THE UNIVERSITY OF CHICAGO

FRAGMENTED UNITY:

PATRONAGE POLITICS AND AUTHORITARIAN RESILIENCE IN CHINA

A DISSERTATION SUBMITTED TO

THE FACULTY OF THE DIVISION OF THE SOCIAL SCIENCES

IN CANDIDACY FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

DEPARTMENT OF POLITICAL SCIENCE

BY

JUNYAN JIANG

CHICAGO, ILLINOIS

AUGUST 2016

Contents

Abstract

The remarkable political durability and economic accomplishments of China under the Chinese Communist Party (CCP) have long interested social scientists and policymakers, as the system lacks many good institutions that are considered to be essential for development and high-quality governance: Electoral institutions that regulate power transition and promote accountability are nowhere in existence except at the grassroots level. The political system has a poor reputation of being riddled with factional struggles and rampant corruption, both of which are supposed to be antithetical to political and economic development. What, then, explains the regime's ability to endure and develop amidst these seemingly pathological features?

This dissertation offers a new perspective for understanding the CCP's resilience. I argue that the regime's remarkable performance in certain areas and its equally glaring failures in others are not inherently contradictory. Rather, they share the same origin in the unique ways in which the system operates. Departing from the existing literature, which focuses primarily on how the regime extends its longevity by improving and adapting its formal institutions to a changing political environment, my explanation traces the CCP's durability to the enduring informal aspect of the system. With a special focus the operations of patron-client networks among the elites, I argue that, contrary to the conventional view that these informal networks are symptomatic of inefficient and corrupt patrimonial regimes, they contribute to the stability and effectiveness of the system by helping foster a sense of trust and mutual obligation among actors in a setting where intra-elite contracts are typically difficult to monitor or enforce. These particularistic relations are important vehicles for elites to organizing interests, coordinating actions, and mobilizing support; and they

are often used to address some of the most pressing political and economic problems that the regime faces.

More specifically, I argue that at the national level, informal networks help maintain elite cohesion by sustaining credible power-sharing arrangements among the elites. Through shared control over personnel appointments, senior political leaders can effectively lock in their power status for an extended period of time through services offered by their appointees. This informal arrangement not only allows them to closely monitor each other's behaviors through tracking the personnel appointments, but also gives them an interest in ensuring the continuation of the regime that goes beyond their formal tenure.

At the subnational level, moreover, I argue that patronage networks contribute to the regime's economic and policy performance by supplying high-powered incentives to local agents who otherwise have a natural tendency to shirk. Contrary to the conventional wisdom that the performance incentives are generated by a formal, meritocratic selection system, I contend that the link between economic achievements and political promotions is far from institutionalized. Instead, vertical patron-client networks are the key instrument that higher-level principals use to motivate lower-level agents and generate momentum for economic development and policy implementation.

Finally, I argue that although this informal institution yields measurable benefits to the regime, the benefits do not come without significant costs. Patron-client relations often involve extra-legal exchange of favors, and the need to maintain an effective and loyalty following often compels patrons to turn a blind eye on clients' illicit activities, such as corruption. This makes the regime's anticorruption enforcement a highly selective undertaking and a non-credible deterrent against official venality. The system's inability to eradicate corruption, therefore, is not a simple result of policy or strategic failures, but rather a direct price that the regime has to pay for its effectiveness.

I provide empirical support to our argument by investigating how informal networks shape several critical aspects of Chinese politics, including (1) political institutionalization, (2) economic development, (3) policy implementation, and (4) anticorruption enforcement. The main quantitative evidence is drawn from an original biographical database of over 4,000 politicians at

city, provincial, and national levels since early 1990s. New automated algorithms are developed to identify patron-client ties by linking lower-level officials with political superiors who oversaw their major promotions in the past. To supplement the quantitative analyses, I also draw evidence from in-depth interviews with serving and retired officials in both central and local governments and additional historical and archival materials during my fieldwork in China.

Acknowledgements

This dissertation can never be written without the support from a large number of individuals. I thank, first and foremost, members of my dissertation committee, who have offered numerous insights and endless encouragement during various stages of this project. My dissertation committee chair, Dali Yang, is the best adviser that one could ever imagine having as a graduate student. Dali taught me by example not only how to do rigorous scholarly work but also everything about how to to be a professional social scientist. He pushed me to ask big and important questions that matter for both China and the general political science scholarship, and provided solid moral and institutional support as I'm seeking out the answer. Chris Berry introduced me to the fascinating world of empirical research but, more importantly, constantly reminded me that first-rate empirical work must be grounded in strong theoretical foundations and backed by a good dose of common sense. I am also grateful to Monika Nalepa for lending me her valuable insights as both a formal theorist and a superb comparativist on post-communism, and for always being encouraging and supportive for all the intellectual endeavors that I take. Moreover, John Padgett has graciously offered me the opportunity to participate in his well-known Florence project, which allowed me to learn firsthand how to build and maintain a complex database of social networks, and gave many helpful comments and suggestions that greatly improved the clarity and strength of the argument.

At Chicago, I had the fortune to study with and receive comments from faculty members in both the political science department and the Harris school of public policy. I wish to thank Mike Albertus, Scott Ashworth, John Brehm, Anthony Fowler, Bobby Gulotty, Garry Herrigel, Stanislav

Finally, I wish to thank my family. My parents, grandparents, and parents-in-law offered me firm and unconditional emotional and material support for all my endeavors even when they do not entirely understand what a political scientist is doing. Their financial support and help with childcare were especially instrument for allowing me to complete this project in a timely fashion. My daughter, Anna, was born about the same time as the idea of the dissertation came into being, and has been my greatest joy ever since. Last but not the least, My wife, Hao Yang, deserves the deepest thank for everything she has done for me and the family. She sacrificed a splendid career of her own to accompany me to the States. She has been the best friend, a terrific life partner, a caring mother, and a source for stimulating conversations and novel ideas. Going through the PhD program with her by my side is one of the greatest fortune that I could ever imagine, and this dissertation is dedicated to her.

List of Tables

List of Figures

Chapter 1

Introduction

1.1 The Puzzle of CCP's Resilience

Over the past three decades, the Chinese Communist Party (CCP) has been tremendously success-ful both as an autocratic regime and as a state that governs a population of 1.3 billion. While many autocracies in other parts of the world are mired in intense elite conflicts, political instability, and economic decline, the CCP has managed to largely avoid major internal strife within the top lead-ership and deliver dazzling economic growth that propelled a third-world country with less than $100 GDP per capita to the world's second largest economy.

Although quite a few authoritarian regime in history have also been able to achieve a period of political stability and economic growth under their respective reigns, China's success is partic-ularly puzzling given both the country's sheer scale and the conditions under which it took place. Unlike many other durable autocracies that ever existed over Eurasia and Africa, China does not enjoy an overabundance of free resources, in the form of either natural resource reserves or support from foreign aid, which can be used to buy off political elites or discontented domestic population. Compared to other neighboring (former) autocracies that have managed to achieve extended peri-ods of rapid growth on their own, such as South Korea, Taiwan, and Singapore, China is also orders of magnitude larger in terms of territory, population, and, naturally the difficulty of governance.

Even more puzzling about China's success is the fact that, at least on the surface, the regime lacks most of the "good" qualities that social scientists typically associate with good political and

economic performance (Fukuyama 2013): Democratic institutions that stabilize power transitions and generate incentives for public officials to work are absent at all but the grassroots level. The political system has a poor reputation of being riddled with patronage exchange, factional struggles and nepotism, all of which are antithetical to political development. Corruption, moreover, is a hallmark of the Chinese system that the CCP has not yet been able to eradicate. Yet, while countries with similar attributes in Latin America, Africa or some other parts of Asia are trapped in the mire of political instability and underdevelopment, these problems appear to be of less a liability for China. Why does the elite consensus not break up when everyone desires power and yet no one possesses a popular mandate to rule? How does the system incentivize officials to exert effort on developmental and policy tasks when electoral accountability is absent?

Several accounts have been offered to make sense of this puzzle. One common theme that runs through most of the accounts is the notion of institutionalization, which entails both in the classical sense of establishment of a strong, coherent, and adaptable organizations that serves as the bedrock of the state capacity (Huntington 1968) and in a more modern sense of imposing formal rules and procedures that govern important aspects of elite political interactions (North 1990). According to this line of argument, CCP has both inherited and developed a set of distinct formal rules and procedures that have allowed it to effectively contain intra-elite conflicts and to provide strong incentives for lower-level agents to work on development and policy tasks. At the top-level, the key institution widely believed central to political stability is the high-level deliberative bodies of collective leadership, such as the Politburo and its Standing Committee (Miller 2008; Nathan 2003; Wang and Vangeli 2016; Zheng 2015). At the subnational level, many regard the elaborate, quantity-based performance-based evaluation system as the most crucial institution that generates performance incentives for lower-level officials by linking outstanding performance with promotions (Li and Zhou 2005; Maskin, Qian and Xu 2000; Rothstein 2014).

While formal institutions undoubtedly do play an important role in the regime's continued functioning, to explain China's durability based on the formal dimension alone is unlikely to be

adequate for theoretical and empirical reasons. Theoretically, all formal-institution-based explanations had to deal with the thorny problem of genesis: To the extent that institutions are artifacts created by human beings to regulate expectations and behaviors (North 1990), what explain the emergence and endurance of these institutions themselves? This question is particularly relevant in an authoritarian context, where it is much easier for power holders to create, discard or manipulate formal rules and procedures at will than in established democracies.

Moreover, China's experience with political and economic development also exhibits important patterns that are either inconsistent with, or directly contradictory to what the formal institutions prescribe. For example, a closer look at the high-level power dynamics in the past two decades suggests that there are indeed marked variations in the de facto authority enjoyed by the three consecutive paramount leaders in the past two decades.[1] More notably, since assuming office in 2012, the current general secretary Xi Jinping has largely defied the prior predictions of his weakness[2] by achieving a stunning degree of power consolidation that has never been seen since Deng Xiaoping.[3] If formal institutions are what sustained intra-elite power sharing and stabilized leadership successions, why do we observe such dramatic shifts in top leaders' personal power during a period when the formal institutions have *remained largely the same*?

Neither does China's subnational governance appear to be fully consistent with the model of a meritocratic bureaucracy. In contrast to the prevailing belief that the meritocratic bureaucracy is an inheritance from the imperial time that has been around for a long time, a formal performance evaluation system based on quantifiable metrics is a much more recent invention—only coming into being around mid-2000s along with the leadership's proposals for "scientific development". A large body of empirical scholarship have found at best weak correlation between economic growth with political advancement at but the lowest level (Landry, Lü and Duan 2015). In the

---

[1] Both Jiang Zemin (1989-2002) and Hu Jintao (2002-2012), for example, were considered to be at best first among equals when they first came to power, yet over time Jiang was able to accumulate sufficient power to emerge as a dominant figure by the end of his term whereas Hu had his hands tied by other elites throughout his entire tenure FlorCruz 2012; Tien and Zhu 2000.

[2] For such views, see Liu and Ip 2013; Yuan 2012.

[3] Barack Obama, for example, made the observation that Xi "has consolidated power faster and more comprehensively than probably anybody since Deng Xiaoping." See Panda 2014.

meantime, informal connections with high-level leaders are found to matter profoundly in career advancement at least at for promotions to the national leadership (Choi 2012; Shih, Adolph and Liu 2012).

Finally, there are also areas where institution building has not been met with adequate progresses. One major area, for example, is on anticorruption. Seeing corruption as one of the gravest threats to regime's legitimacy, the Party has exerted a great deal of effort on building a full panoply of legal and disciplinary institutions to curtail corruption, with a degree of complexity and thoroughness rivaling some of the most advanced systems in terms (Cai 2014; Manion 2004; Quade 2007). Yet, at least until recently, the Party has so far largely failed in effectively curtailing corruption and the country has consistently ranked at the bottom third of the international corruption rankings. If strong formal institutions were the main reason for the Party's success in other areas, how come they fail in saving China from one of its most damning problems?

1.2   Argument

I propose in this dissertation a new perspective for understanding the CCP's resilience. As a key point of departure from the existing explanations, my explanations for how and why China worked center on informal realm of the system—with a special focus the political dynamics associated with networks of patron-client relations among the elites. Contrary to the conventional view that these are primordial relations typically symptomatic of inefficient and corrupt patrimonial regimes, I argue that informal patronage networks are a key institution that fosters trust and mutual obligation among actors in hierarchical organizations, and, as result, they play an instrumental role in helping the Party accomplish important political and economic tasks

More specifically, I argue that there are two fundamental problems essential for CCP's survival but that cannot be adequately addressed by its formal institutions. The first one is about creating a credible power sharing arrangement that ensures fair and adequate distribution of spoils among

major power holders (Magaloni 2008; Svolik 2012). To the extent that formal institutions in non-democratic systems are often susceptible to manipulations by an autocrat's arbitrary power, they cannot provide the fundamental credibility needed to ensure the stability of power sharing arrangements among the elites. Instead, I argue that the credibility of power sharing in China does not come from the provisions of the formal institutions but rather from the strategic maneuvers within the informal elite networks. In particular, I argue that senior political leaders can effectively lock in their power positions for an extended period of time by packing key agencies and organizations with his loyal followers. The personal relationships between patrons and clients thereby offer one of the most fundamental forms of security for elites in an environment where credibility is often in short supply. Paradoxically, these informal maneuvers facilitated the development of *formal institutions* by making political institutionalization an incentive-compatible equilibrium for the major power holders in the system.

In addition to sustaining stable power sharing arrangements among the elites, the CCP also faces the pressing need to promote economic and policy performance, upon which the regime's legitimacy has been based since the beginning of the reform era (Zhao 2009*a*). Yet such effort can be hampered by the principal-agent problems common in all forms of hierarchical organizations. The problem of bureaucratic shirking is further exacerbated in the Chinese context by the absence of explicit provisions that reward outstanding performance and the central authority's conflicting goal of asserting local political control. When the formal bureaucratic institutions are inadequate to provide strong incentives, informal patronage networks can serve as an alternative means for higher-level principals, who typically hold more encompassing interests in improving social welfare, elicit extra effort from lower-level agents and generate momentum for economic development and policy implementation through particularistic exchange of favors.

Finally, I argue that although the benefits associated with this unique patronage-based mode of governance may be important to a regime when the formal institutions have not yet been fully developed, such benefits do not come without a significant cost. Most notably, while particularistic exchange of favors enhances the responsiveness of clients to demands of their own superiors,

it could just as well weaken their responsiveness to other important regulations, disciplines, or the interests of the public as a whole. Although clients may still act in the public's interests insofar as their patrons have long horizons and can act as a more or less benevolent dictator (Olson 1993), such exchange may also reduce outcomes that depart the public's ideal points in areas where the goal and preferences of higher-level patrons are closely aligned with that of the society's. When patrons need to offer special favors to clients in order to maintain their power and influence, this may well lead them to turn a blind eye to (if not in fact implicitly encouraging) clients' illicit activities, such as corruption, as part of the reward for their loyal services. When anticorruption enforcement is selective, it is not only unlikely to deter those with protections from engaging in rent-seeking behaviors but can also undermine the overall credibility of the anticorruption measures the regime undertook. The system's inability to eradicate corruption, therefore, is not a simple result of policy or strategic failures, but rather a direct cost that the regime needs to pay for its effectiveness.

1.3   Literature

This dissertation is situated in, and makes contribution to, several different strands of literature. First and foremost, it is related to a burgeoning literature on authoritarian politics. A number of theoretical models have provided a unified framework analyzing nondemocratic regimes by emphasizing the common survival imperatives they face (Acemoglu, Egorov and Sonin 2008; Acemoglu and Robinson 2005; Bueno de Mesquita et al. 2005; Egorov and Sonin 2011; Svolik 2012). In particular, it has been argued that the existential threats to authoritarian regimes can come from both challenges from within the elites and the rebellions by the dissatisfied mass. Another important line of research, following the seminal work of Geddes (1999, 2003), has been devoted to understanding the variations of formal institutions across different types of authoritarian regimes and their implications for political stability, economic growth and various other policy outcomes. Existing studies have shown that formal institutions play important roles in co-opting opposition

(Gandhi 2008; Blaydes 2010), regulating elite behaviors (Brownlee 2007*a*; Magaloni 2008), alleviating problems of information asymmetry between the dictators and their ruling coalitions (Boix and Svolik 2007), and promoting foreign investments and economic growth (Wright 2008). Building on the existing theoretical line of research, this study examines the CCP's resilience in the context of the two survival challenges. At the same time, however, this study goes beyond the the existing literature's almost exclusive on formal institutions by analyzing how *informal institutions* such as patron-client networks affect the durability of autocratic regimes. While I do not dispute the current literature's central finding that formal institutions contribute in many ways to authoritarian survival, my analysis suggests that there are also important limits to the effectiveness of formal autocratic institutions and that informal politics provide critical inputs to the longevity of those regimes by remedying the deficiencies of the formal institutions.

By systematically assessing the substantive effects of elite networks on authoritarian durability, this dissertation is also related to a large body of scholarship that examines the general political, economic, and welfare consequences of informal institutions in general (for an over view, see Helmke and Levitsky 2004). So far, social scientists have studied different types of informal networks and come up with radically different assessments of their practical and normative implications. Typically, those who study informal networks in social and economic dimensions tend to hold a positive view on the role of these networks (Beugelsdijk and van Schaik 2005; Granovetter 1973; Knack and Keefer 1997; Routledge and von Amsberg 2003). Putnam, Leonardi. and Nanetti (1994), for example, argues that social capital, which refers to "trust, norms and networks" among societal actors, can improve the performance of democratic institutions by encouraging civic participation. In the context of China, Tsai (2002) shows that informal personal networks and non-governmental business associations played an instrumental role in helping private entrepreneurs obtaining access to credit during the early phase of China's market development. Tsai (2007) and Xu and Yao (2015) also show that in rural China, the informal institutions such as lineage groups help improved the quality of local public goods provision by strengthening the accountability of village cadres and by overcoming the collective action problem among villagers.

Those who study the informal networks among the political elites, however, are usually less sanguine about their overall effects. The conventional perspective on these networks is that they are pathological features of corrupt, patrimonial systems (Bratton and Walle 1994; Singer 2009; Van de Walle 2001; Van De Walle 2007). A number of studies of African political economy, for example, have forcefully argued that these patrimonial institutions are the very reason why Africa has been underdeveloped. Geddes (1994) shows that economic and policy reforms that aimed at enhancing the efficiency of the civil service were blocked when the politicians in charge have the competing needs to use those positions to reward their clientelistic supporters. Studies of post-Communist states also provide an impressive collection of case studies on how bureaucratic elites in the former Soviet bloc used their advantaged institutional positions and political networks to grab power and valuable state assets during the transitional period at the expense of the public (Frye and Shleifer 1997; Shleifer and Vishny 1993, 2002). Recently, Ganev (2013) offers a detailed study on how, during Bulgaria's transition, former Communist cadres utilized their old bureaucratic networks to undercut the institutional capacity of the state and amass sizable personal wealth.

Last but not the least, this dissertation is also related to a long-standing body of scholarship on role of factions in Chinese politics. Starting from the seminal work by Nathan (1973), a number of subsequent studies have employed a faction-based perspective to analyze political dynamics within the CCP. Power struggles among competing factions have been used to account for the patterns of elite cleavages on major political events during the history of the People's Republic, including the onset and the end of the Cultural Revolution (Dittmer 1978; MacFarquhar and Schoenhals 2006) and the launch of the economic reform (Shirk 1993). Huang (2000) offers a comprehensive study of the changing structure of factional politics in China leading up to the end of the 1980s. Most of these earlier studies, however, focused almost exclusively on the relationship among a handful of top elites and did not pay any attention to the broader effects of factions on more substantive economic and policy outcomes at the local level.[4] More recently, a few researchers have attempted to

---

[4]A few recent studies have indeed examined in great detail the behaviors of local patronage networks using ethnographic methods (Feng 2010; Hillman 2014). Yet they tend to focus on a single or a few counties and therefore may have limited generalizability beyond the cases analyzed.

derive faction indicators from biographical datasets and estimate their relationship with observable outcomes. Shih, Adolph and Liu (2012), for example, offer quantitative evidence confirming the literature's long-standing perspective that personal connections with top political leaders matter for the advancement of elites in the CCP's Central Committee elites. A few other studies have also explored the relative importance of factional connections and economic performance in determining the promotion of local officials (Choi 2012; Jia, Kudamatsu and Seim 2015). Yet the measurement being used to capture factional ties are still quite imprecise and little work has been done to explore the impact of factions beyond the narrow area of political advancement. This dissertation extends this literature's focus by both proposing a new methodological infrastructure for capturing elite relations and applying it systematically assess the substantive effects of informal factions on a wide range of political and economic outcomes.

1.4   Road map

The rest of the dissertation is organized as follows. Chapter 2 presents the essential background information on the origin, nature and forms of patronage politics in China. I argue that far from being a recent feature that emerged only under the current Communist regime, the use of informal personal networks as a means of political competition and governance can be dated back to the retainer system that has been developed since the formative years of the imperial state. I then describe the basic patterns of this dyadic relationship and the specific content of mutual obligations for both the patron and the client in the contemporary setting, drawing cases from field interviews, journalistic accounts, and other secondary sources. Finally, I provide a survey experiment to illustrate how patron-client relations are viewed by regime insiders.

Chapter 3 explains how informal networks served as an important instrument for elites to achieve gradual institutionalization in the past two decades. Focusing on leadership succession as a case study, this chapter argues that a fundamental tension in institutionalizing leadership succession is one between developing a credible precedent of voluntary exit and retaining sufficient

power to enforce the same succession bargain one others. I argue that informal power rendered by clientelistic networks serves as an important form of insurance for the departing leader to protect his political and personal interests before the formal tenure. Through a separation of the formal succession events and the informal transfer of power, the departing leader can create important institutional precedent that sets the expectations and behavioral standards for the rest of the elites but at the same time also preserve sufficient strength to enforce the precedent upon other elites by drawing on support from loyal clients serving in key positions.

I provide empirical support to this argument by investigating the dynamics of personnel appointments within the top echelon of the CCP leadership during China's three peaceful successions. A key implication from my theory is that the patterns of appointment at and following major leadership reshuffles should reflect the departing leader's effort to expand and strengthen his informal networks and create effective constraints on his successor in the next leadership. Analyzing the patterns of elite mobility during the last five Party Congresses (1987 ~ 2012), I show that a disproportionate share of officials affiliated with the departing paramount leader were elevated to the Politburo prior to their patron's retirement, and that the outgoing leader's influence was especially predominant at the level of the Politburo's Standing Committee—the Party's highest decision-making body. Additionally, I also show that the degree to which an incumbent leader can be constrained varies closely with the informal coalition structure within the elites: When the current paramount leader was faced with a single, active former leader who could act as the leader of that informal coalition, we tend to observe a balanced distribution of power and a period of stable institutionalization. By contrast, the death of the former patriarch or intense internal conflicts among multiple predecessors can significantly weaken the strength of the countering coalition and produce opportunities for the successor to expand his power.

Chapter 4 examines the role of patron-client relations in local economic development. Contrary to the common expectation that personal networks tend to undermine the formal accountability of agents in a bureaucracy by weakening the role of formal evaluation criteria, I argue that these informal relations can in fact *enhance* performance incentives in a system that lacks formal, credible

means to to reward effort. More specifically, I argue that unlike many other developing countries that suffer from a lack of capable bureaucracy, a key barrier in China's development is the problem of *over-institutionalization*: Owing to a long history of imperial bureaucratic rule and an era of extensive central planning, the contemporary Chinese system features an elaborate set of checks-and-balance institutions that constrain the power and discretion of local actors. While this system helps the central authority to effectively prevent the emergence of local strongmen, it also has the tendency to discourage local actors from undertaking productivity-enhancing policies that may be politically or professional risky, such as large-scale privatization, urban development, or other bold market-oriented reform measures. I argue that in this context, informal ties with powerful high-level figures can enhance local actors' incentives by shielding them against the potential uncertainties associated with such bold actions. To test this argument, I empirically analyze the relationship between informal connections and economic performance using a panel of 330 Chinese cities for over a decade and a new, promotion-based measure of informal ties. Contrary to the conventional wisdom that informal connections with top leaders undermine performance incentives, I find that officials with strong ties to the higher-level leadership actually deliver *better* economic performance as measured by both official GDP and satellite data on nighttime brightness. Additional analyses suggest that while clients do receive more fiscal resources from the higher-level government when their patrons are in charge, tangible distributive favors can at best account for a small portion of the growth premium. Instead, I find both quantitative and qualitative evidence that informal connections also generate strong incentive effects that result in more efficient use of existing resources.

Chapter 5 extends the framework from the preceding chapter by adopting a better-identified research desgin and by going beyond the narrow focus on development promotion to policy implementation more generally. I show that informal networks were being used to align the interests of higher-level policy makers and local agents and overcome the long-standing problem of bureaucratic fragmentation. Exploiting an unexpected increase in the Chinese central government's perceived urgency in pollution control in 2007, I empirically examine how an exogenous shift

in policy preferences of the higher-level authority was translated into actual policy changes on the ground and how political networks conditioned local leaders' response to the center's call for emission reduction. Using both official statistics on emission of sulfur dioxide and satellite data on aerosol optical thickness, I find that cities connected to the the incumbent provincial secretary experienced considerably larger scale of emission reduction than unconnected cities, even though doing so requires considerable effort and a marked slowdown of the local economy. I take special care to ensure that the results are not driven by strategic appointment of connected leaders to less polluting localities after 2007.

The final substantive chapter turns to the negative consequences of patronage politics by examining how patronage networks shape the patterns of anticorruption enforcement in contemporary China. Consistent with the overall argument, I find that the pervasive presence of patron-client relations in the system has led to a highly selective form of enforcement: individual-level anticorruption investigations systematically avoid implicating clients of incumbent central and provincial leaders, while disproportionately targeting those affiliated with incumbents' rivals. I also explore the origin of such differential treatment by examining the overall variations in the degree of protection as well as the sentencing outcomes. Unfortunately, I find no support for an alternative explanation that those affiliated with top-level politicians are less frequently investigated because they are less corrupt. Instead, there is ample evidence that the differential investigation is driven by special protection that powerful patrons can offer to their followers in return for their loyal services.

Chapter 2

Patronage and Politics in Chinese Officialdom: Past and Present

Before engaging in a systematic analysis of the patterns and effects of patronage politics in China, I provid in this chapter the essential background information on the nature and form of these informal practices. The materials presented here are based on secondary sources such as academic research and journalistic accounts, in-depth interviews conducted with serving and retired officials over several Chinese provinces, and an original survey experiment conducted on serving party cadres.

2.1 The Historical Roots of Patronage Politics: The Retainer/Mufu System

Patron-client relations have deep roots in China's political culture that can be traced a long way back. During most of the imperial era, these informal relations were not only defining features of politics but also served as important but informal institutions for the proper functioning of the empire. The historical origin of contemporary patronage politics can be traced to a key informal institution under the imperial rule—the retainer system, which is also later known as the *mufu*.

Discussion of these institutional precursors not only helps us understand the historical context under which the contemporary institutions arise, but also signifies the general importance of informal relations in governing a vast, complicated country like China.

The existence of the retainer system (*menke* 门客, or *shike* 食客) was documented in as early as the Spring and Autumn Period (770 - 476 B.C), an era characterized by a weak central sovereign and intense competition among local elites for political and military supremacy. Nobles and senior officeholders who wished to augment their political influence and social prestige often did so by hosting a large number of retainers in their own houses. Retainers were recruited from all walks of life and often possessed a diverse set of skills that may be of value to the host. According to the *Records of the Grand Historian*, some of the most prominent noble houses during the Warring State Period hosted more than a thousand retainers at the peak of their power (Sima and Watson 1993).

Formally, the relationship between the masters of the house and the retainer is one between the host and the guest. Retainers were viewed not as servants or slaves but as friends, or "special guests", of the hosts and thus had to be treated with a high degree of respect. In reality, however, this relationship is much closer to a patron-client bond, in which the retainers, or the clients, were personally dependent on their hosts, or the patrons, for food, accommodation, and many other material benefits (Li 2001). In return for their patrons' special favors, the retainers were expected to offer services to their hosts when they were called upon (Qu 1971). The types of services that the retainers had to perform for their hosts were usually not formally specified but could vary greatly according to both the hosts' demands and the abilities that the retainers possessed. Documented services by retainers ranged from mundane tasks such as bookkeeping and debt collection to more challenging ones such as tactical advising and bodyguarding (Sima and Watson 1993). Despite not having any place in the formal state apparatus, retainers were also sometimes entrusted with political tasks with the utmost importance to their patron. For example, Mao Sui, a retainer of Prince Ping Yuan in the state of Zhao, went on a diplomatic mission on behalf of his patron to form seek out military alliances when Zhao was under siege. Aside from diplomatic negotiation,

assassination is another key task that retainers, especially those with military skills, perform for their hosts. For example, Jing Ke, a retainer residing in the house of Dan, the crown prince of the state of Yan, attempted to assassinate Ying Zheng, who later became the first emperor of China, under the order of his patron.

The tradition of keeping retainers as informal consultants and assistants did not fade away as China became unified under a powerful central state. With the elimination of local lords and the rise of a Confucian state, the system evolved into an essential but informal component of the imperial administration, which later became known as the *mufu* (幕府), literally translated as "the government behind the curtain". Although never formally recognized by the imperial state, the mufu system nonetheless offered important services to the empire by mitigating the conflicting imperatives that it faced in governing a vast and complicated territory. For most of the imperial history, Chinese rulers championed Confucianism as the dominant ideology and find the fundamental justification of the regime's legitimacy in its teachings. Officials, therefore, were selected on the basis of their literary skills and learning of Confucian classics, rather than technical and administrative competence. To avoid the emergence of entrenched local elites, government officials were also frequently rotated across localities and a rule of avoidance was developed to forbid officials from serving in their own home districts. Under this arrangements, officials typically lacked both the technical expertise and social knowledge for effective administration.

The *mufu* system was therefore used an alternative means to assemble a team of talents who could help the Confucian-scholars do their job well. The hired talents in a mufu system were called *muliao* (幕僚, literally meaning colleagues behind the curtain). The hiring decision was a personal one made by the official himself and did not have to go through the formal state apparatus. The talents consisted of both low-level intellectuals who had a good practical/tactical mindset but did not do well in civil service exams or individuals who had expertise on agriculture, military operation, public finance, and later foreign affairs—important skills not recognized or valued by the formal examination system (Folsom 1968, 33). The relationship between an official and his muliaos is thus a highly personal one that is not too different from that between the lord and the

retainer in the early era. The instrumental nature of exchanges masked under formally emotional bonds and egalitarian statuses between the two parties. According to a comprehensive study of the operation of the mufu system during the Ming (1368-1644 A.D) and Qing (1644-1911 A.D) dynasties, the social protocol required the official to show respect for his muliao and take their advice with a degree of seriousness. Muliaos were typically called or referred to on a zi (courtesy name) basis (Eisenstadt and Roniger 1984, 134), indicating their nominally equal status with the patron.[1]

While the mufu system was generally important for effective administration, it was particularly relevant in periods of radical social political changes during which the formal institutions were usually too slow to adapt. In the final decades of the Qing dynasty, the mufu was particularly influential as the empire tried to grapple with several major rebellions and a whole range of new tasks that arose from its engagement with foreign powers. Several prominent politicians, including Zeng Guofan, Li Hongzhang, and Zuo Zongtang, all held large mufus—usually more than several hundreds—with individuals possessing modern skills such as foreign language, technology, and operation of modern armies.

From the patron's personal perspective, the hiring of muliao not only helped mitigate the pressing problems of governance but also served as a means to expand his influence in the political system. The latter function is made possible by the sponsorship system (*baoju* 保举) , which is an important alternative selection method aside from the better-known competitive civil service examination. Under this system grants, senior politicians enjoy the formal privilege to recommend talents to the imperial court when positions become vacated. Sponsorship of talents is considered not only a moral obligation for the political elites but also one of the most valuable rewards that they can receive from the imperial court. After a major military victory or successful completion of a significant assignment, for examploe, the leading politician in charge of the task is often granted a list of positions to which they can recommend individuals. Loyal muliaos who had provided valuable services were often on the top of the list. Both Li Hongzhang and Zuo Zongtang, for

---

[1]Sometimes the patron will make one of the closest (and usually most senior) muliao to be the instructor of his children to demonstrate his appreciation of the latter's talents and reinforce the relational bonds.

example, served under Zeng Guofan's mufu before they were sent for more important state and military offices on Zeng's recommendations. They too sponsored a large number of their own muliaos to high-level positions after rising to prominence. For the muliao, recommendation is both an important reward and a form of political obligation: He was expected to act as a loyal ally and supporter to the patron when called upon. Even when he could not do so due to other important moral or legal commitments, the bottom line is that he should not actively perpetuate harm onto the former patron. Turning one's back on the old patron is widely considered a disloyal act that is widely despised.[2]

2.2   Patronage Politics under the CCP

Informal patron-client relations flourished under the CCP, in part because the political and governance challenges that the contemporary regime is facing are not radically different from its imperial predecessor. For one, like its counterpart during the imperial times, the new guiding ideology of system—Communism, or, more specifically, Leninism—placed an even stronger emphasis on political unity and refused to recognize disputes and cleavages within the political leadership as persistent phenomena in politics. The preoccupation with maintaining the appearance of cohesion naturally foreclosed the possibility of open, formal coalition building and compelled elites to resort to more informal means of organizing when vying for supremacy. At the same time, the regime also continued to face the challenging task of governing a large, diverse territory and was

---

[2]Although the formal system does not stipulate reciprocity of any sort, the sponsors and sponsored were bounded together through both formal and informal linkages. On the formal dimension, the sponsors are usually held politically responsible for the actions of the sponsored and will be punished for the misconduct committed by individual who he sponsored. At the informal level, there is also social expectation that those who receive favorable recommendations to repay the favor by offering their assistance and support to the recommender in times of need. When there is clear parties and factions in the system, those sponsored is expected to join their recommenders' (or patrons') faction in order to boost the latter's influence. When the latter was banished from the central court due to either loss of the emperor's favor or defeat in a political battle, many of the officials whom he sponsored will be compelled by the norm to follow the sponsor into exile. In one example during the Song dynasty, when Fan Zhongyan, a prominent politician in under Renzong's court, was demoted to a remote prefecture, one of his supporters (尹洙) voluntarily asked to share Fan's culpability, emphasizing the fact that he was sponsored by Fan. See Kracke (1953).

constantly being torn between the conflicting imperatives of securing the loyalty of regional administrators of the central authority on the one hand and granting them sufficient power to deliver effective local governance on the other.

The networks of patron-client relations provided at least a partial compromise between these inherently contradictory tendencies by allowing elites to accomplish tasks essential for the survival of both the regime and themselves but not condoned by the formal rules. From the perspectives of the clients, on the other hand, patronage from higher-level politicians also brings various forms of important benefits that they need to in order to thrive politically and personally. Unlike many other Leninist single-party regimes, there are few external employment opportunities for professional politicians outside the regime and advancement within the party. The competition for promotion within the political hierarchy is extremely fierce,[3] yet the criteria for selection are at best vaguely specified, partly as a result of the political effort to assert local political control by maximizing its control and discretion over the fates of lower-level agents. Under this situation, aspiring talents seeking a career in politics have to seek out patrons, who are usually experienced senior leaders, to act as their mentors as well as sponsors in the system. Political patronage from a senior leader not only provides junior officials with a relatively stable environment in which they can enjoy sufficient resources and latitude to demonstrate their talents but also ensures that their efforts and accomplishments will not be unnoticed in an enormous bureaucracy with a myriad of potential candidates. At the same time, repeated interactions with the patron also facilitate the transmission of critical but tacit knowledge about the officialdom, which can be instrumental for the clients' future career development.

From the patron's perspective, moreover, personal ties with clients are also indispensable political instruments. For one, they are an effective means for building political coalitions and obtaining

---

[3]According to one estimate, for a section-level (科级), who is at the lowest rung of the political hierarchy, his chance of promotion to the next level (i.e., the department-level, 处级) is merely 4.4%. The game does not get any easier afterwards: the rate of promotion from the next two levels are both less than 2%. More recently, a series of recent personnel reforms that imposed term limits on important state offices and age ceilings on the promotion to every rank further transformed the career advancement system into an effectively up-or-out game where an official needs not only to be promoted but also to achieve promotion within a limited period of time in order to remain as an eligible candidate for the next level. Based on estimates of official data, see http://www.ce.cn/macro/more/201306/16/t20130616_24482807.shtml for a related report.

access to critical resources in a large and fragmented political structure. In times of intense power struggles, clients help patrons stage attacks on political opponents, collect information and disseminate rumors, and perform various other legal or extralegal tasks that cannot be done by the patron in person. Both Mao Zedong and Deng Xiaoping, for example, were famous for their ability to conduct political maneuvers through proxies while staying behind the scene themselves. In times of necessity, these proxies can also be used as scapegoats for policy failures made by the patrons in order to preserve the latter's authority. Mao, for example, is well-known for direct the resentment against Cultural Revolution to a small of group of associates who were handpicked by him to do his bidding (MacFarquhar and Schoenhals 2006). Deng also allegedly tried to shift the blame to his protege Zhao Ziyang after his radical price reform resulted in hyper inflation (Zhao 2009*b*).

In more peaceful times, these informal ties can also be used by the politicians to fashion an effective administration that brings together a diverse set of sectoral and regional interests. By offering trusted subordinates special favors that are not readily supplied in the impersonal regulations of the formal bureaucratic institutions, these personal relations can serve effectively as credible profit- or risk-sharing mechanisms that align the preferences of the patron and his clients and strengthen the internal cohesion of the administration. An extensive personal network that spans multiple organizations and administrative hierarchies can provide the patron with both the financial wherewithal and the manpower necessary for carrying out ambitious policy programs that will contribute to his ruling credentials. At the same time, flexibility and protection offered by these personal ties also help mitigate the suffocating effects that rigid and impersonal bureaucratic institutions often have on local innovation. Some of the boldest policy changes during the early phase of the economic reform (~ late 1970s), for example, were pioneered by Deng Xiaoping's proteges-–most notably Zhao Ziyang and Wan Li (Baum 1996, 68-69). In a more recent study of policy experimentation under Hu Jintao administration, Tsai (2011, 168-169) similarly finds that officials with strong ties to the incumbent general secretary are more active in carrying out democratic governance reforms, which increase the scope of participation by the public but can may be too politically controversial.

2.3 The Micro-Level Dynamics of Patron-Client Relations

2.3.1 Building Relations

In the contemporary Chinese system, patron-client relations are colloquially referred to as "lines 线" and the act of becoming one's clients is described as "attaching to one's line 搭线". The act of developing a line relationship can be initiated by both sides and under a variety of circumstances. The process of establishing such ties can be initiated on both sides: Aspiring junior cadres who seek upward movement can actively seek out patronage from senior officials. At the same time, senior politicians also often pay special attention to taking on junior colleagues as their clients as they are rising through the hierarchy.

For the clients, developing a personal relationship with a patron can be accomplished in broadly two ways, professional or personal. The professional route usually requires the demonstration of extraordinary performance on certain dimensions that are of professional interest to the patron. The content of "performance" depends on the nature of the sector and usually encompasses a wide range of issues. In some cases, a junior official can impress a patron by successfully organizing a large government meeting/conference that marks the latter's accomplishments. Other patrons may have strong policy preferences and wish to see their visions faithfully implemented in localities. Yet performance may also include other less formal skills that are nonetheless important for conducting government business in many settings. One informant, for example, described to me how he became attached to his patron because of his good social and drinking skills:

> *I was then a worker in that factory where Mr. Z (the former county secretary, my informant's presumptive patron) was the factory head. Our factory was very well run and there was a lot of external visitors. We often had to banquet with them after their official tour was over, and there was a lot of drinking. Mr. Z had a liver problem and could not drink a lot, but I was young and known to be a good drinker. So he often brought me to dine with guests so that I can drink on his behalf. I also learned how to say things that light up the atmosphere (diaodong qifen) and make our guests happy.*

He was very fond of me and later made me to take charge of the factory's external affairs. When he left the factory for the county seat, I was one of the two people he brought along because he expected a lot of drinking in the government.

In trying to draw attention from the targeted patron, it is equally important that performance be delivered in a *selective* manner in order to signal to the patron one's personal loyalty and exclusive dedication to him/her personally. The junior official may, for example, choose to exert more effort and attention on tasks assigned by their prospective patrons than others with whom they do not expect to develop close ties. More subtley, a client may try to arrange his/her work flow in a way that always prioritizes tasks or displays a significantly higher level of customization when serving his/her prospective patron.[4]

As an example of the blatant way of displaying selective performance, one of my informants described to me how a county party secretary tried to actively attach himself to the line of his city party secretary by adopting different ways to handle inspection visits by different higher-level leaders:

Depending who came down to visit, Mr. C (the county secretary) could act as two completely persons: When the party secretary came down for a visit, he would usually start preparing as soon as he receives the notice. On the day of visit, he and the county party committee would drive to first highway entry into the county boundary and wait there to greet with the secretary. The reports he delivered at those inspection meetings are usually carefully written and well-rehearsed...He would basically do everything he could to please the boss. However, when other city leaders, especially those who do not have good ties with the party secretary, came for a work visit, he was definitely much less enthusiastic. Last time the city mayor came, he did a sloppy work report that

---

[4]Selectivity can be communicated in both blatant and subtle ways, each with its merit and limitations. The main merit of a blatant display of selective performance is that it sends strong signals of loyalty and dedication that usually cannot be missed by the recipient. At the same time, however, the downside of a strong signal is that it may antagonize other power holders in the system by making them feel that they are not properly served by the subordinate. By contrast, a subtle signal of loyalty can avoid much of the negative publicity, but may suffer the problem of low credibility due to its weakness. Typically, a strong signal is more desirable when the targeted patron is in a relatively more dominant position and there is not too much collegiality in the higher leadership.

even got the basic figures wrong. The mayor was furious and criticized him harshly in front of all his subordinates, but there was also a few party secretary's people there and they later told the secretary about this incidence. His ties with the secretary actually became much stronger afterwards.

Alternatively, connections can also be established through personal contacts. Junior officials may, for example, develop good personal relations with their superiors by offering their own resources and connections to help the superior take care of certain personal matters. Although this is typically rare given the fact that the superior is usually at a much more advantageous position than his subordinates, one common setting under which this may happen is when a client with deep local roots is faced with a superior who comes from the outside. Without many acquaintances in a new locality, a patron is usually pressed to take over whoever is willing to offer loyalty at the beginning of tenure. More frequently, though, clients can only showcase their goodwill indirectly by first establishing ties with other members of the patron's network, including close associates, business friends, or even family members. In one well-known example, Yang Weize, the former party secretary of Wuxi (later Nanjing) city, managed to attach himself to the line of Zhou Yongkang by first getting in touch with Zhou's brother. To show his goodwill, Yang first called to a halt an on-going demolishing project in the home village of the Zhou family and then spent extra fiscal resource to make the village a "star village (明星村庄)" in the city. These actions pleased Zhou's brother, who later put Yang in touch with Zhou Yongkang in person.[5] In another case, Wang Lijun became connected to his future patron, Bo Xilai, through Xu Ming, a billionaire who had long and close ties with Bo and his family since their years in Dalian city.

In the meantime, ambitious senior leaders do not passively wait for clients to come but instead try to actively recruit worthy followers to strengthen their networks. The searching for talents occurs regularly and constantly throughout a patron's career, as they go through personnel files, review work evaluations, and go on inspection tours. The preferences and strategies in recruitment vary greatly by patron: Some patrons, for example, may place emphasis on technical expertise and

---

[5]For a journalistic investigation on this matter, see Xue (2015).

professional competence while others value moral characters and social skills. Similarly, while certain patrons prefer recruiting followers who share their own ascriptive attributes, such as hometown origin, linguistic similarity or professional background, others have a more eclectic attitude in terms of the background of the prospective clients. Generally speaking, however, there are two rules that most patrons follow when it comes to recruitment strategies: The first rule is to have a group of followers with a diverse set of characters and skills. When the clients are heterogeneous, it is usually easier for a patron to maintain his position by acting as the sole intermediary to resolve conflicts and coordinate actions among them. Sometimes, a patron may deliberately try to foster some degree of competition among key members of his network precisely to strengthen his own control.[6] Moreover, diversification also provides patrons with a rich set of skills that can be used to accomplish tasks that are inherently complex and multi-faceted. To undertake a major policy program with wide social impact, for instance, a politician needs not only effective administrators who will oversee the details of implementation on the ground, but also intellectuals who can frame the program in a way that aligns with the predominant political trends and social butterflies who can work out relations with key central and local partners as well as business contributors.

The second general rule is that preference in recruitment will be given to those who come to know the patron *before* he/she reached a position of great influence. Relationships formed in early days are believed to be more reliable because they are purer and less tarnished by instrumental motivations. Sometimes, a politician may even bring in a long-term acquaintance from outside the political system when he/she is trying to build a governing team in a new locality but lacks familiar contacts within the local government. Several of my informants recalled that they were first brought into the government services by their former teachers, managers (usually in state-owned factories or firms), or military superiors when the latter were appointed to leadership positions and needed assistance. Even very senior politicians with large personal networks still prefer to have the positions with the highest stakes placed under the hands of old colleagues and friends

---

[6]For example, it is known that there was considerable competition between important sub-network leaders within Jiang Zemin's own patronage network. See Nathan and Gilley (2003). or an example of Deng Xiaoping, see Padgett (2012).

whose loyalty has been tested. Deng Xiaoping, for example, effectively governed with a group of comrade-in-arms that Deng met during his years in the second field army (formerly the *Jinji Luyu* field army).[7] Similarly, a number of Jiang Zemin's old contacts in First Machinery Ministry (where Jiang worked as an engineer and later a mid-level cadre) were elevated to important posts after Jiang was made the general secretary. Under the current administration, Xi Jinping's two closest allies in the Politburo, Li Zhanshu and Wang Qishan, both met the general secretary in their twenties or thirties, long before Xi ascended to preeminence.

2.3.2 Obligations, Norms, and Enforcement

2.3.2.1 Patron's Obligations

Patron-client relations, once established, tend to be relatively stable and can last for years. They operate on the basis of a set of common expectations about mutual obligations. For the patron, his primary obligation is to to help clients advance their careers. When valuable positions open up, patrons often have to ensure that an adequate share will go to their own clients. Sponsoring a client's promotion sometimes involves formally making a case on behalf of the clients during the leadership meetings, where the patron describes in detail the merits of the client and his fitness to a particular position and defends the nomination against any questions that may arise in the meeting. Typically, to get a nomination through, a patron has to "do a lot of work" (做工作) on other senior leaders in order to get broad consensus before the formal deliberation starts. This may involve making concessions to his senior colleagues on other important issues, or agreeing to offer to his support for their own nominations for the future.

Aside from assistance in promotions, an important obligation that patrons have for their clients is to shield them from disciplinary sanctions. When evidence about the wrongdoings of a client is being reported to the authority, a patron with allies in the disciplinary agency usually enjoys a

---

[7]During the 13th and 14th Central Committee (1982-1992), Politburo members with 2nd field army background included Bo Yibo (deputy chairman of the Central Advisory Comittee), Qin Jiwei (Minister of Defense), Wan Li (chairman of the National People's Congress), Yang Shangkun (president of the PRC and the first chairman of the Central Military Commission) and Zhao Ziyang (premier).

first-mover advantage by suppressing it before the materials even get on the record. Sometimes, the patron can even use his access to the disciplinary power to punish the suspected whistle blower in order to deter future unfavorable actions against his clients. When this first trench of defense somehow fails to block the case and a client is facing an imminent corruption investigation, the patron could also try to deflect it by stepping in and making a personal pledge about the client's innocence. This act, commonly known as *bao* 保, is a widespread practice in the Chinese officialdom. Senior political leaders, for example, have repeatedly called off investigations that may potentially implicate their loyal associates. At the lower-level, the practice is likely to be even more pervasive, especially given the weakness of legal and judicial institutions.

What ensures that the patron would honor his promise to the client, especially given the asymmetric power status between the two? One important mechanism is the reputational considerations. Patrons who could not fulfill their obligations to the followers after the latter have provided their services will tend to develop a reputation as being either weak (*ruo* 弱) or disloyal (*bujiang yiqi* 不讲义气) and such a reputation could considerably limit a politician's ability to recruit loyal followers in the future. This rational is best illustrated in a former local party disciplinary chief's response when asked about patrons' motivations behind helping their clients avoid corruption investigations

> *Except for a few saints who could absolutely not tolerate corruption by their underlings, most senior leaders are reluctant to have their friends investigated for whatever causes. It's not necessarily that they themselves are implicated—although sometimes they do—but being seen as unable to protect one's men is not a good thing. If someone is put in jail and people know he is on your line, that makes you look really bad and no one will be willing to follow your lead in the future.*

A reputation of disloyalty, once developed, can follow a politician throughout his career as he moves across regions and organizations and can have an impact on a wide range of audiences beyond one's clients. When a new leader arrives at a new place, the local subordinates would try hard to find out from various sources about his personality and leadership style. Rumors and anecdotes about how he dealt with underlings in his previous post was a particularly relevant piece

of information that many are interested in knowing. Aside from the subordinates, the politician's patrons and superiors may also use this reputation to make inference about his moral character. When a politician is known for constantly shirking obligations to clients, his own patron may start to develop doubts about whether he would be a reliable follower, and sometimes may simply be hesitate to keep him in the patronage network because the patron does not want to be seen as condoning disloyalty. One retired city secretary, for example, describes his personnel policy as follows:

> *When I pick who to use, I need to look at not only how he treats me but also how he treats others, especially his family and those who have worked for him. If that person has a reputation of treating those close to him badly and unfaithfully, I would never use that person no matter how good he is to me—how could I be sure that I would not be one of them one day?*

To the extent that maintaining a good, loyal reputation is essential for one's power and survival, senior politicians often adopt various gestures and strategies to signal to the elite audience that they are strong and loyal patrons. One way to do so is by publicly demonstrating affection and care for those who have served them. Patrons may, for example, regularly praise the work done by their clients in front of many other officials. When clients make a significant accomplishment in implementing the patron's plans, the local party mouthpiece may be ordered to run a headline on it and publicize the subordinates' achievements. In promotion contests, leading politicians can also showcase the benefits of loyalty by offering a few special promotions to their loyal clients (or even his clients' followers), which clearly violates the formal rules of seniority.

Even for those who did not serve the patron satisfactorily, a patron sometimes still wants to be seen as paying back their services with gratitude rather than completely lacking affections. During my fieldwork in a north province, several informants described to me a case that well illustrates this logic. This case involves Mr. A, a Politburo member who worked in that province about a decade ago. During his tenure there, Mr. A had a personal secretary, Mr. W, who used A's name to make personal fortunes and later received a disciplinary sanction for such behaviors. A was quick

enough to replace W and distance himself from what W has done. However, after Mr. A came back to the province in the capacity of a Politburo member ten years later, he brought up the issue of W himself over the dinner hosted by the provincial party branch and attended by the senior party and government cadres. As one of my informants who attended the dinner recalled:

> *We were instructed to not discuss any matters that may be linked to Mr. W that night because it was known to be quite sensitive. But (surprisingly) Mr. A started to ask about W in front of all the people. He asked how W had been doing recently and whether we had offered him a full-bureau position yet (W was formerly at the deputy-bureau level). A said that W had after all served him many years and that service should not go unappreciated.*

Why did A start to care about someone who he has not met for years and almost hurt his career? If Mr. A was simply caring about his former colleagues, he could simply ask the S provincial leadership to arrange a special promotion for Mr. W, which can be easily and secretly done in his capacity as a Politburo member (and a very important one, to be sure). However, his choice of displaying such care in a public setting is likely to be motivated by something beyond the immediate concern for his underlings. A common interpretation of A's display of kindness by senior officials in province S is that it is A's own way to attract followers. One of my informants, for example, suggest the following:

> *I don't think Mr. A really cares about his former aide—if that's the only reason he did not have to do this in public. A's career will be on the rise in the next few years and this province is where he spent most of his career. A is not only showing kindness to W but also sending a message to us (those attended the dinner): I'm a very loyal person, and I will not forget people's service even if they have not served me 100% well.*

2.3.2.2 Clients' Obligations

Clients also bear important duties in the relationship with the patrons. The most fundamental obligation for the client is to faithfully defend the patron's authority and carry out his assignments

with enthusiasm. When the patron proposes a new policy with uncertain outcomes, for example, clients must not only to be the first to implement it but also try their best to deliver good results that will justify the patron's decisions and serve as model examples for others to follow. When a patron makes a mistake or is under political attacks, clients have to defend the patron's reputation by either helping him cover up the wrongdoings, deflecting the criticisms, or sometimes even by shouldering part of the responsibility themselves. Occasionally, core clients may be given the opportunity to take care of the patron's personal affairs, and they are expected to remain silent on private issues that patrons do not want others to know about.

Except for cases where there are real legal or personal constraints on what the clients could do, expressing reservations on the patron's tasks or trying to openly bargain for a better deal are regarded as signs of disloyalty or immaturity and may result in the loss of the patron's favor. A former county secretary, for example, recalled that he once became deeply upset when his client X, a township party secretary who he promoted to that position, shirked on his assignment:

> *When I was serving as the party secretary of the county, my plan was to modernize the township industries by building industrial groups—like ones you see in South Korea and Japan. I knew there were a few small agriculture machinery workshops in X's town and I told him that it would make a great example to the rest of the county if he could help emerge them the county's machinery firm to create a business group. He promised me several times but never actually delivered. Later he even sold them to a company from outside![8] I was furious after knowing this and regretted that I really did not see this clearly beforehand—such a person with no sense of gratitude should never be promoted in the first place.*

Others put the obligations in a more blunt manner. One county leader, for example, state the following:

---

[8] *As I learned later, X resisted in large part because his family had a substantial share in one of the most profitable workshops, and he was concerned that merging would lead to loss of control and profits over the business. His family was also in the process of negotiating with a Southern firm on potential acquisition and the negotiation has been kept away from the county secretary.*

When I promote people, the single most important criterion is whether they can help me achieve my goals and plans. If they work hard, I will reward them properly. But if they could not or unwilling to do that, they'd better just pack up and go home.

If shirking is already viewed as violating one's obligation as clients, shifting patrons is even less tolerable. My informants from multiple provinces have independently confirmed that exclusive loyalty is of paramount importance in these relations. Generally speaking, one can only be attached to a single line at a time and the attachment typically does not change insofar as the relative status of the two individuals remains stable.[9] Defection is usually met with grave political and social sanctions. Not only would the patron himself try to find ways to punish the defecting client, but other elites may sometimes also join forces as they do not want to be seen as tolerating defections by their own followers.

Anecdotes from elite politics suggest that there is a strong, collective norm against defection among the political elites. In one well-known example in high-level politics, Wang Zhaoguo 王兆国, who was a protégé of Hu Yaobang, turned against his patron when a group of party veterans were trying to depose Hu in 1985. Wang's enthusiastic criticism of Hu, however, did not earn him much appreciation from the veterans but was instead viewed as an act of grave betrayal. Chen Yun, then the second most powerful veteran and one of the main supporters for Hu Yaobang's demotion, explicitly told Deng Xiaoping that Wang "was unsuitable for high-level politics and had better to receive additional training at the lower-level." Deng himself concurred with such a view and soon demote Wang to a provincial post. By contrast, Hu Jintao, another close associate of Hu Yaobang and the future general secretary, was considered by the veterans as an upright man precisely because he displayed a much greater degree of reservation and refrained from lashing harsh criticisms against his patron.

Similarly, local elites also display a strong distaste against defection. The more dispersed power structure and additional institutions of checks and balances at the local level also allowed

---

[9]The relationship may change, however, after the client is promoted to the same level as the patron, or after the patron is demoted or prosecuted. Under these circumstances, it is acceptable for clients to seek out new patronage. Personal interview, SX20150203, JS20160105, JS20160201.

the patrons to more effectively impose collective sanctions on opportunists who dared to defect for short-term gains. This is best illustrated in the following experience of Mr. K, as recounted by an informant:

Mr. K was a deputy head of the transportation bureau in a city. He was promoted to his position from within the bureau by Mr. Y, the head of the bureau. Mr. Y was on the lines of the city mayor but was not liked by the city secretary. Mr. K was asked by the city secretary to report on corrupt dealings of his superior. In return, he was personally promised Mr. Y's position after he was gone. Mr. K agreed to the deal and offered materials that eventually led to the investigation of his former patron. His treacherous action, however, angered a number of city leaders who were affiliated with the city secretary. When it comes to the time of passing the new appointment in the city party standing committee, they collectively voted down the motion and Mr. K was never able to get the job that he was promised.

2.4 Patron-Client Relations and Behavioral Patterns: A Survey Experiment on Regime Insiders

The discussion above suggests that patron-client relations in the Chinese official are an informal institution that has deep historical roots in the Chinese political culture and entails strong, socially enforced norms of loyalty and mutual obligations for both parties. Most important to this study is the claim that the obligations tend to foster a highly personalized and dedicated mode of interaction between the patron and the clients that is different from their interactions with others elites. In this section I provide more systematic evidence on the attitudinal and behavioral patterns associated with patron-client relations through a survey experiment conducted on regime insiders.

2.4.1 Background

The survey was conducted in partnership with another larger survey on local law and politics officials. It took place during class sessions of a provincial-level cadre training institutions and

the subjects were civil servants who were taking the classes. Those who attended those sessions were drawn from a variety of localities from the province and primarily worked in sectors related to legal and judiciary affairs.

To the extent that the regime itself has never publicly acknowledged the presence of patron-client relations, nor does it consider them legitimate, a natural concern is that the respondents may not be willing to reveal their true attitudes on some of the potentially sensitively questions. To over come this problem, I employ a list experiment design, in which the respondents are randomly assigned to two groups and asked to provide the *total number* of items that they agreed on over a list of statements. Because the respondents are randomly assigned into one of the two groups,[10] the average number of items they pick should be roughly the same between the two groups and any systematic difference between the number of items picked should thus be attributed to number of respondents in the treatment group who include the treatment item in their choices. As a result, a comparison of the mean numbers of items picked between treatment and control will allow us to get an estimate of the proportion of individuals supporting the key statement in the sample without directly asking individual respondents their attitudes.

Given the discussion in the previous sections, the primary goals of the survey is to provide individual-level evidence that patronage affiliations result in clear behavioral and attitudinal changes for regime insiders. Because the cadres who participated in the survey are relatively junior in the hierarchy (most of them at the rank of deputy and full section 正副科级), I focus specifically on their role as clients.

2.4.2 Survey Questions

The three main questions are as follows (the treatment items are in bold and presented to the treatment group only).[11]

---

[10]We perform three different randomization for the three questions. Therefore an individual can be in the treatment group for question 1 and control group for question 2, etc.

[11]The actual survey questions were asked in Chinese.

Question 1   Of the following factors, how many of them do you think are most important factors that can motivate your to work hard? Only tell us how many, not which ones.

- Whether the job is interesting

- Whether the salary is good

- Whether my colleagues cooperate

- Whether my family understands

- Whether my relatives support

- ***Whether my superior appreciates (赏识) me***

Question 2   Of the following statements, how many of them do you agree with? Only tell us how many, not which ones.

- When the regulations are at odds with the public's interests, we should follow the regulations rather than the public opinion.

- The public must be informed even about potentially destabilizing public incidences.

- Social connections are more important than education.

- National interests take precedence over personal interests.

- My colleagues are primarily my competitors.

- ***I shall try my best to fulfill tasks assigned by the leader who promoted me, insofar as it is within the boundaries of law.***

Question 3   Of the following phenomena , how many of them have you observed others doing in daily work? Only tell us how many, not which ones.

- Building small cliques and factions

- Using one's power to benefit family and relatives

- Ignoring one's family while being preoccupied with work

- Highly educated people not being able to manage practical issues

- Cadres with a grassroots background not having a broad perspective

- ***Those promoted by the supervising leader devote extra effort on the leader's task.***

All three questions try to assess whether patron-client relations can elicit behavioral changes on the part of the clients, but come at the issue from different perspectives. First question is based on personal attitudes, the second on the normative beliefs of obligations and the third on the perception of others' behaviors. The words "patron" or "patronage" are not explicitly used in the statements because of the lack of clear corresponding words in the contemporary Chinese jargon and the sensitivity of directly mentioning such informal exchange. Instead, I refer to patrons as "leaders who promoted/appreciated you", as favoritism in promotion is one of the most common forms of benefits that patrons offer to their clients in the contemporary officialdom.

2.4.3   Results

Figure 2.1 visually displays the results from the survey experiment. Each circle represents the estimated difference in the number of items reported between the treatment and the control groups and the horizontal lines are the 90% confidence intervals. I find that there are indeed significant portions of the respondents expressing agreement with the treatment statements. On average, 60.9% of the respondents suggested that the superior's appreciation is an important source of motivation for them to work hard. A whopping 92.5% of the respondents indicate that there is normative obligation to reciprocate the patron's favor by faithfully carrying out the tasks that he/she assigns. Finally, over 40% respondents noted that there is also a behavioral pattern that clients work harder on their patrons' tasks.

33

Figure 2.1: Results from the Survey Experiment
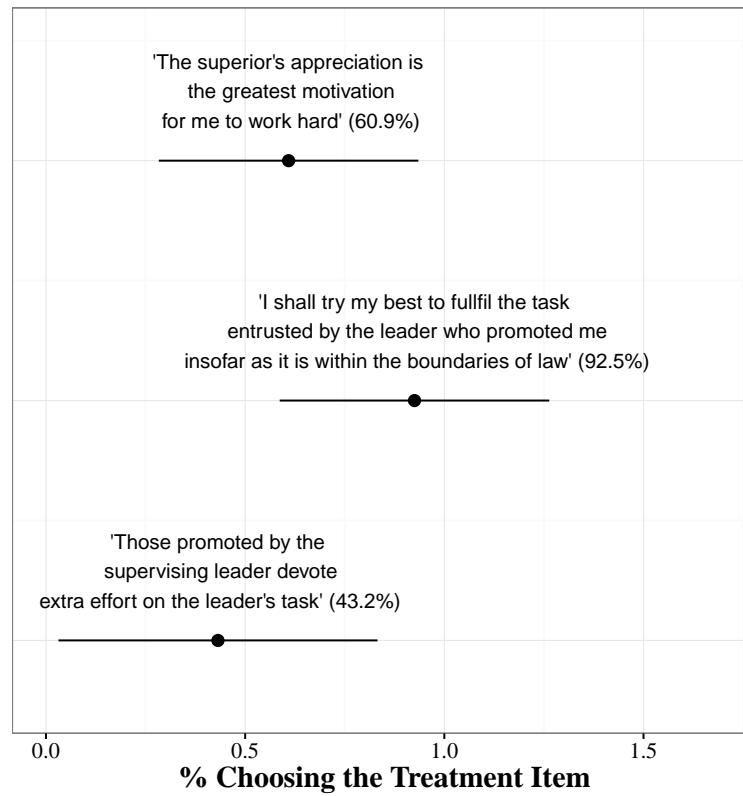
Note: The figure presents the estimated proportion of respondents who agree with the statements displayed above. The circles represent the point estimates and the horizontal bars are 90% confidence intervals. Estimation method: linear regression. N=173 for the first item on the top and N=133 for the other two items.

Overall, the results from the survey experiment corroborate the qualitative discussion above by showing that patronage does induce important behavioral changes on the part of the clients. Consistent with the examples offered in previous sections, I do find that officials perceive patronage as both an important motivator and obligation that will change the amount of effort they exerted on tasks.

2.5 Conclusion

This chapter explores the dynamics of patronage politics in China along both historical and behavioral dimensions. In the first part of the chapter, I show that instead of being a recent phenomenon, patron-client relations have been a long-standing and essential informal institution in Chinese politics since the ancient times. These personal relations have been instrumental for selecting talents and administrating localities, especially during periods of rapid social, economic and political changes. The second half of the chapter discusses in detail the basic norms, expectations, and behavioral patterns of patronage politics in the contemporary CCP regime. I show that while the relationships are highly informal and personal, there are clear expectations about the obligations that each side bears and effective mechanisms for enforcement. The results from the survey experiment further confirm that regime insiders view patron-client relations as a special obligation and act differently when orders are coming from their patrons.

Chapter 3

Patronage Networks, Informal Power, and the Contingent Institutionalization of Leadership Succession in the Post-Tiananmen Era

While many theories have been championed to explain the CCP's remarkable political resilience, one central explanation that features prominently in almost all of them is the concept of institutionalization. While authoritarian regimes are typically characterized by weak rules and personal domination, China appears to defy this trend by developing an elaborate set of formal rules and procedures that govern key aspects of elite politics. A large body of research on authoritarian politics suggests that formal institutions serve crucial functions for the survival of nondemocratic systems by helping autocrats more effectively contain intra-elite disputes (Brownlee 2007*a*; Geddes 2003), sustaining credible power sharing arrangements (Magaloni 2008; Svolik 2012), incorporating and co-opting key social and political groups (Gandhi 2008), and gathering information on mass support and performance of local agents (Lorentzen 2014; Malesky, Schuler and Tran 2012). Cross-national statistical analyses also suggests that institutionalized dictatorships typically last

much longer and tend to deliver superior performance by a number of metrics (Ezrow and Frantz 2011; Gehlbach and Keefer 2012; Wright 2008).

While the utility of institutionalization to authoritarian survival has been widely recognized, an equally important question that has not been adequately addressed so far is how these institutions emerge in the first places. The process of institution creation is typically plagued by a severe credible commitment problem: To make institutions binding constraints, elites who initiate the institutionalization process must set the example by first accepting formal limitations on their own power. By making concessions, however, elites also make themselves more vulnerable to potential non-institutional abuses by opportunistic actors who prefer exploiting their peers' short-term weakness to making complementary investments in long-term institution building. While the benefits are dispersed to all elites under the regime, this risk tends to concentrate on a few elites who initiate this process. The asymmetric costs and benefits are not only an important reason why there have been relatively few autocrats willing to take the personal risk and institutionalize, but also makes China's apparent success puzzling: How do political elites resolve this problem of credible commitment and initiate a process of institutionalization that persists for several decades?

This chapter studies CCP's institutionalization by focusing specifically on how the party regularizes one of the most fundamental problems of authoritarian politics—leadership succession. Since late 1980s, the Chinese Communist Party (CCP) has been able to carry out three peaceful and timely leadership successions (listed in Figure 3.1), a record that surpasses 95% of the dictatorships. Smooth and stable leadership successions are widely considered of fundamental importance to the Party's political resilience and impressive economic performance (Nathan and Gilley 2003), yet few studies have offered explanations for how the CCP was able to overcome the aforementioned challenges to institutionalize succession while so many other regimes failed. My explanation for the party's ability to institutionalize trace its origin to the informal dynamics of the system. More specifically, I argue that informal patronage networks played a crucial role in facilitating the party's initial development of of formal succession institutions by addressing the thorny credible commitment problem: A paramount leader who wishes to voluntarily pass down

his power may face the tangible risk of picking a successor who, after coming to power, would act against the predecessor's interests or even undo the institutionalization process entirely. Informal clientelistic networks can provide a partial solution to this problem by allowing paramount leaders who give up the formal title to extend and perpetuate their de facto influence beyond through the loyal services from trusted clients whom he appointed to powerful positions. Through a separation of the formal succession events and the informal transfer of power, the departing leader can create important institutional precedent that sets the expectations and behavioral standards for the rest of the elites but at the same time also preserves sufficient strength to enforce the precedent upon other elites by drawing on support from loyal clients serving in key positions.

Table 3.1: List of Transitions in P.R.China

Date	Outgoing leader	Incoming leader	Exit mode
September, 1976	Mao Zedong	Hua Guofeng	Death in office
September, 1980	Hua Guofeng	Deng Xiaoping	Involuntary removal
October, 1992	Deng Xiaoping	Jiang Zemin	Voluntary exit
October, 2002	Jiang Zemin	Hu Jintao	Voluntary exit
October, 2012	Hu Jintao	Xi Jinping	Voluntary exit

By highlighting the importance of informal politics in the CCP's institutionalization process, my account offers a set of more subtle and refined predictions about how and when institutionalization will progress under the party that departs from the more common, linear view of institutionalization (Hu 2014; Wang and Vangeli 2016; Zheng 2015). Most importantly, I argue that because the informal political power rendered by the clientelistic networks is the most fundamental mechanism that deters the successor from engaging in opportunistic actions, institutionalization can only progress and persist insofar as these informal networks can continue to impose strong and credible constraints. When the strength of the networks is weakened, either by exogenous shocks or endogenous evolution, however, opportunities may arise for the successor to consolidate his personal power and potentially alter or even reverse the institutionalization process. Therefore, instead of viewing China's institutionalization as linearly progressing, my theory suggests that this process has a deeply contingent character, with the pace and rhymes of institutionalization corresponding closely with the informal configurations of power among the elites.

I provide empirical support to this argument by investigating the dynamics of personnel appointments within the top echelon of the CCP leadership during China's three peaceful successions. A key implication from my theory is that the patterns of appointment at and following major leadership reshuffles should reflect the departing leader's effort to expand and strengthen his informal networks and create effective constraints on his successor. While informal institutions are usually difficult to detect and measure empirically, especially in authoritarian regimes where politics is typically secretive, I overcome this challenge by monitoring systematic pattern of elite mobility using biographic data on political elites that span five Party Congresses (1987 ~ 2012). I gauge the distribution of personnel power between the outgoing and incoming leaders by estimating how much influence the current and former leaders have on promoting their followers to powerful positions in the system. Consistent with this hypothesis, I find that a disproportionate share of officials affiliated with the outgoing dictator were elevated to the Politburo prior to their patron's retirement, and that the outgoing leader's influence was especially predominant at the level of the Politburo's Standing Committee—the Party's highest decision-making organ.

Additionally, I provide suggestive evidence on why there are notable variations in the degree of constraints that the successors face over this period when the formal institutions of collective leadership remain largely the same: While the institutionalization is more stable and predictable during Hu Jintao era (2002-2012),[1] his predecessor Jiang Zemin (1989-2002) had similarly started as the first among equals but eventually manages to accumulate sufficient power to redefine some of the key rules of politics by the end of his term.[2] More importantly, the current general secretary Xi Jinping has largely defied the prior predictions that he would be either a "weak leader" or a mere "consensus-builder"[3] and achieved a fast consolidation of personal power that has led many to lament the "end of the era of institutionalization" (Forsythe 2016). I show that a critical structural factor that determines stability (or the lackof) of the formal institutional arrangements is the presence or the absence of a strong, unified countering coalition to balance the power of the

---

[1]FlorCruz 2012.

[2]Tien and Zhu 2000.

[3]For such views, see Liu and Ip 2013; Yuan 2012.

successor. In particular, I show that when the current paramount leader was faced with a single, active former leader who could act as the leader of that informal coalition, we tend to observe effective constraints on the power of the incumbent and period of stable institutionalization. By contrast, the death of the former patriarch or intense internal conflicts among multiple predecessors can significantly weaken the strength of the countering coalition and produce opportunities for the successor to expand his power.

How to establish a credible mechanism for power transition is a general political problem that has been studied in many settings. While an extensive literature has studied the problem of credible commitment in the context of dictatorship's transition to democracy (Nalepa 2010; O'Donnell and Schmitter 1986), power transitions within autocratic regimes has so far received relatively limited attention. Recently, several studies have explored the origins and consequences of hereditary succession methods in both contemporary and historical autocracies (Brownlee 2007*b*; Kokkonen and Sundell 2014), but studies on non-hereditary methods still remain limited. In this study, I outline an alternative strategy that autocrats can use to achieve stable intra-regime transitions without passing power to their direct offspring.

In addition, this study also contributes to a growing literature in authoritarian politics that examines the relationship between political institutions and regime durability. The existing studies on authoritarian institutions so far have focused primarily on *formal* institutions, such as the ruling party and elections and use cross-national datasets for empirical evidence (Boix and Svolik 2013; Blaydes 2010; Brownlee 2007*a*; Escriba-Folch 2013; Ezrow and Frantz 2011; Gandhi 2008; Magaloni 2008). While these cross-country analyses are informative about the general patterns,[4] they are usually less specific in pinning down which aspects of these large political organizations are really at work in improving a regime's resilience.[5] This chapter supplements this line of research by offering an in-depth analysis of how a major autocracy manages to stabilize one of the most

---

[4]Others have expressed concerns about the robustness of the results. Smith (2005), for example, finds that the positive effect of ruling party on regime longevity fails to remain significant after two outliers (Mexico and USSR) are removed from the sample.

[5]This lack of micro-level evidence on mechanisms has also raised concerns about whether these formal institutions have any independent causal effects in addition to the deeper social or political factors that produce them. See Pepinsky (2014) for a critique.

sensitive areas of elite politics—leadership successions—and the analysis highlights the central role of *informal* institution in sustaining elite cohesion during China's peaceful power transitions.

3.1 Institutionalizing Leadership Succession in Autocratic Regimes: Challenges and Solutions

A growing body of research in authoritarian politics has noted the importance of political institutions for the survival of nondemocratic systems. Institutions such as political parties, legislatures, and elections have been found to help autocrats more effectively contain intra-elite disputes (Brownlee 2007*a*; Geddes 2003), sustain credible power sharing arrangements (Magaloni 2008; Svolik 2012), incorporate and co-opt key social and political groups (Gandhi 2008), and gather information on mass support and performance of local agents (Lorentzen 2014; Malesky, Schuler and Tran 2012). Cross-national statistical analyses also suggests that institutionalized dictatorships typically last much longer and tend to deliver superior performance by a number of metrics (Ezrow and Frantz 2011; Gehlbach and Keefer 2012; Wright 2008).

While the benefits of institutions to dictatorships have been widely acknowledged, the question of of how such institutions emerged in the first place still remains inadequately answered. Implicit in much of the existing literature is a functionalist view that associates the rise and persistence of institutions to the benefits they provide to the contemporary elites. However, the process of institution creation may take place under very political conditions and usually involve distinct sets of actors and incentives. In particular, to the extent that institutionalization requires elites to give up certain autonomy and place their own power under the constraints of explicit rules and procedures, the process of institution creation is rife with credible commitment problems. By accepting such limitations on their own power, elites also make themselves vulnerable to potential non-institutional abuses, as these concessions may give opportunistic actors who move after them the incentive to exploit their short-term weakness rather than making complementary investments in long-term institution building. This cost is disproportionately borne by those who initiated the

process, as the norms and precedents that can effectively deter such opportunistic behaviors are usually the weakest at the inception stage of institutionalization. Brownlee (2007*a*) notes that political parties can be overwhelmed by ambitious elites and become the "site for internecine struggle" when the foundational conflicts among the elites remain unresolved. Similarly, allowing semi-competitive elections poses a tangible risk to the regime because it gives dissatisfied elites a venue to openly challenge autocrats' power (Lust-Okar 2006; Magaloni 2006). When the immediate threats of potential abuses loom large, elites may naturally prioritize their own survival over the long-term benefits of the regime and postpone institutionalization. In studying the process of dominant party creation in contemporary Russia, Reuter and Remington (2009) show that even though building a dominant authoritarian party yields tangible political benefits to most of the ruling elites, the attempt to do so has repeatedly faltered because of elites' concerns about losing their autonomous power and being held up by others players. Others studies also suggest that autocrats are sometimes unwilling to institutionalize ambiguous and incomplete formal rules precisely because they stand to gain by acting as the ultimate interpreter of such ambiguity and fear that clarity gives others the opportunity to challenge them with their own words (Distelhorst 2015; Stern and Hassid 2012).[6]

The uncertainty associated with initiating institutionalization is particularly severe in the area of leadership succession, where the transfer of raw political power is at stake. In order to persuade other elites to hand over their power and privileges, the dictator often needs to set the first example by passing his own power to a designated successor in a timely fashion. However, in a political environment where the command of force is the ultimate means to protect personal security and enforce elite bargain (Svolik 2012), giving away such power can be a highly risky move, as he cannot be completely sure whether the successor would one day use such power against him. Tempted by the supreme position of power, the successors would have every incentive to hide their true preferences and appear loyal and supportive before they get their hands on the crown. Yet

---

[6]As an example from elite politics in China, Zhao (2009*b*) recalled that Deng Xiaoping did not like holding formal Politburo meetings at which all veteran leaders would be present, but instead like to give order personally to his associates.

once he assumes the power, there is no guarantee that he would do exactly as expected by his predecessor. In many cases, the successor may turn out to be of a type that cares about maximizing his own personal power much more than maximizing the regime's long-term durability; the initial institutionalization effort by the retired dictator may be forfeited. In other cases, the successor may also develop strong incentives to distant himself from his predecessor on other political and policy issues in order to make his own mark on history. This may involve making major changes to the policies set forth by his predecessor (Bunce 2014).[7] In more extreme cases, the successor might even take political and legal measures against his predecessor in order to establish his own reputation and authority.[8]

At its heart, successful institutionalization of leadership succession requires the retiring autocrat to develop an arrangement that achieves two potentially conflicting imperatives at the same time: (1) setting the first precedent of voluntary exit by giving up his formal power and status, and (2) retaining sufficient capacity to enforce the succession bargain on other elites, especially his successor, after leaving power. While a compromise between the two may be difficult to find within formal institutions, the informal institution of patron-client networks provides a partial solution to this dilemma by creating a separation between the formal succession events and the informal transfer of de facto power. Under this arrangement, the outgoing leader would usually set the example of voluntary exit by formally stepping down from office and passing down power to a successor. At the same time, however, the departing leader will try to foster an informal countering coalition within the ruling elites as the counterweight against the successor's influence. This is accomplished first and foremost by placing a number of his trusted associates to take control over

---

[7]This is best exemplified by Khrushchev's denouncement of Stalin (Taubman 2004). Similarly, Mohammed Mahathir, the former prime minister of Malaysia, became deeply frustrated with policies implemented by his successor Abdullah Badawi—who was allegedly chosen precisely because of his demonstrated loyalty—after stepping down from office, and cast harsh public criticism against the succeeding administration in numerous occasions (Welsh and Chin 2013).

[8]For example, Ne Win, the former Myanmar dictator, saw many of his family members prosecuted for corruption charges and himself put under house arrest after power was passed to Than Shwe, one of his long-term associates.

43

powerful positions prior to his own departure. Through the services of these loyal followers, therefore, the retired leader would continue to possess an important means to exert political influence and tie the hands of his successor even when he himself no longer holds any formal position.

The degree to which the successor's hands can be tied, of course, depends to a large extent on the characteristics of the countering elites in the predecessor's networks. While the successor's power is most likely to be constrained when he is faced with a strong and cohesive group of countering elites united under a *single dominant* predecessor,[9] the succession process itself also contains distinct dynamics that can produce opportunities for the successor's power expansion. The death or incapacitation of the former patriarch, for example, poses one of the greatest challenges to the unity of the countering coalition. Without a common patron to resolve internal disputes and coordinate actions, the rest of the coalition members will have a much harder time in remaining united and resisting dictator's divide-and-conquer tactics. This is especially the case if the former leader had been deliberately trying to keep his associates distant from each other as a way to secure his own central position in the coalition.[10]

---

[9]Somewhat analogous to a bipolar system in international relations (Waltz 1964), power bargain under such a structural configuration is typically zero-sum in nature, with the successor's gain necessarily being the countering coalition's loss and vice versa. When the cost and benefits of balancing is fully internalized, each side thus has strong incentives to devote its full attention to monitor the other side's behaviors and to promptly respond to evidence of power grab with countermeasures. From the successor's perspective, in particular, this bipolar structure makes it very difficult to expand his personal power without being detected because his moves are being constantly and closely watched by the countering elites. Moreover, when other ruling elites are united, their combined power will allow them to impose sanctions that are large enough to offset the expected benefits from opportunistic actions. Both the high probability of ex ante detection and the greater severity of ex post punishment are therefore likely to discourage the successor from attempting to expand power beyond the stipulated limits.

[10]In sociology, John Padgett and Chris Ansell note a unique form of "robust action" taken by the Medici family in maintaining their brokerage position among the Florentine elites. A key element of this strategy is to engage in qualitatively different types of activities with different types of families so that these families will not be able to establish direct ties with each other (see Padgett and Ansell 1993, For discussion related to China, see Padgett 2012). In economics, Acemoglu, Egorov and Sonin suggest that there is a trade-off between power and self-enforcement in coalition building, in that powerful coalitions are usually difficult to maintain and are vulnerable to exogenous perturbations. Although they conceptualize power as primarily the ability to repress popular rebellion, this insight can well travel to internal power balancing within the elite circle: When the predecessor who has a relatively short time horizon may prefer maximizing the coalition's short-term power as opposed to long-term persistence. This implies that when the predecessor is gone, there is a high likelihood that the coalition will fall apart. See Acemoglu, Egorov and Sonin 2008.

Another possible, albeit somewhat rare situation that may emerge in systems that have accomplished several rounds of peaceful successions is that there will be more than one living predecessors. The presence of multiple former leaders, however, may not necessarily mean stronger constraints on the successor, especially if the predecessors have diverging interests. While the successor's own share of power may be smaller when in the presence of multiple major power holders, the countering coalitions that each power holder can build on his/her own is also likely to be smaller and weaker when multiple power centers coexist. More importantly, when these predecessors perceive each other, rather than the successor, as the greater threats that needs to be contained, they may turn their power against each other rather than using it to collectively limit the power of the successor.[11] A tactically savvy successor can take advantage of this situation by playing one side off against another.[12] Although there is no guarantee that these maneuvers for greater power will succeed every time, a system with a fragmented coalition structure and complicated rivalries does offer more room for the successor's strategic maneuver than one in which the countering elites are united and fixating on the successor himself.

3.2 Patronage Networks and the Development of Successions Institutions in Post-Tiananmen China

The development of succession institutions in China has so far been most decisively shaped by two transition events, both of which involved the creation of important precedents through voluntary exit of a prominent leader. First, in 1989 after a bloody crackdown of the Tiananmen protest, Deng

---

[11]As an international relation analogy, Kenneth Waltz similarly argues that in a multipolar international system, "difficulties (to estimate strength) multiply because a state has to estimate its strength with a number of others and also has to estimate the strength of actual and potential conditions." See Waltz 1964.

[12]Although not always in a succession context, a number of powerful personal dictator did rise to preeminence in an environment with multiple factions coexisted and were intense conflicts among them. In Soviet Union, for example, Stalin's early attempts to tighten his grip over the party machine received little attention from the party elites because other major factions at that time were preoccupied with checking the influence of Trotsky, who was a much more prominent figure and Lenin's heir presumptive. Similarly, he became the single dominant figure in North Korea, Kim Il Sung, was able to leverage the conflicts that long existed among several major factions to remove his political opponents with the backing of the their own rivals. For the rise of Stalin, see Deutscher 1990; for Kim, see Suh 1988, chapter 7.

Xiaoping decided to retire from all his formal positions and elevated Jiang Zemin, then the party secretary of Shanghai, to the position of general secretary. In doing so, Deng initiated the first non-death-in-office succession in the entire history of the CCP and established the key precedent of no lifetime tenure for the top party leadership position. About a decade after Deng's exit, his successor Jiang Zemin made a second voluntary exit at the 16th Party Congress in 2002, passing the mantle of leadership to Hu Jintao.

The transition from Jiang to Hu was the *first formal and procedural-based* power transition (i.e., taking place at a regular Party Congress) and displayed a high degree of stability and orderliness that marveled many seasoned China observers.[13] Jiang's voluntary retirement further reinforced and developed the existing succession institutions by introducing a two-term tenure for the position of CCP general secretary, a post that previously was not subject to any formal term limits. Additionally, it also establishes a mandatory retirement age of 68 for Standing Committee members and a practice of generation-based transition whereby elites who belong to the same leadership cohort retired at the same time. With these precedents in place, the CCP was able to carry a third peaceful leadership transition from Hu Jintao to Xi Jinping in 2012.

As discussed above, a key challenge that autocratic leaders face in institutionalizing leadership succession is how to bind the successor to the precedents they set forth after they retire. This problem was made even more severe in China's first two voluntary transitions due to several institutional and historical factors. Institutionally, the CCP, unlike many other party-based dictatorships, contained few formal mechanisms to check the power of the top leaders: Elections, both within and outside the CCP, for example, play little more than a ceremonial role in both leadership selection and decision-making; and the Party does host powerful corporate sectors that can serve as the counterweight against the executive leadership. Historically, in the CCP's three recent successions, the outgoing dictators were all faced with a situation where they were unable to pick their own successors. In 1989, Deng Xiaoping allegedly favored someone else as the candidate for the position of general secretary but had to settle with Jiang Zemin in order to appease the more

---

[13]Nathan (2003), for example, commented that the 2002 succession "displays attributes of institutionalization unusual in the history of authoritarianism and unprecedented in the history of the PRC".

conservative-leaning veterans. In the latter transitions, moreover, the successors were also often more closely affiliated with the incumbent's predecessor than the incumbent himself.[14] The lack of preexisting ties can be an important source of conflict between the outgoing and incoming leaders and might have exacerbated perceived risk of voluntary exit on the part of the outgoing leader. Deng, for example, was for a while deeply unhappy about Jiang's conservative stance on economic reform and had planned to replace him with someone with a more liberal leaning. Similarly, Jiang did not have full faith in Hu and was unwilling to entrust him with key political responsibilities throughout the latter's decade-long tenure as the heir apparent.[15]

When the formal arrangements cannot guarantee credible protection of their post-tenure interests, outgoing leaders had to seek assistance from the informal realm. The practice of using informal clientelistic networks to project one's power and influence has a long history in Chinese politics, and is especially pervasive under the CCP's reign. As noted by Pye (1981), political actors join patron-client ties to counter the insecurity they face in an inherently uncertain political environment. Clients receive from such relations favorable allocation of rents, promotion opportunities and career protection by their patrons (Nathan 1973; Shih 2004). In return, they are called upon, usually in group, to defend their patrons' political status and policy causes in times of need (Dittmer 1978; Hillman 2014). Anecdotal evidence suggests, for example, that while Deng allowed Jiang to promote a number of his followers to key positions at the 14th Party Congress to help the latter consolidate power among the elites, Deng also made sure that he himself, rather than Jiang, had the final say on who would sit on the incoming Standing Committee—China's highest decision-making body.[16] Similarly, when Jiang gave up power to Hu Jintao in 2002, he not only expanded the size of the Standing Committee from 7 to 9, but also managed to allocate the majority

---

[14]Jiang Zemin, for instance, did not choose Hu Jintao as the successor but the designation was instead made by Deng. Likewise, Jiang and his associates had allegedly play an instrumental role in selecting Xi Jinping as Hu's successor.

[15]Insider sources also suggested that in several occasions Jiang had flirted with the idea of staying on as the party general secretary or the chairman of the military commission for another term. See Dittmer (2003) and http://www.aboluowang.com/2015/1202/654002.html (in Chinese).

[16]Eventually, Deng managed place five of his followers into the seven-member leadership body, including a deputy premier known for his bold pro-reform stance (Zhu Rongji) , a seasoned general and long-term subordinate to Deng in the PLA (Liu Huaqing), and a young official who was apparently the heir apparent that Deng had chosen for Jiang (Hu Jintao).

of seats in the enlarged body to his former colleagues from both Shanghai Municipality and the Machinery ministry.

There is also ample anecdotal evidence to suggest that the predecessor's appointees served as important constraints on the successor's power. During Jiang Zemin's first full term as the general secretary (1992-1997), for example, his proposals were constantly being challenged in PSC meetings by senior politicians, such as Qiao Shi and Li Ruihuan, both of whom were loyal associates of Deng Xiaoping. Similarly, Jiang's own clients also continued to place considerable limits on the power of his successor Hu Jintao after Jiang himself had left power. In particular, several of Jiang's appointees in the military headquarters, including Guo Boxiong and Xu Caihou, two most senior military commander under Hu's administration, effectively isolated Hu from military decision-making. In one notable example, Hu was not even informed about the military's test of China's first stealth flight until his meeting with the U.S defense minister.

The anecdotal evidence presented so far is largely consistent with my theory that a unique informal political arrangement is underlying China's stable leadership transitions. In what follows, I further substantiate my argument by presenting systematic evidence on the patterns of political appointments. My chief expectation is that the promotion patterns at and following major leadership reshuffles should reflect *discernible influence by the departing leader* as he sought to consolidate his informal position through strategic appointments.

3.3   Data and Measurement

I construct an original database that records the career mobility of political elites that span China's all three peaceful leadership successions. The primary data source is the Chinese Political Elite Database (CPED), which is a new biographical database that contains standardized, machine-readable information on the demographic and professional backgrounds of over 4,000 Chinese elites since late 1980s. The full database includes all full and alternate Central Committee members between the 13th-18th party congresses (1987-2012, about 1600+ individuals) as well as

48

Figure 3.1: Political Hierarchy in China
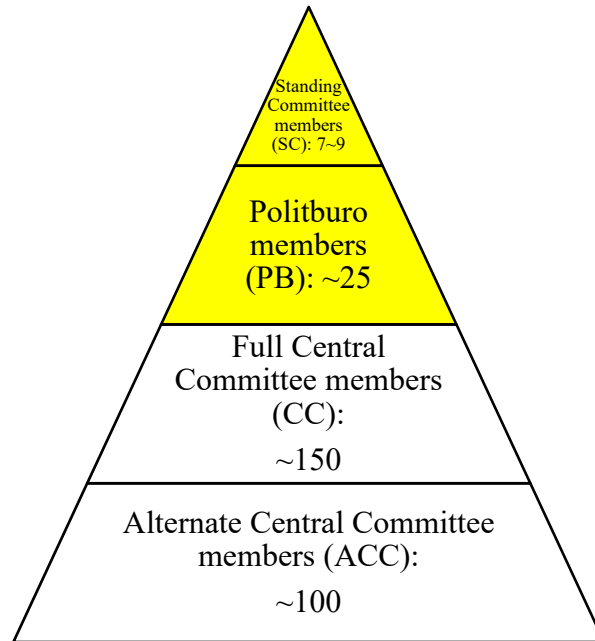
provincial standing committee members, city mayors, and city secretaries since 2000 (~2500+ individuals).

For analysis in this chapter, I use information for all political elites who were full and alternate Central Committee members (CC and ACC) from the 13th to the 17th party congress (1987 to 2007). This group of officials constitutes the primary pool of candidates for top Party leadership posts (Figure 3.1 illustrates the political hierarchy in China). Virtually all Politburo and Standing Committee members during this period were drawn from the CC or the ACC. I exclude from the sample sitting Standing Committee members, who are already at the top echelon of the system and therefore face no possibility of further promotion. The full sample consists of 945 distinct politicians and 1623 politician-congress observations. In the pooled analysis, I cluster the standard error at the politician level to account for the possibility that unobserved factors that affect promotion might be correlated within an individual across multiple party congresses.

The primary task of the empirical analysis is to estimate the influence of paramount leaders are in promoting lower-level associates to the Politburo or its Standing Committee. In this chapter, I

follow the conventional approach in measuring informal political affiliation by coding two individuals as connected if they have overlapped work experiences prior to their advancement to the top leadership.[17] I focus on work experience alone in our main analysis because Chinese politicians have been known for using their positions in formal institutions to recruit followers and expand their informal power bases.[18] A recent study also shows that that work-based connection measures are more precise than school and hometown backgrounds in predicting political alignment.[19] More specifically, I adopt the following formal definition:

Definition 1. A lower-level official C is connected to a higher-level patron P if and only if C has overlapping work experience with P or one of P's key political allies prior to his advancement to high-level leadership posts.[20]

A key methodological departure from existing studies is that my connection measure incorporates ties with both the top leader and his close allies. This approach is justified because the political influence of a senior leader, of course, not only affects the careers of people who are directly connected to him, but in many occasions also those affiliated with his factional allies. Stalin, for example, in his late years extended patronage primarily through promoting clients of his loyal protégé. Chinese leaders have been found to frequently use intermediaries in recruiting followers, especially those from a much younger generation. As a result, I construct the connection measures using the following steps: First, I run the aforementioned algorithm to determine whether an official is connected to the current or the former top leaders (either directly or through their allies in the PSC). Top leaders' PSC allies are identified manually based on a wide range of expert sources (for details of the coding and a list of references consulted, see the online appendix) and the details of faction break down is provided in Table 3.2. The final products are indicators for whether a

---

[17]For similar measures, see Jia, Kudamatsu and Seim 2015; Shih, Adolph and Liu 2012.

[18]Dittmer 1978.

[19]Keller 2016.

[20]High-level leadership position is defined as appointments at the Politburo level or above. I also exclude overlapping experience in extremely general/terminal career organizations, such as the Politburo and Standing Committee (政治局及常委会), State Council (国务院), the Secretariat (中央书记处), the Central Military Commission (中央军委), the People's Congress (人大), and People's Consultative Conference (政协). For Deng Xiaoping, who was much more senior than his clients by the end of 80s, I also draw qualitative information provided by Huang Jing to supplement the indicators generated by our automatic method. For details, see Huang 2000, 364 and 384.

given CC or ACC member is connected to the outgoing leader/predecessor faction or the incoming leader/successor faction.

Table 3.2: Factional Alignment in the Top Leadership

Party Congress	Outgoing leader/predecessor Faction	Incoming leader/successor Faction	Reshuffle type
13th to 14th (1992)	Deng Xiaoping	Jiang Zemin	**Major**
14th to 15th (1997)	Qiao Shi Li Ruihuan Zhu Rongji Hu Jintao	Jiang Zemin	Minor
15th to 16th (2002)	Jiang Zemin Li Lanqing	Hu Jintao	**Major**
16th to 17th (2007)	Wu Bangguo Zeng Qinghong Jia Qinglin Huang Ju Li Changchun	Hu Jintao Wen Jiabao	Minor
17th to 18th (2012)	Hu Jintao Wen Jiabao Li Keqiang	Xi Jinping	**Major**

Note: This table shows the factional breakdown among the top CCP leaders (PSC members and retired paramount leaders) since the 14th party congress. Individuals belonging to the same faction are indicated with the same color. The main patrons' names (faction leader) are underlined.

3.4 Estimation Framework

I estimate the influence of different factions using logistic regressions with the following specification:

$$
\begin{aligned}
\text{Prob(Promoted to PB/PSC)} \ = \ & \text{logit}^{-1}\Big(\beta_1 \text{Ties to outgoing leader/predecessor faction}_i \\
& + \beta_2 \text{Ties to incoming leader/successor faction}_i \\
& + \mathbf{X}\boldsymbol{\beta}\Big)
\end{aligned}
\tag{3.1}
$$

where *i* indexes the individual officials. The dependent variable takes value of 1 if a given politician in the sample enters to the Politburo (for ACC and CC members) or its Standing Committee (for ACC, CC, and Politburo members) at the next party congress.[21] The two key independent variables are ties with the outgoing leader/predecessor faction and those with the incoming leader/successor faction.

X is a vector of control variables that may simultaneously affect the promotion probability and the likelihood of getting connected to prominent factions. I include a set of party congress dummies to remove any systematic difference in the overall rate of promotion across time.[22] I also include a number of standard demographics, such as gender, ethnicity, and education. Furthermore, I also control for whether a subject has served as provincial secretary in the past (*Former Provincial Secretary*) or has a parent or parent-law who is a former CC member (*Princeling*), because both attributes are likely to be associated with both a greater prospect of political advancement and their distribution may vary systematically across different factions.[23]

I take special care to address the issue of political seniority, which can be one of the most important confounders for the analysis. Since those who are connected to the outgoing leaders tend to be on average older and more senior, they may be promoted to high-level positions simply because of seniority rather than connections with the top leader. The faction-based measure of political connection partly addresses this problem by including indirect connections with retired leaders' current PSC allies, who are usually in the same age cohort as the successor. To further address this issue, I include a dummy variable for their party ranks in the previous congress (ACC vs. CC vs. Politburo) as well as two sets of third-order polynomials to flexibly control for the effects of age and number of years in the Central Committee.

---

[21] One potential concern is that because the small size of the Politburo (~20), the Stable Unit Treatment Assumption may be violated because incidences of promotion are not i.i.d. However, it should be noted that the overall size of the Politburo (and its Standing Committee) is not fixed but often a result of extensive bargaining among the top elites. Powerful leaders can manage to alter the size of the Politburo to their own advantages.

[22] For instance, there are typically more promotions in the major reshuffle years (1992, 2002, and 2012) than minor reshuffle years (1997, 2007).

[23] Cheng Li, for example, notes that Jiang Zemin's faction tends to disproportionately recruit members from the elite families. See Li 2012.

3.5 Pooled Analysis: Estimating the Departing Leader's Influence in Power Transition, 1992-2012

3.5.1 Baseline Results

Table 3.3 presents the main results on the respective influence of the outgoing and incoming leaders' factions on the promotion to the Politburo or its Standing Committee, pooling all samples between the 14 to 18 party congresses. Model 1 uses the most parsimonious specification with only two key independent variables. Through Model 2 to 4, I incrementally add the duration polynomials, the dummies for initial ranks, and a set of additional covariates for demographic and political backgrounds. The main results are fairly consistent throughout different models: Both the incoming leader/successor and outgoing leader/predecessor appear to wield statistically significant influence over the selection of Politburo members, and the magnitudes of effect are in fact somewhat greater for the outgoing leaders than their successors. To appreciate the substantive significance of these coefficients, I present in column 5 the marginal effects when all other covariates in Model 4 are set at medium. All else equal, connections with the outgoing and incoming leaders' factions increase the probability of being promoted to the Politburo or its Standing Committee by 5 and 4.6 percentage points, respectively. Since the average rate of promotion in the sample is only about 4.7 percent, these effects represent a 106% and 98% percent increase from the baseline probability.

There is also an interesting pattern in the effect of connections with other sitting Standing Committee members who do not belong to either of the two major camps (*Other factions*). While such effects appear to be quite strong in the more parsimonious models, they become much smaller once the initial ranks are controlled. In other words, PSC members who belonged to neither of the major factions in fact do not enjoy much *extra* influence over high-level appointments except for the fact that they tend to have more senior followers who are likely to be candidates for those positions. This result suggests that the ultimate source of power in the system is not from the

membership in the formal institution of collective leadership, but rather one's informal affiliation with the current or former paramount leaders.

3.5.2 Comparing the Goodness of Fit across Models

I also investigate whether this bipolar model of power sharing represent a more accurate depiction of the political reality in the CCP's leadership than other possible formulations. To do so, I run the same model with different ways of coding the elite alignment and compare them with the baseline model in terms of statistical goodness of fit. The results are presented in Table 3.4. In the first two permutations, I exclude the dummies for the outgoing and incoming leaders' factions, respectively. Models 4 and 5 test two "big man" models by only including a dummy for being connected to the outgoing and the incoming paramount leaders themselves, respectively. Models 6 through 10 further test five different forms of alignments based on the formal ranking of PSC members. Finally, Model 9 tests a scenario where all PSC members matter equally by including a dummy for being connected to any sitting PSC members.[24] For each model, I provide fit statistics in the form of both conventional R-square style measures (McFadden's R^2, Tjur's D) and measures based on information criteria (AIC, BIC). Across all measures, our original coding consistently provides the best statistical fit for explaining the promotion patterns in the sample. Based on Raftery's rule-of-thumb criteria that a difference of 6 or above in BIC scores indicates strong difference in model performance,[25] the original model indeed outperforms all alternative models by a substantial margin.

---

[24]For details on the alternative coding strategies, see online appendix.
[25]Raftery 1995.

Table 3.3: Overall Patterns of Power Sharing: 14th-18th Party Congresses (1992-2012)

	DV: Promotion to Politburo or Standing Committee				
	(1) Model 1	(2) Model 2	(3) Model 3	(4) Model 4	(5) Marginal effects
Outgoing leader/predecessor faction	1.631*** (0.237)	1.583*** (0.258)	1.362*** (0.289)	1.327*** (0.296)	0.051*** (0.011)
Incoming leader/successor faction	1.045*** (0.284)	1.115*** (0.283)	1.200*** (0.284)	1.214*** (0.285)	0.046*** (0.011)
Other factions	0.776** (0.327)	0.833** (0.325)	0.689* (0.368)	0.585 (0.375)	0.022 (0.014)
Full CC			1.636*** (0.369)	1.352*** (0.376)	0.042*** (0.010)
Politburo			2.520*** (0.510)	1.852*** (0.556)	0.072** (0.030)
Female				-0.772 (0.586)	-0.029 (0.023)
Ethnic minority				-2.151** (0.854)	-0.082** (0.033)
College education				1.505 (1.103)	0.057 (0.042)
Former provincial secretary				0.619* (0.333)	0.024* (0.013)
Princeling				0.918** (0.442)	0.035** (0.017)
Duration: $CC^{1\sim3}$ and $age^{1\sim3}$		Y	Y	Y	Y
Number of individuals	945	945	945	945	945
Observations	1623	1623	1623	1623	1623

Note: The first three columns report the coefficient estimates from logistic regression with duration polynomials. The forth column reports the marginal effects based on model 3. Robust standard errors clutered at individual level are reported in parentheses.

* $p < 0.1$, * $p < 0.05$, ** $p < 0.01$ (two-tailed test)

Table 3.4: Comparison of Fit with Other Ways to Code Factional Alignment

	(1) Original	(2) Only outgoing faction	(3) Only incoming faction	(4) Only former leader	(5) Only current leader	(6) Top 2	(7) Top 2 vs. rest	(8) Top 3	(9) Top 3 vs. rest	(10) Top 2 vs. Middle vs. Bottom 2	(11) Equal Influence within PSC
Log likelihood	**-237.86**	-244.65	-249.34	-255.24	-250.41	-248.53	-242.53	-246.37	-244.80	-244.27	-252.01
McFadden's R^2	**0.232**	0.210	0.195	0.176	0.192	0.198	0.217	0.205	0.210	0.212	0.187
Tjur's D	**0.150**	0.141	0.117	0.111	0.113	0.119	0.138	0.129	0.131	0.130	0.118
AIC	**507.72**	519.29	528.68	540.47	530.82	527.06	517.07	522.73	521.60	522.54	534.02
BIC	**593.99**	600.17	609.56	621.35	611.70	607.94	603.34	603.61	607.88	614.21	614.90

Note: In each row, bold figures indicate the model with the best fit (i.e.,highest R^2/Log Likelihood or lowest AIC/BIC)

3.5.3 Differentiated Control over Politburo Seats

As discussed above, the more important seats within the Politburo are those in the Standing Committee (PSC), which enjoys the formal authority over national policy making and high-level personnel selection. Given its primary importance in national political life, for a departing leader concerned with limiting the power of his successor, one of his natural priorities will be to ensure that his own followers will enjoy a more dominant presence in the next PSC than those of the successor's. Empirically, this implies that the predecessor will enjoy a much greater degree of influence than his successor when it comes to promotions to these powerful PSC seats. To test this implication, I estimate a multinomial logit model with three possible outcomes: no promotion, promotion to the Politburo (non-PSC seats), and promotion to Standing Committee.[26] To facilitate interpretation, I present the marginal effects of the main coefficients for the two promotion outcomes (no promotion as the base) in Table 3.5. Consistent with this expectation, I find that while both the former and current leaders command sizable influences over the promotion of an ACC/CC member to the Politburo, the former leader assumes a predominant authority over the appointment at the PSC-level. The difference in influence between the current and former leaders at the PSC-level is not only statistically significant at the 90% level (p value from one-tailed test= 0.074) but also substantively large: The effect of being connected to the former/outgoing leader's faction is more than three times as large as the effect of being connected to the incoming successor's, effectively doubling the baseline probability of being promoted to the PSC.

3.6 Analyses by Successions

The pooled analysis provides clear evidence that the departing paramount leaders have tried to deliberately strengthen their informal power through strategic promotions when they themselves were leaving or have left the leadership positions. In this section, I analyze the power dynamics in

---

[26]I also perform various tests of the assumption of the independence of irrelevant alternatives (IIA). Both the Hausman and Small-Hisao tests fail to reject the null that the choice between two outcomes is independent the other alternative for all pairs of outcomes.

Table 3.5: Variations across Positions of Different Importance

Baseline: *NOT* promoted to PB or PSC	DV: Promotion to Politburo or Standing Committee	
	(1) Outcome: Promotion to PB	(2) Outcome: Promotion to PSC
Outgoing leader/predecessor faction	0.033***	0.020***
	(0.010)	(0.006)
Incoming leader/successor faction	0.042***	0.006
	(0.011)	(0.007)
Previous rank: CC	0.054***	-0.018***
	(0.012)	(0.005)
Female	-0.003	-0.121***
	(0.019)	(0.024)
Ethnic minority	-0.049	-0.123***
	(0.032)	(0.024)
College education	0.034	0.114***
	(0.035)	(0.024)
Former provincial secretary	0.007	0.016***
	(0.012)	(0.006)
Princeling	0.029*	0.014*
	(0.016)	(0.008)
Duration: $CC^{1\sim3}$ and $age^{1\sim3}$	Y	Y
Baseline probability	0.035	0.013
Number of individuals	945	945
Observations	1623	1623

Note: This table reports marginal effects from multinomial logistic model. The baseline outcome is not promoted to Politburo. Robust standard errors clustered at individual level are reported in parentheses.

 * $p < 0.1$, * $p < 0.05$, ** $p < 0.01$ (two-tailed test)

detail by looking at each of the CCP's three major leadership transitions. To do so, I run separate regressions for each of the 5 party congresses using the same specification as Model 4 in Table 3.3. Figure 3.2 visually displays the quantitative results up to the 17th party congress. Each row represents a full round of succession, which includes both a major leadership reshuffle (which involved change of top leadership) and a minor reshuffle that took place five years later.

Several important observations follow: First, I note that the patterns of power sharing in the first two major leadership reshuffles (1992 and 2002) are quite similar: While both the outgoing and incoming paramount leaders appear to command significant influence over top-level appointment, the incoming leader's influence is clearly overshadowed by his retiring predecessor. In both cases, the estimated effects of the retiring leader more than double those of the successors'. This is consistent with both the theoretical expectation that the leader about to leave power tried to strategically foster a countering coalition in the next leadership prior to his imminent retirement and the anecdotes that both Jiang and Deng tried to pack the high leadership with their preferred candidates.

Turning to the minor reshuffles five years down the road, however, I observe two diverging patterns. Comparing these two minor shuffles allow for better appreciation of both the conditions under which a balance of power can be maintained and the inherent uncertainties in such balance. One critical difference between these two reshuffles is the condition of the former leader: In the 1997, Deng Xiaoping, then the retired paramount leader, passed away several months before the party congress. Deng's passing was a major blow to the internal unity of the countering coalition, which consists of politicians with different priorities and demands. This gave Jiang the opportunity to effectively divide-and-conquer this group of elites by forming alliances with some while alienating others.[27] The 15th party congress turned out to be a major victory to Jiang: As illustrated in the

---

[27]Most notably, Jiang was able to form alliances with a number of PSC members, including some of Deng's appointees, to force into retirement one of his major rivals at that time, Qiao Shi, who was a close protégé of Deng Xiaoping's and a politician with much more senior political credential than Jiang. Jiang secured (at least tacitly) support from Li Peng, then the Premier and the second most senior figure in the PSC, by offering him the control of the Central Politics and Law Commission (formerly Qiao's turf). Several Deng's other appointees, including Zhu Rongji and Hu Jintao, also did not intervene because they have other priorities that have to be fulfilled with Jiang's cooperation. Zhu, for example, was eyeing the position of the Premier, which depended on the timely transfer of Li Peng to the National People's Congress. Hu Jintao, as the heir apparent, was expecting a smooth accession to power

top-right corner of Figure 3.2, Jiang's faction was the only one that enjoyed substantial advantage in promotion in 1997 whereas Deng's PSC appointees on average enjoyed no additional influence over high-level appointment.

By contrast, the 2007 reshuffle represents a scenario where a living former patriarch used the countering coalition to effectively balance the influence of his successor. At the 17th party congress, the retired general secretary Jiang Zemin was still quite healthy and politically active.[28] With the backing from Jiang, the countering coalition remained strong and cohesive, and this ensured that the control over powerful seats did not skew disproportionately in favor of the incumbent general secretary Hu Jintao.[29] As evidenced in the quantitative results, there was almost an exact balance between Hu's influence and that of the countering coalition.

Taken together, this sharp contrast between the power sharing patterns in 1997 and 2007 illustrates offers insights into where the real center of power is among the CCP top elites. Contrary to the conventional view that the dictator's power is constrained by a group of ruling elites incorporated in the formal power sharing institution, my results suggest that at least in the Chinese case the ultimate constraints on the incumbent paramount leader come not from his colleagues in the collective leadership body but rather from the former paramount leader who is typically outside the formal ruling coalition. Without an influential predecessor to support and coordinate its actions,

and also did not want to challenge Jiang. Moreover, Jiang's effort to oust Qiao also received support from several other senior non-PSC members of the Deng faction. For example, Bo Yibo, an influential party veteran who was close aide to Deng, allegedly helped Jiang to pressure Qiao for retirement, in return for Jiang's support for the political careers of his son, Bo Xilai. For related discussion, see Nathan and Gilley 2003, chapter 6.

[28]Since his full retirement in 2004 to 2012, Jiang made over 90 "opinions and suggestions" to the Politburo and over 120 written comments to various types of Party, government, and military issues. See Boxun News 2015.

[29]The process of this deliberate balancing can be well illustrated by the following case: In September 2006, Chen Liangyu, then the party secretary of Shanghai was abruptly removed from his position under the charge of corruption. Chen was a close confidant of Jiang's and a promising candidate for the Standing Committee. This dismissal was widely interpreted as a result of his lack of respect for the new administration under Hu Jintao. There was some evidence that Jiang himself was not even aware of this dismissal beforehand. Nonetheless, he and his associates acted immediately to damage control after Chen was sacked. As the first step, they blocked Hu's nominations for Chen's replacement and ensured that China's most wealthy municipality will continue to be ruled by one of the Jiang people. Xi Jinping, who at that time was much closer to Jiang than to Hu, was first appointed to that position briefly before he was made the de facto heir apparent to Hu. After Xi left Shanghai, his replacement, Yu Zhengsheng, was again a close associate with Jiang. As a result, even though this removal caused some temporary disruptions, Hu's attempt to expand his power was met with strong resistance and did not materialize in tangible political gains. The power balance between the two major coalitions persisted. For more background on this event, see Jiang and Yang 2016. According to Wiki Leaks, Two of Hu's preferred for candidates were Li Yuanchao and Liu Yandong. See WikiLeaks 2006, also see Li 2007b.

Figure 3.2: Variations in Power Sharing Patterns, 1992-2007
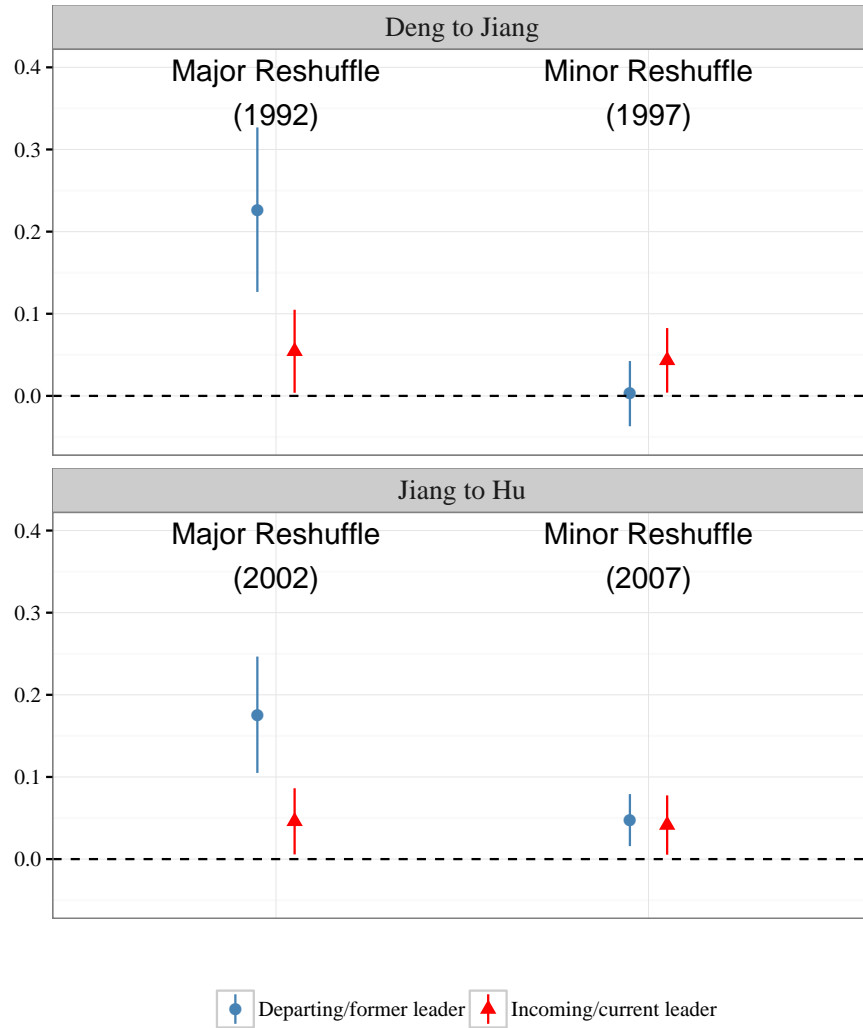
Note: This Figure shows the marginal effects of predecessor and successor's factions during the first two full power transitions (Deng Xiaoping to Jiang Zemin and Jiang Zemin to Hu Jintao). The circles represent the estimated marginal effects and vertical bars indicate 90% confidence intervals. Major reshuffles are party congresses where the change of the paramount leader occurred.

the ruling coalition usually cannot effectively limit the influence of the incumbent simply on its own.

3.7 Preventing Defections

The preceding analysis has shown that the top CCP leaders tried to mitigate the uncertainties associated with power transitions in the early phase of institutionalization by placing clients in positions of power in the next leadership. A key assumption for this arrangement to work, of course, is that the appointees must be willing to remain loyal to the retired patrons when the latter has formally stepped down from power. In this section, I provide suggestive evidence on the one important mechanism at work: manipulation of network structure through strategic appointments.

A large body of literature on social network analysis suggests that having an advantageous position within a network is in itself a key source of power (Padgett and Ansell 1993). Being at the center of the elite network not only makes the retired dictator less dependent on any single client for maintaining his influence, but also enables him to act as an effective broker to coordinate actions among elites with otherwise heterogeneous backgrounds. To examine if this mechanism is present, I focus on the intra-Politburo networks and calculate the centrality scores for each Politburo member. I focus on two centrality measures: the degree centrality, which measures the number of individuals one has direct ties with in a given network, and betweenness centrality, which measures the number of times a given individual is on the shortest paths between all pairs of network members. Betweenness centrality, in particular, is often used as a measure of relational power in politics, that is, how effective one can serve as a broker between different sub-networks. Actors with a high level of betweenness often occupies critical paths through which information or resources are transferred, and therefore plays an indispensable role in mobilizing/de-mobilizing collective undertakings within the network (Keller 2015).

Table 3.6: Comparison of Network Centrality within the Politburo

Betweenness (Degree)	14th	16th	17th	18th
Predecessor	79.8(9)	76.2(11)	58(9)	46.6(12)
Successor	16.2(4)	4.5(4)	0.2(7)	2.5(3)
Average	9.5(3.1)	10.3(4)	12.9(4.8)	8.6(4.5)

In Table 3.6 I report both centrality measures for the predecessor, the successor, and the Politburo average by Party Congress[30] The simple tabulation is quite informative: For both centrality measures and all Congresses reported, the predecessor's scores exceed that of the successor's and the Politburo average by a substantial margin. Most notably, the predecessor's advantage appears to be orders of magnitude larger in betweenness centrality than degree centrality, suggesting that maintaining an effective brokerage position among the subsequent generation of elites might be the very priority for the outgoing leader in his pre-retirement personnel maneuver.[31] Figure 3.3 further shows the over-time change in the centrality scores, focusing on the two top leaders whose entire terms are covered by the data—Jiang Zemin and Hu Jintao.[32] Most notably, I find that while the degree centrality of the outgoing Jiang had remained fairly stable before and after the succession, his betweenness centrality went up markedly at the 16th Party Congress, at which he stepped down. Similarly, I find that when Hu stepped down in 2012, his betweenness centrality also increased quite a bit, although the scale of increase was only about half the size of Jiang's.

To illustrate how a highly central network position helps reduce the risk of client defection, I perform a simple simulation exercise on the observed network: I define defection in the network as an individual who is previously connected to the predecessor terminating such connection and establishing connection (if not previously present) with the successor. For a given number of defections d, I exhaust all possible defection scenarios [33] and calculate how the centrality of the predecessor changes in each of the scenarios. I do so for all positive integer values of $d \leqslant n$, where

[30]I exclude the 15th Party Congress because the predecessor, Deng Xiaoping, died before the congress.

[31]I perform a more systematic analysis of how a top leader's centrality scores change upon his voluntary retirement. The results are presented in the online appendix and largely consistent with the simple tabulation.

[32]I do not have data for Deng prior to 13th Party Congress and hence cannot conduct a similar analysis.

[33]There is a total of $\frac{n!}{d!(n-d)!}$ possible combinations (with no order), where n is the total number of individuals

Figure 3.3: Change in Betweenness within the Politburo Network
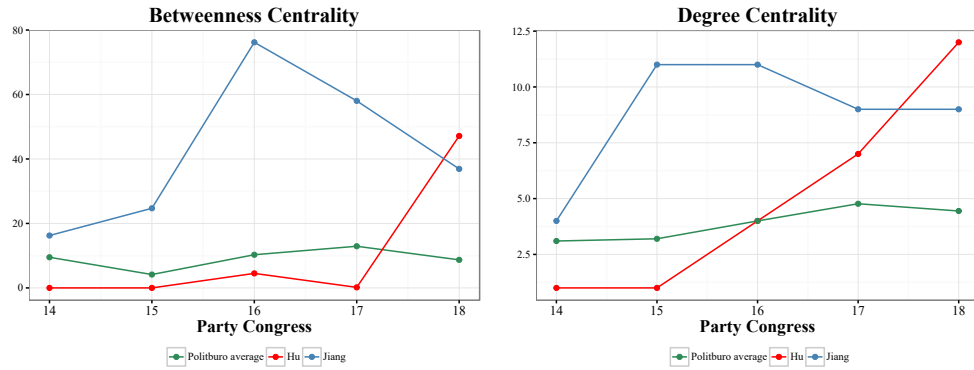
n is the total number individuals directly connected to the predecessor. This exercise allows me to assess substantively how certain scales of defection would affect the position of the predecessor in the network.

Figure 3.4 presents the main simulation results. On the left panel, I plot how the average difference in betweeness score between the predecessor and the successor change when $\frac{d}{n}$ share of the predecessor's direct connections have defected to the successor's camp.[34] Each gray line represents the average result from the simulations for a Party Congress[35] and the red line is the average across all Party Congresses (Lowess method). On the right panel, I repeat the same calculation for the difference in betweenness score between the predecessor and an average Politburo member.

The simulation results provide an important insight on how a highly central network position could help sustain an equilibrium of continued loyalty. The left panel suggests, for example, that even after about one third of the predecessor's faction base has defected to the successor—a quite substantial blow in most political settings—the predecessor still enjoys on average the same degree of centrality as the successor in the Politburo network. The right panel further suggests that even after more than half of his direct connections have defected to the successor, the predecessor's betweenness score is still higher than that of an average Politburo member. When unilateral defection by individual clients does not fundamentally alter the power balance in the system, defection is not

---

[34]This means changing their connections to the predecessor from 1 to 0 and changing those to the successor from 0 to 1 if that member is not previously connected to the successor.

[35]For the 2012 simulation, I also include Jiang Zemin as another predecessor since he was still alive at the time of the transition. I thus have a total of five gray lines (4 transitions, five predecessors)

Figure 3.4: Robustness to Defection
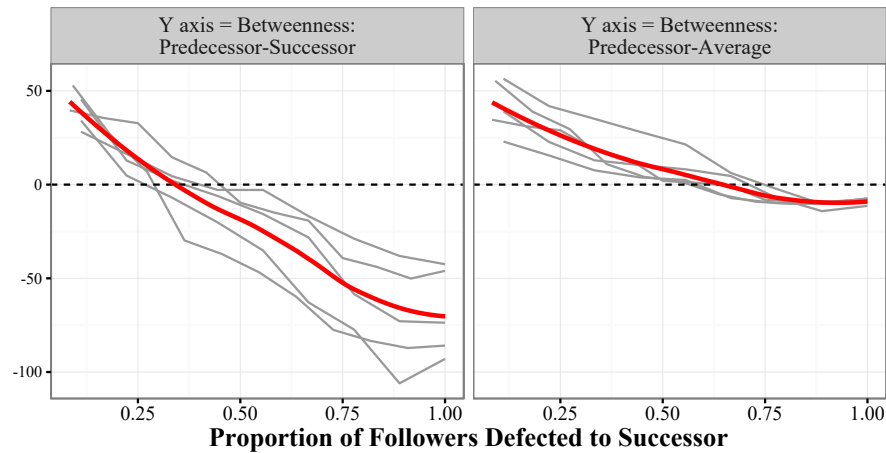
a preferred strategy for the predecessor's clients, especially when doing so may invite severe social and political sanctions from a still-powerful predecessor.

3.8 The Rise of Xi

Finally, I turn to the most recent transition from Hu Jintao to Xi Jinping. Those who are familiar with the recent development in China may note that Xi has managed to grab more power within a much shorter period than both of his predecessors. Figure 3.5 illustrates the distribution of personnel power at the 18th party congress and confirms the general impression that Xi was gaining an upper hand: The point estimate for Xi's influence over top-level appointments is in fact much larger than both of his predecessors—a pattern that never existed in earlier major reshuffles.

What explains Xi's success in outmaneuvering the same informal arrangements have effectively tied the hands of his predecessors? I argue that, like the 1997 case, it is a result of the lack of a unified countering coalition. Unlike the 1997 case, however, the source of disunity does not come from the absence of a dominant coalition leader but the presence of multiple major power holders with conflicting interests. Partly thanks to the earlier peaceful successions, a new structural feature that emerged in the eve of the 2012 transition was that the system now has two, instead of one, former patriarchs. As discussed above, multiplicity of power holders may lead to weaker

Figure 3.5: Power Sharing at the 2012 Transition
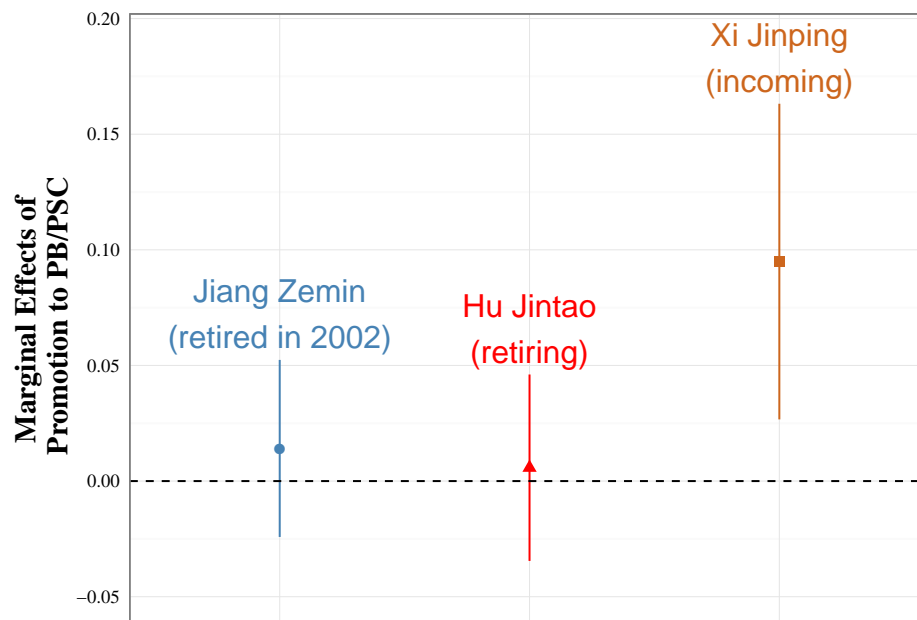
Note: This figure shows the marginal effects of predecessor and successor's factions the 18th party congress. The circles represent the estimated marginal effects and vertical bars indicate 90% confidence intervals. Major reshuffles are party congresses where the change of the paramount leader occurred.

constraints on the successor if these power holders are primarily concerned with containing each other's influence rather than collectively balancing the successor. Given that Jiang has played an instrumental role in repeatedly limiting Hu's influence throughout the latter's entire tenure, we have ample reasons to believe that the relationship between the two was anything but friendly.

Anecdotal evidence suggests that in the period leading up to the 2012 transition there were intense conflicts between the two figures, which Xi was able to exploit to his own advantage. Xi first secured his position as the heir apparent by developing a close relationship with not only several important figures in the Jiang Zemin faction but also most importantly with Jiang himself.[36] However, when Hu Jintao moved against Bo Xilai, an influential politician closely related to Jiang Zemin (through his father, see footnote 27) and one of the leading contenders for the PSC seats, Xi allied with Hu and cast a decisive vote that led to the arrest of Bo, thereby precluding a major potential challenger from entering his administration.[37] Later, when Ling Jinhua, one of Hu's closest aides, was found out to have attempted to cover up a car accident that caused the death of Ling's son, Xi sided with several senior members of the Jiang faction in precipitating Ling's demotion (and later investigation).[38] As Ling was transferred away from his position as the director of the CCP General Office (an equivalent of the White House chiefs of staff in the U.S), Xi had the opportunity to fill the vacancy with one of his most trusted friends (Li Zhanshu), and thereby place the Party headquarters under his direct control.[39] The intense conflicts between the two major coalitions led by former paramount leaders were therefore one of the key structural factors that underpinned Xi's unexpected rise to preeminence after he took office.

---

[36]For example, Xi worked under Jiang Qinglin, a key member of the Jiang faction, during his time in Fujian province. He also allegedly had close relationship with Zeng Qinghong, a close aide to Jiang. As one of most conspicuous display of his close ties with Jiang at that time, Xi presented to Angela Merkel, the German Chancellor, two books written by Jiang during his visit to Germany in October 2009. See Xinhua News 2009. For a video clip illustrating his close bonds with Zeng, see China Central Television (2008, starting 1:01).

[37]See Voice of America 2012.

[38]After learning that Ling turned out to work as normal after the night his son died, Jiang himself was obviously displeased and even questioned whether Ling "had any human emotion at all". In the cover up, Ling's son was handled using the pseudo last name of "Jia", which led many to associate this event with Jia Qinglin, the 4th ranking member of the PSC, due to the same surname. Jia himself was allegedly angered by Ling's action. See South China Morning Post 2012.

[39]Li Zhanshu and Xi Jinping both worked as party secretaries in neighboring counties in Hebei province during the 80s, and they have known each other since. Li have also worked for an extended period of time in Shaanxi, which was Xi's hometown. See Wong 2015.

3.9 Concluding Remarks

How did the CCP manage to overcome the credible commitment problem and gradually institutionalize the transfer of raw political power? Moreover, what explains the marked variations in the pace and stability during the institutionalization process? In this chapter, I offer a unified explanation for these puzzling patterns by tracing the origin of institutionalization to the informal realm of the system. I argue that in a system where formal institutional constraints are weak or underdeveloped, the informal institution of patron-client networks can help alleviate the uncertainty of power transition by providing departing autocrats an alternative means to tie the hands of the successor and extend their influence beyond the formal tenures. Analyzing the political mobility of elites during China's three peaceful transitions, I find that instead of relinquishing power completely upon their departure, the retiring autocrats continued to wield significant influence over high-level appointments during major leadership reshuffles, and their influence is most visible over the most senior posts in the Standing Committee. I also show that while this balance of power between the current and former leaders is best maintained when the system resembles a bipolar structure, powerful incumbents typically arise in an environment where the elites are too fragmented to form an effective countering coalition to contain the incumbent.

The analyses presented here clarify both why China has been able to gradually institutionalize for most of the Tiananmen era and why the institutionalization is still far from permanent. For one thing, a key insight from the study is that the development of formal institutions in weakly institutionalized settings depends to a large extent on the elites' ability to come up with *informal* arrangements that provide incentive-compatible arrangement to all major power holders in the system. The strength and vitality of the informal arrangement is what deters elite opportunism and therefore is the most important guarantee for the viability of the formal institutions. At the same time, however, to the extent that the informal power configurations are inherently fluid and constantly changing, institutions in autocracies will be fundamentally uncertain. Once the informal alignment that supports the reproduction of the formal institutions alters or collapses—due to unintentional negligence, political miscalculation, or even other contingent factors—ambitious

actors may take the opportunity to break the existing rules and expand their own power, leading to a slowing or even reversal of the institutionalization process.

Chapter 4

Patronage Networks, Particularistic Accountability, and Local Development

The preceding chapter demonstrated that the informal patronage networks have played a crucial role in helping elites create credible power sharing bargains that support the institutionalization of leadership successions at the top. Yet institutionalization is but one aspect of the Party's resilience. To the extent that the proper functioning of a regime also requires the active support or at least tacit consent of the ruled, the Party also faces a pressing need to cultivate some degree of support from the masses. Throughout much of the reform era, this has been accomplished primarily by promoting rapid economic growth that improves citizens' material well-being (Zhao 2009*a*).

China's rapid development in the past three decades is widely viewed as an example of an authoritarian regime somehow managing to get the political incentives right. In contrast to other transitional Communist regimes where local bureaucrats turned into the "grabbing hands" that predated the economy at the expense of the public interests (Frye and Shleifer 1997; Shleifer and Vishny 2002), in China subnational governments acted as the "helping hand" in the process of economic development, using their authority and control of resources to offer valuable services that compensated for the system's institutional deficiencies, including the absence of a well-functioning market system and strong legal institutions that protect property rights (Oi 1992, 1995; Xu 2011).

While there is little doubt that local political actors played an instrumental role in China's economic takeoff, there is less a consensus, however, on what exactly motivated them to exert costly effort on these development-oriented tasks. Early studies suggest that China's decentralized fiscal arrangements gave local officials a significant stake in local development by making them the de facto residual claimants of local economic surplus (Montinola, Qian and Weingast 1996; Oi 1992; Qian and Weingast 1997). This explanation, however, runs into difficulty in accounting for development in the post-1994 period, during which the fiscal revenue was recentralized back at the hands of the central government. More recently, a predominant view among China specialists is that the incentives of local officials come from the CCP's unique institutions of political selection, which rewards economic accomplishments with political advancement. According to this view, the system, by regularly evaluating and ranking local officials on the basis of quantifiable metrics, puts them in intense, tournament-style competition with each other and compels them to deliver outstanding growth in order to win promotions (Bo 2002; Edin 2003; Li and Zhou 2005; Maskin, Qian and Xu 2000; Whiting 2004).

While the later view has received a great deal of traction, especially given its natural affinity with a large group of models that characterize career contracts in private firms (Holmstrom 1999; Lazear and Rosen 1981), it has been increasingly challenged on both empirical and theoretical grounds. Empirically, such a formal selection system does not appear to contain any explicit provisions that links economic performance with promotion decisions (Su et al. 2012). The use of quantifiable evaluation metrics to evaluate cadre performance—a widely cited evidence for the presence of a meritocracy—are but a very recent phenomenon and the results typically have no binding effects on personnel decision-making. A number of recent empirical studies on promotion patterns also suggest that promotion is at best weakly correlated with economic performance, but instead find strong influence from personal connections with senior leaders (Landry, Lü and Duan 2015; Opper, Nee and Brehm 2015; Shih, Adolph and Liu 2012; Yang and Zheng 2013).

Theoretically, the notion that there exists some form of performance-promotion exchange between the superior and the subordinate also tends to underestimate the challenge associated with

such transactions. For such transaction to elicit effort, the subordinate needs to believe that there is a sufficiently high probability that his/her effort would have an effect on the odds of promotion. Yet given the highly asymmetric power status between the transacting parties, there is no formal guarantee that the superior will promote the person who delivered the best outcome (as opposed to someone who he preferred for other reasons). The inability for the superior to commit to such a promotion rule ex post makes the promise of promotion lack credibility ex ante, which will in turn undermine the subordinate's incentives in exerting effort.

In this chapter I offer an alternative framework for understanding the nature of the incentive structure faced by Chinese officials. This framework, which I term particularistic accountability, emphasizes the central role of the informal, patron-client relationship in producing high-powered incentives for local officials. I argue that in a system where policy activism is costly and the evaluation criteria do not explicitly reward such behavior, the formal bureaucratic structure is usually inadequate to supply the optimal degree of government activism needed for rapid economic development. Facing these impediments, high-level principals who wished to elicit extra effort from the lower-level agents often tried to do so through cultivating personal relations with their subordinates. Such relations in many ways resemble an informal performance contract, in which the patron offers special political favors (in terms of better promotion prospects and political protection) in return for clients' dedicated services. The very credibility of such contract is based not on any formal bureaucratic stipulations, but rather on the patron's considerations for his long-term personal reputations, which affects not only his moral standing among the elites but also his ability to recruit future followers.

Although not denying the presence of top-down incentives in the system, this alternative framework differs fundamentally from the existing perspectives on China's political economy by emphasizing that such incentives do not come from any universally applicable meritocratic principles, but rather from highly personalized interactions between clients and their political patrons. Such a formulation leads to new predictions about how officials will behave and performance will be evaluated in the current system. Most importantly, it predicts that the supply of both effort and

reward will be highly selective when the source of performance incentives are based on personal relations rather than institutions: Lower-level agents are expected to expend greater effort when they are working on tasks that directly serve the interests of their patron; at the same time, patrons are also expected to honor the implicit contracts by offering their clients greater reward for their observable performance than those non-clients.

I test these predictions using an original city-level panel dataset between 2000 and 2013. Leveraging a new measure of subnational officials' informal connections that infers their political affiliations from past promotions, I first estimate how political connections with the provincial leadership affect the observed economic performance of city-level leaders. Contrary to the conventional wisdom that informal clientelistic ties are either independent from or tend to undermine economic performance, I find that officials who had experienced significant promotions under the incumbent provincial party secretary, the de facto political leader of China's provinces, in fact delivered significantly faster economic growth than those unconnected as measured by both official statistics and satellite imagery on nighttime brightness. Additional analyses further suggest that while connected officials did appear to attract more tangible resources from the above in terms of fiscal transfers, distributive favoritism can at most account for a relatively small part of the performance premium. In contrast, I present both direct and indirect evidence indicating that heightened incentives play a much more important role in accounting for the performance differentials.

I also demonstrate the particularistic nature of these informal patronage-based contracts by analyzing how different types of performance mattered differently for local officials' prospect of promotion. More specifically, I calculate the cumulative relative performance indicators (CRPs) to capture the average relative growth rate (anchored by the provincial average) an official has achieved up to a given point. I calculate the CRPs separately for the period of services under a provincial secretary who was the official's patron and that under other non-patrons. Consistent with the framework of particularistic accountability, I find that not all performance is rewarded equally: The only part of performance that seems to be strongly correlated with both greater promotion prospects and lower rates of corruption investigations is the part delivered to the one's patron when

he/she was in charge of that province. By contrast, cumulative performance under a non-patron bears no relationship with political rewards.

4.1   The Myth of A Developmental Meritocracy

China's impressive economic growth in the past three and a half decades in the absence of developed legal and market institutions has been a major puzzle to social scientists. The prevailing explanation for China's economic success emphasizes the active role of local officials. According to this view, the key to the CCP's success was its ability to devise a unique set of political and bureaucratic institutions that generate powerful incentives for local officials to exert effort on tasks related to economic development. Early studies suggest that China's decentralized fiscal structure fosters intense inter-jurisdiction tournaments in which local officials compete with each other on attaining economic targets in order to win promotions (Bo 2002; Edin 2003; Li and Zhou 2005; Maskin, Qian and Xu 2000; Whiting 2004).[1] Such a view not only receives wide currency among China specialists but also is taken as a fact by scholars who study China from a comparative perspective. In discussing the capacity of the Chinese state, Fukuyama (2012) notes "there are highly meritocratic features to the system, beginning with recruitment into the Party and state bureaucracy and promotion within these hierarchies". In comparing China with western liberal democracies, Bell (2015) goes even further by stating that the Chinese system was the epitome of a political meritocracy, where officials are "put through a grueling process of talent selection and only those with an excellent record of past performance are likely to make it to the highest levels of government."[2]

Yet a closer look at the system casts into serious doubt the claim that there are institutionalized sources of performance incentives. Contrary to the prevailing belief that the Chinese bureaucracy has a powerful, well-defined system that converts economic performance into political rewards, there was not a single provision that made economic performance a formal evaluation criterion for officials at any of the five formal administrative levels for most of the reform era. Although the regime does have several evaluation systems that have been evolving throughout the reform era,

---

[1]For a survey, see Xu (2011).
[2]For a critique, see Nathan (2015).

most of the criteria used are very broad and vague, involving abstract standards such as morality and competence but with no specific, quantifiable target (Yang and Zheng 2013). Systematic, quantifiable evaluations metrics for local leadership (*difang lingdao banzi kaohe*), in which economic growth was included along with several dozen other targets, only came into being in the late 1990s and had not been widely adopted beyond the lowest administrative level (i.e., village and township) until around 2006 (Su et al. 2012).[3] Interviews with local officials at multiple levels also suggest that even under the latest system the results from the evaluations not only lacks discriminatory power to differentiate potential candidates [4] but also do not have binding effects on personnel decisions by the higher-level.[5]

Aside from the absence of a formal mechanism to reward performance, the bureaucratic institutions in China also contain important disincentives for development. Owing to a long history of bureaucratization and extended periods of central planning, the formal rules and regulations of the Chinese bureaucracy are not entirely conducive to maximizing economic efficiency despite several rounds of rationalization during the reform era.[6] Development promotion often requires the leading officials to break or circumvent certain rules and procedures and improvise solutions that are sometimes beyond the officially sanctioned domains. To attract private and foreign investments, for example, local officials offering private investors with various forms of informal benefits and services, such as financial support through fiscal resources, expedited process for approving business and land licenses, and slack in environment and safety regulations. Many of these services are not encouraged or condoned by the formal regulations, and, if exposed, can hurt the official's

---

[3]Quantifiable performance metrics were but a very recent phenomena that merged only after Hu Jintao's proclaimed the importance of "Scientific Development 科学发展观".

[4]One official suggested to me that over 70%~80% of the officials will receive a rating of either "excellent" or "good".

[5]It was acknowledged, however, that there are political penalties for failing to meet certain minimal performance standards. Yet negative evaluations are typically associated with more politically charged tasks (e.g., One-Child Policy, production safety and public health, social stability) rather than economic development, and usually affect a very small subset of officials (< 5%). I have not encountered a single case in the fieldwork where an official was sanctioned for poor economic performance.

[6]According to the World Bank's 2015 *Ease of Doing Business Survey*, China ranked 84 out of 189 countries surveyed in terms of a country's administrative and regulatory environment for start a new business, and it received the lowest ranking on two subcategories—(1) getting approval for a new business (176th) and (2) getting construction permits (176), both involving interaction with the bureaucracy.

career prospects.[7] Moreover, development itself also tends to increase the likelihood of various forms of hazards, such as mass protests (due to land-expropriation) and safety incidence (through construction of industrial firms). Like many other hierarchical organizations, the lower-level agents are among the first to be sanctioned when such incidents occur.

When promoting development is not rewarded by the formal channels but instead entails significant negative side effects that can sabotage one's career, the default action of the agents is typically to undersupply their effort on development-related tasks. The problem of bureaucratic inaction (*guanyuan bu zuowei* 官员不作为) has been viewed as one of the most persistent problems in the Chinese government. Several large scale national surveys suggest that "delay and responsibility shirking" is the most common form of negative experiences with the government.[8] In another survey of government officials, the majority of the respondents indicate that a primary reason for inactivism is the fear of potential backlash from hurting the existing stake holders.[9] This conservative mentality is best captured by the following statement by a county magistrate:[10]

> *"In government, the most important principle is not to be outstanding but make no mistake. If you work hard and do a great job, that may not necessarily bring your promotion. But if you made a mistake, that became your little braid that others can grab···The best type of cadres are those who can do things without inviting troubles"*

4.2   Patronage Ties and Performance Incentives

When the formal bureaucratic rules do not contain explicit terms that rewards development effort, an alternative way for a principal to elicit effort from his subordinates is by cultivating patron-client

---

[7]When an official is being considered for promotion, for instance, the higher-level Organization Department would often elicit opinions and information about his past records. His/her rivals and competitors may use these opportunities to reflect corruption and malfeasance to the above in order to block his/her advancement.

[8]Calculation based on question `qn1014-1017` in the 2012 China Family Panel Survey (CFPS).

[9]http://paper.people.com.cn/rmlt/html/2015-05/20/content_1574751.htm and http://politics.people.com.cn/n/2013/0521/c1001-21550117.html

[10]Fieldwork in Zhejiang, January 2014

relations with his underlings. These informal personal relations serve effectively as informal performance contracts, whereby the patrons make personal promises to their clients that their efforts will be rewarded with better promotion prospects and greater protection. The credibility of the promise comes from both repeated interactions and the reputational considerations of the patron. Typically, such relations are cultivated over an extended period of time and involve multiple rounds of exchanges. These prior rounds of exchanges thus help develop a basic level of mutual trust between the patron and the client that make subsequent transactions easier. Not only do clients need to demonstrate their worth and loyalty to the patron through various symbolic gestures and selective enthusiasm for different task assignments, but the patron himself also has to make substantial commitments—usually in the form of a special promotion or other major political favors—to reveal his genuine preference for the clients before he can call on them to perform important but challenging policy tasks.

More importantly, the reputational considerations also figure prominently in patron's decision to comply with the implicit contracts. To the extent that services from clients are instrumental for both implementing policies and winning political battles, senior politicians often face a pressing need to develop a good reputation in order to maintain the continued loyalty of the current clienteles as well as to attract future followers.[11] When a patron repeatedly fail to reward clients' services with no good justifications, on the other hand, information of such behaviors will quickly spread within the elite circle and the politician will gain a reputation for being either weak (*ruoshi* 弱势) or disloyal (*bujiang yiqi* 不讲义气).[12] In either cases, such a negative reputation is likely to significantly hamper his ability to expand or even maintain his power base in the future.

While there is not yet any systematic evidence on how patronage affects performance, there are numerous historical anecdotes that informal patronage was being used to encourage local innovations and to carry out challenging tasks from above. During the early phase of China's reform, for example, Deng Xiaoping sent several of his former subordinates in the Second Field Army to

---

[11] Fieldwork interviews suggest that in many cases, senior politicians would even try to deliberately display their caring of former associates in public gathering in order to signal their commitment and loyalty to potential followers. Interviews with officials in Shaanxi province, December 2014.

[12] Personal interviews from Guangxi, Jiangsu, and Zhejiang.

spearhead agricultural reform policies in selected provinces when the overall political tone was still against economic liberalization . Similarly, Jiang Zemin allegedly mobilized his associates to implement an ideological campaign that bolstered his political legacy even after his retirement (Shih 2008). More recently, there was also evidence that local supporters of Hu Jintao and Wen Jiabao responded more fervently to the central authority's call for inflation control in 2004.[13]

4.3   Testable Implications

The preceding discussion suggests several testable implications of official behaviors that depart from the prevailing theories. Most importantly, when agents are motivated primarily by particularistic contracts with their superior, rather than universally applicable meritocratic rules, we expect supply of both efforts and rewards to be supplied in a highly selective fashion. Those with particularistic ties will be motivated to exert effort on developmental tasks, leading to, on average, better economic performance than those without such ties. To honor this contract, the superiors are also willing to offer greater reward for performance delivered by their clients as they know that such performance is more likely to be a result of genuine effort rather than due to other exogenous shocks. This suggests the following two main testable implications:

Hypothesis 1. All else equal, clients will on average deliver better economic development performance then non-clients, and much of the difference can be attributed to the former's stronger performance incentives.

Hypothesis 2. When informal contracts exist between patrons and clients, a client's performance under his patron should be met with greater political reward than his performance under those who are not his patron.

---

[13]One example was Li Yuanchao, a well-known associate of Hu Jintao. See Li (2007*a*).

4.4 Patrons and Clients in Subnational China

While the practice of patronage politics permeates all layers of the Chinese system, our empirical investigation focuses on the interactions between the provincial and the city levels. Figure 4.1 provides a stylized depiction of the Chinese administrative hierarchy. The primary patron of interest is the provincial secretary, who is the head of the provincial CCP organ and de facto ruler of a province. Typically appointed from outside the province, the provincial secretary often needs to assemble a team of supporters from within the local bureaucracy to help him effectively govern the province and undertake policy programs that will set him apart from his predecessors. Yet to the extent that the formal political system does not contain any formal mechanism for team building, it usually has to be carried out informally through patron-client exchanges.[14] Upon his arrival, the newly appointed provincial secretary will try to actively recruit "team members"—that is, junior officials willing to offer their personal loyalty to their superior in exchange for favorable treatment in the future—and use them to replace the personnel left by their patron's predecessors.[15]

Some of the most essential subnational positions are the leadership posts in the city administrations—more specifically, the city party secretary and the mayor, who are the first and second most powerful figures in a city, respectively. As the highest administrative units below the province, city governments not only are influential actors for implementing policies at the sub-provincial level, but also control a range of productive resources instrumental for promoting economic growth. When a provincial secretary appoints clients to become city leaders, he expects them to exert great effort on delivering concrete socioeconomic accomplishments that will not only justify his policy programs but also contribute to his governing credentials.[16] In the meantime, the provincial secretary's predominant authority over major political and personnel matters affords him ample means

---

[14]For similarity, see Willerton (1992)'s discussion of the policy-making process in the USSR.

[15]The search for team members, or clients, can be made through both personal and professional contacts and perceived trustworthiness and personal familiarity often play a much more important role than strictly meritocratic criteria. The personnel overhaul following provincial leadership reshuffle is usually a protracted process, the length of which depends on both the age structure of the personnel as well as the relative power of the incumbent secretary vis-à-vis both the predecessor and his colleagues.

[16]In addition to these professional obligations, sometimes clients also need to offer services that benefit the patron or his family personally, an area that breeds corruption and nepotism.

Figure 4.1: Provincial Politics in China: A Sketch
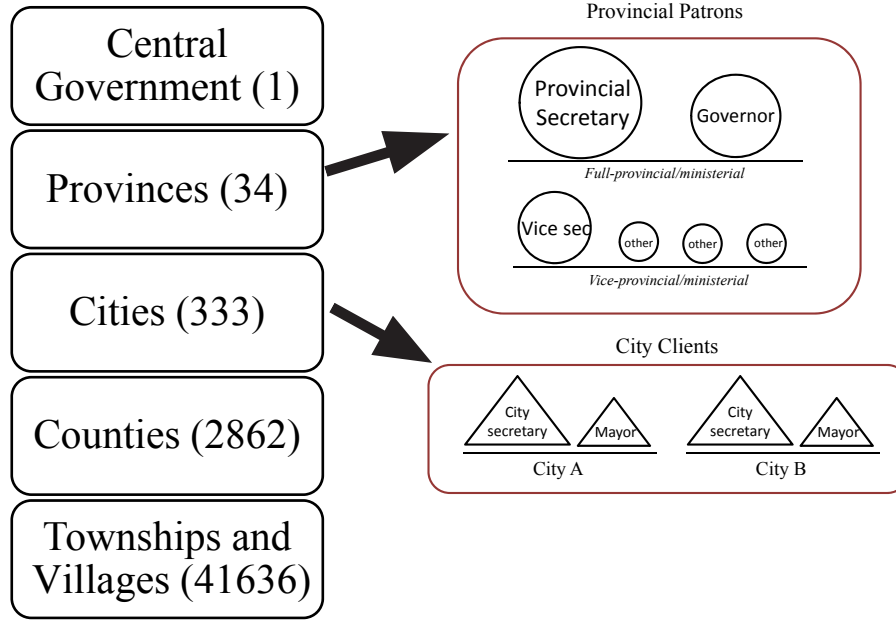
and resources to reward clients for their dedicated effort. Aside from expedited career advancement under his watch, clients who delivered outstanding performance for their patrons may receive special personal endorsement from the provincial secretary when they are being considered by the Central Organization Department for higher-level positions. When there are on-going disciplinary investigations that may potentially implicate the clients, the provincial secretary can also use his authority to redirect or even block such investigations in order to protect his associates.[17]

4.5 Data and Measurement

4.5.1 Data on Economic Performance

The data on GDP growth rates are collected from *Statistical Yearbooks on Regional Economy (quyu tongji nianjian)* from 2000 to 2009. For the analyses below, I use the portion of data from all prefecture and sub-provincial level units, but exclude districts under centrally administered municipalities (*zhixia shi*). The resulting panel contains observations for 333 localities for 10 years.

---

[17]This practice, commonly known as (*bao* 保) in the officialdom, is discussed further in Chapter 5.

To address this concern, I also use the DMSP-OLS nighttime brightness data as an alternative measure to assess the extent of development. Nighttime brightness captured by satellites has been shown to be a good indicator for development in contexts where official statistics are absent or unreliable (Henderson, Storeygard and Weil 2012).

4.5.2 Measuring Patronage Ties at the Subnational Level

The data on political leaders are drawn from the China Political Elite Database (CPED), which is a newly constructed database containing extensive biographical information about key municipal, provincial, and national leaders in China since the late 1990s. For each leader, the database provides standardized information about the time, place, organization, and rank of *every* job assignment listed in his or her curriculum vitae, which is collected from government websites, yearbooks, and other trustworthy internet sources (detailed in the Online Appendix). I matched each city-year spell in the panel dataset with a city secretary and a mayor. In cases where multiple leaders held the same post within a given spell, the most recent individual was chosen.

Measuring informal relations in authoritarian regimes has always been a challenge for empirical researchers. In studies of Chinese politics, the most commonly used approach in measuring informal connections is based on overlaps between work or school experiences, as well as shared hometown. A key limitation of this overlap-based approach, however, is that shared experiences only suggest acquaintance but cannot capture the nature or the actual quality of the relationship. In this study, I exploit our knowledge of some key institutional features of the personnel appointment system in China to propose a more precise measure. This measure identifies patron-client relations by linking lower-level officials with the provincial leaders who were in power when those officials were first promoted to key city leadership positions. More specifically, I define a city leader C as a client of a provincial leader P if and only if the following condition is met:

- C was *first* promoted to a city leadership position (as city secretary or mayor) from *within* the province when P was serving as *either* the provincial secretary or the governor.

Focusing on first promotion to city leadership allows reliable measurement of strong political connections for two reasons. First, city leadership positions are highly valuable positions within the Chinese system. In addition to the political power and ample rent-seeking opportunities that these positions typically accord, experience as a city leader is also a key political credential required for promotion to many higher level offices. There are approximately 40,000 positions in China that are of the same rank as city leaders (prefecture/bureau-level), but only about 660 city leadership positions. However, 5 out of the 7 current Politburo Standing Committee (PSC) members and 12 out of the 18 Politburo (PB) members served as city leaders earlier in their careers. With the exception of a few deputy-provincial level cities, whose leaders are usually appointed from outside the province, the provincial leaders typically have the greatest influence over the selection of city leaders. For promotion of prefecture-level city leaders, the appointment decisions can be made after deliberation by the provincial standing committee. For city leaders at deputy-provincial ranks (but in non-deputy provincial cities), the provincial leadership still holds significant sway in nominating suitable candidates.

4.6   Empirical Strategy

The baseline model is a fixed effects regression with the following specification:

$$
\begin{aligned}
\text{Growth}_{i,p,t+2} \quad = \quad & \delta \text{Connected to Prov Sec}_{ipt} \\
+ \quad & \mathbf{X}_{ipt}\boldsymbol{\beta} + \eta_i + \gamma_{pt} + \epsilon_{ipt},
\end{aligned}
\tag{4.1}
$$

where i, p, and t index city, province, and year respectively. The dependent variable is economic growth measured by growth in GDP per capita. I set the dependent variable at $t+2$ to capture the time elapse between political turnover and economic development.[18] The key independent variable, *Connected to provincial secretary*, is a binary indicator that takes the value of 1 if the

[18]Results from other lag structures are presented in the Appendix.

incumbent city secretary or mayor is connected to the provincial secretary by the aforementioned definition. The city fixed effects η_i capture the time-invariant heterogeneity in the levels of transfers across cities, while the year fixed effects γ_{pt} are allowed to vary arbitrarily by provinces to absorb any province-specific economic or political shocks on transfers, such as those induced by changes in the provincial leadership or the central government's regional policies.

X is a vector of controls for time-varying political and economic conditions in a city and the career backgrounds of the two city leaders. I include the levels of *Log GDP*, *Log Population*, *Log Fixed Asset Investment* the last years of the city secretary's and the mayor's predecessors terms to account for the possibility that connected officials may be systematically assigned to cities that are different from unconnected ones in terms of, among other things, the growth potential.[19] As for career-specific controls, we include a set of standard demographics, such as *Gender*, *Ethnicity*, and *College Education* for both the city secretary and the mayor. Because those promoted by the incumbents tend to be younger and have relatively shorter tenures as city leaders, I also include both city leaders' *Age* and *Tenure length* in the more extensive specification.

4.7 Main Results

4.7.1 Baseline

Table 4.1 presents the baseline results on the effects of political connections on the economic performance. I examine a wide range of performance indicators. Models 1 through 3 use growth in GDP per capita as the dependent variable. I begin with the most parsimonious model with only the connection indicator, the first-year controls, and the three sets of fixed effects, and then incrementally add the economic and career controls in the next two models. The results from the first three models suggest that political connections with the incumbent provincial secretary has a large, positive, and statistically significant effect on local economic growth. Focusing on Model 3,

---

[19]There is some evidence, for example, that officials with career in central governments are more likely to be assigned to larger and wealthier cities.

the coefficient estimate suggests that all else being equal the growth rates in connected cities are about 0.4 percentage points (or 11% of a standard deviation) higher than unconnected cities. To interpret the effect more concretely, note that the average GDP for a city in the sample is about 70.3 billion yuan ($10.75 billion dollars). The coefficient estimate thus suggests that the informal ties translate into an additional 278 million yuan ($41.3 million USD) in the wealth of the connected cities every year.

I then turn to examining the effect of political connections by sectors. Models 4 through 6 present the results using growth rates in agriculture, manufacturing and service sectors as the dependent variables. The results suggest that politically connected leaders tend to develop faster in all three sectors but the premium is largest and most significant for the manufacturing sector. This result is not at all surprising given that manufacturing has been the primary engine of growth for the Chinese economy during the recent decades and the local state's active guidance and assistance are often crucial for the competitiveness of local industrial firms (Oi 1995).

One concern with using government statistics, of course, is that the data may be manipulated for political purposes (Wallace 2014). If the connected city leaders enjoy greater protection for fabricating growth figures, we might well overestimate the degree of actual performance premium associated with patronage. However, it should be noted that the framework of particularistic accountability would predict the opposite: When clients are bound by the informal contract as well as a moral obligation to serve the patron, we should expect them to deliver more genuine accomplishments and less falsification than those who are not part of the patronage network. To see if this is the case, I ran two additional regressions. In Model 7, I use *Growth in Nighttime Brightness* as the alternative measure for economic development, and the the performance premium associated with connected leaders remains quite strong (by a margin of 1.6 percentage points). Finally, in Model 8, I use GDP and Nighttime brightness to capture the degree of falsification and ran the same specification. Consistent with the prediction of my own framework, the effect of connection on this dependent variable is negative, suggesting that connected leaders actually falsify less, rather than more, on economic statistics.

Table 4.1: Baseline Results

	Growth at $t+2$ (last year=100)							
	(1) overall	(2) overall	(3) overall	(4) agriculture	(5) manufacturing	(6) service	(7) brightness	(8) gdp-brightness
Connected to prov sec (1=yes)	0.357**	0.659***	0.395***	0.239	0.812**	0.338*	1.555**	-1.171
	(0.172)	(0.178)	(0.144)	(0.299)	(0.358)	(0.198)	(0.768)	(0.758)
Year FE	✓	✓	✓	✓	✓	✓	✓	✓
City FE	✓	✓	✓	✓	✓	✓	✓	✓
Province X Year FE	✓	✓	✓	✓	✓	✓	✓	✓
City economic controls		✓	✓	✓	✓	✓	✓	✓
City leader controls			✓	✓	✓	✓	✓	✓
Adjusted R^2	0.55	0.56	0.60	0.39	0.46	0.50	0.78	0.78
Number of Cities	333	333	333	333	333	333	333	333
Observations	3989	3987	3779	3777	3777	3776	3781	3779

Note:

Robust standard errors clustered at individual are reported in parentheses.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$ (two-tailed test)

4.7.2 Addressing the Issue of Strategic Appointments

A central assumption for the validity of this type of fixed-effects analyses is the assumption of parallel trends—that is, the connected and unconnected cities must be otherwise comparable in their counterfactual states. This assumption might be violated if patrons are strategically appointing clients to localities that already exhibit positive trends of growth. Although this practice is possible in theory, my interviews with local officials suggest that such behaviors are indeed quite unlikely because the provincial secretary often needs to provide a good justification for such irregular transfer in order for such motion to be passed in the provincial Standing Committee. Instead, most of the political appointments follow an opening-driven process and the location of clients' appointment depends primarily on which city has leaders about to retire. Analysis of determinants of city's connection status also suggests that the most powerful predictor for whether a city will become connected is the number of years that it has remained *unconnected*. By contrast, none of the usual socioeconomic variables (or their lags) appear to be significantly associated with the likelihood of becoming connected (results available in Appendix).

To investigate this possibility further, I adopt a more flexible specification that includes a number of dummies for whether a city will be, is currently, or used to be connected to the incumbent secretary.

$$
\begin{aligned}
\text{Growth}_{i,p,t} \quad = \quad & \sum_{\tau=-2}^{+2} \delta_\tau^S \text{Connected to Prov Sec}_{ip(t+\tau)} \\
+ \quad & \mathbf{X}_{ipt}\boldsymbol{\beta} + \eta_i + \gamma_{pt} + \epsilon_{ipt},
\end{aligned}
\tag{4.2}
$$

where *Connected to Prov Sec*$_{ip(t+\tau)}$ are a set of dummies for whether city i is connected to the provincial secretary at time $t+\tau$. The whole set of dummies encompasses connection statuses ranging from four years before forming a connection to three years after losing one. In Figure 4.2, I display the dynamics effects of political connections. The key finding is that there are no significant pre-trends in years leading up to the arrival of a connected leader: Cities that will soon

Figure 4.2: Parallel Trends
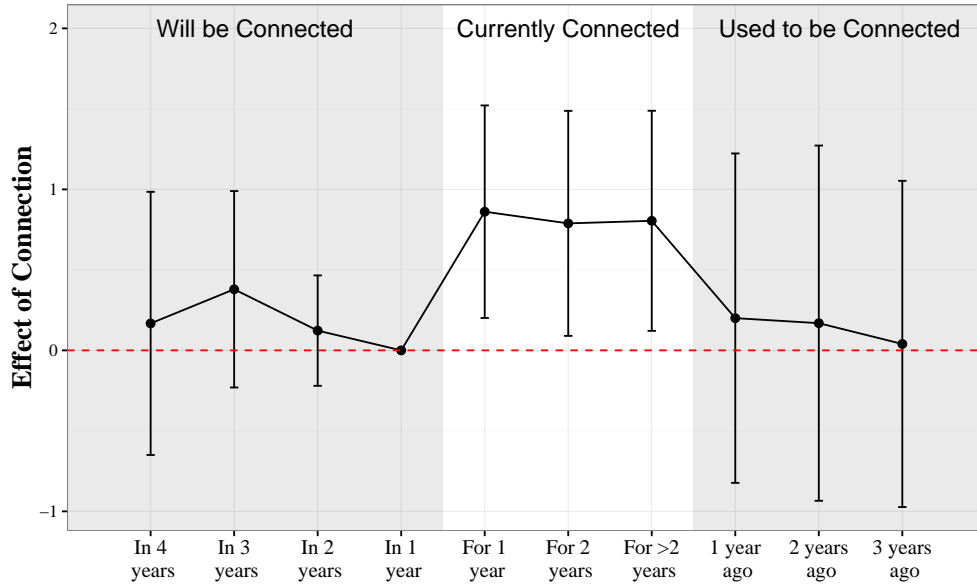
became connected to the provincial secretary do not see their growth increase significantly until the connection is actually in place. More interestingly, although industrial and night-time light growth appeared to quickly slow down after cities become disconnected, the premium on per capita growth appears to persist for a much longer period of time.[20]

4.8   Evaluating Mechanisms

The preceding analyses have provided strong evidence that city leaders promoted under the current provincial secretary tend to deliver better economic performance than other city leaders, and that such difference is unlikely to be driven by spurious factors such as more intensive data falsification or favorable appointment to high-growth localities. In this section, I further investigate three mechanisms that may give rise to this performance differential and provide evidence that enhanced incentives is the most important channel.

---

[20]The reference group consists of cities that are at least three years either before gaining a connection or after losing a connection.

4.8.1 Differential Competence

The first mechanism I test is whether the observed difference in performance is a result of differential competence between clients and non-clients. While there is no reason to believe that those promoted by the incumbents are necessarily more or less competent than those promoted by the predecessors on average, one way for differential competence to arise is through attrition–that is, high-ability clients of the predecessors are likely to be promoted to other positions relatively soon after the predecessors have departed, leaving only those of lower ability to stay on as city leaders.

To address this problem, I adopt an estimation strategy similar to the regression discontinuity design (RD) with dates of city leader's promotion relative to the arrival of the provincial secretary as the running variable. The spirit of this exercise is to compare officials who are promoted barely before and after the arrival of the incumbent provincial secretaries. The idea is that when difference in competence is a function of difference in times of appointment, then such difference should be smallest between officials who are appointed about the same time. In other words, those promoted right before the incumbent provincial secretary's arrival should deliver roughly the same level of growth as those promoted just before that, if competence, rather than incentives, is what drives the difference in performance.

Figure 4.3 reports the results from the RD analysis graphically. The top panel reports the results for the city secretary and the bottom for the city mayor. In both panels, the gray dots represent the average economic performance at $t+2$ for an official promoted at t (relative to the year at which the incumbent provincial secretary comes to power). The blue and red lines are the 3rd order local polynomials fitted from both sides of the cutoff point along with their respective 95% confidence intervals.[21]

In contrast to what we would expect if the mechanism of differential competence were true, the figure shows that there are notable differences in the performance outcomes even between officials who were promoted within very close time intervals but had different political affiliations. For city

---

[21]The bandwith is chosen to minimize the Mean Squared Error, as recommended by Imbens and Kalyanaraman (2012).

secretary, I estimate that those promoted just after the provincial leader's arrival outperform those promoted just before that by a margins of 2.9 percentage points (standard error= 1.49 on city). The figure also makes it clear that the difference in performance is primarily driven by the higher performance of the more recently promoted clients. The estimated difference for the mayors is somewhat smaller (1.57 percentage points, standard error= 0.76), which is consistent with the fact that mayors are only the second most powerful officials in a city.

4.8.2 Distributive Favoritism

Another possible explanation for the observed difference in performance is that clients simply receive more material and policy support from the higher-level governments. To check whether this is the case, I collect data on a number of the most important fiscal and financial resources that the governments have direct control on, including fiscal transfer, bank loans, and land quotas. In addition, I also collect data on the approval of both national-and provincial-level special economic zones as a measure for policy support from above. For all outcome variables, I ran the same specification as Model 3 in Table 4.1. The results are displayed in Table 4.2. For all regression that yield a positive coefficient on the variable of interest, I also conduct mediation analysis based on Imai et al. (2011) to gauge the share of effects channeled through that particular type of resources. Overall, I find that connection status has little effect on all material and policy resources except for fiscal transfers, which are typically determined by not only favoritism from above but also active solicitation on the part of the lower-level officials. But even if we assume that transfers are treated as a purely favoritism that requires no effort, [22] mediation analysis suggests that increase in transfers can explain at best only about 30% of the performance premium.

---

[22]Local officials often need to exert considerable effort in order to secure funds from above. This practice of soliciting funds from key higher-level government agencies—often known as paobu qianjin (跑步前进—has been widely documented by domestic media. See http://news.xinhuanet.com/local/2013-06/05/c_124816410.htm.

Figure 4.3: Testing the Competence Mechanism Through an Regression Discontinuity Design

City Secretary

GDP growth at t+2

Promotion Time Relative to Prov Sec's Arrival (in years)

Mayor

GDP growth at t+2

Promotion Time Relative to Prov Sec's Arrival (in years)
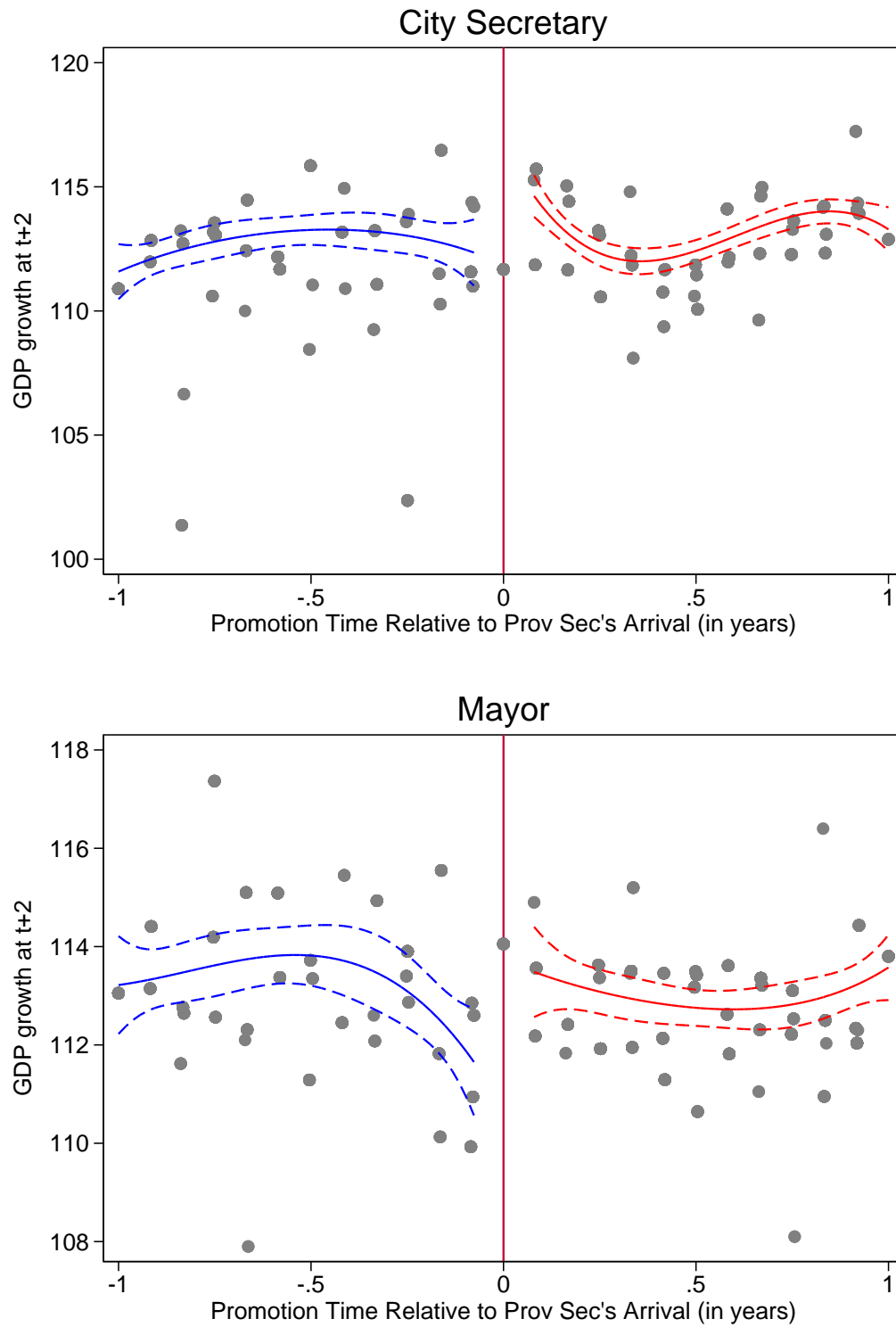
Table 4.2: Testing Mechanisms: Resources

	Tangible Resource ($t+1$)			Policy Support ($t+1$)	
	(1) transfer	(2) loan	(3) land	(4) national SEZ	(5) provincial SEZ
Connected to prov sec (1=yes)	0.042**	0.007	0.027	0.003	0.007
	(0.017)	(0.018)	(0.052)	(0.020)	(0.007)
Effect of connection mediated	0.30	-0.02	0.01	-0.00	0.01
Year FE	✓	✓	✓	✓	✓
City FE	✓	✓	✓	✓	✓
Province X Year FE	✓	✓	✓	✓	✓
City economic controls	✓	✓	✓	✓	✓
City leader controls	✓	✓	✓	✓	✓
Adjusted R^2	0.98	0.98	0.85	0.46	0.03
DV period	2001-2009	2004-2013	2003-2011	2000-2006	2000-2006
Number of Cities	331	285	332	333	333
Observations	2762	2807	2873	2126	2327

Note:
Robust standard errors clustered at individual are reported in parentheses.
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$ (two-tailed test)

4.8.3 Enhanced Incentives

Having shown that the performance premium associated with patronage ties cannot be simply explained away by competence or material resources, I provide empirical evidence that the main mechanism is indeed through enhancing the performance incentives of the politically connected. First of all, to the extent that both promotion and distributive favoritism are costly signals that can be used to reveal the patron's commitment to the clients, we should expect agents who receive positive signals on both dimensions (i.e., promotion and higher transfer) to be even more motivated to exert effort than if they receive any one of the two signals. This implies, among other things, that there will be a complementary relationship between promotions and the amount of transfer in terms of inducing performance. This possibility is tested in the first model of Table 4.3, where I run the baseline regression with additional variables on (standardized) fiscal transfer and an interaction term between transfer and political connection. As expected, I find that while the main variable for transfer is positive and statistically significant, so are the interaction terms. For one standard deviation increase in fiscal transfer, connected city leaders could achieve an extra 1/3 standard

deviation in growth rates, suggesting that clients actually made more efficient use of the resources allocated than non-clients.

Second, when stronger incentives are what drive the better performance of politically connected agents, we should also expect the performance premium to disappear when the incentives are terminated by some external forces in a non-reversible fashion. In the Chinese system, one such force comes from the mandatory retirement institutions, which set ceilings for the maximum age at which officials are eligible for promotion to the next level. For the vast majority of the city leaders in the sample, the ceiling is usually set at 56 (Kou and Tsai 2014). This rule of retirement applies indiscriminately to officials at the same level regardless of their informal connections. As a result, if connected officials delivered superior performance because they expected that such effort is more likely to be rewarded, then we should expect that turning 57 will have a large and negative impact on the performance of those connected when the prospect of advancement is drastically reduced. By contrast, the decline in performance should be much smaller, if at all, for the unconnected officials, since they do not possess a strong incentive to exert effort to begin with.

To empirically evaluate this implication, I include in the baseline specification two variables. The first is *Client At or Above 57*, which takes the value of 1 if (1) one of the two city leaders is client of the provincial secretary and he/she is at or above 57, or (2) both of the city leaders are clients of the provincial secretary and both of them are at or above 57. The second is *Non-Client At or Above 57*, which measures whether any or both of the non-client city leaders hit the age ceiling. Column 2 of Table 4.3 reports the results. Consistent with the expectation, the coefficient on this variable suggests an almost 1 percentage points drop in subsequent GDP growth rates in connected cities when the clients became formally ineligible for further promotion. In fact, the decline is so large that cities with retired clients actually perform weakly poorer than even unconnected cities. By contrast, the estimated effect of a non-client turning promotion-ineligible is noisy but positive.

Finally, I provide more direct evidence on the policy priority of the connected city leaders by looking at the composition of topics in city government's work reports, which are official policy

Table 4.3: Evidence for Incentive Effects

	DV: GDP growth at $t+2$		% of work report devoted to development at $t+2$
	(1)	(2)	(3)
Log transfer at $t+1$ (standardized)	1.343***		
	(0.444)		
Connected to prov sec (1=yes) $\times$ Log transfer at $t+1$ (standardized)	0.375** (0.167)		
Client at or above 57		-1.058***	
		(0.379)	
Non-client at or above 57		1.177	
		(0.873)	
Connected to prov sec (1=yes)	0.074	0.443***	0.013**
	(0.175)	(0.147)	(0.005)
Year FE	✓	✓	✓
City FE	✓	✓	✓
Province X Year FE	✓	✓	✓
City economic controls	✓	✓	✓
City leader controls	✓	✓	✓
Adjusted R^2	0.62	0.60	0.67
DV period	2000-2009	2000-2011	2004-2011
Number of Cities	331	333	316
Observations	2760	3779	2420

Note:
Robust standard errors clustered at individual are reported in parentheses.
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$ (two-tailed test)

documents presented at local legislatures' annual sessions.[23] I sum up the total proportion of three topics that are explicitly related to development issues as the dependent variable.[24] The results, which are presented in column 3 of Table 4.3, suggest that connection with the provincial leader has a positive and significant effect on the degree of emphasis on the development-related topics, suggesting that development moves higher in a city's policy priority once it becomes connected.

---

[23]I collect the full set of government work reports by city governments between 2004 and 2011 and ran topic models to distill 20 different topics from these reports. See appendix for more details.

[24]The three words that are most highly correlated with each of the three topics are: infrastructure 基础设施, comprehensive planning 全面规划, urbanization 城镇化 (for the first topic); advanced technology 高新技术, value-added 附加值, industrial parks 工业园区 (topic 2); and infrastructure 基础设施, highway 高速公路, major projects 重点项目 (topic 3).

4.9 Particularistic Reward from the Patron

The preceding analyses have shown that patronage ties with bureaucratic superiors motivate lower-level officials to exert greater effort on promoting development. To complete the picture of this informal performance contract, this section provides further evidence on the behaviors of the political superiors. If the performance incentives are generated by the system's formal institutions, we should expect to find a universal linkage between performance and political rewards. By contrast, in a world of particularistic accountability, different types of performance can be rewarded differently when and to whom it was delivered. More specifically, based on the second hypothesis, I expect officials to receive greater reward for performance delivered to their patrons than that delivered to other superiors who are not their patrons.

To test this hypothesis, I construct a person-year sample for all the prefecture-level city secretaries and mayors that have ever appeared in our city panel. For each official, I create a sequence of observations starting in the year of his or her first appearance in the city panel and continuing on to 2011 unless one of the following conditions is met: (1) the official experiences a promotion, defined as movement from a prefecture-level post to a vice-provincial level (or above) post in the party or the government,[25] (2) the official dies or receives a disciplinary sanction, or (3) reaches the age of retirement.[26]

The key independent variables are the Cumulative Relative Performance (CRP), which is the average of relative growth that an official has achieved in the capacity of a city secretary or a mayor in his past career. Effectively, it measures on average how much a city official has outperformed the provincial average up to the current point. For a sequence of relative performance statistics $y_1, y_2 \cdots y_t$ where t indexes year, the CRP at time T is simply $\frac{\sum_{t \leqslant T} y_t}{T}$.[27] In the empirical analyses, I add an extra complication to the formula above by distinguishing between two types of CRPs:

---

[25]The common destination posts includes vice-governor, vice provincial secretary, secretary or mayor in vice-provincial level cities, members of the provincial standing committee, and vice-ministerial level posts in the central government. We exclude semi-retirement promotions such as those to the People's Congress and People's Consultative Conference.

[26]The age is set at 60 for prefecture-level official and 63 for vice-provincial level.

[27]Guided by the previous results, CRPs are calculated using GDP growth at $t + 2$.

the CRP for the patron and *the CRP for the non-patron*. The former is the cumulative performance delivered under a provincial secretary who had promoted the official, and the latter is the performance under a non-patron provincial secretary.[28] In the person year sample, the CRPs are updated throughout the official's city leadership terms (since s/he delivers new performance every year). Once the official leaves city leadership posts, the values stay constant for the rest of his/her observations.

My measure has several advantages over the existing approaches, which are based on either contemporaneous or term-based average performance. First, in making promotions, the superior is likely to take into account the candidate's entire career record up to that point rather than just focusing on the present. If a client has delivered outstanding performance in one year but abysmal results in another, both are likely to be taken into account. Second, to the extent that growth statistics in regional units allows comparison among officials with otherwise heteregenous backgrounds, it is a useful and informative signal that is likely to follow with the official throughout his career. Even when officials are not immediately promoted after completing their terms as city leaders, their performance in cities, which reveal information about their ability and loyalty, is still likely to be remembered for some period of time and affect later promotion decisions.[29]

I estimate the following hazard model:

$$
\begin{aligned}
h_{ig}^{\text{outcome}}(t) \quad = \quad & h_{0g}(t)\exp\Big(\beta_1\text{CRP under Patron}_{ig} \\
& +\beta_2\text{CRP under non-Patron}_{ig} \\
& +\delta_1\text{Under Patron}_{ig} \\
& +\mathbf{X}\boldsymbol{\beta}\Big)
\end{aligned}
\tag{4.3}
$$

---

[28] A value of 0 is assigned to these CRP if we cannot identify any segment of performance between 2000 and 2011 that satisfy the conditions.

[29] As evidence on how economic performance can have an impact beyond one's immediate term, many of my prefecture-level informants can frequently recall and comment on the performance of their subordinates in counties even they have been transferred to other specialist agencies.

where i and g index the individual and the risk strata, respectively. To account for the heterogeneity in the underlying hazard, I stratify all models with two variables: 1) whether the subject was a city secretary or a mayor and 2) the province in which the subject worked at the beginning of all his/her observations.[30]

I estimate the effect of CRPs separately for two key outcomes of interests: promotion and disciplinary sanction. For each outcome, the dependent variable takes the value of 1 if that outcome is realized and 0 otherwise. *Under Patron* is an indicator for whether the official's CRP for patron can be calculated for the period of 2000-2011. This variable takes the value of 0 if an official has not served as a city leader during this period under the provincial secretary who promoted him.

Table 4.4 presents the main results on the differential effects of performance on both promotion and disciplinary sanction. Column 1 presents the baseline result with controls on the size of the economy, population and fiscal transfer in the assigned city. I find that cumulative performance delivered under the patron is strongly correlated with one's promotion. One standard deviation increase from the provincial average, for example, raises the odds of promotion by about 20%. By contrast, performance under a non-patron appears to have no effect on growth. The second model adds additional controls on the demographic and career attributes of the official and the results remain virtually the same. The third model further explores whether patrons are equally responsive to performance when the client is over-performing versus under-performing. We decompose the CRP under patron into two variables to capture the positive and negative deviations from the provincial average (0). The variable on positive deviation takes the same value as CRP under Patron when the latter is positive and 0 otherwise, and the variable on negative deviation is similarly constructed. The result suggests that the degree of responsiveness is highly asymmetric: While the slope is essentially flat when a client is performing under the provincial average, over-performance is generously rewarded: One standard deviation above the provincial average is associated with a

---

[30]City secretaries, who are more senior than mayors, are naturally more likely to be promoted. Similarly, some provinces have more vice-provincial posts relative to the number of city posts, making the odds of promotion higher for city leaders in those provinces. This is also noted in Lü and Landry (2014).

50% increase in the odds of promotion. Columns 4 through 6 report the results from using disciplinary sanction as the dependent variable. The results are remarkably similar to those of the promotion analyses: While performance in general seems to weakly increase the probability of disciplinary sanctions, better performance under a patron is associated with actually lower such risk.

4.10 Conclusion

In any political systems, effective governance requires institutions that elicit the right type of incentives from those who wield power. China's economic accomplishments in the past several decades has been widely attributed to the system's ability to motivate local officials to exert effort on development related tasks. Yet the presence of high-powered incentives among local officials is inherently puzzling because the system not only lacks bottom-up electoral accountability but does not furnish any credible, formal provisions that link performance with political rewards. In this chapter, I tackle this puzzle by offering an alternative framework for understanding the nature and origin of performance incentives faced by Chinese officials. Contrary to the conventional wisdom that trace performance incentives to a set of imagined rules of meritocratic selection that the bureaucracy mysteriously upholds, my own framework argues that China's formal bureaucracy is poorly equipped for generating credible promise of reward for effort and that strong performance incentives often need to be backed by informal patron-client relations between superiors and their subordinates. By placing these informal relations at the center of analysis, my framework predicts highly selective behavior in the supply of both effort and reward that depart from the existing theories. These predictions are tested using a city-level panel along with a novel promotion-based strategy to measure patronage ties at the subnational level. The empirical findings suggest that cities with political leaders who are clients of the incumbent provincial leader tend to experience significantly faster economic growth than those without, and that much of the growth premium appears to be due to heightened incentives, rather than merely a result of better job assignment,

Table 4.4: Particularistic Reward to Performance: Evidence from Promotion

	Promotions		Disciplinary Sanctions	
	(1)	(2)	(3)	(4)
CRP under patron	1.203**	1.242**	0.702**	0.700**
	(0.101)	(0.104)	(0.126)	(0.127)
CRP under non-patron	1.077	1.088	1.276	1.249
	(0.094)	(0.099)	(0.283)	(0.258)
Average relative city GDP	1.479***	1.461***	0.867	0.896
	(0.141)	(0.142)	(0.232)	(0.242)
Average relative city population	0.978	0.985	1.272	1.238
	(0.089)	(0.090)	(0.307)	(0.286)
Average relative fiscal transfer	1.110	1.162	0.806	0.818
	(0.121)	(0.130)	(0.209)	(0.208)
Non-zero CRP under patron	0.592***	0.634***	0.660	0.645
	(0.083)	(0.092)	(0.267)	(0.306)
Age	4.571***	4.564***	3.090	3.129
	(1.312)	(1.394)	(3.675)	(3.698)
Age^2	0.984***	0.984***	0.991	0.991
	(0.003)	(0.003)	(0.011)	(0.011)
Patron currently a PSC/PB member		1.967***		1.532
		(0.348)		(0.698)
Year first promoted to bureau-level		0.942***		1.015
		(0.018)		(0.069)
Ethnic minority		1.312		1.681
		(0.292)		(1.226)
Female		3.690***		0.335
		(0.845)		(0.348)
Full-time college		1.278**		0.884
		(0.151)		(0.276)
Year dummies	✓	✓	✓	✓
Proportional hazard test (p-value)	0.251	0.417	0.222	0.170
Number of promotions	356	356	51	51
Number of individuals	1540	1540	1540	1540
Observations	8826	8826	10516	10516

Note: The table presents exponetiated coefficients (odds ratios) from Cox proportional hazard models. The results suggest that performance delivered under the patron matters considerably more for promotion than that delivered under non-patron.

Robust standard errors clustered at individual are reported in parentheses.

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$ (two-tailed test)

greater competence, or more favorable resource allocation. Examining the patterns of subsequent career paths of city leaders, I further show that the correspondence between performance and political rewards is stronger between patrons and their clients: While officials' economic accomplishments under their patrons are strongly correlated with both greater career prospect and lower risk of investigation, performance under a non-patron do not appear to yield any significant benefits.

The findings from this chapter illustrate another important benefit of informal patronage networks for the CCP regime: In addition to helping sustain credible power sharing arrangements between major holders, these networks are also an important instrument for increasing the credibility of intra-bureaucratic contracts and mobilizing lower-level agents. In the next chapter, I will explore how this unique mode of mobilization affects policy implementation more generally by leveraging a natural experiment created by an unexpected pollution control campaign.

The theoretical framework developed in this chapter offers a new perspective for resolving a long-standing puzzle in China studies: Namely, why does the system simultaneously exhibit higher-powered career incentives for economic performance and rampant factionalism that presumably undermines the power of meritocratic selection. While most of the existing studies on political selection tend to assume, either explicitly or implicitly, that these two dimensions are either contradictory or independent, this chapter is the first to argue that they are intimately connected through an incentive mechanism.[31] Personal affiliations with the superior provides clients credible guarantee of future reward for their effort, and this guarantee in turn translates into strong incentives for serving the interests of their political patrons. Insofar as the patron has an encompassing interests in promoting development and welfare, these particularistic relations can elicit policies and effort geared towards socially desirable outcomes. Future research on the political

---

[31]The only prior research that touches on this issue is Jia, Kudamatsu and Seim (2015), who document a similar complementary relationship between economic performance and promotion among a pool of provincial-level leaders. However, they interpret the complementary relationship as primarily a result of the principal's selection preferences (i.e., valuing both loyalty and competence) but do not justify why the competence that produces economic performance is necessarily equivalent to type of competence needed in high-level politics. My framework does not rely on any assumptions the convertibility of competence in different areas, but instead emphasizes the role of performance incentive in giving rise of the complementary relationship.

determinants of China's development, therefore, must go beyond the dichotomy between meritocratic and patrimonial institutions and pay greater attention to the complex interaction between the formal selection criteria and informal politics.

More generally, the findings in this chapter also cast a new perspective on the long-standing question of what makes a bureaucracy effective. While the conventional answers to the question tend to focus on the Weberian elements of the bureaucracy, including rational, impersonal rules and meritocratic selection institutions (Johnson 1982; Evans and Rauch 1999), my analysis of the incentive structure of local officials in China suggests that the personal, sometimes even patrimonial relations are also indispensable ingredients for bureaucratic effectiveness, especially when the formal incentive contract is either incomplete or unfeasible. This perspective also serves as a counter point to a large literature that sees these patrimonial relations as institutional liabilities in underdeveloped economies (Collins 2011; Ganev 2013; Geddes 1994), and joins an emerging literature in comparative politics that highlights the importance of informal institutions in political and economic governance (Azari and Smith 2012; Helmke and Levitsky 2004).

Chapter 5

Patronage Networks and State Capacity: Quasi-Experimental Evidence from China's 2007 Pollution Control Campaign

The preceding chapter argues that patron-client relations serve as a crucial mechanism to incentivize lower-level officials when the formal institutions do not adequately reward effort. Through the provision of particularistic favors and personalized interactions, such relations helped the principal to mobilize agents to undertake challenging economic projects or policy tasks that may be too risky or too costly for them to initiate were they the sole bearer of the full political consequences. While the previous chapter focuses on the issue of economic development, as a general strategy to elicit effort, these relationships are also widely used by senior Chinese politicians in a number of other settings where heightened enthusiasm from the subordinates are needed. Building on this line of argument, this chapter examines the role of local patronage networks in policy implementation by studying a nationwide pollution control campaign that occured between 2007 and 2011.

The selection of this particular case is motivated by several considerations. At the practical level, environmental governance has become an increasingly salient issue in recent years across the globe and particularly in China, whose rapid growth has come at heavy environmental costs .

China is one of the largest sources of carbon emissions and sulfur dioxide, and hosts the majority of the the world's most polluted cities.[1] Deteriorating environmental conditions have not only caused severe social and health problems, but also had significant political consequences. Environmental grievance has recently taken over land disputes as the main causes of China's 30,000 to 50,000 protests every year (Bloomberg News 2013). Studies also show that heavy air pollution can lower citizens' support for local and central governments in major municipalities (Alkon and Wang 2016).

Empirically, the unique way in which China's 2007 pollution campaign unfolded also provides an ideal setting for testing the causal effect of informal networks on policy implementation. While the central government announces the target of 10% reduction in the emission of major pollutants (Chemical oxygen demand, or COD, and SO2) as early as 2005 in its formulation of the 11th Five-Year Plan (FYP), it was not taken seriously at a much later time, when the authority found out, largely to its surprise, that the total emission rose instead of falling in the first year of the FYP. Fearing that the target might not be fulfilled by the end of the Plan (2011), the central government started a major pollution-control campaign that put considerable pressure on subnational governments beginning from late 2007. To the extent that this sudden increase in the perceived urgency on the part of the central government is largely a result of an aggregation of information that is not accessible to subnational authorities, it is unlikely that local political and economic arrangements were deliberately manipulated in advance in anticipation of this campaign. As a result, the event serves as a unique natural experiment for us to evaluate how policy orders are transmitted across the political hierarchy and how their implementation is conditioned by the presence of informal networks in the system.

I collect city-level data on emission statistics between 2003 and 2011. My primary focus is on the emission of sulfur dioxide, which is a major cause of lung cancer and other cardiovascular disease and one of the two major targeted pollutant in China's 11th FYP. [2] To overcome the issue of

---

[1] http://www.cbsnews.com/8301-18563_162-2895653.html

[2] The other major target was COD, but there is no systematic COD data available at the city level.

102

data falsification by the local government (Ghanem and Zhang 2014; Wallace 2014), I also leverage satellite-based measure of SO2 emission derived from NASA's Ozeon Monitoring Instrument (OMI) as an alternative measure of environmental performance. Using the same promotion-based measure of political connection, I estimate the effect of connections between the party chiefs at the city and the provincial levels on the extent of emission reduction across localities. More specifically, I ask how changes in the pressure on emission reduction from above differentially affected the behaviors of local officials with different degrees of political connections to the higher-level provincial leaders. The main empirical strategy is a within-city and within-leader Difference-in-Difference (DID) design, which estimates the effect of political connection on emission reduction after 2007 while holding constant all unobservable but time-invariant attributes associated to both the city and the city party leaders. Compared to the generic fixed effects approach used in the previous chapter, this design has the additional advantage of dealing with the issues like endogeneity because the estimation only uses plausibly exogenous variations produced by policy and personnel changes at the higher level.

Consistent with findings from the previous chapter, the main results from this chapter confirm the importance of informal political networks in China's subnational policy implementation: Cities where the party secretaries were connected to under the provincial secretary achieved considerably larger emission reduction after 2007 than did those unconnected cities. The difference amounts to 1/4 to 1/3 of the sample standard deviation. This pattern remains salient even when I use satellite-based emission measures and is robust to a number of different specifications.

I also investigate how the effectiveness in implementation varied across different sub-samples of cities. Overall, the magnitude of the effect appears to be remarkably consistent across different types of clients. I find no significant variation in effect size across officials from different age cohorts or with different career prospects. However, there is some evidence that the effect of connection on reduction is larger in localities where either the state controls a greater share of the economy or the city leaders have deep local roots. These results provide suggestive evidence for

the "embedded autonomy" thesis (Evans 1995), which views internal bureaucratic solidarity and external penetration into the society as complementary in enhancing state capacity.

By showing that patronage networks facilitate effective policy implementation, this chapter contributes to a large literature on the sources of state capacity. In contrast to the conventional view that state's strength is positively correlated with the development of the formal elements of the state apparatus and that clientelistic networks typically produce political capture and undermine state capacity (Ganev 2013; Geddes 1994), this chapter supports an alternative view that that the informal personal relations play an integral role in sustaining the efficacy of bureaucratic institutions (Easter 2007; Evans 1995; Ha and Kang 2011; Hwang 1996). Moreover, I also offer empirical support to a key claim of this literature, that a internal organizational cohesion and external reach into the society are complementary ingredients in the making of an effective state (Evans 1995).

This chapter is also related to a growing body of recent research that examines the relationship between political institutions and environmental governance. Earlier research has focused on the distinction between regime types (i.e., democracies vs. autocracies) but with mixed evidence (Congleton 1992; Li and Reuveny 2006). Recent studies have moved to investigating how specific incentives generated by different institutions affect politicians' stances and strategies with respect to the environment. List and Sturm (2006), for example, show that in democracies incumbents politicians facing electoral competition can deliberately manipulate their stance on environmental policies to attract voters. Burgess et al. (2012) find that subdivision of jurisdictions in Indonesia led to intensified competition among local officials that exacerbate deforestation. In the context of China, research so far has focused primarily on the career incentives generated by the system's formal cadre evaluation system but reach contrasting conclusions.[3] This paper departs from these studies by positing an alternative incentive structure for local officials. Under this framework, local officials are motivated not by universal career incentives but rather particularistic ties they

---

[3]While Zheng et al. (2013) finds that career incentives helps mitigate environmental degradation by linking local agents' environmental performance with their prospects of promotion,Jia (2016) finds that high-powered incentives can lead to more pollution by shfiting local officials' attention to economic development.

have with higher-level patrons. The empirical evidence on the patterns of emission reduction is much more consistent with this alternative interpretation: While there was a universal increase in the pressure for pollution control from the central government after 2007, local officials responded differently to it, and those who had a higher-level patron responsible for successful implementation of the campaign exhibited the greatest enthusiasm in curbing emissions.

5.1   Subnational Environmental Governance in China: Actors and Incentives

Under China's highly decentralized governance structure (Landry 2008), subnational governments are crucial players in environmental governance. Although there exist specialized environment protection agencies (EPAs) to enforce environmental regulation, local EPA usually could not properly function without the material and administrative support from the local government.

The incentives structure of the local authority, however, is not always conducive to environmental protection. In its very essence, pollution control is an action with high externalities that cannot be properly internalized by local officials. While the benefit of a cleaner environment spills over to many other localities, the costs associated with such actions are primarily borne by the local authority itself. In many cases, the local governments or individual politicians have a direct financial stake in local polluting firms, which are important sources of fiscal revenue as well as private rents. Additionally, when major firms are forced out of business due to environmental violations, it can also create social problems such as unemployment and even local unrest, which poses a much more direct threat to a local official's career than underwhelming environmental performance.[4] These considerations made local governments unwilling to wholeheartedly enforce environmental regulations. Existing cases and my interviews with practitioners both suggest that local officials preferred to cut some slacks on environmental compliance for firms that have a significant economic presence in the locality. In a more systematic study, Lorentzen, Landry and

---

[4]See Persson and Zhuravskaya (Forthcoming) for systematic evidence on how local interests are an important countervailing consideration against career incentives.

Yasuda (2014) also find that localities dominated by large industrial firms were slower in implementing environmental transparency and the effect is especially large when the dominant firm is a major polluter.

The lack of intrinsic incentives to promote better environmental governance raises the question about what methods can be used to give local officials greater incentives to control pollution. Several studies have suggested that the central government tried to align local officials' incentives by increasing the weights on environment-related criteria in the cadre evaluation. The empirical support for a fundamental shift in cadre evaluation, however, is limited. While some studies find a positive correlation between environment progress and the promotion of mayors in a subset of major cities Zheng et al. (2013), others suggest that the cadre evaluation system still emphasizes predominantly economic performance, leading local officials to prioritize growth over environmental protection (Jia 2016; Wu et al. 2013). Aside from the empirical correlations, however, a much more fundamental problem with such a view, as indicated in the previous chapter, is that the evaluation system itself has no non-binding effects on the career advancement of local officials. Fieldwork interviews suggest that for cadres above the lowest-level of the system (i.e., the village and township level), the evaluations they receive are almost always positive and are far from being deterministic of one's career other than for the most exceptional cases.[5]

Following the framework developed in Chapter **4,** I argue that when the formal evaluation system is inadequate to provide incentives, informal patronage-client relations can serve as an alternative mechanism to mobilize effort. When there is wide resistance to certain challenging policies, the patron can create the initial momentum by first calling upon those with whom he has a close relationship to carry out the tasks. From the clients' perspectives, they are willing to expend additional effort on their patron's tasks because of the practical need to maintain the close and trusting relationship with their patrons. Shirking is seen first and foremost as a sign of

---

[5]Personal interviews with serving government officials: Jiangsu, December 2015; Shaanxi, November and December 2015; Zhejiang, January 2015.

disloyalty and may be punished by the loss of access to the essential political support and material benefits from the patron.[6]

5.2 The Natural Experiment: The Pollution Control Campaign 2007-2011

The research design leverages a sudden increase in the pressure for emission reduction from the central government in 2007 to identify how informal political networks conditioned the implementation of emission reduction policies at the subnational level. In 2005, the Chinese central government announced a series of a emission reduction targets in its newly promulgated 11th Five Year Plan as part of the effort to comply with the Kyoto protocol, which China ratified in 2002. The targets include, among other things, a 10% reduction in key emission indicators, including sulfur dioxide (SO2) and chemical oxygen demand (COD) by the end of the Plan (2011). However, these targets were initially not greeted with enthusiasm by the local governments, which, for all the reasons discussed above, are unwilling to undertake costly actions to reduce pollution. As a result, both SO2 emission and COD failed to meet the annual targets during the first year of the Plan: Instead of an planned 2% decrease, SO2 and COD emission continued to rise in 2006, by 1.2% and 1.8% respectively (Wen 2007).

Concerned about the prospect of failing to meet the final target and angered by local disobedience, the central governments quickly started to take a series of actions to put pressure on the local governments to carry out emission reduction tasks. In his Government Work Report delivered at the annual session of the National People's Congress on March 2007, Premier Wen Jiabao publicly acknowledged this failure and warned that the emission reduction was a "very serious matter that must be accomplished with no compromise (十分严肃的事情，不能改变，必须坚定不移地去实现)". On April 28, 2007, the State Council organized a major national teleconference to issue

---

[6]Personal interviews.

107

guidelines on emission reduction work, at which Wen Jiabao reemphasized the urgency of pollution control and urged local governments to treat emission reduction as one of the central tasks in governance. In July, the State Council formed a small leadership group on energy conservation and emission reduction (国务院节能减排领导小组), headed by the Premier himself, to oversee and coordinate the implementation emission reduction targets. Later in that month, a comprehensive work plan on emission reduction was also issued to central ministries and provincial governments to specify their responsibilities in pollution control and state-owned banks were ordered to provide financial support to support policy and business projects towards that end. Based on the national guidelines, each province further formulate its own emission control plans and set targets for cities.

As far as the empirical design is concerned, the most important point about this campaign is that it creates an unexpected increase in the pressure of policy enforcement that is exogenous to the patterns of appointments at the local level. To the extent that the aggregate-level statistics that informed the central government about the urgency of emission reduction was accessible to any local governments at that moment, there is no reason to believe that local leaders would either learn about the failure in advance or strategically adjust their appointment/rotation decisions accordingly. As a result, the geographic distribution of clients and non-clients at the beginning of the campaign can be regarded as largely unrelated to the environment conditions of the cities to which they are assigned.

As an illustration of the unexpected nature of this campaign, Figure 5.1 plotted the index of Google search interest for the key word "emission reduction (节能减排)" between 2004 and 2010.[7] We see that although the word appeared as early as 2004 when the 11th FYP was being prepared, it did not start attract much public attention until the week when the State Council's teleconference was initiated in April. Two moths later, there was another major spike in public attention that corresponded to the release of the the comprehensive work plan. The pattern of over-time variation in public attention is thus consistent with the claim that the onset of the campaign was largely unexpected by local leaders.

---

[7]The data is collected weekly, accessed at https://www.google.com/trends/explore#q=%E8%8A%82%E8%83%BD%E5%87%8F%E6%8E%92. The search was done in Chinese.

Figure 5.1: Google Search Interest for Keyword "Emission Reduction", 2004-2010
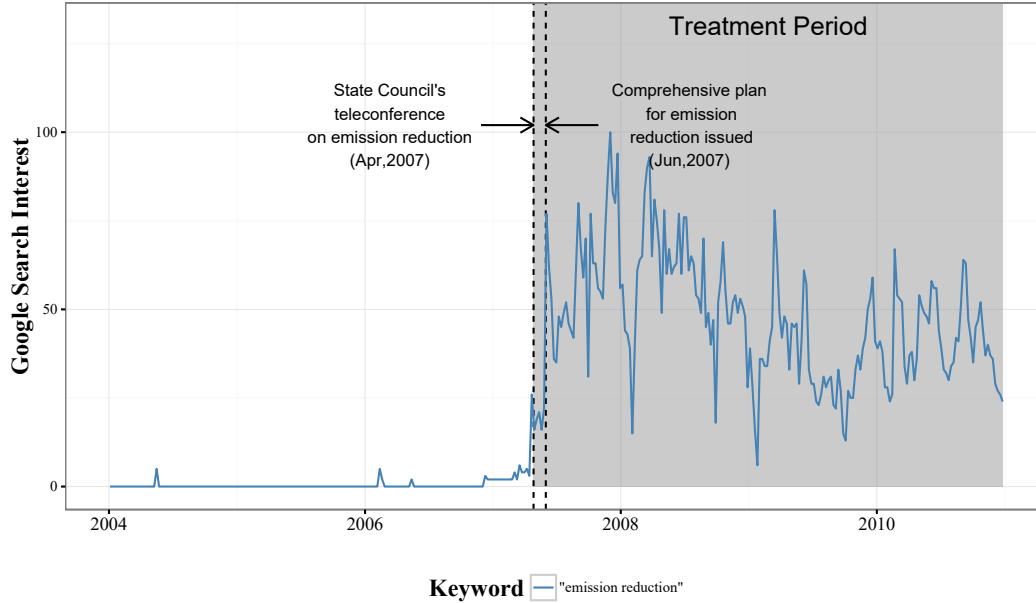
Figure 5.2 further displays the scale of emission reduction between 2006 and 2010. I use three different colors to indicate whether a city has achieved the targeted 10% reduction (green), achieved a reduction but less than 10% (blue), or failed to achieve any reduction at all (red). As first glance, we note that in contrast to the conventional expectation all-powerful state, a central order is not uniformly implemented at the lower level. Rather, there are marked variations in terms of the the target achievement within the boundary of the same province.

5.3 Data and Measurement

5.3.1 Official Data on SO2 Emission

While the 11th FYP set targets on a couple of pollutants, I focus in this chapter specifically on sulfur dioxide (SO2) for two reasons. First, SO2 is one of the most common pollutants in China. Produced by the burning of fossil fuel as well as many common industrial processes, such as metal smelting, SO2 is not only a main ingredient in acid rain but has also been associated with a

Figure 5.2: SO2 Emission Reduction, 2006-2010

Legend

Reduction in SO2

🟥	-5.849484 - 0.000000
🟦	0.000001 - 0.100000
🟩	0.100001 - 1.000000

0   2.5   5   10
Decimal Degrees
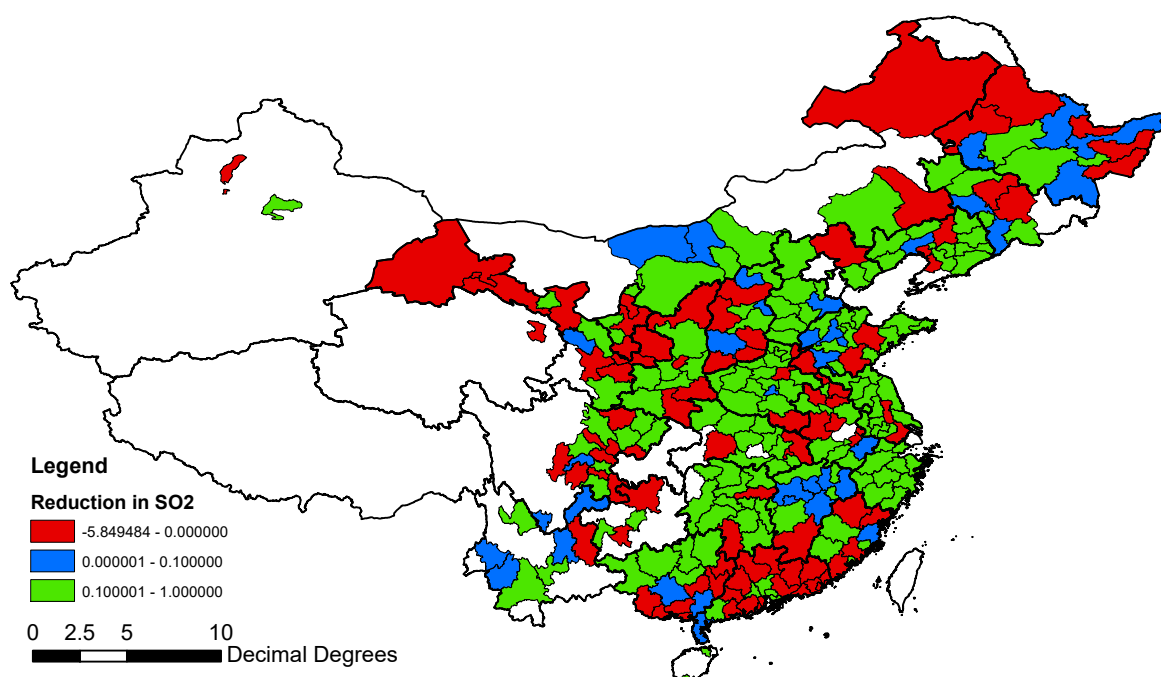
Note: This figure shows the scale of pollution reduction during China's 11th Five Year Plan (2006-2010), measured by the difference in the amount of SO2 emission between 2006 and 2011, divided by the 2006 level. The boundaries are drawn on cities.

Green: areas that had reduced SO2 emission by more than 10% (the national target) by 2011.

Blue: areas that had witnessed reduction in SO2 emission but of a smaller proportion.

Red: areas where the emission had increased during this period.

White: no data

variety of respiratory and cardiovascular diseases.[8] Second, compared to other targeted indicators, especially the COD, there is also better data availability for SO2. Data on city-level SO2 emission are collected from *China City Statistical Yearbook* 中国城市统计年鉴, which records the total amount of annual emission of industrial SO2 (in 10,000 tons) for 276 cities (prefecture-level or above) since 2003.

5.3.2 Satellite-based SO2 Measure

One major problem with using government statistics, of course, is the possibility of data manipulation. There is evidence that the local authorities in China deliberately manipulate data with high political significance, including GDP growth (Wallace 2014) and air pollution indices (Ghanem and Zhang 2014). To address this issue, I employ an alternative measure of SO2 emission, *OMI SO2*, which is derived from Ozone Monitoring Instrument (OMI), an ultraviolet/visible nadir solar backscatter spectrometer that flies on the NASA's Earth Observing System Aura satellite.[9] The OMI provides nearly global coverage in one day with a spatial resolution of 13 km to 24 km, measuring gases such as O3, NO2, SO2, HCHO, BrO, and OClO (Levelt et al. 2006). The amount of SO2 emission is estimated by a principal component (PC) method developed by Li et al. (2013). This method first employs the PC technique in regions with no significant SO2 to capture radiance variability and then uses the resulting principal components along with SO2 Jacobians calculated with a radiative transfer model to directly estimate SO2 vertical column density. This approach has been shown to result in significantly less bias and lower noise than existing measures, thus providing greater sensitivity to man-made emissions.

The monthly data on *OMI SO2* are available at 0.25 ×0.25 resolution since 2005 for longitude between -179.875 to 179.875 and latitude -89.875 to 89.875, covering virtually the entire territory of China. Since most of the other covariates are available on an annual basis, I construct the yearly

---

[8]https://www3.epa.gov/airquality/sulfurdioxide/

[9]Aura (EOS CH-1) is launched in July 15, 2004, with the goal of studying the Earth's ozone layer, air quality and climate. It is the third major component of the Earth Observing System (EOS) following on Terra (launched 1999) and Aqua (launched 2002). Aura follows on from the Upper Atmosphere Research Satellite (UARS).

Figure 5.3: Bivariate Correlation between the Official and the Satellite Measures
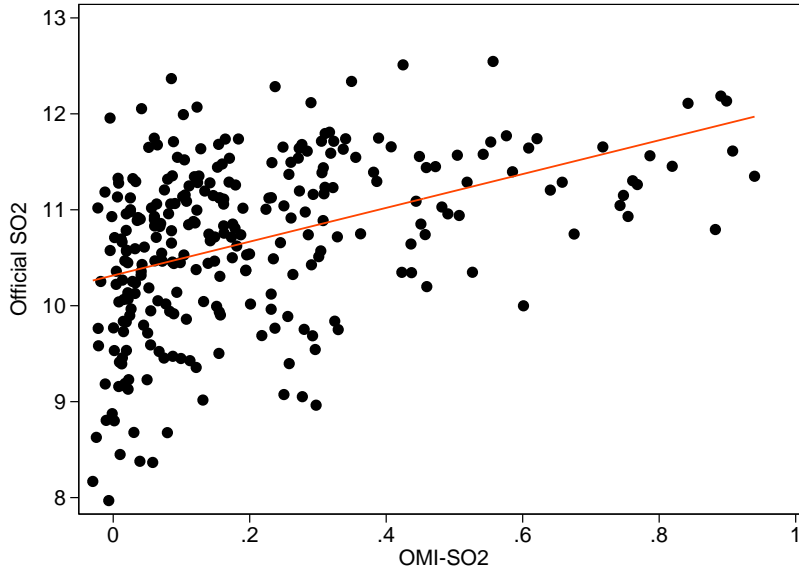
average for the measure by taking a simple average of all months in a given year. The resulting value, which is measured in Dobson unit, ranges from -0.084 to 1.44. Figure 5.3 displays the bivaraite correlation between the official measures in terms of city averages. We see that there there is a fairly clear linear relationship between the two measures, and the bivariate correlation between the two is about 0.42 ($p < 0.0001$).

5.3.3 Measuring Political Connection

I measure political connection between city and provincial leaders using the same promotion-based algorithm as developed in the preceding chapters. To reiterate, for a lower-level official C and a higher-level official P, they are considered to be connected if the following statement is true:

- C was *first* promoted to a city leadership position (as city secretary or mayor) from *within* the province when P was serving as *either* the provincial secretary or the governor.

As indicated in the previous chapter, subnational governments in China operate on a dual leadership system in which the city secretary and the mayor are the respective heads of the party and the government. In this chapter I focus specifically on city secretary because he/she is the person who

has the final say on the most important issues in the city. To the extent that emission reduction is a highly controversial and locally unpopular task, the decisions of such nature usually require the approval of the party secretary. Of the full sample we use, about 38% of the cities are considered to be connected to the provincial party chief through the city secretary. The average proportion in the control and treatment periods are 42% and 34%, respectively.

5.4 Identification Strategy

I exploit within-city and within-leader variations to identify the effect of informal networks on the emission reduction. More specifically, this involves estimating the following regression equation:

$$
\begin{aligned}
y_{i,s,t+1} \;=\; & \beta \text{Connected to Prov Sec}_{ist} \\
& + \; \delta \text{Connected to Prov Sec}_{ist} \times \text{After } 2007_{ist} \\
& + \; \mathbf{X}_{ist}\boldsymbol{\beta} + \eta_{is} + \tau_t + \epsilon_{ist},
\end{aligned}
\tag{5.1}
$$

where i, s, and t index city, leader (city secretary), and year respectively. The dependent variable is the outcome of pollution control, measured in both incremental change in Log SO2 and *OMI SO2*. I set the dependent variable at $t+1$ to capture the time lapse between actions and policy outcomes.[10] The key independent variable is the interaction, *Connected to Prov Sec × After 2007*, where *Connected to Prov Sec* is a binary indicator that takes the value of 1 if the incumbent city secretary is connected to the provincial secretary and 0 otherwise and *After 2007* is an indicator for the period between 2007 and 2010. I also include the main effect of both variables in the baseline specification.[11]

The baseline regression includes fixed effects for year (τ_t) and city-secretary pair (η_{is}) . In doing so, the empirical strategy effectively removes any unobservable but time-invariant heterogeneity

---

[10]Results from other lag structures are presented in the Appendix.

[11] Note that the main effects for for *After 2007* is subsumed in the year fixed effects τ_t.

both across cities and across different local officials. Effectively, we are estimating how variations in the treatment status affects the pace of emission reduction within the same leader's tenure in the same city. There are two ways in which treatment status can change. First, as the panel moves into the treatment period, all connected cities will see the treatment status increasing from 0 to 1. Second, within the treatment period, the departure of a provincial secretary will also change the treatment status by disconnecting cities with leaders promoted by the departed leader. Both the initiation of the campaign and the reshuffle of provincial-level leaders can be regarded as more or less exogenous since they do not depend on the local conditions of individual cities.

Furthermore, **X** is a vector of controls for time-varying political and economic conditions in a city and the career backgrounds of the two city leaders. I include in all models province-specific trends to account for the possibility that SO2 emission may follow different trajectories over time. Since the overall target is set for the entire five-year period, we might expect the responsibility for emission reduction in the last three years of the FYP to be (inversely) related on the amount of reduction achieved in the first two years of the Plan (2006 and 2007). I thus include a variable *SO2 reduction (2006 and 2007)* to capture prior scale of reduction. Additional controls include socioeconomic covariates such as *Log GDP*, *Log Population*, and *Log Fiscal Expenditure* and measures of city leader's career status, such as the age and tenure (for both the city secretary and the mayor). In more expanded models, I also interact a number of key covariates with the treatment dummy and include them in the regression.

5.5   Results

5.5.1   Main Result: Connected City Leaders Exert Greater Effort in Reducing SO2 Emission

Table 5.1 presents the main results. Column 1 reports the results from a baseline model with only the fixed effects, the province trends, and the main interaction term. Columns 2 and 3 incrementally add covariates for cities' climate and economic conditions and city leaders' attributes. Column 4

further control for a series of interactions terms. Most importantly, I control for the interaction between the amount of pollution in the previous year (2006 to 2007) and the *After 2007* dummy to account for the possibility that cities that have achieved a greater degree of emission reduction prior to the campaign might face less pressure to reduce emission in subsequent years. The fifth Column, finally, reports a model in which the province-specific trends are replaced by city-specific trends.

Throughout these models, the results are remarkably consistent: Cities with a connected party secretary appeared to cut SO2 emission by a significantly greater margin after 2007 than those without. Focusing on Column 5, the coefficient estimate suggests that compared to those unconnected cities, connected ones experienced approximately 15 percentage points more reduction in SO2 emission, and the magnitude of the effect is as large as 40% of a standard deviation.

From Columns 6 through 10, I repeat the same analysis using *OMI SO2* as the dependent variable. The coefficient of interest is again statistically significant and consistent with the pattern obtained from using official statistics. It is also worth noting that while the R square is much larger for the satellite-based measure, probably due to the fact that changes in atmospheric conditions usually lagged behind changes in actual emission, the signs of the coefficients for the control variables are also quite consistent between the two measures. In particular, the results from both measures suggest that the scale of prior reduction has a strong inverse relationship with subsequent emission reduction effort. Moreover, cities with a large population also appear to be less effective in cutting down emissions than smaller cities.

Table 5.1: Main Results

	DV: Δ Log SO2_$t+1$				DV: OMI SO2_$t+1$			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Connected to Prov Sec	0.076	0.076	0.075	0.066	-0.000	0.001	0.000	0.000
	(0.050)	(0.050)	(0.052)	(0.055)	(0.015)	(0.015)	(0.015)	(0.013)
Connected to Prov Sec × After 2007	-0.159**	-0.158**	-0.159**	-0.146**	-0.021**	-0.023**	-0.023**	-0.030***
	(0.066)	(0.067)	(0.067)	(0.062)	(0.011)	(0.011)	(0.011)	(0.011)
Reduction in SO2 (2006-2007) × After 2007				0.017***				0.369***
				(0.005)				(0.108)
After 2007 × City secretary's age (2006)				0.008				-0.002
				(0.007)				(0.001)
After 2007 × Industrial GDP growth (2006)				-0.002				-0.000
				(0.005)				(0.001)
After 2007 × Log GDP (2006)				-0.074				-0.033***
				(0.057)				(0.010)
After 2007 × Log population (2006)				0.132**				0.023**
				(0.056)				(0.012)
City, leader, and year fixed-effects	✓	✓	✓	✓	✓	✓	✓	✓
Province-specific trends	✓	✓	✓	✓	✓	✓	✓	✓
City climatic/economic controls		✓	✓	✓		✓	✓	✓
City leader controls			✓	✓			✓	✓
Adjusted R square	0.03	0.03	0.03	0.10	0.97	0.97	0.97	0.97
Number of Cities	276	276	276	276	302	302	302	302
Observations	2180	2180	2167	2167	2113	2112	2102	2102

5.5.2 Robustness Checks

The preceding analysis suggests that city leaders with different connectedness to the provincial leaders responded differently to the call for emission reduction from after 2007. In this section I conduct several tests to ensure the robustness of the results.

Testing Parallel Trends Assumption

For DID estimates to be valid, a key assumption is that the treatment and the control groups should be roughly comparable if the intervention did not happen. Figure 5.4 presents three different tests to verify this assumption. The top panel presents the dynamic effect of connection during the entire sample period. We can see that there was no notable difference between the connected and unconnected cities prior to the treatment period, and the effects of connection only became salient after the campaign started.

One alternative explanation, for example, is that there might be some observable factors that affect both the probability that a city become connected and its responsiveness to emission reduction. If this is the case, then we should expect cities that will soon gain or have lost connections to exhibit similar patterns as those currently connected. To verify this possibility, I estimate a model where I include two special groups of unconnected cities—those that will be connected to the provincial leader in one year and those that was connected a year ago—along with those currently connected. The results, which are presented in the middle panel of Figure 5.4, suggest otherwise: The point estimates for cities that are just lost or about to gain connections exhibited no noticeable response in emission reduction after the campaign was initiated. This result gives us confidence that the response is very specific to the group of cities that is currently connected.

Finally, it is also possible that the specific timing at which city leaders are promoted is correlated with their performance in the campaign. If a special cohort of city leaders who are particularly good at pollution control were promoted around the same time when the Center initiated the campaign, then we might conflate the effect of selection with connection. However, as discussed

117

before, we are not aware of any evidence that the provincial secretaries, who were the ones primarily responsible for appointing city leaders, were deliberately selecting those who were good at environment protection before the campaign was announced. To further evaluate this alternative, I gathered information on the timing of each party secretary's timing of promotion to city secretary position relative to the starting dates of the incumbent provincial secretary. I then add to the baseline model additional interactions between the treatment dummy and indicators for whether a city has a secretary who was promoted one or two years before the incumbent provincial secretary's arrival. If the unobserved confounder correlates with timing of appointment of those connected city leaders, then we should expect those who were promoted *immediately before* to exhibit similar behavioral patterns. The results (bottom of Figure 5.4), however, do not support such a hypothesis. By contrast, we find that even for those who were promoted only 1 year before the arrival of the incumbent provincial leader, the campaign does not have a significant effect on their emission reduction effort. Most of the effect, instead, came from cities that are connected.

Selection Issues

I also investigate whether connected and unconnected cities are different to begin with. Although the unexpected nature of the campaign and the within-leader research design has largely assuaged the concern about pre-treatment sorting, there might still be a possibility that connected leaders are assigned to cities with certain attributes that are correlated with their capacity to respond to the policy order. To check that, I estimate a series of models to check what predicts whether a city will become connected to the provincial leader through its party secretary. The right-hand side of the regression equation includes the duration for which a city has been unconnected, along with a number of indicators for past environmental performance. The results are reported in Table 5.2. The first model uses the full sample and the second only those whose appointments were before 2007. Quite expectedly, the results suggest that the time that a city has remained unconnected is the most important predictor for whether it became connected to the provincial leader.[12] Other

---

[12]We count the duration for all the prior years during which a city is unconnected and the first year in which it becomes unconnected. Observations that are connected in both the current year (t) and the previous year ($t-1$) are

Figure 5.4: Testing the Parallel Trends Assumption
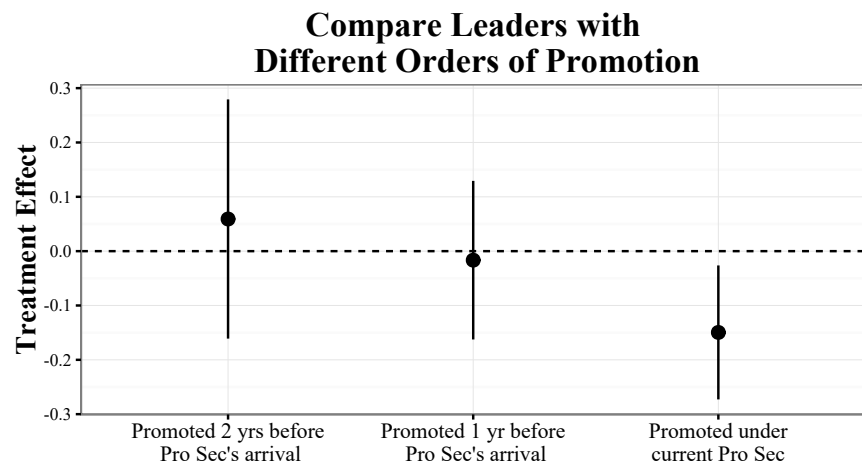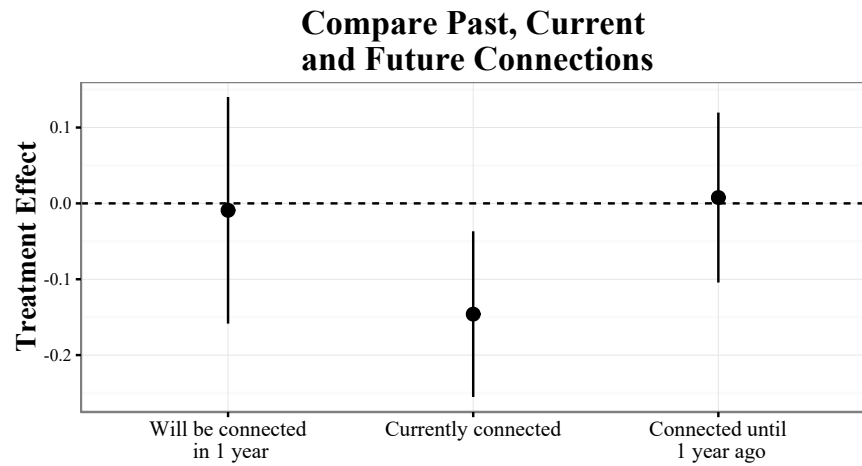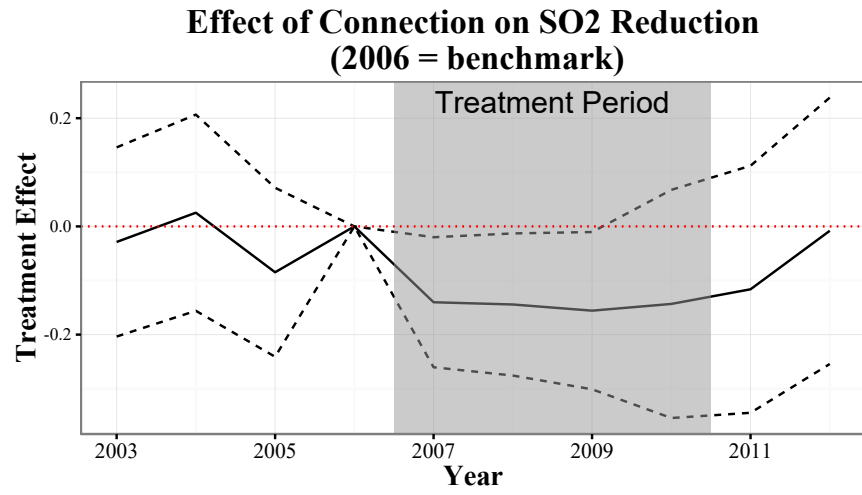
environment-related covariates, including current and past growth rates in the emission of SO2, waste water, and industrial dust, do not appear to be significantly correlated with connection.

Do Other Types of Connection/Leaders Matter?

Finally, it is also possible that the specific ways in which I measure connection between provincial and city leaders capture some structural features that can be correlated with policy responsiveness. To test whether this is the case, I construct three alternative connection measures: City secretary promoted under the current governor, mayor promoted under the current provincial secretary, and mayor promoted under the current Governor. Although mayors and governors are the respective heads of the city and provincial governments, they typically have to heed to the orders of the party secretary under the Chinese system, and are usually much less influential on personnel issues (i.e., opportunities to extend patronage). Hence, connections measured in such ways should be much weaker predictors of implementation effort if patron-client exchange is what is driving the behavior. Table 5.3 compares the results of our original measure with three other alternative measures. As expected, the original measure is the only way that is significantly correlated with emission reduction, whereas all the alternative measures are weak predictors.

Spillover to Other Pollutants

Another outstanding question is whether efforts to curb SO2 emission also affect the emission of other types of pollutants that are not specifically targeted. I explore the spillover effects on three other types of major pollutants of which the data are available at the city level: Industrial dust, industrial solid waste, and industrial waste water. The results are reported in Table 5.4. I find no evidence that the connected cities performed differently on any of these non-targeted pollutants after 2007, suggesting that most of the effort was concentrated on curbing pollutants that are specifically targeted.

---

dropped. The model effectively resembles a hazard model. The results are substantively the same if a logistic model is used, but I present the OLS results for the ease of interpretability.

Table 5.2: Issue of Selection

	DV: Cities Becoming Connected	
	(1) Full sample	(2) Before 2007
Years being unconnected	0.098***	0.218***
	(0.008)	(0.058)
D.Log SO2 emission	0.032	0.010
	(0.035)	(0.063)
LD.Log SO2 emission	0.017	0.060
	(0.036)	(0.101)
GDP growth: industry	-0.005	-0.011
	(0.003)	(0.011)
L.GDP growth: industry	0.000	-0.002
	(0.002)	(0.007)
Average nighttime brightness	0.028	-0.128
	(0.081)	(0.489)
L.Average nighttime brightness	0.009	-0.275
	(0.098)	(0.394)
Log fiscal expenditure	-0.014	0.012
	(0.104)	(0.654)
L.Log fiscal expenditure	0.073	0.166
	(0.129)	(0.630)
Log industrial dust	-0.005	0.131
	(0.027)	(0.093)
L.Log industrial dust	-0.025	-0.107
	(0.025)	(0.086)
Log waste water	-0.018	-0.090
	(0.049)	(0.127)
L.Log waste water	-0.055	-0.062
	(0.050)	(0.121)
City and year fixed-effects	✓	✓
R square	0.404	0.735
Number of Cities	262	212
Observations	1181	379

Table 5.3: Testing Other Types of Ties

	DV: Δ Log SO2$_{t+1}$			
	(1)	(2)	(3)	(4)
City Secretary Connected to Prov Sec $\times$ After 2007	-0.147**			
	(0.062)			
City Secretary Connected to Governor $\times$ After 2007		0.008		
		(0.064)		
Mayor Connected to Governor $\times$ After 2007			0.058	
			(0.065)	
Mayor Connected to Prov Sec $\times$ After 2007				-0.046
				(0.062)
Secretary, city, and year fixed-effects	✓	✓	✓	✓
Mayor, city, and year fixed-effects	✓	✓	✓	✓
Province-specific trends	✓	✓	✓	✓
City climatic/economic controls	✓	✓	✓	✓
City leader controls	✓	✓	✓	✓
R square	0.41	0.41	0.39	0.39
Number of Cities	276	276	276	276
Observations	2167	2167	2167	2167

Table 5.4: Spillover to Other Pollutants

	(1) Δ Log industrial dust$_{t+1}$	(2) Δ Log solid waste$_{t+1}$	(3) Δ Log waste water$_{t+1}$
Connected to Prov Sec	-0.046	0.044	-0.008
	(0.063)	(0.036)	(0.042)
Connected to Prov Sec $\times$ After 2007	-0.075	-0.041	0.022
	(0.097)	(0.050)	(0.050)
City, leader, and year fixed-effects	✓	✓	✓
Province-specific trends	✓	✓	✓
City climatic/economic controls	✓	✓	✓
City leader controls	✓	✓	✓
Adjusted R square	0.41	0.30	0.39
Number of Cities	276	276	276
Observations	2167	2154	2172

5.5.3   Extensions

The evidence presented so far indicates that politically connected local officials exerted greater effort on emission reduction than the unconnected ones after pollution control became a pressing policy issue in 2007. In this section, I conduct two additional sets of analyses to explore how the difference varies by key features of local political economy.

Career Incentives

The first extension analysis concerns the role of career incentives. In the preceding chapter, I have shown that in the context of economic development, patronage ties complement the career incentives by shielding local officials from the potential risks associated with violating inefficient bureaucratic rules. In the area of pollution control, however, it is unclear whether the relationship will necessarily be complementary, as local officials do not have an intrinsic desire for cleaning up the environment as they do in economic development. To systematically evaluate how patronage ties interact with career incentives, I include in the baseline regression a triple interaction among the connection dummy, the treatment dummy, and a proxy variable for a city party secretary's promotion prospects. Two conventional proxies used here are (1) the length of the city secretary's tenure and (2) whether the secretary is above the age of 57, which is the informal age limit for prefecture-level officials. Column 1 of Table 5.5 reports the coefficient estimate on the interaction with the city secretary's tenure and Column 2 further adds an interaction with the tenure squared. In neither model, however, do I find any evidence that the length of tenure is in anyway systematically correlated with the scale of emission reduction. Column 3 reports the result from the interaction with age ceiling. Although the point estimate is positive, which means that officials approaching the retirement age exert less effort on emission reduction, the magnitude of the estimate is small and the standard error is too large to ascertain any statistical significance.

123

Testing the Embedded Autonomy Hypothesis

In the second extension, I test predictions of an influential thesis about state capacity. In a ground-breaking work on state's role in industrialization, Evans (1995) argues that the capacity of East Asian states in engineering late development depends on both an internally cohesive bureaucracy but also its strong connections with the rest of the society. More specifically, Evans suggests that there might be a complementary relationship between internal and external networks. According to him, "the secret of developmental state lies in the amalgam [of both both types of connection]", and that "either autonomy or embeddeness may produce perverse results without the other" (1995, 59).

The empirical setting of this research provides an opportunity to systematically evaluate this key relationship. To do so, I look for proxies for local states' penetration into the society and interact it with the existing treatment variable. I use three different measures for local governments' external reach. The first two measures are (1) (logged) share of fiscal expenditure in local GDP and (2) the (logged) share of private employment in total local employment, both of which are are intended to capture the formal linkage with the society. A local government whose expenditure accounts for a large share of the local economy obviously has a greater presence in the society. Conversely, when the economy is dominated by privately owned enterprises that lack formal connections with the state, the government might face greater challenges in implementing its policy agenda. Moreover, as a third measure, I use the length of time the city leaders have spent their careers in the current cities.[13] Recent studies have suggested that officials develop connections with local business actors throughout their career and such connections can serve as an important channel for them to obtain information and exert influence (Persson and Zhuravskaya Forthcoming).

Columns 4 through 6 reports the coefficient estimates on the key triple interaction for testing the embedded autonomy hypothesis. The results provide strong support to the presence of a complementary relationship between internal cohesion and external penetration: the extra emission

---

[13]More specifically, the measures takes the maximum the city secretary's and mayor's local tenures.

124

reduction caused by connected city secretary is especially (i.e., more negative) in localities where the government expenditure accounts for a sizable share of the local economy, the private sector is relatively small, and when the city leaders have a long local career.

Table 5.5: Results from Two Extensions Analyses

	Career Incentives			Embedded Autonomy		
	(1)	(2)	(3)	(4)	(5)	(6)
Connected to Prov Sec × After 2007 × City secretary's tenure	-0.046 (0.032)	0.079 (0.078)				
Connected to Prov Sec × After 2007 × City secretary's tenure^2		-0.024 (0.015)				
Connected to Prov Sec × After 2007 × City secretary: Age>57			0.084 (0.255)			
Connected to Prov Sec × After 2007 × Log expenditure/GDP				-0.345** (0.175)		
Connected to Prov Sec × After 2007 × Log share of private sector employment					0.153* (0.089)	
Connected to Prov Sec × After 2007 × City leaders' local tenure (maximum)						-0.021*** (0.008)
City, leader, and year fixed-effects	✓	✓	✓	✓	✓	✓
Province-specific trend	✓	✓	✓	✓	✓	✓
City climatic/economic controls	✓	✓	✓	✓	✓	✓
City leader controls	✓	✓	✓	✓	✓	✓
Number of Cities	276	276	276	276	276	276
Observations	2167	2167	2167	2167	2083	2167

5.6 Concluding Remarks

While much of the literature that explains the origin of state capacity focuses on formal features of the bureaucratic institutions, this chapter argues that informal institutions are also crucial ingredients for the making of a capable state. In particular, I contend that loyalty networks and personalized exchanges can serve as an important basis for policy mobilization when sanctions and incentives provided by the formal institutions cannot adequately motivate actions.

Studying an unexpected campaign on pollution control in China, the empirical analysis illustrates network-based mobilization taking action in one of the world's largest bureaucratic organizations. In contrast to the conventional perception that China's strong bureaucratic institutions and the cadre evaluation system ensures a universal compliance of such orders, my analysis suggests that there are considerable variations in how local officials reacted to the call for emission reduction. Most notably, I show that city leaders who had promotion ties with the incumbent provincial leader exerted significantly greater effort in curbing pollution than those who did not enjoy such ties. Analysis of atmospheric data from satellite imagery confirmed the salience of the pattern, and the main results hold through a variety of robustness checks. Moreover, I also find suggestive evidence that the bureaucracy's internal networks and its external penetration to the society are complementary in policy implementation. The performance premium by clients are much larger in localities where the government has a substantial formal presence and where the politicians in charge have extensive informal ties with local interests.

This chapter confirms the general impression that the personnel system is, as Landry (2008) and others have put it,[14] "the glue" that holds the fragmented Chinese state together, but offers a different interpretation for why the personnel system matters. While the conventional perspective emphasizes the system's ability to align the incentives of lower-level cadres with the higher-level authority through manipulation of the evaluation/promotion criteria, this chapter suggests that the formal criteria may sometimes fall short in motivating local agents to undertake challenging tasks,

---

[14]See for example Naughton and Yang (2004).

and that a much more important function of this appointment system is to foster informal, personalized ties between the superiors and subordinates, which serve as the basis of mobilization.

The welfare implications of this unique form of state capacity, however, are worth further pondering. A major disadvantage associated with this personalized mode of mobilization is its exclusiveness: While these networks, once mobilized, can be highly effective at accomplishing challenging tasks given the high-power incentives they provide to the constitutive members, they usually can only be accessed and mobilized by very specific individuals, typically only the patron. Agents who want to please their patron may allocate a disproportionate share of resources to tasks that their patrons care most about, while paying scant attention to other tasks, which could be equally important for public welfare.

Finally, when state capacity is highly personalized, it also implies that creating effective internal checks and balances will be difficult. Unlike other systems where a politically neutral bureaucracy acts in some way as a constraint on political leaders' power, in China, patronage-based mobilization is precisely what undermines the neutrality of the bureaucracy.[15] When an official can knit a large patronage network in the system, he can enjoy tremendous informal influence in terms of policy mobilization, but at the expense of the bureaucratic institutions' ability to constrain his authority. Such a system has the power to do great good if properly used, but also has the potential to cause great harm. In a recent study, Yang, Xu and Tao (2014) note that some of the most radical implementers of the Great Leap policy—which caused one of the worst man-made famines in human history—were Mao's most loyal supporters and that they were catapulted to the key positions of first provincial secretaries precisely to carry out Mao's mandates. My analysis thus suggests that we should therefore remain extremely cautious in assessing the overall welfare implication of this mode of mobilization.

---

[15]It is also worth noting that the distinction between politicians and bureaucrats is inherently vague in the Chinese context.

Chapter 6

Patronage Politics and Selective Enforcement in Anticorruption

Up to this point, I have shown that as an informal institution, patronage networks provide important benefits that contribute to the vitality of the CCP regime. The benefits, however, do not come without costs. When personalized interactions dominate written rule and regulations, it can weaken inefficient bureaucratic constraints but also undermine formal accountability and disciplinary mechanisms. Particularistic exchange of favors, which are at the heart of the informal relations, are also a hotbed for corruption and nepotism. In this chapter, I offer a glimpse into the dark side of patronage politics by examining the patterns of anticorruption enforcement.

Chinese leaders have long acknowledged the detrimental effects of corruption and have taken serious measures to rectify them through both institution building and periodical anticorruption campaigns. Throughout its reign, the regime has gradually developed an elaborate legal and disciplinary framework that rivals similar systems in more developed countries in terms of thoroughness and complexity, and the Party has undertaken more anticorruption campaigns than any other country in the world, democratic or authoritarian (Manion 2004). Despite all these efforts, however, China today remains one of the most corrupt countries in the world. According to the Corruption Perception Index (CPI), the most widely used cross-national indicator, China consistently ranked

at the bottom third of the country list. Manion (2004, 3) also states that anticorruption measures "have largely failed in China, despite basic contextual features that favor success".

While there are many reasons why the regime has largely failed to curtail corruption, this chapter focuses on one of the most direct contributing factors: the pervasive practice of patronage politics. More specifically, I argue that the informal, personalized exchange between patrons and clients are fundamentally incompatible with the formal and impersonal principles upon which modern anti-graft institutions operate. To the extent that genuine cleanups require indiscriminate enforcement on both cronies and enemies, power-conscious senior politicians are only willing to tolerate impartial anticorruption enforcement insofar as it does not significantly compromise their own base of power. When threats from within the elites are more salient than threats from below—as is often the case in authoritarian systems (Svolik 2012)—elites naturally prioritize the strength of their own factions over thorough eradication of corruption. This leads them to turn a blind eye to the corrupt dealings of their cronies, which in turn undermines the credibility and effectiveness of the anticorruption measures.

This chapter provides systematic evidence on how patronage networks distorted the patterns of anticorruption enforcement in China. Empirically, to demonstrate that a bias exists in enforcement is challenging. Most of the existing studies on corruption enforcement in China focus exclusively on those exposed cases.[1] This approach, however, is likely to lead to biased inferences especially since many potential confounders may be co-varying with both factional affiliations and the likelihood of receiving a disciplinary investigation. To overcome this limitation, I construct from the CPED a new dataset that tracks the careers of over 3,000 officials who have served in key regional and central leadership positions between 2000 and 2012 and examine the influence of factional labels on their odds of investigation while controlling for a rich set of personal and professional covariates. I also provide additional tests of several alternative explanations by exploiting information on the sentencing outcomes and plausibly exogenous variations in the strength of an official's political connection created by changes in political status of his patron.

---

[1]See, for example, Guo (2008); Liu (1983); Wedeman (2005, 2012).

The main empirical results suggest that anticorruption enforcement in China is systematically patterned on the informal alignment and cleavages created by patronage politics. More specifically, the investigations systematically avoid implicating clients of the incumbent power holders and their key coalition members, while disproportionately targeting those affiliated with the incumbents' rivals. I further demonstrate that the systematic difference in the investigation rates for officials with political affiliations is not due to the differential corruptness by providing two pieces of evidence: First, conditional on investigation, clients of the incumbent power holders indeed receive more severe sanctions than those associated with the rivals. Second, there are marked changes in the protection effects over time even for the same patron, and the direction of change is most consistent with the changes in the patron's power status in the system.

6.1 The Political Logic of Anticorruption in Authoritarian Regimes

The subject of corruption has long interested social scientists. While the causes and impact of corruption have received a great deal of scholarly attention, discussion of anticorruption has so far been largely confined to policy domain and tends to focus on the specific techniques that make implementation more or less effective, rather than the political motivations behind such actions. The starting premise of my theory, however, is that anticorruption enforcement is a highly politicized process, in which considerations about personal power and regime survival figure as prominently as, if not more than, those about the target's actual severity of offense. It has been shown that in electoral democracies, incumbent politicians strategically time corruption investigation to boost their popularity in order to win re-elections (Ang 2015), and initiate significantly more investigations on targets from the opposition party (Gordon 2009; Gordon and Huber 2009). If anything, we would expect the political considerations to be even more salient in authoritarian systems, where the institutional checks on the executive are typically weak and legal institutions underdeveloped.

While the prevailing theories of authoritarian politics suggest that dictators typically have few incentives to wage war against corruption because their political survival often depends on distributing private rents to a small group of ruling elites (Bueno de Mesquita et al. 2005; Svolik 2012). In reality, however, the authoritarian regimes do from time to time undertake draconian measures against corruption for a number of other reasons. One important reason, for example, is to shore up the popularity. Although not having to win popular votes, some degree of voluntary support from the citizens can not only help the autocrat more effectively govern, but also reduces his dependence on agents of repression, such as military and security forces, which are themselves a source of threat (Wintrobe 1998). To the extent that corruption is regarded as a pathological attribute in many political cultures and has been found to have deleterious effects on citizens' evaluations of the political system (Anderson and Tverdova 2003; Seligson 2002), cracking down on corruption not only helps a ruler improve his/her personal image but may also serve to restore public faith in the regime as a whole.

In addition to legitimacy considerations, some researchers suggest that anticorruption measures can be used in combination of other methods to achieve internal political control. Hollyer and Wantchekon (2014) develop a theoretical model in which the ruling elites use corruption rents as a means to provide incentives for lower-level bureaucrats. When pecuniary incentives produce adverse selection problems, anticorruption agencies are created as a commitment device to deter ideologically disaffected members from entering the bureaucracy and restrict the monetary benefits to only those who are zealous supporters of the regime.

Regardless of the specific motives, however, autocrats who use anticorruption to their political ends need to carefully manage the implementation in order avoid to additional risks. In its essence, anticorruption is a highly disruptive process: Arrests and replacement of key personnel in the system could significantly disrupt the existing power equilibrium, and it may hurt, rather than help, the regime's legitimacy by exposing corruption scandals that the citizens were not previously aware of. Aspiring elites can exploit these opportunities by strategically directing criticisms and

investigations to the ruler's followers, or sometimes even to the ruler himself, as a way to undermine the his popularity and power base. Clark (1993), for example, finds that in the later years of the Brezhnev era, rising leaders such as Andropov and Gorbachev used corruption investigations as a strategic weapon to weaken the power and influence of Brezhnev's faction and to shore up their own popularity. Even in Singapore, a system known for its effective, impartial anticorruption enforcement, elite challengers have reportedly sought to tarnish the public image of the incumbent leaders by initiating anticorruption investigations on their private transactions (Worthington 2003). At the most basic level, therefore, power-conscious autocrats need to defend their own power base amidst anticorruption initiatives by carefully calibrating the scope of these investigations to avoid implicating allies who they rely on for support and resources. Losing control over the choice of targets not only undermines one's substantive political power, but also signals political weakness that may further alienate supporters and embolden challengers.

When incumbents have firm control of the anticorruption apparatus, they can, of course, do much more with that power than merely protecting their cronies. Indeed, corruption investigation is one of the most effective tactical devices that autocrats can employ to swiftly (and legally) remove political enemies from the scene. Using forceful measures, such as restrictions of personal freedom and freezing of bank accounts, autocrats can immediately reduce opponents' abilities to exert political influence. Thorough investigations of the targets' political and financial backgrounds under the pretext of anticorruption may further reveal informal networks among the challengers and their secret agendas, giving incumbents both informational and strategic advantage in dealing with their rivals. Moreover, when there is concrete evidence of corruption, which is not rare to find given the pervasiveness of corruption in those systems, charging a rival with corruption, as opposed to political conspiracy, treason, or ideological difference, is arguably the least politically controversial strategy as far as public opinion is concerned. Through carefully orchestrated show trials, public humiliation, and demonstrations of the opponent's economic and moral depravity, rulers can rally public support behind their move against the opponents and deter other potential challengers from emerging.

6.2 Patronage, Protection, and Anticorruption Enforcement in China

The CCP's primary anticorruption institution is the party's Discipline Inspection Commissions (DICs), which conduct preliminary investigations of government and Party officials before transferring them to the prosecutors. The DICs are constantly collecting information of corrupt behaviors and disciplinary violations on officials over which they supervise from a variety of sources, including, but not limited to, their own routine monitoring, reports from whistle-blowers, and tips from other agencies. When there is sufficient evidence of significant wrongdoing, the DICs can initiate a formal investigation of the target. During investigation, the DICs enjoy a number of extralegal authorities, including the power to search for relevant documents and evidence, question witnesses, withhold illegal gains, and most importantly, require involved individuals to provide explanations at a specific time and place. The last method, famously known as *shuanggui* (double restrictions 双规), grants DICs the power to exercise extralegal detention (Sapio 2008), making them formidable agencies with de facto coercive power. Officials who are subject to *shuanggui* can be held by DICs for months or even years without legal proceedings. After the DIC's investigation is concluded, decisions will be made as to whether the official should receive party sanctions, be removed from office, or transferred to the judiciary. If the last option is chosen, the case will be handed over to the procuratorate and tried in courts. Once a case is transferred, prosecution and conviction are almost certain, and appeals can rarely change the verdict. According to our data, over 85% of the officials investigated by DICs were prosecuted for related charges, and virtually all of those prosecuted were eventually convicted in subsequent trials.

While the DICs are in theory subject to dual leadership from both the higher level supervising DICs and the party committees at their own levels,[2] it is widely recognized that the de facto authority lies with the latter rather than the former. In particular, the party chiefs (i.e., the party secretaries) of local party committees enjoy substantial influence over the investigation process

---

[2]The Central DIC (CDIC) has no higher level functional supervisor and only answers to the Central Committee.

([Manion 2004](#)). The party chief's power over the DIC is secured through several means. As the final decision maker of a locality, the party chiefs control a wide range of key material and administrative resources that DICs need for conducting investigation or even carrying out daily operations ([Guo 2008](#)). This gives the party chief the opportunity to exploit the DIC's dependence to his/her own advantage. More importantly, a party chief can use his/her predominant authority over personnel matters to place a trusted personal alley to take control of this key organization. Although the local DIC chief, who is usually a member of the party standing committee, has to be formally appointed by the higher-level Organization Department, the party chief at the same level can still play a very active role in nominating/vetoing candidates. These prerogatives thus allow the chief to have an even firmer control of the disciplinary organ.

The political influence of the party chief is manifested in two main ways. First, and most commonly, he/she can forestall an investigation before it starts to implicate his friends or allies. Before a DIC proceeds to file a case against a senior official, it has to first notify the sitting party secretary, usually even before it reaches the party standing committee meetings. Insofar as the wrongdoings are not too serious, the party secretary can ask the DIC chief to drop the case on justifiable grounds such as political stability, public image, or the appropriateness of timing. Given the enormous formal and informal power the party chief wields, such orders are rarely disobeyed. There is substantial anecdotal evidence that senior party leaders in both the central and local levels have used their power to protect their cronies from such investigations. In a well-known case, Jiang Zemin, the former general secretary of the CCP, for example, helped Jia Qinglin, the former provincial secretary of Fujian province and a long-time protege of Jiang, to avoid corruption investigations after a major smuggling scandal broke out in Fujian under Jia's watch ([Fewsmith 2001](#)).

Second, in addition to protecting their cronies, the party chiefs can also use the DIC as a political weapon to remove political enemies from the scene. Although proactive investigation does not happen frequently because corruption scandals may produce negative publicity that tarnish the party chief's own governing credentials,[3] it has been used from time to time by party chiefs on

---

[3]According to my interview with serving officials in local DICs, however,

those who posed a serious threat to his/her authority and interests. As revealed by recent anticorruption investigations, several senior provincial leaders who were arrested for corruption charges have themselves used corruption to sack political rivals when they were in power. Su Rong, the former provincial secretary of Jiangxi province, has allegedly ordered a corruption investigation on an official who tried to report Su's wife's illicit involvement in local development projects to the above (Gao and Ouyang 2014).

6.3 Research Design

Despite numerous anecdotes about how senior political leaders manipulate anticorruption investigations to advance their own interests, systematic evidence on selective enforcement is lacking. One piece of evidence that scholars and journalists frequently invoke to substantiate their claims about the selective nature of the enforcement is the unequal presence of political backgrounds among officials who have been investigated. According to some critics of the recent anticorruption drive under Xi Jinping, for example, Xi's campaign is considered to be "selective" and "politically driven" because a large portion of officials investigated are allegedly affiliated with a few top elites who were allegedly Xi's political rivals and that almost no senior officials has been arrested for corruption in Zhejiang and Fujian, two provinces in which the incumbent general secretary Xi himself has worked (Murong 2015).

The unequal representation of factional backgrounds among the investigated , however, does not constitute definitive evidence of selective enforcement for several reasons. First of all,without systematic information on the attributes of those who have not been investigated, it is difficult to ascertain whether the factional representation among the investigated is truly different from that in the general population of officials. Second, and more importantly, even when the rival factions are indeed overrepresented among the investigated (and those affiliated with the incumbent

underrepresented), it can arise from a process similar to the statistical discrimination in law enforcement (Knowles, Persico and Todd 2001)—that is, those affiliated with the rivals are simply more inherently corrupt than those affiliated with the incumbents.

To overcome these inferential problems, the main strategy I adopt is to construct and analyze a comprehensive sample of officials at multiple administrative levels who faced different career outcomes in terms of disciplinary investigation. Thanks to the detailed information in the biographic database, I was able to construct a rich set of covariates and include them in the regression alongside the main variables of interests. To address the problem of differential corruptness more specifically, I exploit two additional sets of information: The first piece of information is the sentencing outcomes. Consistent with a large body of literature on discrimination in economics and political science (Anzia and Berry 2011; Becker 1957; Gordon 2009; Knowles, Persico and Todd 2001), I show that under only very moderate assumptions, one direct implication of selective enforcement is that the severity of sentencing outcomes will differ systematically between those with the "right" and "wrong" types of connections. Moreover, I also exploit plausibly exogenous variations in top-level leadership reshuffles to how clients' investigation probabilities change when their patrons become more or less powerful.

6.4   Sample Construction

Using the Chinese Political Elite Database (CPED), I construct the sample of officials who have served in the following positions between 2000 and 2012: Prefecture-level secretary and mayor,[4] provincial secretary, governor, and civilian members of the provincial standing committees.[5] While these positions do not exhaust all important posts in the Chinese system, they nonetheless constitute arguably the most important subset of offices that the majority of promising politicians would hold at some point in their careers (Bo 2002). Among all civilian Politburo members since 1997,

---

[4]We also include districts and counties under centrally administered municipalities (直辖市的区县)

[5]We only focus on civilian leaders, as career information about military officers is scant and often incomplete.

for example, 78.2% of them had served in at least one of these positions before they rose to prominence.[6]

I was able to identify a total of 3,256 officials. For each of them, I create a sequence of person-year observations that track changes in their political careers, starting in the year of 2000 or the year the official started his/her first key regional leadership position, whichever is later. The sequence continues on to 2015, unless either of the two exiting conditions is met: (1) the subject received a disciplinary/legal sanction[7] or (2) the official died due to a natural cause/accident or reached the age of 75.[8] Of all the subjects in our sample, 2,960 ($\sim$ 91%) continue on to 2015, 74 ($\sim$ 2%) exit the sample before 2015 due to natural causes (natural/accidental death or reaching 75), and 222 ($\sim$ 7%) exit due to disciplinary or legal sanctions.[9] The majority of the sanctions ($>$ 90%) were due to corruption-related activities such as embezzlement, bribe-taking, or sale of offices, and a relatively small number of officials were sanctioned for dereliction of duty or malfeasance after major public health or safety incidences. The main dependent variable *Anticorruption Investigation* is a dummy variable that takes the value of 1 if an official received the first type of sanction in a given year and 0 otherwise. In doing so, I effectively assume that other forms of hazards, such as outbreak of major public accident or natural/accidental death, are independent from anticorruption investigations. Figure 6.1 illustrates the variations in the total number of anticorruption investigations between 2000 and 2015.

---

[6]Calculation based on own data.

[7]There is no single individual in our sample who has received repeated sanctions. So a single sanction should be regarded as a permanent exit.

[8]Our observation continues on even after the subject has retired from all his/her formal posts. This is because for retired officials, the risk of being investigated is smaller, but non-zero. For cases of investigation of a retired official, see "广东茂名原政协主席冯立梅系退休两年后被查", March 30, 2014, *Dongfang Daily*, http://news.ifeng.com/mainland/special/fanfu/content-3/detail_2014_03/30/35279032_0.shtml.

[9]Our data are updated through November 2015.

Figure 6.1: Total Incidence of Anticorruption Investigation, 2000-2015
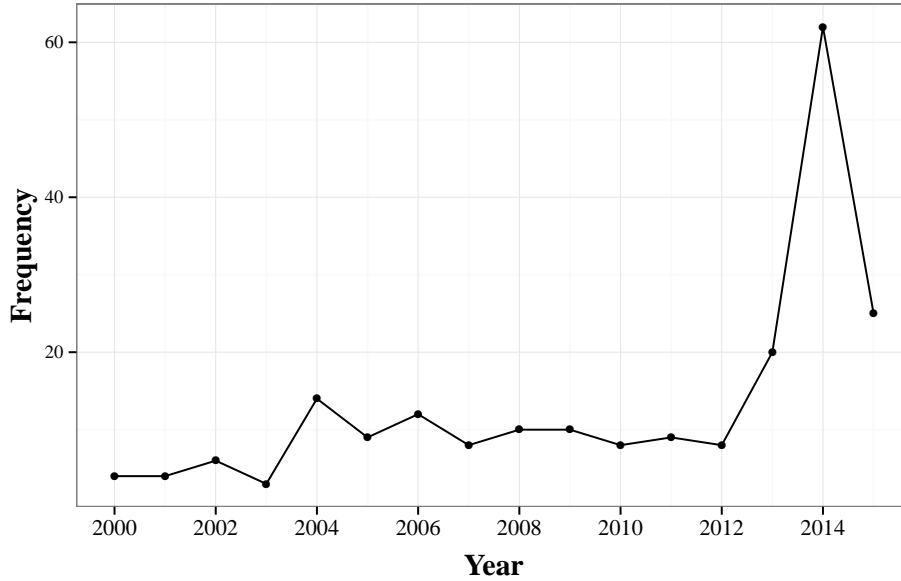
6.5 Measuring Informal Political Relations

I extend the promotion-based measure developed in the previous chapters to infer patronage ties between high and low-level officials at multiple levels. Specifically, I adopt a more general measurement as follows: A lower level official C as a client of a higher level official P if and only if

1. C has experienced *significant career advancement* in a region or organization where P was serving as the head of that region or organization.

2. P had the authority to decide the promotions that C has experienced.

"Significant advancement" in Condition 1 includes the first time to (1) full-bureau level (正厅级), (2) prefecture-level city leader (mayor or city secretary), (3) prefecture-level city secretary, and (4) a vice-provincial leader from within the province.[10] "The head" in Condition 2 refers to the provincial secretary if the advancement happens within a province, and the minister/director (usually as full-ministerial level or above) if within a central party or government organ. Since

---

[10]We exclude cross-provincial promotion to the vice-provincial level, since such promotions are usually decided by the Politburo and its Standing Committee and difficult to identify who were actually exerting the influence.

provincial secretaries and ministers usually have overwhelming authority over personnel matters under their jurisdiction, we can be relatively sure that for someone to be promoted within a province or ministry, he must at least have an non-antagonistic relationship with the secretary/minister as the latter did not veto such advancement. Compared to the existing measures, this measure tends to be more conservative, as it may exclude clients who did not experience significant promotions when their patrons were in charage.[11] This may create an attenuation bias that prevents me from finding significant results.

The merit of this approach over the more common, overlap-based approach can be readily seen from one exemplary case: On February 16, 2015, Si Xinliang became the first vice-provincial official from Zhejiang province to be investigated in the recent anticorruption campaign. On the surface, Si has had extensive shared work experience with two top leaders of the Politburo Standing Committee: Xi Jinping and Zhang Dejiang, both of whom served as provincial secretaries in Zhejiang. The conventional measure would suggest that Si had strong political ties to the top leadership and therefore has trouble explaining his downfall. A closer look at of Si's career path, however, reveals that his first major promotion (to city secretary of Huzhou) was made prior to the arrival of both Xi and Zhang. In particular, Si experienced no significant advancement under Xi's watch. Hence, this measure would suggest that Si was not on particularly good terms with the current general secretary, which is likely to be closer to the reality.[12]

6.6 Estimation Framework

Since the event of interest (whether an official is investigated) is binary in nature and can only occur once in one's career, the hazard model is the most appropriate technique for analyzing the data. Following Beck, Katz and Tucker (1998)'s observation that, when outcomes are measured in

---

[11]In other words, our measure is likely to produce fewer false positives (non-clients measured as clients) at the expense of more false negatives (clients measured as non-clients).

[12]A recent report suggests that Si was indeed close to Gu Liping, the wife of Ling Jihua, and Ling happens to be one of Xi's main political rivals. See "浙江首虎斯鑫良涉令计划与郭正钢妻子", May 23, 2015, *Boxun*, http://www.boxun.com/news/gb/china/2015/04/201504171002.shtml#.VWFI3vnF_Qk.

discrete intervals (i.e., grouped duration data), a logistic regression that takes into account duration dependence is identical to the proportional hazard model, I use logistic regression with natural cubic splines as the main estimation framework for the subsequent analysis. The baseline specification takes the following form:

$$
\begin{aligned}
h_{ig}^{\text{Investigated}}(t) \;=\; & \text{logit}(\theta_1 \text{Ties to current PSC}_{igt} + \theta_2 \text{Ties to current prov sec}_{igt} \\
& + \theta_3 \text{Ties to retired PSC}_{igt} + \theta_4 \text{Ties to current PB}_{igt} \\
& + \nu \text{Ties to rivals}_{igt} \\
& + q_g(t) + \sum_{j=2001}^{2015} \gamma_j + \mathbf{X}_{igt}\boldsymbol{\beta}),
\end{aligned}
$$

where i indexes the subject and g the starting post. Given the way I construct the sample, subjects can enter the sample as either a city or a provincial leader. t denotes the number of years a subject has been in the sample since 2000 or his/her first year at a target post (whichever comes later). $q_g(t)$ is the post-specific baseline hazard, which is modeled by interacting the natural cubic splines with a dummy variable for the starting post (0=city leader, 1=provincial leader). I also include a set of year dummies $\sum_{j=2001}^{2015} \gamma_j$ to capture changes in the overall intensity of anticorruption campaigns over time.

I use five variables to capture different types of political affiliations. The first two variables measure ties with incumbent power holders, including both members of the Politburo standing committee and the provincial secretaries. As key decision-makers at the central and the provincial levels, respectively, these incumbent leaders have the strongest influence over the investigation tasks carried out by DICs under their jurisdictions. Therefore, I expect officials who have ties with the sitting PSC members and provincial secretaries to enjoy systematically lower rates of investigation than those who do not (i.e., $\theta_1, \theta_2 < 0$). In addition, I also include two measures for ties with other members of the ruling coalition, including the non-standing Politburo members (PB)

141

and retired PSC members,[13] who are usually not directly involved in crafting anticorruption plans, but are nonetheless influential players in national politics. To the extent that their continued support is valued by the incumbents, Ie expect officials affiliated with these other coalition members to also receive some protection (although samller) in anticorruption enforcement (i.e., $\theta_3, \theta_4 < 0$).

Finally, I include a variable that measures ties with incumbents' rivals. Based on substantive knowledge of Chinese politics, I identify four high-level politicians who have posed tangible political threats to the incumbent general secretaries during the period of analysis: Chen Liangyu, Bo Xilai, Ling Jihua,[14] and Zhou Yongkang. With the exception of Chen, who fell for his lack of respect to the leadership of Hu Jintao (Jiang and Yang 2016), the remaining three were all rivals to the current general secretary, Xi Jinping: Bo came from a prominent political family and was widely regarded as a major contender for seats in the Standing Committee. Zhou was a former PSC member and had served as the head of the security apparatus for half a decade. Ling, furthermore, was a close aide to the former general secretary Hu Jintao, Xi's predecessor. Bo, Zhou, and Ling were allegedly involved in a major conspiracy against Xi's succession to power before the 18th Party Congress. Since all these figures are already under arrest for corruption charges themselves (Shi 2015), those affiliated with them are also likely to become the priority targets in anticorruption investigations, implying a positive estimate for v.[15]

6.7   Results

Table 6.1 displays the main empirical results from the hazard models. The first column presents the most parsimonious model with only the five connection variables. The second column adds

---

[13]In constructing the variable for retired PSC members, we only consider those who have just retired from the preceding administration. For example, as of 2008, the group of retired PSC members include Zeng Qinghong, Wu Guanzheng and Luo Gan. Moreover, to avoid double counting, we exclude Zhou Yongkang, who is both a retired PSC member after 2012 and a political rival to Xi Jinping.

[14]Since Ling did not serve in any significant regional positions, we measure his clients by additionally identifying those who were born in Yuncheng, Ling's hometown.

[15]Since political rivalry is incumbent-specific, I code the rival dummy in the following way: The variable takes the value of 1 if an official is (1) connected to Chen Liangyu between 2006 and 2009, or (2) connected to Bo, Zhou, or Ling after 2012, and 0 otherwsie.

fixed effects for the province in which a subject served in his/her first observation in our sample. The fixed effects for the starting provinces are intended to capture the unobserved, time-invariant heterogeneity across different provinces that might affect both the opportunity for corruption and the likelihood of establishing ties with future national leaders.[16] The third column adds key demographics, and the final column adds three indicators for career background. To ease interpretation, all coefficients are presented in odds ratios, which represent the effect of a one-unit change in a given variable on the relative probability of being investigated in a given year. The overall pattern of the results is consistent with my second hypothesis: Ties with the incumbent central and local decision-makers—PSC members and the provincial secretaries, respectively—both significantly reduce the odds of being investigated by a margin of roughly 50%. In addition, the point estimates for the effect of connections with other ruling coalition members also indicate some reduction in the odds of investigation. However, the standard errors of these estimates are too large to assert statistical significance.

---

[16]For instance, there are usually more opportunities for corruption in large, economically advanced provinces. It is also easier to become clients of a powerful patron in those provinces, given that many national leaders have served in those provinces. Ignoring the heterogeneity among provinces can create an upward bias that attenuates the negative coefficients that we obtain.

Table 6.1: Individual-level Analysis: Patronage Ties and Probability of Being Investigated

	DV: Anticorruption Investigation			
	(1)	(2)	(3)	(4)
Incumbents				
Connected to current PSC members	0.627*	0.542**	0.509**	0.505**
	(0.152)	(0.147)	(0.139)	(0.138)
Connected to current prov sec	0.536**	0.567**	0.616*	0.616*
	(0.132)	(0.140)	(0.163)	(0.162)
Other ruling coalition members				
Connected to retired PSC members	0.850	0.844	0.789	0.786
	(0.316)	(0.328)	(0.311)	(0.311)
Connected to current PB members	0.835	0.890	0.835	0.835
	(0.165)	(0.179)	(0.172)	(0.173)
Rivals				
Connected to rivals	2.378***	2.578***	2.679***	2.684**
	(0.665)	(0.923)	(1.019)	(1.030)
Control variables				
Retired			0.813	0.806
			(0.290)	(0.287)
Ethnic minority			0.682	0.691
			(0.216)	(0.218)
Female			0.380**	0.393**
			(0.174)	(0.179)
College education			0.843	0.839
			(0.207)	(0.206)
Youth league experience			1.025	0.996
			(0.290)	(0.284)
Age			2.702***	2.727***
			(0.797)	(0.809)
Age^2			0.991***	0.991***
			(0.003)	(0.003)
Experience in development/transportation/land				0.854
				(0.309)
Experience in discipline and law				0.412**
				(0.182)
Experience in police or security				1.222
				(0.439)
Constant	0.005***	0.006***	0.000***	0.000***
	(0.003)	(0.004)	(0.000)	(0.000)
Year Dummy and Post × Duration	✓	✓	✓	✓
Starting Province FE		✓	✓	✓
Pseudo R^2	0.07	0.09	0.11	0.11
Number of Individuals	3256	3256	3109	3109
Observations	37511	37511	35479	35479

Note: This table displays the results from logistic regressions with post-specific duration. Exponentiated coefficients (odds ratios) are reported. Robust standard errors clustered at individual level are in parentheses.
*$p < 0.1$, **$p < 0.05$, *** $p < 0.01$ (two-tailed test)

More notably, I find that connections with political rivals have very large, positive effects on the likelihood of investigation. All else being equal, having ties with any of the elite challengers effectively more than doubles the odds of being investigated. To interpret this result in more substantive terms, I calculate the predicted probability of investigation for an official who has all his observable attributes set at the median value of the sample. The year-on-year probability of investigation is about 0.5%. Assuming that the probability of survival for each year is independent, the cumulative probability that the official will fall within 10 years is about 4.8%.[17] Having ties with political rivals increases the year-on-year probability of investigation to 1.5%, and the cumulative probability to 15%.

Some results on the control variables are also worth noting. First, female officials appear less likely to be investigated than their male colleagues. This might be due to both the deliberate protection of female cadres (for descriptive representation) and the lower propensity of women to engage in corruption in general (Swamy et al. 1999). Second, there exists a strong inverse-U relationship between age and investigation: Investigation is most likely to happen on median aged officials ($\sim$ 55) than both older and younger ones. Finally, those who have had work experience in the DICs or other law enforcement agents are less likely to be investigated. This, again, can be due to either those agencies' deliberate effort in selecting cleaner officials to fill positions or those officials' specialized expertise on avoiding investigations.

6.8   Dealing with Differential Corruptness

The results from the preceding section have indicated that the investigation rate is significantly lower for officials affiliated with the incumbent power holders, but much higher for those who side with their challengers. An alternative explanation for this discrepancy, however, is that officials in the former group may be on average less corrupt than the latter. In this section, I conduct two additional tests following the strategies proposed by Gordon (2009) to evaluate whether the

---

[17]This is calculated by $1 - (1-p)^n$, where p is the year-on-year probability of investigation and n is the number of years elapsed.

differential rates of investigation are due to different degrees of corruptness or faction-specific targeting.

The first test examines the sentencing outcomes of the sacked officials. The rationale for this test is as follows: If the incumbents' clients are systematically less corrupt, then this should be reflected in not only a lower rate of investigation for this group, but also, conditional on investigation, *lower severity of the revealed corruptness*.[18] By contrast, if those officials are less frequently investigated not due to their superior integrity but rather due to the protection that their patrons offer, then we should expect the revealed severity of corruptness to be higher for those who are associated with the incumbents but nonetheless get investigated.

Since the degree of corruptness is a multidimensional object that is difficult to quantify,[19] I use the sentencing outcome as its low-dimension summary. If the alternative explanation were correct, the sentencing outcome would be lighter than average for those connected to the incumbents and heavier than average for those connected to the rivals. It should be noted that the judiciary in the context of our study is, of course, unlikely to be unbiased. However, as long as it is biased in favor of the incumbents, the sentencing for incumbents' clients would be still lighter, thereby exacerbating, rather than attenuating the discrepancy in sentencing severity.

Empirically, I collect the information on sentencing outcomes for all the fallen officials who have been tried. I rank the sentencing outcome in the following order (from lighter to more sever): x years in jail (x from small to large), life in prison, death with reprieve, and death penalty. I estimate the effects of different types of connections using ordered probit. Table 6.2 displays the coefficient estimates from the regression (Column 1) along with the average marginal effects for the three most severe sentences (Columns 2-4). Although most of the coefficient estimates are quite noisy due to the small sample size, I find strong evidence that clients of the incumbent PSC members tend to receive significantly *more*, rather than less severe sentencing than others. Conditional on investigation, the probability of receiving life imprisonment is 18 percentage points higher for

---

[18]More formally, this requires the assumption that the distributions of corruptness across factions can be ordered by monotone likely ratio dominance. See Gordon (2009) for technical details.

[19]It involves not only corruption in monetary terms, but also other immoral or criminal behavior, such as sexual misconduct, malfeasance, abuse of power, among others.

an official connected to the incumbent PSC members than for someone who is unconnected. The increases for death with reprieve and death penalty are 64 percentage points and 3.4 percentage points higher, respectively. At the same time, the sentencing for those connected to the challengers is indeed significantly *less* severe even when the court might hold a bias against those politically motivated targets. On average, connection with any of the rivals reduces a fallen official's probability of receiving a life sentence by 4%, death with reprieve by 15%, and death sentence by 0.8%. These results contradict the alternative explanation that differential corruptness is what drives the discrepancy in investigation rates across factions.

The second test evaluates the plausibility of the alternative explanation by exploiting the temporal variations in the top leadership. The basic idea is that if the political leaders are indifferent toward officials with different factional backgrounds, the direction of change in the rates of investigation should be consistent for officials from all factions. In other words, the levels of enforcement for those connected to the incumbents and those connected to the supposed challengers should move in tandem—either both rising when the threat from the masses is high or both lowering when such threat is low. By contrast, if top leaders do have preferences over different factions and such preferences differ across leaders, then alteration in the top leadership may lead to contradictory changes in the rates of investigation: Followers of those who entered top leadership may receive greater protection than they had before their patrons rose to prominence, whereas those associated with the incumbents' rivals would suffer higher rates of investigation only after the incumbents had taken effective control of the disciplinary apparatus.

Table 6.2: Effect of Patronage Ties on Sentencing

	Model Coefficients	Marginal Effects		
	(1) Ordered Probit	(2) Life sentence	(3) Death w/ reprieve	(4) Death
Incumbents				
Connected to current PSC members	3.5431***	0.1858**	0.6417***	0.0347***
	(0.6212)	(0.0842)	(0.1171)	(0.0109)
Connected to current prov sec	0.3473	0.0182	0.0629	0.0034
	(0.4942)	(0.0260)	(0.0895)	(0.0051)
Other ruling coalition members				
Connected to retired PSC members	1.4434*	0.0757	0.2614*	0.0141
	(0.8360)	(0.0518)	(0.1515)	(0.0093)
Connected to current PB members	-0.2643	-0.0139	-0.0479	-0.0026
	(0.4792)	(0.0266)	(0.0871)	(0.0047)
Rivals				
Connected to rivals	-0.8806**	-0.0462*	-0.1595**	-0.0086*
	(0.3603)	(0.0266)	(0.0667)	(0.0045)
Control variables				
At or above vice-provincial level	-0.0934	-0.0049	-0.0169	-0.0009
	(0.3694)	(0.0194)	(0.0669)	(0.0035)
Ethnic minority	-0.8339	-0.0437	-0.1510	-0.0082
	(0.7507)	(0.0393)	(0.1365)	(0.0072)
Female	-2.9612***	-0.1553**	-0.5363***	-0.0290**
	(0.8557)	(0.0634)	(0.1637)	(0.0120)
College education	0.9545***	0.0500**	0.1729***	0.0093**
	(0.3638)	(0.0247)	(0.0642)	(0.0040)
Youth league experience	-1.8152**	-0.0952*	-0.3288**	-0.0178**
	(0.7815)	(0.0545)	(0.1412)	(0.0088)
Experience in development/transportation/land	0.6162	0.0323	0.1116	0.0060
	(0.9995)	(0.0509)	(0.1807)	(0.0096)
Experience in discipline and law	7.3914***	0.3876**	1.3387***	0.0723***
	(1.0727)	(0.1650)	(0.2257)	(0.0248)
Experience in police or security	11.6881***	0.6128**	2.1169***	0.1144***
	(1.6510)	(0.2588)	(0.3555)	(0.0435)
Regime: Hu	-1.5471**	0.0540	-0.3441**	-0.0153***
	(0.6820)	(0.0619)	(0.1359)	(0.0051)
Regime: Xi	-2.2219***	0.0045	-0.4510***	-0.0207***
	(0.7465)	(0.0690)	(0.1395)	(0.0052)
Pseudo R^2	0.22	0.22	0.22	0.22
Observations	99	99	99	99

Note: The table reports ordered probit results on severity of sentencing. Outcomes in the dependent variables are ordered as follows: no trial (lowest), x years in prison (ordered from small to large), life sentence, death penalty with reprieve, and death penalty. The first column reports the coefficient estimates, and columns 2 to 5 report the marginal effects of independent variables on the probability of receiving one of the three most severe sentencings.

$^*p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.01$ (two-tailed test)

Empirically, I focus on comparing changes in the rates of investigation before and after 2012—the year in which a major leadership reshuffle occurred—for two groups of clients: officials who are affiliated with (1) politicians who eventually landed on the PSC after the 18th Party Congress,[20] and (2) the alleged political rivals of Xi Jinping. If the difference in the rates of investigation between the two groups is indeed due to the difference in their inherent corruptness, we should expect the over-time change in the rates of investigation for the two groups to move in the same direction. More specifically, I run the same logistic regression with two key independent variables, *Connection to members of the 18th PSC* and *Connection to Xi's rivals*,[21] and their interactions with an indicator for *After 2012*. I also include the same set of covariates as Model 4 in Table 6.1 as controls[22]. Figure 6.2 presents the results in terms of odds ratios. For those connected to the would-be 18th PSC members, the odds of investigation dropped by over 20 percentage points, from +14.4% to −30.7%, after their patrons formally assumed positions after 2012. During the same period, however, there was a significant increase in the rate of investigation for those affiliated with Xi's rivals. Interestingly, prior to Xi's accession to power, officials affiliated with his rivals were in fact enjoying a greater degree of protection than even the clients of the would-be PSC members (−70.5% in odds ratio vs. 14.4%). However, this benefit turned into a significant liability after 2012, with the odds of investigation for the rivals' faction spiking by over 160 percentage points. The contrasting directions of change between the two groups whose patrons face different political fates are again inconsistent with the alternative explanation of differential integrity, but lends support to the presence of political motivations in anticorruption enforcement.

---

[20]This includes the following seven individuals: Xi Jinping, Li Keqiang, Zhang Dejiang, Yu Zhengsheng, Wang Qishan, and Zhang Gaoli. Xi and Li were also members of the previous Standing Committee, but their ranking within the PSC increased considerably after 2012 (from 6 and 7 to 1 and 2, respectively).

[21]This variable differs from the previous variable for connection to rivals in two ways. First, I drop connections to Chen Liangyu, who was considered to be a rival of Hu rather than of Xi. Second, instead of limiting the connection period to post-2012, I count connections for the entire time span covered in the sample.

[22]To avoid double-counting, I exclude connections to the would-be PSC members and Xi's rivals in constructing all the indicators for connection to national and regional leadership (e.g., connection to PSC, PB, retired PSC, provincial secretary).

Figure 6.2: Change in the Effect of Connection Before and After the 18th Party Congress (2012)
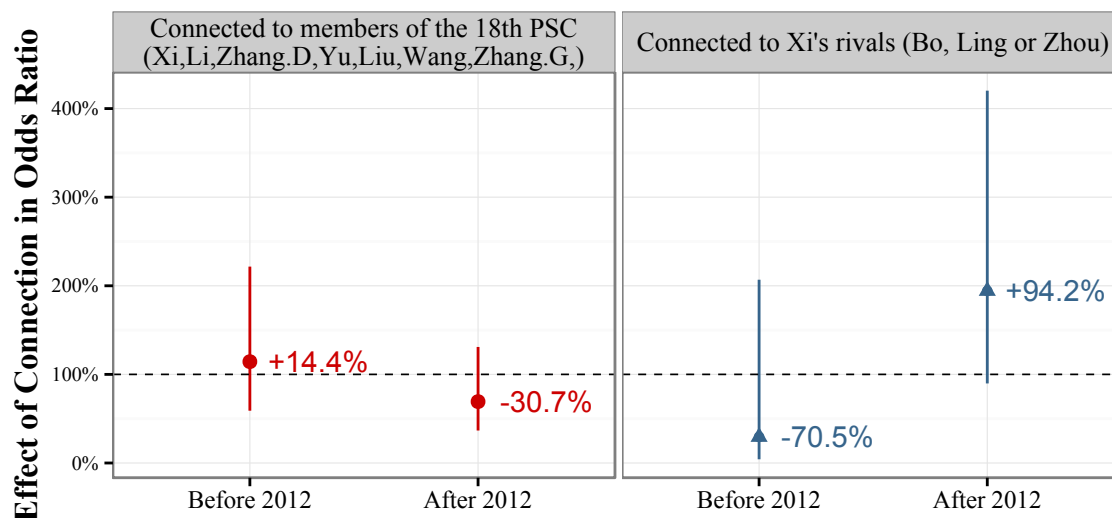
Note: This figure displays the changing effects of connections with (1) PSC members of the 18th Central Committee and (2) political rivals to Xi Jinping before and after 2012. The circles and triangles indicate the point estimates (in odds ratios) and vertical bars the 95% confidence intervals.

6.9   Conclusion

Ever since taking power, the Chinese Communist Party has been fully aware of the deleterious effects of corruption on regime legitimacy and worked strenuously to eliminate corruptions through numerous various means. Yet these efforts have not been able to effectively constrain official venality and corruption remains one of the most widespread political and social problems in China today. In this chapter I argue that one of the key reasons for why anticorruption measures have largely failed is due to the influence of patronage politics. Leading politicians who waged war against corruption were also faced with the pressing need to honor their friends and cronies in order to maintain his power and patronage coalition, and, as a result, often tended to selectively pick targets to be prosecuted in anticorruption campaigns. Empirically, this chapter offers one of the first systematic assessments of the patterns of anticorruption enforcement in China, or authoritarian regimes in general, by examining the career outcomes of a large set of officials who are potential targets of corruption investigations. The results provide systematic evidence that rates of corruption

investigation differ systematically between officials with different types of patronage affiliations, and that such difference cannot be explained away by differential corruptness.

By linking corruption with the fundamental mode of politics in the system, this chapter helps us understand why it is so difficult for the CCP to self-clean when the regime apparently enjoys a great of deal of capacity in accomplishing numerous other more challenging tasks. First, to the extent that anticorruption measures can only serve as a credible deterrent against corrupt behaviors if they are carried out in an impartial fashion, selectivity casts into serious doubts the sincerity of the political elites and is unlikely to fundamentally change players' beliefs and behaviors in the long run (Manion 2004).[23] In some cases, patronage protection may even further exacerbate corruption by encouraging those who are politically protected to engage in more egregious activities, and by eliminating competition from other players (through selective investigation) that may drive down the rents (Shleifer and Vishny 1993).

Second, and more controversially, given the fact that the strength of the patronage institutions in part hinges on these corrupt transactions, it may also not be in the regime's overall interests to completely eliminate the room for such informal activities. To the extent that patronage politics is the means to achieve political stability, economic growth, and effective policy implementation, rooting out corruption may not necessarily bring a net increase in social welfare, if doing so can compromise the regime's ability to accomplish other important tasks.[24]

---

[23]Thanks to its sheer scope and intensity, the recent anticorruption campaign undertaken by Xi Jinping has rekindled many observers' optimism in eliminating corruption (Chen 2014; Zheng 2014). Yet it remains unclear whether the mode of operation is fundamentally different. I offer more discussion on Xi's recent initiatives in the concluding chapter.

[24]For a similar point, see Acemoglu and Verdier (2000)'s discussion on the tradeoff between market failure and corruption.

Chapter 7

Conclusion

This dissertation argues that to better understand origins of China's political resilience and economic accomplishments, one needs to go beyond the veneer of formal institutions and start to pay attention to the informal power dynamics. Although China is widely perceived to be one of the most institutionalized autocracies in the world, the formal institutions in China still lack the fundamental credibility in enforcing intraelite bargains because they have never attained a level of independent strength that frees them from manipulations by powerful political actors. Instead, I highlight the indispensable roles of the the unwritten norms and practices of patron-client networks in mitigating some of the most damning deficiencies of the formal institutions and in ensuring the coherence and unity of political actors within the system. While the formal institution in the Chinese system continues to emphasize lofty, but unrealistic assumptions of revolutionary personalities, such as ideological devotion, voluntarism, and selfless devotion, during the reform era, the informal patronage networks recognize, albeit in an implicit fashion, the universal needs for political power, material well-being, and self-interest. Through personal interactions and particularistic exchanges, these informal networks help foster a sense of trust and mutual obligation that the formal system badly needs for its proper functioning but fails to provide due to its unrealistic assumptions about human nature. In doing so, these networks serve as the social glue that binds

elites together and generates incentives for coordinated actions. They are essential instruments for transmitting orders downward as well as also for channeling career ambitions upward.

7.1 Key Findings

The central empirical finding from the dissertation is that patronage networks have important enabling effects on the political, economic, and policy domains of governance by helping elites strike bargains with an inter-temporal dimension. In Chapter 3, I show how they contribute to the gradual institutionalization of leadership succession during the post-Tiananmen era. by giving the outgoing top leaders a means to reduce the inherent uncertainty associated with power transfer. More specifically, my examination of the patterns of elite appointments in China's first two major leadership successions suggest that the outgoing supreme leaders were deliberately hedging against the post-succession risks by elevating a large share of their loyal proteges to high-level political offices prior to their retirement. I also provide examples that these appointments were more prevalent on those more senior party and leadership posts, and that these appointees did play an important role in limiting the authority of the successors through both passive resistance and active counterbalancing.

Chapters 4 and 5 shift the analytical scope down to the subnational level to explore the sources of high-powered performance incentives of local officials. I challenge the prevailing wisdom that the Chinese bureaucracy provides strong performance incentives to local officials through a powerful and meticulously designed cadre evaluation system by showing that formal bureaucracy not only contains no explicit provisions linking performance with political rewards, but also features many arrangements that discourage innovation and activism. Instead, I demonstrate that patron-client ties play an indispensable role in generating strong performance incentives among lower-level agents by increasing their perceptions about the likelihood of reward for effort. My empirical analyses of the patterns of economic development and the implementation of a major nationwide pollution control campaign both illustrate that city leaders who were connected to the provincial

party chief exerted significantly more effort on promoting growth and curtailing pollution than those unconnected.

Finally, China's overreliance on this informal mode of governance, however, is not without major problems. In Chapter 5, I present evidence on one of the most egregious consequences of patronage politics: the failure to curtail corruption. I argue that in order to maintain a strong and loyal patronage network as the basis of power, senior political leaders in charge of the anti-graft enforcement possess strong incentives to manipulate anticorruption enforcement by directing investigations away from their own friends and cronies and towards those affiliated with the rivals. Analyzing a large pool of officials who have held important political offices at multiple administrative levels since the 2000s, I show that anticorruption enforcement indeed systematically avoids implicating those affiliated with the incumbent ruling elites while disproportionately targeting clients of the incumbents' political rivals. I also demonstrate through analysis on sentencing outcomes and temporal variations that the differential rates of investigation cannot be explained by difference in the underlying degree of corruptness alone.

7.2 Informal Autocratic Institutions from a Comparative Perspective

A broad point to be drawn from this study is that a more thorough understanding of the political dynamics in autocracies requires us to go beyond the formal institutional veneer of those regimes and probe deeply into the informal institutions that regulate elite behaviors. As empirical analyses of this study suggests, even in a seemingly institutionalized single-party regime like China, informal institutions are far from being merely a residual feature or an addendum to the formal polity. Rather, they are not only persistent features of a political system but also the key institutions that provide solutions to some of the most thorny political and governance challenges faced by the regime. To the extent that some of these problems are often evident in other authoritarian, or even democratic polities, a fruitful direction of future research would might be to compare

the similarities and differences in the configurations of informal institutions in different autocracies and examine their relative effectiveness in addressing these important problems that they face. In this section, I make an preliminary attempt in this direction by showing that several informal arrangements analyzed in this study have important parallels elsewhere.

In terms of the leadership succession, to begin with, the practice of using shared control over personnel to stabilize power transitions can be found in a number of other major autocracies during when the initial phase of institutionalization. One such example is contemporary Vietnam, which is another Communist regime that managed to abolish life-tenure and initiate regular leadership reshuffles since the late 1980s. According to Vu (2014), a critical element of the succession bargain during Vietnam's early transitions was to give the retiring top elites substantial influence over the lineup of the next leadership in exchange for their agreement to stepping down.[1] In Mexico, another dictatorship with a highly institutionalized succession mechanism, personnel bargains among elites also played an important role in its early phase of institutionalization: When Lázaro Cárdenas stepped down after a single presidential term in 1940 (thereby establishing the first precedence of no presidential reelection), he did not give up power fully but instead left behind a full entourage of followers to take charge of important positions in both the cabinet and other important sectors to contain the influence of his successor and ensure the continuation of his preferred policies (Niblo 2000).[2]

Moreover, the phenomenon of particularistic accountability also has been noted in other parts of the developing world where the formal structure is poorly equipped for political principals to elicit sufficient effort from underlings. In the Soviet Union, for example, it is widely noted that senior politicians needed to build governing teams of loyalists before embarking on their own policy agenda (Willerton 1992). In both Latin America and the Gulf States, politicians have been found

---

[1] At sixth Party Congress in 1986, for example, several senior leaders (Truong Chinh, Van Dong, and Le Duc Tho) retired from the Central Committee but remained influential from behind the scene through lieutenants they appointed to the next Politburo. Similarly, when Nguyen Van Linh, the architect of economic reform in Vietnam, voluntarily gave up the post of Party General Secretary at the 7th Party Congress in 1991, he appointed a number of his allies from the South to key leadership positions in the politburo to ensure the continuation of the reform policy.

[2] Consistent with this observation, in a recent study on the social networks of Mexican elites, Gunten (2015) reports evidence that Camacho himself was only have a single direct tie with all 14 cabinet members during his presidency.

to generate momentum for economic reforms by creating "pockets of efficiency" and have them headed by their trusted allies. Furthermore, even studies on East Asian developmental states, such as Japan and South Korea, note that the state bureaucracies in those countries do not fully conform to the impersonal, meritocratic Weberian ideal, but instead contain important traditionalistic and personal elements (Evans 1995; Johnson 1982). Regional ties and common school backgrounds, for example, played a crucial role in shaping the bureaucrat's prospect of upward mobility (Ha and Kang 2011; Hwang 1996). Instead of undermining the effectiveness of the bureaucracy, however, these personal connections improved the internal cohesion among the bureaucrats, which helped them preserve a high degree of autonomy in making economic policies and dealing with the private sector.

7.3   Looking Ahead: A New Political Game Under Xi?

The recent, largely unexpected rise of Xi Jinping to a status of de facto personal dominance within a nominally collective leadership has raised many concerns and speculations about China's political future. As discussed in Chapter 3, Xi came to power under a relatively propitious condition when the conflicts between his two predecessors gave him the opportunity to quickly expand his own power. From its very beginning, Xi's reign was marked by a series of initiatives that set it apart from his two recent predecessors: Quickly after he assumed power, Xi launched an anticorruption campaigns with unprecedented scope and intensity to destroy entrenched patronage networks led by powerful political figures. He has repeatedly issued stern warnings against elites forming "cliques and cabals" or engaging in "unorganizational activities" within the party,[3] and vowed on many occasions to eradicate these informal groupings and restore the discipline and unity of the party (Zhang 2016). A series of austere measures, moreover, has been promulgated to set standards of political and economic conducts for party cadres. These bold and aggressive measures against informal elements of the party have earned Xi much genuine admiration from both within

---

[3]See https://www.stratfor.com/weekly/chinas-fragile-evolution

and outside China and led many to predict that a "new mode of politics" (Wallace 2015) or a "new reform era" (Zheng and Gore 2014) has begun.

One might wonder, however, whether Xi was really capable of transforming Chinese politics into something radically different from its past. While it may still be too early to provide a conclusive answer, the key insights from this dissertation would suggest that as a key informal institution that organizes Chinese politics, patron-client relations are very difficult to eradicate without a fundamental overhaul of the existing institution or significant damage to the performance of the system. The rest of the concluding section substantiates this claim by reviewing the relevant evidence on the changes (or the lack thereof) in personal appointment and disciplinary enforcement under Xi, and offers some speculations about China's future trajectories.

7.3.1 Patterns of Appointments

We begin with appointments. Table 7.1 displays a list of individuals who were elevated to important political positions after the 18th Party Congress and with clear, identifiable past ties with Xi.[4] A perusal of the list suggests although Xi has repeatedly warned other party members against forming "cabals and cliques" (Zhang 2016), this does not mean that he would preclude himself from using personal ties to expand and consolidate power. As the list suggests, Xi's lieutenants effectively helped him cover a variety of essential party, government, and military positions in the system. At the Party center, Wang Qishan and Li Zhanshu, two long-term friends who Xi knew from very early on,[5] helped him take control of two agencies that are of paramount importance to his power: The Central Disciplinary Commission, chaired by Wang, is the primary agency to carry out Xi's massive anticorruption campaign—one of his greatest achievements in Xi's first term; also, Li's control over the CCP General Office, an organ that is responsible for the daily operation of the Party headquarters, also gives Xi the full logistical and informational support for his authority within the top elites.

---

[4]The list was created by running an extensive search of Xi's connections within the database, combined with expert opinions from several sources. See, for example, Li (2014*a*,*b*,*c*).

[5]Xi himself was born in 1953.

Outside the small circle of Politburo, it is also noteworthy that Xi also placed his associates in deputy positions in a number of key functional departments where he could not immediately replace the nominal head. Although not formally the most senior official, these appointees are likely to be influential players in the vehicle for Xi to project his influence over these departments. For instance, Chen Xi, a close friend of Xi's from his days as a college student in Tsinghua University, was appointed the executive deputy head (常务副部长) of the Central Organization Department, which is the equivalent of human resource department for the Party; He Lifeng, who served as Xi's personal aide as early as his days in Xiamen city, was made the vice party secretary of the National Development and Reform Commission, which was a macro-economic management agency with a wide range of responsibility over economic planning, price control, and investment approval. Moreover, Xi was also able to extend his reach to the area of propaganda, which was formally under the turf of another influential PSC member, Liu Yunshan, by making Huang Kunming, another former subordinate in the Fujian province, the deputy head of that department.

Aside from positions in the central party and government apparatus, Xi also used his personal contacts to secure his control over the military and the security forces. Although Xi's status as an offspring of a revolutionary veteran allowed him to develop friendly relations with many senior generals who share similar family backgrounds, he still reserves some of the most essential positions for those with whom he had a personal ties in his early career. Most notably, Wang Xiaohong, who was the chief of the public security bureau in Xiamen city when Xi was the mayor of Xiamen, received a number of special promotions after Xi assumed power and is now the vice minister of the Minister of the Public Security in charge of the entire security force in the national capital.[6] During his service in Zhejiang and Fujian, Xi also met a number of generals stationed in the Nanjing military region (MR), many of whom later became his confidants. For example, Xi endorsed the advancement of Zhao Keshi, then the commander of the Nanjing MR, to the head of the Logistic Department and a member of the Central Military Commission. Zhao was the commander of an army stationed in Xiamen city when Xi was the mayor there, and his presence in the central

---

[6]Formally, Wang has a joint appointment as the chief of the Public Security Bureau in Beijing.

military headquarters, along with a few other princeling allies, helped Xi to exert much greater influence over military affairs than his predecessors did. In addition, Song Puxuan, who also rose within the Nanjing MR during Xi's service in Fujian and Zhejiang, is appointed the commander of the Northern Theater, a position that is in charge of the military forces most close to Beijing. Moreover, Xi also placed the navy under his control by making Miao Hua, yet another general from the same MR, the political commissar of the Navy.

Finally, there is also some evidence that Xi has started building a reserve army for the future by placing several of his junior clients in regional positions that are important stepping stones for the next level. Chen Min'er, who was the propaganda chief of Zhejiang province when Xi was the provincial party secretary, was appointed to become the governor of Guizhou province 2 months after Xi took power and was later promoted to become the party secretary of the same province. Born in 1960, Chen is one of the four youngest serving provincial secretaries at this moment, making him one of the likely contenders for the highest leadership in the 20th Party Congress (2022).[7] In addition to Chen, Xi also had a number of candidates in place at the governor or deputy-provincial ranks: Liu Cigui and Chen Hao, who were Xi's colleagues in Fujian and Shanghai respectively, were given governorship in Hainan and Yunan. Moreover, three of Xi's old colleagues in Zhejiang—Ying Yong, Lou Yangsheng, and Shen Hairong—were also placed in leading deputy-provincial level positions in politically significant regions, such as Shanghai, Guangdong and Shaanxi.

---

[7]The three other young provincial secretaries (all born at or after 1960) were Hu Chunhua (1963), Sun Zhengcai (1963), and Zhou Qiang (1960), all of whom were appointed under the reign of Hu Jintao

Table 7.1: A List of Key Members of Xi's Patronage Network

Name	Latest position	Rank	Birth year	First year met Xi (estimated)	In what capacity?
Party and Government					
Wang Qishan	Chief of the disciplinary	PSC	1948	1969	Friends while Xi was sent down to the countryside during the Cultural Revolution
Li Zhanshu	Director of the CCP General Office	PB	1950	1983	County secretary of a neighboring county when Xi was serving in Hebei
Cai Qi	Deputy Director of the National Security Commission	CC	1955	1985	Deputy director of the General Office of Fujian provincial party committee

Table 7.1 Continued

Chen Xi	Deputy head of Central Organization Department	CC	1953	1979	Xi's college classmate at Tsinghua University
He Lifeng	Vice party secretary of the National Development and Reform Commission	ACC	1955	1985	Deputy director of the General Office of Xiamen Party Committee, Fujian province.
Huang Kunming	Deputy head of the Central Propaganda Department	ACC	1956	1996	Mayor of Longyan city, Fujian province
Ding Xuexiang	Deputy Director of the CCP General Office	ACC	1962	2007	Deputy Director, General Office of Shanghai Party Committee
Zhong Shaojun	Deputy Director of the General Office of the Central Military Commission		Unknown	2002	Xi's personal secretary since Zhejiang

Table 7.1 Continued

Shu Guozeng	Deputy Director of the Central Finance Leadership Group		1956	2002	Deputy Director of the General Office of Zhejiang Party Committee
Military and Security					
Zhao Keshi	Head of the Central Logistic Department	CC	1947	2002	Commander of the 31st Group Army, Nanjing Military Region (overseeing Zhejiang and Fujian)
Wang Xiaohong	Public security chief of Beijing Municipality		1957	1990	Deputy public security chief of Fuzhou City
Song Puxuan	Commander of the Northern Theater (in charge of military force around Beijing)		1954	2009	Deputy commander of the Nanjing Military Region

Table 7.1 Continued

Miao Hua	Comissar of the Navy		1954	2002	Head of the 31st Army's political affairs department, Nanjing Military Region
Regional administration					
Chen Min'er	Party secretary of Guizhou	CC	1960	2002	Propaganda chief of Zhejiang province
Liu Cigui	Governor of Hainan	CC	1955	1999	Colleagues in Fujian provincial government
Chen Hao	Governor of Yunnan	CC	1954	2007	Vice Chairman of the Shanghai People's Congress
Ying Yong	Vice party secretary of Shanghai		1957	2002	Deputy chief of the Disciplinary Inspection Commission, Zhejiang province

Table 7.1 Continued

| Lou Yangsheng	Vice party secretary of Shaanxi	1959	2002	Mayor of Jinhua City, Zhejiang
Shen Haixiong	Head of the Propaganda Department of Guangdong.	1967	2002	Journalist of Xinhua New Agency, Zhejiang branch

7.3.2 Shifting Power Centers in the Anticorruption Campaign

Similar to the patterns of appointments examined above, a close look at the practice of anticorruption under Xi also suggests that it also fails to achieve a complete departure from the selective mode of enforcement, despite the sheer scope and intensity of the recent campaign. The distribution of protection power, however, does undergo dramatic shift within the ruling elites under the current campaign: In contrast to the previous regime where all influential members of the ruling elites enjoyed some degree of protection over their cronies, now the power of protection is concentrated within a much smaller circle with Xi at the center.

Figure 7.1 offers a glimpse of the changes in power distribution by plotting the rates of investigation based on more refined categories of patron's political status than in Chapter 6. In particular, I divide the PSC members into two sub-groups: (1) the general secretary and the chief of the Central Disciplinary Inspection Commission (CID)—the two most important decision makers in picking the targets of investigation—and (2) the rest of the PSC members. I display changes in the rates of investigation for three terms of the general secretary: Hu Jintao's first and second terms and Xi's first term.

The results suggest that the proponent's claim that selective enforcement is no longer a problem in Xi's anticorruption is only partially true: On the one hand, we do observe a noticeable drop in the rates of protection among the rest of the PSC members along with the Politburo members. At the same time, however, the probabilities of investigation for officials who had previously been promoted by the general secretaries and the CDIC chiefs are uniformly 0 throughout the period under investigation and it remains so after Xi took power. At the same time, however, we see a noticeable decline in the rate of protection for other types of elites—most notably the rest of the PSC members, the Politburo members, and retired patriarchs. In other words, the greatest change in the current campaign is the decline in the number of senior patrons who can offer real political

Figure 7.1: Changing Power Balance Within the High Leadership
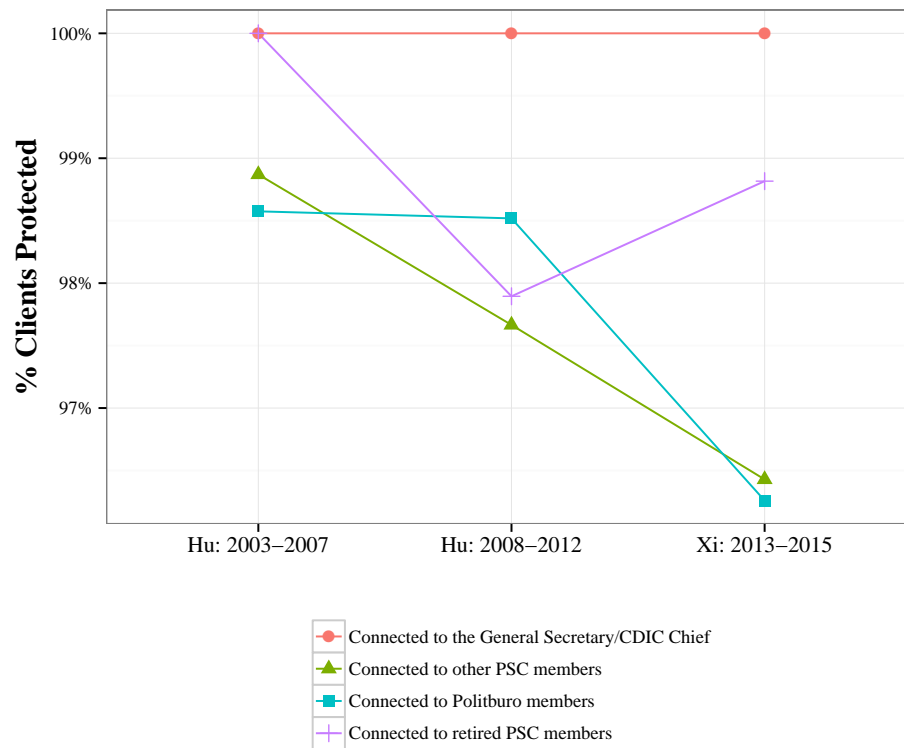
protections, rather than the decline in the importance of patron-client relations in Chinese politics in general.[8]

7.3.3 Speculations of China's Future Trajectories

Taken together, the evidence so far suggests that despite some dramatic shifts in the power structure among the elites since Xi took power, the fundamental ways in which politics is organized remains essentially unchanged. Although Xi has demonstrated a clear preference for ideological purity, the practical imperatives of power struggle compels him to continue to rely on the very institution of factions and patronage networks, which he publicly denounces. His authority will not be unchallenged if there is no loyal personnel to help him secure control over the essential posts,

---

[8]Our results here are consistent with what has been suggested by many country experts. See, for example, the quote from Obama in Panda (2014).

and his reform plans, whatever that may be, will not be effectively implemented if the lower-level agents are not be adequately rewarded for the services they offer.

In the meantime, however, Xi's continued attacks on other informal networks outside his own clique can produce potentially destabilizing consequences for the regime. For one, as Xi tries to claim a monopoly control over the patronage power while denying other elites the same rights, it undermines the very foundation that unites a group of otherwise fragmented elites. Even though the elites are currently not powerful enough to openly challenge Xi, many of them can still choose to not be fully cooperative with him, and will be more than happy to create troubles for him, or at least stand aside as he stumbles. As many observers have noted, in spite of the seemingly formidable personal power that Xi has accumulated, he has suffered many more noticeable political and policy setbacks than any of his predecessors. These setbacks ranged from a failed attempt to crown himself as the core of the party to an awkward publicity campaign that tries to portray Xi as the "Big Daddy (dada)" but ended up tarnishing his own image by reminding many of the personal cult during the Cultural Revolution. In March 2016, an anonymous open letter was posted on one of the heavily censored Chinese official media, publicly calling for Xi's resignation. During the sessions of National People's Congress round the same time, it also became evident that there was great tension between Xi and Li Keqiang, who is the premier and the second most senior politician in the PSC.

In addition to increasing tension among the elites, Xi's effort to impose stricter disciplines over the local cadres also produced the unintended consequence of weakening their performance incentives. By disrupting the local elite networks and denying patrons the power to reward their clients, the anticorruption campaign takes away an important instrument that can be used to motivate local officials to work hard and effectively. When there is no longer credible protection against exercising discretions or circumventing inefficient rules, risk-averse officials naturally choose the safer option of sticking wholeheartedly to the formal, but lengthy and slow procedures in accomplishing their assignments. At the same time, they are also careful not to display too much enthusiasm for promoting economic development, for the fear that they might be seen as having a too intimate

167

relationship with the private sector. At one point, the problem of officials' slacking off became so widespread that even the official media has to grudgingly acknowledge its presence.[9]

The inherent contradiction between Xi's open denunciation of the informal politics and his de facto reliance on it for power and governance constitutes a major source of tension in the current regime. Ultimately, how this tension will be resolved is likely to determine the trajectories of Chinese politics in the years to come. In one possible scenario, a compromise may be reached between Xi's ideal for party unity and the fragmented, plural, and instrumental nature of Chinese politics. This implies, among other things, a gradual withdrawal of many of the stringent disciplinary measures in order to encourage activism at the lower-level, and offering more concessions to other elites in exchange for their support and compliance with his own agenda. In effect, this would mean in many ways a partial restoration of the political arrangements that have been in place for most part of the post-Tiananmen era: a ruling coalition maintained by the mutual respect of interests among the elites, and a responsive local administration that has both the willingness and the capacity to accomplish tasks.

Alternatively, Xi could also choose to continue on the current path of power centralization by completely crushing all the alternative centers of power at both the central and the local levels. This path, however, is the most uncertain one as discontented elites are unlikely to passively accept the loss of their power and status. The resistance against Xi will be especially fierce if the two living former paramount leaders, Jiang Zemin and Hu Jintao (along with a number of other retired senior politicians) would unite and act as the focal point of coordination for elites to rally behind. The intense power struggles that ensue may not only incur significant personal risks on Xi himself but also severely damage the vitality and legitimacy of the entire system. If even he manages to succeed in the end– most likely through a systematic purge of the high-ranking elites and the imposition of even more draconian measures over the officialdom—the victory is likely to come with a high political and economic price that may eventually drag the regime down into the graves.

---

[9]For a related report, see http://paper.people.com.cn/rmlt/html/2015-05/20/content_1574751.htm.

Finally, a third way in which this tension can be resolved is through development of more formal and pluralistic institutions that better accommodate the regime's political and governing imperatives. Although not very likely given Xi's manifested distaste for plural institutions, this path might turn out to be of good tactical value for Xi if he wishes to completely break the existing political and institutional constraints imposed by his predecessors and rewrite the rules of the game for himself. At the elite level, Xi may choose to allow a limited degree of political competition within the party as his term is coming toward an end. The Central Committee may be given some real power to select senior members of the Politburo or even the PSC, and candidates for higher-level positions may be allowed to campaign on their platforms within certain scopes. The uncertainties created by intra-party electoral competition would give Xi a legitimate cause to get rid of some political rivals and disrupt the succession arrangements his predecessors have laid out for him. Moreover, he could even participate in the competition himself and a victory would justify serving beyond the currently stipulated two-term limits. At the local level, performance incentives could also be strengthened by streamlining the existing bureaucratic institutions and creating more credible formal incentives for hard-working agents. One way to do this is by introducing more democratic elements into the selection process. Currently, democratic consultation and public notification are already formally part of the cadre selection process. The evaluation results can be made more binding on the final appointment decisions than they currently are, and the scope of participants can also be expanded from a relatively small group of senior cadres to a larger set of individuals both within and outside the system. At some point, the local residents may also be invited to give their input on the performance of leading politicians in a locality through either a systematic polling or even a limited election. Overall, these bottom-up accountability measures are likely to provide an important alternative source of incentives for local officials to exert effort when the top-down motivations generated by patron-client relations are weakened.

Appendix A

Details of the CPED Database

The Chinese Political Elite Database (CPED) is a comprehensive biographical database of Chinese political leaders from multiple levels. Currently it contains extensive and systematically coded information of career information for all *civilian* leaders who belong to one of the following categories:

- City secretaries and Mayors since January 1, 2000.

- Members of the provincial standing committee since January 1, 2000.

- Provincial secretaries and governors since January 1, 1995.

- Other full and alternate Central Committee members: 13th~18th party congresses (1987-2012)

To construct the database, I first develop a list of officials serving in those relevant positions. The name list for sub-national leaders are based compiled from government websites, provincial and city yearbooks, and other authoritative internet sources. I also cross-check the name list several times with the actual records in the CVs after the completion of the database.

I then collect the detailed career information of leaders from the list using the following sources:

- Baidu Encyclopedia (*baidu baike*) www.baike.com

- News of the Chinese Communist Party of China (*zhongguo gongchandang xinwenwang*) http://cpc.people.com.cn/GB/64162/index.html

- The Database on Local Party and Government Leaders *(difang dangzheng lingdao renwu shujuku)* http://district.ce.cn/zt/rwk/

- Kou, Chien-wen. 2008. *Zhongguo Zhengzhi Jingying Shuju Ku*: National Chengchi University.

- Central Organization Department and Party History Research Center of CCP Central Committee. 2004. *Zhongguo Gongchandang Lijie Zhongyang Weiyuan Dacidian, 1921-2003 (The Dictionary of Past and Present CCP Central Committee Members)*. Beijing: Party Hisotry Publisher.

- Provincial Yearbooks for relevant years and provinces.

A "raw" CV from these sources contains the basic demographic information of the official and the past appointments that he/she has served, in a fairly standard fashion. Figure A.1 is an example of an entry of Mr. Sun Yongchun, a former city secretary in Shandong but now a member of the provincial standing committee in Guizhou, on Baidu encyclopedia.

Figure A.1: Official Biography from Baidu Encyclopedia

孙永春 🔒 锁定

孙永春，男，汉族，1957年5月生，山东寿光人。1976年7月加入中国共产党，1976年12月参加工作。中央党校在职研究生学历，工商管理硕士学位。现任中共贵州省委常委、省委组织部部长、省委党校校长（兼）。

中文名	孙永春	职　业	中共贵州省委常委、组织部部长
国　籍	中华人民共和国	信　仰	共产主义
出生地	山东寿光	入党日期	1976年7月6日
出生日期	1957年6月12日	参加工作日期	1976年12月18日

目录
1 人物履历
2 担任职务

1 人物履历

1974.06——1976.12，山东省垦利县西宋乡大三合村团支部书记，党支部书记，公社团委副书记；

1976.12——1978.03，山东省垦利县委工作队组长；

1978.03——1978.10，山东省垦利县西宋公社团委书记；

1978.10——1980.06，共青团山东省垦利县委干事；

1980.06——1984.08，共青团山东省委干事，副科级干事；

贵州省委常委、组织部长孙永春

1984.08——1987.09，共青团山东省委组织部副部长（其间：1984.10—1987.07在曲阜师范大学函授中文系大专班学习）；

1987.09——1992.09，共青团山东省委常委、组织部部长（其间：1989.10—1991.04挂职任博兴县委副书记，1989.09—1992.07在中央党校函授本科经济管理专业学习）；

1992.09——1997.12，共青团山东省委副书记、省青年联合会副主席（其间：1995.03—1995.07在中央党校进修班学习；1995.09—1997.12在山东省委党校在职研究生班经济管理专业学习）；

1997.12——2001.01，山东省德州市委副书记；

2001.01——2001.02，山东省德州市委副书记、代市长；

2001.02——2006.03，山东省德州市委副书记、市长；

2006.03——2006.10，山东省烟台市委副书记、市长；

2006.10——2007.01，山东省烟台市委书记；

2007.01——2011.04，山东省烟台市委书记、市人大常委会主任；

2011.04——，贵州省委常委、省委组织部部长、省委党校校长（兼）。

While such information is easily accessible through human eyes, they are unstandardized and therefore unsuitable for automated analysis at a larger scale. To address this problem, a team of research assistants (RAs) was hired to transcribe the raw CV to an excel file. The primary task for the RAs was to decompose and reorganize the career entries in the CV in a way that is friendly to systematic, computer-based analysis. Among other things, RAs were required to record the time, place, main organization associated with job and the administrative ranks according to the coding manual. To standardize the content of input across RAs in the face of the vast heterogeneity in our subjects' political careers, I maintain a bank of area, job and school codes, which is continuously updated as new areas and organizations arise during the data collection process. Throughout the process, I also merged effectively identical jobs and areas that for historical reasons have somewhat different nomenclature, based on consultation with expert opinions.[1]

After compiling a full set of standardized CV in excel files, I imported them into a SQL database. The final output from the database, shown in Figure A.2, contains two separate tables on the official's time-invariant attributes and time-varying career information.

---

[1]For example some prefectures are later converted to cities, with the suffix of the name changed from *diqu* to *shi*. We use the same underlying code for the same territorial unit before and after the conversion.

Figure A.2: Standardized CV as Exported from the SQL database

Name ID	Name	Sex	Ethnicity	Date of Birth	Province	City	County	Highest Education	Join Party	Status	# of CC	Military
1	孙永春	男	汉族	6/12/1957	山东省	潍坊市	寿光市	硕士	7/1/1976	在职		否

Name ID	Name	Start	End	Province	City	County	Lv1 Unit ID	Lv1 Unit	Lv2 Unit	Lv3 Unit	Job Name	Rank	Key post	Education
1	孙永春	6/1/1974	12/1/1976	山东省	东营市	垦利县	9637	西宋乡	大三合村		团支部书记	小于副处	无	高中
1	孙永春	12/1/1976	3/1/1978	山东省	东营市	垦利县	1343	党委工作队			组长	小于副处	无	高中
1	孙永春	3/1/1978	10/1/1978	山东省	东营市	垦利县	9637	西宋乡			团委书记	小于副处	无	高中
1	孙永春	10/1/1978	6/1/1980	山东省	东营市	垦利县	1300	党委常委会/政治局			干事	小于副处	无	高中
1	孙永春	6/1/1980	8/1/1984	山东省			4600	共青团委			干事	小于副处	无	高中
1	孙永春	8/1/1984	9/1/1987	山东省			4602	组织部（共青团）			副部长	副处	无	高中
1	孙永春	10/1/1984	7/1/1987	山东省	济宁市	曲阜市	80243	曲阜师范大学	函授中文系	大专班	学员	副处	学校	专科
1	孙永春	9/1/1987	10/1/1989	山东省			4600	共青团委			常委/组织部部长	正处	无	专科
1	孙永春	9/1/1989	7/1/1992	中央			80001	中央党校	函授本科	经济管理专业	学员	正处	学校	本科
1	孙永春	10/1/1989	4/1/1991	山东省	滨州市	博兴县	1300	党委常委会/政治局			副书记	正处	无	本科
1	孙永春	4/1/1991	9/1/1992	山东省			4600	共青团委			常委/组织部部长	副厅	无	本科
1	孙永春	9/1/1992	12/1/1997	山东省			4600	共青团委			副书记	副厅	无	本科
1	孙永春	9/1/1995	12/1/1997	山东省			80248	山东省委党校	研究生班	经济管理专业	学员	副厅	学校	硕士
1	孙永春	12/1/1997	1/1/2001	山东省	德州市		1300	党委常委会/政治局			副书记	副厅	市委副书记（专职	硕士
1	孙永春	1/1/2001	3/1/2006	山东省	德州市		2600	政府/国务院（综合）			市长	正厅	市长	硕士
1	孙永春	3/1/2006	10/1/2006	山东省	烟台市		2600	政府/国务院（综合）			市长	正厅	市长	硕士
1	孙永春	10/1/2006	4/1/2011	山东省	烟台市		1300	党委常委会/政治局			书记	正厅	市委书记	硕士
1	孙永春	4/1/2011	7/1/2015	贵州省			1302	组织部（党委）			部长	副部	省组织部长	硕士
1	孙永春	4/1/2011	7/1/2015	贵州省			1300	党委常委会/政治局			常委	副部	省常委（其他）	硕士
1	孙永春	4/1/2011	7/1/2015	贵州省			81968	贵州省委党校			校长	副部	学校	硕士

Appendix B

A List of Informants

Province A

Provincial-level

1. Deputy secretariat of the provincial government

2. Chief of the confidential affair bureau of the provincial government

3. Former member of the provincial standing committee

4. Deputy chief of the finance bureau

5. Staff of the finance bureau

City-level

1. Deputy mayor of city A-1

2. Former deputy chief of the government executive office of city A-1

3. Chief of the environmental protection bureau of city A-1

4. Standing member of city party committee of city A-2

5. Deputy chief of the organization department of of city A-2

6. Former chief of the CCP general office of city A-2

7. Former chairman of the People's Congress of city A-2

8. Head of the finance bureau of city A-2

County-level or below

1. Former party secretary of county A-1-1

2. Former head of agriculture bureau of county A-1-1

3. Township party secretary of county A-1-1

4. Deputy township party secretary

5. Deputy county mayor of county A-2-1

6. Disciplinary chief of county A-2-1

7. Township party secretary of county A-2-1

8. Township party secretary of county A-2-1

Other

1. Manager of a state-owned enterprise owned by the provincial government

2. Journalist in the official newspaper in city A-2

3. Editor of a party-sponsored magazine in A-2

4. Associate professor in party school of city A-2

5. Assistant professor in party school of city A-2

Province B

1. Former chairman of the People's Political Consultative Conference of city B-1

2. Former staff of the CCP general office of city B-1

3. Head of the finance bureau of city B-1

4. Deputy party secretary of county B-1-1

5. Deputy chief of the Law and Politics Commission of county B-1-1

6. Deputy public security chief, B-1-1

7. Manager of a state-owned enterprise in county B-1-1

Province C

1. Former deputy chief of the government executive office of city C-1

2. Former personal aide to mayor of city C-1

3. Former personal aide to mayor of city C-1

4. Deputy chief of finance bureau of city C-1

5. Mayor of county C-1-1

6. Deputy mayor of county C-1-1

7. Head of transportation bureau, county C-1-1

8. Township head, county C-1-1

9. Township head, county C-1-1

Province D

1. Former deputy provincial governor

2. Former deputy chief of the executive office of provincial government

3. Former head of the bureau of education of provincial government

4. Mayor of County D-1-1

5. Former head of the government executive office of county D-1-1

6. Former head of the textile bureau of county D-1-1

7. Township head, county D-1-1

8. Deputy township head, county D-1-1

9. Member of the party standing committee, county D-1-2

10. Township secretary, county D-1-2

11. Deputy township secretary, county D-1-2

12. Professor of public administration in a university located in D

13. Professor of journalism in a university located in D

Bibliography

Acemoglu, Daron, Georgy Egorov and Konstantin Sonin. 2008. "Coalition Formation in Non-Democracies." *The Review of Economic Studies* 75(4):987–1009.

Acemoglu, Daron and James A. Robinson. 2005. *Economic Origins of Dictatorship and Democracy*. Cambridge University Press.

Acemoglu, Daron and Thierry Verdier. 2000. "The Choice between Market Failures and Corruption." *American Economic Review* 90(1):194–211.

Alkon, Meir and Erik H. Wang. 2016. "Pollution and Regime Support: Quasi-Experimental Evidence from Beijing." Working Paper.

Anderson, Christopher J. and Yuliya V. Tverdova. 2003. "Corruption, Political Allegiances, and Attitudes Toward Government in Contemporary Democracies.".

Ang, Milena. 2015. "Corrupt Accountability: Political Responses to Grand Corruption.". Paper Presented at the Annual Meetings of American Political Science Association, San Francisco.

Anzia, Sarah F. and Christopher R. Berry. 2011. "The Jackie (and Jill) Robinson Effect: Why Do Congresswomen Outperform Congressmen?" *American Journal of Political Science* 55(3):478–493.

Azari, Julia R. and Jennifer K. Smith. 2012. "Unwritten Rules: Informal Institutions in Established Democracies." *Perspectives on Politics* 10:37–55.

Baum, Richard. 1996. *Burying Mao: Chinese Politics in the Age of Deng Xiaoping*. Princeton University Press.
URL: *https://books.google.com/books?id=WszREB6v_1AC*

Beck, Nathaniel, Jonathan N. Katz and Richard Tucker. 1998. "Taking Time Seriously: Time-Series-Cross-Section Analysis with a Binary Dependent Variable." *American Journal of Political Science* 42(4):pp. 1260–1288.

Becker, Gary S. 1957. *The Economics of Discrimination*. Economic Research Studies University of Chicago Press.

Bell, Daniel.A. 2015. *The China Model: Political Meritocracy and the Limits of Democracy*. Princeton University Press.

Beugelsdijk, Sjoerd and Ton van Schaik. 2005. "Social Capital and Growth in European Regions: an Empirical Test." *European Journal of Political Economy* 21(2):301 – 324.

Blaydes, Lisa. 2010. *Elections and Distributive Politics in Mubarak's Egypt*. Cambridge University Press.

Bloomberg News. 2013. "Chinese Anger Over Pollution Becomes Main Cause of Social Unrest.".
URL: *http://www.bloomberg.com/news/articles/2013-03-06/pollution-passes-land-grievances-as-main-spark-of-china-protests*

Bo, Zhiyue. 2002. *Chinese Provincial Leaders: Economic Performance and Political Mobility since 1949*. Armonk N.Y: M.E. Sharpe.

Boix, Carles and Milan Svolik. 2007. "The Foundations of Limited Authoritarian Government: Institutions and Power-Sharing in Dictatorships." *Journal of Politics* 75(2):300–316.

Boix, Carles and Milan W. Svolik. 2013. "The Foundations of Limited Authoritarian Government: Institutions, Commitment, and Power-Sharing in Dictatorships." *The Journal of Politics* 75:300–316.

Boxun News. 2015. "Hu Jintao Tuixiu Hou Fawei, Da Jie Jiang Zemin De Liexing (after Retirement, Hu Revealed Jiang's Interference).".
URL: *http://www.boxun.com/news/gb/china/2015/01/201501120532.shtml#.V1jViPkrIhd*

Bratton, Michael and Nicolas Van de Walle. 1994. "Neopatrimonial Regimes and Political Transitions in Africa." *World Politics* 46(4):pp. 453–489.

Brownlee, Jason. 2007*a*. *Authoritarianism in an Age of Democratization*. Cambridge University Press.

Brownlee, Jason. 2007*b*. "Hereditary Succession in Modern Autocracies." *World Politics* 59(4):pp. 595–628.

Bueno de Mesquita, Bruce, Alastair. Smith, Randolph.M. Siverson and James.D. Morrow. 2005. *The Logic of Political Survival*. MIT Press.

Bunce, Valerie. 2014. *Do New Leaders Make a Difference?: Executive Succession and Public Policy Under Capitalism and Socialism*. Princeton Legacy Library Princeton University Press.

Burgess, Robin, Matthew Hansen, Benjamin A. Olken, Peter Potapov and Stefanie Sieber. 2012. "The Political Economy of Deforestation in the Tropics*." *The Quarterly Journal of Economics* 127(4):1707–1754.

Cai, Yongshun. 2014. *State and Agents in China: Disciplining Government Officials*. Stanford, California: Stanford University Press.

Chen, Dingding. 2014. "4 Misconceptions About China's Anti-Corruption Campaign." *The Diplomat* .
URL: *http://thediplomat.com/2014/08/4-misconceptions-about-chinas-anti-corruption-campaign/*

China Central Television. 2008. "Hu Jintao Dangxuan Guojia Zhuxi, Xi Jinping Dangxuan Fuzhuxi (Hu Jintao Elected President of the PRC, Xi Jinping the Vice President).".
URL: *https://www.youtube.com/watch?v=UNrzcnnfFD4*

Choi, Eun Kyong. 2012. "Patronage and Performance: Factors in the Political Mobility of Provincial Leaders in Post-Deng China." *The China Quarterly* 212:965–981.

Clark, William A. 1993. *Crime and Punishment in Soviet Officialdom: Combating Corruption in the Political Elite, 1965-1990*. M.E. Sharpe.

Collins, Randall. 2011. "Patrimonial Alliances and Failures of State Penetration: A Historical Dynamic of Crime, Corruption, Gangs, and Mafias." *The ANNALS of the American Academy of Political and Social Science* 636(1):16–31.

Congleton, Roger D. 1992. "Political Institutions and Pollution Control." *Review of Economics and Statistics* 74(3):412–421.

Deutscher, Issac. 1990. *Stalin: A Political Biography*. Penguin history Penguin.

Distelhorst, Greg. 2015. "The Power of Empty Promises: Quasi-Democratic Institutions and Activism in China." *Comparative Political Studies* .

Dittmer, Lowell. 1978. "Bases of Power in Chinese Politics: A Theory and an Analysis of the Fall of the "Gang of Four"." *World Politics* 31(1):pp. 26–60.

Dittmer, Lowell. 2003. "Chinese Factional Politics Under Jiang Zemin." *Journal of East Asian Studies* 3(1):97–128.

Easter, Gerald.M. 2007. *Reconstructing the State: Personal Networks and Elite Identity in Soviet Russia*. Cambridge Studies in Comparative Politics Cambridge University Press.

Edin, Maria. 2003. "State Capacity and Local Agent Control in China: CCP Cadre Management from a Township Perspective." *The China Quarterly* 173:35–52.

Egorov, Georgy and Konstantin Sonin. 2011. "Dictators and Their Viziers: Endogenizing The Loyalty-Competence Trade-off." *Journal of the European Economic Association* 9(5):903–930.

Eisenstadt, Shumuel N. and Luis Roniger. 1984. *Patrons, Clients and Friends: Interpersonal Relations and the Structure of Trust in Society*. Themes in the Social Sciences Cambridge University Press.
URL: *https://books.google.com/books?id=NWU-vE3SE9oC*

Escriba-Folch, Abel. 2013. "Accountable for What? Regime Types, Performance, and the Fate of Outgoing Dictators, 1946-2004." *Democratization* 20(1):160–185.

Evans, Peter and James E. Rauch. 1999. "Bureaucracy and Growth: A Cross-National Analysis of the Effects of "Weberian" State Structures on Economic Growth." *American Sociological Review* 64(5):748–765.

Evans, Peter.B. 1995. *Embedded Autonomy: States and Industrial Transformation*. Princeton paperbacks Princeton University Press.

Ezrow, Natasha M. and Erica Frantz. 2011. "State Institutions and The Survival Of Dictatorships." *Journal of International Affairs* 65(1):1–13.

Feng, Junqi. 2010. Zhongxian Ganbu (Cadres from the Zhong County) PhD thesis Peking University.

Fewsmith, Joseph. 2001. *China since Tiananmen: The Politics of Transition*. Cambridge Modern China Series Cambridge University Press.

FlorCruz, Jaime A. 2012. "Checkered End-of-Term Report Card for Hu Jintao.".
URL: *http://www.cnn.com/2012/11/08/world/asia/china-hu-jintao-report-card-florcruz/*

Folsom, Kenneth E. 1968. *Friends, Guests, and Colleagues: the Mu-Fu System in the Late Ch'ing Period*. University of California Press.
URL: *https://books.google.com/books?id=4_NwAAAAMAAJ*

Forsythe, Michael. 2016. "Q. and A.: Carl Minzner on the Shift to Personalized Rule in China." *New York Times* .
URL: *http://www.nytimes.com/2016/05/25/world/asia/china-carl-minzner-xi-jinping.html?_r=0*

Frye, Timothy and Andrei Shleifer. 1997. "The Invisible Hand and the Grabbing Hand." *American Economic Review Papers and Proceedings* 87(2):354–358.

Fukuyama, Francis. 2012. "China and East Asia Democracy: The Patterns of History." *Journal of Democracy* 23(1):14–26.

Fukuyama, Francis. 2013. "What Is Governance?" *Governance* 26(3):347–368.

Gandhi, Jennifer. 2008. *Political Institutions under Dictatorship*. Cambridge University Press.

Ganev, Venelin.I. 2013. *Preying on the State: The Transformation of Bulgaria after 1989*. Cornell University Press.

Gao, Yu and Yanqin Ouyang. 2014. "Top Political Advisor Investigated for Graft: Highest-Ranking Target in Two-Year-Old Crackdown." *Caixin Online* .
URL: *http://english.caixin.com/2014-06-16/100691180.html*

Geddes, Barbara. 1994. *Politician's Dilemma: Building State Capacity in Latin America*. California Series on Social Choice and Political Economy University of California Press.

Geddes, Barbara. 1999. "What Do We Know About Democratization After Twenty Years?" *Annual Review of Political Science* 2(1):115–144.

Geddes, Barbara. 2003. *Paradigms and Sand Castles: Theory Building and Research Design in Comparative Politics*. Analytical perspectives on politics University of Michigan Press.

Gehlbach, Scott and Philip Keefer. 2012. "Private Investment and the Institutionalization of Collective Action in Autocracies: Ruling Parties and Legislatures." *The Journal of Politics* 74:621–635.

Ghanem, Dalia and Junjie Zhang. 2014. ""Effortless Perfection": Do Chinese cities manipulate air pollution data?" *Journal of Environmental Economics and Management* 68(2):203–225.

Gordon, Sanford C. 2009. "Assessing Partisan Bias in Federal Public Corruption Prosecutions." *American Political Science Review* 103:534–554.

Gordon, Sanford C. and Gregory A. Huber. 2009. "The Political Economy of Prosecution." *Annual Review of Law and Social Science* 5(1):135–156.

Granovetter, Mark S. 1973. "The Strength of Weak Ties." *American Journal of Sociology* 78(6):pp. 1360–1380.

Gunten, Tod Van. 2015. "Brokers, Clients and Elite Political Networks in Mexico." Working Paper.

Guo, Yong. 2008. "Corruption in Transitional China: An Empirical Analysis." *The China Quarterly* (194):349–364.

Ha, Yong-Chool and Myung-koo Kang. 2011. "Creating a Capable Bureaucracy With Loyalists: The Internal Dynamics of the South Korean Developmental State, 1948-1979." *Comparative Political Studies* 44(1):78–108.

Helmke, Gretchen and Steven Levitsky. 2004. "Informal Institutions and Comparative Politics: A Research Agenda." *Perspectives on Politics* 2(4):725–740.

Henderson, J. Vernon, Adam Storeygard and David N. Weil. 2012. "Measuring Economic Growth from Outer Space." *American Economic Review* 102(2):994–1028.

Hillman, Ben. 2014. *Patronage and Power: Local State Networks and Party-State Resilience in Rural China*. Stanford University Press.

Hollyer, James R. and Leonard Wantchekon. 2014. "Corruption and Ideology in Autocracies." *Journal of Law, Economics, and Organization* . Online Publication.

Holmstrom, Bengt. 1999. "Managerial Incentive Problems: A Dynamic Perspective." *The Review of Economic Studies* 66(1):169–182.

Hu, Angang. 2014. *China's Collective Presidency*. SpringerLink : Bücher Springer Berlin Heidelberg.

Huang, Jing. 2000. *Factionalism in Chinese Communist Politics*. Cambridge Modern China Series Cambridge University Press.

Huntington, Samuel.P. 1968. *Political Order in Changing Societies*. Henry L. Stimson lectures, Yale University Yale University Press.

Hwang, Kelley K. 1996. "South Korea's Bureaucracy and the Informal Politics of Economic Development." *Asian Survey* 36(3):306–319.

Imai, Kosuke, Luke Keele, Dustin Tingley and Teppei Yamamoto. 2011. "Unpacking the Black Box of Causality: Learning about Causal Mechanisms from Experimental and Observational Studies." *American Political Science Review* 105:765–789.

Imbens, Guido and Karthik Kalyanaraman. 2012. "Optimal Bandwidth Choice for the Regression Discontinuity Estimator." *The Review of Economic Studies* 79(3):933–959.

Jia, Ruixue. 2016. "Pollution for Promotion." Working Paper, UCSD.

Jia, Ruixue, Masayuki Kudamatsu and David Seim. 2015. "Political Selection In China: the Complementary Roles of Connections and Performance." *Journal of the European Economic Association* pp. 631–668.

Jiang, Junyan and Dali L. Yang. 2016. "Lying or Believing? Measuring Preference Falsification From a Political Purge in China." *Comparative Political Studies* 49(5):600–634.

Johnson, Chalmers. 1982. *Miti and the Japanese Miracle: The Growth of Industrial Policy : 1925-1975*. Stanford University Press.

Keller, Franziska B. 2015. Coalition Formation on Networks PhD thesis New York University.

Keller, Franziska Barbara. 2016. "Moving beyond Factions: Using Social Network Analysis to Uncover Patronage Networks among Chinese Elites." *Journal of East Asian Studies* 16:17–41.

Knack, Stephen and Philip Keefer. 1997. "Does Social Capital Have an Economic Payoff? A Cross-Country Investigation." *The Quarterly Journal of Economics* 112(4):1251–1288.

Knowles, John, Nicola Persico and Petra Todd. 2001. "Racial Bias in Motor Vehicle Searches: Theory and Evidence." *Journal of Political Economy* 109(1):203–229.

Kokkonen, Andrej and Anders Sundell. 2014. "Delivering Stability: Primogeniture and Autocratic Survival in European Monarchies 1000-1800." *American Political Science Review* 108:438–453.

Kou, Chien-wen and Wen-Hsuan Tsai. 2014. ""Sprinting with Small Steps" Towards Promotion: Solutions for the Age Dilemma in the CCP Cadre Appointment System." *The China Journal* (71):pp. 153–171.

Kracke, Edward.A. 1953. *Civil Service in Early Sung China, 960-1067, with Particular Emphasis on the Development of Controlled Sponsorship to Foster Administrative Responsibility*. Harvard University Press.

Landry, Pierre F. 2008. *Decentralized Authoritarianism in China*. Cambridge University Press.

Landry, Pierre F., Xiaobo Lü and Haiyan Duan. 2015. "Does Performance Matter? Evaluating Political Selection along the Chinese Administrative Ladder.". Working Paper.

Lazear, Edward P and Sherwin Rosen. 1981. "Rank-Order Tournaments as Optimum Labor Contracts." *The Journal of Political Economy* 89(5):841–864.

Levelt, P. F., G. H. J. van den Oord, M. R. Dobber, A. Malkki, Huib Visser, Johan de Vries, P. Stammes, J. O. V. Lundell and H. Saari. 2006. "The Ozone Monitoring Instrument." *IEEE Transactions on Geoscience and Remote Sensing* 44(5):1093–1101.

Li, Can, Joanna Joiner, Nickolay A. Krotkov and Pawan K. Bhartia. 2013. "A fast and sensitive new satellite SO2 retrieval algorithm based on principal component analysis: Application to the ozone monitoring instrument." *Geophysical Research Letters* 40(23):6314–6318.

Li, Cheng. 2007*a*. "China'sTwo Li's: Frontrunners in the Race to Succeed Hu Jintao." *China Leadership Monitor* .

Li, Cheng. 2007*b*. "Was the Shanghai Gang Shanghaied?" *China Leadership Monitor* No. 20.

Li, Cheng. 2012. "The End of the CCP's Resilient Authoritarianism? A Tripartite Assessment of Shifting Power in China." *The China Quarterly* 211:595–623.

Li, Cheng. 2014*a*. "Xi Jinping's Inner Circle: (Part 1) The Shaanxi Gang." *China Leadership Monitor* (43).

Li, Cheng. 2014*b*. "Xi Jinping's Inner Circle: (Part 2) Friends from Xi's Formative Years." *China Leadership Monitor* .

Li, Cheng. 2014*c*. "Xi Jinping's Inner Circle: (Part 3) Political Protégés from the Provinces." *China Leadership Monitor* .

Li, Hongbin and Li-An Zhou. 2005. "Political Turnover and Economic Performance: The Incentive Role of Personnel Control in China." *Journal of Public Economics* 89(9-10):1743–62.

Li, Junping. 2001. *Chunqiu Zhanguo Menke Wenhua Yu Qinhai Zhiyong Wenyi Guan (The Retainer Culture during the Spring and Autumn Period)*. Zhongguo Shehui Kexue Chubanshe (China Social Sciences Press).

Li, Quan and Rafael Reuveny. 2006. "Democracy and Environmental Degradation." *International Studies Quarterly* 50(4):935–956.

List, John A. and Daniel M. Sturm. 2006. "How Elections Matter: Theory and Evidence from Environmental Policy." *The Quarterly Journal of Economics* 121(4):1249–1281.

Liu, Alan P. L. 1983. "The Politics of Corruption in the People's Republic of China." *The American Political Science Review* 77(3):pp. 602–623.

Liu, Irene Jay and Chris Ip. 2013. "Analysis: China's next inner circle.".
URL: *http://www.reuters.com/article/us-china-factions-idUSBRE9220GJ20130304*

Lorentzen, Peter. 2014. "China's Strategic Censorship." *American Journal of Political Science* 58(2):402–414.

Lorentzen, Peter, Pierre Landry and John Yasuda. 2014. "Undermining Authoritarian Innovation: The Power of China's Industrial Giants." *The Journal of Politics* 76:182–194.

Lü, Xiaobo and Pierre F. Landry. 2014. "Show Me the Money: Interjurisdiction Political Competition and Fiscal Extraction in China." *American Political Science Review* 108:706–722.

Lust-Okar, Ellen. 2006. "Elections under authoritarianism: Preliminary lessons from Jordan." *Democratization* 13(3):456–471.

MacFarquhar, Roderick. and Michael. Schoenhals. 2006. *Mao's Last Revolution*. Belknap Press of Harvard University Press.

Magaloni, Beatriz. 2006. *Voting for Autocracy: Hegemonic Party Survival and Its Demise in Mexico*. Cambridge Studies in Comparative Politics Cambridge University Press.

Magaloni, Beatriz. 2008. "Credible Power-Sharing and the Longevity of Authoritarian Rule." *Comparative Political Studies* 41(4-5):715–741.

Malesky, Edmund, Paul Schuler and Anh Tran. 2012. "The Adverse Effects of Sunshine: A Field Experiment on Legislative Transparency in an Authoritarian Assembly." *American Political Science Review* 106:762–786.

Manion, Melanie. 2004. *Corruption by Design: Building Clean Government in Mainland China and Hong Kong*. Cambridge, MA: Harvard University Press.

Maskin, Eric, Yingyi Qian and Chenggang Xu. 2000. "Incentives, information, and organizational form." *The Review of Economic Studies* 67(2):359–378.

Miller, Alice L. 2008. Institutionalization and the Changing Dynamics of Chinese Leadership Politics. In *China's Changing Political Landscape: Prospect for Democracy*, ed. Cheng Li. The Brookings Institution.

Montinola, Gabriella, Yingyi Qian and Barry R. Weingast. 1996. "Federalism, Chinese Style: The Political Basis of Economic Success." *World Politics* 48(1):50–81.

Murong, Xuecun. 2015. "Xi's Selective Punishment." *New York Times* .
  URL: *http://www.nytimes.com/2015/01/17/opinion/murong-xuecun-xis-selective-punishment.html*

Nalepa, Monika. 2010. *Skeletons in the Closet: Transitional Justice in Post-Communist Europe*. Cambridge Studies in Comparative Politics Cambridge University Press.

Nathan, Andrew. 2015. "The Problem With the China Model.".
  URL: *https://www.chinafile.com/reporting-opinion/viewpoint/problem-china-model*

Nathan, Andrew J. 1973. "A Factionalism Model for CCP Politics." *The China Quarterly* (53):pp. 34–66.

Nathan, Andrew J. 2003. "Authoritarian Resilience." *Journal of Democracy* 14(1):6–17.

Nathan, Andrew J. and Bruce Gilley. 2003. *China's New Rulers: The Secret Files*. New York Review book New York Review of Books.

Naughton, Barry.J. and Dali.L. Yang. 2004. *Holding China Together: Diversity and National Integration in the Post-Deng Era*. Cambridge University Press.

Niblo, Stephen.R. 2000. *Mexico in the 1940s: Modernity, Politics, and Corruption*. Rowman & Littlefield.

North, Douglass.C. 1990. *Institutions, Institutional Change and Economic Performance*. Cambridge University Press.

O'Donnell, Guillermo. and Phillipe.C Schmitter. 1986. *Transitions from Authoritarian Rule: Tentative Conclusions about Uncertain Democracies*. Johns Hopkins University Press.

Oi, Jean C. 1992. "Fiscal Reform and the Economic Foundations of Local State Corporatism in China." *World Politics* 45(1):99–126.

Oi, Jean C. 1995. "The Role of the Local State in China's Transitional Economy." *The China Quarterly* (144):1132–1149.

Olson, Mancur. 1993. "Dictatorship, Democracy, and Development." *The American Political Science Review* 87(3):pp. 567–576.

Opper, Sonja, Victor Nee and Stefan Brehm. 2015. "Homophily in the Career Mobility of China's Political Elite." 54:332 – 352.
URL: *http://www.sciencedirect.com/science/article/pii/S0049089X15001593*

Padgett, John F. and Christopher K. Ansell. 1993. "Robust Action and the Rise of the Medici, 1400-1434." *American Journal of Sociology* 98(6):1259–1319.

Padgett, John.F. 2012. The Politics of Communist Economic Reform: Soviet Union and China. In *The Emergence of Organizations and Markets*, ed. John.F. Padgett and Walter.W. Powell. Princeton University Press pp. 267–270.

Panda, Ankit. 2014. "Obama: Xi Jinping Has Consolidated Power Quickly and Comprehensively.".
URL: *http://thediplomat.com/2014/12/obama-xi-jinping-has-consolidated-power-quickly-and-comprehensively*

Pepinsky, Thomas. 2014. "The Institutional Turn in Comparative Authoritarianism." *British Journal of Political Science* 44:631–653.

Persson, Petra and Ekaterina Zhuravskaya. Forthcoming. "The Limits of Career Concerns in Federalism: Evidence from China." *Journal of European Economic Association* .

Putnam, Robert D., Robert Leonardi. and Raffaella Y. Nanetti. 1994. *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton paperbacks Princeton University Press.

Pye, Lucian W. 1981. *The Dynamics of Chinese Politics*. Oelgeschlager, Gunn & Hain.

Qian, Yingyi and Barry R. Weingast. 1997. "Federalism as a Commitment to Reserving Incentives." *Journal of Economic Perspectives* 11(4):83–92.

Qu, Tongzu. 1971. *Han Social Structure*. Han Dynasty China Institute for Comparative and Foreign Area Studies, University of Washington.
URL: *https://books.google.com/books?id=1o7emgEACAAJ*

Quade, Elizabeth A. 2007. "The Logic of Anticorruption Enforcement Campaigns in Contemporary China." *Journal of Contemporary China* 16(50):65–77.

Raftery, Adrian E. 1995. "Bayesian Model Selection in Social Research." *Sociological Methodology* 25:111–163.

Reuter, Ora John and Thomas F. Remington. 2009. "Dominant Party Regimes and the Commitment Problem: The Case of United Russia." *Comparative Political Studies* 42(4):501–526.

Rothstein, Bo. 2014. "The Chinese Paradox of High Growth and Low Quality of Government: The Cadre Organization Meets Max Weber." *Governance* pp. n/a–n/a.

Routledge, Bryan R. and Joachim von Amsberg. 2003. "Social capital and growth." *Journal of Monetary Economics* 50(1):167 – 193.

Sapio, Flora. 2008. "Shuanggui and Extralegal Detention in China." *China Information* 22(1):7–37.

Seligson, Mitchell A. 2002. "The Impact of Corruption on Regime Legitimacy: A Comparative Study of Four Latin American Countries." *Journal of Politics* 64(2):408–433.

Shi, Ting. 2015. "Xi Dismantles the "New Gang of Four" with Probe of Hu's Aide." *Bloomberg Business* .

Shih, Victor. 2004. "Factions Matter: Personal Networks and the Distribution of Bank Loans in China." *Journal of Contemporary China* 13(38):3–19.

Shih, Victor. 2008. ""Nauseating" Displays of Loyalty: Monitoring the Factional Bargain through Ideological Campaigns in China." *The Journal of Politics* 70:1177–1192.

Shih, Victor, Christopher Adolph and Mingxing Liu. 2012. "Getting Ahead in the Communist Party: Explaining the Advancement of Central Committee Members in China." *American Political Science Review* 106:166–187.

Shirk, Susan.L. 1993. *The Political Logic of Economic Reform in China*. California series on social choice and political economy University of California Press.

Shleifer, Andrei and Robert W. Vishny. 1993. "Corruption." *The Quarterly Journal of Economics* 108(3):599–617.

Shleifer, Andrei and Robert W. Vishny. 2002. *The Grabbing Hand: Government Pathologies and Their Cures*. Harvard University Press.

Sima, Qian and Burton Watson. 1993. *Records of the Grand Historian: Qin dynasty*. Research Centre for Translation, Chinese University of Hong Kong.

Singer, Mathew. 2009. BuyingVoters with Dirty Money: The Relationship between Clientelism and Corruption. In *ASPA 2009 Toronto Meeting Paper*.

Smith, Benjamin. 2005. "Life of the Party: The Origins of Regime Breakdown and Persistence under Single-Party Rule." *World Politics* 57:421–451.

South China Morning Post. 2012. "Exclusive: How Crash Cover-up Threatens Career of Hu's Top Aide.".
URL: *http://www.scmp.com/news/china/article/1028489/how-crash-cover-threatens-career-hus-top-aide*

Stern, Rachel E. and Jonathan Hassid. 2012. "Amplifying Silence: Uncertainty and Control Parables in Contemporary China." *Comparative Political Studies* 45(10):1230–1254.

Su, Fubing, Ran Tao, Lu Xi and Ming Li. 2012. "Local Officials' Incentives and China's Economic Growth: Tournament Thesis Reexamined and Alternative Explanatory Framework." *China & World Economy* 20(4):1–18.

Suh, Dae-Sook. 1988. *Kim Il Sung: The North Korean Leader*. Studies of the East Asian Institute Columbia University Press.

Svolik, Milan. 2012. *The Politics of Authoritarian Rule*. Cambridge University Press.

Swamy, Anad, Young Lee, Omar Azfar and Stephen Knack. 1999. "Gender and Corruption." *IRIS Center Working Paper* (232).

Taubman, William. 2004. *Khrushchev: The Man and His Era*. W. W. Norton.

Tien, Hung-mao and Yunhan Zhu. 2000. *China Under Jiang Zemin*. Lynne Rienner Publishers.

Tsai, Kellee S. 2002. *Back-alley Banking: Private Entrepreneurs in China*. Cornell University Press.

Tsai, Lily L. 2007. *Accountability Without Democracy: Solidarity Groups and Public Goods Provision in Rural China*. Cambridge University Press.

Tsai, Wen-Hsuan. 2011. *Zhonggong Zhengzhi Gaige de Luoji: Sichuan Guangdong, Jiangsu de Bijiao (The Logic of CCP's Political Reform: Comparing Sichuan, Guangdong, and Jiangsu)*. Wunan Tushu Chuban Gufenyouxian Gongsi (Wunan Publishing Company).

Van De Walle, Nicholas. 2007. Meet the New Boss, Same as the Old Boss? The Evolution of Political Clientelism in Africa. In *Patrons, Clients and Policies: Patterns of Democratic Accountability and Political Competition*, ed. Herbert Kitschelt and Steven I. Wilkinson. Cambridge University Press pp. 68–83.

Van de Walle, Nicolas. 2001. *African Economies and the Politics of Permanent Crisis, 1979-1999*. Political Economy of Institutions and Decisions Cambridge University Press.

Voice of America. 2012. "Zhengzhiju Changwei Dan Shuang Shu, Jia He Weihe Ye Daobo? (Why Were Jia Qinglin and He Guoqiang against Bo Xilai?).".
URL: *http://www.voachinese.com/content/why-ccp-political-standing-memebers-in-odd-number-20120827/1496266.html.*

Vu, Tuong. 2014. Persistence Amid Decay: The Communist Party of Vietnam at 83. In *Politics in Contemporary Vietnam: Party, State, and Authority Relations*, ed. Jonathan D. London. New York, NY: Palgra pp. 21–41.

Wallace, Jeremy L. 2014. "Juking the Stats? Authoritarian Information Problems in China." *British Journal of Political Science* pp. 1–19.

Wallace, Jeremy L. 2015. "The New Normal: Reform, Information, and China's Anti-Corruption Crusade in Context." Working Paper.

Waltz, Kenneth N. 1964. "The Stability of a Bipolar World." *Daedalus* 93(3):881–909.

Wang, Zhengxu and Anastas Vangeli. 2016. "The Rules and Norms of Leadership Succession in China: From Deng Xiaoping to Xi Jinping and Beyond." *The China Journal* .

Wedeman, Andrew. 2005. "ANticorruption Campaigns and the Intensification of Corruption in China." *Journal of Contemporary China* 14(42):93–116.

Wedeman, Andrew. 2012. *Double paradox: rapid growth and rising corruption in China*. Ithaca: Cornell University Press.

Welsh, Bridget. and Ung-Ho. Chin. 2013. *Awakening: The Abdullah Badawi Years in Malaysia*. Strategic Information and Research Development Centre.

Wen, Jiabao. 2007. Report on the Work of the Government. Technical report.

Whiting, Susan H. 2004. The Cadre Evaluation System at the Grass Roots: The Paradox of Party Rule. In *Holding China Together: Diversity and National Integration in the Post-Deng Era*, ed. Barry J. Naughton and Dali L. Yang. Cambridge University Press.

WikiLeaks. 2006. "Shanghai Party Leader Chen Liangyu Fired in Corruption-Related Probe; Hu's Shot across The Bow.".
URL: *https://www.wikileaks.org/plusd/cables/06BEIJING20360_a.html*

Willerton, John P. 1992. *Patronage and Politics in the USSR*. Cambridge Russian, Soviet and Post-Soviet Studies Cambridge University Press.

Wintrobe, Ronald. 1998. *The Political Economy of Dictatorship*. 1 edition ed. Cambridge, UK; New York, NY: Cambridge University Press.

Wong, Edward. 2015. "Xi Jinping's Inner Circle Offers Cold Shoulder to Western Officials"." *New York Times* .
URL: *http://www.nytimes.com/2015/09/26/world/asia/xi-jinping-china-president-inner-circle-western-officials.html?_r=0.*

Worthington, Ross. 2003. *Governance in Singapore*. RoutledgeCurzon.

Wright, Joseph. 2008. "Do Authoritarian Institutions Constrain? How Legislatures Affect Economic Growth and Investment." *American Journal of Political Science* 52(2):322–343.

Wu, Jing, Yongheng Deng, Jun Huang, Randall Morck and Bernard Yeung. 2013. Incentives and Outcomes: China's Environmental Policy. Working Paper 18754 National Bureau of Economic Research.

Xinhua News. 2009. "Chinese Vice President Holds Talks with Merkel on China-Germany Ties.".
URL: *http://news.xinhuanet.com/english/2009-10/13/content_12219587.htm*

Xu, Chenggang. 2011. "The Fundamental Institutions of China's Reform and Development." *Journal of Economic Literature* 49(4):1076–1151.

Xu, Yiqing and Yang Yao. 2015. "Informal Institutions, Collective Action, and Public Investment in Rural China." *American Political Science Review* 109:371–391.

Xue, Lei. 2015. "Zai Chuanyan Zhong Luoma de Shiwei Shuji (A City Secretary Who Fell amidst Rumors).".
URL: *http://epaper.ynet.com/html/2015-01/06/content_108018.htm?div=0*

Yang, Dali L., Huayu Xu and Ran Tao. 2014. "A Tragedy of the Nomenklatura? Career incentives, political loyalty and political radicalism during China's Great Leap Forward." *Journal of Contemporary China* 23(89):864–883.

Yang, Qijing and Nan Zheng. 2013. "Difang Lingdao Jinsheng Jingzheng Shi Biaochi Sai, Jinbiao Sai, Haishi Zige Sai? (Is Promotion of Local Leaders a Yardstick Competition, a Tournament, or a Qualification Contest?)." *Shijie Jingji* 12:130–156. (in Chinese).

Yuan, Fang. 2012. "Xi To Be 'Weak' President.".
URL: *http://www.rfa.org/english/news/china/xi-jinping-11122012110129.html*

Zhang, Yi. 2016. "Xi warns of Party 'Cabals and Cliques'.".
URL: *http://usa.chinadaily.com.cn/epaper/2016-05/04/content_25061170.htm*

Zhao, Dingxin. 2009*a*. "Mandate of Heaven and Performance Legitimacy in Historical and Contemporary China." *American Behavioral Scientist* 53:416–433.

Zhao, Ziyang. 2009*b*. *Prisoner of the State: The Secret Journal of Premier Zhao Ziyang*. Simon & Schuster.

Zheng, Siqi, Matthew E. Kahn, Weizeng Sun and Danglun Luo. 2013. Incentivizing China's Urban Mayors to Mitigate Pollution Externalities: The Role of the Central Government and Public Environmentalism. Working Paper 18872 National Bureau of Economic Research.

Zheng, Yongnian. 2014. "Fanfu shi Zhongguo Dier ci Zhengzhi Geming (Anticorruption is the Second Political Revolution in China)." *Lianhe Zaobao* . in Chinese.
URL: *http://www.zaobao.com.sg/forum/expert/zheng-yong-nian/story20140812-376523*

Zheng, Yongnian. 2015. The Institutionalization of the Communist Party and the Party System in China. In *Party System Institutionalization in Asia: Democracies, Autocracies, and the Shadows of the Past*, ed. Allen Hicken and Erik Martinez Kuhonta. Cambridge University Press pp. 162–188.

Zheng, Yongnian and Lance L. P. Gore. 2014. *China Entering the Xi Jinping Era*. China Policy Series Taylor & Francis.
URL: *https://books.google.com/books?id=_pSLBQAAQBAJ*