classify both the private firms and government offices according to the range of employee numbers from the Eurostat classification (2015) of

¹ I would like to thank Jiří Skuhrovec at zIndex for help with the procurement data set

firm size: micro (1-10), small (10-49), medium (50-249), and large (250+). The population census and parliament elections data of the Czech Republic comes from the Czech Statistical Office (2017) which is used as a control variable for the fluctuations in award values and number of overall regional concentration of tenders.

The data on the longitude and latitude coordinates derived from the google maps API using the 'ggmap' package in R studio from Kahle & Wickham (2013) to convert the location of the purchasing authority and the registered location of the award recipient. The distance between these two points used 'google drive' distances to estimate length in kilometers between the two points and the length of time to commute between the distances.

4.5 Statistical Tests

4.5.1 Model I: Test for group Performance Disparity

For model 1, the data aggregates repeat wins per individual firm across the 2006-2012 period and is a pool of cross-sectional data. The reason for this pooling is that contractors wins construction projects intermittingly across the date ranges often operating on one project which precludes operation for various lengths of time. A simple OLS regression uses is the natural log of repeat award wins in the same geographic location within the same year each government administrative office as the dependent variable. The supplementing independent variables for this test are *firm.size*, as mentioned previously, and the *Age*, which is the number of years the firm has existed since the date of its registration which changes according to each subsequent year for a firm receiving an

award. All units are in one calendar year increments. The *density* variable is the population of the administrative award location divided by the area in square kilometers. Other variables used for descriptive purposes are the number of bids placed on the awarded contract, *distance* (the total drive distance in kilometers between the contractor's registered office location and the corresponding location of the government contract issuing authority) and the size of the government office issuing the contract.

4.5.2 Model II: Test for Non-Stationarity of Performance

The results of the OLS regression are geospatially mapped to identify if award values are located in one concentrated area or if they are diffuse throughout the country. This analysis intends to identify non-stationarity of prices. If a preferential region benefits one group, then we can assume that the characteristics of corruption are less indicative of a systems-level problem. Isolating aberrant behavior in one locality is unlikely to give better insight into the problem in the grand scope of the country.

4.5.3 Kernel Density Estimates

A kernel density estimator examines the probability of an event falling within a designated physical space. The data determining the probability of a firm winning over a geospatial area within the Czech Republic uses the physical location of the government authorities' latitude and longitude position. The probability has a "smoothing" function to determine a continuous surface as to where a private firm is likely to win. The kernel density function examines the firm wins in relationship to other nearby wins. It uses a

summary of "bumps" of the nearby observations with and determines the width of those bumps (Everitt, et al., 2011).

Determining statistical significance uses a Monte-Carlo simulation to produce a random distribution of counts for each time interval for both groups. If the actual distribution of counts falls within the random distribution, then we must consider that the patterns of behavior are due to chance and not socio-economic patterns of a system.

4.6 Qualitative Section

The primary objective for the qualitative stage of the field research is to assist the strength of the quantitative findings in this study. The questionnaires from this section aim to identify the mechanisms of agent interaction within the procurement section, enrich the criteria for problem definitions, and to identify key variables associating political influence and exploitation of state resources. The qualitative research stage narrows down the endogenous factors that contribute to systemic corruption, the prevalent state-private network dynamic, and the institutional drivers both formal and informal that contribute to a reversal of effective governance.

The qualitative section of this research uses thematic analysis steps from Boyatzis (1998) through the theoretical assumptions from the conceptual model in Chapter three, the previous data results from the quantitative section, which informs the questionnaire development and emphasis on the code structuring for analyzing the data. The sample consists of 17 interviews from various sources throughout the Czech Republic. Two interviewers conducted the interviews. Approximately half were in Czech and half in English. Prior to the qualitative stage of the research process, only two people were

known in advance. The interviewers applied snowball sampling to reach out to new participants. The participants were not personally known prior to interviewing.

Since the beginning stage of the overall research project included raw data on procurement contracts in the Czech Republic, the initial hope was to differentiate those with gains from influence from those without. The difficulty by this assumption is that it limits the availability of firms to contact because of the lack of insight into all the firms that placed a bid. According to the raw data alone, it is impossible to know the win/loss record per number of bids. The anonymity surrounding the secrecy of firm behavior for contract bids is a good rule to ensure proprietary information of the firm. It is unfortunate for this research endeavor since one may only gain insight into the firm that have technically "won", despite through influence or not. The nature of this issue relied extensively on snowball sampling to compensate for the limited access to participants. It also required expanding the scope of stakeholders which would be sufficient to answer questions for the research project.

4.7 Stakeholder Identification

Stakeholders are identified by three criteria: their stated position on a given issue, their degree of influence or knowledge of the given subject matter, and their relative interest and willingness to share information on the given issue. For a summary of all the categorical areas of stakeholders that participated, please refer to the table below for an overview of the stakeholders involved.

Sector	Public	Private
Subsector	Former Prime Minister $(n = 1)$	Investigative Journalist $(n = 4)$
	Elected Political Official $(n = 5)$	Domestic Procurement Firm $(n = 1)$
	Civil Servant Ministry of Labor $(n = 1)$	Procurement Lawyer $(n = 1)$
	Political Party Representative $(n = 1)$	NGO Activist (<i>n</i> =2)
		Foreign Procurement Firm $(n = 1)$
Total	8	9

Table 2: Participants in the In-Depth Interviews

Expanding the number of stakeholders for the qualitative stage required the development of screening questions to ensure capacity to answer details about the technical nature of public procurement, regional familiarity with the Czech Republic, and insight to the problem of corruption. The specific screening questions are in the appendix which aim to identify those with personal experience suffering an indignant loss due to influence or those that have witnessed such effects first hand. For mixed-methods exploratory designs, Cresswell (2007) recommends using stakeholders that are not part of the quantitative sample to expand the perspectives of pattern identification for theoretical understanding. Broadening the scope of stakeholders became quite beneficial towards answering the specific research questions. The initial assumption was that the "key"

stakeholders would obviously be private firms and contracting officers tasked with soliciting government contracts. However, it became even more critical to understand the stakeholders situated at the intersection between other key stakeholders in the procurement process.

One outstanding example is the instance of procurement lawyers. They represent a broad base of clientele ranging from large to small firms many of whom suffer from undue influence and even some which perpetuate such influence. Including procurement lawyers as part of the sample was not an initial consideration, had it not been for broadening the number of stakeholders this category for informant would have been overlooked. Below is a graph illustrating all the categories of stakeholders and their relationship to the subject matter.

The majority of the interviews included audio recordings. However, due to the sensitivity of the subject matter, approximately one-third of the participants preferred written notes and asked that the voice recorder would be turned off. To ensure anonymity all audio files, written notes, and transcriptions were saved to encrypted hard drives. All names were removed from the transcriptions and the participants were referred to by stakeholder classification, position, and operating location. The former prime minister stakeholder is quite difficult to conceal since there are very few living people from this position. But the participant was eager to assist for research purposes but wishes to remain anonymous nevertheless.

Saturation is the basis for determining the appropriate number of interviews. All of the interview questions belong to categorical areas consistent with the research

questions and the conceptual framework. While some of the questions differ amongst participants, at least one question was asked for every participant from each categorical area. When respondents confirm similar patterns, mechanisms, or conceptualizations, these responses are considered to be triangulated and fit for inclusion for the empirical data. The interview procedure sought to account for bias requesting that the respondents do not ask to see the empirical findings, any names of participating stakeholders.

One strategy to obtain insight into the process of political influence is to target those marginalized from the procurement process. Many research studies into corruption seek to directly analyze those that gain from corruption rather than those which suffer direct losses from the system (Alam 1989; Stefes 2007). I believe this is a unique approach as indignant competitors may be more willing to share information about processes they feel are rigged and partial to those with political influence. Moreover, they may be willing to share how they leverage non-corrupt practices as forms of competitive insulation within an uncertain system.

4.8 Construction of Questionnaires

The construction of the questionnaires follows the same strategy of the quantitative analysis which is to enhance an understanding on the frequency of corruption, the partiality norms, the role of networks, and extent of political influence between private firms and political or government officials. Please refer to the Appendix A for the questionnaires. In total, there are 40 questions and three screening questions. The interviews normally consisted of one to two hours of discussion so it was never expected to have all questions answered. The questions are organized into thematic areas

consistent with the theoretical framework so the intent was to answer as many questions as possible to cover the core theoretical areas and accommodate the questions based on the stakeholder's competency within the public procurement sector.

4.9 Methodological Justification

Since this study is fundamentally a mixed-method research endeavor, there is a need to select qualitative methods to fulfill a supportive role for theoretical enrichment and compensating for the empirical challenges associated with difficult-to-access phenomenon (DAP) (see von Maravic, 2012). The statistical analysis used in this study has the advantage of achieving scope and magnitude but fails to garner insight into processual accounts of public procurement instances of corruption. Moreover, the bulk of the quantitative data on public procurement was not collected with the sole design of corruption measurement.

The first advantage of using interviews as a supplementary resource is the deep saturation it provides to already existing findings on vulnerabilities in the procurement sector. There are a large number of entry errors from the contracting officers for the procurement data. In many cases these errors cannot be corrected for and severely restrict the significance level of the findings. These errors contribute to a large issue of missing data values and a limitation on the representativeness of the sample of contracts.

The findings from the interviews can augment the significance of findings when the statistical sampling simply cannot correct for limitations from missing data values. The use of interview data is by no means a replaceable substitute for the missing data values or reproducible instance to magnify the significance of statistical testing. What interviews do offer is a reification of critical social phenomenon that might be overlooked when data limitations force the researcher to neglect an important pattern of behavior. Such findings offer complementary saturation which may bolster the confidence of future researchers to dedicate resources to further the empirical development of data with weak to moderate numerical strength.

One may question the extent to which interviews saturate the implications of the patterns of corrupt behavior. This stage of the research project uses two specific techniques to intensify data saturation. The first instance uses multiple-stakeholder perspectives between the problem area and case context. Multiple stakeholder perspectives offer advantages for the direction of corrupt influence (i.e. who captures whom?) and offers greater detail as to the technical details of influence mechanisms. It garners strength from a broad base of actor perspectives. Each may offer their own perspective while confirming similar patterns from different actors. It also may be a useful strategy for limiting the level of bias responses from participants of the same industry knowing one another. Colleagues from private firms or government ministries could potentially possess knowledge of others participating in a research study.

The multiple perspectives of stakeholders increase the general consensus of patterns. It can correct for actors attempting to garner sympathy by justifying their behavior or skew a narrative independent of the prevailing problem. A broader perspective is critical for systems-oriented research since the aim is to identify reoccurring patterns of social behavior.

Diverse perspectives are important for addressing bias responses, however it is important to address homogeneity of responses. Triangulation is the process of cross confirming responses from multiple sources to increase the reliability of the findings. Research areas focusing on DAP limit the reliability of data due to the inherent need for participants to self-censor or conceal incriminating information. Every researcher on the nature of corruption faces the challenges of reliability.

The process of combining triangulation with multiple perspectives strengthens the theoretical aims of the analysis and progresses new avenues of information. Quantitative data analysis engenders a vantage point problem whereby the researcher is distant from the source of interaction. Quantitative methodology emphasizes this distancing to correct for bias conclusions. An unintended consequence for the correction of bias is the self-limitation of familiarity with crucial variables for statistical analysis. Intimate exposure to the research area can be a risk for objectivity but it is also a serious risk for limitations of the subtleties of variable behavior. There is a trade-off for objectivity and nuance. However, one can implement specific processes to mitigate the risks of objectivity but cannot do the same for nuance.

Chapter 5. Empirical Results

This section will cover all the empirical results and responses from the in-depth interviews. The first part will begin with a statistical analysis of award performance followed by pattern point analysis of the win locations. The second part will provide an overview to the in-depth interview responses and attempt to add descriptive characteristics to the empirical findings.

5.1 Quantitative Findings

It is critical to first establish that firms produce distinct advantages in the procurement sector through means other than innovation of market competency. To isolate for influence as the prevailing factor in determining the differences in the patterns of behavior between groups we must operationalize criteria to account for public officials made discretionary decisions not based on merit but on special considerations of political or personal influence. As mentioned in the last chapter, the operationalization of corruption for study seeks to find if a public official would have made the same decision without the consideration of political influence. Using a t-test for differences in means I investigate as to whether or not one particular group is significantly more "competent" than the other. This is important as we must narrow down that influence ties are the key explanatory factor for the disparity in award prices and preferential treatment in the procurement sector. There is no current available information on post-contract evaluation or consistency of fulfilling the government's contract obligations, which limits by how much a group produces quality over another. Within the dataset, however, there are three

variables we may use to explore the differences: level of experience within the sector, competitive exposure within different administrative territories, and geographical mobility.

The table below provides brief summary statistics for the influence and non-influence groups for public procurement contracts from 2006-2012 in construction.

Group	Distance	Age	Bids	Large	Medium	Small	Micro
Non-Influence	58.41	12.88	5.57	76.98*	12.21***	6.86***	3.75***
Influence	49.84	12.76	5.44	59.76*	18.32***	14.04***	6.27***

Table 3: Firm Competence Comparison. Note: *, **, *** Significance at the 10, 5, and 1% level

Age of the firm accounts for the number of years existing as firm at each specific year per contract award. Competitive exposure includes all the number of bids a firm holds exposure to when receiving an award. The final variable is just how mobile a firm is within the state. The data looks at the google drive distance for each firm relative to the issuing authority. The logic is that a firm may be more competent overall if they can win across various regions and are not limited to one specific areas' subtleties in administrative procedures.

5.2 Age of the Individual Firm

Differentiating for levels of experience between both groups shows no significant differences. The non-influence group has slightly longer experience as a registered firm with 12.89 years compared to the influence group with 12.76 years of experience.

5.3 Competition

Examining each group's exposure to competition is another factor for determining a level-playing field. One may presume that certain groups will gravitate towards the areas of contract types with the lowest probability of other firms placing a bid, or carefully discriminating their options to decrease competitive exposure. The differences in the average number of bids holds little significant differences with an average of 5.77 and 5.44 bids respectively for non-influence and influence groups. The significance tests include testing for normal distribution for differences between group averages, which all re-affirm the significance tests.

5.4 Distances or Geographic Mobility

This measurement test seeks to find differences between groups as to how far they travel and how many different locations they receive awards from. The notion behind this test is whether or not a firm can win at a number of regionally distinct locations with different nuances in the environmental conditions for construction, the administrative personnel they communicate with, and the prospect of varying changes in competing against different firms they may not be familiar with. The statistical test here confirms that the non-influence group is significantly more likely to travel greater distances to distinct locations than the influence group. We can confirm at the 99% level that the non-influence group will travel roughly 8.57 kilometers more than the influence group when receiving awards at distinct locations. The extra 8.5 kilometers may not seem like much but it can be more than enough for a firm to move into a different administrative region if

close enough to a border. It can also mean the difference between moving from a government office with a large number of employees to a small number or vice versa.

5.5 Distribution of Procurement Firms

Before moving forward to the differences in award prices between groups, it is important to look at the overall representation in the sector. Figure three below shows the relative proportion of unique firms within the data set per each year from 2006-2012. The non-influence group represents roughly 83% of the total number of firms operating in the procurement sector, within the data, while the influence group representing roughly 17% after controlling for missing employment number in the data. There is considerable variation of market entrance and exit when comparing the non-influence and influence firms. On the one hand, there is some optimism for the Czech procurement market by which firms enter and exit the market. One of the tenets of state capture is the overwhelming extent private firms restrict the market entrance (see Hellman, Jones, & Kaufmann, 2000). On the other hand, the figure below illustrates a deceptive danger as the "influence market" is comparatively invariant to changes conditions as well as the freedom for new entrants. As we will see in the next section, the advantages for the influence group as strikingly disproportionate in comparison to the non-influence group.

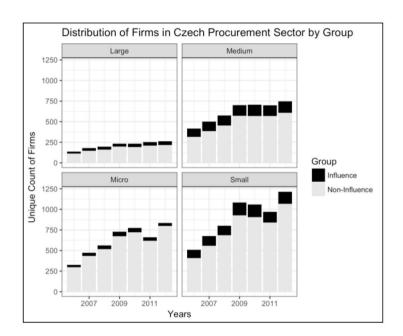


Figure 6: Distribution of Number of Firms

5.6 Summary Analysis

The first test examines if there is a performance disparity between the influence and non-influence groups using a simple OLS regression. As we can see in the figure below, the dummy variable for Influence is positive meaning that firms that pay political contributions within three years of an award receive higher award values on average. We can say that switching from a political influence firm to a non-influence firm yields a 17% increase over non-influence firms for the geometric mean of award values per year. The F-statistic shows that the variables in the relationship are significant and we may reject the null that there is no significant difference in the awards values when taking into consideration the population density, size of the firm, and proxy for political connection.

Figure 7: OLS Regression Model

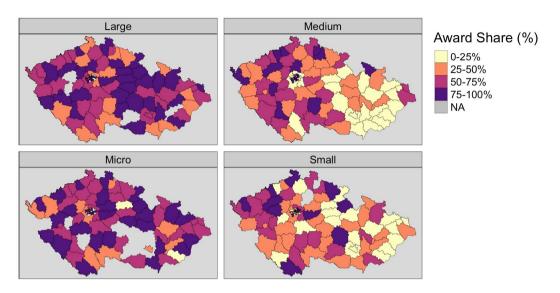
	$Dependent\ variable:$		
	$\log(\text{Award})$		
Influence	0.17***		
	(0.03)		
Density	0.0001***		
	(0.0000)		
Medium	-0.27***		
	(0.03)		
Micro	-0.48***		
	(0.04)		
Small	-0.40***		
	(0.04)		
Age	-0.005^{*}		
	(0.003)		
Year dummies	Yes		
Constant	16.10***		
	(0.06)		
Observations	12,226		
\mathbb{R}^2	0.08		
Adjusted \mathbb{R}^2	0.08		
Residual Std. Error	$1.41~({\rm df}=12213)$		
F Statistic	$87.76^{***} \text{ (df} = 12; 12213)$		
Note:	*p<0.1; **p<0.05; ***p<0		

A second question is to ask if these performance disparities exist in one location of the country or vary. Calculating the differences were made by counting the number of award wins by quantile range as per group level of influence and firm size. The counts of quantile ranges are the award locations by government office location within each of the administrative districts in the Czech Republic plus the Prague districts. The calculation examines the non-stationarity effect of all the award values throughout the country and to provide an answer as to whether or award disparities favor the influence group in one exclusive award location or many throughout the country. The data is the same from the set used in the OLS regression. The lighter shades refer to counts of award wins in the bottom 25th quantile (yellow) and the darker shades (purple) are award wins in the 75th percentile onwards. The quantile ranges are fixed to compare each groups award wins relative to the size of the firm within each group. Areas that are blank are missing values from the firm category.

Figure 8 below shows that the influence groups possesses high award ranges throughout the country, not fixed in one particular administrative district. When comparing Figure 8 (Influence group) with Figure 9 (Non-Influence group) we can see that all firms are relatively more dominant in the upper bounds of the award distribution. The only possible exception is comparing the "large" firm category in both groups, which the non-influence figure shows is also comparatively quite high. Nevertheless, these two graphs aid in clarifying that not only does a disparity in award values exist between groups, but the disparity is not fixed on only one particular location.

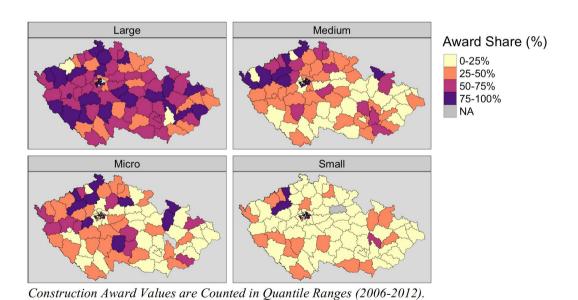
The map shows non-stationarity changes in awards for the two different groups. If a preferential region benefits one group, then we can assume that the characteristics of corruption are less indicative of a systems-level problem. However, this is not case and it is reflective of the patterns of behavior exemplifying emergent conditions at the systems level (see Goldstein, 1999). Isolating aberrant behavior in one locality is unlikely to give better insight into the problem in the grand scope of the country.

Figure 8: Influence Group Award Averages



Construction Award Values are Counted in Quantile Ranges (2006-2012).

Figure 9: Non-Influence Group Award Averages



There are a number of important factors to consider from this map. First, preferential advantages do not derive from one distinctive administrative office or municipality. Though the absolute value of the awards differs, the acute patterns of partiality are consistent throughout the state. These patterns are inconsistent with one or a few aberrations in the forfeiture of public responsibility. The preponderance of the patterns within the Czech Republic indicate a prevailing system of particularistic behavior.

At the micro level, the players within the sector of public procurement demonstrate behavior of one cohesive structure in terms of the commonalities of their behavioral patterns. Yet, the density of integration for the connections between these players does not exist as strong as it does at the micro-level as does the macro level. The instances of emergence for systems theory possesses the explanatory power to answer the question as to why a large scale of different actors in regionally diverse geographical areas exhibit similar patterns.

5.7 Network findings and processual indicators

The next important component is to examine the pattern point dynamics of award wins as a means to understand if networks are prevalent. One of the biggest paradoxes in the data encompasses the question that if political contributions and influence provides such distinct advantages, then why is it that not all firms give contributions? Answering this question requires practical explanation as to why contributions are necessary for political support, what they are used for, and the structural processes as to how they may disrupt impartial treatment in the procurement process.

The first figure below is a random sample of pattern points taken from the general data set. The first process uses a technique described by Andresen & Malleson (2013) to compare random samples of point patterns with the actual point patterns in the data set. Randomly generating 85% of the longitude and latitude of award points from each administrative district in the data set produced the pattern point cluster in Figure 10 below. In conjunction with the pattern points is the google drive distances from the registered contracting location to the administrative authority issuing the contract. This series of lines in the graph (in red) are also randomly sampled with the pattern points.

The denser the pattern point clusters the smaller the "heat map" will reflect the kernel density. If the amorphous shapes of the pattern grow across the country, then there is an indicator that a disproportionate amount of the win locations are decentralized. Likewise, with the intensity of the red color in the spatial lines is an indicator of multiple firms move across the country region. Greater intensity means great color saturation.

Comparing Figure 10 (random distribution) with Figure 11 (non-influence group) we find similar pattern distributions. What is interesting is comparing both Figure 10 and Figure 11 with the influence group in Figure 12. Although the non-influence group is significantly larger in terms of the overall number of contractors there are very little comparative clusters when you compare the pattern distributions with the influence group's distribution. The reason for this difference is that non-influence contractors tend to win in regions closer to metropolitan areas such as the capital city of Prague and the second most populated area of Brno. This behavior has an impact on the clusters in the map below which makes the density far more centralized than in Figure 12.

Figure 10: Random Points Taken from Sample. Author's Calculation

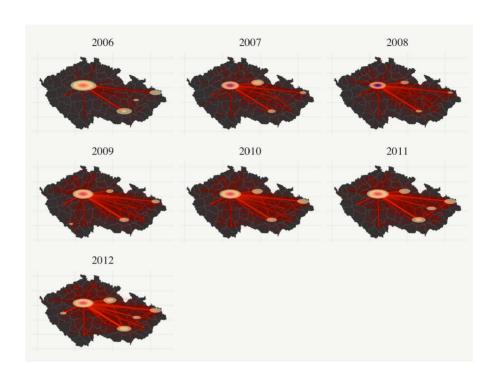
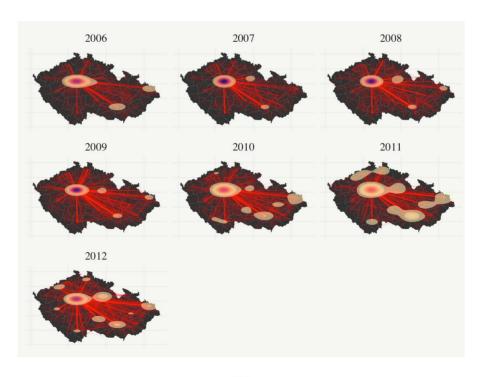


Figure 11: Non-Influence Group Pattern Point Distribution



One of the interview participants sheds light on the issue depicted in the graph for smaller level government authorities. "The problem in the Czech Republic is that the country is too small. And this is a problem across all sectors within procurement: from water to utilities to construction etc. It is all one big oligopoly one could say. And these friends are a large network structure. If you want to enter to have to buy into an existing network. In Spain it's totally different. Sure there's corruption there. But there are more open areas to compete in. But here [Czech Republic] it's different. It's a totally closed system in procurement. Entrance is much more complicated. Very few people are coordinating the economic activity of this country. The winner is always the same. IT'S A CLOSED SYSTEM." (Interview 11, Foreign Procurement firm).

Figure 12 below highlights that influence firms have a more diffuse likelihood of winning in areas outside of the metropolitan regions than exhibited by the non-influence group in Figure 11 and move throughout the Czech Republic winning contractors in various locations as opposed to repeated wins within a small geographic radius.

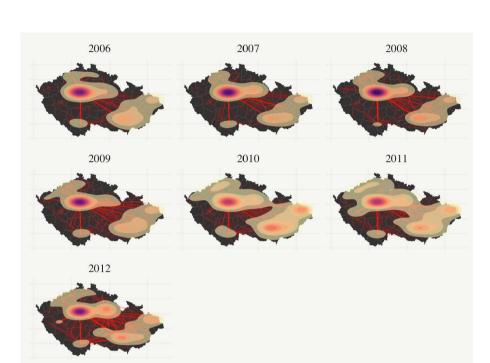


Figure 12: Influence Firms Kernel Density Point Patterns

The characteristics of pattern points are more pronounced when you narrow the focus of which firms contributed to specific parties. According to (Skuhrovec, Vítězslav, & Palanský, 2015) the Czech Social Democratic Party (ČSSD) and the Civic Democratic Party (ODS) are the largest recipients of political contributions. By isolating for the firms which gave to each of the largest parties during the time within the data (2006-2012) you can see that each density of the pattern point engulfs the regions where Senate seats within parliament were held. Election data from the Czech Statistical office (2007) provides a comparison for both distributions of firms respective to their proxy level of political connectedness. The spatial lines and cluster densities are the same estimation as within the previous graphs, but with Figure 16 and Figure 17 the graphs include a

georeferenced point (labeling "CSSD" and "ODS" both in white) where the political party held incumbent political office until a change in the election cycle.

What is comparatively notable about these graphs is that ČSSD contributing firms possess density in the eastern part of the country where ODS contributing firms do not. This is likely due to the strong historical political presence for the party in Plzeň. The second important feature of these two graphs is the corresponding change of pattern clusters with the election cycle. Some of the changes are latent but in Figure 16, for example, a win in 2008 in the northern part of the country figure shows an adjustment in the cluster for the year 2009.

With improvements in variables identifying political connectedness, the pattern points estimates would greatly improve in highlighting the relationships. However, these pattern shifts are not random clustering patterns. The last portion of the quantitative section will show the relationships with government office sizes and the final test to determine if the pattern clusters exhibit complete spatial randomness.

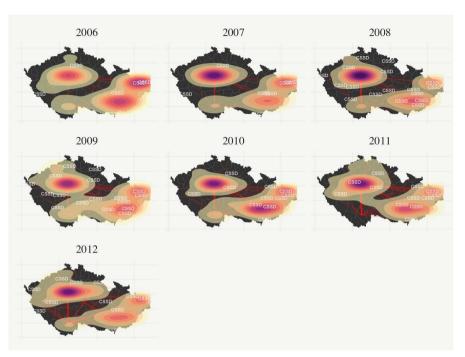


Figure 13: Influence Firms that Support (CSSD)

One of the participants in Plzeň highlights how important political connections are with ČSSD and ODS. The networks reinforce cooperation by rewarding seats at big state-owned enterprises and threatening your removal if you do not concede to party incentives. "And if, if happens if, if was some big deal [contracting deal] in, in, in zastupitelstvo [council] the you know the, the what is from ODS and from, from CSSD too and if, if not be the, the what is from CSSD, they, they was taken out from the seats from these firms [if you don't cooperate with deals from ODS and CSSD]" (Interview 10, Civil Activist Plzeň).

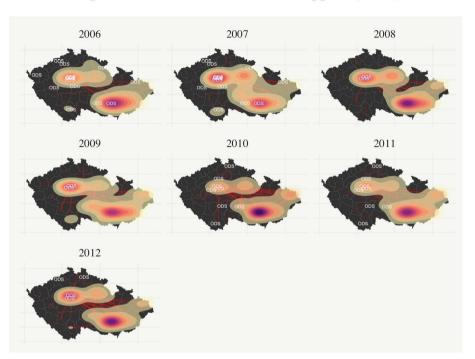


Figure 14: Influence Firms that Support (ODS)

The following chord diagram determines where private firms within their respective group—typically win contracts according to the size of the government offices. The figure on the following page shows the pattern movement as to where private firms proportionately win contacts according to corresponding size of government contract office. The scale for government office size is the same scale as number of employees for private firms which is as follows: large (250+), medium (50-249), small (10-49), and micro (1-9). The pattern movement in grey refers to non-influence groups and their corresponding movement, while the pattern in purple refers to the influence groups' movement. The top of the diagram represents the government office size and the bottom two slices are the groups. The lines starting from the bottom represent the percentage the groups correspond to government office size. The thicker the lines means a greater proportion of wins with a government authority. The graph above corresponds with the

summary table provided at the beginning of this chapter showing the summary of the proportion of the size of the government offices that issue contacts to non-influence and influence firms.

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Figure 15: Chord Diagram of Wins per Government Office Size

This pattern is quite interesting as the influence group relies on close proximity and consistent relationships with smaller government offices to secure stability in future transactions. The path towards larger government offices for the non-influence group exemplifies that more oversight may be more likely to transpire and reward merit for an innovative product over a personal connection. The non-influence group may seek these government offices for contracts as a form of insulation against non-competitive practices of corrupt actors. The influence groups may seek smaller government offices as they are

more likely to expend little resources amongst personnel in exchange for contract opportunities.

5.8 Tests for Complete Spatial Randomness (CSR)

The equation below tests for the significance of the spatial characteristics of the data set. The g-distance function calculates the average nearest neighbor point for construction award locations in the Czech Republic (this function is also known as "inter-event" distribution). Testing for the extent of spatial random variance uses the g-distance algorithm created by Baddeley, A., & Turner, R. (2005). Distances above the blue line indicate clustering patterns are due to some particular process and are not random (Ripley, 1988). Values closely following the blue indicate Poisson (random) processes and values below the blue line indicate dispersion of point patterns. The equation accounting for complete spatial randomness (CSR) using a (Poisson) point process is below:

Equation for G-distance function:

$$G(d) = 1 - \exp(-\lambda \pi d)$$

Where lambda is the intensity (expected number of points per unit area). Deviations between the empirical and theoretical G curves may suggest spatial clustering or spatial regularity. If the distribution follows along the pattern of the blue line of the Poisson distribution (Gpois in the image), then there is concern for the effects of the data to be likely due to random circumstance and not contingent upon geographic effects.

Figure 8 and figure 9 illustrate the G-distance results for the non-influence and influence groups respectively. The red line of the curve does not follow the blue line of

the Poisson random curve for both figure 18 and figure 19. We may reject the null that the clusters found in the previous kernel density analysis are due to random circumstances. We may conclude that the outcome of the characteristics of influence in the public procurement sector are highly unlikely due to random chance.

Figure 16: Non-influence group. G-distance complete spatial randomness test

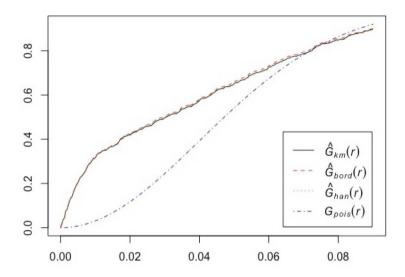
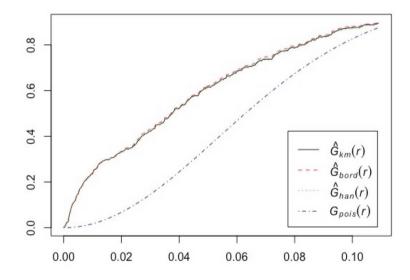


Figure 17: Influence group. G-distance complete spatial randomness test



5.9 Summary of Qualitative Responses

This final section will provide a summary of important responses from the in-depth interviews. They will aid in garnering insight as to which mechanisms can drive such a disparity between influence and non-influence firms.

The individual firms within the non-influence group lack the capacity to guarantee certainty in the same patterns the influence firms can. Many of the responses in the interviews discussed specific ways influence groups can reinforce the exclusion of competitors.

One contractor in the public procurement sector identifies this problem of exclusion through bid rotation schemes: "My friend from transport and public procurement originally in construction and transport sector so he has a lot of contacts and they ask a lot of companies which I think they are linked because it is the same companies all the time. There are 10 companies which are always rotating and there is 3, 4, 3, 3, 3 but all the time they are the same companies. I think the companies are linked and the proposal for the city council is manipulated in this way. The real price is 5 million so I will write 5.5 million. I will write six million or 5.7 million you will write 6, you 7. I will gain this procurement with 5.7 million and we gain 700000 crowns. And OK you will take someone also me and the person in the town hall" (Interview 2, Elected Official Praha).

Further examples of exclusion are quite common in the procurement sector through contract cancellations. This is a critical mechanism for insight into how political influence restricts market access. "Another common strategy is though cancellations. This is a common method to exclude competitors from the process." (Interview 13, Former Prime Minister). *However*, one of the biggest questions is why are so few willing to speak up against obvious instances of preferential treatment. The following two participants summarize in essence why leveraging accountability mechanisms are underutilizes.

"There is a problem with reporting mechanisms. There are essentially two black lists: the formal ones present online and the ones that are informal. Those which slow the process of contracting will be remembered within the ÚOHS [Office for the Protection of Competition] Brno. Firms that lose to those suspected of influence are not reported against because of the costs of prosecution and the little chance of success. The other reason is that word and reputation quickly spreads around. Those that make trouble and slow down the process prevent future opportunities in the procurement sector." (Interview 1, Procurement Lawyer).

The final participant response came from asking what would happen if someone from within a network did not want to conform to the informal rules of collaboration. "There is no way. Again he either has to play the game that is being played or get the fuck out" (Interview 3, Investigative Journalist).

One can learn as much from what participants do not state than what they explicitly state. The key word search function used in the qualitative analysis for this research illustrates that the word "bribery" is never mentioned. The questionnaire design offers participants the opportunity to describe their own perspective as to the nature of the corruption problem in the Czech Republic. There are several explanations for this finding. First, bribes are predominant within impersonal contexts where an informal market price establishes the transaction cost for sale of a public good or service. Second, bribery transactions prevail when power holders are definitive between buyer and seller. Within the systemic context, the power relationship very much exists but is neither impersonal nor strictly hierarchical since network members collectively

share responsibilities within less rigid hierarchical contexts and between members with far greater familiarity to one another. Informants may seldom use the term "bribery" since it resembles a crude terminology for transactions based in recurring personable settings.

Chapter 6. Conclusion

Can the previous findings merit the existence of a system of corruption? We have exhausted many of the available measures of differences leaving only the variable of influence as the predominant distinguishing factor which opens all the avenues to explore the outcomes prevalent for each group's respective patterns of behavior. The initial statistical tests provide empirical evidence that preferential treatment exists as both a geographic phenomenon and one which is not predicated on measures of competency. The variables producing preferential treatment creates disparities in resources in favor for the minority of influence firms at the expense of non-influential firms. These differences prolong through both physical space and time with little variation of market conditions. Accessibility to the advantages of influence networks is slim yet entrance into the competitive domain of non-influence remains relatively open but with little monetary reward for market uncertainty.

The remaining question is to what extent are these patterns indicative of a system and what differentiates them from other instances of corruption? The first essential feature is the stability of particularistic behavior. The influence group resembles the patterns consistent with literature on systems theory which contends that systems are resilient to change. The influence group is relatively invariant to consistent award wins with higher overall values. They do not control the "market" but control the influence market. The second crucial feature is the superveniance of the phenomenon. Caiden and Caiden contend that corruption is systemic when a single violation is a poor metric of the overarching problem (1977). The spatiotemporal patterns reflect a problem much more

suitable as one of persistence throughout space rather than instance of case. Lastly, there is no discernable organization, agent, region, authority, or legal violation as a core driver. As to whom or what is quite blurry resembling what Wedel describes as "structural unaccountability".

Recognizing the patterns within a system is imperative for understanding the overarching social drivers of corruption. Emphasizing the individual as the primary unit isolates the problem away from the overarching social narratives. Anti-corruption intervention strategies tend to focus on the individual more than the network (Wedel, 2015; Stefes, 2007; Persson, Rothstein, & Teorell, 2013), which presses for the need to identify the endogenous modes of interaction between the state and civil society.

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APPENDIX A

Screening questions

- 1. Do you have any experience or specialized knowledge of the public procurement sector in the Czech Republic: ether through direct participation or indirect observation of the sector?
- 2. Have you ever witnessed, or received, unjust effects from political influence or preferential treatment in the procurement process?
- 3. Would you be willing to participate in an anonymous interview at a time of your convenience? The interview will serve to enhance academic research in the area of public procurement and EU subsidies.
- I. Block: Frequencies
- 4. What are the general characteristics or patterns of corruption in public procurement? How widespread is it? How common is it?
- II. Block: Networks
- 5. Do abuses typically come from individuals or do individuals work together in groups or networks?
- 6. What categories of people are members of such network (entrepreneurs, public officials, politicians, judges, policemen ...?)
- 7. Do networks develop from personal connections or impersonal connections solely for conducting business?
- 8. Do members of networks tend to be familiar with one another? Or do they communicate only on matters pertaining to transactions?
- 9. Do outsiders get a chance to join the network? If so how are they contacted?
- 10. What makes private firms within networks different from those that are not within a network?
- 11. Who are the central or "key" members of networks?
- 12. Are members of "networks" considered equal status?
- 13. Would you state that firms are a passive victim in the process of corruption or an active participant? Would it also be the same for civil servants and politicians? Or different?
- 14. Do networks tend to be more loyal to its members or positions within the state or private organization?
- 15. Do private firms and public authorities feel a sense of accountability to one another based on their level of connection?
- 16. Do you think that there is more than one such network?
- 17. If yes, how they could be recognized?
- 18. Do they have any names?
- 19. Are they in co-operative or competitive relations?
- 20. Is it possible to be a member of more than one such network?
- 21. How do they manage or decide who has access or who is excluded from a contract?

- 22. Do networks tend to be more loyal to its members or positions within the state or private organization?
- III. Block: mechanisms
- 23. Can you offer some explanations as to why corruption persists in the procurement system?
- 24. Can you describe some processes of how the procurement system is abused?
- 25. Who can initiate a corrupt transaction?
- 26. Who should be contacted in order to get things done outside of formal processes?
- 27. How do corrupt officials or networks maintain control over transactions? How do they guarantee results?
- 28. How do members guarantee they get paid? What happens if they don't receive their fair share of a transaction?
- 29. How do firms avoid being victims of corrupt networks or in what ways can they protect themselves from exploitation? Are they powerless or do they have some recourse for protection?
- 30. Would you state that firms are a passive victim in the process of corruption or an active participant? Would it also be the same for civil servants and politicians? Or different?
- IV. Block: Norms
- 31. Why are firms silent about these problems? Are they simply unaware of the problem? Or do they know but are unable to do anything?
- 32. What will happen if the police reveal a member of corruption within a network? How can the network protect its members?
- 33. Is it possible to step out from the network without any consequences? Did you hear about excommunication of some members due to improper behavior? If yes, for what was the basis of excommunication?
- 34. Is whistleblowing or any other misconduct in the network punished? If yes, how?
- 35. How can someone gain importance within the network?
- 36. In what manner are bribes distributed among the members of the network?
- 37. Are the lines between public and private officials blurry? Is it difficult to distinguish the roles or positions of the stakeholders in the procurement sector?
- 38. Are the formal rules of procurement fair for everyone or is it privileged for a select few?
- V. Block: Politics
- 39. How important is political party affiliation for private firms? Do networks develop around political parties?
- 40. Do you observe that favorable treatment is an extension of political interests or loyalty to personal connections? Or perhaps both?

APPENDIX B: List of Participants for Interviews

Interview 1. Procurement Lawyer

Interview 2. Elected Official Praha 2

Interview 3. Investigative Journalist

Interview 4. Investigative Journalist

Interview 5. Municipal representative

Interview 6. Civil Servant: Ministry of Labour

Interview 7. Council Member

Interview 8. Vice Mayor Praha 7

Interview 9. Praha 5 Political Representative

Interview 10. Civil Activist Plzeň

Interview 11. Foreign Procurement Contractor Marco. Foreign Procurement

Interview 12. Anti-Corruption NGO

Interview 13. Prime Minister Jan Stráský

Interview 14. Firm Public Procurement Contractor Transportation Ostrava

Interview 15. Green Party Political Representative

Interview 16. Investigative Journalist

Interview 17. City Planning Construction and Architecture