UC Berkeley

UC Berkeley Electronic Theses and Dissertations

Title

Constitutional Environment and Entrepreneurship: An Empirical Study

Permalink

https://escholarship.org/uc/item/5178p22t

Author

Zhang, Wei

Publication Date

2012

Peer reviewed|Thesis/dissertation

Constitutional Environment and Entrepreneurship: An Empirical Study

by

Wei Zhang

A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Philosophy

in

Jurisprudence and Social Policy

in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:

Professor Robert D. Cooter, Chair Professor Daniel L. Rubinfeld Professor Andrew T. Guzman Professor Peter Lorentzen

Spring 2012

© Wei Zhang

All Rights Reserved, 2012

Abstract

Constitutional Environment and Entrepreneurship: An Empirical Study

by

Wei Zhang

Doctor of Philosophy in Jurisprudence and Social Policy

University of California, Berkeley

Professor Robert D. Cooter, Chair

Built on the theories about talent competition between rent-seeking and entrepreneurship, and the theories about constitutional environment and rent-seeking, this dissertation explores empirically the effects of a country's constitutional settings on entrepreneurship, in terms of the quantity of entrepreneurs and the quality of their performance. Both the de facto and de jure constitutional environments are studied. In particular, with respect to the de facto constitutional environment, I considered the property rights protection, decentralization, and the factors suggested by the "selectorate theory". In relation to the de jure constitutional environment, I focused on six aspects including electoral rules, form of government, federalism, property rights protection, judicial independence and antidiscrimination provisions. Three indexes were constructed to measure the de jure property rights protection, judicial independence and antidiscrimination provisions, using the data set provided by the Comparative Constitution Project.

The empirical study first shows that the quantity of entrepreneurs is inversely correlated with the quality of entrepreneurship in a country. If entrepreneurship does serve as the engine of economic growth, it is perhaps the quality, rather than quantity, that matters. This study then demonstrates that the de facto property rights protection is associated negatively with the quantity of entrepreneurs, but positively with the quality of entrepreneurship. The effects of the two key factors of the selectorate theory, the size of the winning coalition and the ratio of this size to the size of the selectorate, also appear to be compatible with what the theory is to predict. On the other hand, neither fiscal nor political decentralization is found to significantly affect entrepreneurship. Among the de jure constitutional features, two have significant influence on entrepreneurship. First, the constitutional design of judicial independence has a negative effect on the quantity of entrepreneurs, but a positive one on the quality of their performance. Second, majoritarian electoral rules, compared with non-majoritarian rules, have a negative effect on the quality of entrepreneurship. In contrast, the presumed effects of the other three

formal constitutional attributes, federalism, presidentialism and property rights protection, cannot be ascertained.

Apart from the cross-country study, I also conducted a detailed research on China. Entrepreneurship in China is a case of entrepreneurial development in an authoritarian state lack of secure property rights and the rule of law, hence afflicted with profuse rent-seeking activities. Under these circumstances, entrepreneurship hinges on both the rent-seeking and the entrepreneurial abilities. Drawing on the private enterprise surveys, I found that, in China, the politically connected were systematically advantaged in terms of bank finance, entry to regulated industries and judicial treatment, when they plunged into the business world. The Chinese case also indicates that, when entrepreneurs cannot trust the commitment made by the state in the constitution, they will be eager to scoop profits as soon as possible and exit swiftly with accumulated wealth.

Finally, this dissertation concludes by suggesting that a healthy development of entrepreneurship should be sustainable rather than aiming merely at quick money and instant success. It should allow all talented people to reach their full potentials, rather than keep the politically disconnected away from resources needed to make the best use of their potentials. Above all, it wants a constitutional environment with reliable property rights and equal access to opportunities, neither of which is seen in today's China.

Table of Contents

Chapter	1 Introduction and Overview	1
1.1	Entrepreneurship and Economic Growth	1
1.2	Economic Nature of Constitutional Environment	2
1.3	Which Aspects of Constitutional Environment?	4
1.4	Overview of This Research	6
Chapter	Theories and Predictions	8
2.1	Rent-seeking and Entrepreneurship	8
2.1.1	Exogenous Theories	8
2.1.2	Endogenous Theories	10
2.2	Constitutional Environment and Rent-seeking	11
2.2.1	De Facto Constitutional Features	11
2.2.2	De Jure Constitutional Features	14
2.3	Predictions	22
Chapter	23 Entrepreneurship Measures and Its Determinants	25
3.1	Defining Entrepreneurship	25
3.2	Measuring Entrepreneurship	27
3.3	Determinants of Entrepreneurship	30
3.3.1	Culture	31
3.3.2	Geography	31
3.3.3	Level of Economic Development	32
3.3.4	Human Capital	32
3.3.5	Age of Population	33
3.3.6	Vitality of Capital Market	33
3.3.7	Competitiveness of Credit Market	34
3.3.8	Age of Democracy	34
Chapter	4 Constitutional Environment Measures	41
4.1	De Facto Constitutional Environment Measures	41
4.1.1	Property Rights Protection	41
4.1.2	De Facto Federalism	42
4.1.3	Selectorate and Winning Coalition Sizes	43
4.2	De Jure Constitutional Environment Measures	44
4.2.1	Electoral System	45
4.2.2	Form of Government	47
4.2.3	Federalism	51
4.2.4	Property Rights Protection	53

4.2.5	Judicial Independence	54
4.2.6	Antidiscrimination Provisions	59
Chapte	r 5 Cross-Sectional Study: Basic Methods	62
5.1	Linear Regression Model and Conditional Independence Assumption	62
5.2	Which Variables to Control?	63
5.3	Propensity Score Matching	67
Chapte	r 6 Results of the Study	69
6.1	De Facto Constitutional Environment and Entrepreneurship	69
6.1.1	De Facto Property Rights Protection	69
6.1.2	De Facto Federalism	74
6.1.3	Factors in the Selectorate Theory	78
6.2	De Jure Constitutional Environment and Entrepreneurship	81
6.2.1	Entrepreneurship and the Five Rent-seeking Related Aspects	81
6.2.2	Entrepreneurship and Antidiscrimination Provisions	102
6.3	Summary	104
Chapte	r 7 Discussion About the Results	107
7.1	The Negative Correlation Between the Number of Entrepreneurs	
	and the Institutional Quality	107
7.2	The Impact of Electoral Rules	109
7.3	The Relevance of Judicial Independence and	
	the Irrelevance of Property Rights Protection	111
7.4	The Irrelevance of Form of Government and Federalism	117
Chapte	r 8 A Case Study on China	121
8.1	The Constitutional Environment in China	121
8.1.1	The PRC Constitution	121
8.1.2	Other Aspects	132
8.1.3	Summary	145
8.2	The Pattern of Entrepreneurship in China	148
8.2.1	Political Connection and Entrepreneurship	149
8.2.2	Shortsighted Developing Strategies	182
8.2.3	Summary	188
Chapte	r 9 Conclusion	192
Referei	nces	196
Append	Appendix: Coding Rules	

Constitutional Environment and Entrepreneurship:

An Empirical Study

Chapter 1 Introduction and Overview

1.1 Entrepreneurship and Economic Growth

In his masterpiece, Schumpeter (1934), Schumpeter regarded entrepreneurship as the principal driving force of economic growth. As he put it clearly:

The slow and continuous increase in time of the national supply of productive means and of savings is obviously an important factor in explaining the course of economic history through the centuries, but it is completely overshadowed by the fact that development consists primarily in employing existing resources in a different way, in doing new things with them, irrespective of whether those resources increase or not (Schumpeter 1934: 68).

In fact, Schumpeter believed that development itself should be defined by "the carrying out of new combinations" (Schumpeter 1934: 66). Naturally, then, those who are responsible for doing new things or doing things in new ways must be playing the central role in economic development, whose importance even outweighs that of incremental savings or investment. Schumpeter went on to suggest that entrepreneurs were these key figures, and that their entrepreneurial actions displaced old products and production processes, which would be rapidly imitated by competitors. New equilibrium is thus created through these cycles of breakthroughs and imitations. Thus, the Schumpeterian "creative destruction" process improves the technology qualitatively, serving as the engine of economic growth.

Since 1990s entrepreneurship has increasingly moved to the forefront of research in economic growth. There's a bulk of literature that proposes and testifies the significance of entrepreneurship on a nation's long-run economic growth that builds on Schumpeter's classical treatment of this topic. For example, Murphy *et al.* (1991) formally analyzed the effect on development as talents are allocated away from entrepreneurial activities. Acemoglu *et al.* (2006) argues formally that the selection of high-skill entrepreneurs is especially important for an innovation-driven growth. Recent years have also seen empirical support for the contributory part of entrepreneurship to economic growth. Audretsch & Thurik (2001) stressed the importance of entrepreneurship as a mechanism for knowledge spillovers that promotes the long-run growth of the entire economy. Based on data from OECD countries, they also found that increases in entrepreneurial activities result in higher subsequent growth rates. Haltiwanger (2006) reports substantial contribution to overall industry productivity

growth from entrepreneurial entry.¹ Some researchers emphasized in particular the pivotal importance of entrepreneurship in transitive economies with respect to promoting competition and upgrading productivity (e.g. McMillan & Woodruff 2002). The publication of Baumol *et al.* (2007) laid down another milestone in this line of research. The authors posit unequivocally that entrepreneurship should be placed at the center of studies on economic growth. For economies at or near the frontier, the essential ingredients to maximize growth are a set of institutional apparatuses facilitating the emergence of entrepreneurs and ensuring the continuous motivation of entrepreneurial actions.

My study is obviously inspired by the acclaimed significance of entrepreneurship on economic growth, though a detailed theoretical or empirical exploration into the relationship between entrepreneurship and growth is far beyond the scope of this project. Instead, I will focus on the potential effects of institutional setting, in particular the constitutional environment, on the development of entrepreneurship. In other words, while the constructive part of entrepreneurship in economic growth is underlying the motivation and design of my research, it is not a direct inquiry into the specifics of this correlation. However, if a robust entrepreneurial development does contribute to the economic growth, a better understanding of the relationship between constitutional environment and entrepreneurship will certainly enrich our understanding of the institutional and legal impacts on economic growth.

1.2 Economic Nature of Constitutional Environment

According to S.E. Finer (1979: 15), constitutions are "codes of rules which aspire to regulate the allocation of functions, powers and duties among the various agencies and offices of government, and define the relationship between these and the public". Put differently, a constitution is a legal document that 'sets forth the fundamental powers, duties, and structure of the government" (Posner 2003: 649). It specifies the basic relationship between sovereignty and citizens. Although the specific topics included vary widely from one constitution to another,² the vast majority of constitutions contain two general categories of provisions, one for the distribution of power among governmental institutions, the other for certain types of basic individual rights. democracies under the rule of law, the formal document largely reflects the actual operation of the government, while in authoritarian states it is often created as a decoration boasting the legitimacy of the regime. However, from a functional perspective, even if in the latter group of countries, the basic setting still exists in terms of the organization and power structure of government, so does the fundamental condition of individual rights. The main interest of the cross-county study in this research rests on

¹ But there is also opposite evidence, e.g. Blanchflower (2000). For a brief review of the literature, see Parker (2009).

² See Elkins *et al.* (2009) for illustration of the varying scope of formal constitutions.

democracies, but I also attempt to probe into the relationship between basic institutional settings and entrepreneurship in authoritarian states, especially in the case study part. Therefore, I choose the phrase "constitutional environment" to encompass the broad idea of primary framework of governmental formation, operation, and rights of citizens, no matter whether this framework conforms to or deviates from the formal constitutions.

Constitutional environment laid down the basic rules of the game in which people choose their behaviors and interact with each other. Above all, it determines the public sector's domain of influence over private activities. It is within this setting that production and exchange occur. The constitutional environment influences the political outcomes such as the number of political parties, incidence of coalition governments or frequency of governmental crises. These political outcomes will be translated into economic policies, and, eventually, affect the economic outcomes as those who obtain power through the political process attempt to push the nation closer to their ideal shape. Hence, constitutional environment is not only relevant but may even systematically formulate the economic outcomes (Persson & Tabellini 2003).

The fundamental rules of the game can affect a nation's economic performance from one particular aspect – by providing individuals and groups with different incentives to engage in rent-seeking – and this incentive, as discussed below, are considered as a direct determinant of entrepreneurial development. Rent-seeking is a redistributive game misallocating and depleting valuable resources. As rent-seeking intensifies in a society, its economic pie shrinks. The constitutional environment is of special importance to rent-seeking incentives at least for the following three reasons. First, as the highest law of the state, the constitution allocates basic powers to different government branches at different levels, and, more importantly, defines the fundamental rights of citizens, thus delineating the boundary between the public and the private sectors (Cooter 2000). as a blurry definition of property rights generates rents by placing valuable resources in the public domain, vaguely divided governmental powers encourage contests for rents among duplicative authorities, and weakly bounded public sector promotes rent-seeking by encroaching upon private opportunities and resources. Second, usually the onerous procedural requirements for amending a constitution make it the most entrenched law of a This unique feature of constitutions makes it possible to remove some pivotal decisions from the ordinary political process, and eliminate the chance to seek rents on certain vital entitlements. As Judge Posner points out, "a supermajoritarian constitutional provision confines legislative discretion to matters that do not matter all that much; the stakes are not large enough to evoke a disproportionate expenditure of resources on redistributing wealth or utility" (Poser, 1987: 9).³ This implies that, other things being equal, for those countries not anchoring the basic governmental structures or

_

³ However, Judge Posner also cautions us that resources deflected by the constitution from investment in rent-seeking with respect to fundamental institutional changes may nevertheless be redirected into efforts to obtain "ordinary" legislative redistributions rather than into productive activities.

pivotal civil rights in rigid constitutional rules, rent-seeking can become a more serious concern. Finally, an enforceable constitution trumps all other laws inconsistent with its stipulations. Accordingly, the state is able to make credible commitments to its citizens in such a constitution, which expels the uncertainty in the fundamental structure of the nation and extends the time horizon of people's choices (Brennan & Buchanan 1985). While productive investments usually require a long-run strategy, redistributive efforts are more likely to yield gains in the short run. Thus, a shortened time horizon works in the benefit of rent-seeking, whereas reliable constitutional commitments help tip the balance to the opposite side. In brief, the constitutional environment can bear heavily on the extent of rent-seeking within a country.

1.3 Which Aspects of Constitutional Environment?

A general inquiry of the effects of constitutional environment on entrepreneurship is, of course, too wide and volatile for a dissertation research. It is necessary to narrow down the scope to a few features before I can actually operationalize the research.

The first and probably the most fundamental difference in governmental structure in the modern world is whether the regime is organized and operating on the basis of democratic choice. In democracies, voting serves as an essential control of government performance, though probably at varying degrees. It mobilizes open and substantive competitions among politicians and political parties. Authoritarian governments, on the other hand, lack such a choice-based control. There might be open competitions in authoritarian states, but usually these competitions are no more than bandwagon performances. More substantive competitions can also exist in these states, but they tend to be going on under the table, and success or failure will not hinge upon the popular The relationship between democracy and economic performance has long been a major focus of theoretical and empirical studies in both political science and economics. For my current research, however, the democratic/authoritarian categorization serves mainly as a starting point to develop a strategy for the empirical study. As it is reasonable to believe that, by and large, the formal rules will be complied with only in democratic states, sticking to the constitutional rules in book will not generate a good of the relationship between environment understanding constitutional entrepreneurship in non-democratic countries. Therefore, the basic strategy for this empirical study is to separate democratic states from authoritarian ones, and employ the indexes of de jure constitutional features exclusively to the former.

As a quick note, it may be useful to emphasize that the distinction between de jure and de facto is in effect equivalent to the difference between formal and informal, or that between law in book and law in action. Another categorization of constitutions distinguishes the capital-C Constitutions from the small-c constitutions (e.g. Brennan & Pardo 1991). The former is reserved for the particular written legal document entitled as

"Constitution" or "Basic Law" of a nation, while the later refers to the broader constitutional order. Though related, this bifurcation is not the same as the de jure vs. de facto distinction used in this study. The de jure constitutional environment can include rules in the official Constitution, as well as those in other laws, whether codified or not, that stipulate the basic formation and operation of government and its relationship with the citizens. In other words, de jure constitutional environment is concerned about the rules of official, rather than practical, authority, so it may encompass rules in both capital-C Constitutions and small-c constitutions. On the other hand, de facto constitutional environment does not care about formal authority, but focuses on actual functioning. It may or may not conform to either the capital-C Constitution or the small-c constitution.

One major task of my research is to look into the effects of formal constitutional settings on entrepreneurship in democracies. In particular, six formal aspects will be considered regarding their relationships with entrepreneurship: the form of government, the electoral rules, federalism, judicial independence, constitutional protection of property rights, and constitutional protection against discrimination. In addition, the quantitative study will also investigate the effects of another set of de facto institutional features on entrepreneurial performance across democratic and authoritarian countries. This set of indicators includes: de facto security of property rights, decentralization of power or de facto federalism, and the two characteristics of power structure suggested by the "selectorate theory", namely, the size of the "winning coalition" and its ratio to the size of the "selectorate" (Bueno de Mesquita *et al.* 2003).

Admittedly, when stretching the concept of constitutional environment beyond the formal legal rules, the specificity of constitutional institutions will be overshadowed by the generality of political institutions. But when we look beyond constitutional democracies, incorporation of de facto elements becomes indispensable, and hence, the submergence of legal dimension into the broader political dimension of institutions seems inevitable. After all, even the formal constitution is part of a nation's general political institution. Probably, what should be done is not to underscore the distinctiveness of the constitutional setting when there is none, but to organize the research around its central interest, i.e. the primary framework of governmental formation, operation, and individual rights, and survey the relevant and feasible aspects accordingly.

The main reason for choosing the above constitutional attributes is their potential relevance to entrepreneurial development based on the existing theoretical literature. As to be discussed in detail below, institutional settings are believed to affect entrepreneurial selection through their influence on the relative returns between the productive entrepreneurial sector and the redistributive rent-seeking sector. In the last two decades, the study on positive political theories in general and the constitutional political economy in particular has generated a number of predictions about the connection between certain

specific constitutional features and rent-seeking incentives. Electoral rules and legislative rules associated with different forms of government are thought to determine the politicians' opportunity to seek rents by setting forth the representation, transparency, and accountability of the governmental operation. Federalism is believed to motivate subnational competition and enhance the government accountability, both of which should work to curb the political rent-seeking activities. Judicial independence may place another check on politicians' corruptive or redistributive efforts. Constitutional protection of property rights is supposed to solidify the interests of individuals against the encroachment by public power, while the de facto security of property rights is an even more direct measurement of the strength of private parties in a political state. As a priori, it is reasonable to say that better entrenched private rights restrict the chance of redistribution by the public entities. The only aspect of the constitutional environment that may not be closely related to this line of reasoning is the antidiscrimination rules in constitutions. Since discrimination has long been regarded as either a driving or repressing force of entrepreneurship, the antidiscrimination rules may be yet another interesting constitutional design pertaining to entrepreneurial actions.

Apart from theoretical relevance, data availability is of course another criterion in selecting the constitutional features. Thanks to the extensive research in comparative politics and development economics, cross-country data on political institutions and governmental performance have become increasingly abundant. The recent innovative efforts of the Comparative Constitution Project, on the other hand, provide necessary resource for evaluating some of the formal constitutional characteristics. Consequently, the selection of the specific aspects of the constitutional environment comes out of both relevance and feasibility considerations.

1.4 Overview of This Research

This research is composed of a cross-country study and a case study. Below, Chapter 2 reviews the theoretical priors that connect entrepreneurship with constitutional factors. I first introduce the theories on the talent competition between rent-seeking and entrepreneurship, and then discuss how a nation's constitutional environment may affect the intensity of rent-seeking. With respect to the de facto constitutional environment, I consider the property rights protection and factors suggested by the selectorate theory. As for the de jure constitutional environment, I focus on the six aspects mentioned above. Finally in this chapter, I generate several predictions based on the theories.

In Chapter 3, I offer the definition of entrepreneurship, after which I talk about the advantages and disadvantages of the various possible measurements of entrepreneurship. I choose self-employment indicators to measure the quantity and quality of entrepreneurship in this research for their theoretical relevance and practical availability. This chapter also explores the potential determinants of entrepreneurship other than the

constitutional environment including culture, geography, level of development, human capital, age of population, vitality of capital market, competitiveness of credit market, and age of democracy. These factors are candidates for control variables in the statistical study.

Chapter 4 describes the measurements used for the constitutional features of interest. In particular, I will show in this chapter how I have constructed three indexes for the constitutional design of three issues: property rights protection, judicial independence, and antidiscrimination, based on the data provided by the Comparative Constitution Project. As for the other constitutional features, de jure or de facto, I rely mainly on the measurements commonly used in the literature.

Chapter 5 talks about the methodology of the quantitative research. It presents the basic specification of OLS regressions, as well as the propensity score matching. It also discusses the pitfalls in causal studies on the cross-country data, and describes the presumed relationship between dependent, independent and control variables.

Chapter 6 shows the results of the cross-country study, and Chapter 7 tries to explain the observed effects of constitutional environment on entrepreneurship. In particular, it considers the possible reasons for negative impact of majoritarian electoral rules, the positive impact of de jure judicial independence, and the irrelevance of forms of government, federalism and the formal constitutional protection of property rights.

Chapter 8 is a case study on China, an authoritarian state achieving high-speed economic growth in recently years. I first introduce the PRC Constitution and the constitutional environment in China. Then, using micro-level data, I want to uncover two characteristics of China's entrepreneurship: inequality in opportunities and entrepreneurs' shortsighted developing strategies. Both seem to be reasonable consequences of a constitutional setting lack of secure property rights and rule of law.

Finally, Chapter 9 concludes the research by stressing the importance of reliable property rights and equal access to opportunities to a healthy development of entrepreneurship.

Chapter 2 Theories and Predictions

2.1 Rent-seeking and Entrepreneurship

2.1.1 Exogenous Theories

The existing literature conceptualizes the relationship between institutions and entrepreneurship as one about allocation of talent between productive entrepreneurial activities and distributive (or destructive) rent-seeking. Economists noticed the possible link between the socioeconomic environment and entrepreneurial activities decades ago. Krueger (1974), from which the now well-known concept of "rent-seeking" acquires its name, predicts that economic rents generated by market restrictions will shift entrepreneurs away from developing and adopting new technology and prompt them to "devote all their time and resources to capturing windfall rents" (Krueger 1974: 302). Baumol (1990) and Murphy *et al.* (1991) are the earliest studies that explicitly attribute the allocation of talent in a society to the relative payoffs that the society offers to the rent-seeking sector and the entrepreneurial sector. These theories form the basis of my empirical inquires.

Baumol (1990) uses the term "entrepreneur" to refer to talented persons who are ingenious and creative in finding ways to increase their own wealth, power, and prestige. So motivated, these talents should not be expected to be overly concerned with whether an activity to achieve their goals "adds much or little to the social product or, for that matter, even whether it is an actual impediment to production" (Baumol 1990: 898). Therefore, Baumol separates entrepreneurs into three categories – productive, unproductive, and destructive – based on the impact of their activities on our society. Those who making innovative and productive contribution to economic growth are regarded as "productive" whereas the remaining entrepreneurs who engage themselves in rent-seeking or criminal activities are viewed as "unproductive" or "destructive". Entrepreneurial activities are driven by rewards, and the basic rules of a society, most importantly the prevailing laws and legal procedures, determine the rewards of various activities. Consequently, he hypothesizes that "at least one of the prime determinants of entrepreneurial behavior at any particular time and place is the prevailing rules of the game that govern the payoff of one entrepreneurial activity relative to another" (Baumol 1990: 898), and that "(E)ntrepreneurial behavior changes direction from one economy to another in a manner that corresponds to the variations in the rule of the game" (Baumol 1990: 899). The allocation of entrepreneurship among different activities, Baumol also suggests, can profoundly affect the innovativeness and dissemination of technology of the economy. Using historical evidence from ancient Rome, China, and the Middle Age and Renaissance Europe, he finally posits that it is much easier to achieve the objective of reallocating entrepreneurial effort through changes in the rules that determine relative rewards than via modification of the goals of entrepreneurs themselves.

While Baumol's theory is, by and large, suggestive and intuitive, Murphy *et al.* (1991) delves more deeply into the channels through which the institutional setting of a society can determine the flow of its talents between entrepreneurial and rent-seeking activities. They point out that the rewards of an occupation to talent depend on three elements: market size, firm size, and the compensation contract. Market size determines the potential amount of return to talented persons; the larger the market, the higher the potential return. Firm size here essentially refers to the extent to which output is subject to diminishing returns to scale. The weaker the effect of diminishing returns to scale on a certain activity, the larger the firm size tends to be for this activity, thus it become more attractive to a person of high ability. The compensation contract decides how much of the quasi rents on their talent from an activity the talented persons can capture. Obviously, the higher the amount they can keep, the more motivated they will be to engage in this activity.

Murphy et al. (1991) shows that the basic rules of a society can affect all these three factors, hence exerting influence on talents' selection between entrepreneurship and rent-seeking. First, according to their explanation, the institutional setting that channels large resources to the public sector opens a big market for "official" rent-seeking, and poorly defined property rights will expand the market for "unofficial" rent-seeking through bribery, theft, or litigation. Second, when the legal and political framework delegates substantial authority to rent-seekers such as government officials or military, "they can expand their operations and collect larger sums unhindered by law or custom" (Murphy et al. 1991: 520). This means rent-seekers are able to run larger "firms". Since poorly defined property rights add to the discretion of government officials (e.g. officials have more discretion which can be used to invite bribes where the entitlement to enter a certain business is vaguely defined), they encourage rent-seeking also in this respect. Finally, the solidity of legal protection awarded to property rights and patents, in particular, outlines the fundamental compensation structure of entrepreneurship. Also, the tax schedule of a country bears directly on the share of returns from productive activities. All these rules determine the compensation contract of entrepreneurial effort. In sum, Murphy et al. (1991) posits that when the institutional setting is shaped in favor of rent-seeking in the above three aspects, talents will be attracted away from entrepreneurship.

Similar to Baumol's (1990) argument, Murphy *et al.* (1991) emphasizes that legal and political institutions play an important role in shaping incentives of talented people to opt for rent-seeking or entrepreneurship. Unlike Baumol (1990), however, Murphy *et al.* (1991) displays a picture of talent allocation delineating not only the number of talents but also the grade of talent attracted into each sector. They present a simple model to describe the choice made by persons of heterogeneous abilities among three activities: entrepreneurship, rent-seeking, and wage earning. In their model, depending on the

elasticity of output with respect to human capital in each sector, the ablest people choose to be rent-seekers or entrepreneurs while the next group goes into the other sector, and the least able ones become wage earners. As discussed below, this model leads to interesting predictions about variation in quantity as well as quality of entrepreneurs under different institutional settings.

2.1.2 Endogenous Theories

The above two studies both regard the institutional setting and thus rewards to rent-seeking and entrepreneurship as exogenous. On the other hand, based on these studies, Acemoglu (1995) and Acemoglu & Verdier (1998) provide more nuanced endogenous theories about allocation of talent.

Acemoglu (1995) points out that "(R)ents that an entrepreneur expects to pay and the marginal profitability of the entrepreneur's investment depend on the number of rent-seekers"; "the extent of rent-seeking activities (the allocation of talent) influences relative rewards" (Acemoglu 1995: 18). He continues to show that, as long as (1) the return to rent-seeking is lower than that to entrepreneurship when there is no rent-seeking, and (2) at some level of economic activity, rent-seeking is more profitable than entrepreneurship, there exist at least three equilibriums of talent allocation.⁴ Of these equilibriums, only the one without rent-seeking assures a higher return to entrepreneurship relative to that of rent-seeking and an equilibrium with less rent-seeking strictly Pareto dominates the one with more rent-seeking. Acemoglu also suggests that the dynamic extension of this endogenous model demonstrates historic dependence of allocation of talent: "if the majority of the current generation choose rent-seeking, the return to entrepreneurs relative to that of rent-seekers will be reduced in future periods and future generations will be induced to choose rent-seeking" (Acemoglu 1995: 27). Therefore, it may be difficult to reverse the adverse effects of misallocation if an economy starts with too much rent-seeking at some point in history.

In Acemoglu & Verdier (1998), a delicate and more complicated model is applied to explore the relationship between the return to rent-seeking and entrepreneurial activity level. As private property rights depend on state protection, rents to the public sector is necessary to secure property rights, which in turn will encourage entrepreneurial investment and raise the rewards to entrepreneurs. Therefore, they argue that (1) there will be an optimal level of property right protection and it is not optimal to enforce all property rights since enforcement is costly, (2) the optimal organization of the society involves rents to public sector employees and misallocation of talent, and (3) higher investment opportunities require a higher level of property rights protection, which means, due to limited investment opportunities in underdeveloped countries, the optimal level of property right protection should also be lower in these countries. Consequently, the

⁴ Existence of multiple equilibriums, given the possibility of rent-seeking, of talent allocation is also suggested in Murphy *et al.* (1993).

correlation between property rights and economic growth may indeed be endogenous as well. Such an endogenous relationship essentially implies that the correlation between the level of entrepreneurship and return to rent-seeking may not be monotonic. Instead, there will be a threshold in public wages under which the public sector is too small to protect property rights and stimulate investment, so the rise in wages of this sector works only to attract talent to the public sector; as the public wages further increase, however, property rights will be strengthened adequately since the wage increase discourages corruption, thus more talented people become entrepreneurs until the property rights protection improves to its full extent; and then the number of entrepreneurs will decrease again due to the continuing increment of public wages.

While the endogenous theories profoundly enrich our understanding of the interaction between rent-seeking and entrepreneurship, a cross-country empirical study based on these theories will be challenging, especially in relation to the non-monotonic model. On the other hand, as acknowledged by Acemoglu himself, the less complicated version of the endogenous theory may well lead to an observable outcome similar to Baumol's hypotheses. ⁵ Consequently, my empirical study is built mainly on the exogenous theories.

2.2 Constitutional Environment and Rent-seeking

Conceivably, constitutional environment may be linked to rent-seeking behaviors in various ways. First, as explained in detail below, political institutions stipulated in constitutions – electoral rules, forms of government and federalist structure – can affect the size of the government and governmental expenditure, the level of political accountability, as well as the extent of political competition, all of which may bear closely on the attractiveness of rent-seeking. Second, constitutional recognition and protection of property rights strengthen the commitment of the sovereignty to shield interference with private property from the state, especially when constitutional amendments are subject to more stringent procedural requirements than other legislations. In addition, property rights protection determines the relative return of rent-seeking. Finally, independence judicial surveillance of law enforcement consolidates people's trust in the institutional stability, and further entrench private property, both of which stimulates long-run productive investment rather than shortsighted redistributive activities.

2.2.1 De facto Constitutional Features

Constitutional environment can be explored from both de facto and de jure perspectives. Since informal practices oftentimes diverge from formal rules, the de facto constitutional setting is obviously crucial to people's occupational choice between

⁵ Acemoglu (1995) is closer to Baumol (1990) than to Murphy *et al.* (1991) in that it also assumes homogenous abilities.

rent-seeking and entrepreneurship, especially in authoritarian countries. Unlike formal provisions in constitutions, the de facto constitutional setting is relevant in authoritarian and democratic states alike. However, two difficulties impede our exploration of the de facto constitutional environment and its impact on economic performance. First, there are relatively few theories explaining how to decompose the actual constitutional setting Second, it is also not easy to identify and measure the across different regime types. informal setting empirically. Consequently, my study on de facto constitutional environment is preliminary, relying on limited data source and possibly immature theories. Among the de facto constitutional features, property rights protection is the most discussed determinant of the severity of rent-seeking in a country. Besides, decentralization, or the de facto federalism, is believed by many to stimulate competition among local government, and competition usually scale down the amount of rents.⁶ Finally, the selectorate theory is of particular relevance to my research. It constructs an analytical model leading to falsifiable hypotheses about prospects for rent-seeking under various regime types, and is also accompanied with a dataset allowing for an exploratory cross-country empirical study.

1) Property Rights Protection

Protection of property rights is now widely recognized as of fundamental importance to economic growth (e.g. North & Thomas 1973; Acemoglu *et al.* 2005). To promote sustainable economic growth, "people who make wealth should keep much of it" (Cooter & Schäffer forthcoming). This general imperative evidently requires reliable property right scheme. Solid protection of property rights works to thwart rent-seeking efforts and promote investment in productive activities.

As reviewed in the previous subsection, insecure property rights attract talent to rent-seeking by expanding the market size for rent-seekers and the size of the firm they can run. Success in redefining property rights brings high rewards in absence of a secure private property regime, which means the wealth available for rent-seekers' grabs grows. Poorly defined property rights also leave more social wealth at the discretion of official rent-seekers like governmental officials so that they are enabled to collect large sums unhindered by law or custom (Murphy *et al.* 1991).

On the other hand, secure property rights result in better investment incentives. Given that entrepreneurship is inherently an investment behavior, the positive impact of property rights protection on entrepreneurial performance appears readily foreseeable. Besley (1995) formalizes the three channels through which secure property rights encourage investment. First, secure property rights keep investors free from expropriation, enabling internalization of investment benefits. Second, better property rights also ensure safe collateral, thus facilitating fund-raising in credit market. This

⁶ Theories about the political and economic consequences of decentralization and federalism are reviewed together in 2.2.2 3).

respect seems particularly important to entrepreneurial investment as elaborated by some other writers. Solid protection of property rights alleviates outside investors' concerns of opportunistic behaviors by entrepreneurial firms (Smith & Ueda 2006), and induces lenders to relax credit constraints (Jappelli et al. 2005). Third, secure property rights enhance possibilities for gains from trade, and investment will be encouraged if it becomes easier for individuals to alienate their property and retrieve investment profits. In addition, some also argue that the insecure property rights incentivize people to discount long-run payoffs excessively and focus on short-run benefits, thus discouraging investment in entrepreneurial projects that promote prosperity over time (Torstensson 1994). Moreover, property rights protection is especially important for entrepreneurs engaging in innovative production characterized by a tremendous discrepancy in developing costs and dissemination costs. Thus, intellectual property rights become a prerequisite for fostering innovative entrepreneurship. Empirical evidence seems to support the general idea that property rights protection propels entrepreneurial investment. For instance, based on a survey of new firms in post-communist countries, Johnson et al. (2002) finds that secure property rights are even more critical to entrepreneurial investment than accessibility to external finance.

As a related issue, a credible commitment from the state to protect contractual rights might also carry weight in generating entrepreneurial activities. In effect, contracts are the primary vehicle to realize the economic value of property rights in market. This being said, researchers noticed long ago that informal relationship or other reputation-based mechanisms could alleviate the problems stemming from weak formal contractual institutions, at least when no endgame issue was involved (Macaulay 1963, Acemoglu & Johnson 2005).

2) The Selectorate Theory

Bueno de Mesquita *et al.* (2003) divides citizens in a polity into three nested groups. The residents, the largest of the three, consist of all the members of the polity. The selectorate is the subgroup of the residents who are endowed with the characteristics institutionally required to choose the government's leadership. The winning coalition is a subset of the selectorate the support of which is both necessary and sufficient to keep the leader in power.

The selectorate theory predicates that the economic performance of a polity is decided by the size of the winning coalition, and its ratio to the size of the selectorate (this ratio is also called the loyalty norm). To secure the support from the winning coalition, the incumbent leader rewards members of this coalition with private goods in addition to public goods shared among all the residents. As the cost of supplying private goods rises proportionately to the size of the winning coalition, when this size enlarges, subject to his budget constraint, the incumbent relies increasingly on public goods as the reward for support, which reduces the advantage of staying in the coalition,

thus motivating members of the current winning coalition to switch support to the challenger if the reward provided by the challenger is more attractive. Since the challenger will face the same budget constraint as the incumbent when he takes office, in polities with large winning coalitions, politicians essentially compete for support over public good provision, whereas in polities with small coalition sizes, they will compete over provision of private goods. This model predicts that as the size of the winning coalition increases, tax rates decreases, rent-seeking diminishes, and the level of corruption also becomes lower.

While the size of the winning coalition determines the extra welfare obtained as a member of the coalition, its ratio to the selectorate size decides the probability to be included in such a winning coalition. When this ratio is small, the likelihood of being included in a challenger's winning coalition is minute in that there are a substantial number of people in the selectorate from whom the challenger can recruit support. Consequently, members of the incumbent's winning coalition will have less incentive to switch their support to the challenger. In other words, members in the incumbent's coalition become more loyal to him when the size of the winning coalition reduces. As the allegiance of the winning coalition is by definition sufficient to keep the incumbent in power, higher loyalty also means the incumbent will be less concerned about the threat of replacement by the challenger. Therefore, it is easier for the incumbent to engage in corruptive practices and take repressive measures to prevent others from reducing his corrupt privileges.

In brief, according to the selectorate theory, big winning coalition, as well as high ratio of the winning coalition size to selectorate size, discourages rent-seeking.

2.2.2 De Jure Constitutional Features

For democracies, formal constitutional rules are more likely to conform to the actual legal and political operations. In these countries, constitutional rules shape political outcomes, which in turn frame up the policy decisions affecting the reward of entrepreneurial actions relative to that of rent-seeking. In this research, I will focus on six specific constitutional attributes, five of which are considered to affect the extent of rent-seeking, and the last one may be associated with entrepreneurship though possibly through other routes.

1) Electoral Rules

The electoral rules in democratic countries are thought to have substantial influence on the level of rent extraction by politicians, the size of government spending and taxation, as well as the expansion of the welfare state programs.

First, different electoral rules can yield different opportunities and incentives for politicians to seek rents, or engage in corruptive practices. Myerson (1993) indicates that proportional representation performs better than majoritarian rules at electing less corruptive political parties to the legislature. He assumes that voters care about both

corruption levels and policy positions of political parties. Under majoritarian rules, voters have to coordinate effectively if they want to ensure that the less corruptive party sharing their policy preference wins the election. Without such coordination, any voter switches his or her vote from a more corruptive party to a less corruptive one will see this switch might be more likely to change the government policy decision from what he or she prefers to the opposite than to reduce the level of government corruption. In contrast, proportional representation does not require strong coordination among voters, so each voter can always vote for the least corruptive party advocating his or her most preferred policies.

On the other hand, however, Persson & Tabellini (2000) predicts that voting on party lists is associated with more rent extraction and higher corruption than voting on individuals because the reelection concern becomes a less effective counterweight to curb the rent extraction motive for politicians when they are held accountable collectively. Since the majoritarian rule rarely requires voting on party lists, it is supposed to bring about lower level of corruption and rent extraction.

Second, electoral rules may influence the size of government spending, and large size of government spending pumps huge amount of resources to the public sector. Murphy *et al.* (1991) points out that such resource movement expands the market size for rent-seekers, which in turn disincentivizes entrepreneurship. At the same time, high taxation used to finance government spending will also lower the return for entrepreneurial activities.

Hallerberg (2004) argues that coalition governments tend to have more difficulty in reigning in cabinet ministers' desire for maximizing the ministry budget size as they belong to different parties and the prime minister or the finance minister cannot use party disciplines to control ministers outside his own party. Consequently, coalition governments are more likely to have greater government spending. Kontopoulos & Perotti (1999) finds empirically that governmental spending increases with the number of coalition parties, and in particular, it increases with the number of ministers in charge of Since coalition governments are more common under the proportional representation system, it is predicted to yield bigger size of government spending. On the other hand, Austen-Smith (2000) suggests that proportional representation with legislative bargaining produces equilibriums with higher taxation than the majority rule with winner-takes-all legislative decision-making. He argues this happens because in the proportional representation system, political parties' behaviors are largely governed by the endogenously identified individual with average employee income, but in the majority rule system, political incentives are shaped by the exogenously identified individual with median income in the electorate.

Third, the volume of redistributive expenditure by the government probably hinges on electoral rules as well. The more redistributive decisions are left to political discretion, and the higher the amount these decisions will redistribute, the greater the chance for rent-seekers. Using Murphy *et al.*'s (1991) analogy again, we may say that the "firm size" that rent-seekers can run expands in these situations. Over the last decade or so, the scholarship on comparative politics has demonstrated that proportional representation is associated with more redistribution.

Rodden (2005) argues that as a product of industrialization in an era when transportation costs were high, the supporters for left-wing parties are concentrated geographically. This geographic concentration makes left-wing parties more likely to win in the proportional representation system in that distribution of legislature seats better reflects underlying electoral support in the proportional representation system. Insofar as left-wing parties are more anxious about redistributive programs, proportional representation will see higher level of redistribution. Iversen & Soskice (2006) draws the same conclusion about electoral rules and redistribution but with a different reasoning. They believe that in the proportional representation system, the median income group tends to form a coalition with the low income group so as to get a bigger share from the This tendency promotes redistribution by increasing the redistributive spending. probability for left-wing parties to have a voice in fiscal policies. Persson & Tabellini (2000) provides still another reason for higher levels of redistribution in the proportional representation system. They hypothesize that in the majoritarian system, legislators will push for public projects with concentrated benefits, while in the proportional representation system legislators are more willing to adopt projects producing broader benefits. To the extent that the latter type of spending is more redistributive, the proportional representation system will generate higher levels of redistribution.

Finally, as a related issue, electoral rules might have impact on the appearance of welfare state, too. Although extensive rent-seeking cannot be immediately inferred from welfare states, the emphasis on equalizing the wealth through redistribution in these states dispirits entrepreneurial as entrepreneurs are commonly motivated by the possibility to collect quasi rents on their talents and accumulate huge wealth (Henrekson 2005). In effect, such redistributive goals facilitate free riding on productive efforts made by talented persons, hence blunting their avidity for entrepreneurship. Furthermore, a large welfare state requires high tax to finance it, which can crowd out private saving needed for start-up finance (Parker 2009: 456). With respect to the connection between electoral systems and the tendency toward welfare states, Huber *et al.* (1993) asserts that the single member majoritarian rule which "disperse political power and offer multiple points of influence on the making and implementation of policy are inimical to welfare state expansion" (Huber *et al.* 1993: 722).

Although most theories will predict a positive relationship between proportional representation and rent-seeking, such effect may as well be undetermined in that proportional representation advances political competition by facilitating entry of small

and new parties, and competition reduces rents.

2) Forms of Government

The comparative political theories also indicate that the forms of government, like electoral rules, will affect the amount of political rents, as well as the size of tax and government spending. As already explained, these factors bear on the return, and consequently degree, of rent-seeking in a polity.

Persson *et al.* (2000) demonstrates that the stronger separation of powers between the president and legislature usually seen in presidential regimes sets back collusion among politicians, thus generating less rents to them, and also lower level of tax and spending. They also argue that in parliamentary regimes, a confidence requirement, meaning the executive needs the support of a majority in the legislature to remain in power, creates stable majorities that vote together for the governmental proposals. Such a stable majority of incumbent legislators, backed by the majority voters, can keep the benefits of spending within the majority, and pass along part of the costs to the minority. The majorities will therefore prefer both high tax and spending.

Comparing the presidential system in US and the typical European parliamentary democracy, Mueller (2002) finds that there are at least three advantages for interest groups to seek rents in Europe, all of which contribute to inflating the size of government and redistribution. These advantages are economies of scale in winning votes through campaign contributions, long-run linkages to political parties, and ideological closeness to parties. Moreover, Huber *et al.* (1993) also suggests that the presidential government, as another political arrangement that disperses political power, is less likely to engender welfare state.

In sum, the limited theoretical research suggests that, compared to presidential governments, parliamentary governments might be more amicable to rent-seeking.

3) Federalism

Federalism, in both the de jure and de facto senses, has long been believed to have effect on economic performance, but existing theories lead to ambiguous conclusions about the effect of federalism on rent-seeking.

On the one hand, combined with mobility of citizens and investors, federal arrangements incentivize subnational governments to compete in governmental performance, for poorly-performing governments encourage citizens and investors to move away, taking with them tax dollars and assets. This is known as "voting with one's feet" (Tiebout 1956). This competition between subnational governments is expected to provide congestible public goods at lower costs (Inman & Rubinfeld 1997), which essentially means fewer rents are dissipated by the public sector for the provision of public services. Federalism is thus linked to smaller, more efficient, and less corruptive governments (Buchanan 1995). Also, federalism is supposed to bring governments closer to voters, which results in greater overall transparency and

accountability (Muller 2006). Less corruption, higher transparency and accountability all work in favor of stronger property rights protection. In addition, Huber *et al.* (1993) lists federalism as an institution inimical to welfare state, together with the majoritarian and presidential regimes. As already explained, smaller size of government and constrained governmental redistribution are unfriendly environments to rent-seekers.

On the other hand, some writers suspect that federalism contributes to corruption. By adding layers of government and expanding areas of shared responsibility, federal structure actually reduces, rather than increases, government accountability (Rodden 2004). The relatively balanced power of central and local officials over some common pool resources can result in serious overextraction for these resources serve essentially as a base of bribery (Schleifer & Vishny 1993). It is also suggested that the increased mobility of people and business under federalism might as well enhance the hardship to control corruptive behaviors as those who committed evil acts can easily move to another locality (Rose-Ackerman 1999). The positive association between federal arrangements and corruption finds some support in empirical research, too (Treisman 2002). With respect to government size, while the local competition theory anticipates smaller government, the so-called "flypaper effect" says that intergovernmental grants in federal states will lead to an expansion of the public sector as a result of fiscal illusion. Recently, Rodden (2003) presents evidence that when funded primarily by autonomous local taxation, decentralization is indeed associated with a smaller public sector. However, fiscal decentralization is associated with larger government when funded by intergovernmental transfers or centrally regulated sub-national taxation. research reveals that the full benefits from federalism will only be obtained when a strong federalist structure exists. Unfortunately, oftentimes this condition does not seem to be satisfied. Rodden suggests that the global trend of decentralization has occurred almost exclusively through increased intergovernmental grants.

In view of these researches, there appears to be no definite a priori expectation about the relationship between federalism and rent-seeking incentives. Some predictions of the federalist structure, such as better property right protection and lower tendency toward welfare state, can be associated negatively with rent-seeking, whereas others, like larger government size and more serious corruption, may bode well for a positive association.

4) De Jure Property Rights Protection

As repeatedly stressed, almost all writers on institutions believe that property rights protection plays a central role in curbing rent-seeking. Formal constitutions can safeguard property rights in several respects.

First, the direct recognition of private property rights, including intellectual property rights, in a nation's constitution highlights the commitment of the sovereignty to shield interference with private property from the state. Subsequent renege on this

commitment made in the supreme law is likely to attenuate the legitimacy of the government. When coupled with such legal mechanisms as judicial review or cumbersome amending procedures, a constitutional commitment becomes more credible than a commitment included in regular legislations.

Second, the design of taking clauses in constitutions determines the risk of governmental appropriation of private property. It is readily apparent that restrictive conditions for taking and generous provisions of compensation make property owners' rights more secure, thus encouraging them to scale up investment in their assets, even excessively in some cases (Cooter & Ulen 2007).

Third, free transfer of property rights improves private parties' abilities to internalize the benefits associated with holding valuable assets (Ellickson 1992), and constitutional protection consolidates this freedom. Asset owners, with an expectation of uninterrupted ability to reap profits from trade, will in turn be better motivated to make investments (Besley 1995).

Fourth, adherence to competitive market mechanism and free operation of business assure property owners of equal opportunities to gain from applying their assets to productive activities without undue interference from the state or other sources of monopolistic powers. While the first two aspects, recognition and restriction on taking, guarantee static security of property rights, the freedom of business in competitive market, together with the freedom of transfer, promotes the dynamic security of property rights.

Finally, as stated above, constitutional protection awarded to contracts might also contribute to property rights protection. Reliable contractual rights matter both to safe transfer of property rights and successful business operation. However, it is relatively rare to see an article in a constitution distinctively devoted to protecting contractual rights like the "Contract Clause" in the U.S. Constitution.

5) Judicial Independence

Constitutional protection granted to property rights relies on impartial judicial enforcement. Therefore, judicial independence contributes to fortifying the legal entitlements affirmed by the formal constitution. This is most obvious when the government itself is a litigant, as in the case of takings. When the judiciary is subordinated to the executive, private parties are unlikely to be guarded against illegal encroachment by the state on their property rights. Even in purely private disputes, independent judiciary attenuates the undue influence from the executive when one of the litigants is politically connected to it (La Porta *et al.* 2004).

Some scholars believe judicial independence is necessary but inadequate for incorrupt legal enforcement. Uprightness of judiciary is as crucial as independence (Rose-Ackerman 1999, 2007). Others even predict that the relationship between judicial independence and uncontaminated advocacy of legal rights is non-monotonic: they are positively correlated when the degree of judicial independence is low, but the correlation

turns negative as the judiciary becomes increasingly independent (Rios-Figueroa 2006: 134).

While I do not dispute the importance of judicial integrity in protecting individual rights, I submit that judicial integrity can be positively associated with judicial independence. Integrity is of little meaning to a judiciary dependent on other branches of government. As they lack material power in such an institutional setting, integrity is worthless to judges whereas venality will more easily find the excuse of political subordination. Conversely, when independence is secured, integrity becomes more beneficial to the judiciary itself.

It is almost universally true that the value of judiciary resides in its fairness. If the judiciary is set institutionally free from undue influence from other government branches, unfair adjudications resulting from judicial corruption will be more clearly attributable to the judiciary. Although judges are not popularly elected in most countries, at least in democracies, citizens nevertheless have certain measures to hold them accountable such as the national review in Japan or judicial impeachment in the U.S. In extreme cases, constitutional amendment can be adopted to constrain the judicial power as a response to excessive judicial corruption. But lack of confidence in judiciary by the public itself might be the most apparent bridle on judicial misbehaviors. Judicial power will be crippled when the public refuses to use it to settle disputes as a result of observed corruption and unfairness. And the passive role of judiciary in law enforcement makes it especially vulnerable to such a de facto power deprivation. Indeed, popular support can even be a strategic tool to expand judicial power where judicial independence is relatively weak.

Apart from these instrumental perspectives, judicial independence may promote judicial integrity in another respect. Judicial independence strengthens judges' self-esteem and reinforces their faith in the notion of legality and fidelity to text. A special feature of legal training is its ideological emphasis on fairness and integrity (Ginsburg 2003: 32). However, the credibility of such an ideology undermines as the legal practice systematically deviates from its teaching because of outside pressures. Ideological consensus crystallizes more smoothly in the legal profession when the judiciary is fenced away from these pressures institutionally. This way, judicial independence facilitates reshaping judges' preferences toward upright adjudication.

After all, even if all these possible links between judicial independence and judicial integrity were unsound, judicial independence still works in favor of individual rights protection. At least, independent judiciary is more likely to be bribed to support the rights of the politically disconnected private parties than a dependent judiciary. Therefore, in any event, judicial independence seems to buttress the security of property rights.

Another noteworthy point about judicial independence is that judicial independence

requires at least some degree of judicial power to conduct constitutional review (Feld & Voigt 2003). When the judiciary is not allowed to strike down unconstitutional legislations, judicial independence itself might be attenuated by such legislations even if it is stipulated in the constitution. In addition, without the power of constitutional review, the judiciary will probably descend to a position subordinate to the other government branches since it loses an institutionalized control over the legislative or administrative actions, hence is not able to exert substantive influence on the operation of constitutional democracy. In other words, an independent judiciary, equipped with constitutional review power, amounts to a crucial apparatus of check and balance. Once the judiciary becomes politically biased, the courtroom is likely to be reduced to another battlefield for political rents. As a consequence, the intent of the constitution to quarantine vital entitlements rights from the ordinary political process will just fall through. In this sense, judicial independence lays down a useful constraint on political power, narrowing the scope allowed for rent-seeking.

6) Antidiscrimination

While not necessarily related to rent-seeking, discrimination, ethnic discrimination in particular, has long been thought of as a determining factor of entrepreneurship. On the one hand, employer discrimination in those lucrative professions will push talented minorities into entrepreneurship (Moore 1983, Murphy *et al.* 1991). On the other, however, discrimination in the financial market may raise the costs for minorities to become entrepreneurs (Robb & Fairlie 2007). Also, discrimination in the product market, or consumer discrimination, will discourage minorities to engage in entrepreneurial activities by lowering returns to these activities (Borjas & Bronars 1989).

Antidiscrimination rules in constitutions may play a part in resisting the discriminative practices in the public sector at least. Backed with the mechanism of judicial review, these constitutional provisions will preclude the implementation of legislations with discriminative intent or effects. Conversely, constitutional entrenchment of the privileges of the majority social groups crystallizes discrimination against minorities, hence creating their particular incentives toward entrepreneurship.

Here, theories have not delineated a clear pattern in which discrimination may be associated with entrepreneurship, so we are unable to form a definite hypothesis about the relationship between constitutional rules against discrimination and entrepreneurial performance.⁸

-

⁷ Of course, an otherwise independent judiciary is also indispensable for a meaningful judicial review. Without such independence, the judiciary will interpret the constitution in favor of the politically powerful persons or entities, thus undermining the credibility of the commitment contained in the constitution.

⁸ However, it seems to be consistent with these theories that in a less rent-seeking oriented economy, discrimination tends to have a negative correlation with entrepreneurship because the abovementioned "pushing" effect should be insignificant. But discrimination may have ambiguous effects on entrepreneurship in economies more amenable to rent-seeking.

2.3 Predictions

The exogenous selection theories view rent-seeking as a competitor with entrepreneurship for talent. Able persons are less likely to be entrepreneurs where the institutional environment favors rent-seekers.

Murphy *et al.* (1991) shows that, depending on the output elasticity with respect to human capital of the production functions in the rent-seeking sector and the entrepreneurial sector respectively, there will be two types of equilibrium of talent allocation. When the rent-seeking sector is more elastic, the ablest people become rent-seekers, the next group goes into entrepreneurship, and the least able become workers. On the other hand, if the productive sector has higher elasticity, then the ablest people become entrepreneurs, the next group goes into rent-seeking, and, similarly, the least able become workers.

Suppose we are facing the first type of equilibrium. When the institution tips the balance further toward rent-seeking, the most talented person in the second group, i.e. entrepreneurs, will be attracted to rent-seeking. Since the output elasticity is more elastic in the rent-seeking sector, this new rent-seeker will demand more workers than she did as an entrepreneur. As the total demand for workers rises, the least able person in the second group will become a worker, not an entrepreneur any more. Consequently, the number of entrepreneurs decline.

Now suppose we are in the second type of equilibrium. In this case, when the institutional setting turns more favorable to rent-seekers, the least able person in the first group, an entrepreneur, will opt for rent-seeking, so we will also have fewer entrepreneurs. But since now the entrepreneurial production is more elastic with respect to human capital, her shift will bring down the total demand of workers in the market. As a result, the ablest worker becomes a rent-seeker.

This model predicts that, regardless of the type of equilibrium, we will always see a shrinkage in the number of entrepreneurs as the institution shifts in rent-seekers' favor, although this effect might be more apparent in the first type of equilibrium for such an institutional change will take away entrepreneurs both from the top and from the bottom whereas in the second equilibrium will only see entrepreneurs leave at the bottom. Correspondingly, the model also predicts that the rent-seeking sector will always expand as the institutional environment moves in its favor.

Based on Murphy *et al.* (1991), we may also build some expectations about the variation in average ability of entrepreneurs due to institutional changes. Interestingly, this variation seems dependent on the type of equilibrium we are facing. When the best talent is in the rent-seeking sector, the institutional change further favoring rent-seekers will drive away the ablest entrepreneurs, whereas only the least able entrepreneurs will leave because of a similar change when the most talented group is engaging in entrepreneurship. However, Murphy *et al.* (1991) also argues that rent-seeking seems to

have an inherent advantage as a career choice, so the first equilibrium should be what we normally see.

According to the exogenous theories, therefore, both the quantity of entrepreneurs, and the quality of entrepreneurship, meaning the average ability of entrepreneurs, should decline as the institutional setting shifts to the advantage of rent-seekers. Therefore, for the purpose of this research, I would say that, generally speaking, any constitutional feature that facilitates rent-seeking, either through corruptive extraction, government expansion, or attenuation of property rights protection, should be negatively associated with both the number of entrepreneurs as well as the quality of entrepreneurship. For simplicity, in this section, I refer to the combined effects of quantity and quality of entrepreneurs as entrepreneurial performance, and by better entrepreneurial performance, I mean both the quantity and quality of entrepreneurs are higher. In light of the theories discussed above, I generate the following hypotheses for empirical tests.

First, with respect to the de facto constitutional environment measured across democratic and authoritarian states,

- H1: Property rights protection is positively correlated with entrepreneurial performance;
 - H2: De facto federalism is correlated with better entrepreneurial performance;
 - H2': De facto federalism is correlated with worse entrepreneurial performance;
- H3: Entrepreneurial performance improves as the size of the winning coalition increases;
- H4: Entrepreneurial performance improves as the ratio of the size of the winning coalition to the size of the selectorate increases.

Regarding the de jure constitutional features measured for democracies alone,

- H5: Majoritarian electoral rules are correlated with better entrepreneurial performance;
 - H5': Proportional presentation is correlated with better entrepreneurial performance;
 - H6: Presidential governments are correlated with better entrepreneurial performance;
 - H7: Federal governments are correlated with better entrepreneurial performance;
 - H7': Unitary governments are correlated with better entrepreneurial performance;
- H8: Stronger protection granted to property rights in the formal constitution is correlated with better entrepreneurial performance.
- H9: More solid judicial independence confirmed by the formal constitution is correlated with better entrepreneurial performance

Finally, not necessarily related to rent-seeking but for convenience of representation,

- H10: Constitutional rules against discrimination are positively correlated with entrepreneurial performance;
- H10': Constitutional rules against discrimination are negatively correlated with entrepreneurial performance.

These hypotheses are summarized in Table 2.1.

Table 2.1 Hypotheses

Property Rights Protection (de jure and de facto)	+
Size of Winning Coalition	+
Size of Winning Coalition / Size of Selectorate	+
Electoral Rules: Majoritarian (vs. Proportional Representation)	+/-
Form of Government: Presidential (vs. Parliamentary)	+
Federal Structure, de jure and de facto (vs. Unitary Structure)	+/-
Judicial Independence	+
Antidiscrimination Rules	+/-

Chapter 3 Entrepreneurship Measures and Its Determinants

3.1 Defining Entrepreneurship

What is entrepreneurship, or who are entrepreneurs? This is not an easy question. There is no general agreement among scholars about the exact meaning of entrepreneur or entrepreneurship. Some even call entrepreneurs "elusive animals" to suggest the difficulty in drawing a clear boundary for entrepreneurs (Harwood 1982). By and large, four different elements are thought, in various writings, to be characteristic of entrepreneurship: innovation, alertness, judgment, and willingness to take unknown risks.

First, as Schumpeter originally underscored, entrepreneurs are conceived as innovators. They introduce new combinations – new goods, methods of production, markets, sources of supply, or organizations of industry – that shake the economy out of its previous equilibrium through the "creative destruction" process. So entrepreneurs do not need to own capital, open their own business, or even work within the confines of a business firm at all. The unique feature of an entrepreneurial action is innovation. Since no innovation remains innovative for a long time, people cannot be entrepreneurs forever, but only when they actually carry out new combinations (Bjornskov *et al.* 2008: 310).

Second, some scholars believe that the source of entrepreneurship is personal alertness to potential opportunities of gain. To these scholars, entrepreneurs are those who discover the disequilibrium in the market and step in to fill the gap (Kirzner, 1973, Unlike a pure innovator, who can work even outside the framework of a business entity, an entrepreneur as a gap-filler needs to grasp profitable opportunities through personal engagement in market activities. Opening his own firm as the vehicle to reap the gains should be a normal trait of an entrepreneur who discovers market gaps unnoticed by others. Therefore, a popular definition of an entrepreneur in business studies is someone who "perceives an opportunity, and creates an organization to pursue it" (Bygrave et al. 1991: 14). But is a person who discovers a previously undetected opportunity necessarily an innovator? At one extreme, for example, opening a street corner shop to sell wholly existent products in sheerly settled ways does not seem to involve anything innovative. But even slight alternation in business mode to cater the special needs of local community may nevertheless make an otherwise banal street corner shop innovative in the sense that it perceives and adjusts itself to a new niche in the Therefore, the line between innovation and alertness, to a large extent, is not sufficiently clear. In fact, sometimes alertness to business opportunities is understood as a byproduct of the innovative idea of entrepreneurship (Parker 2009: 6).

Third, entrepreneurs are sometimes deemed as the judgmental decision makers.

⁹ In fact, even in such a case, a different combination of the goods sold in the shop might as well reflect the owner's, probably *de minimis*, innovation efforts.

They are left with "the power of making the fundamental decisions to invest or not to invest, to enter a new market or to leave an old one, etcetera", and it is this decision-making function alone that deserves the title of "entrepreneurship" (Blaug 2000: 76). In this sense, entrepreneurs are distinguished from capitalists, who supply the capital for entrepreneurship through the capital market, and managers, who administer the day-to-day management of firms. This judgment-based idea of entrepreneurship seems consistent with the above alertness argument. The decision to step into the market, after being aware of a unique opportunity, is certainly a key decision for a business firm. To be sure, the boundary between fundamental and routine decision-making might be vague at times, but the power to decide the most crucial business strategies is definitely indispensable for an entrepreneur to grasp the opportunities detected by his or her unique alertness.

Finally, entrepreneurs are thought of as persons who are ready to take risk in uncertain conditions. To take advantage of the discrepancies between demand and supply in the market, they are willing to buy at a certain price and sell at an uncertain one. Entrepreneurship is thus a matter of foresight and willingness to assume risk (Blaug 2000: In particular, the risk that entrepreneurs are ready to assume is not the 77-78). probabilistic risk, but rather, the uncertainty in the Knightian sense whose distribution is generally unknown. Since the transaction costs of trading such an ability to make decisions in uncertainty tend to be prohibitive, it can be exploited only by starting up a new venture. Also, having his own firm enables an entrepreneur to be the residual claimant of the business venture, who bears ultimately the risk of entrepreneurial Therefore, the risk-taking aspect makes entrepreneurship and new firm formation two sides of the same coin (Knight 1921). The risk-bearing feature also seems related to the power of decision-making. Only when a decision maker is required to bear the residual risk can we expect him or her to have the right incentive to make To some extent, the unification of the judgment power and prudent decisions. risk-bearing responsibility is, compared to professional managers of public companies, a distinct property of entrepreneurship.

In my opinion, innovativeness, alertness, decision-making and risk-taking are four facets of entrepreneurship, and they do not need to be mutually exclusive. Different combinations of these four features might be detected from various entrepreneurs. However, except innovation in a pure Schumpeterian sense, the other three aspects of entrepreneurship all seem to suggest a same vehicle of entrepreneurship, i.e. a business venture. Moreover, the innovation requirement is inevitably subjective, and the opening of a new firm almost always involves innovativeness to some extent. At least, it takes up a new niche in the market. At the same time, an innovator completely detached from business activities – usually happen within a certain form of firm – looks no different from an inventor, who may not contribute directly to destructing the old economic

process as originally visualized by Schumpeter. Therefore, perhaps it is appropriate to weight the other three elements more heavily than innovativeness when we try to pin down entrepreneurship. I thus define entrepreneurship as an activity to start a business venture to fill a gap in the market by a person who makes primary decisions about its operation and bears the residual risk of its failure.

3.2 Measuring Entrepreneurship

It is a tough task to find a good measurement for entrepreneurship even after we have made the concept less amorphous, especially when confined to the limited availability of cross-country data. Some writers use percentage of engineering majors in a country's college student body as such a proxy (e.g. Murphy et al. 1991), assuming that students with engineering majors are more likely to engage in entrepreneurship than those majoring in other subjects such as law. Yet this is a strong assumption about the correlation between undergraduate majors and future occupation selection, which may in fact be invalid (it also assumes that college students are representative of the general population in terms of entrepreneurship). Another measurement of entrepreneurship used by some early studies is the number of small and medium sized enterprises (SME) in the economy. But "firm size definitions are arbitrary and industry-specific, and do not obviously represent notions of entrepreneurship" in that "(N)ot all entrepreneurs run small firms, and not every small firm is run by an entrepreneur" (Parker 2009: 10). Still another possible proxy for entrepreneurship is the number of patents issued. However, as Baumol et al. (2007) has pointed out, patent numbers can be a poor indicator since countries may have very different standards for patent issuance, and more importantly, patents issued by the state can sit on the shelf for years until some entrepreneur actually puts them into use. Essentially, patent number at most measures the quantity of inventors, but inventors are apparently not equivalent to entrepreneurs who need to engage in market activities in person.

Another set of entrepreneurship indicators are provided by the Global Entrepreneurship Monitor (GEM). It equates an entrepreneur to an adult who is engaged in creating or operating a new venture less than 42 months old. GEM is providing comparative entrepreneurship data based on annually conducted surveys in about 40 countries. In particular, it presents an index of Total Entrepreneurship Activity (TEA) that measures the proportion of the population who are entrepreneurs as defined above. The quality of GEM data is questionable for academic research (Baumol *et al.* 2007). An even more serious difficulty involved in using GEM data for empirical research is its small sample size and short time-series. Such small and heterogeneous samples may not be very helpful for us to understand the states of entrepreneurship in cross-country studies.

Recently, self-employment numbers have been widely used to measure

entrepreneurship (e.g. Evans & Leighton 1989), which emphasizes the risk-taking nature of entrepreneurship. A practical advantage of this measurement is that cross-country data on self-employment are relatively easy to obtain. The International Labor Organization (ILO) database, the OECD Labor Force Statistics as well as many other official national databases provide reliable data of self-employment. Nevertheless, if we consider the variation among nations in defining self-employment, this proxy may still bring about considerable noises when applied to cross-country analysis (Baumol *et al.* 2007). Probably, self-employment usually does not capture, either, many nascent entrepreneurs who are within the process of creating enterprises.

For such a cross-country study involving a substantial number of independent variables and controls, I believe the highest importance should be attached to the availability and reliability of data. Compared with all other measurements, self-employment seems to be the best possible proxy for entrepreneurship despite its conceivable limitations. Self-employment probably is also the most exemplary of the key features of entrepreneurship as discussed in section 3.1. Those who are self-employed typically have their own business venture, incorporated or unincorporated, which enables them to catch whatever opportunities they are aware of. They certainly make judgmental decisions and bear business risk on their own. People engaging in self-employment may not be sufficiently innovative, but as already stated, innovativeness itself is subjective and a matter of extent.

If self-employment is used to assess entrepreneurship, then the quality of entrepreneurial activities, by which I mean the average ability of entrepreneurs, is supposed to be represented by the performance of self-employment. In this respect, education levels of the self-employed, or returns to self-employment seem to be a most telling indicator. While the former directly measures the ability of the population attracted to self-employment, the latter reveals to us the outcome of self-employed production, a sign closely linked to the ability of self-employed population. In fact, these two variables exhibit significant positive correlation in empirical studies at the micro level (Sluis et al. 2005, 2008). Unfortunately, however, I was not able to obtain reliable cross-country data about either of these two variables. Instead, I choose to proxy the performance of a country's entrepreneurship using the share of self-employers, the self-employed with employees, in the whole self-employment population. contrast, those who self-employed but work on their own and do not employ other people are called own-account workers. The justification for this proxy comes from the idea that entrepreneurs with higher ability demand for greater labor and capital. In other words, abler entrepreneurs run larger firms, regardless of whether size is defined in terms of employment or capital (Lucas 1978, Murphy et al. 1991). If this is true, then we shall expect higher percentage of self-employers in a country with better overall entrepreneurial performance.

Therefore, two indicators are used as the dependent variables in the cross-country quantitative study: the self-employment rate and the rate of self-employers. The self-employment rate is calculated as the ratio between the number of the self-employed persons and the number of the total employed population. The rate of self-employers is the proportion of self-employers in the self-employed population. In particular, natural log values of these two rates are used in this study, mainly to reduce the heteroscedasticity common in cross-sectional data (Gujarati & Porter 2009). The variable Inserate captures the self-employment rate, and the variable Inserate reflects the self-employer rate.

The majority of the self-employment data in this research are drawn on the ILO LABORSTA database. The data of self-employers and own-account workers in some European countries are complemented by Eurostat labor market statistics. The data points for the U.S. come from the Current Population Survey (CPS). The data of the total employed population in China are based on the World Development Indicators (WDI) 2009' published by the World Bank, and the numbers of the Chinese self-employers and own-account workers are derived from the China Statistical Yearbook (CSY) published by the National Bureau of Statistics of China in various years.

According to ILO, the employed population includes persons engaging in paid employment or self-employment. Self-employment is defined by ILO as "persons who during the reference period performed some work for profit or family gain, in cash or in kind", or "persons with an enterprise, which may be a business enterprise, a farm or a service undertaking, who were temporarily not at work during the reference period for any specific reason". A self-employer is referred to as "employer" by ILO, which means "a person who operates his or her own economic enterprise, or engage independently in a profession or trade, and hires one or more employees", and an own-account worker is "a person who operates his or her own economic enterprise, or engage independently in a profession or trade, and hires no employees". Eurostat uses similar definitions for employers and own-account workers, so the data from these two sources can be used comparably.

However, in the U.S. CPS, self-employment is divided into incorporated and unincorporated self-employment, and only the latter is counted as the self-employed

¹⁰ These countries are Bulgaria, Denmark, Finland, Netherlands, Poland, Sweden and the United Kingdom.

¹¹ LABORSTA Internet by ILO, at http://laborsta.ilo.org/applv8/data/c2e.html.

¹² LABORSTA Internet by ILO, at http://laborsta.ilo.org/applv8/data/icsee.html.

^{13 &}quot;Employers employing one or more employees are defined as persons who work in their own business, professional practice or farm for the purpose of earning a profit, and who employ at least one other person". The term "self-employed persons" is the Eurostat equivalent of own-account workers, and "Self-employed persons not employing any employees are defined as persons who work in their own business, professional practice or farm for the purpose of earning a profit, and who employ no other persons" (Eurostat by the European Commission, at http://epp.eurostat.ec.europa.eu/portal/page/portal/employment_unemployment_lfs/methodology/definition

(Hipple 2010: 18). But the ILO data do not exclude the incorporated self-employment, so to make the employer and own-account worker comparable, I add up the self-employed with and without employees, respectively, in both the incorporated and unincorporated parts in the U.S. Since the data of the presence of paid employees in the incorporated self-employed are available only for the years of 1995, 1997, 1999, 2001 and 2005, only these years are included in my research.

The Chinese data are more problematic as no clear definition is provided either for self-employment or employers and own-account workers by the data source. In fact, the information about the number of own-account workers is not directly available, and I used the number of households engaging in individual household businesses (*geti gongshanghu*) instead. While these businesses are smaller in scale than private enterprises, whose owners are counted as self-employers, in Chinese context, it is possible for them to employ up to seven employees. Therefore, the number of "employers", as defined by ILO, is likely to be underestimated in the case of China. To address the potential data incomparability, I will exclude China in various models.¹⁴

The summary statistics of these two dependent variables are as follows.

Table 3.1 Summary Statistics of Dependent Variables, All Countries

	-	1			
Variable	Number of	Mean	Standard	Minimum	Maximum
	Observations		Deviation		
Inserate	124	-1.28	0.77	-4.44	-0.05
Inesrate	116	-2.31	1.38	-7.45	-0.32

For the group of democratic countries, to be defined in the next subsection, the summary statistics are indicated in Table 3.2.

Table 3.2 Summary Statistics of Dependent Variables, Democracies

Variable	Number of	Mean	Standard	Minimum	Maximum
	Observations		Deviation		
Inserate	100	-1.31	0.67	-3.62	-0.07
lnesrate	95	-2.14	1.13	-5.63	-0.51

One noticeable feature of these two variables, however, is their strong negative correlation (r = -0.70) significant at 1% level. ¹⁵ This suggests, contrary to the Murphy *et al.* (1991)'s theory, that the quantity and quality of entrepreneurship might move in opposite directions as institutional environment changes.

3.3 Determinants of Entrepreneurship

¹⁴ As an authoritarian state, China does not enter the dataset to test the constitutional effects on entrepreneurship in democracies.

This correlation is for the broad sample of all countries, and for democracies, the correlation coefficient is –0.72, also significant at 1% level.

Besides constitutional environment, entrepreneurship may be affected by various other factors as well. The literature on entrepreneurship has discussed many demographical and macroeconomic determinants. But some of these are individual level features, like marital status, family background and relevant experience, which may not have sufficient variation at the national level. For a cross-country study, the following determinants seem to be the most relevant, and their conceived relationships with entrepreneurship are discussed below.

3.3.1 Culture

Cultural heritage may shape people's attitudes toward, among others, risk-taking, openness to change, and self-independence. All these attitudes will conceivably influence their preference for entrepreneurial activities. So it seems reasonable to believe that culture can, to some extent, form a nation's entrepreneurial spirit. It is said that "cultures exhibiting high individualism, high masculinity, low uncertainty avoidance, and low power distance are more conducive to entrepreneurship" (Licht 2007: 848). In contrast, some other researchers show that cultures characterized by large power distance, low individualism, and strong uncertainty avoidance are more likely to inspire dissatisfaction with society and life, hence give rise to high incidence of small-scale entrepreneurship (Hofstede et al. 2004). Also, there is an established tradition of emphasizing culture as the fundamental cause of economic development which can be dated back at least to Marx Weber, and it still has persistent influence on our understanding of growth (Landes 1998; Guiso et al. 2006). Considering the potential relationship between growth and entrepreneurship, culture might as well have indirect impact on entrepreneurship via economic growth. However, culture is by far a loosely defined term, and as such is inherently difficult to measure. Following the practice of some recent studies of cultural effects on economics, I use religion as the proxy for culture. In particular, four variables are created to measure the percentage of population that is Catholic, Protestant, Muslim and "other" religious affiliates in 1980. The source of these data is La Porta et al. (1999).

3.3.2 Geography

Like cultural traditions, the idea that geographic elements bear causal relationship with economic growth dates back at least to Montesquieu (1748). Neighboring countries may also share close historical heritage, so geography will catch cultural impact not fully represented by religion as well. And as stated, both growth level and cultural background are thought to affect entrepreneurial performance. Finally, although there have been no direct findings yet about the correlation between entrepreneurship and geography at the cross-country level, regional factors of entrepreneurship have been

¹⁶ For a literature review on the empirical studies of various determinants of entrepreneurship, *see* Parker (2009).

For a brief discussion of the potential links between geography and economic growth, see Acemoglu *et al.* 2005.

observed at lower levels, due probably to information and knowledge spillover effects (Parker 2009). For all these considerations, I include continental location of nations as a control in my study.¹⁸

3.3.3 Level of Economic Development

A nation's level of economic development is another potential determinant of entrepreneurship. As the classic Lucas (1978) model predicts, as long as the technical elasticity of substitution is less than unity, when the stock of capital increases as the economy develops, the demand for labor will rise which increases the wage, so encourages marginal entrepreneurs to become employees. Consequently, we expect to see entrepreneurial actions decline as the economy develops.

On the other hand, some studies assert that the relationship between entrepreneurship and economic development is not simply monotonic (e.g. Wennekers *et al.* 2005). As the economy proceeds to higher levels of development, entrepreneurial activity level will move along an L or U-shaped curve. For instance, GEM divided countries covered in their surveys into three categories: factor-driven economies, efficiency-driven economies and innovation-driven economies. It is conceived that in the factor-driven and efficiency-driven phases, "entrepreneurial activities would be negatively related to economic development since most people would be trying to move from subsistence self-employment to wage employment," whereas in innovation-driven phase, entrepreneurial activity would be positively related to economic development as people shift from wage work to entrepreneurial activity (GEM 2008: 36-37).

However, the causal direction between development level and entrepreneurial is never clearly identified. As the classical Schumpeterian theory argues, entrepreneurship itself can be a cause of economic development. At the same time, institutional environment is widely recognized as a determining factor of economic growth since North and Thomas' seminal study (North & Thomas, 1973). Considering these complicated relationship among growth, entrepreneurship and institutions, perhaps level of economic development should not be controlled, for the reasons to be detailed in Chapter 5, to explore the constitutional effects on entrepreneurship. Nevertheless, it might be advisable to have some idea about the influence of economic development upon entrepreneurial performance, at least when the relationship between institutions and entrepreneurship is not a direct concern. I therefore proxy the level of economic development, as is frequently seen in the literature, by GDP per capita, and report its influence in the next section of this Chapter.

3.3.4 Human Capital

Human capital, and formal education in particular, is thought to have impact on entrepreneurship propensities. Education might improve entrepreneurial judgment as

¹⁸ Six dummy variables are used to indicate, respectively, Africa, Asia, Europe (including U.S. and Canada), Latin America, Middle East, and Oceania.

¹⁹ For a recent review of the literature, see Acemoglu *et al.* 2005.

well as other skills, like computation or communication, needed to run businesses (Parker 2009). On the other hand, it is possible that education facilitates entry into paid employment, which can depress the likelihood for the highly educated people to become entrepreneurs (Le 1999). Some researchers also found that, compared with non-entrepreneurs, disproportionate numbers of entrepreneurs were among the most and least educated groups (Parker 2009).

However, there is a concern that the education level might be a result, rather than a cause, of entrepreneurship if we consider the possibility that entrepreneurship determines economic development which further affects the investment in education. To address this issue, following Barro (1991), I use the school enrollment rate in the previous decade, i.e. in year 1980, as a proxy for education level. The data source of this proxy is the "combined gross enrollment ratio in education" by the United Nations Development Programme. Like Barro, I also used adult literacy rate as an alternative measurement of human capital, as the literacy rate is more likely to relate to the stock of human capital rather than to the flow of investment (Barro 1991: 422). Adult literacy rate is based on the UNESCO statistics and complemented by the CIA World Factbook.²⁰ These two measurements of human capital turn out to be highly correlated (r = 0.83) and significant at 1% level.

3.3.5 Age of Population

People are expected to be more likely to become entrepreneurs as they age. Older people may be better prepared for starting their own businesses in that they have accumulated sufficient human and physical capital, or have established better social networks. But people's eagerness for entrepreneurship may decline as they exceed a certain level of age for older people are in general more risk-averse. At the micro level, most empirical studies find the quadratic pattern between age and entrepreneurship as expected. Some indicate entrepreneurship is concentrated among individuals in mid-career, i.e. between thirty-five and forty-four years of age, while others show the probability of being or becoming an entrepreneur increases up to early fifties (Parker 2009). Considering these facts, a country with a high proportion of population falling in this age group may exhibit relatively prosperous entrepreneurial activities. Taking various empirical findings into account, I calculated the proportion of population in the thirty-five to fifty-four age group based on the UNdata.²¹

3.3.6 Vitality of Capital Market

The vitality of a nation's public capital market may influence entrepreneurship in two possibly opposite ways. On the one hand, a weak capital market will limit the potential to invest in established public corporations, which in turn orients the investment to small

²⁰ Adult literacy rate is missing for many countries in 1980s, so the UNESCO data are averaged for 1993 to 2008, and the CIA World Factbook data are from its 2010 online edition.

²¹ Averaged data from 1993-2008 are used. The data for Taiwan come from the Ministry of Interior of the Republic of China.

startup companies. This can lead to a negative association between the strength of capital market and the prosperity of entrepreneurship. On the other hand, a vibrant capital market facilitates the exit of early-stage investors, such as angel investors or venture capitalists, in startup companies through IPO or acquisition by public corporations. Thus, it encourages ex ante private investments in nascent companies by offering diversified exit strategy options. And this bodes well for a positive correlation between the vitality of capital market and entrepreneurship. Either way, capital market development seems to be another possible explanatory variable of entrepreneurial activities.

The vitality of capital market is measured by the total value of outstanding equity shares as a fraction of GDP, a measurement used in the law and finance literature (e.g. Beck *et al.* 2003). The variable, mcapc, takes record of this value which is generated according to the data reported in the CIA World Factbook 2010'.

3.3.7 Competitiveness of Credit Market

Studies have shown that bank lending is the most important source of external finance for entrepreneurial ventures (Parker 2009). Competition among banks tends to lower the cost of credit and remove obstacles to loans, thus expanding the access to finance by startup and small-scale companies. Therefore, a competitive credit market will conceivably promote entrepreneurship.

Bank concentration ratio is used to proxy the competitiveness of credit market. Previous empirical works have suggested that bank concentration is associated with more self-assessed obstacle to finance by small business owners especially in less developed countries (Beck *et al.* 2004). The bank concentration ratio variable, acon, is based on Question 2.6.2 – "Of commercial banks in your country, what percent of assets is held by the five (5) largest banks at yearend of 2005?" – of the World Bank Banking Regulation Survey of 2007.²²

3.3.8 Age of Democracy

For democratic states, the age of democracy possibly affects entrepreneurial activity, too, since older democracies are thought to be abler to deal with corruption and power abuse (Persson & Tabellini 2003). Before searching for an appropriate measurement of democracy age, however, it is naturally a prerequisite to operationalize the somewhat fuzzy idea of democracy for such an empirical work.

Like Persson & Tabellini (2003), I rely on the so-called Gastil indexes published annually by Freedom House. These indexes assign values on a discrete scale from 1 to 7 with respect to political rights and civil liberties. Countries scoring 1 or 2 on an index are defined as "free", countries scoring from 3 to 5 are "partly free", and the remaining countries are categorized as "not free". To construct these ratings, Freedom House uses answers to a number of survey questions on a specific checklist. For political rights, this

²² The same survey was conducted in 2003 as well, but this earlier version covered fewer countries.

checklist includes questions covering, among others, electoral process, political pluralism and participation, and functioning of government. For civil liberties, the checklist questions involve freedom of expression and belief, associational and organizational rights, rule of law, as well as personal autonomy and individual rights.²³ I take averages of the annual political rights and civil liberties scores for each country from 1993 to 2008, and call these averaged scores gastil. To be defined as a democracy, a country must have a gastil score lower than an average of 5 for the 1993 to 2008 period. This rule permits 100 countries to be classified as democracies (subject to the availability of other variables), and the mean gastil value for this group of countries is 2.38 (standard deviation = 1.23).²⁴

I also follow the practice of Persson & Tabellini (2003) to date democracies. A variable dem_age is constructed to date the birth of democracy in a particular country. It is built on the POLITY scores provided by the Polity IV project. The date of birth of a democracy is defined as the first year of a string with uninterrupted positive POLITY scores until 2007. Foreign occupation during World War II is not regarded as an interruption of democracy. POLITY scores are missing for Belize and Malta, and the dem_age values for these two countries were directly taken from Persson & Tabellini (2003). Since the Polity IV project dates back to 1800, the minimum value of the variable dem_age is 1800. The age of democracy, recorded as dage, is calculated by subtract dem age from 2008.

The summary statistics of these explanatory variables are as follows.

Table 3.3 Summary Statistics of Entrepreneurship Determinants (All Countries)

Variable	e Number of Mean Standard Minimum Maximum				
variable		Mean		MIIIIIIIIIIII	Iviaxiiiiuiii
	Observations		Deviation		
ca80	120	35.14	38.49	0	97.3
mu80	120	19.06	33.93	0	99.9
pr80	118	12.29	22.29	0	97.8
no80	118	33.28	33.95	0	100
lngdpp	122	8.09	1.43	4.70	10.56
cger80	104	61.54	15.36	11.3	84.4
literacy	124	88.80	14.72	23.07	100
rate3554	124	0.24	0.05	0.13	0.35
mcapc	93	0.41	0.35	0.01	1.75
acon	89	0.73	0.19	0.12	1

-

For a detailed description of the methodology used to construct these indexes, see the homepage of Freedom House at http://www.freedomhouse.org/template.cfm?page=351&ana_page=292&year=2005.

²⁴ Like Persson & Tabellini (2003), I also used an alternative rule to define democracy based on POLITY scores provided by the Polity IV project. Only countries with positive POLITY scores averaged from 1993 to 2008 will be regarded as democracies under this rule, and 86 democracies are included in this more restrictive sample. However, this smaller group does not seem to be more democratic than the larger one. The mean gastil score for these 86 countries is 2.45 (standard deviation = 1.26).

Table 3.4 Geographic Distribution (All Countries)

Variable	Location	Number of Observations
geo1	Africa	17
geo2	Asia	20
geo3	Europe & North America	38
geo4	Latin America	28
geo5	Middle East	16
geo6	Oceania	5
	124	

Table 3.5 Summary Statistics of Entrepreneurship Determinants (Democracies)

14016 3.3	Summary Statistics of Entrepreneurship Determinants (Bemoeracies)					
Variable	Number of	Mean	Standard	Minimum	Maximum	
	Observations		Deviation			
ca80	97	40.90	39.45	0	97.3	
mu80	97	9.50	22.66	0	99.4	
pr80	95	14.82	24.10	0	97.8	
no80	95	34.56	33.51	0.40	100	
lngdpp	100	8.28	1.38	4.94	10.56	
cger80	85	64.15	13.72	14.1	84.4	
literacy	100	90.91	13.70	23.07	100	
rate3554	100	0.25	0.05	0.13	0.34	
mcapc	81	0.42	0.37	0.01	1.75	
acon	78	0.72	0.19	0.12	1	
dage	95	46.51	44.56	4	210	

Table 3.6 Geographic Distribution (Democracies)

	,			
Variable	Location	Number of Observations		
geo1	Africa	12		
geo2	Asia	13		
geo3	Europe & North America	38		
geo4	Latin America	26		
geo5	Middle East	6		
geo6	Oceania	5		
	100			

Table 3.7 shows the results when the measurements of the quantity (Inserate) and quality (Inesrate) of entrepreneurship are regressed on the first seven determinants discussed above using the sample of both democratic and authoritarian states. Together,

these covariates explain about 50% of the variation in entrepreneurial activity level, and 70% of the quality of entrepreneurship. The level of economic development as measured by GDP per capita is significantly correlated both with the quantity and quality of entrepreneurship. In particular, it does have a quadratic effect on entrepreneurship although this effect might be less significant with respect to the activity level of entrepreneurship. As for the other covariates, Latin American countries seem to have a significantly higher activity level, yet lower quality of entrepreneurship, compared with the benchmark, i.e. European and North American, countries. Oceania perhaps also has higher quantity of entrepreneurship than Europe and North America, though at a less significant level of 10%. On the other hand, the vitality of capital market demonstrates a positive association with the quality of entrepreneurship significant at 5% level. One striking point we may observe from Table 3.7 is that, again, the quantity and quality of entrepreneurship probably move in opposite directions with the variation of the relevant covariates. However, the estimated coefficients in Table 3.7 should not be over-interpreted. As for those variables potentially correlated with constitutional environment, the omission of constitutional features will generate biased estimates.

Table 3.7 Determinants of Entrepreneurship Other than Constitutional Environment (All Countries)

in countries)				
	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	lnesrate
00	0.004	0.003	0.003	0.003
ca80	(0.003)	(0.003)	(0.003)	(0.003)
00	-0.002	-0.005	-0.005	-0.003
mu80	(0.007)	(0.004)	(0.006)	(0.005)
00	0.001	0.003	0.001	0.003
pr80	(0.004)	(0.003)	(0.003)	(0.003)
geo1	0.44	-0.18	0.37	-0.23
	(0.39)	(0.33)	(0.32)	(0.40)
2	0.36	-0.19	0.50	-0.36
geo2	(0.37)	(0.31)	(0.31)	(0.29)
1	0.41	-0.78	0.50	-0.79
geo4	(0.20)**	(0.24)***	(0.16)**	(0.22)***
5	0.15	0.07	0.25	-0.09
geo5	(0.34)	(0.51)	(0.29)	(0.54)
(0.41	-0.61	0.42	-0.65
geo6	(0.23)*	(0.55)	(0.23)*	(0.56)
lngdpp	-0.99	4.24	-1.03	3.95

	(0.52)*	(0.76)***	(0.50)**	(0.73)***
1	0.05	-0.22	0.051	-0.21
lngdpp2	(0.03)	(0.04)***	(0.030)*	(0.04)***
20000	-0.01	0.007		
cger80	(0.01)	(0.007)		
1:40.00			-0.02	0.01
literacy			(-0.01)**	(0.02)
mata 2.5.5.1	0.33	-4.52	2.37	-4.82
rate3554	(2.80)	(3.10)	(2.22)	(2.98)
****	-0.39	0.45	-0.40	0.44
mcapc	(0.23)	(0.18)**	(0.24)	(0.18)**
	-0.49	0.33	-0.33	0.29
acon	(0.41)	(0.33)	(0.41)	(0.33)
Number of	(5	<i>C</i> 1	71	70
Observations	65	64	71	70
Adjusted R ²	0.45	0.69	0.49	0.69

Note: Robust standard errors in parentheses.

In Table 3.8, I add the age of democracy to the regressions and the sample of democracies are used instead. Apparently, these covariates explain more about entrepreneurial performance than before. Most significant results observed in Table 3.7 remain significant in the current regressions. But for geographic dummies, now Asian countries also exhibit more entrepreneurial activities than the base group. When adult literacy rate is used to control human capital, both human capital and age factors become significant in explaining entrepreneurship, with quantity and quality moving again in opposite directions. Finally, the age of democracy appear to affect entrepreneurship significantly indeed. Older democracies tend to have lower entrepreneurial activity level but better quality of entrepreneurship. However, the caveat in the previous paragraph still applies to interpreting the estimates in Table 3.8.

Table 3.8 Determinants of Entrepreneurship Other than Constitutional Environment (Democracies)

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	lnesrate
ca80	0.003	0.003	0.002	0.003
Cabo	(0.003)	(0.003)	(0.003)	(0.003)
mu80	0.002	-0.008	-0.003	0.004

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

	(0.004)	(0.004)**	(0.003)	(0.004)
00	-0.002	0.002	-0.003	0.002
pr80	(0.004)	(0.004)	(0.003)	(0.003)
1	0.21	0.14	0.10	0.34
geo1	(0.35)	(0.31)	(0.31)	(0.31)
2	0.61	-0.21	0.67	-0.31
geo2	(0.23)***	(0.29)	(0.21)***	(0.25)
~~~1	0.51	-0.71	0.56	-0.66
geo4	(0.15)***	(0.21)***	(0.13)***	(0.18)***
~~~	0.28	-0.28	0.37	-0.50
geo5	(0.28)	(0.54)	(0.24)	(0.52)
(0.42	-0.71	0.43	-0.74
geo6	(0.24)*	(0.47)	(0.23)*	(0.49)
1 1	-1.17	4.28	-1.19	4.02
lngdpp	(0.56)**	(0.90)***	(0.51)**	(0.79)***
1	0.06	-0.23	0.062	-0.21
lngdpp2	(0.03)*	(0.05)***	(0.032)*	(0.05)***
222400	-0.01	0.011		
cger80	(0.01)	(0.008)		
litamaar			-0.03	0.04
literacy			(-0.01)***	(0.01)***
rate3554	2.15	-4.00	3.61	-5.76
18163334	(1.79)	(2.65)	(1.48)**	(2.72)**
maana	-0.12	0.22	-0.11	0.20
mcapc	(0.19)	(0.16)	(0.20)	(0.15)**
0000	0.19	0.26	0.25	0.27
acon	(0.20)	(0.32)	(0.19)	(0.33)
daga	-0.002	0.0035	-0.002	0.0030
dage	(0.001)**	(0.0016)**	(0.001)**	(0.0015)**
Number of	58	57	63	62
Observations	30	31	03	02
Adjusted R ²	0.64	0.75	0.66	0.77
ata. Dahwat atand	and annung in man	mth agas		

Note: Robust standard errors in parentheses.

Although the level of economic growth presents a quadratic effect on entrepreneurship, given the point estimates, it is likely to be negatively correlated, in a decreasing rate, with the quantity of entrepreneurship, and positively correlated, also in a decreasing rate, with the quality of entrepreneurship, rather than changing along a

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

U-shaped or bell shaped curve. Therefore, I define a growth-consistent mode of entrepreneurial development as one with low quantity or high quality of entrepreneurs. To use the term "growth-consistent", I try to avoid implying any particular causal direction between economic growth and entrepreneurship.

Chapter 4 Constitutional Environment Measures

4.1 De Facto Constitutional Environment Measures

With respect to the de facto constitutional environment, existing theories do not provide much clue about its potential impact on rent-seeking and entrepreneurship. Indeed, there is even no clear understanding about what are the key elements of the de facto constitutional environment that can be captured across democracies and authoritarian states. For this reason, my study is preliminary and focuses narrowly on three sets of measures: property rights protection, decentralization, and selectorate – winning coalition size.

4.1.1 Property Rights Protection

My measurement of de facto property rights protection is based on two sources. The first is the property rights component of the index of economic freedom published annually by the Heritage Foundation. This is an expert-compiled index. It measures, on a 0 – 100 scale with 100 indicating the best protection of property rights, the official legal protection of property rights, the probability of governmental expropriation of private property, private parties ability to enforce contracts, as well as the extent of judicial independence and integrity.²⁵ The Heritage Foundation index was used in some previous studies to measure the security of property rights at cross-country level, e.g. La Porta *et al.* (2004). I constructed a variable, dfph, which takes the averages of Heritage Foundation scores from 1996 through 2008.²⁶

The second source of measurement for de facto property rights protection is the index of government antidiversion policies constructed by Hall & Jones (1999) (gadp). It was created from data assembled in the International Country Risk Guide (ICRG) by the Political Risk Services. The antidiversion index uses the average of five categories of ICRG indicators for the years 1986 - 1995. Two of the categories assess government's role in protecting against private diversion: (i) law and order, and (ii) bureaucratic quality. Three categories measure the possibility of diversion conducted by governments: (i) corruption, (2) risk of expropriation, and (iii) governmental repudiation of contracts. The index is on a 0-1 scale with 1 meaning the best possible protection of property rights.²⁷

The summary statistics of these two de facto property rights protection measures are as follows.

Table 4.1 Summary Statistics of Property Rights Protection Indicators (All Countries)

Variable Number of Mean Standard Minimum Maximum

Observations Deviation

²⁷ See Hall & Jones (1999), at 97-98.

²⁵ See the website of the Heritage Foundation at http://www.heritage.org/Index/Property-Rights for details.

²⁶ The earliest available index is for 1995 which has a substantial number of missing data.

dfph	115	54.17	22.03	10	90
gadp	93	0.60	0.26	0	1

Table 4.2 Summary Statistics of Property Rights Protection Indicators (Democracies)

Variable	Number of	Mean	Standard	Minimum	Maximum
	Observations		Deviation		
dfph	95	58.36	20.89	10	90
gadp	79	0.62	0.28	0	1

The correlation between these two indicators is not very high $(r = 0.56)^{28}$ although they seem to capture quite similar aspects of the institutional environment except that the Hall & Jones (1999) antidiversion index perhaps does not directly address the issue of judicial independence as the Heritage Foundation index does. The relatively low correlation might be attributable to the more limited data availability of the antidiversion index, or the difference in time when the data were collected – the Heritage Foundation index reflects the conditions of property rights protection a decade later than the Hall & Jones (1999) data.

4.1.2 De Facto Federalism

De facto federalism is explored in two aspects, fiscal decentralization and political decentralization. Fiscal decentralization is measured as the share of the subnational governments in total tax revenue. This is a widely used scale for the degree of centralization, which assumes that governments need tax revenue to implement policies, so "the scope of policymaking activities at any one level of government will ultimately depend on the share of tax revenues that it collects" (Clark *et al.* 2009: 614). The variable str takes record of this measurement. The data come from the World Development Report 1999/2000 (World Bank 2000). All data points are for 1997, with the exception of Japan whose data point is for 1990.

Political decentralization is measured as the number of subnational levels at which executives are popularly elected. This measurement picks the difference between elected and appointed local officials assuming the former are subject to lower central influence on local policymaking activities. The data, recorded by the variable est, are also based on World Bank (2000), and all the data points are for 1999.

Summary statistics of the two variables for all countries and democracies are reported in the next two tables.

Table 4.3 Summary Statistics of De Facto Federalism Indicators (All Countries)

	2 07				
Variable	Number of	Mean	Standard	Minimum	Maximum
	Observations		Deviation		

 28 For democracies, the correlation is marginally higher (r = 0.58), and both correlations are significant at 1% level.

str	52	14.68	13.43	0.2	51.4
est	91	1.36	0.89	0	3

Table 4.4 Summary Statistics of De Facto Federalism Indicators (Democracies)

Variable	Number of	Mean	Standard	Minimum	Maximum
	Observations		Deviation		
str	50	14.08	12.61	0.2	43.5
est	74	1.59	0.77	0	3

It seems that the extent of fiscal decentralization varies dramatically from one country to another, while the variation in political decentralization is less striking, especially within democracies. In addition, political decentralization, judged by the number of elected subnational tiers, is significantly more intensive in democratic countries than in authoritarian countries.²⁹ For democracies, the correlation coefficient between these two types of decentralization is 0.32 with 5% level significance.

4.1.3 Selectorate and Winning Coalition Sizes

The data about the sizes of the selectorates and winning coalitions are from Bueno de Mesquita *et al.* (2003), the very origin of the selectorate theory. The data are available for the years up to 1999, so the values of variables W and S, indicating the size of selectorate and winning coalition respectively, reflects the institutional settings from 1993 to 1999. For most countries, there is no change in the institutional data during this period of time, but for those few do have a change, I take the values of the majority of years.³⁰ Another variable, wsrate, measures the ratio of the size of winning coalition to that of the selectorate. To avoid division by zero and to ensure that the value of S is never smaller than W,³¹ like Bueno de Mesquita *et al.* (2003), wsrate is obtained by dividing W by (log((S+1)*10))/3. Table 4.5 and Table 4.6 are the summary statistics of these variables for all countries and democracies respectively.

Table 4.5 Summary Statistics of Winning Coalition, Selectorate Sizes and Their Ratio (All Countries)

Variable	Number of	Mean	Standard	Minimum	Maximum
	Observations		Deviation		
W	119	0.74	0.23	0	1
S	117	0.98	0.14	0	1
wsrate	117	0.74	0.23	0	1

²⁹ The mean difference between authoritarian and democratic countries is -1.24, and the t-value is -6.18.

³⁰ These countries are Algeria, Indonesia, Iran, Israel, Mexico, and Trinidad & Tobago.

According to Bueno de Mesquita *et al.* (2003), two countries in my dataset, Tonga and United Arab Emirates, have W to S ratios higher than 1 - W = 0.75 and S = 0.5 for both, and one country, Algeria, has an S value of zero.

Table 4.6 Summary Statistics of Winning Coalition, Selectorate Sizes and Their Ratio (Democracies)

_		,				
	Variable	Number of	Mean	Standard	Minimum	Maximum
		Observations		Deviation		
	W	98	0.80	0.18	0.25	1
	S	96	0.99	0.05	0.5	1
	wsrate	96	0.80	0.18	0.25	1

Bueno de Mesquita et al. (2003) built up the index for S based on the LEGSELEC variable of the POLITY IV project, which essentially measures the breadth of the selectiveness of the members of each country's legislature. They believe that the larger the value of LESSELEC, the more likely it is that S is large (Bueno de Mesquita et al. 2003: 134). On the other hand, their data source for W is a combination of several variables taken from POLITY IV project plus Arthur Banks's cross-national time-series Those original variables reflect the regime type (REGTYPE of Banks's data), competitiveness of executive recruitment (XRCOMP of POLITY IV), openness of executive recruitment (XROPEN of POLITY IV), and competitiveness of participation (PARCOMP of POLITY IV).³² The founders of the selectorate theory posit that none of these variables alone should indicate a large size of winning coalition, but polities satisfying more of the criteria set by these indexes are more likely to have a larger winning coalition.³³ As some commentators acutely point out (Knack 2005), and as the authors of Bueno de Mesquita et al. (2003) explicitly admit, the above measurement of selectorate size and winning coalition size are crude and primitive. specific weaknesses of these measurements have not been spelled out by the critics, and the more accurate data are yet to be collected. So, concurring with those authors, however, I believe that, since their index constructing process seems reasonable, these measurements should enable at least a preliminary test of an interesting theory that connects certain economic outcomes with institutional features of a wide variety of regimes.

4.2 De Jure Constitutional Environment Measures

The de jure constitutional features in this study fall roughly into two categories. The first category contains the form of government, electoral rules as well as federal structure. These factors, although sometimes can be traced in the formal constitutions, are largely descriptive of the variations in democracy as a form of polity. In particular, electoral rules are often not embodied in the constitutions themselves, but left for special

³³ For details about the construction of S and W indexes, see Bueno de Mesquita *et al.* (2003), at 134-135.

³² According to POLITY IV, the competitiveness of participation refers to "the extent to which alternative preferences for policy and leadership can be pursued in the political arena" (Polity IV Project Dataset Users' Manual).

legislations. It is in the sense of defining the fundamental structuring and operation of state power that these rules are appropriately considered as part of the constitutional environment. Since they have been carefully studied and categorized in comparative politics, it is better to follow the well-trodden paths taken by political scientists than attempting to distinguish one another from scratch according to a newly erected database of constitutions. The second category, including constitutional property rights protection, judicial independence, and constitutional antidiscrimination provisions, are more legal than political issues. The impact of legal design in these aspects on economic outcomes such as entrepreneurial development is a much less explored yet immensely important area in legal academia. For measures of these de jure constitutional features, I rely on the coding of formal constitutions by the Comparative Constitution Project.

4.2.1 Electoral System

The categorization of electoral rules seems less controversial among comparative political scientists than telling apart the form of governments, at least in terms of the basic taxonomy of majoritarian, proportional representation and mixed systems. A majoritarian system is one in which the candidates or parties receiving the most votes win, i.e. "winner takes all", whereas a proportional representation system is a quota- or divisor-based electoral system employed in multi-member districts. Finally, an electoral system is mixed when voters elect representatives through both majoritarian and proportional systems (Clark *et al.* 2009). ³⁴

The basic variable used to identify electoral systems in my study, maj, is a dummy takes the value of 1 if the underlying system is purely majoritarian and 0 otherwise. So in effect, it measures the difference between majoritarian vs. non-majoritarian systems. Most vices blamed on proportional electoral systems look like stemming from the dispersed representation that meddles in the accountability of policy making. Therefore, the bifurcation of majoritarian and non-majoritarian seems to capture the quintessential point of the majoritarian ideal of democracy underlining the possibility to identify policy alternatives and governmental accountability (Powell 2000). Even a mixed electoral system can add vagueness to the transformation of election outcomes to governmental formation, thus blurring the voter-policymaker connection both prospectively and retrospectively. Technically, using a single dummy also saves the degree of freedom for a study based on a relatively small sample.

The measures of electoral rules rely principally on the Database of Political Institutions (DPI) 2010 version compiled by a research team composed mostly of World Bank experts (Beck *et al.* 2001). Specifically, I looked to two dummy variables in DPI,

Minor opinion differences do appear though. For instance, Giovanni Sartori believes that a system in which two-or-more winters are elected on a "highest votes" basis in multi-member constituencies should be viewed as proportional (Sartori 1997, 4). Under this construction, therefore, the single nontransferable vote system should be proportional.

PRURALITY and PR, for coding electoral rules. Both variables indicate the rules used for legislature elections. PRURALITY equals 1 if legislators are elected on winner-take-all basis; PR is 1 if candidates are elected by percent of votes received by their party.³⁵ The electoral system dummy in my dataset, maj, is coded 1 only if a country has PLURALITY = 1 and PR = 0 for the years from 1993 to 2008.³⁶ For a country that has values of 1 for both PLURALITY and PR, which suggests a potential mixed system, I referred to Clark *et al.* (2009) to decide whether maj should be coded as 1 (only if Clark *et al.* 2009 lists it as a majoritarian system) or 0.

According to this rule, the electoral systems of the 100 democracies in my study are coded as follows.

Table 4.7 Electoral Systems (Democracies)

Country	maj	Country	maj
Argentina	0	Armenia	0
Australia	1	Austria	0
Bangladesh	1	Barbados	1
Belgium	0	Belize	1
Bolivia	0	Bosnia and Herzegovina	0
Botswana	1	Brazil	0
Bulgaria	0	Canada	1
Cape Verde	0	Chile	1
Colombia	0	Costa Rica	0
Croatia	0	Cyprus	0
Czech Republic	0	Denmark	0
Dominica	1	Dominican Republic	0
Ecuador	0	El Salvador	0
Estonia	0	Ethiopia	1
Fiji	1	Finland	0
France	1	Gabon	1
Georgia	0	Germany	0
Greece	0	Grenada	1
Guatemala	0	Honduras	0
Hungary	0	Iceland	0
Indonesia	0	Ireland	0
Israel	0	Italy	0

_

³⁵ See the DPI page on the World Bank website at http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/0,.contentMDK:20649465~ pagePK:64214825~piPK:64214943~theSitePK:469382,00.html for the details of coding.

36 When the values of PLURALITY and PR vary during this period for a particular country, then the value

³⁶ When the values of PLURALITY and PR vary during this period for a particular country, then the value for the earlier part of the sample counts to take into account the lagged institutional effects on economic outcomes.

Jamaica	1	Japan	0
Korea (S)	0	Kuwait	1
Kyrgyzstan	1	Latvia	0
Lithuania	0	Macedonia	0
Madagascar	0	Malaysia	1
Mali	1	Malta	0
Marshall Islands	1	Mauritius	1
Mexico	0	Moldova	0
Mongolia	1	Montenegro	0
Morocco	0	Namibia	0
Nepal	1	Netherlands	0
New Zealand	0	Nicaragua	0
Norway	0	Panama	0
Paraguay	0	Peru	0
Philippines	1	Poland	0
Portugal	0	Romania	0
Russia	0	Saint Lucia	1
Serbia	0	Singapore	1
Slovakia	0	Slovenia	0
South Africa	0	Spain	0
Sri Lanka	0	Suriname	0
Sweden	0	Switzerland	0
Taiwan	0	Tanzania	1
Thailand	1	Tonga	0
Trinidad and Tobago	1	Turkey	0
UK	1	Ukraine	1
US	1	Uruguay	0
Venezuela	0	Zambia	1

4.2.2 Form of Government

Classifying the form of governments is more controversial. While the core difference between presidential and parliamentary governments – in presidential systems, the executive branch is not responsible to the elected assembly and its survival does not count on the confidence of the latter – garners nearly unanimous support among political scientists, disagreement emerges in various respects beyond this core.

Most writers on this issue believe a popularly elected, either directly or indirectly, chief executive is a defining feature of presidential governments (Lijphart 1999; Sartori 1997; Shugart & Carey 1992; Shively 2008). Yet some insist that a government is presidential as long as it does not rely on the confidence of legislature to stay in power no

matter whether the executives are elected by popular vote (Cheibub 2007; Clark *et al.* 2009). Thus, a regime such as Switzerland where the assembly elects a collective government that cannot be removed before the end of its term is classified as presidential (Cheibub 2007: 36). Another debate concerns whether the presidential system is necessarily a "one-person executive" government. If the answer to this question is yes, then members of presidential cabinets are no more than advisers and subordinates of the president (Lijphart 1999: 118). It also implies that presidential governments are necessarily majoritarian (Lijphart 1999: 159-160). Opponents to this idea claim that this additional requirement for presidential governments is too restrictive although it is generally the case in presidential democracies (Sartori 1997: 84). They also assert that defining presidentialism as an inherently majoritarian system seems to contradict the spirit of other criteria of presidential governments which emphasize mutual checks and dispersion of power (Shugart & Carey 1992: 21).

As the classification of the two pure forms is open to debates, the guidance for identifying the mixed form, so-called semi-presidential or premier-presidential systems, is even less certain. A salient feature of this governmental form is the concurrent existence of an independently elected president and a cabinet subject to the assembly confidence. But this might as well fit the outer look of a parliamentary government. The substantive standard needed for a mixed form government is that the president has certain political powers to be qualified as one head in a dual-authority system rather than a mere ceremonial existence. But the extent of authority essential to tell apart the pure and mixed forms is evidently indeterminate. Vague phrases such as "considerable power" (Shugart & Carey 1992: 23) or "share power" (Sartori 1997: 121) are used to generalize the idea although they are obviously insufficient to serve as a guideline to pinpoint semi-presidential governments in a systematic manner. Perhaps for this reason, some commentators tend to categorize these hybrids into one or another pure form on a case-by-case basis (Lijphart 1999).

Notwithstanding the conceptual debates, an operable standard is indispensable for an empirical study. For the reasons to be specified later, I decide to use the classification made by Cheibub (2007). In particular, it depends on answers to three questions. First, is the government responsible to the elected legislature? A democracy is presidential if the answer is no. If the answer is yes then the second question asks whether there is an independently elected president. A positive answer gives us a parliamentary government while a negative one leads to the last question – "Is the government responsible to the president?" "Yes" identifies a semi-presidential regime while "no" points again to a parliamentary one. Thus, Cheibub set up a coherent and exhaustive line to divide different forms of government. This line looks to the governmental responsibility. While presidential and parliamentary governments are solely responsible to the president or the legislature respectively, a mixed form government is responsible to

both. By "responsible to", Cheibub essentially means the potential to be "dismissed by". 37

I choose these rules of classification not only for their coherence but also for their relevance to the underlying issue of this study. The theories suggest that the crucial link between form of governments and entrepreneurial development rests on the separation of power that supposedly restrains rent-seeking. And the institutional mechanism ensures such separation comes from the confidence requirement, which squarely fit the classifying standard delineated in Cheibub (2007): When a government is responsible to the legislature it can only survive with the confidence of the latter. The focus on confidence requirement also suggests that the difference between parliamentary and semi-presidential governments is not material for the current study to the extent that both count on the legislative confidence.³⁸ Therefore, I use a dummy variable, cpre, to code the form of governments. Presidential governments are coded 1 while the other two forms are coded 0.

The cost of relying on Cheibub (2007) is the increased missing data points as it seems to define democracy more restrictively. Nevertheless, for the coherence and accuracy of coding, I choose not to blend it with other data sources. The classification in Cheibub (2007) is based on the governmental forms as of 2002. Although most of the variables in my study average the relevant data for the period of 1993 to 2008, I do not think this inconsistency in data time is a big concern. On the one hand, the well-known inertia of institutions may assure the stability of governmental forms for most countries after the year of 2002. On the other hand, the constitutional environment probably exerts its influence on economic outcomes over time so that the institutional features of earlier years can be the right focus of research. For similar consideration, when there is a change in form of government during the 1993 to 2002 period, I measure it according to the earlier part of the sample. Table 4.8 shows the coding of the form of governments.

Table 4.8 Form of Governments (Democracies)

	\	,	
Country	cpre	Country	cpre
Argentina	1	Armenia	0
Australia	0	Austria	0
Bangladesh	0	Barbados	0
Belgium	0	Belize	0
Bolivia	1	Bosnia and Herzegovina	n/a
Botswana	n/a	Brazil	1
Bulgaria	0	Canada	0
Cape Verde	0	Chile	1

³⁷ See Cheibub (2007) at 33-38.

³⁸ Cheibub (2007) also ignores this difference when exploring the impact of separation of power on the survival of democracy.

Colombia	1	Costa Rica	1
Croatia	0	Cyprus	1
Czech Republic	0	Denmark	0
Dominica	0	Dominican Republic	1
Ecuador	1	El Salvador	1
Estonia	0	Ethiopia	n/a
Fiji	n/a	Finland	0
France	0	Gabon	n/a
Georgia	n/a	Germany	0
Greece	0	Grenada	0
Guatemala	1	Honduras	1
Hungary	0	Iceland	0
Indonesia	1	Ireland	0
Israel	0	Italy	0
Jamaica	0	Japan	0
Korea (S)	1	Kuwait	n/a
Kyrgyzstan	n/a	Latvia	0
Lithuania	0	Macedonia	0
Madagascar	0	Malaysia	n/a
Mali	0	Malta	0
Marshall Islands	0	Mauritius	0
Mexico	1	Moldova	0
Mongolia	0	Montenegro	n/a
Morocco	n/a	Namibia	1
Nepal	0	Netherlands	0
New Zealand	0	Nicaragua	1
Norway	0	Panama	1
Paraguay	n/a	Peru	1
Philippines	1	Poland	0
Portugal	0	Romania	0
Russia	0	Saint Lucia	0
Serbia	n/a	Singapore	n/a
Slovakia	0	Slovenia	0
South Africa	0	Spain	0
Sri Lanka	1	Suriname	1
Sweden	0	Switzerland	1
Taiwan	0	Tanzania	n/a
Thailand	0	Tonga	n/a
Trinidad and Tobago	0	Turkey	0

UK	0	Ukraine	0
US	1	Uruguay	1
Venezuela	1	Zambia	1

4.2.3 Federalism

Federalism is defined in a variety of ways in the literature, but there seems to be a broad agreement on its basic characteristic: a guaranteed power division between central and subnational governments (Lijphart 1999: 186). In determining whether a state is de jure, or structurally, federal, I follow the rule specified in Clark *et al.* (2009), which in turn is based on Bednar (2008). To be classified as structurally federal, a country must satisfy three criteria.

- 1) Geopolitical division: The country must be divided into mutually exclusive regional governments that are constitutionally recognized and that cannot be unilaterally abolished by the national or central government.
- 2) Independence: The regional and national governments must have independent bases of authority. Typically, this independence is established constitutionally by having the regional and national governments elected independently of one another.
- 3) Direct governance: Authority must be shared between the regional governments and the national government; each governs its citizens directly, so that each citizen is governed by at least two authorities. In addition, each level of government must have the authority to act independently of the other in at least one policy realm; the policy sovereignty must be constitutionally declared (Clark *et al.* 2009: 605).

A dummy variable, fed, codifies de jure federal states as 1 based on the above criteria. The following table summarizes the federal / unitary structure of democracies in my sample.

Table 4.9 Federal / Unitary Structure (Democracies)

Country	fed	Country	fed
Argentina	1	Armenia	0
Australia	1	Austria	1
Bangladesh	0	Barbados	0
Belgium	1	Belize	0
Bolivia	0	Bosnia and Herzegovina	1
Botswana	0	Brazil	1
Bulgaria	0	Canada	1
Cape Verde	0	Chile	0
Colombia	1	Costa Rica	0
Croatia	0	Cyprus	0
Czech Republic	0	Denmark	0
Dominica	0	Dominican Republic	0

Ecuador	0	El Salvador	0
Estonia	0	Ethiopia	1
Fiji	0	Finland	0
France	0	Gabon	n/a
Georgia	0	Germany	1
Greece	0	Grenada	0
Guatemala	0	Honduras	0
Hungary	0	Iceland	0
Indonesia	0	Ireland	0
Israel	0	Italy	0
Jamaica	0	Japan	0
Korea (S)	0	Kuwait	0
Kyrgyzstan	0	Latvia	0
Lithuania	0	Macedonia	0
Madagascar	0	Malaysia	1
Mali	0	Malta	0
Marshall Islands	0	Mauritius	0
Mexico	1	Moldova	0
Mongolia	0	Montenegro	0
Morocco	0	Namibia	0
Nepal	0	Netherlands	0
New Zealand	0	Nicaragua	0
Norway	0	Panama	0
Paraguay	0	Peru	0
Philippines	0	Poland	0
Portugal	0	Romania	0
Russia	1	Saint Lucia	0
Serbia	1	Singapore	0
Slovakia	0	Slovenia	0
South Africa	1	Spain	0
Sri Lanka	0	Suriname	0
Sweden	0	Switzerland	1
Taiwan	0	Tanzania	0
Thailand	0	Tonga	0
Trinidad and Tobago	0	Turkey	0
UK	0	Ukraine	0
US	1	Uruguay	0
Venezuela	1	Zambia	0

4.2.4 Property Rights Protection

The property rights protection variable, pright, measures the formal constitutional protection of property rights. This de jure index of property rights protection at the constitution level is constructed according to the Comparative Constitution Project database. It is the first initiative to systematically measure the formal constitutions throughout the world since 1789. Based on reliable English translations, over 1,000 constitutional documents are coded in terms of nearly 700 items covering 13 categories of constitutional issues ranging from fundamental government structures to detailed political and economic rights of citizens.³⁹

In particular, this property rights protection index looks to the constitutional text in four aspects: risk of taking, security of ownership, freedom of transfer and freedom of business. 40 The first aspect concerns the constraint on state taking power. Four questions in the survey instrument of the Comparative Constitution Project are used to identify the extent of such constraint. 1) "Can the government expropriate private property under at least some conditions?" A yes answer obviously suggests lower constraint than a no answer. 2) "What is the specified level of compensation for expropriation of private property?" The more compensation is required, the more costly it is for the state to take private property, which, in turn, should restrict the appetite for 3) "Under what conditions or for what purposes can the state expropriate private property?" This question essentially asks about the usages to which the government can apply expropriated property. It is reasonable to consider that the fewer usages allowed for expropriated property, the higher the threshold is raised for taking. limits/conditions are placed on the ability of the government to expropriate private property?" This is about any additional limits on taking embodied in the constitution. The more limits set by the constitution, of course, the more the government is constrained, thus the more secure private property rights are.

The ownership aspect bears on the constitutional recognition of private ownership in both traditional property and intellectual property. The relevant survey questions are: 1) "Does the constitution mention any of the following intellectual property rights?", and 2) "Does the constitution provide for a right to own property?". Supposedly, the more the types of intellectual property rights are stipulated in the constitution, the broader the realm of valuable assets is acknowledged for private ownership. Also, an explicit constitutional provision for property ownership is a positive sign of property rights protection.

The aspect of transfer pertains to the freedom to alienate property, *inter vivos* or after death. Three survey questions are used. 1) "Does the constitution mention the right to transfer property freely?" 2) "Does the constitution provide for a right of testate, or the

³⁹ For detailed introduction and survey instrument, see the Comparative Constitution Project website at http://www.comparativeconstitutionsproject.org.

The specifics of coding rules are included in Appendix.

right to transfer property freely after death?" 3) "Does the constitution provide for inheritance rights?" A positive answer to any of these questions should strengthen private property rights in that the value of assets will be fully internalized only if the owner is able to transfer his assets to others, for objective or subjective considerations, when he cannot completely exploit the value of these assets by himself.

The last aspect addresses the potential for a property owner to put his assets into productive usage by starting a business. Here, two survey questions are considered. 1) "Does the constitution provide a right to conduct/establish a business?" A yes answer is evidently beneficial to property owners. 2) "Does the constitution provide the right to a free and/or competitive market?" A free or competitive market condition works to ensure equal opportunities to undertake business activities, so it should improve property owners' incentives to start businesses, which further promotes the value of property ownership.

The above four aspects are equally weighted, so are the questions within each aspect, to construct a de jure constitutional property rights protection index with the lowest possible value of 0 and the highest of 10. The standardized alpha is approximately 0.7, suggesting a reasonable coherence of this index. Table 4.10 reports this score of each country covered in my sample.

4.2.5 Judicial Independence

Another de jure index constructed out of the CCP database measures the extent of judicial independence as reflected by the text of constitutions. This index encompasses five factors: status of the highest court in constitution, security of judicial tenure, difficulty in removal, independence of salary setting, and ability to conduct constitutional review.⁴¹

Anchoring the highest court in the constitution indicates a status held by the judiciary commensurate with other branches of the government. Since constitutions are, in general, more difficult to change than ordinary legislation, this kind of anchoring also ensures the stability of the institutional arrangements within which judges operate (Feld & Voigt 2003: 501). This first factor is assigned a value of 1 if a constitution provides for the supreme court; otherwise the value is 0.

Judicial tenure is widely believed crucial to judicial independence. The tenure security for the Chief Justice and other judges of the highest ordinary court are measured separately on 0 or 1 basis. 1 is assigned to a particular constitution only if there is no limit on term length for which one can serve as, respectively, the Chief Justice or a judge of the highest ordinary court.

With respect to removal, four elements are considered. The first is whether there are constitutional provisions for dismissing judges. Not anchored in the constitution,

⁴¹ All these factors, except the salary setting, focus on the highest ordinary courts, due to data availability and also to avoid potential complications. See appendix for detailed coding rules.

removal may be subject to more political influence, and instability in office will compromise judicial independence.⁴² Second, the number of conditions under with judges can be dismissed can also affect judicial independence in that the more causes allowed for dismissal, the less secure a judicial position is, especially when other governmental branches trigger and approve the dismissal. Third, judges' positions tend to be more secure if the proposal and approval powers are assigned to different entities in terms of dismissal. Separation of power adds veto points, hence reducing the probability to actually remove a judge from office. Finally, I also take into account the votes needed to propose or approve the dismissal of judges when the relevant power is awarded to the legislature. Apparently, the higher the number of votes needed, the less likely a judge will be removed. The reason to single out the legislature is because its operation is determined by the collective actions of legislators, and a decision reached by a collective action is, by and large, more costly than one made otherwise. In this sense, it is easier to remove judges when either the proposal or the approval power is reserved for an entity that is not amount to a deliberative assembly, ⁴³ all else being equal.

As for the judicial salary, my coding is based on one survey question, "Does the constitution explicitly state that judicial salaries are protected from governmental intervention?". A positive answer gets 1 while a negative one gets 0.

Finally, it is considered that, in order to guarantee judicial independence, the highest courts must have certain competencies to check the behavior of the other government branches (Feld & Voigt 2003: 502). So, like Feld & Voigt (2003), I look into the power of conducting judicial review by the highest ordinary court. In particular, one survey question – "To whom does the constitution assign the responsibility for the interpretation of the constitution?" – is used. A constitution will be coded 1 if the supreme court, including its special chamber, or any ordinary court is assigned with this responsibility, 44 and 0 otherwise. Admittedly, this simplified coding ignores much nuance underlying the designs of judicial review, but it also averts the possible inconsistencies involved in

_

⁴² Arguably, not having dismissal provisions in the constitution might imply judges cannot be dismissed at all. Yet, even in this situation, an explicit denial of the possibility to remove judges should better ensure the stability of judicial offices than a mere silence.

⁴³ Except the legislature, other governmental entities usually do not function based on collective deliberation. This is quite clear regarding the executive branch, but perhaps less so for public prosecutors or a judicial council whose decision making process may be more volatile. My coding is based on the assumption that, in terms of proposing or approving the dismissal of judges, the legislature is bound by stricter parliamentary procedures than any other governmental entity so that its operation depends more clearly on collective actions. Probably, the trickiest case is where the public retains the power to propose (the survey does not contain the information if the public can approve) dismissal of judges. Nevertheless, unless a substantial part of the public is required to make such a proposal, which cannot be determined from the Comparative Constitution Project database, it may not involve more costly coordination than the legislative process. In any event, fortunately, there is only one country, Chile, whose current constitution allows for proposing removal of judges by the public.

⁴⁴ In a few cases, a constitution is also coded 1 if the Chief Justice or a council composed of supreme court judges are charged with this responsibility.

complicated processes, thus making a cross-country comparison more sensible.

Like the property rights index, the above five factors are equally weighted, and within each factor, if built on multiple survey questions, every component is also equally weighted. The resulting index, ji, can take on values between 0 and 10 with greater values indicating higher degree of judicial independence. The standardized Cronbach's alpha of this index is about 0.7. Table 4.10 below reports this judicial independence index.

Table 4.10 De Jure Property Rights Protection and Judicial Independence Indexes (All Countries)

Country	pright	ji	Country	pright	ji
Algeria	4.17	2	Anguilla	n/a	n/a
Argentina	3.69	7.55	Armenia	8.07	3.4
Australia	0.77	9.3	Austria	1.25	2.5
Azerbaijan	5.77	3.53	Bangladesh	2.08	7.3
Barbados	1.61	4.5	Belgium	0.77	4.5
Belize	3.15	7.3	Bhutan	4.52	4
Bolivia	3.69	3.13	Bosnia and	1.25	0
			Herzegovina		
Botswana	0.36	6.8	Brazil	5.36	8.5
Bulgaria	5.57	4.5	Burundi	3.27	2
Cambodia	3.27	6	Cameroon	1.61	2
Canada	0.83	3.4	Cape Verde	7.44	4.9
Chile	3.90	5.3	China	2.44	2.5
Colombia	5.98	4.4	Costa Rica	4.32	4.5
Croatia	6.82	3.9	Cuba	3.48	4.5
Cyprus	4.12	5.8	Czech	3.69	4
Denmark	3.48	2.5	Dominica	0.21	5
Dominican	3.69	4	Ecuador	5.83	4
Republic					
Egypt	1.61	2	El Salvador	4.94	4.5
Estonia	4.79	6.5	Ethiopia	4.73	3.48
Fiji	2.02	6.8	Finland	3.48	2.5
France	0	4	Gabon	2.02	2
Georgia	5.98	2.5	Germany	2.86	2.5
Greece	2.23	3.9	Grenada	1.88	5
Guatemala	4.94	2	Honduras	2.44	4.5
Hungary	5.57	2	Iceland	2.23	4.5
Indonesia	1.25	2	Iran	2.86	3.9
Ireland	4.11	7.3	Israel	n/a	n/a

Italy 4.11 2.5 Jamaica 1.79 5 Japan 1.67 6.5 Kazakhstan 3.75 4 Korea (S) 3.27 6.9 Kuwait n/a n/a Kyrgyzstan n/a n/a Latvia 2.86 3 Lebanon 2.86 2 Lithuania 5.15 3.33 Macedonia 5.57 3.3 Madagascar 3.69 2.5 Malaysia 2.71 7.3 Maldives 2.02 2.5 Mali 3.27 4 Malta 2.71 3.43 Marshall 2.44 6.93 Mauritius 0.57 5.3 Islands Mexico 5.36 7.61 Moldova 6.82 4 Mongolia 5.98 6.5 Montenegro 5.77 4.8 Morocco 1.25 2.5 Namibia 4.94 5.3 Nepal 4.52 7.3 Netherlands 0.63 4.5						
Korea (S) 3.27 6.9 Kuwait n/a n/a Kyrgyzstan n/a n/a Latvia 2.86 3 Lebanon 2.86 2 Lithuania 5.15 3.33 Macedonia 5.57 3.3 Madagascar 3.69 2.5 Malaysia 2.71 7.3 Maldives 2.02 2.5 Mali 3.27 4 Malta 2.71 3.43 Marshall 2.44 6.93 Mauritius 0.57 5.3 Islands Mexico 5.36 7.61 Moldova 6.82 4 Mongolia 5.98 6.5 Montenegro 5.77 4.8 Morocco 1.25 2.5 Namibia 4.94 5.3 Nepal 4.52 7.3 Netherlands 0.63 4.5 New 0 5.3 Nicaragua 5.54 4.5 Zealand Norway 2.23 2 Oman 4.94	Italy	4.11	2.5	Jamaica	1.79	5
Kyrgyzstan n/a Latvia 2.86 3 Lebanon 2.86 2 Lithuania 5.15 3.33 Macedonia 5.57 3.3 Madagascar 3.69 2.5 Malaysia 2.71 7.3 Maldives 2.02 2.5 Mali 3.27 4 Malta 2.71 3.43 Marshall 2.44 6.93 Mauritius 0.57 5.3 Islands Mexico 5.36 7.61 Moldova 6.82 4 Mongolia 5.98 6.5 Montenegro 5.77 4.8 Morocco 1.25 2.5 Namibia 4.94 5.3 Nepal 4.52 7.3 Netherlands 0.63 4.5 New 0 5.3 Nicaragua 5.54 4.5 Zealand Norway 2.23 2 Oman 4.94 0.5 Pakistan 4.11 6.8 Panama 3.69 4	Japan	1.67	6.5	Kazakhstan	3.75	4
Lebanon 2.86 2 Lithuania 5.15 3.33 Macedonia 5.57 3.3 Madagascar 3.69 2.5 Malaysia 2.71 7.3 Maldives 2.02 2.5 Mali 3.27 4 Malta 2.71 3.43 Marshall 2.44 6.93 Mauritius 0.57 5.3 Islands Mexico 5.36 7.61 Moldova 6.82 4 Mongolia 5.98 6.5 Montenegro 5.77 4.8 Morocco 1.25 2.5 Namibia 4.94 5.3 Nepal 4.52 7.3 Netherlands 0.63 4.5 New 0 5.3 Nicaragua 5.54 4.5 Zealand Norway 2.23 2 Oman 4.94 0.5 Pakistan 4.11 6.8 Panama 3.69 4 Paraguay 5.36 6.9 Peru 7.86 6.9	Korea (S)	3.27	6.9	Kuwait	n/a	n/a
Macedonia 5.57 3.3 Madagascar 3.69 2.5 Malaysia 2.71 7.3 Maldives 2.02 2.5 Mali 3.27 4 Malta 2.71 3.43 Marshall 2.44 6.93 Mauritius 0.57 5.3 Islands Mexico 5.36 7.61 Moldova 6.82 4 Mongolia 5.98 6.5 Montenegro 5.77 4.8 Morocco 1.25 2.5 Namibia 4.94 5.3 Nepal 4.52 7.3 Netherlands 0.63 4.5 New 0 5.3 Nicaragua 5.54 4.5 Zealand Norway 2.23 2 Oman 4.94 0.5 Pakistan 4.11 6.8 Panama 3.69 4 Paraguay 5.36 6.9 Peru 7.86 6.9 Philippines 4.17 9.33 Poland <t< td=""><td>Kyrgyzstan</td><td>n/a</td><td>n/a</td><td>Latvia</td><td>2.86</td><td>3</td></t<>	Kyrgyzstan	n/a	n/a	Latvia	2.86	3
Malaysia 2.71 7.3 Maldives 2.02 2.5 Mali 3.27 4 Malta 2.71 3.43 Marshall 2.44 6.93 Mauritius 0.57 5.3 Islands Islands Mexico 5.36 7.61 Moldova 6.82 4 Mongolia 5.98 6.5 Montenegro 5.77 4.8 Morocco 1.25 2.5 Namibia 4.94 5.3 Nepal 4.52 7.3 Netherlands 0.63 4.5 New 0 5.3 Nicaragua 5.54 4.5 Zealand Norway 2.23 2 Oman 4.94 0.5 Pakistan 4.11 6.8 Panama 3.69 4 Paraguay 5.36 6.9 Peru 7.86 6.9 Philippines 4.17 9.33 Poland 3.33 3.5 Portugal 7.64 2 Qatar 2.86<	Lebanon	2.86	2	Lithuania	5.15	3.33
Mali 3.27 4 Malta 2.71 3.43 Marshall 2.44 6.93 Mauritius 0.57 5.3 Islands Mexico 5.36 7.61 Moldova 6.82 4 Mongolia 5.98 6.5 Montenegro 5.77 4.8 Morocco 1.25 2.5 Namibia 4.94 5.3 Nepal 4.52 7.3 Netherlands 0.63 4.5 New 0 5.3 Nicaragua 5.54 4.5 Zealand Norway 2.23 2 Oman 4.94 0.5 Pakistan 4.11 6.8 Panama 3.69 4 Paraguay 5.36 6.9 Peru 7.86 6.9 Philippines 4.17 9.33 Poland 3.33 3.5 Portugal 7.64 2 Qatar 2.86 0 Romania 4.52 2 Russia 5.98	Macedonia	5.57	3.3	Madagascar	3.69	2.5
Marshall 2.44 6.93 Mauritius 0.57 5.3 Islands Mexico 5.36 7.61 Moldova 6.82 4 Mongolia 5.98 6.5 Montenegro 5.77 4.8 Morocco 1.25 2.5 Namibia 4.94 5.3 Nepal 4.52 7.3 Netherlands 0.63 4.5 New 0 5.3 Nicaragua 5.54 4.5 Zealand Norway 2.23 2 Oman 4.94 0.5 Pakistan 4.11 6.8 Panama 3.69 4 Paraguay 5.36 6.9 Peru 7.86 6.9 Philippines 4.17 9.33 Poland 3.33 3.5 Portugal 7.64 2 Qatar 2.86 0 Romania 4.52 2 Russia 5.98 6 Rwanda 2.02 5.4 Saint Lucia n/a n/a	Malaysia	2.71	7.3	Maldives	2.02	2.5
Islands Mexico 5.36 7.61 Moldova 6.82 4 Mongolia 5.98 6.5 Montenegro 5.77 4.8 Morocco 1.25 2.5 Namibia 4.94 5.3 Nepal 4.52 7.3 Netherlands 0.63 4.5 New 0 5.3 Nicaragua 5.54 4.5 Zealand Norway 2.23 2 Oman 4.94 0.5 Pakistan 4.11 6.8 Panama 3.69 4 Paraguay 5.36 6.9 Peru 7.86 6.9 Philippines 4.17 9.33 Poland 3.33 3.5 Portugal 7.64 2 Qatar 2.86 0 Romania 4.52 2 Russia 5.98 6 Rwanda 2.02 5.4 Saint Lucia n/a n/a Serbia 6.40 2.5 Singapore 0 9.3	Mali	3.27	4	Malta	2.71	3.43
Mexico 5.36 7.61 Moldova 6.82 4 Mongolia 5.98 6.5 Montenegro 5.77 4.8 Morocco 1.25 2.5 Namibia 4.94 5.3 Nepal 4.52 7.3 Netherlands 0.63 4.5 New 0 5.3 Nicaragua 5.54 4.5 Zealand Value Value 0.5 4.5 Pakistan 4.11 6.8 Panama 3.69 4 Paraguay 5.36 6.9 Peru 7.86 6.9 Philippines 4.17 9.33 Poland 3.33 3.5 Portugal 7.64 2 Qatar 2.86 0 Romania 4.52 2 Russia 5.98 6 Rwanda 2.02 5.4 Saint Lucia n/a n/a Serbia 6.40 2.5 Singapore 0 9.3	Marshall	2.44	6.93	Mauritius	0.57	5.3
Mongolia 5.98 6.5 Montenegro 5.77 4.8 Morocco 1.25 2.5 Namibia 4.94 5.3 Nepal 4.52 7.3 Netherlands 0.63 4.5 New 0 5.3 Nicaragua 5.54 4.5 Zealand Value Value 4.5 4.5 Pakistan 4.11 6.8 Panama 3.69 4 Paraguay 5.36 6.9 Peru 7.86 6.9 Philippines 4.17 9.33 Poland 3.33 3.5 Portugal 7.64 2 Qatar 2.86 0 Romania 4.52 2 Russia 5.98 6 Rwanda 2.02 5.4 Saint Lucia n/a n/a Serbia 6.40 2.5 Singapore 0 9.3	Islands					
Morocco 1.25 2.5 Namibia 4.94 5.3 Nepal 4.52 7.3 Netherlands 0.63 4.5 New 0 5.3 Nicaragua 5.54 4.5 Zealand Norway 2.23 2 Oman 4.94 0.5 Pakistan 4.11 6.8 Panama 3.69 4 Paraguay 5.36 6.9 Peru 7.86 6.9 Philippines 4.17 9.33 Poland 3.33 3.5 Portugal 7.64 2 Qatar 2.86 0 Romania 4.52 2 Russia 5.98 6 Rwanda 2.02 5.4 Saint Lucia n/a n/a Serbia 6.40 2.5 Singapore 0 9.3	Mexico	5.36	7.61	Moldova	6.82	4
Nepal 4.52 7.3 Netherlands 0.63 4.5 New 0 5.3 Nicaragua 5.54 4.5 Zealand Norway 2.23 2 Oman 4.94 0.5 Pakistan 4.11 6.8 Panama 3.69 4 Paraguay 5.36 6.9 Peru 7.86 6.9 Philippines 4.17 9.33 Poland 3.33 3.5 Portugal 7.64 2 Qatar 2.86 0 Romania 4.52 2 Russia 5.98 6 Rwanda 2.02 5.4 Saint Lucia n/a n/a Serbia 6.40 2.5 Singapore 0 9.3	Mongolia	5.98	6.5	Montenegro	5.77	4.8
New 0 5.3 Nicaragua 5.54 4.5 Zealand Norway 2.23 2 Oman 4.94 0.5 Pakistan 4.11 6.8 Panama 3.69 4 Paraguay 5.36 6.9 Peru 7.86 6.9 Philippines 4.17 9.33 Poland 3.33 3.5 Portugal 7.64 2 Qatar 2.86 0 Romania 4.52 2 Russia 5.98 6 Rwanda 2.02 5.4 Saint Lucia n/a n/a Serbia 6.40 2.5 Singapore 0 9.3	Morocco	1.25	2.5	Namibia	4.94	5.3
Zealand Norway 2.23 2 Oman 4.94 0.5 Pakistan 4.11 6.8 Panama 3.69 4 Paraguay 5.36 6.9 Peru 7.86 6.9 Philippines 4.17 9.33 Poland 3.33 3.5 Portugal 7.64 2 Qatar 2.86 0 Romania 4.52 2 Russia 5.98 6 Rwanda 2.02 5.4 Saint Lucia n/a n/a Serbia 6.40 2.5 Singapore 0 9.3	Nepal	4.52	7.3	Netherlands	0.63	4.5
Norway 2.23 2 Oman 4.94 0.5 Pakistan 4.11 6.8 Panama 3.69 4 Paraguay 5.36 6.9 Peru 7.86 6.9 Philippines 4.17 9.33 Poland 3.33 3.5 Portugal 7.64 2 Qatar 2.86 0 Romania 4.52 2 Russia 5.98 6 Rwanda 2.02 5.4 Saint Lucia n/a n/a Serbia 6.40 2.5 Singapore 0 9.3	New	0	5.3	Nicaragua	5.54	4.5
Pakistan 4.11 6.8 Panama 3.69 4 Paraguay 5.36 6.9 Peru 7.86 6.9 Philippines 4.17 9.33 Poland 3.33 3.5 Portugal 7.64 2 Qatar 2.86 0 Romania 4.52 2 Russia 5.98 6 Rwanda 2.02 5.4 Saint Lucia n/a n/a Serbia 6.40 2.5 Singapore 0 9.3	Zealand					
Paraguay 5.36 6.9 Peru 7.86 6.9 Philippines 4.17 9.33 Poland 3.33 3.5 Portugal 7.64 2 Qatar 2.86 0 Romania 4.52 2 Russia 5.98 6 Rwanda 2.02 5.4 Saint Lucia n/a n/a Serbia 6.40 2.5 Singapore 0 9.3	Norway	2.23	2	Oman	4.94	0.5
Philippines 4.17 9.33 Poland 3.33 3.5 Portugal 7.64 2 Qatar 2.86 0 Romania 4.52 2 Russia 5.98 6 Rwanda 2.02 5.4 Saint Lucia n/a n/a Serbia 6.40 2.5 Singapore 0 9.3	Pakistan	4.11	6.8	Panama	3.69	4
Portugal 7.64 2 Qatar 2.86 0 Romania 4.52 2 Russia 5.98 6 Rwanda 2.02 5.4 Saint Lucia n/a n/a Serbia 6.40 2.5 Singapore 0 9.3	Paraguay	5.36	6.9	Peru	7.86	6.9
Romania 4.52 2 Russia 5.98 6 Rwanda 2.02 5.4 Saint Lucia n/a n/a Serbia 6.40 2.5 Singapore 0 9.3	Philippines	4.17	9.33	Poland	3.33	3.5
Rwanda2.025.4Saint Lucian/an/aSerbia6.402.5Singapore09.3	Portugal	7.64	2	Qatar	2.86	0
Serbia 6.40 2.5 Singapore 0 9.3	Romania	4.52	2	Russia	5.98	6
\mathcal{L}_{1}	Rwanda	2.02	5.4	Saint Lucia	n/a	n/a
Slovakia 6.61 4.4 Slovenia 5.77 5.3	Serbia	6.40	2.5	Singapore	0	9.3
	Slovakia	6.61	4.4	Slovenia	5.77	5.3
South 2.02 9.13 Spain 5.15 2	South	2.02	9.13	Spain	5.15	2
Africa	Africa					
Sri Lanka 2.5 9.38 Suriname 1.61 5.4	Sri Lanka	2.5	9.38	Suriname	1.61	5.4
Sweden 4.11 4.9 Switzerland 4.91 2	Sweden	4.11	4.9	Switzerland	4.91	2
Syria 2.86 0 Taiwan 1.82 6.9	Syria	2.86	0	Taiwan	1.82	6.9
Tanzania 1.67 2.8 Thailand 0 2.63	Tanzania	1.67	2.8	Thailand	0	2.63
Tonga 2.02 6 Trinidad and 1.25 7.3	Tonga	2.02	6	Trinidad and	1.25	7.3
Tobago				Tobago		
Tunisia 1.25 2 Turkey 2.44 4.8	Tunisia	1.25	2	Turkey	2.44	4.8
UAE 2.02 4.8 UK n/a n/a	UAE	2.02	4.8	UK	n/a	n/a
Ukraine 6.19 4.8 US 2.86 7.4	Ukraine	6.19	4.8	US	2.86	7.4
Uruguay 5.36 5.43 Venezuela 5.36 4.63	Uruguay	5.36	5.43	Venezuela	5.36	4.63
Vietnam 5.33 2.5 West Bank n/a n/a	Vietnam	5.33	2.5	West Bank	n/a	n/a
and Gaza				and Gaza		

Yemen 2.86 4.5 Zambia 0.68 /.3	Yemen	2.86		Zambia	0.68	7.3
--------------------------------	-------	------	--	--------	------	-----

Feld & Voigt (2003) listed twelve variables used to construct their indicator of de jure judicial independence. As their index does not target solely at constitutions, its coverage is, unsurprisingly, broader than mine, which contains five of those elements. Regarding the remaining variables, some are not included in the database, or no data available in its current version, e.g. process of case allocation. For others it seems hard to find out a coherent explanation of the existing data. For instance, the amendment ease of constitutions may not be easily compared by reading the text about the relevant procedures. As Elkins *et al.* (2009: 100) says, it is difficult to evaluate whether a constitution that needs supermajority legislative votes to amend is more or less flexible than one that requires an ordinary legislative majority with a subsequent referendum by the public. Table 4.11 compares my index with the index generated by Feld & Voigt (2003). The correlation between these two indexes is 0.39.

Table 4.11 Comparing Feld & Voigt (2003) and My Indexes

Feld & Voigt (2003)	Index in This	Remarks	
	Study		
Anchoring of highest	Anchoring of		
court	rt highest court		
Amendment Ease		Difficult to compare.	
Appointment procedure		No data available in the current database Also, appointment seems less important than removal as judges can behave	
Term length	independently once appoin Feld & Voigt (2003) considers retirement as a factor weakenin Term length Term length		
Removal	Removal		
Renewable terms		No clear indicator in the database. ⁴⁵	
Salary setting	Salary setting		
Adequate compensations		Not included in the database. It does not seem to be a de jure element, either.	

_

⁴⁵ The database contains questions about the number of terms of the Chief Justice and other members of the highest ordinary court. However, for those constitutions ensuring life time tenure, the restrictions on number of terms are usually not specified, and irrelevant indeed. But such restrictions are not specified, either, for many constitutions that do not allow life time tenure. It is also hard to form a theory ex ante about the different impact on judicial independence between permitting one term and two terms, or successive and non-successive terms.

Court accessibility		Not included in the database.
Allocation of cases		Not included in the database.
Constitutional review	Constitutional Review	
Decision publication		Not included in CCP.

4.2.6 Antidiscrimination Provisions

Restricted by the data availability, I used four survey questions of the Comparative Constitution Project to construct the variable, disc, measuring the antidiscriminative quality of constitutions.

The first question asks about the breadth of the population who are granted the constitutional rights. That more people are entitled to these rights suggests less discriminative constitutional environment.

The second and third questions pertain directly to antidiscrimination. One asks if the constitution refers to equality before the law or non-discrimination, and the other identifies the groups protected from discrimination by the constitution. A positive answer to the former obviously takes a stronger attitude against discrimination than a negative one. As for the latter, I think of a wider coverage by the antidiscrimination provisions as better than a narrower one in terms of equality protection.

The last question asks about the groups whose rights are specifically restricted in the constitution. I assume the smaller the number of such groups, the less discriminative the constitutional environment is.

These four questions are equally weighted as well. The resulting index can take on values from 0 to 10 with 10 indicating the least discriminative constitutional provisions. It is reported in Table 4.12. However, the alpha statistic of this index is only about 0.3, suggesting its dubious reliability.

Table 4.12 Anti-discrimination Index (All Countries)

Country	disc	Country	disc
Algeria	8.13	Anguilla	n/a
Argentina	7.5	Armenia	7.92
Australia	5	Austria	6.98
Azerbaijan	6.41	Bangladesh	5.78
Barbados	8.75	Belgium	6.67
Belize	8.43	Bhutan	5.78
Bolivia	8.78	Bosnia and	9.06
		Herzegovina	
Botswana	8.59	Brazil	8.44
Bulgaria	8.07	Burundi	6.56
Cambodia	8.23	Cameroon	8.13

Canada	6.09	Cape Verde	6.41
Chile	7.5	China	6.98
Colombia	8.91	Costa Rica	5
Croatia	6.72	Cuba	7.5
Cyprus	9.06	Czech	6.56
Denmark	5.31	Dominica	8.44
Dominican Republic	7.5	Ecuador	9.22
Egypt	5.78	El Salvador	5.63
Estonia	9.22	Ethiopia	8.91
Fiji	9.06	Finland	10
France	7.29	Gabon	5.78
Georgia	6.56	Germany	7.60
Greece	8.59	Grenada	8.44
Guatemala	5.15	Honduras	7.5
Hungary	8.07	Iceland	8.59
Indonesia	5	Iran	5.63
Ireland	6.67	Israel	n/a
Italy	8.28	Jamaica	5.94
Japan	8.28	Kazakhstan	9.38
Korea (S)	7.14	Kuwait	n/a
Kyrgyzstan	n/a	Latvia	9.17
Lebanon	6.67	Lithuania	8.75
Macedonia	6.41	Madagascar	5.94
Malaysia	5.63	Maldives	5
Mali	8.59	Malta	5.93
Marshall Islands	9.06	Mauritius	8.44
Mexico	7.22	Moldova	7.92
Mongolia	8.39	Montenegro	5
Morocco	6.82	Namibia	6.09
Nepal	6.41	Netherlands	5.63
New Zealand	2.5	Nicaragua	8.75
Norway	2.5	Oman	7.60
Pakistan	5.63	Panama	8.59
Paraguay	6.09	Peru	10
Philippines	7.81	Poland	7.66
Portugal	6.72	Qatar	5.63
Romania	7.76	Russia	8.75
Rwanda	7.19	Saint Lucia	n/a
Serbia	9.38	Singapore	7.97

Slovakia	6.72	Slovenia	9.06
South Africa	9.38	Spain	10
Sri Lanka	5.94	Suriname	8.44
Sweden	5.63	Switzerland	6.72
Syria	6.67	Taiwan	5.78
Tanzania	6.09	Thailand	9.53
Tonga	7.5	Trinidad and	8.28
		Tobago	
Tunisia	5	Turkey	6.09
UAE	5.63	UK	n/a
Ukraine	7.5	US	7.97
Uruguay	7.5	Venezuela	5.63
Vietnam	7.66	West Bank and	n/a
		Gaza	
Yemen	6.67	Zambia	6.09

Chapter 5 Cross-Sectional Study: Basic Methods

5.1 Linear Regression Model and Conditional Independence Assumption⁴⁶

The question posed to the data in this study is what the effects of a nation's constitutional environment are on its entrepreneurial performance, both in the quantitative and the qualitative senses. So I am interested in asking what might happen if a country's constitutional structure changed, say, from a presidential government to a parliamentary one, or, the constitutional protection of property rights is strengthened. The linear regression model will be a useful tool to provide the basic answers to these questions.

Suppose for any particular constitutional feature, a country would have a certain kind of entrepreneurial performance. So we can use a country-specific functional notation

$$Y_{si} \equiv f_i(s)$$
,

where Y_{si} stands for country i's entrepreneurial performance – Inserate and Inesrate in this study – under the constitutional setup of s. s can be binary, like presidential (s = 1) vs. parliamentary (s = 0) government, or majoritarian (s = 1) vs. proportional (s = 0) election rules, but it can also be continuous, such as a specific value of the property rights protection index.

For the sake of convenience, let's use a binary s as an example. In this case, the potential outcomes of a country's entrepreneurial performance will be Y_{1i} if $s_i = 1$ and Y_{0i} if $s_i = 0$. We hope to measure the average of $Y_{1i} - Y_{0i}$. However, for a particular country, i, we can only see one of Y_{1i} or Y_{0i} , but never both. In other words, the observed outcome, Y_i , is Y_{1i} if $s_i = 1$, or Y_{0i} if $s_i = 0$. Consequently, we have

$$E[Y_i \mid s_i = 1] - E[Y_i \mid s_i = 0] = E[Y_{1i} - Y_{0i} \mid s_i = 1] + E[Y_{0i} \mid s_i = 1] - E[Y_{0i} \mid s_i = 0].$$
(5.1)

Equation (5.1) says that the observed difference in entrepreneurial performance is the sum of the average treatment effect on the treated group and the selection bias. This means that those countries with a constitutional feature s = 1 would have had better entrepreneurial performance anyway if the selection bias is positive and big enough. Then, the direct comparison between observed outcomes exaggerates the benefit of this constitutional feature.

To overcome the selection bias problem, we need to introduce the conditional independence assumption (CIA). It essentially asserts that conditional on certain observed characteristics, X_i , the treatment s_i is randomly assigned, unrelated to the potential outcomes of treatment Y_{si} , or formally,

$$Y_{si} \perp \!\!\! \perp s_i \mid X_i$$
, for all s.

Under CIA, the comparison of average entrepreneurial performance across country groups with different constitutional features has a causal interpretation. In other words,

$$E[Y_i | X_i, s_i = 1] - E[Y_i | X_i, s_i = 0] = E[Y_{1i} - Y_{0i} | X_i].$$

⁴⁶ The discussion in this section is based on Angrist & Pischke (2009).

If we further assume that entrepreneurial performance function $f_i(s)$ is linear in constitutional features, s, and also the same for every country except for an addictive error term, then we can write

$$Y_i = \alpha + \beta s_i + \eta_i. \tag{5.2}$$

If CIA holds given the observed covariate X_i , η_i can be decomposed into a linear function of X_i and an error term, ε_i , i.e.

$$\eta_i = \gamma X_i + \varepsilon_i$$

where γ satisfies $E[\eta_i \mid X_i] = \gamma X_i$, and ε_i and X_i are uncorrelated. If we extend the model to a vector of covariates and a vector of constitutional features, then the baseline regression model for this study can be written as

$$Y_{i} = \alpha + \beta s_{i} + \gamma X_{i} + \epsilon_{i},$$
(5.3)

and the regression coefficient is the causal effect of our interest.

5.2 Which Variables to Control?

CIA asserts that, given the variables under control, the assignment of treatments – constitutional choices in this study – is random and not correlated with the dependent variable to be explained. This means, in our context, that the covariates controlled in the regression have to contain the variables impacting both the selection of constitutional features and entrepreneurial development. In addition, these variables are good controls if their values had been fixed at the time the regressor of interest was determined (Angrist & Pischke 2009: 64).

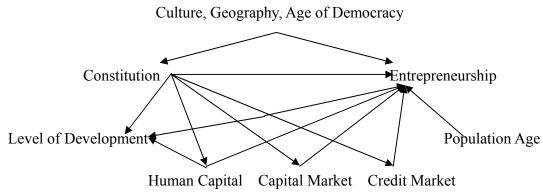
Another set of variables may affect entrepreneurship of a nation, notwithstanding their theoretical irrelevance to selection of constitutional settings. Leaving these variables out of the regression model will not generate biased estimation of coefficients, nevertheless, it causes bias in estimated variances of coefficients, which implies the conclusions about the statistical significance thereby obtained are problematic. Thus, in principle, it is ill-advised to drop any variable from a model that can be a determinant of entrepreneurial performance (Gujarati & Porter 2009: 473). In practice, however, both data availability and consideration about degrees of freedom impose limits on adding extra controls in such a cross-national analysis. Therefore, subject to the availability of data, I try to include the controls that are thought of as strong determinants of entrepreneurship in the literature.

The third group of variables affects entrepreneurship, but may themselves be outcomes of the constitutional environment. In general, controlling outcome variables may cause selection bias (Angrist & Pischke 2009: 64). But on the other hand, if these variables do exert influence on entrepreneurship which cannot be explained directly by constitutional features, we will also be biased at estimating the total effects of

constitutional environment. Alternatively, a more serious specification problem might arise if the omitted variable serves as a partial proxy of some determinant of entrepreneurship despite being affected by the constitutional environment. So this group of variables apparently gives rise to a dilemma in model specification. Fortunately, including these variables in our regression will still generate valid estimates if the following assumption can be made: The disturbance terms in the two kinds of regressions – these outcome variables and the variables measuring entrepreneurial performance, respectively, on constitutional features – are not correlated (Clarke & Stone 2008: 390). This assumption is sometimes referred to as the assumption of zero contemporaneous correlation (Gujarati & Porter 2009: 473). I explicitly rely on this assumption when controlling some potential outcome variables in the regression.

Let's look at the conceivable relationships between constitutional environment, entrepreneurship, and its determinants discussed in Chapter 3. Figure 5.1 plots one pattern of these relationships.

Figure 5.1



In the above figure, culture heritage, geographic location and age of democracy are deemed to determine both the constitutional selection and entrepreneurial development. Their potential effects on entrepreneurship have been explored in Chapter 3. As for their impact on constitutional selection, some researchers suggest that certain constitutional characteristics, form of government in particular, presents strong tendency of geographic concentration. Also, they have shown that, with respect to democracies, the design of basic constitutional mechanisms of democracy is partly determined by when it was adopted, thus bearing on the age of democracy (Persson & Tabellini 2003). Finally, considering the path dependence of institutional selection, it seems reasonable to believe that cultural heritage may play a part in shaping a country's constitutional environment (North 1990). Moreover, these three factors seem to predate the choice of constitutional characteristics, thus becoming desirable controls without much complication.⁴⁷

_

⁴⁷ Arguably, the age of democracy may be determined concurrently with the constitutional choices, but it is

As explained in Chapter 3, the age structure of a country's population affects entrepreneurial actions in this country. At the same time, there does not seem to be any obvious reason why this demographic feature may result from the constitutional environment of a country.

Human capital, vitality of capital market, and the competitiveness of credit market are all regarded as important determinants of entrepreneurship. On the other hand, perhaps they are all affected by constitutional environment as well. For these controls, therefore, zero contemporaneous correlation has to be assumed.

The trickiest component in Figure 5.1 is the level of economic development. Chapter 3 has demonstrated it may be a significant determinant of entrepreneurship, yet a reverse causal relationship also has strong theoretical support. Furthermore, a substantial number of theoretical and empirical studies have posited that the level of economic development, as proxied by GDP per capita, is under the influence of a nation's institutional structure of which constitution is a crucial part (e.g. Hall & Jones 1999).⁴⁸ To borrow a term from Pearl (2009), level of economic development will be a "collider" if the relationships between constitutional environment, economic development and entrepreneurship are as plotted in Figure 5.1. By controlling a collider, we are invalidating CIA. For one thing, when two variables have a common effect, they will become dependent once we condition on this common effect: Given the effect, absence of one cause raises the likelihood of another (Pearl 2009: 17). For another, if there is an unobserved confounder between the effect variable and one of the two ostensible cause variables, then conditioning on the effect may create spurious associations between the two ostensible causes. For instance, suppose the true relationships between X, Y and Z are $X \to Z \leftarrow U \to Y$, where U is the unobserved confounder. In this relationship pattern, X actually has no direct effect on Y, as can be seen by deleting all arrows entering Z. Were we to condition on Z, however, a spurious association would be made up though the unobserved variable that might be construed as a direct effect of X on Y (Pearl 2009: 127). For these considerations, I will not include level of economic development as a control in the regressions.⁴⁹

On the other hand, the reverse causality moving from entrepreneurial performance toward economic development may not exist indeed. In other words, the connections between constitution, development and entrepreneurship may be projected in another way as illustrated by Figure 5.2.

still hard to imagine that the latter can be a cause of the former, rather than in the opposite.

⁴⁸ Nevertheless, there are scholars indicate that economic growth is not correlated with certain institutional elements such at democracy at least in the short run (Acemoglu *et al.* 2008).

⁴⁹ For the same reasons, any outcome variables of the common effect should not be controlled either. In this study, a possible variable of this kind is unemployment.

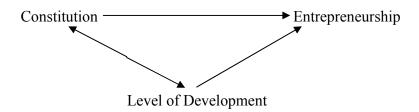
Figure 5.2



In this projection, level of economic development is no longer a collider, and can be conditioned on if the assumption of zero contemporaneous correlation is valid. The instrumental variable (IV) method is probably a means to ascertain whether the reverse causality is really present if an instrument can be found that affects entrepreneurship only through its effects on economic development.⁵⁰

There is another issue needs to be mentioned regarding level of economic development. In this study, I explicitly assume that constitutional environment is exogenous to economic development. Put differently, the choice of constitutional settings is not determined by a country's level of economic development. Otherwise, the relationship among constitution, development and entrepreneurship becomes a cycle presented in Figure 5.3.

Figure 5.3



Identifying the causality in such cyclic associations calls for more sophisticated structural models. This assumption is probably valid as far as the de jure constitutional characteristics are concerned. The formal constitutional structures in most countries, e.g. electoral system and form of government, are very stable over very long time periods (Persson & Tabellini 2003). It does not seem to have any systematic pattern of change in formal constitutions with the growth of economy. But it might be more problematic with respect to some de facto elements of constitutional environment, especially the de facto property rights protection, 51 so the results should be interpreted with caution.

⁵⁰ Unfortunately, I was not able to find a strong instrument for the purpose of this research, so it remains a task for future study to identify the exact causal direction between economic development and entrepreneurship, see section 6.3 *infra*.

⁵¹ The causal direction between corruption and growth is not uncontroversial. Mauro (1995) found corruption led to lower level of economic growth whereas Treisman (2000) shows that level of economic development may be a cause of corruption. Since the extent of corruption is an important component of the de facto property rights protection condition, it is reasonable to suspect that the de facto security of property rights may not be exogenous to economic development. On the other hand, the sizes of selectorates and winning coalitions, as well as some de facto federalist features like political decentralization, are less likely to be outcomes of economic development.

5.3 Propensity Score Matching

In the linear regression model, the entrepreneurial performance function is assumed to be linear in constitutional features. Generally speaking, this assumption is unlikely to distort the results substantially, for the regression can be thought of as the best linear approximation to the underlying nonlinear conditional expectation function (CEF) (Angrist & Pischke 2009). Nevertheless, the linearity assumption is hard to assess, ⁵² so it may be desirable to relax this assumptions as a test of the robustness of the results of regression. The propensity score matching is a semi-parametric method to estimate the treatment effect not relying on linearity of the function form.

Like the causal regression model, the propensity score matching strategy explicitly takes on the conditional independence assumption. It is based on the idea that "if potential outcomes are independent of treatment status conditional on a multivariate covariate vector X_i , then potential outcomes are independent of treatment status conditional on a scalar function of covariates, the propensity score, defined as $p(X_i) \equiv E[D_i \mid X_i] = P[D_i = 1 \mid X_i]$ ", where D_i indicates the treatment status – treated = 1 (Angrist & Pischke 2009: 80). So the gist of propensity score matching is to reduce the control to a one-dimensional covariate, the probability of treatment itself, which, in turn, is usually estimated by the probit or logit model in practice. When comparing countries with similar propensity scores, we are approaching the evaluation of causal effects as we would do in a controlled experiment. The effect of treatment on the treated then can be written as

$$E[Y_{1i} - Y_{0i} \mid D_i = 1] = E\{E[Y_i \mid p(X_i), D_i = 1] - E[Y_i \mid p(X_i), D_i = 0] \mid D_i = 1\}.$$

Considering the pivotal assumption of conditional independence underlying propensity score matching, the variables used to generate the propensity scores should contain those covariates impacting both constitutional selection and entrepreneurial performance. So cultural, geographic, and age of democracy will be included to implement matching, ⁵³ and the propensity scores are obtained using the logit model. To avoid the influence of outliers in matching, I will also impose the common support condition, which drops the observations in the treatment group whose propensity scores are higher than the maximum or less than the minimum propensity score of the control group.

Finally, although the propensity score methods can be adapted to multivalued treatments, it is most practical in cases where the causing variable takes on two values

⁵² Assumptions underlying regression are problematic especially in the time series context, see Angrist & Kuersteiner (2004).

⁵³ The parsimonious specification allows for enough randomness in the propensity scores, which expands the region of overlapping propensity scores between countries belonging to different constitutional groups (Persson & Tabellini 2003: 142). In addition, it lessens the statistical burden and improves the precision of estimation in finite samples (Angrist & Pischke 2009: 84).

(Angrist & Krueger 1999: 1315). So for the two indexes of de jure constitutional features scaling from 0 to 10, ji and pright, I will transform them into two dummy variables, dji and dpright respectively, for the purpose of propensity score matching. The values in the top two percentiles are coded as 1 in the transformed dummies.

Chapter 6 Results of the Study

6.1 De Facto Constitutional Environment and Entrepreneurship

As stated in the previous chapters, the relationship between de facto constitutional environment and entrepreneurship is to be tested across democratic and authoritarian countries. In particular, the quantitative study focuses on the impact of de facto security of property rights, de facto federal characteristics, and the two de facto political structural variables suggested in Bueno de Mesquita *et al.* (2003), viz. the size of the winning coalition and its ratio to the size of the selectorate.

6.1.1 De Facto Property Rights Protection

1) Basic Results

The basic results of the OLS regressions using the Heritage Foundation Index are reported in Tale 6.1.

Table 6.1 De Facto Property Rights Protection and Entrepreneurship: Heritage Foundation Index

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	lnesrate
	0.002	0.008	0.001	0.007
ca80	(0.003)	(0.004)**	(0.002)	(0.004)*
90	-0.003	-0.003	-0.006	-0.002
mu80	(0.007)	(0.007)	(0.007)	(0.007)
nr90	0.000	0.003	0.001	0.002
pr80	(0.004)	(0.005)	(0.003)	(0.005)
gao.1	0.43	-0.06	0.37	-0.12
geo1	(0.41)	(0.54)	(0.32)	(0.57)
2	0.39	-0.31	0.57	-0.57
geo2	(0.40)	(0.41)	(0.34)*	(0.38)
ga a 4	0.34	-0.40	0.43	-0.46
geo4	(0.21)	(0.32)	(0.16)***	(0.27)
gao 5	-0.01	0.54	0.12	0.32
geo5	(0.34)	(0.77)	(0.32)	(0.79)
9006	0.37	-0.46	0.38	-0.52
geo6	(0.22)*	(0.46)	(0.20)*	(0.48)
agar80	-0.01	0.016		
cger80	(0.01)	(0.012)		
literacy			-0.03	0.02
meracy			(-0.01)**	(0.02)
rate3554	-1.79	1.71	0.69	0.68

	(3.35)	(4.69)	(2.9)	(4.42)
****	-0.51	0.71	-0.51	0.73
mcapc	(0.25)**	(0.35)**	(0.26)*	(0.34)**
2227	-0.61	0.70	-0.38	0.51
acon	(0.48)	(0.53)	(0.46)	(0.46)
dfah	-0.003	0.0132	-0.005	0.013
dfph	(0.007)	(0.0075)*	(0.007)	(0.007)*
Number of	65	64	71	70
Observations	03	04	/ 1	70
Adjusted R ²	0.40	0.46	0.45	0.49

Table 6.1 show that, no matter whether the combined gross enrollment ratio of 1980s (Columns (1) and (2)) or the adult literacy rate is used to control human capital (Columns (3) and (4)), de facto security of property rights does not affect the quantity of entrepreneurs, and have some positive effect on the quality of entrepreneurship but only significant at 10% level.⁵⁴

As introduced in Chapter 3, however, the self-employment data of China and U.S. are collected from sources based on definitions different from ILO datasets. The data of China may be especially problematic, as the source does not even provide information allowing for a valid comparison with the ILO data. In fact, China does seem to be an outlier in terms of the quantity of entrepreneurs, ⁵⁵ although it is less so with regard to the quality of entrepreneurship. ⁵⁶ For these considerations, it is desirable to drop China from the regression, and the results after this adjustment are reported in the next table.

Table 6.2 De Facto Property Rights Protection and Entrepreneurship: Heritage Foundation Index (China Excluded)

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	lnesrate
ca80	0.002 (0.003)	0.008 (0.004)**	0.002 (0.002)	0.007 (0.004)*

The few significant t ratios in regressions might suggest a detection of multicollinearity though the adjusted R²s are not very high either. But the results of various tests do not arouse serious concerns about this problem: When cger80 is included, the mean VIF is 2.43 and the condition index (CI) is 5.72; when literacy is included, the mean VIF is 2.48 and the condition index (CI) is 5.45.

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

⁵⁵ Its residual, in absolute values, is 75% larger than the second largest residual in the sample and is 2.4 times of the third largest residual.

⁵⁶ But remember the number of employers is not directly available and tends to be underestimated by using the number individual household businesses as a proxy. So China may as well be an outlier also in terms of entrepreneurial quality.

90	-0.006	-0.001	-0.01	0.001
mu80 pr80	(0.006)	(0.007)	(0.005)**	(0.006)
	0.001	0.002	0.001	0.002
pr80	(0.003)	(0.005)	(0.003)	(0.005)
1	0.46	-0.08	0.32	-0.09
geo1	(0.43)	(0.55)	(0.32)	(0.58)
~~~?	0.74	-0.52	0.87	-0.75
geo2	(0.24)***	(0.39)	(0.20)***	(0.37)**
gaa4	0.35	-0.41	0.41	-0.45
geo4	(0.19)*	(0.33)	(0.15)***	(0.29)
gaa <b>5</b>	0.15	0.44	0.32	0.20
geo5	(0.29)	(0.75)	(0.24)	(0.77)
~~~(	0.38	-0.47	0.38	-0.52
geo6	(0.15)**	(0.41)	(0.13)***	(0.44)
20000	-0.018	0.018		
cger80	(0.01)*	(0.013)		
litamaari			-0.04	0.03
literacy			(-0.01)***	(0.02)
rate3554	0.56	0.27	2.87	-0.59
18163334	(2.69)	(4.77)	(2.15)	(4.50)
maana	-0.37	0.63	-0.37	0.64
mcapc	(0.23)	(0.37)*	(0.22)	(0.34)*
0000	-0.23	0.47	0.04	0.26
acon	(0.29)	(0.47)	(0.22)	(0.40)
dfph	-0.01	0.018	-0.01	0.017
<u>uipii</u>	(0.004)***	(0.007)**	(0.003)***	(0.007)**
Number of	64	63	70	69
Observations	0+	03	70	03
Adjusted R ²	0.57	0.50	0.63	0.52

Now, the de facto property rights protection index is, in both specifications, negatively correlated with the quantity of entrepreneurs at 1% significance level, but positively correlated with the quality of entrepreneurship at 5% significance level.⁵⁷ In another series of regressions, I added the dummy of democracies, dem, assuming democracy affects both de facto property rights protection and entrepreneurship. But

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

⁵⁷ I also ran another four regressions with both China and US excluded, and the results are all the same in terms of both the significance levels and the point estimates of dfph, except that the point estimate becomes slightly higher to 0.019 when cger80 is included.

the associations between dfph and Inserate or Inesrate are all the same in terms of both significance levels and point estimates, except that the coefficient of dfph goes slightly up to 0.019 when the adult literacy rate is used as a proxy for human capital.⁵⁸

I used another index from Hall & Jones (1999) to measure the de facto property rights protection. The OLS regression results are reported in Table 6.3, where China is again dropped.

Table 6.3 De Facto Property Rights Protection and Entrepreneurship: Hall & Jones (1999) (China Excluded)

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	lnesrate
00	0.000	0.008	0.000	0.008
ca80	(0.003)	(0.004)**	(0.003)	(0.004)**
	-0.004	-0.013	-0.01	-0.007
mu80	(0.006)	(0.005)**	(0.006)**	(0.006)
m m ^Q O	-0.003	0.007	-0.004	0.0068
pr80	(0.003)	(0.004)	(0.003)	(0.0037)*
gg 1	0.24	0.17	0.05	0.33
geo1	(0.42)	(0.47)	(0.35)	(0.51)
~~?	0.45	-0.27	0.57	-0.28
geo2	(0.27)	(0.35)	(0.24)**	(0.32)
~~~1	0.33	-0.37	0.38	-0.38
geo4	(0.19)*	(0.29)	(0.15)***	(0.25)
~~~5	-0.48	1.66	-0.05	1.41
geo5	(0.45)	(0.55)***	(0.32)	(0.59)**
~~~(	0.22	-0.32	0.27	-0.36
geo6	(0.18)	(0.48)	(0.17)	(0.48)
2 - 2 - 2 0 0	-0.018	0.002		
cger80	(0.011)	(0.01)		
1:4			-0.05	0.02
literacy			(-0.01)***	(0.02)
mata 255 A	-0.96	5.73	1.87	3.86
rate3554	(2.64)	(4.18)	(2.22)	(4.07)
*** *** **	-0.44	0.61	-0.39	0.55
mcapc	(0.24)*	(0.36)*	(0.22)*	(0.30)*
0000	-0.22	0.30	-0.03	0.22
acon	(0.31)	(0.33)	(0.22)	(0.34)
gadp	-0.44	0.46	-0.40	0.45

⁵⁸ Again, VIF and CI tests do not suggest multicollinearity a serious concern.

	(0.16)***	(0.38)	(0.15)**	(0.37)
Number of Observations	57	56	60	59
Adjusted R ²	0.57	0.59	0.67	0.62

When proxied by the Hall & Jones (1999) index, de facto property rights protection is still significantly and negatively correlated with the number of entrepreneurs, but its effect on the quality of entrepreneurship, despite being positive, is no longer significant. In four unreported regressions, I again added the democracy dummy and found no difference in these outcomes except for slight rises in the magnitude of the effects on entrepreneur quantity.⁵⁹

#### 2) Instrumental Variable (IV) Estimates

To avoid the endogeneity, I use the ethnolinguistic fractionalization (ELF) index as an instrument for de facto security of property rights. It is posited that the ELF index has a significant and negative correlation with the actual quality of property rights protection, and was used as an instrument for institutional quality in previous researches such as Mauro (1995). The variable avelf contains the ELF index according to La Porta *et al.* (1999). The two-stage least liner squares (2SLS) method is applied to make the IV estimates, with the first stage includes cultural, geographical, human capital, population age structure, capital market viability and credit market competitiveness as controls. The IV estimates and the relevant first stage results are reported in the tables below.

Table 6.4 De Facto Property Rights Protection and Entrepreneurship: IV Estimate Heritage Foundation Index (China Excluded)

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	Inesrate
dfph	-0.019	0.032	-0.03	0.04
шрп	(0.008)**	(0.021)	(0.001)***	(0.02)***
Human Capital Proxy	cger80	cger80	literacy	literacy
Number of Observations	55	54	56	55
Adjusted R ²	0.67	0.57	0.62	0.49

First-Stage Summary Statistics: Instrumented Variable = dfph

Dependent Human Capital Adjusted  $R^2$  Robust F Prob > F

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

⁵⁹ In addition, I also tested the results when China is not excluded. Again, no qualitative difference was identified, though China still looks like an outlier in terms of the residual.

Variable	Proxy			
Inserate	cger80	0.61	4.89	0.03
lnesrate	cger80	0.59	5.33	0.03
Inserate	literacy	0.62	5.11	0.03
lnesrate	literacy	0.62	5.66	0.02

Table 6.5 De Facto Property Rights Protection and Entrepreneurship: IV Estimate Hall & Jones (1999) (China Excluded)

( ) (				
	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	Inesrate	Inserate	lnesrate
gadp	-1.01 (0.51)**	1.67 (1.00)*	-1.56 (0.57)***	2.30 (0.85)***
Human Capital Proxy	cger80	cger80	literacy	literacy
Number of Observations	54	53	55	54
Adjusted R ²	0.56	0.46	0.37	0.31

First-Stage Summary Statistics: Instrumented Variable = gadp				
Dependent	Human Capital	Adjusted R ²	Robust F	Prob > F
Variable	Proxy	Aujusteu K	Kooust r	Р100 / Г
Inserate	cger80	0.10	4.28	0.05
lnesrate	cger80	0.09	4.80	0.03
Inserate	literacy	0.12	5.53	0.02
lnesrate	literacy	0.12	6.77	0.01

Note: Robust standard errors in parentheses.

IV estimates, by and large, confirm the findings from OLS regressions. ⁶⁰ Interestingly, de facto security of property rights becomes significantly correlated with the quality of entrepreneurship in a positive way even when proxied by the Hall & Jones (1999) index. However, the adjusted R² values drop so it seems the models fit less well when the Hall & Jones (1999), rather than the Heritage Foundation index, is used.

# 6.1.2 De Facto Federalism

 60  However, a caveat may be in order that the adjusted  $R^2s$  are rather low in the first stage regressions, especially when the Hall & Jones (1999) index was used as a measurement of de facto property rights security. Therefore, the validity of the IV estimates should not be overstated.

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

Table 6.4 reports the results of OLS models when fiscal decentralization is proxied by the share of tax revenue obtained by subnational governments.

Table 6.6 De Facto Federalism and Entrepreneurship: Fiscal Decentralization

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	lnesrate
	0.005	0.007	0.005	0.006
ca80	(0.004)	(0.006)	(0.003)	(0.005)
0.0	0.001	0.006	0.001	0.01
mu80	(0.01)	(0.01)	(0.01)	(0.01)
0.0	0.002	0.002	0.003	0.001
pr80	(0.004)	(0.006)	(0.004)	(0.006)
1	0.24	0.16	0.001	0.30
geol	(0.66)	(0.80)	(0.59)	(0.97)
2	0.55	-0.78	0.50	-0.72
geo2	(0.34)	(0.46)*	(0.36)	(0.48)
4	0.59	-0.99	0.53	-0.897
geo4	(0.27)**	(0.43)**	(0.25)**	(0.450)*
~~~	0.44	-0.98	0.55	-1.17
geo5	(0.44)	(1.05)	(0.40)	(1.03)
	0.20	0.17	0.22	0.15
geo6	(0.15)	(0.30)	(0.13)*	(0.31)
00	-0.007	0.01		
cger80	(0.02)	(0.01)		
1:4			-0.04	0.06
literacy			(0.04)	(0.04)
rate3554	0.48	-4.94	2.96	-8.67
18163334	(3.67)	(5.81)	(4.45)	(6.34)
***	-0.14	0.42	-0.17	0.46
mcapc	(0.24)	(0.27)	(0.23)	(0.28)*
000	-0.82	1.27	-0.85	1.28
acon	(0.51)	(0.61)**	(0.54)	(0.70)*
atr	-0.019	0.015	-0.019	0.01
str	(0.011)*	(0.008)*	(0.011)*	(0.008)
Number of Observations	41	40	42	41
Adjusted R ²	0.49	0.42	0.51	0.45

Note: Robust standard errors in parentheses.

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

From Table 6.6, we see some, though weak, evidence that fiscal decentralization is negatively associated with the quantity of entrepreneurial activities, but positively associated with the quality of entrepreneurial performance. However, if China is excluded from the regressions, even this weak evidence no longer sustains. The following table reports the results when China is not included.

Table 6.7 De Facto Federalism and Entrepreneurship: Fiscal Decentralization (China Excluded)

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	lnesrate
2200	0.004	0.007	0.004	0.006
ca80	(0.003)	(0.006)	(0.003)	(0.005)
00	-0.006	0.008	-0.007	0.01
mu80	(0.010)	(0.01)	(0.008)	(0.01)
	-0.001	0.003	-0.001	0.004
pr80	(0.004)	(0.006)	(0.003)	(0.006)
1	0.10	0.01	-0.21	0.37
geo1	(0.47)	(0.79)	(0.52)	(0.96)
~~~?	0.86	-0.90	0.86	-0.90
geo2	(0.31)***	(0.54)	(0.28)***	(0.53)*
~~^1	0.51	-0.96	0.41	-0.82
geo4	(0.24)**	(0.43)**	(0.18)**	(0.46)*
~~~ <b>5</b>	0.42	-1.00	0.72	-1.29
geo5	(0.39)	(1.05)	(0.35)**	(1.02)
9006	0.17	0.18	0.19	0.17
geo6	(0.12)	(0.28)	(0.13)	(0.29)
2000	-0.02	0.015		
cger80	(0.01)**	(0.014)		
litaraay			-0.10	0.093
literacy			(0.03)***	(0.046)**
rate3554	1.62	-5.67	7.81	-11.77
18163334	(2.83)	(6.00)	(2.72)**	(6.66)*
maana	-0.23	0.46	-0.33	0.56
mcapc	(0.17)	(0.27)*	(0.17)*	(0.26)**
0000	-0.19	0.98	-0.20	0.84
acon	(0.32)	(0.64)	(0.38)	(0.72)
atr	-0.005	0.01	-0.04	0.004
str	(0.007)	(0.01)	(0.005)	(0.010)

Number of Observations	40	39	41	40
Adjusted R ²	0.62	0.43	0.69	0.48

Consequently, fiscal decentralization does not seem to have significant impact on entrepreneurial performance based on the regression analysis. Yet it should be noted that the data on fiscal decentralization is available only for about 40 countries, so the outcomes might be different should we have a more complete dataset.

De facto federalism may be measured in terms of political decentralization as well. When the number of elected subnational tiers is used as a proxy, however, political decentralization does not show impact on entrepreneurship with statistical significance, Table 6.8 reports the results with China excluded.⁶¹

De Facto Federalism and Entrepreneurship: Political Decentralization Table 6.8 (China Excluded)

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	lnesrate
2200	0.003	0.0092	0.002	0.0084
ca80	(0.003)	(0.0046)**	(0.003)	(0.0044)*
·····	0.002	0.000	-0.000	-0.002
mu80	(0.003)	(0.01)	(0.004)	(0.008)
	-0.005	0.01	-0.005	0.008
pr80	(0.003)	(0.01)	(0.003)	(0.005)
~~~1	0.75	-0.09	-0.75	-0.38
geo1	(0.31)**	(0.82)	(0.32)**	(0.89)
~~~?	0.64	-0.29	0.79	-0.63
geo2	(0.23)***	(0.47)	(0.23)***	(0.52)
~~~1	0.44	-0.34	0.56	-0.48
geo4	(0.21)**	(0.47)	(0.20)***	(0.44)
~~~ <del>5</del>	0.39	0.34	0.44	0.39
geo5	(0.28)	(1.03)	(0.26)*	(1.08)
~~~(	0.15	0.25	0.16	0.22
geo6	(0.19)	(0.26)	(0.17)	(0.28)
0.0	-0.13	0.031		
cger80	(0.01)	(0.017)*		
literacy			-0.02	0.02

⁶¹ Including China does not affect the statistical results regarding political decentralization.

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

			(0.01)**	(0.02)
mata 2551	1.48	1.65	2.38	-0.22
rate3554	(1.99)	(5.58)	(1.98)	(5.67)
****	-0.44	0.88	-0.42	0.94
mcapc	(0.20)**	(0.39)**	(0.21)**	(0.43)**
0.004	-0.23	0.99	-0.17	0.87
acon	(0.31)	(0.62)	(0.30)	(0.54)
agt	-0.03	-0.05	-0.02	0.01
est	(0.11)	(0.20)	(0.10)	(0.15)
Number of	54	53	58	57
Observations	34	33	38	37
Adjusted R ²	0.64	0.48	0.64	0.49

In general, de facto federal arrangements do not appear to be significant determinants of entrepreneurial performance across countries, and adding the democracy dummy does not change the results qualitatively. However, the limited data availability may cast some doubt on this conclusion.

#### **6.1.3** Factors in the Selectorate Theory

The selectorate theory suggests two structural determinants on economic performance, the size of the winning coalition, W, and its ratio to the size of the selectorate, wsrate. To test their effects on entrepreneurship, OLS regressions are run on these variables, together with a group of controls. Like Bueno de Mesquita *et al.* (2003), the effects of W (with S) and wsrate are tested in separate models. But unlike Bueno de Mesquita *et al.* (2003), in my regressions, the dummy of democracy is directly controlled rather than using the residuals from the regression of democracy on W and S to avoid the technical flaws pointed out in Clarke & Stone (2008). This control is added to distinguish the effects of W or wsrate from those of democracy. Table 6.9 and Table 6.10 report the results when China is not included in the regressions.

Table 6.9 Winning Coalition Size and Entrepreneurship (China Excluded)

			1 \	,
	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	lnesrate
ca80	0.001	0.010	0.000	0.008
Caou	(0.002)	(0.004)**	(0.002)	(0.004)**
	-0.01	-0.002	-0.012	-0.001
mu80	(0.01)	(0.006)	(0.007)*	(0.006)
pr80	-0.002	0.003	-0.005	0.006

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

	(0.003)	(0.005)	(0.003)	(0.004)
gaa 1	0.19	0.57	0.19	0.12
geo1	(0.35)	(0.50)	(0.30)	(0.59)
gaa?	0.64	-0.08	0.68	-0.59
geo2	(0.22)**	(0.39)	(0.21)***	(0.542)
gaa4	0.26	-0.21	0.36	-0.40
geo4	(0.18)	(0.34)	(0.14)***	(0.30)
gaa5	-0.23	0.10	-0.15	0.28
geo5	(0.41)	(0.86)	(0.39)	(0.99)
9006	0.32	-0.40	0.32	-0.43
geo6	(0.21)	(0.52)	(0.21)	(0.59)
0.000	-0.03	0.04		
cger80	(0.01)***	(0.01)***		
litamaari			-0.03	0.03
literacy			(0.01)**	(0.02)
rate3554	-1.48	4.37	0.29	2.76
14163334	(2.42)	(4.14)	(2.13)	(4.37)
maana	-0.42	0.83	-0.47	0.92
mcapc	(0.21)**	(0.33)**	(0.23)**	(0.38)**
0000	-0.30	1.03	-0.15	0.58
acon	(0.31)	(0.57)*	(0.26)	(0.46)
dem	-0.46	-1.52	-0.27	-0.75
uem	(0.44)	(0.70)**	(0.30)	(0.71)
W	-0.78	0.62	-0.71	0.64
VV	(0.32)**	(0.55)	(0.32)**	(0.52)
S	2.87	-2.50	0.58	-0.64
<u>.</u>	(0.72)***	(1.31)*	(0.80)	(1.36)
Number of Observations	63	62	69	68
Adjusted R ²	0.59	0.52	0.59	0.48
				•

Table 6.10 W/S and Entrepreneurship (China Excluded)

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	Inesrate
ca80	0.000 (0.003)	0.010 (0.004)**	0.000 (0.002)	0.008 (0.004)**

Note: Robust standard errors in parentheses.
* significant at 10%; ** significant at 5%; *** significant at 1%.

	-0.010	-0.002	-0.013	-0.001
mu80	(0.006)	(0.006)	(0.006)**	(0.006)
mu80 pr80 geo1 geo2 geo4 geo5 geo6 cger80 literacy rate3554 mcapc	-0.002	0.004	-0.005	0.006
pr80	(0.003)	(0.005)	(0.003)	(0.004)
1	0.34	0.44	0.18	0.13
geoi	(0.39)	(0.50)	(0.30)	(0.59)
2	0.56	-0.16	0.69	-0.61
geo2	(0.24)**	(0.39)	(0.21)***	(0.41)
geo4	0.30	-0.25	0.36	-0.40
geo4	(0.18)	(0.33)	(0.14)***	(0.29)
<del>-</del> -	-0.30	0.16	-0.16	0.29
geos	(0.42)	(0.89)	(0.38)	(0.98)
6	0.34	-0.41	0.33	-0.43
geob	(0.22)	(0.54)	(0.21)	(0.58)
20000	-0.018	0.033		
cger80	(0.010)*	(0.014)**		
1:4			-0.04	0.03
interacy			(0.01)***	(0.02)
	-1.85	4.69	0.43	2.60
rate3554	(2.42)	(4.04)	(2.12)	(4.35)
	-0.44	0.85	-0.47	0.92
mcape	(0.22)**	(0.33)***	(0.23)**	(0.38)**
	-0.44	1.15	-0.17	0.60
acon	(0.34)	(0.61)*	(0.25)	(0.46)
dama	-0.30	-1.67	-0.24	-0.79
dem	(0.47)	(0.73)**	(0.33)	(0.66)
	-0.69	0.52	-0.72	0.13 (0.59) -0.61 (0.41) -0.40 (0.29) 0.29 (0.98) -0.43 (0.58) 0.03 (0.02) 2.60 (4.35) 0.92 (0.38)** 0.60 (0.46) -0.79
wsrate	(0.35)*	(0.58)	(0.32)**	(0.51)
Number of	62	62	69	68
Observations	63	02	09	Oð
Adjusted R ²	0.54	0.51	0.60	0.49
Into: Dobust stand	ard arrara in nar	onthogog		

The regression analyses show evidence of the significant negative relationship between winning coalition size and number of entrepreneurs. The ratio of this coalition size to the size of the selectorate also displays a negative association with the quantity of entrepreneurial endeavors at a statistically significant level. On the other hand, the quality of entrepreneurship does not appear to have significant correlation with either of

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

these two structural variables suggested by Bueno de Mesquita *et al.* (2003). To the extent that the smaller self-employed labor force can be viewed as a sign of a growth-consistent mode of entrepreneurship, the selectorate theory seems to find some support as far as entrepreneurial performance is concerned.

# 6.2 De Jure Constitutional Environment and Entrepreneurship

The influences of de jure constitutional environment on entrepreneurship are tested only within democracies. This restriction is imposed to moderate the concern about blatant disregard of formal rules in legal and political practices. Five aspects of the formal constitutional setting are to be studied empirically based on the theories about institutions and rent-seeking, i.e. form of government, electoral system, federal structure, de jure property rights protection and de jure judicial independence at the constitution level. Finally, though not necessarily pertaining to rent-seeking, the effect of constitutional antidiscrimination rules will also be probed.

# 6.2.1 Entrepreneurship and the Five Rent-seeking Related Aspects

#### 1) Basic Findings

The results of the basic OLS regressions are reported in Table 6.11.

Table 6.11 Five De Jure Constitutional Features and Entrepreneurship

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	lnesrate
00	-0.001	0.0100	-0.002	0.010
ca80	(0.003)	(0.0053)*	(0.003)	(0.005)**
	-0.007	-0.008	-0.0138	0.009
mu80	(0.006)	(0.010)	(0.0070)*	(0.012)
	-0.006	0.006	-0.008	0.007
pr80	(0.004)	(0.005)	(0.003)**	(0.005)
1	-0.12	0.27	-0.11	0.38
geo1	(0.31)	(0.40)	(0.31)	(0.35)
~~~?	0.63	-0.96	0.61	-0.97
geo2	(0.34)*	(0.51)*	(0.28)**	(0.45)**
~~ 4	0.20	-0.63	0.24	-0.53
geo4	(0.26)	(0.36)*	(0.21)	(0.31)*
~~~	0.24	0.41	0.37	-0.73
geo5	(0.31)	(0.91)	(0.30)	(0.87)
~~~6	0.39	-0.23	0.46	-0.26
geo6	(0.24)	(0.33)	(0.15)	(0.26)
a = a = 0.0	-0.018	0.017		
cger80	(0.008)**	(0.011)		

litaraov			-0.04	0.06
literacy			(0.01)***	(0.02)***
mata 2.55.4	-4.25	5.43	-0.56	1.76
rate3554	(2.23)*	(3.07)*	(2.16)	(2.99)
*** *** **	-0.08	0.66	-0.07	0.69
mcapc	(0.17)	(0.27)**	(0.17)	(0.23)***
0.004	0.20	0.24	0.29	0.21
acon	(0.25)	(0.43)	(0.23)	(0.43)
daga	-0.0019	0.001	-0.0021	0.001
dage	(0.0011)*	(0.002)	(0.0012)*	(0.002)
fed	0.04	-0.52	0.04	-0.58
ieu	(0.14)	(0.26)*	(0.12)	(0.24)**
	0.16	-0.71	0.08	-0.68
maj	(0.12)	(0.22)***	(0.11)	(0.21)***
2000	0.22	0.32	0.34	0.16
cpre	(0.17)	(0.28)	(0.16)**	(0.27)
::	-0.08	0.117	-0.10	0.14
ji	(0.03)**	(0.058)*	(0.02)***	(0.053)**
n mi cala t	0.01	-0.17	-0.002	-0.139
pright	(0.04)	(0.07)**	(0.036)	(0.071)*
Number of	52	51	56	55
Observations	32	<i>J</i> 1	30	33
Adjusted R ²	0.65	0.64	0.69	0.66

The most conspicuous outcome in Table 6.11 is that judicial independence is linked with the growth-consistent mode of entrepreneurial development, with respect to both the quantity and the quality of entrepreneurship. Another significant finding is the negative association between the majoritarian electoral system and the quality of entrepreneurship, implying unfavorable impact of majoritarianism on growth-consistent an entrepreneurship. Furthermore, de jure federalism, with less robustness, is likely to have a negative effect on the quality of entrepreneurship. The de jure property rights protection by constitutions seems to be negatively associated with the quality of entrepreneurship also. This is a surprising result, and its robustness needs to be tested further. Finally, presidential governments appear to be associated positively with the number of entrepreneurs in one model. Unlike the other four constitutional features, presidentialism has positive coefficients in all the regressions. This makes the result suspicious, considering the significant negative correlation between the quantity and

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

quality of entrepreneurship.

Table 6.12 shows the outcomes when various interactions between / among federal structure, electoral rules and government forms are included.

Table 6.12 Five De Jure Constitutional Features and Entrepreneurship: With Interactions

	(1)	(2)	(3)	(4)
Dependant	Inserate	lnesrate	Inserate	lnesrate
Variable	0.001	0.0100	0.002	0.011
ca80	-0.001	0.0109	-0.002	0.011
	(0.003)	(0.0064)*	(0.003)	(0.006)*
mu80	-0.005	-0.01	-0.0123	0.01
	(0.005)	(0.01)	(0.0067)*	(0.01)
pr80	-0.0076	0.007	-0.010	0.007
1	(0.0045)*	(0.006)	(0.004)**	(0.006)
geo1	-0.007	0.27	-0.01	0.37
8	(0.32)	(0.45)	(0.31)	(0.38)
geo2	0.71	-0.93	0.66	-0.92
8002	(0.40)*	(0.60)*	(0.29)**	(0.50)*
geo4	0.33	-0.74	0.37	-0.62
8004	(0.32)	(0.45)	(0.24)	(0.38)*
geo5	0.33	-0.41	0.46	-0.73
geos	(0.32)	(0.97)	(0.28)	(0.90)
9226	0.36	-0.34	0.41	-0.27
geo6	(0.26)	(0.40)	(0.17)**	(0.34)
2000	-0.018	0.021		
cger80	(0.010)*	(0.013)		
litaraay			-0.05	0.07
literacy			(0.01)***	(0.02)***
mata 2551	-4.53	4.85	-0.67	0.04
rate3554	(2.49)*	(3.18)	(2.42)	(3.01)
	0.03	0.72	-0.03	0.83
mcapc	(0.19)	(0.33)**	(0.16)	(0.26)***
	0.45	0.19	0.53	0.28
acon	(0.31)	(0.52)	(0.31)	(0.52)
	-0.0021	0.000	-0.002	0.000
dage	(0.0014)	(0.003)	(0.002)	(0.002)
0.1	0.29	-0.56	-0.24	-0.75
fed	(0.37)	(0.42)	(0.30)	(0.30)
			\ - · - · /	(/

	(0.32)	(0.36)	(0.22)	(0.32)*
0000	-0.003	0.47	0.12	0.21
cpre	(0.268)	(0.40)	(0.21)	(0.36)
::	-0.09	0.120	-0.10	0.14
ji	(0.03)***	(0.062)*	(0.03)***	(0.06)**
nright	-0.01	-0.158	-0.02	-0.13
pright	(0.04)	(0.081)*	(0.04)	(0.07)*
fad mai	0.52	0.19	0.50	0.15
fed_maj	(0.52)	(0.59)	(0.38)	(0.50)
fed cpre	0.53	-0.14	0.50	0.08
reu_cpre	(0.39)	(0.42)	(0.34)	(0.34)
mai anra	0.33	-0.68	0.51	-0.69
maj_cpre	(0.43)	(0.48)	(0.40)	(0.46)
fod mai anra	-0.34	0.34	-0.58	0.69
fed_maj_cpre	(0.67)	(1.00)	(0.58)	(0.88)
Number of	52	51	56	55
Observations	32	<i>J</i> 1	30	33
Adjusted R ²	0.64	0.61	0.68	0.63

None of these interaction terms is statistically significant, and F-tests show that the null hypotheses that the joint effect of these interactions on entrepreneurship is zero cannot be rejected at 5% level in all models in Table 6.10.62 At the same time, the interaction terms do reduce the adjusted R² values, and the Bayesian Information Criterion (BIC) tests suggest using parsimonious models without interaction terms. Table 6.10 also indicates that, after adding the interaction terms, the negative effects of formal federalism and majoritarian rules on entrepreneurial quality lose statistical significance, so does the questionable positive effect of presidentialism on entrepreneurial quantity in model (3). However, F-tests reveal the null hypothesis that the four interaction terms and maj may jointly have no effect on entrepreneurial quality can be rejected at 5% level, whereas similar tests on the four interaction terms and fed / cpre do not reject the null hypothesis at the same significance level. Therefore, the effect of the majoritarian electoral system is probably not just due to chance. Besides, the association between de jure property rights protection and the quality of entrepreneurship also becomes less significant statistically. However, it is most noteworthy that the effects of de jure judicial independence remain significant.

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

⁻

⁶² For models (1) through (3), the null hypotheses cannot be rejected even at 10% level, while for model (4) it cannot be rejected at 8% level.

2) Robustness Tests

First, the above findings might be subject to the bias of missing data. This seems a valid concern especially because of the relatively small number of observations included in the regression analyses. To expand the number of observations and lessen the concern of missing data bias, ⁶³ I imputed data to the two controls with the most missing data, mcapc and acon. In particular, the data were imputed, in the democracy sample, by regressing these two variables, respectively, on all the other independent variables in the baseline model, ⁶⁴ and then using the coefficients from these regressions to predict the values of missing data. Two new variables, imcapc and iacon, are generated to record these imputed data. Table 6.13 reports the regression outcomes replacing mcapc and acon with the new variables.

Table 6.13 Five De Jure Constitutional Features and Entrepreneurship: Imputed Data

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	lnesrate
	-0.000	0.012	0.000	0.012
ca80	(0.002)	(0.004)***	(0.002)	(0.004)***
	-0.001	-0.002	-0.003	0.001
mu80	(0.002)	(0.012)	(0.003)	(0.011)
	-0.005	0.007	-0.0058	0.007
pr80	(0.004)	(0.005)	(0.0032)*	(0.005)
1	0.26	-0.94	0.32	-0.75
geo1	(0.30)	(0.76)	(0.24)	(0.67)
2	0.57	-0.46	0.73	-0.55
geo2	(0.26)**	(0.56)	(0.23)***	(0.51)
1	0.11	-0.29	0.26	-0.43
geo4	(0.20)	(0.47)	(0.18)	(0.44)
_	0.33	0.10	0.55	-0.29
geo5	(0.28)	(1.02)	(0.28)*	(0.94)
(0.40	-0.28	0.44	-0.34
geo6	(0.16)*	(0.33)	(0.14)***	(0.31)
cger80	-0.011	0.01		
	(0.005)**	(0.01)		
1:4.0			-0.015	0.03
literacy			(0.005)***	(0.02)

⁶³ The cost of imputation, though, is artificially increased precision.

65 A similar imputation method was used by Hall & Jones (1999).

These variables are: ca80, mu80, pr80, geo1, geo2, geo4, geo5, geo6, cger80, rate3554, mcapc or acon, dage, fed, maj, cpre, ji, and pright. An alternative imputation does not include the proxy of human capital and mcapc or acon to address their potential dependence on de jure constitutional characteristics.

roto2551	-4.22	6.40	-2.41	2.29
rate3554	(1.60)***	(4.50)	(1.77)	(4.59)
imaana	-0.14	0.62	-0.11	0.43
imcapc	(0.16)	(0.44)	(0.15)	(0.37)
ingon	0.18	0.37	0.13	0.65
iacon	(0.24)	(0.49)	(0.22)	(0.47)
daga	-0.0018	0.003	-0.0017	0.0021
dage	(0.0010)*	(0.002)	(0.0012)	(0.0018)
fed	0.02	-0.28	-0.02	-0.21
ieu	(0.12)	(0.25)	(0.12)	(0.24)
mai	0.08	-0.79	0.04	-0.64
maj	(0.11)	(0.32)**	(0.10)	(0.25)**
	0.29	-0.26	0.25	-0.18
cpre	(0.13)	(0.27)	(0.12)**	(0.35)
::	-0.07	0.14	-0.08	0.13
ji	(0.02)***	(0.06)***	(0.02)***	(0.05)**
pricht	0.00	-0.11	-0.001	-0.09
pright	(0.03)	(0.07)	(0.027)	(0.06)
Number of	69	66	77	74
Observations				
Adjusted R ²	0.74	0.53	0.73	0.50

With the imputed data used in the regressions, de jure judicial independence still exhibits significant correlation with the growth-consistent pattern of entrepreneurial In addition, the majoritarian electoral system also appears to be negatively correlated with the quality of entrepreneurship. On the other hand, no significant effect can be detected any more from de jure federalism or property rights protection. Although presidentialism seems to have a significant positive association with the activity level of entrepreneurship in one model, this association is not robust in a different specification.⁶⁶

Second, some researchers believe that an improvement in the state of trade shifts the relative returns from unproductive rent-seeking to productive entrepreneurial activities as trade encourages competition and thwarts efforts in blocking innovation (Holmes & Schmitz 2001). To control the potential effect of trade, I add to the baseline models another explanatory variable, topen, measuring the percentage of total merchandise trade

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

⁶⁶ In another four unreported regressions, missing data of mcapc and acon are imputed with the alternative method. The outcomes do not change qualitatively except that the positive correlation between presidentialism and the quantity of entrepreneurs are significant at 5% level in both model (1) and (3).

as of GDP. The data come from the World Development Indicator 2009'. ⁶⁷ The next table reports the results after the inclusion of this extra control.

Table 6.14 Five De Jure Constitutional Features and Entrepreneurship: With Trade-Openness

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	lnesrate
2200	-0.001	0.0100	-0.002	0.0098
ca80	(0.003)	(0.0058)*	(0.002)	(0.0053)*
mu ₀ 0	-0.009	-0.008	-0.0141	0.01
mu80	(0.006)	(0.010)	(0.0071)*	(0.01)
	-0.006	0.006	-0.008	0.007
pr80	(0.004)	(0.005)	(0.003)**	(0.005)
1	-0.16	0.26	-0.12	0.38
geo1	(0.30)	(0.39)	(0.30)	(0.25)
~~~?	0.61	-0.96	0.62	-0.97
geo2	(0.34)*	(0.52)*	(0.27)**	(0.45)**
4	0.11	-0.64	0.19	-0.52
geo4	(0.29)	(0.37)*	(0.23)	(0.31)*
7	0.22	-0.41	0.35	-0.73
geo5	(0.31)	(0.92)	(0.30)	(0.88)
~~~6	0.26	-0.24	0.34	-0.23
geo6	(0.31)	(0.34)	(0.21)	(0.29)
2000	-0.02	0.016		
cger80	(0.01)**	(0.011)		
1:4			-0.04	0.06
literacy			(0.01)***	(0.02)***
rata 2551	-3.85	5.47	-0.03	1.63
rate3554	(2.26)*	(3.30)	(2.44)	(3.27)
*** *** **	-0.14	0.65	-0.13	0.71
mcapc	(0.18)	(0.28)	(0.16)	(0.24)***
2222	0.37	0.25	0.45	0.17
acon	(0.31)	(0.53)	(0.23)*	(0.49)
dogo	-0.0022	0.001	-0.0024	0.001
dage	(0.0011)*	(0.002)	(0.0013)*	(0.002)
fad	0.07	-0.52	0.05	-0.59
fed	(0.14)	(0.28)*	(0.13)	(0.25)**
maj	0.16	-0.71	0.08	-0.68

⁶⁷ The topen data of Taiwan come from ROC National Statistics.

	(0.13)	(0.22)***	(0.12)	(0.21)***
onro	0.21	0.32	0.31	0.17
cpre	(0.18)	(0.29)	(0.18)*	(0.28)
::	-0.08	0.117	-0.09	0.13
ji	(0.03)***	(0.060)*	(0.02)***	(0.05)**
	0.00	-0.17	-0.01	-0.138
pright	(0.04)	(0.08)**	(0.03)	(0.075)*
tonon	-0.003	-0.000	-0.003	0.000
topen	(0.002)	(0.004)	(0.002)	(0.003)
Number of	52	51	56	55
Observations	32	51	56	55
Adjusted R ²	0.66	0.63	0.69	0.65

Compared with Table 6.11, no outcome has changed qualitatively so far as the five de jure constitutional aspects are concerned, except that the effect of presidentialism on entrepreneurial activity level turns less significant, which might indicate the weakness of this effect. In fact, topen itself is not significant either statistically or economically, so may not be a good explanatory variable for entrepreneurial development.

Third, some studies found the quality of democracies were associated with a country's fiscal policies (Persson & Tabellini 2003). To control the potential effect of democracy quality on entrepreneurship through these policies, I add gastil scores to the regression models as a proxy for the quality of democracy. It should be noted, however, the quality of democracy may itself be an outcome of certain formal constitutional designs such as the extent of judicial independence. So it may not be a good control unless zero contemporaneous correlation is assumed.

Table 6.15 and Table 6.16 report the results of regressions using, respectively, the original data and the imputed data.

Table 6.15 Five De Jure Constitutional Features and Entrepreneurship: With Quality of Democracy

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	lnesrate
0.90	0.000	0.006	-0.001	0.006
ca80	(0.003)	(0.005)	(0.003)	(0.004)
mu80	-0.007	-0.01	-0.014	0.01
	(0.006)	(0.01)	(0.007)**	(0.01)
pr80	-0.005	0.002	-0.0063	0.003

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

	(0.004)	(0.005)	(0.0034)*	(0.004)
gan 1	-0.10	0.23	-0.12	0.38
geo1	(0.32)	(0.35)	(0.32)	(0.31)
gao?	0.52	-0.55	0.49	-0.61
geo2	(0.36)	(0.42)	(0.30)	(0.37)
gan 1	0.14	-0.40	0.17	-0.32
geo4	(0.25)	(0.31)	(0.20)	(0.27)
gao 5	0.24	-0.41	0.37	-0.75
geo5	(0.27)	(0.65)	(0.24)	(0.63)
9226	0.38	-0.20	0.44	-0.22
geo6	(0.22)*	(0.24)	(0.14)***	(0.19)
200000	-0.02	0.01		
cger80	(0.01)**	(0.01)		
litamaari			-0.04	0.06
literacy			(0.01)***	(0.02)***
mata 2551	-3.59	3.04	0.27	-0.56
rate3554	(2.52)	(3.41)	(2.11)	(2.77)
****	-0.08	0.64	-0.06	0.64
mcapc	(0.19)	(0.27)**	(0.19)	(0.22)***
2222	0.20	0.24	0.28	0.27
acon	(0.24)	(0.38)	(0.23)	(0.39)
1	-0.001	0.001	-0.0017	-0.000
dage	(0.001)	(0.002)	(0.0010)*	(0.001)
	0.03	-0.23	-0.05	-0.29
fed	(0.15)	(0.23)	(0.11)	(0.22)
mai	0.14	-0.65	0.06	-0.61
maj	(0.12)	(0.20)***	(0.11)	(0.19)***
onro	0.25	0.24	0.36	0.10
cpre	(0.16)	(0.24)	(0.14)**	(0.20)
;;	-0.07	0.09	-0.09	0.10
ji	(0.03)**	(0.06)	(0.02)***	(0.05)**
pright	0.00	-0.11	-0.02	-0.08
prignt	(0.04)	(0.06)*	(0.03)	(0.05)
gostil	0.09	-0.34	0.11	-0.32
gastil	(0.09)	(0.13)***	(0.09)	(0.11)***
Number of	52	51	56	55
Observations	32	31	30	33
Adjusted R ²	0.66	0.70	0.70	0.71
. B.1		.1		

* significant at 10%; ** significant at 5%; *** significant at 1%.

Table 6.16 Five De Jure Constitutional Features and Entrepreneurship: With Quality of

Democracy – Imputed Data

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	Inesrate
2200	0.001	0.0078	0.002	0.006
ca80	(0.002)	(0.0043)*	(0.002)	(0.004)
	-0.001	-0.001	-0.002	0.003
mu80	(0.002)	(0.013)	(0.002)	(0.012)
ra m9.0	-0.004	0.003	-0.004	0.003
pr80	(0.004)	(0.005)	(0.003)	(0.005)
1	0.30	-1.04	0.38	-0.84
geo1	(0.30)	(0.73)	(0.25)	(0.64)
2	0.51	-0.31	0.70	-0.46
geo2	(0.26)**	(0.47)	(0.25)**	(0.45)
1	0.10	-0.24	0.26	-0.37
geo4	(0.18)	(0.43)	(0.16)	(0.39)
-	0.32	0.07	0.54	-0.29
geo5	(0.24)	(0.81)	(0.22)**	(0.69)
	0.40	-0.27	0.44	-0.32
geo6	(0.14)***	(0.28)	(0.13)***	(0.27)
0.0	-0.011	0.002		
cger80	(0.005)**	(0.014)		
1.4			-0.015	0.02
literacy			(0.005)***	(0.02)
	-3.25	3.57	-1.53	0.78
rate3554	(1.64)**	(4.26)	(1.75)	(4.25)
•	-0.12	0.56	-0.10	0.39
imcapc	(0.18)	(0.46)	(0.16)	(0.38)
	0.20	0.28	0.15	0.59
iacon	(0.24)	(0.42)	(0.21)	(0.40)
1	-0.001	0.001	-0.001	0.000
dage	(0.001)	(0.002)	(0.001)	(0.002)
C- 1	0.10	-0.02	-0.10	0.02
fed	(0.11)	(0.23)	(0.12)	(0.23)
	0.07	-0.78	0.05	-0.68
maj	(0.12)	(0.30)***	(0.11)	(0.24)***

cpre	0.25	-0.10	0.19	0.01
	(0.12)**	(0.28)	(0.11)*	(0.27)
::	-0.06	0.12	-0.07	0.11
ji	(0.02)***	(0.05)**	(0.02)***	(0.05)**
nright	0.01	-0.08	-0.01	-0.06
pright	(0.03)	(0.06)	(0.03)	(0.06)
gogtil	0.11	-0.36	0.11	-0.36
gastil	(0.07)*	(0.14)***	(0.06)*	(0.14)***
Number of	69	66	77	74
Observations	09	UO	11	/4
Adjusted R ²	0.75	0.59	0.74	0.55

The significant negative correlation between majoritarian electoral rules and the quality of entrepreneurship does not change after controlling the quality of democracy. Formal judicial independence is still significantly correlated with the entrepreneurial activity level in a negative way, while its positive correlation with the entrepreneurial quality loses significance in one of the four models. However, presidentialism now seems to have some positive effect on the number of entrepreneurs, especially when the imputed data are used. On the other hand, federalism and de jure property rights protection are no longer significantly associated with entrepreneurial development.⁶⁸

Fourth, although it has been rarely suggested that the legal family would affect entrepreneurial development, there are some evidence that legal family might be associated with capital market performance (La Porta *et al.* 1998), so indirectly with entrepreneurship. To address this concern, I add a control of legal family, civ, whose value is 1 if a country has civil law influence but no common law influence.⁶⁹ The coding of civ is based on CIA World Factbook 2010. Results are reported below.

Table 6.17 Five De Jure Constitutional Features and Entrepreneurship: With Legal Family

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	Inesrate
ca80	-0.000 (0.003)	0.0102 (0.0054)*	-0.002 (0.003)	0.011 (0.004)**

⁶⁸ Alternatively imputed data were also used in unreported regressions, and the qualitatively same results are found regarding the five de jure constitutional attributes.

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

⁶⁹ So a country with a mixed civil law and religious or customary law tradition is coded as 1, but a country with mixed civil law and common law traditions, such as Cyprus, Malta, South Africa and Sri Lanka, is coded as 0.

0.0	-0.008	-0.01	-0.013	0.01
mu80	(0.005)	(0.01)	(0.007)*	(0.01)
pr80	-0.005	0.01	-0.0074	0.007
	(0.004)	(0.01)	(0.0036)**	(0.005)
	0.02	0.35	-0.07	0.54
geol	(0.32)	(0.42)	(0.35)	(0.35)
2	0.73	-0.88	0.65	-0.80
geo2	(0.38)*	(0.53)	(0.32)**	(0.46)*
4	0.25	-0.60	0.26	-0.46
geo4	(0.26)	(0.36)	(0.23)	(0.31)
5	0.16	-0.45	0.33	-0.86
geo5	(0.33)	(0.92)	(0.31)	(0.84)
	0.33	-0.28	0.43	-0.39
geo6	(0.20)	(0.37)	(0.13)***	(0.30)
0.0	-0.014	0.019		
cger80	(0.008)*	(0.012)		
1",			-0.042	0.07
literacy			(0.016)***	(0.02)***
	-3.85	5.68	-0.62	1.58
rate3554	(2.20)*	(3.08)*	(2.13)	(3.06)
meane	-0.14	0.62	-0.09	0.62
mcapc	(0.18)	(0.30)**	(0.17)	(0.25)**
	0.17	0.25	0.27	0.18
acon	(0.26)	(0.44)	(0.23)	(0.44)
4	-0.002	0.000	-0.0022	0.001
dage	(0.001)**	(0.002)	(0.0012)*	(0.002)
C. J	0.06	-0.19	0.05	-0.52
fed	(0.13)	(0.28)*	(0.12)	(0.23)**
:	0.12	-0.71	0.07	-0.70
maj	(0.10)	(0.22)***	(0.11)	(0.20)***
	0.22	0.32	0.34	0.13
cpre	(0.17)	(0.29)	(0.17)**	(0.27)
::	-0.10	0.10	-0.10	0.11
ji	(0.03)***	(0.07)	(0.03)***	(0.06)*
	0.02	-0.16	0.00	-0.12
pright	(0.05)	(0.08)**	(0.04)	(0.07)*
aire	-0.23	-0.14	-0.08	-0.33
civ	(0.15)	(0.27)	(0.15)	(0.26)
Number of	52	51	56	55

Observations				
Adjusted R ²	0.66	0.63	0.68	0.66

Table 6.18 Five De Jure Constitutional Features and Entrepreneurship: With Legal Family – Imputed Data

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	Inesrate
ca80	0.000	0.012	0.000	0.010
casu	(0.002)	(0.004)**	(0.002)	(0.004)**
mu80	-0.000	-0.004	-0.001	0.001
muso	(0.003)	(0.012)	(0.003)	(0.011)
m=00	-0.005	0.007	-0.0056	0.007
pr80	(0.004)	(0.005)	(0.0033)*	(0.005)
gan 1	0.34	-1.05	0.37	-0.74
geo1	(0.31)	(0.72)	(0.25)	(0.67)
gao?	0.62	-0.56	0.77	-0.54
geo2	(0.27)**	(0.57)	(0.24)***	(0.51)
gan 1	0.10	-0.34	0.28	-0.42
geo4	(0.18)	(0.46)	(0.18)	(0.44)
gao.5	0.29	0.12	0.51	-0.30
geo5	(0.30)	(1.04)	(0.29)*	(0.95)
geo6	0.37	-0.22	0.42	-0.35
geoo	(0.14)***	(0.36)	(0.12)***	(0.34)
cger80	-0.0097	0.003		
egerou	(0.0053)*	(0.015)		
literacy			-0.015	0.03
interacy			(0.005)***	(0.02)
rate3554	-3.83	5.90	-2.20	2.32
14163334	(1.61)**	(4.26)	(1.80)	(4.61)
imaana	-0.17	0.68	-0.13	0.42
imcapc	(0.16)	(0.42)	(0.15)	(0.36)
iacon	0.16	0.38	0.10	0.64
lacon	(0.24)	(0.52)	(0.22)	(0.47)
dage	-0.002	0.003	-0.0018	0.002
uage	(0.001)**	(0.002)	(0.0012)	(0.002)
fed	-0.001	-0.33	-0.01	-0.20

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

	(0.115)	(0.25)	(0.12)	(0.23)
	0.05	-0.75	0.02	-0.65
maj	(0.10)	(0.32)**	(0.09)	(0.26)**
opro	0.30	-0.27	0.26	-0.18
cpre	(0.13)**	(0.38)	(0.12)**	(0.36)
::	-0.08	0.17	-0.08	0.13
ji	(0.03)***	(0.06)***	(0.02)***	(0.05)**
pright	0.01	-0.12	0.01	-0.09
pright	(0.03)	(0.07)	(0.03)	(0.06)
civ	-0.15	0.22	-0.11	-0.04
CIV	(0.13)	(0.31)	(0.12)	(0.30)
Number of	69	66	77	74
Observations	09	00	//	/4
Adjusted R ²	0.74	0.52	0.73	0.49

Similar to the situation where quality of democracies is under control, the significant negative correlation between majoritarian electoral rules and the quality of entrepreneurship does not change when the legal family variable is included. Judicial independence still shows significant negative correlation with the quantity of entrepreneurial actions, while its positive correlation with the entrepreneurial quality loses significance in one of the four models. Presidentialism, again, seems to have some positive effect on the number of entrepreneurs, especially when the imputed data are used. Federalism and formal property rights protection demonstrate negative correlations with the number of entrepreneurs, but like in the regressions without the control of civ, these correlations are less robust and disappear when imputed data are used to expand the degrees of freedom.⁷⁰

Finally, I used a different sample of democracies according to another rule of categorization, and the sample only contains countries with positive POLITY scores averaged from 1993 to 2008. The baseline regressions are run on both the original data and the imputed mcapc and acon data.⁷¹ Results of these regressions are reported in the following two tables.

Table 6.19 Five De Jure Constitutional Features and Entrepreneurship: Alternative Sample

Sumpre				
	(1)	(2)	(3)	(4)

⁷⁰ Alternatively imputed data were also used in unreported regressions, and the qualitatively same results are found regarding the five de jure constitutional attributes.

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

The methods of imputation are the same as aforementioned.

Dependant Variable	Inserate	lnesrate	Inserate	Inesrate
	-0.001	0.0099	-0.002	0.0096
ca80	(0.003)	(0.0057)*	(0.003)	(0.0052)*
	-0.007	-0.01	-0.0144	0.01
mu80	(0.006)	(0.01)	(0.0075)*	(0.01)
0.0	-0.007	0.006	-0.009	0.007
pr80	(0.004)*	(0.006)	(0.003)***	(0.005)
	-0.03	0.26	-0.09	0.45
geo1	(0.33)	(0.43)	(0.33)	(0.37)
	0.67	-0.96	0.62	-0.90
geo2	(0.36)*	(0.52)*	(0.29)	(0.47)*
4	0.24	-0.63	0.26	-0.48
geo4	(0.28)	(0.37)*	(0.23)	(0.32)
~	0.22	-0.41	0.35	-0.75
geo5	(0.30)	(0.92)	(0.28)	(0.88)
	0.44	-0.24	0.49	-0.26
geo6	(0.24)*	(0.34)	(0.15)***	(0.27)
00	-0.016	0.016		
cger80	(0.009)*	(0.012)		
124			-0.045	0.06
literacy			(0.015)***	(0.02)***
mata 2551	-4.35	5.51	-0.65	1.55
rate3554	(2.24)*	(3.11)	(2.26)	(3.11)
maana	-0.09	0.65	-0.07	0.66
mcapc	(0.18)	(0.29)**	(0.17)	(0.24)***
0000	0.23	0.26	0.27	0.31
acon	(0.28)	(0.46)	(0.24)	(0.45)
daga	-0.0016	0.000	-0.0017	0.001
dage	(0.0012)	(0.002)	(0.0012)	(0.001)
fed	0.06	-0.52	0.05	-0.54
ica	(0.15)	(0.28)*	(0.13)	(0.25)**
mai	0.18	-0.71	0.10	-0.66
maj	(0.13)	(0.24)***	(0.11)	(0.23)***
onre	0.22	0.33	0.34	0.16
cpre	(0.18)	(0.29)	(0.17)**	(0.28)
ji	-0.09	0.118	-0.10	0.14
Jı	(0.03)***	(0.063)*	(0.02)***	(0.06)**
pright	0.02	-0.169	0.01	-0.13

	(0.04)	(0.085)*	(0.04)	(0.08)
Number of	50	49	54	53
Observations Adjusted R ²	0.66	0.62	0.70	0.65

Table 6.20 Five De Jure Constitutional Features and Entrepreneurship: Alternative Sample with Imputed Data

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	lnesrate
	-0.003	0.011	-0.001	0.010
ca80	(0.003)	(0.004)**	(0.002)	(0.004)**
0.0	-0.001	-0.003	-0.002	0.003
mu80	(0.003)	(0.011)	(0.003)	(0.011)
0.0	-0.007	0.008	-0.008	0.008
pr80	(0.004)*	(0.006)	(0.003)**	(0.006)
1	0.35	-0.97	0.32	-0.43
geo1	(0.35)	(0.80)	(0.28)	(0.72)
2	0.64	-0.53	0.73	-0.50
geo2	(0.29)**	(0.54)	(0.25)***	(0.50)
4	0.20	-0.07	0.32	-0.26
geo4	(0.22)	(0.44)	(0.19)	(0.42)
7	0.39	0.04	0.52	-0.37
geo5	(0.28)	(0.96)	(0.28)	(0.93)
(0.44	-0.21	0.45	-0.13
geo6	(0.18)**	(0.31)	(0.16)***	(0.31)
0.0	-0.008	0.002		
cger80	(0.006)	(0.014)		
1:4			-0.011	0.02
literacy			(0.005)**	(0.03)
mata 2551	-4.86	9.73	-3.70	6.33
rate3554	(1.77)**	(4.00)**	(1.89)*	(4.10)
·	-0.07	0.91	-0.02	0.60
imcapc	(0.18)	(0.42)**	(0.15)	(0.32)*
inaar	0.25	0.12	0.24	0.48
iacon	(0.29)	(0.45)	(0.26)	(0.40)
dage	-0.0016	0.002	-0.0015	0.002

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

	(0.0012)	(0.002)	(0.0013)	(0.002)
fod	0.03	-0.41	-0.03	-0.31
fed	(0.12)	(0.23)*	(0.12)	(0.21)
mai	0.12	-0.87	0.10	-0.71
maj	(0.12)	(0.31)***	(0.11)	(0.23)***
anra	0.22	-0.16	0.20	-0.02
cpre	(0.15)	(0.33)	(0.14)	(0.34)
::	-0.08	0.14	-0.08	0.12
ji	(0.02)***	(0.05)**	(0.02)***	(0.05)**
pricht	0.01	-0.14	0.01	-0.08
pright	(0.03)	(0.08)*	(0.03)	(0.07)
Number of	64	61	70	67
Observations	04	01	70	0/
Adjusted R ²	0.75	0.58	0.74	0.54

Compared with Table 6.11 and Table 6.13, using this new sample of democracies, we can still find the significant negative correlation between majoritarianism and the quality of entrepreneurship, and that the effects of de jure judicial independence on entrepreneurial performance are the same as before in terms of statistical significance. But with respect to the other three constitutional features, the outcomes appear less robust, and become statistically weaker in general. 72 73

3) Propensity Score Matching

As stated in Chapter 5, propensity score matching tests are also conducted on the five de jure constitutional features in a parsimonious model with common support. The estimator used in these tests is the average treatment effect on the treated (ATT). One-to-one matching and kernel matching are applied. Propensity scores are estimated based on the logit model, and standard errors are estimated by the bootstrapping method.⁷⁴ The results of these matching estimates are reported in the following five tables.

Table 6.21 Matching Results: Federalism

	(1)	(2)	(3)	(4)
Dependant	Inserate	lnesrate	Inserate	lnesrate

⁷² Alternatively imputed data were also used in unreported regressions, and the results are qualitatively the same regarding the five de jure constitutional attributes.

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

Besides these robustness tests, I also added oecd as an additional control measuring the OECD membership as of 2000. No results were different, in terms of statistical significance, from the basic findings as far as the five formal constitutional attributes are concerned.

⁷⁴ Results of balance tests are unreported, but they indicate better balance after matching in general.

Variable				
fed	-0.39	0.19	-0.36	0.16
leu	(0.28)	(0.48)	(0.24)	(0.42)
Method of	One-to-one	One-to-one	Kernel	Kernel
Estimation	One-to-one	One-to-one	Keillei	Kenner
Number of	86	82	86	82
Observations	80	62	80	82
Number of	500	500	499	496
Replications	300	300	499	490

Table 6.22 Matching Results: Electoral Rules

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	Inesrate	Inserate	Inesrate
	-0.26	-0.09	-0.15	-0.12
maj	(0.22)	(0.50)	(0.19)	(0.48)
Method of Estimation	One-to-one	One-to-one	Kernel	Kernel
Number of Observations	86	82	86	82
Number of Replications	500	497	500	500

Note: Bootstrap standard errors in parentheses.

Table 6.23 Matching Results: Form of Government

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	Inesrate
0000	0.16	0.07	0.22	-0.29
cpre	(0.22)	(0.61)	(0.22)	(0.54)
Method of Estimation	One-to-one	One-to-one	Kernel	Kernel
Number of Observations	78	75	78	75
Number of Replications	490	490	485	488

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

Table 6.24 Matching Results: Judicial Independence

	0	1		
	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	Inesrate	Inserate	Inesrate
4 ::	-0.43	0.13	-0.45	0.24
dji	(0.19)**	(0.35)	(0.15)***	(0.29)
Method of Estimation	One-to-one	One-to-one	Kernel	Kernel
Number of Observations	87	83	87	83
Number of Replications	500	500	500	500

Note: Bootstrap standard errors in parentheses.

Table 6.25 Matching Results: Property Rights Protection

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	Inesrate	Inserate	lnesrate
duriaht	0.02	-0.49	0.14	-0.38
dpright	(0.20)	(0.38)	(0.17)	(0.31)
Method of Estimation	One-to-one	One-to-one	Kernel	Kernel
Number of Observations	87	83	87	83
Number of Replications	500	500	500	500

Note: Bootstrap standard errors in parentheses.

Matching estimates show that of the five formal constitutional characteristics, only judicial independence has significant effects on entrepreneurship, both in terms of quantity and quality. The associations between judicial independence and entrepreneurial performance are also consistent with the regression estimates.

To check the robustness, I also apply similar matching estimates to the alternative sample of democracies. Results are reported below.

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

Table 6.26 Matching Results: Federalism (Alternative Sample)

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	Inesrate	Inserate	Inesrate
fod	-0.49	0.71	-0.55	0.73
fed	(0.30)	(0.66)	(0.26)**	(0.52)
Method of Estimation	One-to-one	One-to-one	Kernel	Kernel
Number of Observations	76	73	76	73
Number of Replications	500	498	500	495

Note: Bootstrap standard errors in parentheses.

Table 6.27 Matching Results: Electoral Rules (Alternative Sample)

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	Inesrate	Inserate	lnesrate
maj	0.06	0.91	-0.05	0.22
	(0.28)	(0.91)	(0.24)	(0.74)
Method of Estimation	One-to-one	One-to-one	Kernel	Kernel
Number of Observations	82	79	82	79
Number of Replications	499	499	498	498

Note: Bootstrap standard errors in parentheses.

Table 6.28 Matching Results: Form of Government (Alternative Sample)

		1 /		
	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	Inesrate
cpre	0.53 (0.49)	-0.66 (1.10)	0.45 (0.51)	-0.72 (1.17)
Method of Estimation	One-to-one	One-to-one	Kernel	Kernel
Number of	70	67	70	67

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

Observations				
Number of	266	277	248	259
Replications	200	211	240	239

Table 6.29 Matching Results: Judicial Independence (Alternative Sample)

	\mathcal{C}	1 1 /			1		1 /
	(1)	(2)	(3)	(4)			
Dependant Variable	Inserate	Inesrate	Inserate	lnesrate			
dji	-0.44	0.91	-0.44	0.59			
	(0.21)**	(0.42)**	(0.17)***	(0.32)*			
Method of Estimation	One-to-one	One-to-one	Kernel	Kernel			
Number of Observations	79	76	79	76			
Number of Replications	500	500	500	500			

Note: Bootstrap standard errors in parentheses.

Table 6.30 Matching Results: Property Rights Protection (Alternative Sample)

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	lnesrate
dpright	0.10	-0.14	0.03	0.07
	(0.28)	(0.57)	(0.24)	(0.48)
Method of	One-to-one	One-to-one	Kernel	Kernel
Estimation				
Number of	79	76	79	76
Observations	19	70	19	70
Number of	500	500	500	500
Replications	500	500		

Note: Bootstrap standard errors in parentheses.

The tests on the alternative sample confirm the significant influence of judicial independence on entrepreneurial development. Besides, federalism appears to have significant negative effect on the number of entrepreneurs, but only in one model.

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

6.2.2 Entrepreneurship and Antidiscrimination Provisions

The regression estimates do not show any significant correlation between entrepreneurship and the antidiscrimination provisions in constitutions, no matter whether the other five de jure constitutional characteristics are controlled or not. The next two tables report the results.

Table 6.31 Antidiscrimination Rules and Entrepreneurship: Controlling Five De Jure Constitutional Features

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	lnesrate
00	0.001	0.0104	-0.002	0.0100
ca80	(0.003)	(0.0055)*	(0.003)	(0.0051)*
	-0.007	-0.01	-0.013	0.01
mu80	(0.006)	(0.01)	(0.007)*	(0.01)
	-0.005	0.01	-0.007	0.007
pr80	(0.004)	(0.01)	(0.003)**	(0.005)
1	-0.12	0.23	-0.14	0.36
geol	(0.31)	(0.41)	(0.32)	(0.36)
2	0.64	-0.90	0.65	-0.95
geo2	(0.35)*	(0.51)*	(0.28)**	(0.45)**
4	0.21	-0.61	0.26	-0.52
geo4	(0.27)	(0.36)*	(0.22)	(0.31)*
5	0.23	-0.44	0.36	-0.74
geo5	(0.32)	(0.88)	(0.32)	(0.87)
(0.43	-0.03	0.56	-0.20
geo6	(0.27)	(0.37)	(0.15)***	(0.30)
0.0	-0.02	0.01		
cger80	(0.01)**	(0.01)		
114			-0.05	0.06
literacy			(0.01)***	(0.02)***
	-4.16	5.89	0.02	2.05
rate3554	(2.32)*	(3.03)*	(2.46)	(3.05)
	-0.10	0.58	-0.12	0.68
mcapc	(0.19)	(0.27)**	(0.17)	(0.23)***
	0.22	0.32	0.33	0.22
acon	(0.26)	(0.47)	(0.22)	(0.45)
1	-0.0018	0.001	-0.0018	0.001
dage	(0.0012)	(0.002)	(0.0013)	(0.002)
fed	0.05	-0.50	0.05	-0.58

	(0.14)	(0.27)*	(0.12)	(0.24)**
	0.15	-0.73	0.06	-0.70
maj	(0.13)	(0.21)***	(0.12)	(0.21)***
onro	0.23	0.34	0.34	0.16
cpre	(0.18)	(0.27)	(0.17)**	(0.27)
ji	-0.08	0.11	-0.10	0.13
JI	(0.03)***	(0.06)*	(0.03)***	(0.05)***
pright	0.01	-0.17	-0.00	-0.140
prignt	(0.04)	(0.07)	(0.04)	(0.072)*
disc	0.01	0.06	0.03	0.02
	(0.04)	(0.05)	(0.03)	(0.04)
Number of	52	51	56	55
Observations	32	31	30	33
Adjusted R ²	0.64	0.64	0.68	0.65

Note: Robust standard errors in parentheses.

Table 6.32 Antidiscrimination Rules and Entrepreneurship: Not Controlling Five De Jure Constitutional Features

	(1)	(2)	(3)	(4)
Dependant Variable	Inserate	lnesrate	Inserate	Inesrate
22.90	0.002	0.009	0.001	0.008
ca80	(0.003)	(0.005)*	(0.002)	(0.005)*
mu80	0.003	-0.01	-0.006	0.01
IIIuou	(0.004)	(0.01)	(0.005)	(0.01)
nr90	-0.003	0.01	-0.005	0.006
pr80	(0.004)	(0.01)	(0.003)	(0.005)
gg 1	-0.07	1.02	-0.26	1.25
geo1	(0.31)	(0.54)*	(0.30)	(0.50)**
gaa?	0.59	-0.11	0.65	-0.30
geo2	(0.26)**	(0.43)	(0.25)**	(0.38)
gaa4	0.40	-0.31	0.43	-0.28
geo4	(0.16)**	(0.28)	(0.13)***	(0.24)
g20 5	0.33	-0.32	0.49	-0.71
geo5	(0.34)	(1.28)	(0.31)	(1.24)
~~~6	0.38	-0.49	0.40	-0.58
geo6	(0.22)*	(0.51)	(0.20)**	(0.51)
cger80	-0.017	0.027		

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

	(0.009)*	(0.012)**		
litamaari			-0.04	0.07
literacy			(0.01)***	(0.02)***
mata2551	-0.39	4.02	1.83	0.39
rate3554	(1.90)	(3.34)	(1.39)	(3.00)
****	-0.18	0.38	-0.17	0.41
mcapc	(0.22)	(0.28)	(0.21)	(0.24)*
0.004	0.20	0.42	0.30	0.26
acon	(0.24)	(0.47)	(0.19)	(0.42)
dage	-0.0019	0.0033	-0.0015	0.0027
	(0.0011)*	(0.0018)*	(0.0012)	(0.0014)*
4:	0.02	-0.02	0.04	-0.05
disc	(0.03)	(0.06)	(0.03)	(0.06)
Number of	5.6	55	60	50
Observations	56	55	60	59
Adjusted R ²	0.59	0.53	0.63	0.57

Note: Robust standard errors in parentheses.

The insignificant association between antidiscrimination rules and entrepreneurship might be a result of the counteracting effects of such rules as introduced in Chapter 2, or it may be attributable to the lack of internal consistency among the components of the antidiscrimination index, the alpha value of which is merely about 0.3.

#### **6.3 Summary**

With respect to de facto constitutional environment, as a whole, both the OLS regressions and the IV estimates indicate a negative influence of de facto property rights protection on the quantity of entrepreneurs, and, somewhat less robustly, a positive one on the quality of entrepreneurship. To the extent that lower quantity and higher quality suggest a growth-consistent pattern of entrepreneurship, the de facto security of property rights is likely to promote this form of entrepreneurial development. The two key factors of the selectorate theory, the size of the winning coalition and the ratio of this size to the size of the selectorate, show negative associations with the quantity of entrepreneurs, which seem to have statistical significance. This is probably compatible with the selectorate theory insofar as a smaller group of entrepreneurs is actually a sign of the growth-consistent entrepreneurship. On the other hand, de facto federalism, either in terms of fiscal decentralization or political decentralization, is not found to be correlated with entrepreneurial performance.

As for de jure constitutional environment, judging by the preponderance of evidence,

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

we may be able to say that two of the formal constitutional features show significant impacts on entrepreneurship with robustness. First, de jure judicial independence has a negative effect on the quantity of entrepreneurial activities but a positive one on the quality of entrepreneurial performance. Second, majoritarian electoral rules, relative to non-majoritarian rules, have a negative effect on the quality of entrepreneurship. Moreover, the matching estimates also lend support to the observed relationship between judicial independence and entrepreneurship, although the effect on the quality of entrepreneurship appears weaker in general. If we are ready to accept the concept of growth-consistent entrepreneurship as defined earlier, it seems judicial independence promotes the growth-consistent entrepreneurship while majoritarian rules, maybe to some less extent, obstruct this type of entrepreneurship. At the same time, the other three formal constitutional attributes, federalism, presidentialism and property rights protection, show significant effects on entrepreneurial development only in some specifications, either in terms of quantity or quality, but these outcomes are not robust in general. is seemingly hard to connect these constitutional features with entrepreneurial performance at the current stage.

However, these outcomes are tentative and need to be treated with caution. First of all, the level of economic development is not included in the models leading to the aforementioned results. Thus, they are built on the assumption that both the constitutional structure and the entrepreneurship performance affect the level of economic development. In principle, IV estimates may be used to test the direction of causality between economic growth and entrepreneurship, but I am not able to find an appropriate and strong instrument for the level of economic development. I did try two instruments used in the previous researches, the latitudinal distance from the equator by Treisman (2000) and the trade-weighted world average income by Acemoglu et al. (2008), but neither appeared strong in the first-stage regressions. Second, as noted in Chapter 5, the reverse causal relationship between constitutional environment and economic growth is assumed away. This seems to be valid as far as the formal constitutional features are concerned, but may be questionable regarding the de factor security of property rights. The IV estimates perhaps help alleviate part of the concern if the instrument used really has no effect on entrepreneurship except through the extent of property rights security. Finally, although the formal constitutional setting is less likely to be a direct result of entrepreneurship or level of economic development, there might be unobserved confounders that can give rise to selection biases. Again, lack of reliable instruments prevents us from drawing more robust conclusions. Persson & Tabellini (2003) used three indicator variables for the historical periods when the current form of governments and electoral rules were adopted as instruments for these two constitutional characteristics. But these variables are too weak to be instruments for this study.⁷⁵

⁷⁵ In fact, they were weak instruments even for their original study, but Persson and Tabellini believed in

They also instrumented these constitutional features on the distance from the equator and the percentage of population whose mother tongue is English or a European language. These instruments are believed to reflect the depth of European cultural influence on institutions. Since cultural heritage itself is deemed as a determinant of entrepreneurship, however, this latter group of instruments is obviously inappropriate for the current study. In addition, no instrument has ever been explored for the formal constitutional judicial independence. In fact, we do not even know much about what may determine this constitutional feature except the general geographical and cultural factors.⁷⁶

their strength by mistake as they used a wrong specification for the first-stage regression, see Acemoglu (2005: 1031).

<sup>(2005: 1031).

&</sup>lt;sup>76</sup> Legal family is conceivably a determinant of the formal judicial independence in constitutions, but it also seems to affect other constitutional features such as property rights protection and electoral rules, and may bear on entrepreneurship through other channels as well.

## **Chapter 7 Discussion About the Results**

# 7.1 The Negative Correlation Between the Number of Entrepreneurs and the Institutional Quality

The first interesting finding from the empirical study is that, contrary to the prediction of Murphy *et al.* (1991), the number of entrepreneurs decreases as the institutional quality improves. In particular, we have seen that the actual security of property rights, the degree of formal judicial independence, as well as the two structural factors suggested by the selectorate theory, the size of the winning coalition and the ratio of this size to the size of the selectorate, are all negatively correlated with the quantity of entrepreneurs.

Murphy *et al.* (1991) based its prediction on the assumption that as the rent-seeking sector becomes more profitable, the demand in labor increases, and the level of wages goes up. But it looks suspicious empirically that a rent-seeking friendly institution will be associated with higher wages. Although more carefully designed studies are needed to provide a precise answer, anecdotal evidence seems to contradict this proposition. Based on Anshenfelter & Jurajda (2009), I tested the correlation between the hourly wage of a McDonald's cashier or crew (PPP US dollars) in 2000 and the Heritage Foundation property right index of 1998 in 26 countries. The correlation coefficient is about 0.53 and significant at 1% level. The correlation itself may not be very strong, but the important point is that the correlation is positive rather than negative.

It seems implausible that the overall demand in labor rises as rent-seeking intensifies. First of all, the capital supply in the productive sector is likely to shrink when the rent-seeking activities become more serious. If we think of rent-seeking as an activity depriving the productive sector of certain proportion of its return, then the level of capital investment in this sector should be lower as the proportion of deprivation turns greater. Capital may be simply channeled to consumption instead of investment. When the supply of capital decreases, the labor becomes less productive in the entrepreneurial sector, and the relative price of capital goes up. The first effect pulls down the demand in labor while the second effect pushes up such demand. However, if the technical elasticity of substitution, which describes the sensitivity of the capital-labor ratio to the change in the relative prices of inputs, is less than 1, as assumed in Lucas (1978), the second effect will be overwhelmed by the first one, so that the demand in labor reduces in the entrepreneurial sector.

On the other hand, I also doubt that the number of employers in the rent-seeking sector grows with the profitability of rent-seeking. Oftentimes, there are barriers of entry to the rent-seeking sector. Various qualification exams serve as official barriers, but unofficial barriers such as nepotism are even more crucial. As rent-seeking becomes more profitable, it is reasonable to believe that the incumbents will be better incentivized

to entrench their positions by raising the hurdles for entry. Doing so is likely to increase the private benefits of the incumbents even if it does not maximize the total amount of rents extracted by the rent-seeking sector as a whole.⁷⁷ As Mancur Olson acutely stated, distributional coalitions, once big enough to succeed, are exclusive (Olson 1982: 69). Therefore, in countries where rent-seeking is more severe, we are expecting to see a less open rent-seeking sector with fewer employers. However, it is probably true that a larger number of employees will be hired by each employer in the more profitable rent-seeking sector. Two factors may account for such an increase in demand. For one thing, it requires more labor input to police the restrictive conditions for entry. For another, abundant capital supply in the rent-seeking sector improves labor productivity in this sector, which, based on the same assumption about technical elasticity of substitution, should expand the demand in labor as well. Therefore, it seems difficult to predict whether the entire size of rent-seeking sector will be larger or smaller as rent-seeking escalates in a country. This result finds some evidence in my empirical study. The relative size of the public sector, measured as the share of employment in the public sector, 78 seems to have only very weak correlation with the security of property rights. And if there is any correlation at all, such correlation appears to be positive, which suggests the larger size of public sector actually tends to coexist with better protection of property rights. The correlation coefficient is below 0.01 with no statistical significant even at the 10% level when the Heritage Foundation index is used as a proxy for the security of property rights, whereas the correlation coefficient rises to 0.28 with 5% level significance when Hall & Jones (1999) index is used as a proxy.

Considering the effects of intensified rent-seeking on the labor demand in both the entrepreneurial and the rent-seeking sectors, it looks plausible that the overall demand should decrease, other things being equal. Consequently, the equilibrium wage level will be lower in a country that is more gravely plagued by rent-seeking. As demonstrated above, this prediction is supported by some preliminary empirical evidence. With the decrease in labor demand and wage level, it is sensible to expect a higher rate of self-employment, especially when we consider the relatively high barriers for the superfluous labor to enter the rent-seeking sector. It is also conceivable that, assuming employees are less talented than employers in general, the new comers pushed into the entrepreneurial sector as a result of intensified rent-seeking will downgrade the average

_

⁷⁷ Suppose the profitability of rent-seeking is measured by the tax rate. An increase in the tax rate expands the marginal benefit of the efforts spent on restricting entries to the rent-seeking sector.

The data source is WDI 2009.

⁷⁹ Beyond the technical barriers, it seems that other barriers of entries to self-employment, or the entrepreneurial sector, are possibly the consequence of rent-seeking. In other words, it is the rent-seeking sector that has laid down these barriers. But the barriers to self-employment, at most, benefit the rent-seeking sector indirectly, whereas blocking entries to the rent-seeking sector itself will be a direct means to benefit the incumbents in this sector. Therefore, it is plausible that the entry barriers will generally be higher in the rent-seeking sector.

level of talent possessed by entrepreneurs so that the quality of entrepreneurship decreases

### 7.2 The Impact of Electoral Rules

Another important finding from the empirical study is that the majoritarian electoral system, relative to nonmajoritarian systems, has a negative impact on the quality of entrepreneurship, but no significant correlation with the quantity of entrepreneurs. This result is striking since for most other constitutional attributes, their effects on the quantity of entrepreneurs are more significant than on the quality of entrepreneurship.

One explanation for the weaker significance of the effects on entrepreneurial quality is that the potential measurement error tends to be a more serious concern with respect to this dependent variable. Vagueness in indentifying self-employed employers will arise when some of them work with the assistance of family members or intermittent laborers. Different countries may treat these borderline cases differently. Another factor that contributes to the measurement error might be deliberate misrepresentation about the hiring of employees by the self-employed to take advantage of certain tax or regulatory policies. The measurement error in dependent variables, though does not generate biased estimates, enlarges the standard error of estimates, which, in turn, reduces the statistical significance.

Considering the possibility of measurement error, therefore, the impact of electoral rules on entrepreneurial quality is, perhaps, fairly strong indeed. On the other hand, if it is true that the intensity of rent-seeking is likely to raise the number of entrepreneurs, when measured by self-employment, as well as degrade the quality of entrepreneurship, then lack of significant impact on the quantity of entrepreneurs probably suggests another route of influence by electoral rules, other than the severity of rent-seeking activities. But what might be such a route?

One salient difference between majoritarian systems and proportional representation systems shown in empirical researches is that the latter yield much better representation. Powell has shown that majoritarian elections, notwithstanding opposite theoretical predictions, generate higher vote-seat disproportionality in practice, which eventually leads to substantial divergence between the preferences of median voters and the government or policy makers. In contrast, under proportional representation, despite its indirect multistage representing process, the ultimate policy makers' preferences are much closer to the median voter's. Postelection bargaining among representatives actually creates greater congruence between governments and citizen medians in general (Powell 2000). The high electoral disproportionalities in countries using majoritarian rules are confirmed by other researchers as well. For instance, in the thirty-six democracies studied by Lijphart, those adopting the majoritarian systems are clearly associated with more serious degree of disproportionality, and even the two marginal

cases of proportional representation, Greece and Spain, still demonstrate less electoral disproportionality than the majoritarian states (Lijphart 1999). Such empirical evidence manifests that, unlike the theoretical prediction in Austen-Smith (2000), in proportional representation systems, policy makers' positions are more likely to converge with the position held by the exogenously determined median voter.

If citizens' preferences can be understood as lying on a single superdimension, "choosing the position of the median citizen minimizes the number of voters who would prefer the most popular alternative position" (Powell 2000: 201). Weak representation, reflected in substantial deviation from the median voter's position, gives rise to policies with uneven influences favoring some citizens in the society at the expense of a greater number of others. Weakly represented governments, therefore, tend to create a larger group of underprivileged citizens. If that is true, majoritarian systems probably produce more inequality within a country.

Conceivably, biased government policies will affect access to resources complementary to talent in entrepreneurial endeavors. Above all, such policies tend to aggravate wealth concentration, and may also set restrictions on the financial opportunities available to the general public. Consequently, entrepreneurial activities will be suppressed as long as the distribution of talent is independent from, or at least not highly correlated in a positive way with, the uneven distribution of these complementary resources resulting from the sided policies. If we are ready to believe that talented people are likely to appear with similar probability across the lines of race, gender, religion, origin, family background, etc., then equal opportunities to access resources seem indispensable to insure an unimpeded selection into entrepreneurship. On the other hand, insofar as the government policies exert disparate influence on entries to the rent-seeking sector, talented people belonging to the underrepresented groups will encounter more difficulty becoming a rent-seeker, too, thus pushing them into the entrepreneurial sector. In this sense, underrepresentation affects entrepreneurship in the same way as discrimination, with both pulling and pushing effects. In fact, majoritarian rules might be a political mechanism to legitimize certain implicitly discriminative policies. Consequently, the quantity of entrepreneurs may not vary substantially under these offsetting forces. Nevertheless, to the extent that the discriminative influences of majoritarian rules sort out talents into the entrepreneurial sector according to the availability of some complementary resources, misallocation of talents will occur so that less talented individuals enter the entrepreneurial sector, which reduces the average quality of entrepreneurship.⁸⁰

_

⁸⁰ In this case, the quality of entrepreneurship, when measured by firm size, may decline for another reason. Even if talented people in the underprivileged groups do become entrepreneurs, they will run smaller firms due to limited access to the complementary resources. It should be noted that, unlike Murphy *et al.* (1991), I believe that the quality of entrepreneurship does not depend only on the input of talent, but also on the input of other resources.

As reviewed in Chapter 2, Persson & Tabellini (2000) posits that proportional representation is supposedly linked to higher level of corruption for the blurred accountability resulting from voting on party lists. It is plausible to expect lower accountability correlated with expanded chance for corruption. At the same time, however, Myerson's model also convincingly suggests that the voting mechanism in proportional representation facilitates voters to opt out of corruptive parties. Therefore, collective accountability, on the one hand, alleviates individual politician's concern about reelection, whereas easier punishment on corruptive parties boosts political parties' reelection concern. The ultimate consequence of these two counteractive forces is not clear, and perhaps depends on the strength of party discipline as well. The available data in my study are not indicative of any significant relationship between corruption and electoral rules. When proxied by the Heritage Foundation index, the correlation between security of property rights and the majoritarian system is merely -0.10 and not significant even at the 10% level.⁸¹

Probably, it is also advisable to tell apart the potential effects on entrepreneurship stemming from illegitimate rent-seeking, such as corruption, and legitimate rent-seeking activities, such as logrolling. While illegitimate rent-seeking is usually incentivized by monetary benefits, legitimate rent-seeking is likely to be driven by nonmonetary motivations as well. Conceivably, a desire for power is underlying many self-selections Although entrepreneurs sometimes are also stimulated by into the public sector. non-pecuniary incentives, these are by and large secondary considerations in entrepreneurial selections. Even when non-pecuniary incentives do play a part, usually it is autonomy, rather than power, that motivates entrepreneurial actions (Parker 2009: 111-113). Working in the public sector by no means adds to autonomy in job. Where illegitimate rent-seeking is effectively restricted, the difference in preferences should, imaginably, separate talent into different sectors. In other words, when potential entrepreneurs and potential rent-seekers do not share the same preference, the improved reward in one sector will not attract away talented people from the other. Thus, if proportional electoral systems give politicians more leeway to conduct legitimate rent-seeking, this should not be a major factor to undermine inspirations of becoming entrepreneurs.

# 7.3 The Relevance of Judicial Independence and Irrelevance of Property Rights Protection

Although both the constitutional stipulations on judicial independence and property rights protection are expected to promote the good entrepreneurial performance, the empirical evidence only supports the predicted effect of judicial independence on

⁸¹ When Hall & Jones (1999) index is used, the correlation is -0.09, even lower, and it is insignificant at 10% level, either.

entrepreneurship, and the property rights protection rules do not appear relevant. This might be a surprising result at the first glance, but can be better understood once we have a close look at the different characteristics of these two types of constitutional provisions.

First of all, while judicial independence carves out the fundamental status of a major branch of government, property rights protection concerns the guarantees of individual rights. Although it is desirable to lay down guarantees of rights in a constitution, such protection can be established in other lower-ranking legislations as well. For instance, the Canadian Constitution does not have provisions on protection of basic economic rights, but leave it to ordinary laws. On the other hand, assigning power among various government branches is the central task of a constitution. In fact, only a constitution can lay out the rules by which power is assigned among institutions, and probably there is no other way to do this (Shively 2008: 223). Informal rules may be sufficient to establish and safeguard private property rights sometimes, especially in close-knit communities (Ellickson 1994), 82 but the informal sanctions counting on reciprocity, such as reputation costs, seem less effective to ensuring judicial independence so that formal institutional arrangements become indispensable. Hence, looking at the text of a constitution gives us a better knowledge about the formal framework of judicial independence than about the formal protection of property rights in a country. In brief, judicial independence is at core of formal constitutions whereas protection of property rights is not.

Indeed, it is not implausible that countries with a good tradition of protecting property rights may even feel it less imperative to spell out such protection in their constitutions in that the inviolability of private rights has so crystallized into the prevailing ideology in these countries that the legal mechanisms to guarantee property rights are unshakable even if they are stipulated in an ordinary law. On the contrary, those countries without such a solid tradition might want to embody the property rights protection in their constitutions, either to help strengthen the security of property rights, or just as propaganda for legitimacy of authoritarian regimes. In this sense, Judge Posner might be a bit over-concerned, at least pertaining to property rights, when addressing the risk of political battles for wealth redistribution in the event that vital entitlements were not entrenched in constitutions (Posner 1987).

Second, if we have a close look at the components of the indexes for property rights protection and judicial independence, one conspicuous distinction can be found that the former is almost exclusively composed of substantive rules while the latter is clearly more procedure based. Legal rules on substantive issues usually establish certain principles. They tend to use vague terms and lack detailed guidance for application, so these rules rely heavily on judicial interpretation in the course of implementation. On the other hand, procedural rules, by and large, are less vague and detail-oriented since a

⁸² Here, I am referring to the threats to property rights posed by private parties. As for the threats coming from the sovereignty, however, informal rules probably still cannot provide sufficient defense.

procedure aims at spelling out the steps to be followed in practice, so the way in which they are enforced is relatively independent from judicial interpretation. constitutional provisions are prone to be broad and vague, procedural rules should be less so than the substantive rules. As interpretation inevitably entails discretion subject to the influence, deliberately or inadvertently, of the interpreter's ideology, background or other personal characteristics, 83 it becomes a major source of divergence between the law in books and the law in action.⁸⁴ The greater the room for interpretation, the more likely such divergence appears, so that the actual meaning of black-letter rules becomes less certain, and their impact wanes increasingly in practice. Apart from the vagueness in law, another source for judicial interpretation is the fluidity of facts. It is not unusual that available evidences support different or even contradictory reproductions of facts at Also, the language included in evidence may be ambiguous. All these factors contribute to the judges' discretion in fact finding, hence reducing the predictability of the way how black-letter laws are implemented in practice (Gennaioli & Shleifer 2008). Therefore, the divergence between law in books and law in action should expand, ceteris paribus, when the number of factual issues needed to satisfy the legal requirements is large (i.e. more fact-intensive), and when the facts cannot be easily verified through simple perceptive processes. Compared to substantive rules, procedural rules probably entail less complicated requirements on facts, and these facts are more likely to be verifiable without excessively subjective judgment. This might be another reason why we should expect less distortion, resulting from judicial interpretation, in implementation of judicial independence.

To illustrate this difference between provisions on property rights protection and judicial independence, let's compare the rule about compensation for takings and the one spelling out the term length of supreme court judges. Whether it uses the word "fair", "full", or "adequate", there is always plenty of room for judicial interpretation because these terms are so vague that people's understandings are bound to vary. Even when there are some established patterns for judicial interpretation of these words, such patterns can change with time, and more importantly, are likely to differ from one country to another. Therefore, an adequate compensation in one country might be considered as full in another. In that case, same wording does not lead to same practice, so the formal rules are unsurprisingly irrelevant to the actual outcomes. In contrast, when the term length of supreme court judges are set as a certain number of years, very little space is left for interpretation and the number carries the same meaning anywhere in the world. Hence, if there is any effect of the term length, it is more likely to be detected. In terms of the facts needed to apply the legal standards, determining whether the amount of compensation is fair or adequate obviously involves more complicated factual issues than

-

⁸³ See Posner (2008).

⁸⁴ For the classic discussion on the deviation of the law in action from the law in books, see Pound (1910).

deciding if the term of a judge has expired. Location, usage, and duration of current ownership, among other things, will all affect the value of the property taken by the government, and the assessment process itself can involve substantial discretion. By contrast, the decision on the term length probably requires no more than the straightforward facts about the starting and ending dates of judicial appointment. Probably the same thing can be said with respect to the removal process of supreme court judges. When this power is assigned to certain entities, it is hard to reallocate it to others without violating the formal provisions in a constitution, and judgment about violation can rely on relatively simple facts. Of course, this is not to say that procedural rules are immune to interpretation, but it is perhaps not an overstatement that procedural rules usually leave less room for interpretation than substantive rules do.

Due to the constrained space in interpretation, constitutional provisions on judicial independence tend to be more self-enforceable than the rules of property rights. As Weingast correctly indicates, a prerequisite for a constitutional rule to be self-enforcing is that citizens "must hold sufficiently similar views about the appropriate bounds on government that they react in concert when the government oversteps those bounds" (Weingast 1995: 10). Rules with bountiful space for interpretation impedes the formation of a uniform view among citizens as interpretation might be used as a tool to accommodate various understandings of these rules. At the same time, discretion in fact finding may be even more detrimental to the coordination among citizens. Unlike the legal rules, ordinary citizens are less assessable to the evidences used in fact finding, thus subject to higher influence of the interpretation made by those who implement the law. In short, both the interpretation of law and the interpretation of facts facilitate covering the transgression over the bounds set by the law, and blurs line between legitimacy and illegitimacy.

Although my main interest here is in democracies, this rationale of self-enforceability should predict a smaller deviation of the law in action from the law in books with respect to judicial independence than to property rights protection even in authoritarian states. While in democracies, judicial discretion is probably a major reason for such deviation, deliberate manipulation by dictators may better explain the reduced relevance of formal rules in authoritarian states. Since the very end of having a constitution is to demonstrate the legitimacy of a regime and the vast majority of authoritarian states do have constitutions, it is fair to claim that even dictators care about legitimacy and do not want to weakening it by blatant violations of their constitutions, at least when the benefits of doing so are not sufficiently high. However, if the legitimacy cost is not very high, probably even governments in democratic states will be tempted to deviate from what the constitution requires to pursue their own interests. When the constitutional provisions are vague and amenable to diversified interpretations, it is more difficult for citizens to form a consensus on whether a governmental action has contravened the constitution,

which is indispensable for a coordinated reaction. Accordingly, these provisions tend to be less sincerely followed by those who are in power insofar as they have control on interpretation. If this line of reasoning is correct, then the authoritarian rulers will be better enabled to deviate from the constitutional provisions on property rights protection than on judicial independence. Unequivocal stipulations about judicial independence not only raise the legitimacy cost for autocrats to cross the border, they may even impair their chance to renege on other less clear constitutional rules, such as property rights protection, as the authoritarian rulers lose control over the judiciary as a result of increased judicial independence. So dictators hostile to an independent judiciary will not be so eager to imitate the rules of judicial independence in democratic constitutions. Nevertheless, they may still be enthusiastic to replicate the property rights protection provided by democratic constitutions, just to brag about their legitimacy as the formal rule is really reduced to a cheap talk.

Perhaps there is another factor contributing to the enforceability of rules on judicial independence. The formal constitutional rules are to be enforced by the judiciary, at least where the judicial branch is awarded with the power of constitutional review. While property rights protection is of no direct benefit to the judiciary itself, judicial independence is obviously in the interest of judges and courts. Not only because independence elevates the status of judiciary among the government branches, but also because independent adjudication bears on fair judgment, which is the core value of the This means that judges in charge of enforcing formal rules should be more incentivized to take advantage of the mechanisms in favor of judicial independence than those in favor of secure property rights, other things being equal. The arguably universal espousal for independence within the judiciary also implies that fewer variations, due to ideological disparities, will be involved in enforcing the rules on judicial independence whereas the effective implementation of property rights protection might be more seriously plagued by ideological biases.⁸⁵ On the other hand, where the formal constitution does not explicitly espouse judicial independence, the judiciary will find difficulty in claiming independence by itself. It is harder to obtain popular endorsement of this self-made judicial independence when the constitution keeps silent about it because the citizens' views are less likely to be unified about whether a particular judicial act is legitimate or not without a clear reference in the basic law. consequence, better formal provisions on judicial independence tend to be better applied in practice whereas poor formal safeguards for judicial independence may also trap the judiciary into low level of independence as well. Therefore, the text and practice might better converge in relation to judicial independence.

Finally, considering the judiciary's self-interest in judicial independence, when there is room for interpretation about the provisions on judicial independence, probably they

⁸⁵ See Posner (2008).

will be interpreted in a way to uphold independence should the judiciary has the power to interpret the constitution. In other words, the interpretation of the constitutional rules on judicial independence can be expected to approach the upper bound of the meaning in the judiciary's favor allowed by the text. By contrast, since property rights protection is less closely tied to the interests of the judiciary it is more difficult to tell the potential pattern of judicial interpretation. If this tendency in judicial interpretation really exists, then the difference between the variations in de jure and de facto rules is likely to shrink with respect to judicial independence. Therefore, compared to rules on property rights protection, a cross-country comparison of de jure judicial independence maybe better captures the actual situations.

A numerical example can demonstrate this point more clearly. Suppose a constitutional rule in Country A can be interpreted within the domain of [4, 8], while in Country B, a constitutional rule on a similar issue can be interpreted within a domain of [5, 6]. 86 Also assume that a researcher, when coding the formal rules, will assign a value equal to the median of these domains. Therefore, Country A's rule will be coded as 6, and Country B's rule coded as 5.5; the variance in the coded values of de jure rules is 0.125. If judicial interpretations always reach the upper bounds, then the rules actually applied will be 8 and 6, respectively, in Country A and Country B. So the variance in the de facto rules is 2, and the difference between the variances in the observed de jure rules and the underlying de factor rules is 1.875. If the upper-bound tendency in judicial interpretation does not hold, and countries are equally likely to bias toward either end of the allowed domain of interpretation, then actual rules applied in Country A and Country B will be either 4 and 6, or 8 and 5, respectively, with equal probability. In this case, the expected variance in de facto rules is 0.5*2+0.5*4.5=3.25. Obviously, now the difference between the variances in the observed de jure rules and the underlying de factor rules enlarges to 3.125.87

Although the arguments in the previous paragraphs explain why the de jure provisions on judicial independence may be of more practical relevance than the provisions on property rights protection, they do not indicate a clear route through which an independent judiciary can affect entrepreneurial performance. The theoretical review in Chapter 2 connects judicial independence and entrepreneurship through security of

⁸⁶ Imagine that the condition for dismissing judges in Country A is criminal behaviors, while in Country B it is treason.

⁸⁷ Of course, this last point builds on some strong assumptions about the distribution of positions of judicial interpretation among different countries. In particular, it assumes that judicial interpretation in countries, when lack of a clear pattern, tend to systematically bias away from the center. If such biases do not exist, judicial interpretation should be expected to situate at the median position of the domain allowed by the text, then interpretations of a purely random pattern should result in consistency between de jure and de facto rule while upper-bound tendency should not. But were systematic biases absent, judicial interpretation would not give rise to divergence between de jure and de facto rules at the country level in the first place. Exploring the potential reasons for such bias, though beyond the scope of the current research, will be an interesting and important topic, see Posner (2008).

property rights. There is also some empirical evidence for the positive effect of formal judicial independence on the security of property rights (La Porta *et al.* 2004). However, the correlation between judicial independence and security of property rights in my sample, although significant at 5% level, is only about 0.19. Probably other channels exist for judicial independence to exert influence on entrepreneurship. For instance, some researchers found that judicial independence improves the protection of human rights (Cross 1999), and entrenching rights is thought to be a credible signal encouraging investment (Farber 2002). Another possibility is that judicial independence adds political constraints to government actions, and political constraints on government expand the realm and freedom for business activities in the private sector. At the current stage, however, there is still no sufficient empirical evidence to pin down a clear mechanism.

#### 7.4 The Irrelevance of Form of Government and Federalism

Considering the recent research on presidentialism and parliamentarilism, the irrelevance of form of government to entrepreneurial performance is not surprising indeed. Cheibub (2007) shows that the apparent structural difference in presidential and parliamentary governments cannot be appropriately linked to the major criticisms on presidentialism for lack of coalition formation, weak party discipline, and easy breakdown of democracy. Empirical evidence has been provided to demonstrate *i*) that "in spite of the institutional dissimilarities between parliamentary and presidential democracies, the difference in these systems' coalition formation is one of degree, not a difference in kind" (*id*.: 86); *ii*) that the link from separation of powers in presidential countries to low levels of party discipline is a false one (*id*.: 134); and *iii*) that "the higher instability of presidential democracies ... is not due to any inherent defect of systems based on the separation of executive and legislative powers" (*id*.: 160). Although presidential democracies do seem to be more fragile, it can be largely accounted for by the purely accidental legacy of militarism in Latin American countries that adopted presidentialism.

While the findings in Cheibub (2007) explain the lack of negative influence of presidential governments on entrepreneurial performance, Persson *et al.* (2000) should lead to a positive effect of presidentialism which, nonetheless, has not been confirmed by my study. Their theory builds on the idea that stricter separation of power in presidential states increases the difficulty in rent-seeking. While it might be true that by introducing more veto players, separation of power between executive and legislative branches raises the costs of rent-seeking, it can nonetheless expand the benefits of rent-seeking, too, as the redistributive policies, once adopted, are more difficult to be rolled back given the increased number of veto players. In this sense, Rose-Ackerman (1999) correctly indicated the possibility of corruption for inactivity, i.e. vetoing the

abolishment of rent-generating policies, as a result of intensified separation of power. Therefore, it is not clear whether separation of power gives presidential states an advantage over parliamentary states in restricting rent-seeking. However, separation of the judicial power might have a different effect since judiciary is not directly involved in adopting or abolishing pork-barrel policies, at least when constitutionality is not at issue, but an independent judiciary clearly improves the policing of illegal rent-seeking activities.

In addition, separation of power probably works only when the executive and legislative powers are held by different political blocs. On the contrary, when the president and the majority in the legislature belong to the same party, or when they have formed a coalition, the power in a presidential country is no less concentrated than in a parliamentary one. Thus, the theory developed in Persson *et al.* (2000) implicitly counts on the absence of coalition governments in presidential states. Nevertheless, this probably is inconsistent with the reality as proved by Cheibub (2007). For these reasons, the severity of rent-seeking is not supposed to be quite different in presidential and parliamentary states, hence neither should be the entrepreneurial performance. Although Persson & Tabellini (2003) testified the negative correlation between presidentialism and rent-seeking, these results seem to be affected by their sample bias. Blume *et al.* (2009) shows that such correlation loses statistical significance once additional democracies are added to the sample.⁸⁸

Some researchers have pointed out another difference between presidential and parliamentary systems due to the separation of powers characteristic of the former. That is the apparently dominant role played by the bureaucracy in policy making in parliamentary states; in presidential systems, however, the bureaucracy is delegated with less policy making authorities as the legislature fear that the president might strengthen his influence on policy by holding strong control over the bureaucracy (Kiewiet & McCubbins 1991). These researches usually focus on narrow samples and take the U.S. and the UK as the representatives of presidential and parliamentary systems, which renders their conclusions open to question empirically if we consider a broader scope of countries. But even if the bureaucratic importance does differ between presidentialism and parliamentarilism, it is still not clear how this may affect the intensity of rent-seeking, hence modifying entrepreneurial incentives, because what really changes is but the stage for rent-seeking: The bureaucrats take the place of politicians as major players in rent-seeking when they are delegated with more policy-making authorities.

The irrelevance of federalism to entrepreneurial performance might be due to the

___

My own data suggest a negative correlation between presidentialism and de facto security of property rights, significant at 1% level. Considering the instability of presidential democracies concentrated in Latin America, such a significant negative correlation is not surprising when geography is not controlled. This correlation, however, demonstrates that if there is any significant association between presidentialism and rent-seeking it is may as well be positive rather than negative.

mixed effects of decentralization on rent-seeking activities as discussed in Chapter 2. However, it may also be a result of the lack of reliable measurements for decentralization. In terms of de facto federalism, percentage of tax revenue held by subnational governments probably does not reflect the actual extent of fiscal decentralization. First of all, it does not tell apart the local governments' tax revenues collected from their own source and those funded by intergovernmental grants, and these two types of revenues can give rise to different level of local autonomy in expenditure. Moreover, even though "subnational governments can collect the revenues labeled as own-source, the central government may nevertheless maintain the power to set the rate and the base, leaving the subnational governments as mere collectors of centrally determined taxes" (Rodden 2004: 485). In addition, even if the local governments have the authority to set their own tax rates and bases, their autonomy can still be limited when the leaders of local governments are appointed by the center. Therefore, higher percentage of subnational tax revenues does not necessarily equal to a decentralized fiscal policy making process.

Similarly, when political decentralization is measured by the number of subnational levels at which executives are popularly elected, the nuance underlying political decentralization might be covered by the simple binary distinction between elected and appointed officials. The relationship between the central and subnational electoral arenas cannot be told from such a simplified proxy. "For instance, the slate of candidates competing in local elections might be chosen by central government party officials" (*id.*: 488), which may not increase autonomy of elected local governments as a matter of fact.

Not unlikely, the decentralization needed to prompt local competition depends on both fiscal and political autonomies at the subnational level (Shively 2008: 221). Substantial power in policy-making, coupled with substantial budgetary sources to enforce local policies, is indispensable for local governments to strive to perform superbly in competition. Without more refined measurement in either respect, the effects of de facto federalism may not be readily detected.

On the other hand, de jure federalism does not seem to be a reliable sign of decentralization, either (Clark *et al.* 2009: 613). Anchoring the federal structure in constitutions helps strengthen the autonomy of the units, yet the implementation of the constitutional provisions can still deviate from the text. At least, the credibility of these provisions often hinges upon the presence of a strong, independent constitutional court (Rodden 2004: 490). Furthermore, even if implementation converges to text, the actual extent of local autonomy might as well depend on the particular design of the federal structure. As a mechanism to ensure bargains among territorial governments, federalism should not be a binary concept, but on a continuum of local authority in policy making. Considering all these subtleties, it is not surprising to observe that the formal federalism structure is not positively correlated with such indicators of decentralization as tax

autonomy (*id*.: 491). Consequently, the effects of federalism can be well understood only after we are able to find more accurate measurements for cross-section studies.

## **Chapter 8 A Case Study on China**

In the cross-country study, China seems to be an outlier. However, it might be the inconsistency and inaccuracy in data that have made China look special. After all, ILO does not include the data of China, and the National Bureau of Statistics of China may have used very different definitions of self-employment and method for data collection. Without more reliable data, we cannot tell exactly whether China is really an outlier at the macro-level. So in this chapter, instead of sticking to the self-employment rate and the proportion of self-employers in the body of the self-employed, I try to probe into China's pattern of entrepreneurship at the micro-level, expecting this case study to help us better understand the characteristics of entrepreneurial development in an authoritarian state with few constitutional constraints on political power.

#### 8.1 The Constitutional Environment in China

#### **8.1.1** The PRC Constitution

#### 1) Features

The current PRC Constitution was promulgated in 1982, four years after the adoption of the "Reform and Opening-up" policy at the Third Plenum of the 11th Central Committee of the Chinese Communist Party (CCP). This is also the 4th Constitution since the establishment of the PRC in 1949. There are several noticeable features of this Constitution.

First, the PRC Constitution has a long preamble. The preamble has 1,792 characters in its Chinese version, and was translated into 1,071 words in its official English translation. The most important content of the preamble is the communist and socialist ideology. It confirms the Marxism-Leninism and Mao Zedong Thought as the guiding principle of the country, and incorporated the "Four Cardinal Principles" (sixiang jiben yuanze) stated by Deng Xiaoping in 1979. Besides the Marxist-Leninist-Mao Zedong Thought, the other three cardinal principles are the socialist path, the people's democratic dictatorship, and the leadership of the CCP. Interestingly, the preamble was drafted in a style of telling the history. Narrative language was used instead of the prescriptive words usually found in formal legal documents. It reviewed, from the perspective of the CCP, Chinese history since 1840 when the first Opium War broke out. In particular, it emphasized the success of the communist revolution, and the economic and social development in the PRC. According to those who involved in drafting this Constitution, the special style of the preamble was used to convince, rather than impose on, Chinese people that the "Four Cardinal Principles" were "a historic choice made by hundreds of millions of Chinese people during the long course of revolution and struggle" (Wang, H. 2010). This careful craft of the preamble suggests the strong intent of the CCP to establish the legitimacy of its ruling in the supreme law. The underlying logic is

that the revolutionary success and the socioeconomic development justify the irreplaceable leadership of the CCP.

In fact, the PRC Constitution highlights its ideological orientation not only in the preamble, but also in Chapter 1 General Provisions where the basic political and economic systems of the country are embedded. In particular, it emphasizes the public ownership of the means of production (Art. 6). But, as to be discussed in detail below, over the years the Constitution has been amended to accommodate private ownership as auxiliary components of the socialist economy. Besides, it confirms the state ownership of all urban land, and state or collective ownership of land in suburban areas, which is another defining feature of the socialist economy. So it is fair to say that one important function of the PRC Constitution is to articulate the socialist ideology and inscribe it into the fundamental political and economic institutions.

Second, the PRC Constitution covers a broad spectrum of constitutional issues in very succinct language. It sets up the power of various branches of the government, the basic economic system, as well as the fundamental rights and duties of citizens. It also enumerates a wide range of missions of the State, from developing science and education to promoting family planning. The vast majority of articles in this Constitution just lay down general principles. Except the provisions on the terms of various government offices, the time of convening of the National People's Congress (NPC), and the proportion of votes needed for constitutional amendments and the adoption of ordinary legislations, the PRC Constitution is in short of specific stipulations which can be followed without much interpretation. According to Elkins et al. (2009), the PRC Constitution is the least specific written constitution in the world. As analyzed in the previous chapter, a general and vague constitution allows for substantial room of biases in implementation, and becomes less likely to be self-enforceable. By stirring up the diffusive understanding of the constitutional text, insincerity and pretentiousness can be better covered, which makes constitution an ideal place to boast the legitimacy of the regime without concerns about the easy detectability of violation.

Where the constitutional provisions are specific, however, the text may better reveal the true intent of the party-state. The terms of the various top government offices are among the few provisions with striking specificity. The offices of the Chairman and Vice Chairmen of the Standing Committee of the NPC, the President and Vice President of the PRC, the Premier and Vice Premiers of the State Council, the President of the Supreme People's Court, and the Procurator-General of the Supreme People's Procuratorate all have a five-year term and no one can serve more than two consecutive terms for these offices. These limits on terms of offices have been strictly complied with in the past decade. They led to the first peaceful succession of power in the history of PRC in 2003, and, very likely, will result in another peaceful power transfer in 2012. The Constitution of the CCP does not set limits on the terms of its top leaders. It is the

provisions of the PRC Constitution that have fulfilled the succession of power every 10 The only exception to these limits on terms of offices is set for the Chairman and Vice Chairmen of the Central Military Commission. Although these offices also have a five-year term, the PRC Constitution keeps silent about how many terms one can serve these offices (Art. 93). This special provision justified Jiang Zemin's three consecutive terms from 1990 to 2005, and it will also be completely legitimate for Hu Jintao to follow this precedent after he steps down from the offices of the President of the PRC and the Secretary-General of the CCP later this year. This subtle exception might be easily neglected by a careless reader, yet it seems deeply nuanced. Military is apparently the last resort to keep power in an authoritarian state, and there is little doubt that the Chairman of the Central Military Commission is the de facto top leader in China.⁸⁹ The craft of the PRC Constitution thus reflects the mixed feeling held by its major designer, Deng Xiaoping, and maybe also by other Party leaders, about the life tenure of top leaders during Mao's time. On the one hand, Deng and many of his colleagues were themselves victims of Mao's life tenure, but on the other, they might still believe in the necessity of an ultimate authority that is not subject to many institutional constraints. Life tenure therefore is reserved only for the very top leader of the country. The devil is always in the details. It is not an overstatement that the future amendments of the Article 93 of the PRC Constitution will be a touchstone of the democratic development in China.

Third, the PRC Constitution is largely inapplicable in adjudication of legal disputes. Courts in China, including the Supreme People's Court (SPC), are not authorized to interpret the PRC Constitution. Instead, this authority is reserved exclusively for the Standing Committee of the NPC (Art. 67). Considering the vagueness of most of the provisions in the PRC Constitution, it is almost impossible to apply the constitution to specific legal disputes without conducting a certain degree of interpretation. No constitutional review is allowed during the course of adjudication. So courts cannot exclude any ordinary legislation when they are making decisions on legal disputes even if the relevant legislation contradicts the PRC Constitution because doing so itself is unconstitutional (Tong 2008: 33).

At the same time, the Standing Committee of the NPC, the entity authorized to interpret the Constitution, is incapable of applying the constitutional provisions to or conducting constitutional review in particular legal cases, either. Procedurally, it is not empowered to grant a writ of certiorari or otherwise direct a court to send the record of a given case for review. Neither is there a procedure by which courts may ask the Standing Committee of the NPC to interpret the Constitution or determine the constitutionality of legislations during the course of adjudication. In practice, the

_

⁸⁹ Although the Central Military Commission of the CCP and the Central Military Commission of the PRC are formally two separate institutions, they in fact are composed of exactly the same team.

Standing Committee of the NPC does not make clear when it is interpreting the constitution so that scholars can only try to sift the probable constitutional interpretations based on their own standards. But even these potential candidates are a set of general rules, essentially equivalent to new legislations, rather than responses to the particular constitutional questions encountered in specific legal disputes (Hu & Wang 2000). Moreover, although the Standing Committee of the NPC is well qualified to review the regulations and rules adopted by the State Council or local people's congresses, it has to conduct essentially a self-review when its own legislation is in question. From the legal perspective, it is more questionable whether the Standing Committee should be empowered to review the legislation adopted by the NPC given its lower constitutional status than and accountability to the NPC. In a word, the institutional design of the constitutional application is incoherent and flawed. In practice, to date, the Standing Committee of the NPC is not known to have declared any legislation or administrative regulation unconstitutional although it did have, probably more than one, good chances to do so.

In the wake of the Sun Zhigang incident in 2003 which attracted enormous attention nationwide, three young law professors filed a petition with the Standing Committee of the NPC charging the Measures for Custody and Repatriation of Vagrants and Beggars in Cities, an administrative regulation adopted by the State Council, violated the Constitution and requesting investigation by the Standing Committee.⁹⁰ However, the Standing Committee of the NPC did not take any noticeable action before the State Council decided to rescind the regulation a month later. While some Chinese constitution law scholars regretted that the Standing Committee of the NPC had not taken this opportunity to achieve "institutional innovation" with respect to the constitutional review (Tong 2009: 15), it is anything but surprising to see the inactivity of the Standing Committee of the NPC when we realize the intense desire of the CCP to legitimatize its ruling by crafting the constitution. To declare unconstitutional, or just review, a regulation enacted by the central executive entity itself risks undermining the legitimacy of the government. Even worse to the regime is to create a precedent that ordinary citizens can request the Standing Committee of the NPC to review the constitutionality of a government regulation, which essentially opens the gate for direct challenge to the rules laid down by the central government. In such a widely reported case, the Standing Committee of the NPC would have seen itself at an especially awkward position had it attempted to commence a constitutional review. If the regulation were found constitutional, as stated above, it would attenuate the legitimacy of the central government, but the Standing Committee's own legitimacy might be placed under risk should it uphold the constitutionality of this notorious administrative regulation.

⁻

⁹⁰ For a detailed account of the Sun Zhigang incident, its aftermath, and the role played by the Chinese media in this case, see Liebman (2003), Zhang (2010).

when the State Council voluntarily replaced the regulation with a new one on the basis of outdatedness instead of unconstitutionality, the faces of all sides were saved, though at the sacrifice of an institutionalized constitutional order.

Similar situations reappeared in 2009 after Tang Fuzhen set fire on herself in a physical conflict with the local administrative officers to demolish her house which was claimed to be an illegal construction. This event generated enormous media attention, and five law scholars petitioned to the Standing Committee of the NPC to review the constitutionality of the City Demolition Regulation enacted by the State Council.⁹¹ Again, the Standing Committee of the NPC did not touch the constitutionality of the Instead, the State Council drafted a new version of it which was regulation. promulgated in early 2011. 92 These two events evidenced the unwillingness of the CCP to institutionalize the constitutional review at popularist requests, 93 and its preference for a particularistic approach to handle the grievances of citizens against unconstitutional laws and regulations. This approach averts questioning directly the legitimacy of administrative acts of the central government, but provides sufficient room for the central government to evaluate the sensitivity of the public responses associated with each incident, and to take actions on its own initiative after careful balancing. In fact, it becomes an extremely costly approach to repeal any potentially unconstitutional legal Not only does it require good coordination among the media, the intellectual and the general public, but the state action has followed only after tragedies claiming human lives (Zhang 2010: 968).

On the other hand, notwithstanding the lack of institutional authority, a handful of Chinese courts have attempted to cite the Constitution in their decisions although most of these decisions were not actually based on constitutional provisions and even did not specify which articles of the Constitution they were citing. More often than not, these decisions just indicated that the adjudication was conducted in compliance with the Constitution (Tong 2008). It is worth noting that the majority of these decisions were made during 1998 to 2008 when Xiao Yang, the first lawyer who headed the Supreme People's Court in the years of reform and opening-up, was in office. It is well known that during Xiao's tenure a series of reforms were conducted in the Chinese judicial system, not the least of which was the professionalization of the judiciary. Against this general background, the citation of constitutional provisions in judicial decisions may

⁹¹ For more details of the Tang Fuzhen incident, see Zhang (2010).

⁹² The revision of the regulation was time-consuming as it met serious resistance from local governments, see Zhang (2010).

⁹³ Although the 2000 Legislation Law granted citizens the right to propose to the Standing Committee of the NPC to review the constitutionality of lower regulations, and the NPC has reportedly established a special department to handle the review, so far the NPC has not responded formally to any of the at least 37 requests for review from citizens (Peerenboom & He 2009: 50-51).

Tong (2008) shows that among the 33 cases which may be regarded as applying the Constitution, only 3 really based their decisions on the constitutional provisions.

⁹⁵ For some of the reform measures, see Liebman (2007).

well be an effort of the more professional judiciary to expand its power and raise its status in the political structure.

Of all these cases, Qi Yuling v. Chen Xiaoqi is by far the most influential. Not only was its adjudication based directly on a particular article in the constitution, but it was officially endorsed by the SPC in its written reply to the Higher People's Court of Shandong where the case was on appeal. This SPC reply would have established a formal precedent to apply the constitutional provisions to particular cases. It is believed that this was not an accidental action, but a well-calculated plan to upgrade the status of courts in constitutional implementation. As clearly admitted by the SPC Judge in charge of the matter, the Qi Yuling v. Chen Xiaoqi case was purported to open a path to "the judicial application of the Constitution making a reference to the U.S. model" (Tong 2008: 37). However, the Qi case eventually failed to become the Chinese version of Marbury v. Madison. Soon after Xiao Yang was replaced by a Party bureaucrat in 2008, the SPC reply made in 2001 was quickly repealed and no longer applicable. Again, the PRC Constitution becomes a text without actual relevance in legal practice.

To sum up, the PRC Constitution is a legal document claiming legitimacy for the CCP ruling and identifying the ideological principles endorsed by the party-state. It is vague and lacks specificity in general. It is not applicable institutionally, nor is it of much relevance in legal practice though with a few exceptional cases whose glory faded out quickly. The PRC Constitution thus is mainly window-dressing that does not set up substantive boundaries for government power in the party-state. This being said, the PRC Constitution is indicative of the ideological attitudes, together with the corresponding economic and political systems, endorsed by the CCP. In other words, the constitution has been employed to signify the official ideology of the CCP. The ideological mutation is clearly reflected in the series of amendments to the constitution, to which I am now turning.

#### 2) Amendments

The current PRC Constitution has so far been amended four times, respectively, in

96

⁹⁶ Qi Yuling and Chen Xiaoqi were secondary-school classmates. Qi was admitted to a professional school in Jining, Shandong in 1990. However, Chen Xiaoqi, who was not admitted, took away Qi's offer letter fraudulently and studied at that school in Qi's name during the next three years. After graduation, Chen continued to use Qi's name and work in a local bank while Qi was not able to continue her education or get a stable job during the same period. After the truth was discovered, Qi filed a suit against Chen, asking for damages of 160,000 RMB yuan (\$25,400).

⁹⁷ 最高人民法院法释(2001)25 号[The SPC Judicial Interpretation, No. 25 (2001)], which says, "The right to receive education, which Qi Yuling claimed, was based on Article 46 (1) of the Constitution. Viewing from the facts of this case, by means of infringing the right of name, Chen Xiaoqi and other defendants infringed Qi's basic right to receive education that she was entitled to enjoy under the Constitution. Their infringement caused concrete damages, thus they shall bear pertinent civil responsibilities" (translated by the Chinalawinfo).

⁹⁸ Huang Songyou, who handcrafted the SPC reply, was promoted to the Vice President of the SPC in the following year, but was arrested for corruption in 2008, soon after Xiao Yang stepped down. He was sentenced to life imprisonment in 2010.

1988, 1993, 1999 and 2004. Each amendment was preceded by a CCP Central Committee meeting, and is a direct reflection of the ideological and policy change adopted at that meeting. At the same time, although the contents of constitutional amendments had been included in the resolutions of the preceding CCP Central Committee meetings, obviously not everything mentioned in those resolutions would eventually enter the Constitution. Those changes did become part of the Constitution are of primary importance to the CCP which set forth the path of development for the party-state. Therefore, the constitutional amendments grow into a barometer of the ideological limit set by the CCP Central Committee.

Table 8.1 is a brief summary of the amendments to the PRC Constitution. According to their main contents, I roughly categorized each articles in these amendments into five groups: ideology, economy, politics, individual rights, and others. To be more precise, many articles categorized into the groups of economy, politics, and individual rights are also indicative of the ideological changes of the CCP since the whole PRC Constitution is built on the ideological principles officially endorsed by the CCP. But for the convenience of analysis, an article is placed into one of these separate groups if it bears on a particular institution of economy, politics or individual rights, while the category of ideology only comprises the articles of a general ideological color without a specific connection to a particular institutional arrangement.

Table 8.1 Amendments to the PRC Constitution

Year	Article Revised	Main Content	Category
		adding the permission, protection of and	
1988	11	supervision and control over the private	Economy
		economic sector	
1988	10	permitting the transfer of land use right	Economy
		adding the notion of "the primary stage of	
1993	Preamble	socialism" and "socialism with Chinese	Ideology
		characteristics"	
		adding the long run existence of "the	
1993	Preamble	multi-party cooperation and political	Politics
		consultation" led by the CCP	
1993	7	replacing the old term of "state economy"	Economy
1773	1	with the new one of "state-owned economy"	Economy
		recognizing the "rural household-based	
		contract responsibility system with	
1993	8	remuneration linked to output" as an element	Economy
		of "socialist economy under collective	
		ownership by the working people"	

		replacing the planned economy with the	
1993	15	"socialist market economy" as the	Economy
		fundamental economic system	
1002	1.6	deleting the state-owned enterprises'	Easmann
1993	16	obligation to fulfill the State plan	Economy
		deleting the collective economic	
1993	17	organizations' obligation to accept the	Economy
		guidance of the State plan	
1002	40	replacing the old term of "state economy"	Γ
1993	42	with the new one of "state-owned economy"	Economy
		extending the term of office of the county-,	
1993	98	city-, and district-level people's congress	Politics
		from 3 years to 5 years	
1000	D 11	adding Deng Xiaoping Theory to the guiding	T 1 1
1999	Preamble	ideologies of the country	Ideology
1000	5	recognizing the practice of "ruling the	D-1141
1999	5	country in accordance with the law"	Politics
		recognizing the existence of diverse sectors	
		of the economy in addition to the public	
1999	6	ownership, and the existence of diverse	Economy
		modes of distribution in addition to the	_
		"distribution according to work"	
		recognizing the "double-tier management	
		system that combines unified and separate	
1999	8	operations on the basis of the	Economy
		household-based output-related contracted	· ·
		responsibility system" in the rural areas	
		Recognizing the individual and the private	
1999	11	economies as "major" components of the	Economy
		socialist market economy	· ·
		replacing the old term of	
1999	• •	"counter-revolutionary activities" with the	
	28	new one of "actions that endanger public	Ideology
		security"	
		adding Jiang Zemin's thought of "Three	
2004	Preamble	Represents" to the guiding ideologies of the	Ideology
		country	23
2004	D 11	adding the "coordinated development of the	71 1
2004	Preamble	material, political and spiritual civilizations"	Ideology
2004	Preamble		Ideology

		as a mission of the State	
		adding "all builders of socialism" (essentially	
2004	Preamble	to include private business owners) to the	Ideology
		components of the patriotic united front line	
2004	10	requiring compensation for land takings	Individual rights
2004	1.1	adding the encouragement and support of the	-
2004	11	non-public sector as a mission of the State	Economy
		emphasizing the inviolability of private	
2004	13	property and allowing for taking conditioned	Economy
		on public interest and compensation	•
2004	1.4	adding the establishment of the social	* 1 1 1 1 1 1 .
2004 14	14	security system as a mission of the State	Individual rights
2004	22	adding the respect and preservation of human	T 12 21 1 2 1 .
2004	33	rights as a mission of the State	Individual rights
		adding the special administrative regions	
2004	59	(Hong Kong and Macao) as separate election	Politics
		districts of the NPC deputies	
	<i>(7</i> , 00	replacing the old term of "the imposition of	
2004	67, 80,	martial law" with the new one of "entering	Ideology
	89	the state of emergency"	
		adding the engagement in "activities	
2004	0.1	involving State affairs" as a responsibility	D 117
	81	discharged by the President on behalf of the	Politics
		PRC	
2004	00	extending the term of office of the town-level	D = 1141 = =
2004	98	people's congress from 3 years to 5 years	Politics
2004	136	stipulating the National Anthem	Others

It is readily observable from Table 8.1 that one salient feature of these constitutional amendments is that changes pertaining to the economic institution have taken a central position. Of all the 30 articles in the 4 amendments, 13, or 43%, are concerning the economic institution. It is fair to say that the constitutional amendments go hand in hand with the process of economic reform. The most frequently revised article in the PRC Constitution, included in 3 of the 4 amendments, is Art. 11. 99 It lays the constitutional foundation for the non-public economy in China. Although the

_

⁹⁹ It ties with the preamble in terms of the frequency of revision.

¹⁰⁰ In the original Constitution enacted in 1982, private economy was not mentioned and only individual economy was officially sanctioned by Art. 11. Ideologically, there is a big difference between individual and private economy, though both of them are essentially part of the private sector. Private enterprises hire more than 7 employees while individual household businesses hire no more than 7. The magic

amendment adopted in 1993 did not revise Art. 11 directly, it completely abandoned the planned economy and replaced it with the socialist market economy, which essentially upgraded the legitimacy of the private sector of economy because this sector is not subject to the national plan from the beginning, thus inevitably situated at an awkward position in a planned economy, but it is in better accordance with a competition-based market economy. So there is little doubt that the constitutional confirmation of such a change consolidates the status of the private sector.

The continuous revision of the same article in a consistent direction signals the determination of the state to legalize and promote the growth of the private entrepreneurship through the gradual removal of the ideological impediments. It might be doubtful that the signals sent by an inapplicable Constitution are really credible. a readily detectable deviation from the Constitution still costs the legitimacy of the regime. Nobody wants to use conspicuous shoddies for window-dressing. this cost probably becomes even higher when the regime reneges after frequent confirmation of its position in the Constitution as doing do will just make the government look like a repeated liar. Hence, the regime should not choose to reiterate a policy about which it is not sincere in an increasingly affirmative tone in the supreme law. This is very clear when we note that no amendment to the PRC constitution has ever touched upon the political or civil rights of citizens. The amendment passed in 2004 did mention that the state respects and preserves human rights, but this 9-character article in the amendment is too general to convey any substantive meaning to the public, and considering the consistent position held by the Chinese government about human rights which is biased toward economic rather than political and civil rights, this amendment brings in too little to arouse any expectation about the entrenchment of civil and political The constitutional provisions on basic civil and political rights such as freedom of speech, association, assembly and demonstration (Art. 35) remain unchanged for the past three decades, although "there has not been a single successful application for public assembly since 1949, with the one possible exception of when the Chinese embassy in Yugoslavia was bombed by American missiles in 1999, and it was suspected that even this demonstration was covertly organized by the government" (Zhang 2010: 973). a fair statement that the constitutional amendments have coincided well with the Chinese reform process which emphasizes economic transition but resists the idea of political transition. Therefore, the trend of constitutional amendments is a convincing signal of the change in a direction endorsed by the CCP. Of course, the amendments to the PRC Constitution are not the only channel for the party-state to send out its signal. As summarized in Table 8.2, a series of actions taken by the CCP during the reform years

number of 7 has its origin from Marx's *Capital: Critique of Political Economy* Volume 1, where he asserted, in essence, that, to effectively exploit the surplus value of labor, a capitalist would have to employ 8 laborers including himself. Therefore, according to this Marxist tenet, private entrepreneurs are capitalists, a class to be eliminated in the socialist society, but individual household business owners are not.

gradually intensifies the public's belief that the transition to a market economy is sincerely endorsed by the state. However, the constitutional amendments undoubtedly magnify the signal that the capitalist activity is no longer a taboo, and that the ideological risk has been removed for starting up private businesses. People do not need to fear about the possible persecutions for the sake of being an entrepreneur.¹⁰¹

Table 8.2 Major Events Pertaining to the Change in Policy about Private Economy

14016 6.2	Major Events rettaining to the	Change in Folicy about Frivate Economy
Time	Event	Influence
Dec.	3 rd Plenum of the 11 th CCP	launching the "reform and open-up"
1978	Central Committee	policy
Dec. 1982	5 th Session of the 5 th NPC	adopting the PRC Constitution which allowed for individual economy as a complement to the socialist public economy
Oct. 1984	3 rd Plenum of the 12 th CCP Central Committee	determining the "planned commodity economy" as the basic economic system
Oct. 1987	1 st Plenum of the 13 th CCP Central Committee	introducing the theory of "primary stage of socialism"
Apr. 1988	1 st Session of the 7 th NPC	adopting the 1 st constitutional amendment which permitted the private sector of economy as a complement to
Oct. 1992	1 st Plenum of the 14 th CCP Central Committee	the socialist public economy replacing the "planned commodity economy" with the "socialist market economy" as the basic economic system
Mar. 1993	1 st Session of the 8 th NPC	adopting the 2 nd constitutional amendment which confirmed the socialist market economy
Sept. 1997	1 st Plenum of the 15 th CCP Central Committee	recognizing the private economic sector as a "major component" of the socialist

1

Early years of the economic reform saw many waves of ideological struggles between the reformers and conservative elites. "Each time the economy went out of control, conservative elites within the CCP went on the attack against the 'chaos' created by the reforms ... As a result, periods of economic contraction coincided with periods of retrenchment in ideology and culture" (Shirk 1993: 185). Lai (2006) summarized the flips in ideological control and fiscal policies in early years of the reform era as a result of factional conflicts among the top political leaders. Some important political movements indicative of the ideological flip-flops were the campaign against the spiritual pollution in 1983 and 1984, the campaign against capitalist bourgeois liberalization in 1987, and the well-known political crackdown in the aftermath of the June 4th Incident in 1989. The ideological fluctuations at the top were quickly transmitted to the lower levels and became a political risk to entrepreneurs at the forefront. This is best illustrated by the case of "Eight Kings in Wenzhou" happened in 1982. Eight entrepreneurs in Wenzhou were prosecuted and convicted for crime of speculation and disturbing the economic order in the wake of the 1981 retrenchment campaign.

		market economy
		adopting the 3 rd constitutional
3.4		amendment which further upgraded the
Mar. 1999	2 nd Session of the 9 th NPC	status of the private sector as a major
1999		component of the socialist market
		economy
	5 th Plenum of the 15 th CCP	announcing the policy to support,
Oct. 2000	Central Committee	encourage, and guide the
		privately-owned economy
Nov.	1 st Plenum of the 16 th CCP	officially allowing private entrepreneurs
2002	Central Committee	to join the CCP
		adopting the 4 th constitutional
Mar.	2 nd Session of the 10 th NPC	amendment which confirmed the policy
2004	2 Session of the 10 NPC	to support, encourage, and guide the
		privately-owned economy

### 8.1.2 Other Aspects

#### 1) Election

According to the PRC Constitution, the NPC and the local people's congresses are the "organs of state power". Government officials at various levels are elected by the deputies of the people's congresses at the corresponding levels. Only the deputies of the county and commune level people's congresses are elected directly by the voters, and deputies of county and provincial level people's congresses choose the members of the congresses at higher levels. ¹⁰²

Although a series of partial reforms have been made to the electoral system during the post-Mao time, elections in China are still largely perfunctory. Like many other political and legal reforms conducted in the past three decades, the first priority of the electoral reforms was given to the CCP's intention to reinforce the legitimacy of its one-party rule rather than increase political competition or government accountability (Chen & Zhong 2002: 181). The CCP controls the entire process of local elections, and no opposition parties are allowed in these elections. In fact, the vast majority, 75%-80%, of the winning candidates are members of the CCP (*id.*: 182).

In particular, the CCP's control over elections is guaranteed through the manipulation of lists of candidates and forbiddance of election campaigns. The PRC Election Law authorizes the political parties and mass organizations to nominate the candidates. Since no political parties or mass organizations can ever legitimately exist without the approval by the CCP, their nominations certainly never contradicts with the intention of the CCP. The actual process of compiling the party-approved list is extremely secret: "it was

¹⁰² The PRC Constitution Art. 97 and the PRC Election Law Art. 2.

hidden from the public, deputies, and even individuals engaged in the election work. In some elections, approved candidates were listed first on the ballot and efforts were made to intimidate or bribe others to renounce their nomination" (O'Brien 1990: 129).

The PRC Election Law also allows nominations made jointly by 10 or more voters. Candidates so nominated are usually called "independent candidates". The number of independent candidates seems to increase over years. In 2003, there were about 100 independent candidates for deputies of local people's congresses while this number was believed to soar to "hundreds and thousands" in 2006 and 2007 (Li 2010), thanks mainly to the prevalence of online networking societies. But the CCP has made various attempts to discourage the spread of independent candidates. In 2011, the officials of the NPC reportedly claimed the independent candidates as "legally groundless" notwithstanding the explicit stipulations in the Election Law (CCTV 2011A). The NPC officials were obviously juggling with words since the term of "independent candidate" does not appear in the law indeed. However, the connotation of this speech was clear that these candidates were not blessed by the party-state. Besides, the Election Law itself requires further screening of the nominated candidates before the final list is submitted for election. The law, however, does not specify the details for this screening process by the election committee except saying that it should go through "discussion and negotiation" among voter groups. 103 According to those who had personal experience as an independent candidate in local people's congress elections, this screening works completely in a black-box (Zhu 2006). Some of the independent candidates are harassed and detained (The Economist 2011A), and most of them (above 90%) cannot win seats at the local people's congress (Li 2010).

Even if an independent candidate is included in the final list, they, like all other candidates, are not permitted to conduct campaign activities except delivering a short self-introductory speech no longer than a few more minutes. Voters have no chance to further explore the candidates' background or verify the information provided by the candidates and their recommenders, let alone studying and comparing their platforms. The Election Law, before its most recent amendment in 2010, did not even require the voting committee to organize candidates' meetings with their voters, which effectively means that the voting could be conducted even when the voters had never seen the candidates. Although the newly revised law obligates the voting committee to organize such meetings, it conditioned this obligation on the voters' requests without making clear

¹⁰³ The PRC Election Law Art. 31.

Probably the best account of the local people's congress election in China can be found in Zhu (2006), a documentary writing based on the experience of Yao Lifa, the first independent candidate who was able to get a seat at the local people's congress, where the miseries of an independent candidate, as well as his constituencies, were vividly depicted. Unfortunately, yet expectably, the book was banned by the Chinese government, in spite of its official denial, soon after its appearance. The author later posted the manuscript on her online blog which is again blocked now. Nevertheless, unofficial copies of the manuscript can still be found online.

such important issues as the number of voters needed to make these requests, and the procedures to make the requests. The overall election process is so designed as to block the conveyance of information about candidates to voters, hence voters, more often than not, are about to cast votes blindly. Together with the anonymous voting system at conferences of the people's congresses, the black-box style election cut off the accountability of deputies to their constituencies. In such an institutional setting, no wonder that people with a stronger democratic orientation and a keener sense of internal efficacy are less likely to vote in these showcase elections (Chen & Zhong 2002: 191).

It should be noted that direct elections and independent candidates are legitimate only at local elections for deputies of the people congresses. For top executive officials at all levels of governments, elections are made indirectly by the people's congresses at the same level. Neither the Constitution nor the Election Law says anything about how the candidates should be decided, and apparently the number of candidates does not need to be more than the number of offices to be elected. In practice, almost all candidates are handpicked by the higher level CCP committees and governments. So these top officials are appointed rather than elected as a matter of fact. Those who dare to test direct elections of local executive officials will face a harsh crackdown (Li 2010).

Direct election of officials is only allowed for village committees (VC), a self-governing body of villagers in rural China charged with implementation of certain governmental tasks such as taxation and family planning. Village committees first emerged in Guangxi province in late 1980. With the strong support of Peng Zhen, Chairman of the Standing Committee of the NPC in the 1980s, VC was formally recognized by the PRC Constitution of 1982 (O'Brien & Li 2000). But before 1998 when the Organic Law of Village Committees (OLVC) was enacted, members of VCs, and the chairmen in particular, were usually appointed by the higher level township governments (Wang & Yao 2007: 1637). Since 1998, it has become popular for villagers to nominate candidates directly. The so called "sea-elections" (haixuan), have now spread to 26 provinces (O'Brien & Han 2009: 364). Multi-candidate competitive elections have become the rule, and candidates in most places are now given opportunities to deliver speeches or engage in other forms of campaigning (id: 365). It is fair to say, compared to the showcase elections at all other levels, VC elections converge much better to transparent and democratic procedures although counter-examples were still observed (Zhu 2006). Some studies show that the improved accountability of VCs is correlated with enhanced competitiveness of elections (Wang & Yao 2007). There is also evidence that accounting of village spending is more open in villages where elections are conducted (Oi & Rozelle 2000).

The democratization of VC elections, however, does not necessarily strengthen the

¹⁰⁵ The PRC Election Law Art. 33.

¹⁰⁶ The PRC Constitution Art. 101.

villagers' status in the process of decision-making on rural affairs. This is because VC itself is very weak in the Chinese power structure. First of all, OLVC clearly states that the CCP branches are the "leadership core" in the rural areas, and should "lead and support" the work of VCs. 107 It is believed that through CCP's control over personnel – most VC members, and chairmen in particular, are CCP members - VCs are very vulnerable to the influence of the Party (O'Brien & Han 2009). Even when the VC chairmen, backed by popular votes, dare to defy the direction of the Party secretary, oftentimes the result of the contest will not be in VC's favor (Wang & Yao 2007). Second, the activities of VCs are tightly restricted by the townships, the lowest level government in rural China. Fiscal dependence on and cadre management by the township governments make it difficult for VCs to refuse jobs imposed from above, even in conflict with the views and interests of the village voters. It is also claimed that the fiscal and administrative power were increasingly concentrated in the hands of the townships during the 1990s (Huang 2008: 160-164). Therefore, "in many communities, village committees have failed to achieve their potential, and in some they control few resources and are close to insignificant" (O'Brien & Han 2009: 368-369). Probably, it is exactly because of the triviality of VCs in the power structure of the party-state that secures VC elections as a democratic test in the authoritarian state where no sign has been seen so far of the extension of similar elections to any higher level governments.

#### 2) Decentralization

Although China is formally a unitary country, many have attributed China's rapid economic growth in the reform years to its government decentralization, or the de facto federalism (e.g. Montinola *et al.* 1995; Qian & Weingast 1996; Qian & Roland 1998). Therefore, it is worthwhile to assess the extent of decentralization and its effect on the constitutional environment in China.

First of all, there seems to be a consensus among China scholars that the administration of economy is decentralized in China. However, this kind of decentralization at the administrative level is by no means unique to the reform era (Shirk 1993; Huang 1996). In fact, "strict centralized management of the economy by directives, as under the pure Soviet model, has never existed in China. The 'decentralizing movement' which took place in 1958 and has been renewed from time to time ever since has eroded central planning and its power to control" (Wu & Zhao 1987: 310). Decentralized administration of economic affairs is a result of China's uneven social and economic development, poor transportation and communication infrastructure (Huang 1996: 3), as well as the predominance of small firms in China (Shirk 1993: 29).

The administrative decentralization with respect to economic policies was intensified in 1980s. It peaked around 1988-89, followed by recentralization in the 1990s (Cai & Treisman 2006: 508). During this period, many state-owned enterprises (SOE)

¹⁰⁷ The OLVC Art. 4.

controlled by the central government were delegated to local governments. Many policy decisions, such as the liberalization of prices, were also delegated to provincial and local governments. Special economic zones, coastal open cities, and development zones were established where local governments gained more authority over economic development. In addition, the fiscal contracting schemes applied during 1988-1993 were considered as allowing the local governments to retain substantial parts of local revenues on the margin (Qian & Weingast 1995).

However, in parallel with the economic decentralization is an uninterrupted system of political centralization. In China's unitary political system, local governments derive their authority solely from the central government and perform their duties at the local level on behalf of the central government (Huang 1996: 28). The center controls the incentive of local officials through its monopolistic power over personnel decisions. Government officials at all levels are subject to the top-down appointments. personnel allocation power is the ultimate trump card that the Center can wield over provinces and it is a fundamental constraint faced by all Chinese local officials" (id.: 89). Consequently, the local officials appointed by the Party center "always look to the party leaders in Beijing because they know their careers depend on satisfying these leaders", rather than articulating the interests of their particular regions (Shirk 1993: 83). most famous case during the reform era that reveals the local officials' weakness vis-à-vis the Center is the removal of Ye Xuanping from his position as Governor of Guangdong and a nominal promotion to a purely ceremonial post after he spoke out openly against the Center's proposals in 1990 in spite of his princeling status and widespread connections to the Center. The message was clear: any official who challenge Party leaders by organizing a bloc will be dismissed (id: 195). In fact, evidence points to the enhanced central control – and therefore the attenuation of localism – over personnel during the reform years. The degree of uniformity among the provincial level personnel appointments increased; the length of tenure of the local officials was shortened; the correlation between the tenure length of local Party officials and government officials decreased (Huang 1996: 113). Notwithstanding the fiscal and economic decentralization, this political control from above sets up an ultimate constraint on local decision-making.

Even in terms of the fiscal decentralization, it is not clear to what extent the positions of local governments were strengthened during the 1980s. The central share of total budgetary income rose from 13.8% in 1972 to over 20% in 1982, over 30% in 1985, and 35.3% in 1988 (Shirk 1993: 177). During that period, the central government also increased the scope of the central fixed revenues, shrinking the pool available for sharing with the provinces under the fiscal contracting programs (Cai & Treisman 2006: 522). It was also pointed out that, during the 1980s, although the central government's share of revenue was small in relation to the size of China's consolidated revenue, the central

government was able to appropriate provincial revenues and delegate significant financing responsibilities to the localities so as to reduce its own expenditure requirements (Huang 1996: 58). Whatever the situation of fiscal decentralization might be in the 1980s, the tax reform implemented in 1994 has recentralized the fiscal system by replacing the contracting scheme with one in which only 25% of the largest tax, the value added tax (VAT), is retained by the provinces. After this reform, the local governments are believed to be faced with a very real revenue squeeze that reduced their budgetary revenues (Whiting 2000: 285).

Although many believe that China's economic miracle is attributable to the decentralization which incentivized local competition and institutional innovation (e.g. Montenola *et al.* 1995), those delicate theories do not seem to be consistent with some simple facts. Cai & Treisman (2006) shows that the key institutional reforms, including the "household responsibility system" (1978), the "special economic zones" (1979), and experiments on profit-retention schemes in SOEs (1978), all started in the late 1970s and early 1980s, before any significant decentralization had occurred. In fact, decentralization was conducted selectively and aimed at circumventing Deng Xiaoping's central opponents (Cai & Treisman 2006: 518). Decentralization is also claimed to harden the budget constraints as the competition for capital intensifies (Qian & Roland 1998). But again there is little unequivocal evidence to support this claim. On the contrary, some commentators find that the budget constraint was actually softened during the peak years of decentralization (Cai & Treisman 2006: 526), and it was hardened only after the recentralizing tax reform in 1994 (Whiting 2000).

Given these empirical inconsistencies, some China scholars recently argue that the driving force behind the Chinese economic reform was not from the localities, but instead from the "competition at the Center between rival factions with different ideological predispositions and local connections" (Cai & Treisman 2006: 507). This argument seems to be compatible with the institutional features of a unitary country where the localities are subject to tight political controls from the Center. Of course, local governments have played substantial roles in the reform era, but they are confined eventually to the political agenda set by the Center. The far-reaching economic reforms have not provided the local governments political and fiscal resources sufficient to challenge the policies imposed by the Center. As evidenced by the local compliance with the austerity policies, by and large, the central government was capable of reigning in the localities' impulse to pursue their own investment interests. And the local governments would find more leeway only when they sensed a division in the Center (Huang 1996: 256). While the Center does take into account the local interests, it is just because the top leaders cannot run the country directly, but have to rely on local agents for information and for policy implementation. The top-down authority still takes a dominant position in Chinese political system (Shirk 1993: 349). It is hard to say that

the Center has any deliberate intention to encourage local competitions for the purpose of institutional innovation.

Even if the decentralization with respect to economic administration has stimulated local competition, it is still questionable whether such a competition, while under the tight political control from the Center, would be sufficient to create a constitutional environment conducive to entrepreneurial development which ensures, among others, secure property rights, government accountability, and the rule of law. For a couple of reasons, local competition in the Chinese context does not seem to be promising in completing this task.

Since the local incentives are ultimately influenced by the Center, competition among localities will be channeled to the dimensions consistent with the central preferences. While the central leaders have shown their interest in economic development during the reform era, they are much less enthusiastic in political reform. Local competition, therefore, is unlikely to be intense in this dimension. In fact, local officials may behave cautiously to dance around this sensitive area in order to avoid political risks. To establish the rule of law, and enhance the government accountability requires at least certain level of political reform that constrains the monopolistic power of the CCP and its top leaders. So unless the Center is determined to launch such a reform, the prospect for a bottom-up institutional change is limited.

Although reliable institutions are considered indispensable for the long run economic growth, particularistic implementation of law and discriminative treatment of investors may nevertheless boost local economy in the short run, especially when the focus is extensive, rather than intensive, growth. Promises of soft credit, subsidies, or tax breaks may lure investors easily (Cai & Treisman 2006: 527). Catering a few big, monopolistic, and politically well connected investors at the expense of grass root entrepreneurs will also expand the economic pie more quickly in the short run than upholding a competitive market and nurturing the small and medium sized enterprises. The relative short tenure of local officials tends to abbreviate their time horizon. Huang (1996) indicates that the average tenure of Party secretaries is only 3.44 years while it is even shorter for provincial governors, around 2.85 years. Reforms of political and legal institutions entail large upfront investments, both economic and political, but will take a long time to reap the harvests. Given the short tenure, competition in this dimension is very unlikely as it essentially requires the incumbents to take all the pains to provide some public goods for their successors.

Constructive local competitions require an institutional environment that ensures the mobility of factors and products in a common market. Even the advocates of the de facto federalism logic agree that decentralization has not contributed to the emergence of

While these numbers are for years of 1979 till the early 1990s, my own data covering the years of 1979 to 2011 show a little longer tenure. For Party secretaries, the average length of tenure is 4.11 years while for provincial governors, it is 3.52 years.

such a market (Montenola et al. 1995). Quite to the opposite, decentralization has rendered local energies to be "focused more on fighting bureaucratic battles (often at the SEC) to restrict competition than on competing in the national marketplace" (Shirk 1993: 186). In fact, there are evidences that China's market has become more segmented over time, and the system of assigning administrative controls of firms to local governments is thought of as the major stimulus to the rise of local protectionism (Huang 2003). Local officials are incentivized to erect administrative blockades to protect local markets for their local firms. It seems odd that the Center did not take sufficient action to propel the establishment of a national market since the central government will bear the cost of local protectionism. Some commentators attribute tolerance from the Center to its preoccupation with championing SOEs. "Administrative decentralization is one of the few policy instruments available to the government to improve the efficiency of firms within a framework of state ownership" (id: 144). But the administrative discrimination against non-local firms strengthens the particularistic nature of policy making in China, and stretches the country further away from a constitutional environment under the rule of law.

## 3) Judiciary

Although the PRC Constitution provides that "the people's courts shall, in accordance with the law, exercise judicial power independently and are not subject to interference by administrative organs, public organizations or individuals" (Art. 126), the judiciary has First of all, the courts are never enjoyed independence in adjudicating cases. administratively and institutionally responsible to the corresponding level of people's congresses that created them. 109 The standing committees of people's congresses at various levels are authorized to supervise the work of the people's courts. ¹¹⁰ In reality, the people's congresses not only supervise the general situations of the courts' operation, but, at times, get involved in adjudication of specific cases as well. "individual-case-supervision" (ge'an jiandu) is said to be all-encompassing and not effectively restrained even by the rules set by the people's congresses themselves. The level people's congresses are especially active individual-case-supervision (Cai 2004: 5). Besides, the PRC Constitution also designates the procuracy as the institution of legal supervision. 111 "leading to the curious situation where procuratorates are subject to the authority of the court when they appear before the court as a prosecutor and yet they have the authority to challenge the 'final' decisions of the court" (Peerenboom 2002: 280).

Like any other state organ in the party-state, the judiciary is under the strict control of the CCP. The Political-Legal Committee (PLC) and courts' internal Party Group are the major channels through with the CCP may intervene with the adjudication of specific cases.

¹⁰⁹ The PRC Constitution Art. 128.

¹¹⁰ The PRC Constitution Art. 67 and Art. 104.

¹¹¹ The PRC Constitution Art. 129.

Although such intervention occurs only infrequently, when it does, its effect is decisive (id: 303). More importantly, the CCP's control over the judiciary, much like its control over other state institutions, is based on its authority over personnel appointments and promotions. Nominally, the people's congresses elect the president of the court at the same level, who then nominates the vice-presidents, members of the adjudicative committee, division chiefs and vice-chiefs. But as a matter of fact, all appointments must be approved by the CCP Organization Department. For senior judicial appointments, the approval of the CCP Organization Department at a higher level is required while for lower-level judges simply submitting the appointment to the Organization Department for the record (bei'an) is sufficient, although even in that case the Organization Department can still veto the appointments (id: 305). Essentially, courts are not much different from other bureaucratic institutions, and just a part of the political system of the party-state subject to strict top-down personnel control. Although judges have been increasingly professionalized in recent years, there are still many top leaders of courts who do not hold degrees in law, and worked in other government departments. The current President of SPC, Wang Shengjun, for instance, holds only a college degree in history. The president of the High People's Court of Beijing majored in Chinese literature, and the previous president of the High People's Court of Shanghai served as the top of the Union before taking his office at that court. Obviously, professional background and legal knowledge are not necessary in selection of court leaders. Instead, they are chosen for political reliability and adeptness at complying with the policies of the CCP.

Local governments are thought to have far more prevalent influence over the courts than the CCP organs though it is not easy to distinguish between Party and government interferences as government officials generally wear two hats (*id*: 307). The dependence of courts on local governments stems not only from the de jure and de facto power to appoint and dismiss judges resting, respectively, upon local people's congresses and CCP Organization Department at the local level, but, more importantly, from the local governments' control over court finances, material supplies, and other welfare benefits for court officials and their families. Therefore, "it is very difficult for courts to go against the wishes of local government even should they wish to do so" (Clarke *et al.* 2008: 395). Under such an institutional setting, it is not surprising that China's judicial system lacks unity and consistency in law enforcement. In fact, this is but another reflection of the local protectionism deeply obsessing the country.

Inside the courts, cases are usually heard by collegiate panels. But by internal rules or practice, collegiate panels are required to obtain the approval of the division head, vice-president, president, or the court's adjudicative committee (*shenpan weiyuanhui*) before issuing the judgment. Like in other sections of the bureaucracy, administrative hierarchy has been important in determining the final outcome (Peerenboom 2002: 281). In particular, major and difficult cases, which are vaguely defined, are decided by the

adjudicative committee composed mainly of judges of high administrative ranks. Internal mentoring or supervision itself may not be a serious threat to the collective independence of the judiciary, as notably exemplified by the case of Japan (Haley 2007). But it does become such a threat where senior posts in the judiciary are awarded based not on professional but on political standards. When the president of a High Court is not even a law school graduate, his mentoring can hardly be one of professional authority.

The political status of the court is fairly low relative to the executive branch in general, and the public security departments in particular. Although both the president of the High People's Court and the director of the public security department are usually members of the PLC at the provincial level, the latter frequently serves as the chairman or vice-chairman of the PLC while the former rarely does. Also, the head of the public security department is often a member of the standing committee of the CCP provincial committee, but very few, if any, court presidents are included in this core of power. Such personnel arrangements further strengthen the subordinate position of courts in the political hierarchy of the party-state.

In recent years, as the media commercialization and increased editorial discretion have combined with growing attention to legal problems, the Chinese media have become yet another factor undermining the already weak autonomy of courts (Liebman 2005). To some extent, media supervision contributes to the realization of justice in a country with an incompetent and corruptive judiciary. It improves the transparency of adjudications, and may even counteract undue influences imposed on the judiciary by the politically well-connected. However, the media pressure on judicial decisions on specific cases has posed an additional threat to the establishment of rule of law in China. First of all, Chinese media are still served mainly as information-gathering institutions for the party-state. Their interests are often closely linked to those of the government or CCP institutions with which they are afflicted (*id.*: 124). To a large extent, therefore, the media further amplify the already strong external influence on the judiciary, especially that of local governments.

Second, intensified market pressures accompanied with media commercialization incentivize both catering to and stirring up public opinion in selection and framing of reports. As Professor Liebman acutely noted, the initial report of the Zhang Jinzhu case by the *Dahe News*, ¹¹² for instance, was likely motivated by the newspaper's intent to improve its share in the local news market (*id.*: 72). Media reports may also depict the

^{. .} 

Thang Jinzhu was a local public security official in Zhengzhou, the capital of Henan Province, who hit a man and a boy on a bicycle when drinking and driving. He did not stop after the hit but continued to drive for another 1,500 meters, dragging the man under his car. The initial report on the incident by the *Dahe News* did not identify Zhang but noted that the car involved was a luxury Toyota Crown. The continuing reports on this case by the *Dahe News* generated immense public outrage which led to telephone and written instructions by the top CCP official of the Henan Province. The public rage flamed up further after the report by the CCTV that vilified Zhang who was eventually convicted and executed (Liebman 2005).

facts involved selectively to make a case for the opinion they want the public to form. For example, in the widely reported Peng Yu case, the decision of which has been blamed for chilling Good Samaritan acts, 113 most media coverage did not refer to the fact that the defendant, Peng Yu, had not claimed to be a Good Samaritan either in the initial police investigation or the first court hearing. It was only during the second court hearing that Peng Yu started to add this claim as a defense. In fact, this factual detail neglected, intentionally or inadvertently, by the media substantially attenuated the trial judge's confidence in the defendant's testimony, bearing directly on the final decision of the case 114

Third, standing on a layperson's position, the media usually pay no attention to the technical requirements that a court is obligated to consider in making verdicts. As abovementioned, the media reports may frame the facts in their own convenience or preference and disregard the rules of evidence. They are inclined to stress the substantive issues of cases, but keep a blind eye, or even scorn, on the procedural principles of law as it is a more effective way to gratify the popular concern with substantive justice rather than procedural justice. For instance, in the case of Zhang Jun, who was accused of robbery and murder, the media reports prior to trial questioned the necessity of a formal trial even as short as three days (*id.*: 73).

Of course, internal and external interferences do not always cause illegitimate or unfair judicial decisions. Sometimes they may even correct judicial mistakes or constrain judicial corruption. But more often than not, interferences originate with concerns other than legal issues. The most worrisome part of all these interferences, whether institutionalized or not, is the weakened predictability of implementation of law. Since there are so many approaches to affect eventual judicial decisions, parties are greatly incentivized to mobilize various resources to exert influence on courts. Who prevails in court does not rely solely on the merit of the case, but, perhaps more importantly, on the parties' connections to any of the interfering sources. Consequently, judicial decisions also suffer from strong particularism.

Apart from the interferences of various origins, judicial independence in China is also plagued by insufficient and unreliable salaries of judges. Judicial salaries, though believed to on the rise recently, are usually quite low, especially in comparison with practicing lawyers. Judges in some poor jurisdictions even do not get their salaries

¹¹³ For details of the Peng Yu case and its ramifications, see Peh (2011).

¹¹⁴ I am indebted to Professor Jiang Haifeng of Jiangsu University School of Law for pointing out this omission in the media reports on the Peng Yu case.

One study shows that, as of 2004, in Shanghai, a holder of a bachelor of law's degree can earn 70,000 yuan (\$8,750) per year after having worked as a judge for four to five years while very experienced and senior judges can earn as much as 110,000 yuan (\$13,750) each year (Gechlik 2005: 130). To my knowledge, however, it is not unusual for junior partners of law firms in Shanghai to have an annual income of 500,000 to 1 million yuan for the same period. Even in the initial years of the 21st century, fresh law school graduates working for foreign law firms in Shanghai could earn as much as 120,000 yuan (\$19,050) a year. But the same study indicates that many judges in other places in China earn only 20,000

occasionally (Peerenboom 2002: 294). Besides, judges' salaries are linked to their success in attaining designated performance targets reflecting the policy preferences of the CCP (Minzner 2011). For instance, judges may have their salaries reduced when the percentage of cases overturned on appeal or remanded for further consideration exceeds a certain amount (Peerenboom 2002: 294). Poor remuneration for judges, and lack of funding for courts have contributed to a number of problems in the operation of courts including knowingly accepting cases beyond their substantive jurisdiction, imposing quotas on judges to collect fees, or arbitrarily increasing the amount of bail (*id*.: 295). Corruption is also an endemic problem in the Chinese legal system, although there is no evidence that the judiciary is particularly corrupt, compared with other Chinese institutions (Clarke *et al.* 2008: 397).

Admittedly, the Chinese judiciary is not entirely inactive to claim authority and institutional relevance within a constitutional environment of weak judicial independence, especially as judicial professionalization goes deeper. After Xiao Yang took the helm of SPC, a systematic judicial reform was launched within the judiciary, focusing particularly on civil justice, where political influences are supposedly less conspicuous. The core of this reform was the promotion of judicial justice and efficiency. It leaned toward a greater emphasis on procedure, aiming at a shift from judge-centric justice to party-centric justice in adjudicating civil disputes. The SPC created new evidence rules for civil justice, governing, among others, the time limit to produce evidence, the admissibility of evidence, and the pretrial exchange of evidence by the parties. Judges were prohibited from making ex parte contacts with the parties or their lawyers, and were required to deliver prompt in-court decisions upon hearing the cases (Fu & Cullen 2011). The reform did not hold any intention to call for an expansion of judicial independence. Neither did it result in any noticeable increase in judicial independence. But it did accentuate the role of formal rules in adjudications, which, at least indirectly, escalated the importance of judges as specialists in applying these rules.

This reform, however, turned out to be a failure conceded openly even by the SPC itself. The hallmark of such a failure is the recent retreat from a rule-based adjudicative approach to a power-based mediatory approach to deal with civil disputes (Fu & Cullen 2011; Minzner 2011). The apparent cause of the unsuccessful reform efforts is the lack of capacity for the judiciary to establish its legitimacy in handling cases according to formal rules subject to wide discretion by the judiciary itself. Distrust in and dissatisfaction with the increased judicial formality permeates as evidenced by the upsurge in "law related" (*shefa*) petitions (Fu & Cullen 2011). This was considered as a severe threat to social stability and ostensibly embarrassed the campaign for a harmonious society launched by the top CCP leaders. Thus, political intervention followed to resteer the course toward mediation, in which law is no more than one,

maybe insignificant, factor out of many to be considered in tackling the disputes (*id.*). Recently, "big mediation" (*da tiaojie*), a proceeding with even thinner legal sense, has been applauded by Chinese political-legal authorities. This is primarily political conferences aimed at coordinating responses between government departments including the judiciary and crafting solutions to avoid protests. Legal norms can be openly disregarded, and horse-trading between officials takes place (Minzer 2011). The judicial reform under Xiao Yang seems backfired. Instead of enhancing its institutional relevance, the judiciary is now facing a more serious legitimacy crisis that has offered excuses for aggravated political interference.

While it is relatively easy to notice the legitimacy problem the Chinese judiciary has been suffering, it is more complicated to identify the causes of this problem. simplest explanation would attribute the difficulty in installing legitimacy in a seemingly more professional adjudicative system to the Chinese legal conscience prioritizing substantive justice over procedural justice. But this fails to explain why court mediation, which advocates no more substantive justice due to its coercive and corruptive nature. 116 has reportedly been able to reduce the number of petitions (Liebman 2011: 303) if this number is somewhat indicative of the perceived legitimacy of judicial acts. Alternatively, the underdevelopment of legal profession and a poor legal aid system is believed to undermine the degree of acceptance of rule-based adversarial civil justice by the general public (Fu & Cullen 2011: 48). However, as detailed below, lack of representation is inadequate to interpret the observed difference in willingness to use courts between private business owners with comparable economic resources yet disparate political backgrounds. Instead, I would posit that the far-reaching political influence on the judiciary has immensely impaired its reliability as a neutral forum to resolve disputes. The subordination of courts to political power inflames a strong perception that court decisions are systematically biased toward the politically connected. 117 A reform from inside the judiciary is, by no means, sufficient to cut off its institutional ties to the external powers. Against this broad political-legal backdrop, a technocratic reform of the judiciary can never appease the public distrust, but only intensifies the suspicion that the incremented legal formality does nothing but to disguise the ever-lasting political bias. This perceived bias seems to find some support from the quantitative evidence to be analyzed below, which demonstrates a clear distinction in confidence in courts among Chinese entrepreneurs along the line of previous political status. In some sense, the public rejection of a more formalized judicial process may reveal a general lack of faith in the authority of the party-state, which was vividly evinced

¹¹⁶ For the attacks on court mediations, see Fu & Cullen (2011).

The best footnote for Chinese government officials' contempt of law is Chinese Foreign Ministry spokeswoman's response to a foreign journalist's questioning on police harassment of interview. In her response, the spokeswoman told the journalists "not to use law as a shield" (Chen 2011).

by the Qian Yunhui incident (The Economist 2011B). When people turn to petitions instead of litigations, they do not necessarily believe in the former as a more legitimate channel to redress their grievances. Quite to the opposite, they do so to seek extralegal measures to satisfy their requirements, with or without legal merits, as they see the party-state is willing to make concessions to petitioners and protesters to prevent escalation and unrest. For the ordinary people, it is entirely understandable to buck for extralegal remedies when the formal legal institution is perceived to be heavily manipulated by the political elites. For the government, however, pacifying petitioners on an ad hoc basis at the expense of fair and consistent solutions to legal disputes only exacerbates the risk of social instability in the long run (Liebman 2011; Minzner 2011).

#### 8.1.3 Summary

The written Constitution in China is deemed as a tool by the CCP to claim its legitimacy in ruling the most populous country in the world. The PRC Constitution is, by and large, abstract and vague in the textual design, which foreseeably gives rise to difficulties in application. More notably, however, is the institutional vacuum that makes judicial application of the Constitution impractical and judicial review of constitutionality itself unconstitutional. Although, in principle, the Standing Committee of the NPC is empowered to review and strike down unconstitutional legislation and regulations, it has so far never used its power in any material sense. Consequently, the PRC Constitution loses its teeth. It thus fails to act as the fundamental legal document constraining state power or serve as the premise for the rule of law.

But this does not mean that the Constitution bears no function in the party-state. In fact, the CCP uses the Constitution as a vehicle for propaganda of its endorsed ideology. In the past two decades, the PRC Constitution has been repeatedly amended to keep up with the ideological mutation of the CCP in the economic perspective. Therefore, the Constitution is at least one credible channel for Chinese citizens to evaluate the ideological risk to engage in the private sector in general and start up a private business in particular.

The authoritarian nature of the regime is manifested by the absolute power of the CCP encompassing every branch and level of the government. Strict top-down control over personnel and lack of accountability to constituencies forge the incentive of officials to look mainly to their superiors in the political hierarchy. This renders especially important political power and political policies, neither of which is subject to the supervision of the Constitution. Eventually, the only meaningful constraint on one political power is another superior political power.

.

Qian Yunhui was a former village chief near the coastal city of Wenzhou whose head was severed from his body by a truck in an officially reported traffic accident. But rumors permeated on the Chinese internet that asserted Mr. Qian was actually held down by government-hired goons to allow the truck to drive on him as he had, for years, organized fellow villagers in protests against the uncompensated land appropriations by the government.

The power-ridden constitutional environment in China is characterized by particularism in decision-making and shortsightedness in policy orientation. Access to state-controlled resources and procurement of administrative approvals oftentimes depend on who the users or applicants are, and how well they are connected to those with power, rather than on publicized rules and procedures. One of my lawyer friends lamented, "When my clients asked if a certain investment project is legally feasible, my reply was simple – 'Nothing is impossible in China. What matters is who you are."". Agency costs that weaken the control of lower level bearcats are unlikely to blame for the particularism which seems to be prevalent in the whole political system. As Shirk (1993) has recorded, at the top level, universalistic approaches always gave way to a particularistic one in determining the direction of fiscal and price reforms. A natural consequence of particularism is the stimulation of rent-seeking, which enriches those who hold power.

Contrary to the rule of law, particularism generates uncertainty: outcomes hanging on whether sufficient connection has been mobilized properly within the power framework. Uncertain feelings about the future induce people to put excessive weight on short-term stakes. Moreover, the undemocratic and nontransparent race for the supreme power agitates additional myopia in China nowadays as it effectively reduces the political party, the CCP, to an illusory existence as there is no competition allowed at the party level. Despite the popular surmise about the rivalry between the so-called "princeling group" (taizidang) and the "League group" (tuanpai) within the CCP, the Party has never publicly permitted the formation of factious groups so that it is unlikely to establish the group reputation and crystallize the group interest through policy competition. Therefore, eventually, the power competition is carried out among a handful of *persons* who, as a matter of fact, are expecting to stay in office for no more than 10 years. As a consequence, the time horizon of policy-making is shortened mainly to address the concerns held by the winners of the power race in their tenure of no more than 10 years. This is why the top leaders are inclined to handle various social problems in an expedient way instead of relying on a long-run solution built on the rule of law. Social stability has always been prioritized on the Party's agenda. For the top leaders, however, what really counts probably is just the stability when they are in office. The shortsightedness of the top certainly trickles down, which ultimately affect the behaviors of ordinary citizens.

In this power-based institutional structure, the judiciary is weak both in design and in practice. Externally, the people's congresses and the procuracy are institutionalized to

_

This was a personal dialogue held in June 2011. My personal experience also illustrates the hardship an ordinary citizen is to encounter in a brush with administrative agencies even in the most modernized city of Shanghai. In spite of the publicized policy allowing application through authorized agents, the public security officer bluntly rejected my father's request for a change of residence registration (*hukou*) on behalf of my wife some two years ago.

intervene in adjudication of cases while the CCP, mainly through the PLC at various levels, and local governments wield de facto impact over courts' decisions, instilling policy concerns of the CCP as well as the local interests. On top of that, media reports and popular petitions, for better or for worse, have further jeopardized judicial independence. Internally, the adjudicative committee and judges of senior hierarchy are all possible sources of influence on decision of cases. The various channels to affect judicial decision-making inevitably generate opportunities for rent-seeking to bring forth favorable treatment in legal disputes, which is admitted even by those who appears sympathetic to the Chinese judicial system (Fu & Peerenboom 2010: 98). The incompetence of the judiciary to reign in political power or uphold the rights of the politically disconnected waters down a primary notion of the rule of law, namely, to treat similar cases similarly The particularism in decision-making is thus with no regard to parties' statuses. aggravated as the judiciary is incapable of fending off the undue advantage enjoyed by the politically privileged. Although some scholars argue that political influences have played an increasingly slight role in determining results of litigations in routine economic cases (Peerenboom 2010, Fu & Peerenboom 2010), 120 the evidence I will produce below at least indicates that the public perception does not necessarily coincide with such an academic position, and people with different political connections do behave differently, probably according to their perception of the operation of the judiciary. In fact, similar difference was noted by previous studies, reporting political connection increases the probability of seeking formal legal help (Michelson 2008). 121

¹²⁰ Peerenboom (2010) has listed a series of evidence that questions the common belief in lack of independence in the Chinese judiciary. A close look at the provided evidence, however, arouses suspicion about its persuasiveness. For one thing, the data source and its representativeness are unclear or questionable. For example, Peerenboom (2010: 75) and Fu & Peerenboom (2010: 130), both citing Peerenboom (2002: 400), use the high rate of plaintiffs' success in administrative cases, even higher than that in the U.S., Taiwan or Japan, to show the relative independence of Chinese courts. But none of these works specify the data source, and the data cited are inconsistent indeed. (Peerenboom 2002 suggests the rate of success is as high as 40% while Fu & Peerenboom 2010 says the number is 17% to 22% "between 2001 to 2004". Although the latter explicitly attributes the data to the former, the former was published in 2002, which renders it impossible to cover the numbers coming out after 2002.) For another, the evidence presented is subject to different interpretation, which may even strengthen, rather than subvert, the general wisdom. To illustrate, Peerenboom (2010: 75), citing Fu (2006), argues that the "enhanced stature of the court is also evident in high acquittal rates for lawyers in cases where police and procuracy prosecute lawyers on trumped up charges of falsifying evidence". Nevertheless, Fu (2006: 29) overtly asserts that the high acquittal rate may be caused by the "political forces" mobilized by the organized bar, All China Lawyers Association (ACLA). As far as the undue political influence on the adjudication of charges of falsifying evidence by lawyers is concerned, an excellent case in this point is the widely-reported Li Zhuang case (see Johnson 2011 for details). Also, Peerenboom (2010: 76), citing Brown (2008), tries to substantiate his position with the high success rate of plaintiffs in labor suits in recent years. Yet Brown (2008: 4), briefly referring to the data source as "government reports", focuses on the year 2005 after the campaign for "Harmonious Society" was launched by the top CCP leaders. So this, together with the back-off in civil justice reform toward mediation and the high-profile avocation of "big mediation" process, may well be regarded as a sign of "China's turn against law", which again allows short-term political policies to prevail over the rule of law.

121 In another possibly biased survey investigation, a large amount of respondents who lost in commercial

### 8.2 The Pattern of Entrepreneurship in China

In a constitutional environment characterized by particularism and myopia, entrepreneurship is expected to develop a along a path reflective of these constraints. First of all, in China entrepreneurship is not only a business activity entailing innovation, judgment, decision and risk-taking, but also a rent-seeking process at the same time. Where the regulations are implemented subject to great discretion of officials, and the legitimacy of entrepreneurial practices is decidedly ad hoc, depending on the success of negotiations with authorities in charge of the rules, entrepreneurs "must compete on two fronts: establishing a favorable relationship with these resourceful agents on the one hand, and discovering and occupying a business opportunity in the market on the other. many situations, the former is a pre-condition of the latter" (Yang 2007: 88). decrease in ideological and political risks associated with private entrepreneurship, as signaled by formal constitutional endorsement, better politically connected people are more likely to engage in entrepreneurship, which further elevates the significance of rent-seeking abilities in business operation. Second, while institutional uncertainty does not need to discourage entrepreneurship - indeed risk-taking is characteristic of entrepreneurship – especially in a country with great market potential where even a slight probability of gains can stimulate rational investment incentives (Whiting 2000), such uncertainty should nevertheless leave its footprint on the pattern of entrepreneurial development. In particular, I expect that, against this institutional backdrop, Chinese entrepreneurs should be incentivized to take on strategies focused on short-run benefits and flexible arrangements for quick exit.

In the remaining part of this section, I try to search for empirical evidence substantiating the above two predictions about the Chinese way of entrepreneurial development. With news reports, academic findings, as well as other public and private studies added as anecdotal evidences, the study is mainly a quantitative one drawn on the private enterprise surveys conducted periodically by the United Front Work Department of the Central Committee of the CCP, All-China Federation of Industry and Commerce (ACFIC), and the Chinese Academy of Social Sciences. These surveys were carried out on large random samples selected to imitate the composition of the general population of Chinese private enterprises in terms of location and industrial distribution. The data have been used in a couple of previous researches (e.g. Huang 2008), but may still shed new light on some less explored areas of Chinese entrepreneurship, not the least of which is the political influence on entrepreneurial development. Although the surveys were first conducted in 1993, the coverage, structure and wording of questions vary ostensibly from one year to another. In this study, I used data from the latest three available

litigations in Shanghai believe their loss were attributable to the other party's influence on the judges, though not necessarily a political one (Pei *et al.* 2010). But opposite evidence exists as well (see Peerenboom & He 2009) which, again, should be interpreted with caution.

surveys conducted in 2002, 2004 and 2006 that have relatively high compatibility in contents.

# 8.2.1 Political Connection and Entrepreneurship

To test the effect of political connection on entrepreneurship, I divided the entrepreneurs surveyed into two groups depending on whether they had been cadres before becoming private business owners, assuming that those who with a cadre experience are abler to mobilize political resources. The cadre group consists of former cadres of various levels in the Party, administrative or other public institutions, and leaders of enterprises of state or collective ownership. By "leaders of enterprises" I mean managers (fuzeren) and contractors/lessees (chengbaoren / chengzuren). reason why the managers of the enterprises in the public sector should be deemed as cadres is that, in China's political structure, these enterprises are usually assigned with administrative ranks, such as section-level (keji), division-level (chuji), or bureau-level (juji), comparable to other public institutions. Their managers are appointed by government agencies at the higher levels, just like officials in other public institutions. 122 Not infrequently, they are former cadres of other public institutions and are likely to serve posts of equivalent administrative ranks in these institutions afterwards. So it is fair to say that they are part of the communist nomenklatura. 123

Contractors/lessees are another type of leaders of the enterprises owned by the public sector. They were the products of the efforts to transform the structure (*gaizhi*) of SOEs in the late 1980s through the early 1990s. During that period, long-term contracting system was adopted, mainly in large- and medium-sized SOEs, and leases were used more often in small SOEs. It is said that by the end of 1987, 78% of all SOEs covered by the national budget had implemented the contracting system (Wu 2005: 147), and, according to a research performed from December 2002 to April 2003, about 8% of the SOEs were leased out (Garnaut *et al.* 2005). Notwithstanding its attempt to introduce managerial competition, the contracting system did not actually bring many outsiders into the management of SOEs. The vast majority of contracts were awarded without going through a competitive process, and, more often than not, existing managers became contractors eventually (Naughton 1995).¹²⁴ Therefore, the enterprise contractors were

1'

¹²² In fact, the exact wording of the particular survey questions varies. In the 2006 survey, managers of state or collectively owned enterprises are listed as a separate category while the 2004 survey put them in the same category as the cadres in other public institutions. Moreover, the 2002 survey did not mention mangers of these enterprises in the question asking about the entrepreneurs' previous positions.

This is especially true for the leaders of state-owned enterprises (SOE), but may arguably be less so with respect to those of collective enterprises. However, the surveys do not separate collective enterprises from the SOEs, probably hinting that the survey designers do not consider the difference essential.

One study shows that in the first round contracting implemented in the mid 1980s, less than 5% of the enterprises had gone through a competitive process to award the contract, and that of the successful contractors, 85% were the incumbent managers (Naughton 1995: 217). In the second-round contracts signed in 1990, public auctioning of enterprises became rare to non-existent, and between 80% to 90% of these contracts were taken by the incumbent managerial groups (*id.*: 286).

not very different from the previous managers of SOEs in terms of the likelihood to be politically connected. Outsiders maybe appeared more frequently in leases, yet incumbents probably still comprised a big part of the lessees. Most importantly, even in those transformed SOEs, managerial appointments were still under tight control of the government agencies (Garnaut *et al.* 2005: 140), which suggests that lessees of enterprises owned by the public sector may continue to be insiders of the Chinese political structure having better access to political resources than ordinary citizens. That being said, to address the concern that some of the contractors/lessees were entrepreneurs with no affiliation to the *nomenklatura*, besides the binary variable, GB, separating cadres and non-cadres as defined above, I also constructed an ordinal variable, RANK, ranging from 1 to 3, to indicate the political ranking of entrepreneurs according to their ante-entrepreneurial experience with non-cadres coded as 1, contractors/lessees of enterprises held by the public sector as 2, and the remaining cadres as 3.

Another point that needs to be mentioned about the coding of cadres is that this group does not include the village leaders in the rural area to take into account the fact that public election of village leaders has started in many places at least by the late 1990s. These elected village leaders might be outsiders of the *nomenklatura*. However, to test the robustness of my findings, I also used an alternative binary variable, AGB, in my study which does reckon village leaders as cadres.

#### 1) Access to Bank Loans

It is well known that the formal bank credits is a financial resource tightly controlled by the government in China, and that the private sector as whole has poor access to this valuable resource, which has forced Chinese entrepreneurs to turn to alternative sources for financing (Tsai 2002; Huang 2003). This makes access to bank loans a telling illustration of the role played by political connections. If the role does exist, we should see the cadre group has better chance on average to obtain bank loans.

Two indicators are used to testify this hypothesis. First, I will look to whether the entrepreneur managed to acquire bank loans when he started the business. Fixed effect logit models were used for this study. In particular, the baseline specification is

$$ln[P_{ipt} / (1 - P_{ipt})] = \alpha + \beta \cdot \mathbf{D}_{ip} + \gamma \cdot \mathbf{T}_{it} + \theta GB_{ipt} + \eta \cdot \mathbf{Z}_{ipt} + \epsilon_{ipt}$$

where  $P_{ipt}$  /  $(1 - P_{ipt})$  is the odds ratio of obtaining a bank loan, **D** and **T** are the vectors of province dummies and survey year dummies respectively, GB is the dummy variable recording cadre status, ¹²⁵ and **Z** a vector of other entrepreneur- and firm-specific attributes indicated in Table 8.3 that reports the results.

Table 8.3 Cadre Status and Initial Access to Bank Loans

dependent variable: IBANK = initial access to bank loans				
	(1)	(2)	(3)	(4)
GB	0.28			0.28

¹²⁵ GB is used in the baseline model while RANK and AGB are used in the alternative models.

	(0.06)***			(0.06)***
RANK		0.15		
11111111		(0.03)***		
AGB			0.27	
			(0.06)***	
	-	reneur-specific att		
year of birth	-0.008	-0.008	-0.008	-0.008
J	(0.004)**	(0.004)**	(0.004)**	(0.004)**
gender	-0.274	-0.275	-0.272	-0.274
C	(0.097)***	(0.097)***	(0.097)***	(0.097)***
education level	0.03	0.02	0.03	0.03
	(0.04)	(0.04)	(0.04)	(0.04)
		m-specific attribu		0.04
year of	-0.01	-0.01	-0.01	-0.01
registration	(0.01)	(0.01)	(0.01)	(0.01)
total amount of	0.00	0.00	0.00	0.00
equity when	(0.00)	(0.00)	(0.00)	(0.00)
registered	(0.00)	(1111)	(1111)	(*****)
number of				
employees	0.00	0.00	0.00	0.00
when	(0.00)	(0.00)	(0.00)	(0.00)
registered				
location of				
headquarters	included	included	included	included
when		111010100	111010100	111010100
registered				
industrial				
sector when	included	included	included	included
registered				
LNGRPP				1.45
Ervord r				(0.68)**
provincial	included	included	included	included
fixed effect	meraded	moraded	moraded	meradea
survey year	included	included	included	included
fixed effect	moradou	meradea	meradea	meradea
number of	7012	7012	7012	7012
observations	/012	/012	/012	7012
pseudo R ²	0.10	0.10	0.10	0.10

Cadres are coded 1 in both dummies, GB and AGB. For the dummy variable indicating entrepreneurs' gender, male is coded 0 and female 1. Education level is classified into elementary school, secondary school, high school, 2-year or 4-year colleges, and postgraduate degrees, coded respectively from 1 to 5. Year of registration refers to the year in which an entrepreneur registered a private enterprise. Locations of headquarters are indicated by a series of dummy variables representing major cities, medium/small cities, townships, rural areas, or economic development zones. Industrial sectors are another series of dummies representing 13 sectors listed in the surveys: (1) agriculture; (2) mining; (3) manufacturing; (4) power and gas; (5) construction; (6) transportation; (7) retail and restaurants; (8) finance and insurance; (9) real estate; (10) social services; (11) public health, education, culture and sports; (12) science and technology; (13) others. I also added an extra variable, LNGRPP, to Model 4, which is the natural log of per capital gross regional product of each province in the year right before the survey year.

As Table 8.3 shows, the previous experience as a cadre significantly raises the likelihood to obtain bank loans at the initial stage of private enterprises. The cadre experience is significant not only statistically, but also economically. In the baseline model, for instance, the odds ratio estimate suggests that such an experience increases the odds of getting initial bank loans by 32%, or nearly one third. Indeed, this estimate is fairly consistent in the alternative models as well. Results reported in Table 8.3 also tell us that the older an entrepreneur is the more likely he will get a bank loan at the start-up stage. Furthermore, male entrepreneurs have better chance to get such loans than their female counterparts in general. These are not surprising, and probably lend extra support to the potential effect of political connection on access to bank loans as the older people, as well as male, may have more opportunities to build up ties to the politically privileged. It is worth noting, though, that the age effect does not seem to be economically significant as one year's increase in age seniority merely bumps up the odds by less than 1%, whereas the influence of gender is much more obvious, male being benefited by 24% or a quarter in odds of obtaining initial bank loans.

Though not reported in Table 8.3, private enterprises headquartered in major cities are less likely to get bank loans in their start-up years. The location effect is not only statistically significant at 1% level in all model specifications, but also highly significant in the economic sense. According to the baseline model, private enterprises headquartered in medium/small cities, townships, rural areas and economic development zones have much higher odds to obtain start-up bank loans than those holding

_

¹²⁶ The industrial sectors listed in the 3 surveys vary slightly from one another. I make some adjustments to the original categorizations for the sake of consistency.

headquarters in major cities by, respectively, 169%, 269%, 255% and 172%. This somewhat unexpected finding actually echoes a previous study (Haggard & Huang 2008: 351), and might be best understood as a result of the stricter political pecking order against private firms in major cities (Huang 2003).

Second, I considered the total balance of bank loans as of the year preceding the survey. Prior cadre experience is expected to bring easier access to bank loans, thus the balance should also be higher. As the lowest amount of loan balance is zero, the sample is censored. Therefore, tobit models are used for this test. Table 8.4 reports the results. Table 8.3 Cadre Status and Balance of Bank Loans

	dependent variabl	e: BLOAN = bala	ance of bank loans	3
	(1)	(2)	(3)	(4)
GB	297.60			296.78
	(90.57)***			(90.78)***
RANK		171.32		
KANK		(50.39)***		
AGB			261.97	
AGB			(89.02)***	
	entrep	reneur-specific att	ributes	
	-9.08	-8.64	-9.09	-9.14
year of birth gender	(5.96)	(5.90)	(5.97)	(5.95)
gender	-468.15	-466.70	-467.50	-468.04
gender	(129.54)***	(129.60)***	(129.51)***	(129.56)***
education level	188.31	178.93	197.77	188.01
	(67.04)***	(67.94)***	(67.03)***	(67.03)***
	fir	m-specific attribu	tes	
year of	-43.43	-43.48	-42.43	-43.43
registration	(12.94)***	(12.83)***	(12.87)***	(12.95)***
total amount of	0.161	0.161	0.161	0.161
equity in		(0.085)*		
preceding year	(0.084)*	(0.083)*	(0.084)*	(0.084)*
number of	1.44	1.44	1.45	1.44
employees in	(0.34)***	(0.34)***	(0.34)***	(0.34)***
preceding year	(0.34)	(0.34)	(0.34)	(0.34)
location of				
headquarters in	included	included	included	included
preceding year				
industrial				
sector in	included	included	included	included
preceding year				

				554.38
LNGRPP				
				(851.64)
provincial fixed effect	included	included	included	included
survey year fixed effect	included	included	included	included
number of observations	5823	5823	5823	5823
pseudo R ²	0.03	0.03	0.03	0.03

Again, prior experience as a cadre shows significant correlation with the amount of bank loan balances as predicted in all specifications. Male entrepreneurs still have obvious advantage over females in access to formal finance. Now, an entrepreneur's age is no longer significant, but education level bears a positive relationship with the balance of bank loans. Other factors of statistical significance are the age of the firm, the size of the body of employees, and, to some less extent, the amount of equity. None of these seems surprising. Also, as shown in the previous test, private enterprises headquartered in major cities suffer substantial disadvantage in borrowing bank loans.

Apart from the test on the total balance of bank loans, I explored the balance of loans borrowed from the four major state-owned banks, Industrial and Commercial Bank of China (ICBC), Agricultural Bank of China (ABC), Bank of China (BOC), and China Construction Bank (CCB). These banks are under the most direct and powerful control of the state. If political influence does exist in awarding bank loans to private enterprises, loans from these four banks should not escape such influence. Similarly, tobit models are used for this test, and the results are reported below.

Table 8.4 Cadre Status and Balance of Loans from Four Major State-owned Banks

dependent v	dependent variable: BLOAN4 = balance of bank loans from four major banks			
	(1)	(2)	(3)	(4)
GB	256.03			256.75
GB	(71.12)***			(71.21)***
DANIZ		148.14		
RANK		(38.62)***		
AGB			203.49	
			(69.40)***	
entrepreneur-specific attributes				
an aflainth	-10.69	-10.31	-11.07	-10.65
year of birth	(4.88)**	(4.84)**	(4.94)**	(4.87)**

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

d	-266.08	-264.58	-267.94	-265.81
gender	(103.84)***	(103.99)***	(103.94)***	(103.85)***
education level	177.17	169.08	188.96	177.26
education level	(52.22)***	(52.81)***	(52.02)***	(52.21)***
	fir	m-specific attribu	tes	
year of	-40.79	-40.91	-39.61	-40.81
registration	(10.12)***	(10.02)***	(10.07)***	(10.12)***
total amount of	0.10	0.10	0.10	0.10
equity in	(0.04)**	(0.04)**	(0.04)**	(0.04)**
preceding year	(0.04)**	(0.04)**	(0.04)**	(0.04)**
number of	1.07	1.07	1.07	1.07
employees in	1.07 (0.26)***	1.07 (0.26)***	(0.26)***	(0.26)***
preceding year	(0.26)***	(0.26)***	(0.26)***	(0.26)***
location of				
headquarters in	included	included	included	included
preceding year				
industrial				
sector in	included	included	included	included
preceding year				
LNGRPP				-410.47
LNUKPP				(710.16)
provincial	included	included	included	included
fixed effect	meruded	meraded	meruded	meradea
survey year	included	included	included	included
fixed effect	meruded	meruded	meruded	meradea
number of	6017	6017	6017	6017
observations	001/	001/	001/	001/
pseudo R ²	0.03	0.03	0.03	0.03
Mata, Dalanat ata	adand amana in na	manth agas		

As predicted, political connection does show significant correlation with the borrowing from the four largest state-owned banks. In fact, the pattern is very similar to what we have observed in the test of bank loan balances in general except that entrepreneurs' ages probably become more crucial in the lending decisions of these major state-owned banks.

Some may argue that the difference in access to formal bank loans between former cadres and non-cadres is a consequence of higher human capitals or business abilities held by cadres. Although there is no decisive proof to eliminate this suspicion

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

completely, it seems implausible for a couple of reasons. First of all, human capital is actually controlled in all the above models by the proxy of entrepreneurs' education levels. Second, administrative abilities supposedly held by cadres can be a different set of skills required by business operations. Politicians may not be more likely to succeed in business than others. Third, the survey data show that, in light of the rate of return, measured either as a percentage of equity or as a percentage of total assets, enterprises owned by former cadres are not more successful than those run by non-cadres.

Moreover, if we look at the composition of equity, cadres acquire more external funds from state and collectively owned enterprises, but not from privately owned ones, than non-cadres both at the start-up stage and at later years of operation. On the other hand, non-cadres rely more heavily on self-funding. These findings are reported in the following two tables. ¹²⁷ If the cadre experience is a signal of good business ability, then privately owned firms should not be less eager than state and collectively owned enterprises to invest in firms owned by former cadres. A reasonable explanation is that enterprises owned by the public sector are more prone to political impact. At the same time, privately owned firms tend to make equity investments in enterprises owned by those who with higher education levels while the owner's human capital does not seem be to a significant element in SOEs' investment decisions.

Table 8.5 Cadre Status and Composition of Equity at Start-up Stage

	(1)	(2)	(3)	(4)
dependent variable	% by state-owned firms	% by collectively owned firms	% by privately owned firms	% by self-funding
GB	25.51 (7.06)***	20.38 (6.86)***	6.83 (5.52)	-3.02 (0.69)***
	entrep	reneur-specific at	tributes	
year of birth	-0.62	-1.48	-0.22	0.16
	(0.37)*	(0.39)***	(0.35)	(0.04)***
gender	-15.21	-10.46	-12.22	2.68
	(10.69)	(9.52)	(8.63)	(0.96)***
education level	8.42	7.49	12.44	-3.28
	(4.53)*	(3.98)*	(3.77)***	(0.44)***
	fir	m-specific attribu	ites	
year of	0.72	1.33	2.03	-40.81
registration	(0.79)	(0.81)*	(0.73)***	(10.12)***
total amount of	0.00	0.00	0.003	-0.00
equity when	(0.00)	(0.00)	(0.001)***	(0.00)

Tobit models are used. Only results of baseline specifications are reported, but no qualitative difference exist in the other three alternative specifications.

registered				
number of				
employees	-0.01	0.00	-0.04	-0.009
when	(0.01)	(0.00)	(0.02)**	(0.002)***
registered				
location of				
headquarters	included	included	included	included
when	meruded	meruded	meruded	iliciuded
registered				
industrial				
sector when	included	included	included	included
registered				
provincial	included	included	included	included
fixed effect	included	meruded	meruded	included
survey year	included	included	included	included
fixed effect	included	meruded	meruded	included
number of	4354	4392	4434	6939
observations	4334	4374	4434	0737
pseudo R ²	0.09	0.15	0.13	0.01

Table 8.6 Cadre Status and Composition of Equity in Year Preceding Survey

	(1)	(2)	(3)	(4)
dependent variable	% by state-owned firms	% by collectively owned firms	% by privately owned firms	% by self-funding
GB	19.95 (7.02)***	20.42 (6.73)***	5.80 (5.48)	-3.20 (0.71)***
	entrep	reneur-specific at	tributes	
year of birth	-0.46	-1.12	-0.39	0.19
year or ontin	(0.39)	(0.39)***	(0.34)	(0.05)***
gender	-5.04	-7.34	-8.67	2.15
	(10.15)	(8.95)	(8.52)	(1.01)**
education level	6.46	7.74	12.74	-3.56
	(4.39)	(3.51)**	(3.73)***	(0.45)***
	fir	m-specific attribu	ites	
year of	0.64	0.38	2.03	-0.84
registration	(0.74)	(0.77)	(0.73)***	(0.08)***

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

total amount of equity in preceding year	0.00 (0.00)	-0.00 (0.00)	0.0041 (0.0023)*	-0.00 (0.00)
number of employees in preceding year	-0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.004 (0.001)***
location of headquarters in preceding year	included	included	included	included
industrial sector in preceding year	included	included	included	included
provincial fixed effect	included	included	included	included
survey year fixed effect	included	included	included	included
number of observations	3814	3845	3890	6246
pseudo R ²	0.10	0.16	0.14	0.01

## 2) Barriers to Entry

Apart from the discrimination in formal financing, another advantage potentially enjoyed by the politically connected entrepreneurs is the better chance to enter certain industries that rely on resources tightly controlled by the state. Rent-seeking is intense to gain these resources and the outcome will be in favor of the politically influential. Here, I focus on the entries to two industrial sectors, mining and real estate, considering the fact that mines and land are the typical examples of state-owned resources. If political connection does work, then we should expect that cadres are more likely to enter these industries than non-cadre entrepreneurs. I tested Chinese entrepreneurs' probabilities to engage in mining and real estate business both at the start-up stage and in the year right before the survey. Similarly, logit models are used for these tests. However, to take into account the fact that both industries are capital-intensive, when testing the probability in the year preceding the survey, I added one more specification (model 5) which controls the amount of bank loan balances. The next four tables report the results.

-

¹²⁸ The PRC Property Law Art. 46 and Art. 47.

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

Data are not available for the total amount of credit held by the entrepreneurs at the start-up stage.

Table 8.7 Cadre Status and Entry into Mining Industry at Start-up Stage

	(1)	(2)		
CD	0.46	. ,	. ,	0.46
GB	(0.23)**			(0.23)**
DANIV		0.12		0.49 (0.23)**  tes -0.01
RANK		(0.11)		
AGB			0.49	
AGD			(0.23)**	
	entrep	reneur-specific att	ributes	
vear of hirth	-0.01	-0.01	-0.01	-0.01
year or onth	(0.01)	(0.01)	(0.01)	(0.01)
year of registration total amount of equity when registered number of	-0.86	-0.88	-0.86	-0.86
gender	(0.47)*	(0.47)*	(0.47)*	(0.47)*
education level	-0.28	-0.24	-0.27	
	(0.12)**	(0.12)**	(0.12)**	(0.12)**
	fir	m-specific attribu	tes	
•	-0.03	-0.02	-0.03	-0.03
=	(0.02)	(0.02)	(0.02)	(0.02)
	-0.00	-0.00	-0.000038	-0.00
		(0.00)		
•	(0.00)	(0.00)	(0.0000=)	(0.00)
employees	0.0004	0.0004		
when	(0.0001)***	(0.0001)***	(0.0001)***	(0.0001)***
registered				
location of				
headquarters	included	included	included	included
when				
registered				
LNGRPP				
				(2.19)
provincial	included	included	included	included
fixed effect				
survey year	included	included	included	included
fixed effect				
number of	6550	6550	6550	6550
observations	0.16	0.16	0.16	0.16
pseudo R ²	0.16	0.16	0.16	0.16

Table 8.8 Cadre Status and Entry into Mining Industry in Year Preceding Survey

Company						
GB         0.47 (0.23)**         0.14 (0.21)*         0.63 (0.24)***           ENTREPIER OF THE PRESENCE O	)					
RANK  O.14 (0.11)  AGB  Controlled (0.23)**  O.63 (0.24)***  Controlled (0.24)***  Pagend of birth  Gond (0.01)  Gond (0.02)  Gond (0.02)  Gond (0.02)  Gond (0.00)	1					
AGB  -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.00 -0.01 -0.01 -0.00 -0.01 -0.00 -0.01 -0.00 -0.01 -0.00 -0.01 -0.00 -0.01 -0.00 -0.01 -0.01 -0.00 -0.01 -0.00 -0.01 -0.01 -0.00 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -	)**					
AGB    Country						
AGB    Color						
rentrepreneur-specific attributes  year of birth  year of birth  gender  gender  (0.40) (0.40) (0.40) (0.40) (0.40) (0.40)  level (0.12) (0.11) (0.12) (0.12) (0.12)  firm-specific attributes  year of -0.03 -0.03 -0.03 -0.03 -0.03  registration (0.02) (0.02) (0.02) (0.02) (0.02)  total amount of equity in 0.00 0.00 0.00 0.00 0.00  preceding (0.00) (0.00) (0.00) (0.00) (0.00)  year  number of employees in 0.0004 0.0004 0.0004 0.0004  preceding (0.0001)*** (0.0001)*** (0.0001)*** (0.0001)*** (0.0001)***						
year of birth         -0.01 (0.01) (0.01) (0.01) (0.01) (0.01) (0.01)         -0.01 (0.01) (0.01)         -0.01 (0.01) (0.01)           gender         -0.44 (0.40) (0.40) (0.40) (0.40) (0.40) (0.40)         (0.40) (0.40) (0.40) (0.40)         (0.40) (0.40) (0.40)           education         -0.15 (0.12) (0.11) (0.12) (0.12) (0.12)         -0.16 (0.12) (0.11)           level         (0.12) (0.11) (0.12) (0.12) (0.12) (0.12)         (0.12) (0.12) (0.12)           year of         -0.03 (0.02) (0.02) (0.02) (0.02) (0.02) (0.02)         (0.02) (0.02) (0.02) (0.02)           registration         (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02)         (0.00) (0.00) (0.00) (0.00) (0.00) (0.00)           preceding         (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00)         (0.00) (0.00) (0.00) (0.00) (0.00)           preceding         (0.0001)*** (0.0001)*** (0.0001)*** (0.0001)*** (0.0001)*** (0.0001)***						
year of birth  gender  (0.01) (0.01) (0.01) (0.01) (0.01)  gender  (0.40) (0.40) (0.40) (0.40) (0.40) (0.40)  education  -0.15 -0.12 -0.17 -0.16 -0.1  level (0.12) (0.11) (0.12) (0.12) (0.12)  firm-specific attributes  year of -0.03 -0.03 -0.03 -0.03 -0.03 -0.0  registration (0.02) (0.02) (0.02) (0.02) (0.02) (0.02)  total amount  of equity in 0.00 0.00 0.00 0.00 0.00 0.00  preceding (0.00) (0.00) (0.00) (0.00) (0.00)  year  number of employees in 0.0004 0.0004 0.0004 0.0004 0.000  preceding (0.0001)*** (0.0001)*** (0.0001)*** (0.0001)*** (0.0001)***						
gender (0.01) (0.01) (0.01) (0.01) (0.01) (0.01)  gender (0.44) -0.46 -0.43 -0.44 -0.2  (0.40) (0.40) (0.40) (0.40) (0.40) (0.40)  education -0.15 -0.12 -0.17 -0.16 -0.1  level (0.12) (0.11) (0.12) (0.12) (0.12)  firm-specific attributes  year of -0.03 -0.03 -0.03 -0.03 -0.03 -0.0  registration (0.02) (0.02) (0.02) (0.02) (0.02) (0.02)  total amount of equity in 0.00 0.00 0.00 0.00 0.00  preceding (0.00) (0.00) (0.00) (0.00) (0.00) (0.00)  year  number of  employees in 0.0004 0.0004 0.0004 0.0004 0.000 preceding (0.0001)*** (0.0001)*** (0.0001)*** (0.0001)*** (0.0001)*** (0.0001)*** (0.0001)***	18					
gender (0.40) (0.40) (0.40) (0.40) (0.40) (0.4 education -0.15 -0.12 -0.17 -0.16 -0.1 level (0.12) (0.11) (0.12) (0.12) (0.12)  firm-specific attributes  year of -0.03 -0.03 -0.03 -0.03 -0.03 -0.0 registration (0.02) (0.02) (0.02) (0.02) (0.02) (0.02)  total amount of equity in 0.00 0.00 0.00 0.00 0.00 preceding (0.00) (0.00) (0.00) (0.00) (0.00)  year number of employees in 0.0004 0.0004 0.0004 0.0004 preceding (0.0001)*** (0.0001)*** (0.0001)*** (0.0001)***	4)					
education -0.15 -0.12 -0.17 -0.16 -0.1 level (0.12) (0.11) (0.12) (0.12) (0.12) (0.12) (0.12) (0.12) (0.12) (0.12) (0.13) registration (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02) (0.02)	.9					
level (0.12) (0.11) (0.12) (0.12) (0.12)  firm-specific attributes  year of -0.03 -0.03 -0.03 -0.03 -0.03  registration (0.02) (0.02) (0.02) (0.02) (0.02) (0.02)  total amount  of equity in 0.00 0.00 0.00 0.00 0.00  preceding (0.00) (0.00) (0.00) (0.00) (0.00)  year  number of  employees in 0.0004 0.0004 0.0004 0.0004  preceding (0.0001)*** (0.0001)*** (0.0001)*** (0.0001)***	0)					
firm-specific attributes  year of -0.03 -0.03 -0.03 -0.03 -0.03  registration (0.02) (0.02) (0.02) (0.02) (0.02)  total amount  of equity in 0.00 0.00 0.00 0.00 0.00  preceding (0.00) (0.00) (0.00) (0.00) (0.00)  year  number of  employees in 0.0004 0.0004 0.0004 0.0004  preceding (0.0001)*** (0.0001)*** (0.0001)*** (0.0001)***	7					
year of registration         -0.03         -0.03         -0.03         -0.03         -0.03         -0.00           registration         (0.02)         (0.02)         (0.02)         (0.02)         (0.02)         (0.00)         (0.00)         (0.00)         (0.00)         (0.00)         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00	2)					
registration (0.02) (0.02) (0.02) (0.02) (0.02) (0.00) total amount of equity in 0.00 0.00 0.00 0.00 0.00 0.00 preceding (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) year number of employees in 0.0004 0.0004 0.0004 0.0004 0.0004 preceding (0.0001)*** (0.0001)*** (0.0001)*** (0.0001)*** (0.0001)***	firm-specific attributes					
total amount of equity in 0.00 0.00 0.00 0.00 0.00 preceding (0.00) (0.00) (0.00) (0.00) (0.00)  year number of employees in 0.0004 0.0004 0.0004 0.0004 preceding (0.0001)*** (0.0001)*** (0.0001)*** (0.0001)***	3					
of equity in 0.00 0.00 0.00 0.00 0.00 0.00 preceding (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00) (0.00	3)					
preceding (0.00) (0.00) (0.00) (0.00) (0.00) (0.00)  year  number of  employees in 0.0004 0.0004 0.0004 0.0004  preceding (0.0001)*** (0.0001)*** (0.0001)*** (0.0001)***						
year number of employees in 0.0004 0.0004 0.0004 0.0004 0.000 preceding (0.0001)*** (0.0001)*** (0.0001)*** (0.0001)***	0					
number of employees in 0.0004 0.0004 0.0004 0.0004 0.0004 0.000 preceding (0.0001)*** (0.0001)*** (0.0001)*** (0.0001)***	0)					
employees in 0.0004 0.0004 0.0004 0.0004 0.0004 0.000 preceding (0.0001)*** (0.0001)*** (0.0001)*** (0.0001)***						
preceding (0.0001)*** (0.0001)*** (0.0001)*** (0.0001)***						
	04					
vear	)***					
y <del>- w</del>						
BLOAN -0.0	0					
(0.0	0)					
location of						
headquarters included included included included included	hah					
in preceding	ıcu					
year						
LNGRPP 1.66						
(2.43)						
provincial included included included included included	ded					

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

fixed effect					
survey year fixed effect	included	included	included	included	included
number of observations	5991	5991	5991	5991	5080
pseudo R ²	0.16	0.16	0.17	0.16	0.16

Table 8.9 Cadre Status and Entry into Real Estate Industry at Start-up Stage

depen	dent variable: RE	E = engagement in	the real estate inc	lustry
	(1)	(2)	(3)	(4)
CD	0.23			0.23
GB	(0.14)*			(0.14)*
RANK		0.08		
KANK		(0.07)		
AGB			0.22	
AUD			(0.14)	
	entrep	reneur-specific att	ributes	
waar of hirth	-0.03	-0.03	-0.03	-0.03
year of birth	(0.01)***	(0.01)***	(0.01)***	(0.01)***
aandar	-0.35	-0.35	-0.35	-0.35
gender	(0.21)*	(0.21)*	(0.21)*	(0.21)*
education level	0.62	0.63	0.62	0.62
education level	(0.09)***	(0.09)***	(0.09)***	(0.09)***
	fir	m-specific attribu	tes	
year of	0.02	0.02	0.02	0.02
registration	(0.02)	(0.02)	(0.02)	(0.02)
total amount of	0.00013	0.00013	0.00013	0.00013
equity when	(0.00013	(0.00013	(0.00013	(0.00013
registered	(0.00003)	(0.00003)	(0.00003)	(0.00003)
number of				
employees	-0.00	-0.00	-0.00	-0.00
when	(0.00)	(0.00)	(0.00)	(0.00)
registered				
location of				
headquarters	included	included	included	included
when	meradea	meruded	meruded	meruded
registered				

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

LNGRPP				2.73 (1.47)*
provincial fixed effect	included	included	included	included
survey year fixed effect	included	included	included	included
number of observations	7037	7037	7037	7037
pseudo R ²	0.14	0.14	0.14	0.14

Table 8.10 Cadre Status and Entry into Real Estate Industry in Year Preceding Survey

d	lependent variab	le: RE = engag	gement in the re	eal estate indus	try
	(1)	(2)	(3)	(4)	(5)
CD	0.19			0.19	0.12
GB	(0.13)			(0.13)	(0.14)
RANK		0.05			
KANK		(0.07)			
ACD			0.28		
AGB			(0.13)**		
	6	entrepreneur-sp	ecific attribute	es	
voor of birth	-0.03	-0.03	-0.024	-0.025	-0.03
year of birth	(0.01)***	(0.01)***	(0.008)***	(0.008)***	(0.01)***
a a m d a m	-0.50	-0.50	-0.49	-0.50	-0.53
gender	(0.22)**	(0.22)**	(0.22)**	(0.22)**	(0.24)**
education	0.53	0.55	0.53	0.53	0.53
level	(0.10)***	(0.09)***	(0.09)***	(0.09)***	(0.09)***
		firm-specif	ic attributes		
year of	-0.026	-0.025	-0.027	-0.027	-0.02
registration	(0.015)*	(0.015)*	(0.015)*	(0.015)*	(0.02)
total amount					
of equity in	0.00004	0.00005	0.00004	0.00004	0.00003
preceding	(0.00002)**	(0.00002)**	(0.00002)**	(0.00002)**	(0.00002)*
year					
number of					
employees	0.0003	0.0003	0.0003	0.0003	0.0001
in preceding	(0.0001)***	(0.0001)***	(0.0001)***	(0.0001)***	(0.0001)
year					

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

BLOAN					0.00017 (0.00005)***
location of headquarters in preceding year	included	included	included	included	included
LNGRPP				3.05 (1.35)**	
provincial fixed effect	included	included	included	included	included
survey year fixed effect	included	included	included	included	included
number of observations	5753	5753	5753	5753	5221
pseudo R ²	0.15	0.15	0.15	0.15	0.18

Generally speaking, the results show that cadres do have some advantage in entering the mining industry whereas such advantage is less obvious with respect to the real estate industry. Women seem to be less likely to enter these two sectors on the whole, especially the real estate industry. Interestingly, the effect of human capital as proxied by education level works in opposite directions regarding the entries into these two industries. Less educated entrepreneurs are more likely to enter the mining industry but they are less likely to engage in real estate businesses. This probably is due to the fact that mining is concentrated in rural areas while real estate development is conducted mainly in major cities, as shown by my regression tests, and the average education level is lower in the countryside than in cities. Overall, when potential barriers to entry are considered, there is some evidence supporting the hypothesis that political influence plays a significant role although such evidence may not be as strong as that pertaining to the allocation of bank loans.

#### 3) Willingness to Use Courts

As discussed above, the Chinese judiciary lacks independence and is under severe political influence. So the outcomes of adjudication are possibly politically biased as well. If this is true, then the politically connected entrepreneurs will have better incentives to use the court to resolve disputes emerging in business operation. The private enterprise surveys ask about the approaches that entrepreneurs usually take to resolve these disputes. One of the options provided by the survey questions is litigation or arbitration. I use the answers to this question as a measurement for entrepreneurs'

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

willingness to use courts.

Some may question the validity of this measurement since it does not tell apart arbitration from litigation. Ultimately, its validity hinges on the understanding about these two forms of dispute resolution held by the entrepreneurs under survey. To what extent do they feel differently about arbitration and litigation? Unfortunately, no clue can be found in the private enterprise surveys in this respect. That said, selection of this option should be an approximation of the entrepreneurs' willingness to sue, at least in the Chinese context, for a couple of reasons. First, the designers of the surveys have consistently combined arbitration and litigation in the same option ever since arbitration appearing in the survey questions in 2002, which suggests that in the eyes of the experts at private enterprises they are similar to each other. In fact, arbitration and litigation do seem to be similar when compared with other options listed in the surveys (no action, negotiation, mediation, petition, media exposure, etc.) in the sense that both are supposed to go through certain formal procedures and that the verdicts are sanctioned by state power through judicial enforcement. Second, some evidence shows that most domestic Chinese firms in Shanghai had little awareness or understanding of the potential role for arbitration (Clarke et al. 2008: 410). If this is representative, ¹³⁰ it is quite likely that Chinese private entrepreneurs will place more weight on litigation rather than arbitration when they are presented with such an option merging these two. arbitration is an insignificant means of dispute resolution for domestic firms considering the number of disputes resolved through litigation or mediation (Peerenboom & He 2009: According to a World Bank survey, as of 2001, only 12% of the firms having disputes used arbitration even once and only 2% used it to resolve disputes at least half of the time (Clarke et al. 2008: 410). Taking contract cases as an example, even in the year 2005, the total number of cases resolved by arbitration is only 1.91% of that of the cases accepted by the trial courts (Chen 2010: 11). This further supports the idea that Chinese entrepreneurs are inclined to put more emphasis on litigation when they see a choice combining it with arbitration. Finally, arbitration institutions do not appear to be substantially different from courts in terms of administrative organization and funding The vast majority of arbitration institutions in China is either administrative agencies or closely affiliated to such agencies. Excessively high proportion of the members of the arbitration committees, the highest decision-making organization within an arbitration institution, used to be administrative officials, and above 90% of the directors of these committees are former administrative leaders. Half of the arbitration institutions are funded by the budgets of local governments (id.: 34-44). So arbitration is probably plagued by the same problems as litigation, including undue external influence (Cohen 2005).

-

¹³⁰ Considering the much more sophisticated knowledge held by citizens in Shanghai than those living in other parts of the country (Gechlik 2005), the evidence presented above may actually be the upper bound of the general awareness of arbitration among Chinese.

The private enterprise surveys distinguish ordinary disputes from disputes with administrative agencies, so entrepreneurs can choose different answer options regarding these two kinds of disputes. According to the survey handbook, ordinary disputes refer to those occurring "between one private enterprise and another, consumers, or suppliers". However, the framing and coding of questions differ slightly in all these three years' surveys. In the 2002 and 2006 surveys, entrepreneurs were allowed to choose as many resolution options as possible for each kind of disputes. While every choice counted according to the coding rule used in 2002, the 2006 coding rule required the surveyors to randomly pick four choices for consideration. Given the randomness in deciding which choice counts, data collected in these two years should be comparable. On the other hand, in the 2004 survey, for each option, the surveyed entrepreneurs were probably guided to pick only one of the two kinds of disputes for which this particular form of resolution would be employed. Therefore, respondents were somewhat restricted when making a choice. Even if an entrepreneur had wanted to use litigation for both kinds of disputes, due to the structure of questionnaire, he or she would have to choose the kind for which litigation was more preferred. 131

Again, the estimates about the effect of political connection are based on logit models. Both sales revenue and number of employees are used as proxies for size of enterprises. To take into account the variation in judicial professionalism at the provincial level, number of college graduates per capita, recorded in the variable COLPP, is controlled in addition to gross regional product per capita, assuming that places with more college graduates also have more law school graduates so that local courts are more likely to recruit judges with professional legal training. To address the concern caused by the possible inconsistency in the 2004 survey data, I also ran a separate baseline regression which only included the data from 2002 and 2006 surveys. Table 8.11 reports the results of these regression analyses with respect to the usage of litigation to resolve ordinary disputes.

Table 8.11 Cadre Status and Willingness to Use Courts for Ordinary disputes

depen	dent variable: LIT	1 = usage of course	rts for ordinary di	sputes	
	(1)	(2)	(3)	(4)	
CD	0.24			0.26	
GB	(0.06)***			(0.07)***	
DANIZ		0.12			
RANK		(0.03)***			
A CD			0.21		
AGB			(0.06)***		
entrepreneur-specific attributes					
year of birth	-0.00	-0.00	-0.00	-0.00	

¹³¹ For details of the coding rules, see the codebook complied for each survey.

	(0.00)	(0.00)	(0.00)	(0.00)
aandar	-0.13	-0.14	-0.13	-0.16
gender	(0.09)	(0.09)	(0.09)	(0.12)
education level	0.27	0.27	0.28	0.27
education level	(0.04)***	(0.04)***	(0.04)***	(0.05)***
	fir	m-specific attribu	tes	
year of	-0.013	-0.012	-0.012	-0.01
registration	(0.007)*	(0.007)*	(0.007)*	(0.01)
sales revenue	0.00	0.00	0.00	0.00
in preceding year	(0.00)	(0.00)	(0.00)	(0.00)
number of employees in preceding year location of	0.0004 (0.0001)***	0.0004 (0.0001)***	0.0004 (0.0001)***	0.0003 (0.0001)***
headquarters in preceding year	included	included	included	included
LNCDDD	-0.24	-0.24	-0.25	-0.71
LNGRPP	(0.71)	(0.71)	(0.71)	(0.74)
COLDD	2.11	2.21	2.17	2.92
COLPP	(1.79)	(1.79)	(1.79)	(1.98)
provincial fixed effect	included	included	included	included
survey year fixed effect	included	included	included	included
2004 survey	included	included	included	
number of observations	6600	6600	6600	4561
pseudo R ²	0.06	0.06	0.06	0.06
Mata. Dalamat atas				

Those entrepreneurs who were cadres previously do appear to be more willing to use courts to resolve ordinary disputes just as predicted. The result is not only robust in various specifications, but also significant in the economic sense. The baseline model shows that compared with non-cadres, the odds to bring their cases to the court is 27% higher for former cadres. Among the other factors, education level is positively correlated with the probability to use the court with salient significance, which confirms the idea that education may promote people's incentives to litigate. Despite its

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

statistical significance, the number of employees actually has no more than a slight effect on entrepreneurs' willingness to sue. Finally, private enterprises headquartered in townships or rural areas demonstrate lower probabilities to use the formal legal recourse to resolve their disputes, reminding us of the fact that the legal resources in China are concentrated in urban areas. ¹³²

Considering the possibility that those who did not answer the question might be different from those who did, hence causing the non-response bias, I also tried the probit model with sample selection (Heckman probit model). The selection equation includes all the regressors in the baseline model plus the total amount of equity in the year preceding the survey. The result still confirms the significant positive correlation between prior cadre experience and probability to litigate.

Factors other than political connection may also explain the observed difference between former cadres and non-cadres in the likelihood of using courts. First, lack of economic resources will be a crucial reason impeding litigation. If the cadre group as a whole is wealthier than the non-cadre group, then the difference can be a result of financial constraints. I ran another two regressions to test whether financial ability is the actual cause behind the observed difference. In the first model, I added net business profit in the year prior to the survey as an additional control since net profit is supposedly an important source to fund litigation costs. The second model controls entrepreneurs' self-assessment about their economic status relative to other members of the society. The answers are measured on a 1-to-10 scale with 1 indicating the highest status. extra control should reflect the respondents' subjective estimation about the severity of financial constraints they have encountered. The results of these two additional regressions show, that although financial ability does have the effect as predicted, the difference in willingness to resolve disputes through litigation does not disappear even after the potential gap in wealth between these two groups has been taken into account.

Table 8.12 Cadre Status and Willingness to Use Courts for Ordinary disputes: Test of Wealth Effect

depend	dent variable: LI	$\Gamma 1 = usage of county$	rts for ordinary dis	sputes
	(1)	(2)	(3)	(4)
CD	0.25	0.24	0.25	0.27
GB	(0.06)***	(0.06)***	(0.08)***	(0.07)***
	entrep	reneur-specific att	ributes	
	-0.00	-0.00	-0.00	-0.00
year of birth	(0.00)	(0.00)	(0.00)	(0.00)
gender	-0.12	-0.14	-0.15	-0.17

¹³² According to the baseline model, enterprises headquarted in townships have a nearly 17% lower odds than those headquartered in major cities to use the court, while such difference is further widened to some 27% between rural enterprises and their counterparts located in major cities.

There is no STATA command available to estimate the logit model with sample selection.

education level         0.28 (0.04)***         0.27 (0.05)***         0.27 (0.05)***           self-assessment of economic status         -0.032 (0.017)**         0.03 (0.02)           firm-specific attributes           year of registration         -0.02 -0.013 -0.01 -0.01 (0.01)           sales revenue in preceding year number of employees in preceding year location of headquarters in preceding year net profit in the preceding year (0.0001)***         0.0004 (0.0001)****         0.0001)****         0.0001)****           LNGRPP         -0.35 (0.74) (0.71) (0.71) (0.78) (0.74)         0.74) (0.71) (0.78) (0.74)         0.74)           COLPP         3.14 (2.06 4.23 2.87) (1.89) (1.80) (2.08)**         1.98)           provincial fixed effect survey year fixed effect survey year fixed effect         included inclu		(0.10)	(0.09)	(0.12)	(0.12)
self-assessment of economic status    Color   Color   Color   Color	advantion laval	0.28	0.27	0.29	0.27
of economic status         -0.032 (0.017)**         0.03 (0.02)           firm-specific attributes           year of registration         -0.02 (0.01)**         -0.013 (0.01)         -0.01 (0.01)           sales revenue in preceding year number of employees in preceding year location of headquarters in preceding year net profit in the preceding year net profit in the preceding year (0.0001)***         0.0004 (0.0001)***         0.0001)***         0.0001)***           LNGRPP         -0.35 (0.74) (0.71) (0.78) (0.74)         -0.76 (0.74) (0.71) (0.78) (0.74)           COLPP         3.14 (2.06) (1.89) (1.80) (2.08)**         (1.98)           provincial fixed effect survey year fixed effect survey year fixed effect         included i	education level	(0.04)***	(0.04)***	(0.05)***	(0.05)***
year of registration         -0.02         -0.013         -0.01         -0.01           registration         (0.01)**         (0.007)*         (0.01)         (0.01)           sales revenue in preceding year number of employees in preceding year location of headquarters in preceding year net profit in the preceding year net profit in the preceding year net profit in the preceding year (0.0001)***         0.0004         0.0004         0.0001)***           LNGRPP         -0.35         -0.33         -0.67         -0.76           COLPP         3.14         2.06         4.23         2.87           COLPP         (1.89)         (1.80)         (2.08)**         (1.98)           provincial fixed effect survey year fixed effect         included	of economic				
registration (0.01)** (0.007)* (0.01) (0.01) sales revenue in preceding (0.00) (0.00) (0.00) (0.00) year number of employees in preceding year location of headquarters in preceding year net profit in the preceding year (0.0001)***  LNGRPP (0.74) (0.71) (0.78) (0.74) COLPP (1.89) (1.80) (2.08)** (1.98)  provincial fixed effect survey year fixed effect 2004 survey included include		fir	m-specific attribu	tes	
sales revenue in preceding year         0.00 (0.00)         0.00 (0.00)         0.00 (0.00)         0.00 (0.00)           number of employees in preceding year location of headquarters in preceding year net profit in the preceding year         0.0001)****         (0.0001)****         (0.0001)****         (0.0001)****           LNGRPP         0.35 (0.74) (0.71) (0.78) (0.78)         0.74)         0.74) (0.71) (0.78) (0.74)         0.74)           COLPP         1.89) (1.80) (2.08)**         (1.98)           provincial fixed effect survey year fixed effect         included i	year of	-0.02	-0.013	-0.01	-0.01
in preceding year number of employees in preceding year location of headquarters in preceding year net profit in the preceding year (0.0007)** (0.0001)*** (0.0001)***  LNGRPP (0.74) (0.71) (0.78) (0.74) (0.74) (0.71) (0.78) (0.74) (0.74) (0.89) (1.89) (1.80) (2.08)** (1.98) (1.98) provincial fixed effect survey year fixed effect 2004 survey included in	registration	(0.01)**	(0.007)*	(0.01)	(0.01)
number of employees in preceding year location of headquarters in et profit in the preceding year electing year net profit in the preceding year (0.0001)***         0.0001)****         0.0001)****         (0.0001)****         (0.0001)****         (0.0001)****         (0.0001)****         (0.0001)****         (0.0001)****         (0.0001)****         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)****         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)***         (0.0001)*** <td></td> <td></td> <td></td> <td></td> <td></td>					
employees in preceding year location of headquarters in included included included preceding year net profit in the preceding year (0.0001)***  LNGRPP	-	(0.00)	(0.00)	(0.00)	(0.00)
preceding year location of headquarters in preceding year net profit in the preceding year (0.0001)***  LNGRPP		0.0004	0.0004	0.0004	0.0003
headquarters in preceding year net profit in the preceding year (0.00007)**         0.00025 (0.00011)**           LNGRPP         -0.35 (0.74) (0.71) (0.78) (0.78) (0.74)           COLPP         3.14 (1.89) (1.80) (2.08)**         2.87 (1.98)           provincial fixed effect survey year fixed effect         included include		(0.0001)***	(0.0001)***	(0.0001)***	(0.0001)***
net profit in the preceding year         0.00013         0.00025           preceding year         (0.00007)**         (0.00011)**           LNGRPP         -0.35         -0.33         -0.67         -0.76           (0.74)         (0.71)         (0.78)         (0.74)           COLPP         3.14         2.06         4.23         2.87           (1.89)         (1.80)         (2.08)**         (1.98)           provincial fixed effect         included         included         included           survey year fixed effect         included         included         included           2004 survey         included         included           number of observations         6112         6564         4247         4539	headquarters in	included	included	included	included
Description		0.00013		0.00025	
COLPP	•	(0.00007)**		(0.00011)**	
COLPP (0.74) (0.71) (0.78) (0.74)  3.14 (2.06 4.23 2.87 (1.89) (1.80) (2.08)** (1.98)  provincial fixed effect survey year fixed effect 2004 survey included anumber of observations 6112 6564 4247 4539	LNCDDD	-0.35	-0.33	-0.67	-0.76
provincial fixed effect included includ	LNGRPP	(0.74)	(0.71)	(0.78)	(0.74)
provincial fixed effect included includ	COL DD	3.14	2.06	4.23	2.87
fixed effect survey year fixed effect included i	COLFF	(1.89)	(1.80)	(2.08)**	(1.98)
fixed effect included included included included included included included observations included incl	*	included	included	included	included
number of observations 6112 6564 4247 4539		included	included	included	included
observations 6112 6564 4247 4539	2004 survey	included	included	,	
pseudo R ² 0.06 0.06 0.06 0.06		6112	6564	4247	4539
	pseudo R ²	0.06	0.06	0.06	0.06

Another factor that may cause the observed difference in litigation incentives is the excelled knowledge held by former cadres about the formal legal system obtained through their prior experience. While there is no direct measurement of entrepreneurs' knowledge base, some indirect means may be applied to test this effect. Insofar as such

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

knowledge is not obtainable uniquely through political engagement, ¹³⁴ non-cadre entrepreneurs should be able to catch up as they stay in the business world for a longer time. This means that among the experienced entrepreneurs, the cadre/non-cadre difference in probability to sue should be smaller. To test this hypothesis, I divided the enterprises under survey into two categories, one composed of old enterprises and the other of the new ones. Two standards are used to make this division, setting the line, respectively, at 10 and 15 years since registration. The dummy variables, OLD10 and OLD15, are further interacted with the cadre dummy GB. A significantly negative effect of the interaction terms would confirm the hypothesis, hence cadre more willing to sue probably because of their better legal knowledge. As we can see in the next table, however, no evidence can be found to support such an explanation.

Table 8.13 Cadre Status and Willingness to Use Courts for Ordinary disputes: Test of Knowledge Effect

depend	lent variable: LI	$\Gamma 1 = usage of court$	rts for ordinary dis	sputes
	(1)	(2)	(3)	(4)
CD	0.27	0.24	0.28	0.25
GB	(0.07)***	(0.06)***	(0.08)***	(0.08)***
OI D10	-0.19		-0.23	
OLD10	(0.13)		(0.15)	
CD OLD10	-0.14		-0.07	
GB_OLD10	(0.13)		(0.16)	
OLD15		-0.38		-0.45
OLD13		(0.18)**		(0.21)**
CP OLD15		0.09		0.23
GB_OLD15		(0.25)		(0.29)
	entrep	reneur-specific att	ributes	
year of birth	-0.00	-0.00	-0.00	-0.00
year or onth	(0.00)	(0.00)	(0.00)	(0.00)
gender	-0.13	-0.13	-0.15	-0.15
gender	(0.09)	(0.09)	(0.12)	(0.12)
education level	0.27	0.27	0.27	0.27
education level	(0.04)***	(0.04)***	(0.05)***	(0.05)***
	fir	m-specific attribu	tes	
year of	-0.03	-0.03	-0.033	-0.025
registration	(0.01)***	(0.01)***	(0.014)**	(0.011)**
sales revenue	0.00	0.00	0.00	0.00
in preceding	(0.00)	(0.00)	(0.00)	(0.00)

 134  If the legal knowledge can be acquired by the political elites, then this fact itself signals the effect of political connections.

number of employees in preceding year	0.0004 (0.0001)***	0.0004 (0.0001)***	0.0003 (0.0001)***	0.0003 (0.0001)***
location of headquarters in preceding year	included	included	included	included
LNGRPP	-0.30	-0.25	-0.77	-0.71
LNGKPP	(0.70)	(0.71)	(0.74)	(0.74)
COLPP	2.26	2.03	3.03	2.86
COLFF	(1.79)	(1.19)	(1.97)	(1.97)
provincial fixed effect	included	included	included	included
survey year fixed effect	included	included	included	included
2004 survey	included	included		
number of observations	6600	6600	4561	4561
pseudo R ²	0.06	0.06	0.06	0.06

Based on all the above quantitative analyses, it is fair to say that political connection is likely to be a driving force for entrepreneurs to resolve ordinary disputes through litigation where the judiciary is pliable in front of extralegal influences.

Contrary to the ordinary disputes, entrepreneurs who used to be cadres are not more willing to use courts when they have disputes with administrative agencies. In fact, the probabilities for both the cadre and the non-cadre groups to file suits against administrative agencies are very low. There does not seem to be significant increase in these probabilities over time, either. This can be seen from the following table that summarizes the probabilities for these two groups of entrepreneurs to rely on courts for resolution of disputes with administrative agencies during the whole period covered by the three surveys. The estimation is based on a logit model similar to the baseline model used to study ordinary disputes.

Table 8.14 Summary Statistics of Predicted Probability of Using Courts for Disputes with Administrative Agencies

Survey Year	GB	GB Number of		Standard	Minimum	Maximum
Survey rear	Obse	Observations	Mean	Deviation	TVIIIIIIIIIIIIII	TVIGATITICITI
2002	0	1197	3.87%	2.98%	0.56%	23.78%

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

	1	1287	4.99%	3.95%	0.73%	33.33%
2004	0	1088	5.11%	4.26%	0.03%	52.79%
2004	1	1173	6.27%	4.88%	0.03%	37.26%
2006	0	1577	6.06%	4.52%	0.53%	41.73%
2006	1	1035	7.02%	5.15%	0.23%	36.47%

Entrepreneurs' unwillingness to get involved in litigations against administrative agencies can be seen more clearly when compared with the predicted probability to use courts in ordinary disputes. Table 8.15 summarizes this latter probability estimated in the same way. On average, Chinese entrepreneurs are almost 5 times less likely to use courts in disputes with administrative agencies than in ordinary disputes, no matter whether they were cadres or not before becoming private business owners.

Table 8.15 Summary Statistics of Predicted Probability of Using Courts for Ordinary disputes

Survey Year	GB	Number of	Mean	Standard Deviation	Minimum	Maximum
		Observations				
2002	0	1202	22.87%	8.54%	5.20%	65.27%
2002	1	1292 30.76% 9.65%	6.92%	88.70%		
2004	0	1090	30.70%	10.93%	8.58%	99.86%
2004	1	1177	39.51%	12.62%	11.16%	99.95%
2006	0	1580	29.12%	10.87%	5.81%	96.13%
2000	1	1035	38.39%	12.44%	9.04%	98.08%

The difference between the two kinds of disputes is equally striking when we look at the percentage of respondents in our sample who choose to use courts. ¹³⁵ I did this comparison in Table 8.16.

Table 8.16 Comparison between the Two Kinds of Disputes: Percentage of Respondents Choosing to Use Courts

Survey Year	GB	Ordinary disputes	Disputes with Administration
2002	0	21.38%	3.91%
2002	1	30.09%	5.59%
2004	0	31.17%	5.24%
2004	1	38.10%	6.24%
2006	0	28.58%	6.69%
2000	1	36.58%	8.13%

¹³⁵ Non-respondents were excluded from this comparison.

171

Considering the political influence exerted on the adjudication, these findings are not surprising at all. Although former cadres are politically advantaged than non-cadres, neither group of private entrepreneurs would be more politically entrenched than administrative agencies. Therefore, litigation seems an undesirable approach for entrepreneurs to resolve disputes with those powerful agencies. When we piece together all these evidences, it is hard to deny the political bias pervading the Chinese judiciary. This is quite inconsistent with the encouraging picture depicted by some China scholars who claim that residents in Beijing find courts are more trustworthy than their Chicago counterparts do, or that plaintiffs prevail even more frequently in administrative litigations in China than in the U.S., Taiwan, or Japan (Peerenboom & He 2009). Probably, my study has only showed part of the story, but in no event should this part be regarded trivial.

The private enterprise surveys also ask whether the surveyed entrepreneurs were satisfied with the means they usually use to resolve disputes. Should we be able to show that former cadres were more likely to get satisfied with the outcomes of litigation, it would lend persuasive support to the argument that Chinese courts are politically biased so that the better politically connected entrepreneurs are more willing to use courts. However, there are several issues that complicate the usage of these data.

First, there are plenty of missing data points. With respect to litigations over ordinary disputes, about three-fourths data are missing, and this proportion is much higher for litigations against administrative agencies. Data are missing either because the surveyed entrepreneurs did not use litigation at all, or because they did not answer whether they were contented with the results even when they had chosen litigation to resolve the disputes.

Second, the structure and coding rules of the 2002 and 2006 surveys make it difficult to tell exactly whether the respondents were satisfied/dissatisfied with the outcomes of regular litigations or administrative litigations. As already explained, in these two surveys, entrepreneurs were free to choose as many options as possible to resolve disputes of either kind. When asked about their satisfaction with the outcomes, nonetheless, the two kinds of disputes were no longer separated. Therefore, if an entrepreneur used courts to resolve both kinds of disputes, but was satisfied only with one kind, we would have no idea what his answer might be to this question about satisfaction. Only the 2004 survey seems not suffering from this problem, so I did run a logit regression using the data provided by this survey. As can be seen from Table 8.17, the findings of this regression is consistent with the proposition that the Chinese judiciary is politically biased, and, consequently, entrepreneurs with better political connections are more likely to obtain satisfactory outcomes from litigations over ordinary disputes. Unfortunately, however, even the 2004 survey is not immune to the other problems discussed here. We, therefore, should not exaggerate the implication of this result.

Third, very likely, there is considerable self-selection bias in the data. Those who believe they would be prejudiced against at court will not choose to use courts in the first place, hence leaving a missing data point for the question about satisfaction. On the other hand, those who did choose to use courts may be more likely to get satisfied with the outcomes. Since we have already known that, as far as ordinary disputes are concerned, the probability for non-cadres to use courts is lower than that for cadres, the dissatisfaction with litigation might be concealed by the higher proportion of missing data points among non-cadres. In that case, the observed difference will be a lower bound of the actual difference in the attitudes held by cadres and non-cadres pertaining to the outcomes of litigation.

Table 8.17 Cadre Status and Satisfaction with Litigation over Ordinary disputes: 2004 Survey

	(1)	(2)	(3)
CD	0.44		
GB	(0.23)**		
DANIZ		0.28	
RANK		(0.12)**	
A CD			0.37
AGB			(0.23)*
	entrepreneur-spe	ecific attributes	
	-0.00	-0.00	-0.00
year of birth	(0.01)	-0.00 (0.01) -0.14 (0.34) -0.07	(0.01)
1	-0.14	-0.14	-0.14
gender	(0.34)	(0.34)	(0.33)
advantion laval	-0.05	-0.07	-0.04
education level	(0.15)	(0.15)	(0.15)
	firm-specifi	c attributes	
ream of magistration	0.03	0.02	0.02
year of registration	(0.03)	(0.03)	(0.03)
sales revenue in	0.000022	0.000022	0.000021
preceding year	(0.000013)*	(0.000013)*	(0.000013)*
number of	0.00	0.00	0.00
employees in			
preceding year	(0.00)	(0.00)	(0.00)
location of			
headquarters in	included	included	included
preceding year			
LNGRPP	78.32	97.26	67.86

	(606.09)	(600.81)	(614.80)
COLPP	-742.56	-921.88	-643.37
COLPP	(5754.51)	(5704.17)	(5837.26)
provincial fixed effect	included	included	included
survey year fixed effect	included	included	included
number of observations	659	659	659
pseudo R ²	0.11	0.12	0.11

# 4) Self-assessment

Former cadres seem to differ from non-cadres in still another aspect. Cadres' self-assessments about political and social statuses are significantly higher than non-cadres'. This confirms further that the cadre group is politically privileged in the Chinese society. On the other hand, the self-assessment about economic status does not exhibit such a difference. This probably shows that non-cadre entrepreneurs' business performance is no worse than cadre entrepreneurs in spite of the various disadvantages encountered by the former. Ordered logit models were used to make these comparisons, and the results are reported below.

Table 8.18 Cadre Status and Self-assessment of Economic Status

depend	lent variable: ES	TA = self-assessn	nent of economic	status
	(1)	(2)	(3)	(4)
GB	-0.07			-0.06
ÜБ	(0.05)			(0.05)
RANK		-0.03		
KANK		(0.03)		
AGB			-0.03	
AGB			(0.05)	
	entrep	reneur-specific att	ributes	
year of birth	-0.00	-0.00	-0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)
gender	0.13	0.13	0.13	0.13
	(0.07)*	(0.07)*	(0.07)*	(0.07)*
education level	-0.057	-0.060	-0.064	-0.059
education level	(0.034)*	(0.034)*	(0.034)*	(0.034)*

firm-specific attributes

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

year of	0.05	0.05	0.05	0.05
registration	(0.01)***	(0.01)***	(0.01)***	(0.01)***
total amount of equity in preceding year	-0.00059 (0.00032)*	-0.00059 (0.00032)*	-0.00059 (0.00032)*	-0.00058 (0.00032)*
sales revenue in preceding year	-0.000011 (0.000005)**	-0.000011 (0.000005)**	-0.000011 (0.000005)**	-0.000011 (0.000005)**
number of employees in preceding year	-0.0004 (0.0002)**	-0.0004 (0.0002)**	-0.0004 (0.0002)**	-0.0004 (0.0002)**
location of headquarters in preceding year	included	included	included	included
industrial sector in preceding year	included	included	included	included
LNGRPP				-2.55 (0.55)***
provincial fixed effect	included	included	included	included
survey year fixed effect	included	included	included	included
number of observations	5961	5961	5961	5961
pseudo R ²	0.04	0.04	0.04	0.04

Table 8.19 Cadre Status and Self-assessment of Social Status

dependent variable: SSTA = self-assessment of social status				
	(1)	(2)	(3)	(4)
CD	-0.13			-0.13
GB (0.05)***	(0.05)***			(0.05)***
DANIZ		-0.06		
RANK		(0.03)**		
ACD			-0.12	
AGB			(0.05)***	

entrepreneur-specific attributes

Note: Robust standard errors in parentheses.
* significant at 10%; ** significant at 5%; *** significant at 1%.

	0.009	0.010	0.009	0.009
year of birth	(0.003)***	(0.003)***	(0.003)***	(0.003)***
aandar	0.01	0.01	0.01	0.01
gender	(0.07)	(0.07)	(0.07)	(0.07)
advantion laval	-0.09	-0.09	-0.09	-0.09
education level	(0.03)***	(0.03)***	(0.03)***	(0.03)***
	fir	m-specific attribu	tes	
year of	0.05	0.05	0.05	0.05
registration	(0.01)***	(0.01)***	(0.01)***	(0.01)***
total amount of	-0.00	-0.00	-0.00	-0.00
equity in	(0.00)	(0.00)		(0.00)
preceding year	(0.00)	(0.00)	(0.00)	(0.00)
sales revenue	-0.00	-0.00	-0.00	-0.00
in preceding	(0.00)	(0.00)	(0.00)	(0.00)
year	(0.00)	(0.00)	(0.00)	(0.00)
number of	-0.0004	-0.0004	-0.0004	-0.0004
employees in	(0.0002)**	(0.0002)**	(0.0002)**	(0.0002)**
preceding year	(0.0002)	(0.0002)	(0.0002)	(0.0002)
location of				
headquarters in	included	included	included	included
preceding year				
industrial				
sector in	included	included	included	included
preceding year				
LNGRPP				-1.51
LINGINI I				(0.57)***
provincial	included	included	included	included
fixed effect	meraded	meruded	meradea	meruded
survey year	included	included	included	included
fixed effect	meradea	meraded	meradea	meraded
number of	5960	5960	5960	5960
observations	3700	3700	3700	3700
pseudo R ²	0.05	0.05	0.05	0.05

Table 8.20 Cadre Status and Self-assessment of Political Status

dependent variable: PSTA = self-assessment of political status					
(1)	(2)	(3)	(4)		

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

GB	-0.10			-0.10
02	(0.05)**			(0.05)**
RANK		-0.04		
TO II VII		(0.03)		
AGB			-0.12	
			(0.05)***	
	entrep	reneur-specific att	ributes	
year of birth	0.03	0.03	0.03	0.03
year or ontin	(0.00)***	(0.00)***	(0.00)***	(0.00)***
aandar	-0.05	-0.05	-0.05	-0.05
gender	(0.07)	(0.07)	(0.07)	(0.07)
	-0.14	-0.14	-0.14	-0.14
education level	(0.03)***	(0.03)***	(0.03)***	(0.03)***
	fir	m-specific attribu	tes	
year of	0.06	0.05	0.06	0.06
registration	(0.01)***	(0.01)***	(0.01)***	(0.01)***
total amount of	0.00	0.00	0.00	0.00
equity in	-0.00	-0.00	-0.00	-0.00
preceding year	(0.00)	(0.00)	(0.00)	(0.00)
sales revenue	0.00	0.00	0.00	0.00
in preceding	-0.00	-0.00	-0.00	-0.00
year	(0.00)	(0.00)	(0.00)	(0.00)
number of	0.000	0.00026	0.00026	0.00027
employees in	-0.0002	-0.00026	-0.00026	-0.00026
preceding year	(0.0001)**	(0.00013)**	(0.00013)**	(0.00013)**
location of				
headquarters in	included	included	included	included
preceding year				
industrial				
sector in	included	included	included	included
preceding year				
				-1.55
LNGRPP				(0.57)***
provincial				, ,
fixed effect	included	included	included	included
survey year				
fixed effect	included	included	included	included
number of				
observations	5949	5949	5949	5949
ouser various				

pseudo R ²	0.03	0.03	0.03	0.03

According to the above analyses, an entrepreneur's education level is positively correlated with his self-assessment of all three statuses. Older people tend to believe they have higher social and political, but not economic, statuses. Owners of older firms have lower self-assessments in any of these three aspects, so do those of firms with more employees albeit the latter effect may be small. Amount of equity and sales revenue only have slight, though significant, impact on self-assessment of economic status. Somewhat surprisingly, compared with entrepreneurs whose firms are headquartered in major cities, all other entrepreneurs have higher self-assessments of social and political statuses, and all but those having firms headquartered in medium/small cities also hold a higher self-assessment of economic status. This may again imply that conditions for entrepreneurship are especially severe in major cities where the state policies are generally more discriminative against the private sector (Huang 2008).

#### 5) Effect of Time

Do the politically connected become more likely to start up their own businesses over time as a result of the diminished political costs of being capitalists? The survey data also shed some light on this question. As indicated below, former cadres do seem to open their private firms later than non-cadres. In Table 8.21 are the results of the OLS regression of years of registration on the indicators of cadre experience and a series of controls.

Table 8.21 Cadre Status and Start-up Time

depende	ent variable: YRI	EG = year of priva	te enterprise regis	stration
	(1)	(2)	(3)	(4)
GB	1.05			1.05
GB	(0.10)***			(0.10)***
RANK		0.53		
KANK		(0.06)***		
ACD			0.92	
AGB			(0.11)***	
	entrep	reneur-specific att	ributes	
year of birth	0.11	0.11	0.11	0.11
	(0.01)***	(0.01)***	(0.01)***	(0.01)***
gender	0.50	0.49	0.50	0.50
	(0.14)***	(0.14)***	(0.14)***	(0.14)***
advantion laval	-0.08	-0.09	-0.04	-0.08
education level	(0.07)	(0.07)	(0.07)	(0.07)

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

	fir	m-specific attribu	tes	
total amount of equity when registered number of	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
employees when	0.0008 (0.0004)**	0.0008 (0.0004)**	0.0008 (0.0004)**	0.0008 (0.0004)**
registered location of headquarters when registered	included	included	included	included
industrial sector when registered	included	included	included	included
LNGRPP				-0.87 (1.17)
provincial fixed effect	included	included	included	included
survey year fixed effect	included	included	included	included
number of observations	7037	7037	7037	7037
adjusted R ²	0.21	0.21	0.21	0.21

The cadre effect is very significant statistically, yet appears less so economically. The baseline model shows that on average former cadres start their businesses just 1.05 years later than non-cadres. However, if we compare with the effect of year of birth which is also of high statistic significance, the cadre effect becomes more impressive as it is almost the same as the effect of 10 years' difference in an entrepreneur's age. Besides these two factors, women are later than men to engage in entrepreneurship, and firms with more employees also come up later. Level of education does not affect when entrepreneurs started their businesses, which is consistent with the prior findings that the early generation of Chinese entrepreneurs were in fact quite well educated relative to the general public (Huang 2008, Yang 2007). Firms headquartered in major cities were founded no later than those headquartered in medium/small cities, townships or rural areas, and earlier than those headquartered in development zones. Considering that the

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

reform in China started in the rural places, this is somewhat unexpected. At the same time, the regression analyses also verify the fact that in the coastal provinces of Zhejiang, Fujian and Guangdong, private enterprises appeared earlier than most other places of the country.

Does the importance of political connection in entrepreneurship rise as those who are better politically connected become more anxious to enter the world of entrepreneurs? From the data, I also detected some, though not extremely strong, evidence for this prediction. I divided the enterprises in the surveys into two categories, those registered before or in 1997, and those after 1997. Looking at the effect of the interaction term of the pre-/post 1997 dummy and the cadre/non-cadre dummy on the probability of obtaining initial bank loans, I found that political connections as proxied by the cadre experience had turned more crucial after 1997. I chose 1997 as the cutoff point because in that year the 1st Plenum of the 15th CCP Central Committee officially acknowledged the private sector as a major component of the socialist market economy, which, in effect, admitted the full legitimacy of private businesses. Although the Constitution was not amended until one and a half years later to embrace, literally, the CCP Central Committee resolution, it had already been widely publicized right after the Party conference. So it seems plausible that the political and ideological risk of openly becoming a private business owner has been lowered since that time. Table 8.22 reports the relevant results. The interaction terms indicative of the time effect, GB T97 and AGB T97 are significant at the 10% level. Estimation based on Model (1) also shows that, with respect to the odds of gaining initial bank loans, the "difference in differences" is 23%, or nearly a quarter.

Table 8.22 Cadre Status and Initial Access to Bank Loans: Time Effect

nt variable: IBANK =	= initial access to bank	loans
(1)	(2)	(3)
0.16		0.16
(0.09)*		(0.09)*
-0.06	-0.05	-0.06
(0.11)	(0.12)	(0.11)
0.21		0.21
(0.12)*		(0.12)*
	0.17	
	(0.09)**	
	0.19	
	(0.11)*	
entrepreneur-spe	ecific attributes	
-0.01	-0.01	-0.01
(0.00)**	(0.00)**	(0.00)**
	(1) 0.16 (0.09)* -0.06 (0.11) 0.21 (0.12)*  entrepreneur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-speceur-spece	0.16 (0.09)* -0.06 -0.05 (0.11) (0.12) 0.21 (0.12)*  0.17 (0.09)** 0.19 (0.11)* entrepreneur-specific attributes -0.01 -0.01

~~	-0.27	-0.27	-0.27
gender	(0.08)***	(0.10)***	(0.10)***
education level	0.03	0.03	0.03
education level	(0.04)	(0.04)	(0.04)
	firm-specifi	c attributes	
year of registration	-0.01	-0.01	-0.01
year of registration	(0.01)	(0.01)	(0.01)
total amount of equity when registered	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
number of employees when registered	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
location of headquarters when registered	included	included	included
LNGRPP			1.44 (0.68)**
provincial fixed effect	included	included	included
survey year fixed effect	included	included	included
number of observations	7012	7012	7012
pseudo R ²	0.10	0.10	0.10

However, this trend should not be understood as showing decreased interest in joining the army of public officials because it simply is not. The headcount of civil servants in China keeps growing in the reform era. Some researchers estimate that the number of officials on the government payroll was around 20 million in the 1990s, and this number surged to 46 million in 2004 (Huang 2008: 167). Becoming a public official remains high on the list of college students' preferred jobs. In a 2007 survey, college students in Beijing ranked a government job as the second most desirable, after a job in a MNC while only 1% wanted to work for the domestic private sector (*id.*: 282). Compared to those in the metropolitan cities, college graduates in remote provincial areas probably woo jobs in governments even more avidly. A teacher in charge of student affairs at a local university in Yunnan province told me that 80% to 90% of students in his

^{*} significant at 10%; ** significant at 5%; *** significant at 1%.

university consider government jobs their top priority, and up to about 70% of the graduates take the national or local exam for civil servants (*guojia gongwuyuan kaoshi*). ¹³⁶

Statistics show that the number of applicants for the national exam for civil servants rises steadily from 87,000 in 2003 to 1.46 million in 2010, and only declined slightly in 2011 to 1.42 million (Sina 2011). Maybe it is worth noting that the number of exam applicants expands much more quickly than the size of government officials. While the former was more than tripled from 2003 (87,000) to 2005 (0.31 million) the latter was just a little more than doubled from the 1990s to 2004. This implies that the barrier to enter the government is heightened within the growing fever of working in the government. No wonder corruption finds an ideal niche in the recruiting process of for governmental positions, as exemplified most recently by the Song Jiangming incident (Wang 2011; CCTV 2011B). Since being a private business owner becomes less risky politically, it essentially opens up a route for officials to cash out their political connections cultivated during the years in the public sector. Therefore, in the Chinese context, the value of a government job actually rises as the private sector gradually gains its legitimacy.

The Chinese story seems to support the prediction that talented people are attracted to the rent-seeking sector where the institutional conditions are built in its favor. But it also evinces the possibility that when rent-seeking is especially lucrative, entries into this sector may be tremendously difficult as well. In a country like China, the access to the entrepreneurial arena has lower barriers of entry than the political arena even if entrepreneurship itself depends on political connections (Dickson 2008: 25). As a consequence, the total number of entrepreneurs is not necessarily small under such an institutional setting when people less competitive in rent-seeking are nonetheless pushed into the entrepreneurial sector.

# 8.2.2 Shortsighted Developing Strategies

Constitutional commitments or constraints are considered as means by which members of a polity can incorporate long-term considerations into current-period decisions (Brennan & Buchanan 1985: 81). Where such commitments or constraints are in short, individuals tend to discount future excessively as they are expecting too many uncertainties down the road. Living in this kind of institutional environment, entrepreneurs' time horizons are necessarily shortened, and they are rationally motivated to take myopic developing strategies. This seems to be what is happening in China.

In fact, the prevailing policy climate has changed multiple times albeit the ostensible

Email communication with Hailong Wang, Dean of the School of Foreign Studies (former secretary of the university committee of the Communist Youth League of China) at the Dali University.

Song Jiangming, who topped the local exam for public servants, was denied employment by the local government for sake of claimed health problems, which turned out to be a concocted result of blood test involving rampant corruptive behaviors.

tone during the reform era remains largely accommodating to private enterprises. As Professor Huang has elaborated in his most recent book (Huang 2008), while the direction of economic policy in the 1980s was progressively liberal and pro-private entrepreneurship, there was a great reversal during the following decade with an increasing emphasis on state-led investment drives. For the next 10 years under the "Hu-Wen Administration" (Hu-Wen tizhi), China has been increasingly sliding toward the path of state-guided capitalism, as Baumol et al. (2007) put it, characterized by a prevalent trend of "state advance and private retreat" (guojin mintui). 138 This is a time when state-owned firms willingly flex their muscles, thanks to the indulgently favorable regulatory and financial policies (The Economist 2011C), while private enterprises are relentlessly squeezed out as witnessed by the recent massive disappearance of private business owners in Wenzhou, one of the most entrepreneurial areas in modern China (Niu & Huang 2011). In addition, according to the private enterprise surveys, the tax burden of private firms rises consistently in the 21st century. In 2007, the sum of tax, fees and other levies on average accounts for 9.40% of the sales revenue of the sample firms, a 22% increase from 7.71% in 2001, and the burden is especially heavy for small and medium firms (Research Project Committee 2008). 139 This might as well be indicative of the policy orientation turning less and less friendly to the private sector.

The absence of rule of law has exposed Chinese entrepreneurs not only to the risk of high-profile policy shifts, but more frequently to unexpected high-handed exploits by the local officials. A good case in this point is the self-immolation of a female entrepreneur in Ningbo after the local officials forced demolition of her factory and taking of the premises which she had acquired just four years before. Apparently, the government action was driven by the local real estate boom which could have brought the government 40,000 RMB yuan (\$6,350) per square meter (10.76 square feet) had the entrepreneur's land been condemned (Huang 2010). Confronted with all these antagonistic possibilities, no wonder Chinese entrepreneurs would turn to a lot of shortsighted tactics, not the least of which are increasingly cautious reinvestments, and vast-scale emigration coupled with capital flight.

### 1) Increasingly Lower Rate of Reinvestment

Since 1999, the private enterprise surveys have recorded a steady trend among Chinese entrepreneurs of reducing the proportion of net profits used for reinvestment. Although the private enterprises in China rely heavily on profit reinvestment for financing, due to the difficulty in obtaining external finance, entrepreneurs seem to become more and more grudging to reinvest their profits in the past decade. In 1999, the average rate of reinvestment as of net profit was 67.9%, but this number dropped to

¹³⁸ For a good introduction to this trend in various industrial sectors, see Xie (2009).

The private enterprise survey is part of the research project on Chinese private enterprises. The latest survey was conducted in 2007, but the dataset of this survey is not available to public so far. What can be found is only a comprehensive report published by the research project committee.

63% in 1999, 59.3% in 2003, 47.5% in 2005, and then slightly rose to 50.1% in 2007 (Research Project Committee 2008). In other words, the reinvestment rate has declined by more than 26% during that 8-year period.

This drop may be accounted for by the rise in net profits of Chinese private firms. If so, it does not necessarily reflect Chinese entrepreneurs' unwillingness to reinvest profits. But the profit rise does not explain another interesting phenomenon regarding reinvestment by the private firms. The same period exhibits an upward tendency of the proportion of zero-reinvestment firms. Compared with 1999, the proportion of zero-reinvestment firms has risen by 91% (*id.*). In addition, the bivariate regression of the amount of reinvestment on that of the net profit shows that the explanatory power of the latter also drops consistently from 96.6% in 1999 to 30.8% in 2007 (*id.*), which means that Chinese entrepreneurs make their reinvestment decisions less and less dependent on the size of net profit.

Still another explanation for the drop in the reinvestment rate might be the increase in debt financing. However, this again does not seem to be consistent with what is indicated by the data. The average leverage ratio, calculated as the ratio of the amount of debt to the sum of equity and debt, actually fell from 31.5% in 1999 to 24.2% in 2005. This renders it unlikely that the loss in profit reinvestment was compensated by the additional use of credits. Taken as a whole, then, the average Chinese entrepreneur appears to be increasingly cautious in financing investment opportunities. This kind of caution can be well understood as a business strategy to cope with the high uncertainty accompanied with a weak institutional environment.

Another sign of Chinese entrepreneurs' reluctance to make long-term business commitment is the low and decreasing amount of investment in R&D. The private enterprise surveys show that in 2001 the ratio of R&D investment to sales revenue was averaged at 8.6%, but it plummeted to 3.8% in 2005. 141 The median of the R&D-to-sales ratio was 0 for all the three surveys, which means that at least half of the Chinese private enterprises do not invest in R&D at all. It is not easy to make an exact comparison of the R&D expenditure with other places of the world for lack of cross-country data on privately-owned enterprises. Some rough comparison may be possible nevertheless. For instance, according to Lee & O'Neill (2003), in 1995, the average R&D-to-sales ratio of 1,044 publicly traded U.S. firms was about 6%, with a median of 1%. In the same year, a sample of 270 Japanese publicly traded firms averaged an R&D-to-sales ratio of 6% as well while the median was about 5%. If we only look at the publicly traded firms covered in the 2006 survey which actually includes the most of such firms, the average R&D-to-sales ratio was merely 1% with the median again being 0. The declining share of R&D investment by Chinese private firms is also

¹⁴⁰ These were calculated from the data provided by the private enterprise surveys. As mentioned above, the data for 2008 survey is not available.

The R&D expenditure was included first in the 2002 survey, so there is no data available for 1999.

reflected in the survey conducted annually by ACFIC on large private enterprises. Among the surveyed enterprises, 30.06% have a R&D-to-sales ratio below 5% in 2004. This proportion rises to 43.68% in 2005, 46.51% in 2006, and 46.99% in 2007. On the other hand, the proportion of surveyed enterprises whose R&D-to-sales ratios are above 20% drops from 1.18% in 2004, to 0.93% in 2005, 0.69% in 2006 and 0.37% in 2007 (ACFIC 2004 – 2007).

It is more complicated to measure the innovativeness of the private enterprises in Some researchers have recorded a "patent explosion" in China since 2000 (Hu & Jefferson 2009), and others have identified the private enterprises as the major contributor to the surge in patent grants (Huang K.G. 2010). These should lead to some encouraging assessment about the innovativeness of Chinese private firms. On the other hand, existing evidence also points to the opposite direction, especially when the quality of Chinese innovations is considered. Huang (2008: 193) noted that, as of 2006, there is only 1 drug supplied by 1 indigenous Chinese firm on the World Health Organization (WHO)'s List of Pre-Qualified Medicines which signals the effectiveness of a drug and the reliability of the manufacturing process of the supplier although in 2006 China granted more than 7,500 patents pertaining to medical science and another 1,000 related to biochemistry, microbiology and genetics sciences (Huang K.G. 2010). At the same time period, there are 89 drugs supplied by at least 5 indigenous Indian firms on the list (Huang 2008: 193). As countries may have very different standards for patent issuance, the number of patents issued itself will be a poor measurement of innovativeness (Baumol et al. 2007). A more telling indicator is the number of triadic patent filings which refer to the patents filed, for the same invention by the same inventor or applicant, at all three world's leading patent offices, the U.S. Patent and Trademark Office (USPTO), the European Patent Office (EPO), and the Japan Patent Office (JPO). In 2008, there were only 473 triadic patent filings from China versus 14,399 from the U.S., 14,525 from Europe, and 13,446 from Japan (Guapta & Wang 2011). These data demonstrate the overall degree of innovativeness of the country though not necessarily fit the situation in the private sector. The great jump of the number of patents awarded to the private sector may be accounted for by the better incentives of private firms to claim property rights resulting from the clearer ownership structure of these firms (Hu & Jefferson 2009). or by the higher efficiency of private firms in R&D in spite of the relative small amount spent for this purpose. Neither of these accounts, however, needs to refute the proposition that the private entrepreneurs in China take shortsighted developing strategies in general.

Instead of reinvesting profits to advance productive entrepreneurship, Chinese entrepreneurs, in recent years, are more fascinated by investing in the stock and real estate markets where quick money gushes. Youngor, found in 1979, is a leading garment manufacturing company, and one of the first generation private enterprises

emerging in the reform era. In 2010, the once famous ready-to-wear maker earned 1.25 billion RMB yuan (\$198.5 million), or 47% of its net profit, from stock investment, and another 679.2 million yuan (\$107.8 million), or 25% of its net profit, from the real estate market. As for the 11 stocks Youngor invested in 2010 and still held at the end of year, their total year-end market value rose by 44.27% relative to the investment cost (Annual Report 2010A). Youngor is not alone among Chinese private manufacturing enterprises in accumulating huge wealth from stock or estate market. Fosun, or Fuxing, the pharmaceutical manufacturer supplying the only WHO pre-qualified Chinese medicine, earned 30% of its net profit, or 1.28 billion yuan (\$203.2 million), from the real estate market in 2010 (Annual Report 2010B).

Not only are those in the top 500 private enterprises list entertaining the giant returns from speculative investments, grass root entrepreneurs also shift their attention to stocks and real estates. Wenzhou is considered by many as the exemplary case of China's grass root entrepreneurship, but since 2000, it has also become famous for massive real estate speculations by local entrepreneurs. Now, "Wenzhou chao fang tuan" (real estate speculation group from Wenzhou) is even listed as a separate entry in Baidu Encyclopedia, the Chinese version of Wikipedia, which estimates that the total amount of capital invested by Wenzhou residents in real estates is up to 100 billion yuan (\$15.87 billion). One Wenzhou entrepreneur's lament reveals the harsh reality encountered by Chinese entrepreneurs. He runs a factory with more than 1,000 employees and earns less than 1 million yuan a year whereas his wife reaps above 30 million yuan from real estate speculation within 8 years (Zhao & Jiang 2011). In fact, real estates are not the sole target of speculation by Wenzhou entrepreneurs. Coal, diamond, Chinese herb medicine, and even garlic have been speculated in by these entrepreneurs in the past decade. Wu Xiaobo, a famous financial columnist, acutely noted that Chinese entrepreneurs' aspiration for industrial investment was cooling down, and attributed this unfortunate fact to the unfavorable policy environment, represented by "State Advance and Private Retreat", for investing in the real economy (Wu 2010).

#### 2) Emigration and Capital Flight

China is experiencing its third wave of emigration since the beginning of the "reform and open-up" era. The Report on Global Politics and Security published by the Chinese Academy of Social Sciences in 2007 estimated that China was becoming the largest origin country of emigrants. In 2009, 25,000 Chinese citizens emigrated to Canada, 65,000 to the U.S. and 16,000 to Australia (Pan *et al.* 2010).

The uniqueness of this wave, however, is the massive leaving of business and technology elites. It is said that in the fiscal year from October 2008 to September 2009, 70% of the newly issued EB-5 visa, the U.S. investment immigration visa, were obtained by Chinese, while the number of Chinese applicants for EB-5 visa was also doubled in 2009 compared to the previous year (*id.*). From 2006 to 2010, the compound annual

growth rate of Chinese investment immigrants to the U.S. is 73% (China Merchant Bank & Bain & Company 2011). One study shows that the emigration avidity is especially salient among the high-net-worth population, whose value of investable assets exceeds 10 million yuan (\$1.6 million). As of 2010, approximately 60% of Chinese high-net-worth individuals have completed the emigration process or are considering emigration. particular, of those entrepreneurs whose value of investable assets exceeds 100 million yuan (\$15.9 million), 27% have become investment immigrants to foreign countries, and another 47% are considering investment immigration (id.). These numbers merely reflect the emigration fever of those who have been entrepreneurs already. If we believe that technology elites are more likely to start up their own businesses than the general public, then China's loss of talent with high entrepreneurial potentials might be even more striking. Since 1978, there have been 1.06 million Chinese students studying abroad, but, notwithstanding the government's effort to attract overseas Chinese students back, 785,000, or 74%, of them, chose to stay abroad, amounting to 30 times the number of undergraduate students at two most prestigious Chinese universities, Peking University and Tsinghua University, combined (Pan et al. 2010).

When rich people leave, they leave with money. China cannot afford to neglect the capital flight accompanying this emigration wave. The year of 2009 alone saw at least 2.35 billion yuan (\$373 million) capital flight to Canada (id.). The compound annual growth rate of overseas investment by Chinese individuals from 2008 to 2010 is said to be 100% (China Merchant Bank & Bain & Company 2011). The data provided by the private enterprise surveys seem consistent with the tendency for Chinese entrepreneurs to increase overseas investment. Among the respondents to the question whether you have invested overseas, the proportion of "yes" answers was only 8% in 1999, but rose significantly to 57% in 2001 and 66% in 2003. Though this proportion declined again to 57% in 2005, it seems safe to conclude that, in the 21st century, probably the majority of the surveyed Chinese entrepreneurs have invested overseas. 142 The average amount of investment by those who answered "yes", though with fluctuations, also demonstrates an upward tendency, rising from 1.04 million yuan (\$165,000) in 2001 to 1.40 million yuan (\$222,000) in 2007, a 35% increase (Research Project Committee 2008). 143 advisable to note, as mentioned above, that the surge of overseas investment happens against a backdrop of overall decline in investment avidity among Chinese entrepreneurs.

According to one influential report, when asked about the reason for emigration, the Chinese new rich raised security of property as the most important (Pan *et al.* 2010). Among the high-net-worth people, 43% listed seeking protection for private property as the reason for emigration to foreign countries, second only to facilitating children's education which was chosen by 58% of the respondents, contrasting with the 16% who

¹⁴² The data for 2007 is not available.

The amount of overseas investment was asked first in the 2002 survey, reflecting the situation in 2001.

selected facilitating overseas investment as a reason (China Merchant Bank & Bain & Company 2011). Apparently, the rich people leave China not so much fascinated by the investment opportunities abroad, but care more about security in the long-run. As Professor Zheng Yongnian of the National University of Singapore has observed, the hollow promises made in the PRC Constitution leaves entrepreneurs' grievances unaddressed. Once getting rich, they easily become the preys of those in power. Alternatively, entrepreneurs have to seek asylum from the politically powerful by paying protection fees. This type of marriage between power and money has agitated widespread hatred of the rich among ordinary Chinese people, and attaches a string of future purge to entrepreneurs when the power structure is reshuffled. Both fear of the expropriation and of the hatred contribute to entrepreneurs' feeling of uncertainty and pushes them to "vote with their feet" (Zheng 2010).

#### 8.2.3 Summary

The story of Chinese entrepreneurship is one in an institutional environment without credible constitutional commitment to secure property rights and the rule of law. It is not surprising that rent-seeking easily finds a hotbed in such an environment. China is a deeply rent-seeking trodden country. Professor Huang Yasheng noted the violent clash between the police and thousands of traders in Guangdong in March 2006, and made the following comments. "In China, the repression of the small entrepreneurial traders was not motivated to eliminate them but rather to extract rent from them (Huang 2008: 234)." This probably is a close depiction of the institutional backdrop faced by Chinese entrepreneurs. Rent-seeking itself becomes a part of entrepreneurship in China. To prosper, or even to survive, entrepreneurs often have to buy favors from government agents whose behaviors are rarely under the surveillance of law.

Some scholars interpret the dual efforts of Chinese entrepreneurs to seek business opportunities and political patronage as "double entrepreneurship" which innovates at both the economic and the institutional sense (Yang 2007). This, however, seems to fail to distinguish the result of pursuing volatile, particularistic political favor from that of pushing for anchored, universal institutional change. Chinese entrepreneurs are found to prefer contacting individual cadres to going through formal institutional channels to express their grievance, and prefer to rely on their own efforts, rather than collective actions, to solve problems (Tsai 2007). Oftentimes, the so-called institutional innovations are just collusions between entrepreneurs and corruptive officials to exploit loopholes of the formal law, and leave behind landmines backfiring when the honeymoon between the entrepreneur and the political agent ends. In fact, some researches have already expressed pessimism about entrepreneurs' role in changing political institutions (Dickson 2003). With respect to the changes in economic institutions, even the

¹⁴⁴ A representative case in this point is the predicament of Yang Rong, the once third wealthiest businessperson in China on Forbes fortune list, which was detailed in Tsai (2007).

seemingly most spontaneous breakthrough of the "household responsibility system" (HRS) was pointed out as a result of deep involvement by the central authorities in terms of its institutionalization (Cai & Treisman 2006).

Given the little constitutional constraint on the government and the officials, it is not unexpected at all to see the connection between political clout and advantageous position in economic activities. It has already been noted that the families of high ranking officials is the single most important origin of millionaires in China. They have nurtured 90% of these super-wealthy (Dickson 2008). Yet the connection is not limited to the high-profile political elites only. The national surveys on private enterprises show that the inequality does exist between entrepreneurs with and without prior cadre experience in opportunities to obtain bank loans, redress grievances through courts, and to enter certain industries relying heavily on state-owned resources. Over years, as the ideological and political costs to become private business owners get lower, the union of political and business elites is probably strengthened further. Should the financial, regulatory, or even legal favors be auctioned openly, their distribution would not be so biased. Whoever bids the highest receives these favors. But since the purchase of favors is officially illegal, it has to be covered and completed by means of corruption. This may give the politically connected a special advantage. They have better knowledge of the targets and methods of seeking favors. They also have more channels to approach their targets. The politically connected are not new to the corruptive scheme and more familiar with the "latent rules" directing the covert rent-seeking process, so, from the perspective of government officials, favoring these patrons involves lower risk of exposure or betrayal. On top of all these advantages, privileging the entrepreneurs with political connections also help government officials solidify the relationship with their equally or more powerful colleagues, thus expanding and stabilizing their network of power.

Neither is it surprising to find entrepreneurs shortening their time horizons in a country without trustworthy commitments in the Constitution to safeguard property and enforce the rule of law. Entrepreneurs are more interested in quick money from speculations than time-consuming investments in promoting productivity since they are afraid of the unpredictable policy change or officials' capricious behaviors in future. Once they have accumulated wealth, they will start to consider and implement exodus plans, moving their wealth, together with their bodies, to somewhere capable of providing trustworthy commitments. If the theory of directional liberalism helps explain the take-off of Chinese entrepreneurship in the 1980s (Huang 2008), its effect has been waning over time. The security of proprietors is no longer sufficient to motivate sustained investment by private entrepreneurs, and without the follow-up of the security of property, the direction of liberalism becomes murky. Thus, the aspiration for productive entrepreneurship cools down, and talent exits with capital.

In a society gravely afflicted with rent-seeking like China, the ability to seek rents becomes a separate and indispensable input, in addition to the entrepreneurial ability, in the production function of entrepreneurship. This additional input, however, does not inevitably reduce the number of entrepreneurs. If there are more demanding requirements for the rent-seeking ability to enter the rent-seeking sector, people relatively talented in entrepreneurship will nevertheless be pushed into the entrepreneurial sector, not because this is where they can reap the highest return, but because the gate to the Moreover, compared with the more profitable rent-seeking sector is closed. entrepreneurial ability, the rent-seeking ability seems to depend more on factors beyond the reach of personal efforts such as family origin. ¹⁴⁵ As far as entrepreneurship is concerned, what really matters in a rent-seeking society, therefore, is the mismatch of talent and the resources needed for high quality entrepreneurial endeavors, as well as the exit of able people when they get a chance to leave. The mismatch happens because the access to resources is determined by the rent-seeking ability which can be distributed independently from the entrepreneurial ability. As the extent of rent-seeking deepens, the rent-seeking ability plays an increasing crucial part in the entrepreneur's production function, and the mismatch may also become a greater issue.

The private enterprise surveys tell us that, with all the favors that the former cadres are enjoying, they are running much larger entrepreneurs than non-cadres on average, in terms of the amount of assets (by 887 million yuan, or \$141 million), size of sales revenue (by 1.9 billion yuan, or \$302 million), and number of employees (by 51 persons). These differences show that the better politically connected entrepreneurs are controlling much bigger size of capital and wealth as a group. However, when it comes to the rate of return, either on assets or on equity, this difference disappears immediately. This is quite surprising considering the favorable treatments that the former cadre group has received. A reasonable conjecture is that those politically connected are in fact worse talented in entrepreneurship in the sense of increasing the value of assets, and it is their rent-seeking abilities that have somehow compensated this deficiency. But the implication is that for the politically underprivileged, their entrepreneurial talent is probably muffled even though they are actually the more talented entrepreneurs.

In passing, it behooves me to say that I do not attempt to overemphasize the causality between the rent-seeking nature of Chinese constitutional environment and the pattern of entrepreneurship in China. The statistical models are not strictly causal, either. However, the observed inequality in opportunities and the shortsightedness of Chinese entrepreneurs are consistent with our expectations about a country without secure

¹⁴⁵ The significance of family origin in entering the rent-seeking sector is arrestingly illustrated in Dr. Junqi Feng's research into a standard county in Henan province where the majority of cadres come from a handful of elite families (Feng 2011).

¹⁴⁶ All these differences are significant at 1% level.

property rights and the rule of law. Unless future research identifies confounders standing in the way of the causal relationship, I would like to present it as my best guess that the constitutional environment has shaped the form of entrepreneurial development in China.

# **Chapter 9 Conclusion**

The empirical study first shows that the quantity of entrepreneurs is inversely correlated with the quality of entrepreneurship in a country. If entrepreneurship does serve as the engine of economic growth, perhaps it is the quality, rather than quantity, that matters.

While Baumol (1990) and Murphy *et al.* (1991) are right in claiming that attractive rewards for rent-seeking tend to induce talent away from entrepreneurship, they might be neglecting the possibility that the barriers to enter the rent-seeking sector will be heightened as rent-seeking turns more rewarding. In such a case, talents will nevertheless be led to entrepreneurship as a second best option. As a result, we do not need to see a decline in number of entrepreneurs in countries with a constitutional environment favoring rent-seeking. What suffers is the quality of entrepreneurship. With the decline of quality, the entrepreneurial sector is demanding less labor, lowering the wage level, which may even further expand the size of the self-employed population. Consistent with the arguments developed in Murphy *et al.* (1991), when only the second or third class talent is left in the entrepreneurial sector, growth of the economy will be retarded.

Theoretically, a constitutional environment favoring rent-seeking is expected to bring negative effects on entrepreneurship, and this empirical study demonstrates that some of the considered constitutional features are more relevant. De facto property rights protection is associated negatively with the quantity of entrepreneurs, but positively with the quality of entrepreneurship. These associations seem to confirm the benefits that secure property rights may have on a growth-consistent pattern of entrepreneurship. The effects of the two key factors of the selectorate theory, the size of the winning coalition and the ratio of this size to the size of the selectorate also appear to be compatible with what the selectorate theory is to predict. On the other hand, de facto federalism, either in terms of fiscal decentralization or political decentralization, is not found to be correlated with entrepreneurial performance.

In terms of de jure constitutional environment, probably two of the formal constitutional features influence entrepreneurship with statistical significance. First, the constitutional design of judicial independence has a negative effect on the quantity of entrepreneurs, but a positive one on the quality of their performance. Second, majoritarian electoral rules, compared with non-majoritarian rules, have a negative effect on the quality of entrepreneurship. Thus, judicial independence promotes the growth-consistent entrepreneurship while majoritarian rules, maybe to some less extent, obstruct this type of entrepreneurship. In contrast, the presumed effects on entrepreneurship of the other three formal constitutional attributes, federalism, presidentialism and property rights protection, fail to be ascertained robustly.

Whereas the empirical study confirms certain effects of the constitutional environment on entrepreneurial development, the exact mechanism of these effects are not necessarily clear. In particular, the impact of the electoral rules is special in that they seem to affect only the quality, but not the quantity, of entrepreneurship. I suggest that equality in opportunities can be conducive to high-quality entrepreneurial development since it enables a better match between entrepreneurial talent and resources complementary to such talent in promoting entrepreneurship. The constitutional design of judicial independence appears to converge with its implementation in practice, perhaps thanks mainly to its procedure-oriented structure and less fact-intensive nature. Nevertheless, some important questions are yet to be answered such as to what extent de jure judicial independence promotes the security of property rights, or whether there are bridges other than the protection of property rights that connect judicial independence with entrepreneurial performance. The failure to identify the effect of federalism may also be surprising. Probably, better measurement of federalism is needed before we can reach more confident conclusions about its influence on entrepreneurship. Finally, the irrelevance of the constitutional design of property rights protection, in contrast to the relevance of that of judicial independence, calls for careful exploration of the factors that determine the potential divergence or convergence between the formal legal rules and the implementation of these rules. At the current stage, I would submit that the specificity of rules might contribute to the compatibility of the law in books and law in action.

Entrepreneurship in China is a case of entrepreneurial development in an authoritarian state lack of secure property rights or the rule of law, hence afflicted with profuse rent-seeking activities. Under these circumstances, entrepreneurship is likely to depend on both the rent-seeking and the entrepreneurial abilities. This may call into question another assumption underlying the theory proposed by Baumol (1990) and Murphy *et al.* (1991): people's talent is interchangeable between rent-seeking and entrepreneurship, but not tied to certain types of activities. This assumption seems implausible. The ability to create new products or apply new processes of production will not earn you a family origin that has good connections to those who hold power.

In short of credible constitutional commitments, the politically connected embark on an orgy of wielding their political clout to acquire resources for business development which are hardly available to grass root entrepreneurs. Little wonder that the political elites are systematically advantaged in terms of bank finance, entry to regulated industries, and judicial treatment, when they plunge into the business sector. In China, the inequality in opportunity has resulted in serious mismatch between entrepreneurial talent and valuable business resources. Those who are not well connected politically have to run smaller businesses, notwithstanding their ability in entrepreneurship. Although crony capitalism is not unique to China or other authoritarian states, lack of effective judicial constraint on governmental actions aggravates its symptoms to an extent

unparalleled in democracies under the rule of law. An independent judiciary can put the political favoritism in check, or, at least, raises the cost of official's prejudiced treatment of private business owners, as evinced by the case of Creekstone Farms Premium Beef, L.L.C. v. Department of Agriculture.¹⁴⁷

When entrepreneurs feel uncertain about the policy change by the government, fear of exploitation by officials, or the risk of being jailed, they will be eager to scoop profits as soon as possible and exit swiftly with accumulated wealth. Speculations are hence preferred to toil in real economy, and reinvestment in business expansion becomes increasingly lackluster. Above all, it is their stinginess with R&D expenditures that best illustrates the shortsightedness of Chinese entrepreneurs struggling with insecure property rights and unreliable legal system. When one is interested narrowly in today's money, why should he or she ever bother to invest for the sake of tomorrow's productivity?

The "China model", or "Beijing consensus", has been attracting more and more eyeballs as the Chinese economy surges to the second largest in the world, with even brighter prospect of overlooking all other economies very soon. While some, like the Yale economist Chen Zhiwu, explicitly denies the existence of such a model (Chen 2008), I would say it may still be too early to tell what the model is and, more importantly, whether it is worth replicating. In the midst of all the pros and cons of the state capitalism represented by China (The Economist 2012), its detrimental impact on entrepreneurship is stark and incontestable. When the Leviathan starts to flex its muscle in the business world, it eats up the capital, talent and other resources needed for private start-ups. It easily monopolizes the most profitable industrial sectors and arrogantly expels private entrepreneurs. State capitalism finds its best soil in China's institutional setting where credible constitutional check on political power is in blank. ever-looming shadow of the party-state in economy seems natural in such a constitutional When the state was constrained in capital, it had to resort to the innovative and efficient private sector for revenue generation. After it gains enough fiscal strength, a constitutionally unconstrained state reclaims its economic territory without much trouble. State capitalism allows the powerful political cliques to take direct control of the economic resources without bothering to share rents with business elites. Needless to say, corruption turns easier and more lucrative. The evolution of China's policy toward entrepreneurship, from progressively liberal in the 1980s, to increasing emphasis on state-led investment drives in the 1990s, and finally to an outright embrace of state capitalism, has its root in China's political structure featuring absence of constitutional constraints.

In his masterpiece published almost one and a half century ago, Henry Sumner Maine, an eminent British legal historian, stated that "the movement of the progressive societies has hitherto been a movement *from Status to Contract*" (Maine 1861). The

¹⁴⁷ 07-5173, U.S. Court of Appeals, District of Columbia Circuit, Aug. 29th, 2008.

current Chinese society, unfortunately, is witnessing an exact countermovement from contract back to status. Entrepreneurship is no exception to this regrettable trend. Anyone who attempts to copy the China model should be fully aware of the pattern of entrepreneurship it accompanies: unequal opportunities coupled with myopic developing strategies. The social retrogression from contract to status breeds tremendous inequality more generally, both in opportunity and outcome. According to Professor Wang Xiaolu of the Chinese Academy of Social Sciences, in 2008, the per capita income of the wealthiest 10% households was 65 times that of the poorest ones in China (Wang X. 2010: 15). As a rough comparison, the U.S. Census Bureau shows that, in the same year, the top 5% American households earned an average income approximately 25.3 times as much as the lowest 20% did. If that number has been big enough to pull out tens of thousands of Americans to the streets, why shouldn't we believe the anger accumulated behind the scene of "imposed harmony" (bei hexie) will eventually push for a fundamental change of institutions in China?

A healthy development of entrepreneurship should be sustainable rather than aiming merely at quick money and instant success. It should let all talented people to reach their full potentials rather than keep the politically disconnected away from resources needed to make the best use of their potentials. Above all, it wants a constitutional environment with reliable property rights and equal access to opportunities, neither of which is seen in today's China.

#### References

Acemoglu, Daron (1995). Reward Structures and the Allocation of Talent, *European Economic Review*, 39, 17-33.

Acemoglu, Daron (2005). Constitutions, Politics, and Economics: A Review Essay on Persson and Tabellini's *The Economic Effects of Constitutions*, *Journal of Economic Literature*, 43, 1025-1048.

Acemoglu, Daron & Simon Johnson (2005). Unbundling Institutions, *Journal of Political Economy*, 113, 949-995.

Acemoglu, Daron, Simon Johnson, & James A. Robinson (2005). Institutions as a Fundamental Cause of Long-run Growth, in Philippe Aghion & Steven N. Durlauf (eds.), *Handbook of Economic Growth* (Elsevier).

Acemoglu, Daron, Simon Johnson, James A. Robinson & Pierre Yared (2008). Income and Democracy, *American Economic Review*, 98, 808-842.

Acemoglu, Daron & Thierry Verdier (1998). Property Rights, Corruption and the Allocation of Talent: A General Equilibrium Approach, *Economic Journal*, 108, 1381-1403.

Acemoglu, Daron, Fabrizio Zilibotti & Philippe Aghion (2006). Distance to Frontier, Selection, and Economic Growth, *Journal of European Economic Association*, 4, 37-74.

ACFIC (2004 – 2007). ACFIC Research Report on Large Scale Private Enterprises, 2004 – 2007.

Angrist, Joshua D. & Alan B. Krueger (1999). Empirical Strategies in Labor Economics, in Orley C. Ashenfelter & David Card (eds.), *Handbook of Labor Economics*, vol. 3 (Elsevier).

Angrist, Joshua D. & Guido Kuersteiner (2004). Semiparametric Causality Tests Using the Policy Propensity Score, Working Paper No. 10975, National Bureau of Economic Research.

Angrist, Joshua D. & Jorn-Steffen Pischke (2009). *Mostly Harmless Econometrics:* An Empiricist's Companion (Princeton University Press).

Annual Report (2010A). Annual Report of the Youngor Group Ltd. [SSE 600177] of 2010, available at <a href="http://www.sse.com.cn/sseportal/cs/zhs/scfw/gg/ssgs/2011-04-19/600177_2010_n.pdf">http://www.sse.com.cn/sseportal/cs/zhs/scfw/gg/ssgs/2011-04-19/600177_2010_n.pdf</a>, last accessed: Jan. 18th, 2012.

Annual Report (2010B). Annual Report of Fosun [00656.HK] of 2010, available at <a href="http://media.corporate-ir.net/media_files/irol/19/194273/20110411/Annual%20Report_c.">http://media.corporate-ir.net/media_files/irol/19/194273/20110411/Annual%20Report_c.</a>
<a href="PDF">PDF</a>, last accessed: Jan. 18th, 2012.

Ashenfelter, Orley & Stepan Jurajda (2009). Cross-country Comparison of Wage Rates: The McWage Index, unpublished manuscript, available at <a href="http://www.eale.nl/Conference2010/Programme/PaperscontributedsessionsA/add128510">http://www.eale.nl/Conference2010/Programme/PaperscontributedsessionsA/add128510</a>

## mO6yRNlfCm.pdf.

Audretsch, David B. & Roy Thurik (2001). Linking Entrepreneurship to Growth, OECD Science, Technology and Industry Working Papers 2001/02.

Austen-Smith, David (2000). Redistributing Income under Proportional Representation, *Journal of Political Economy*, 108, 1234-1269.

Barro, Robert J. (1991). Economic Growth in a Cross Section of Countries, *Quarterly Journal of Economics*, 106, 407-443.

Baumol, William J. (1990). Entrepreneurship: Productive, Unproductive, and Destructive, *Journal of Political Economy*, 98, 893-921.

Baumol, William J., Robert E. Litan & Carl J. Schramm (2007). *Good Capitalism, Bad Capitalism, and the Economics of Growth and Prosperity* (Yale University Press).

Beck, Thorsten, George Clarke, Alberto Groff, Philip Keefer, & Patrick Walsh (2001). New Tools in Comparative Political Economy: The Database of Political Institutions, *World Bank Economic Review*, 15, 165-176.

Beck, Thorsten, Asli Demirguc-Kunt, & Rose Levine (2003). Law and Finance: Why Does Legal Origin Matter?, *Journal of Comparative Economics*, 31, 653-675.

Beck, Thorsten, Asli Demirguc-Kunt, & Vojislav Maksimovic (2004). Bank Competition and Access to Finance: International Evidence, *Journal of Money, Credit and Banking*, 36, 627-648.

Bednar, Jenna (2008). *The Robust Federation: Principles of Design* (Cambridge University Press).

Besley, Timothy (1995). Property Rights and Investment Incentives: Theory and Evidence from Ghana, *Journal of Political Economy*, 103, 903-937.

Bjornskov, Christian & Nicolai J. Foss (2008). Economic Freedom and Entrepreneurial Activity: Some Cross-Country Evidence, *Public Choice*, 134, 307-328.

Blanchflower, D. G. (2000). Self-employment in OECD Countries, *Labor Economics*, 7, 471-505.

Blaug, Mark (2000). Entrepreneurship Before and After Schumpeter, in Richard Swedberg (ed.), *Entrepreneurship: The Social Science View* (Oxford University Press).

Blume, Lorenz, Jens Müller, Stefan Voigt & Carsten Wolf (2009). The Economic Effects of Constitutions: Replicating – and Extending – Persson and Tabellini, *Public Choice*, 139, 197-225.

Borjas, George J. & Stephen G. Bronars (1989). Consumer Discrimination and Self-Employment, *Journal of Political Economy*, 97, 581-605.

Brennan, Geoffrey & James M. Buchanan (1985). *The Reason of Rules: Constitutional Political Economy* (Cambridge University Press).

Brennan, Geoffrey & Jose Casas Pardo (1991). A Reading of the Spanish Constitution (1978), *Constitutional Political Economy*, 2, 53-79.

Brown, Ronald (2008). China Labour Dispute Resolution, in Developments in

Dispute Resolution in China (The Foundation for Law, Justice and Society), available at: <a href="http://www.fljs.org/uploads/documents/Brown%231%23.pdf">http://www.fljs.org/uploads/documents/Brown%231%23.pdf</a>, last accessed: Dec. 28th, 2011.

Buchanan, James M. (1995). Federalism as an Ideal Political Order and an Objective for Constitutional Reform, *Publius: The Journal of Federalism*, 25, 19-28.

Bueno de Mesquita, Bruce, Alastair Smith, Randolph M. Siverson, & James D. Morrow (2003). *The Logic of Political Survival* (MIT Press).

Bygrave, William D. & Charles W. Hofer (1991). Theorizing About Entrepreneurship, *Entrepreneurship: Theory and Practice*, Vol. 16 Issue 2, 13-22.

Cai, Dingjian (2004). Renda Ge'an Jiandu De Jiben Qingkuang [The Basic Situations of the Individual-Case-Supervision by the People's Congresses], *Renda Yanjiu* [Studies on People's Congresses], 147, 4-7.

Cai, Hongbin & Daniel Treisman (2006). Did Government Decentralization Cause China's Economic Miracle?, *World Politics*, 58, 505-535.

CCTV (China Central Television) (2011A). Xinwen Lianbo [Evening News], broadcast on June 8, 2011.

---- (2011B). Shanxi Changzhi Gongwuyuan "Tijian Fengbo" Diaocha Jieguo Gongbu; Song Jiangming Zuizhong Bei Luyong; 6 Ren Zao Chufen [Investigation Results Publicized Regarding the "Health Test Scandal"; Song Jiangming Employed Eventually; Six People Disciplined], CCTV net broadcast on Nov. 20th, 2011, available at <a href="http://news.cntv.cn/china/20111120/106686.shtml">http://news.cntv.cn/china/20111120/106686.shtml</a>, last accessed: Jan. 23rd, 2012.

Cheibub, Jose Antonio (2007). *Presidentialism, Parliamentarism, and Democracy* (Cambridge University Press).

Chen, Fuyong (2010). Weijing De Zhuanxing: Zhongguo Zhongcai Jigou Xianzhuang Yu Fazhan Qushi Shizheng Yanjiu [The Unfinished Transformation: An Empirical Study of the Current Status and Future Trends of China's Arbitration Institutions] (Law Press, China).

Chen, Jie & Yang Zhong (2002). Why Do People Vote in Semicompetitive Elections in China?, *Journal of Politics*, 64, 178-197.

Chen, Youxi (2011). Falü Yingdang Shi Suoyouren De Dangjianpai [Law Should Be a Shield for Everyone], in *Nanfang Zhoumo* [Southern China Weekly], Mar. 17th, 2011.

Chen, Zhiwu (2008). Meiyou Zhongguo Moshi Zhehuishi! [China Model Never Exists!] (Baqi Wenhua Press).

China Merchants Bank & Bain & Company (2011). 2011 Zhongguo Siren Caifu Baogao [Report on Chinese Private Wealth, 2011].

Clark William Roberts, Matt Golder, & Sona Nadenichek Golder (2009). *Principles of Comparative Politics* (CQ Press).

Clarke, Donald, Peter Murrell & Susan Whiting (2008). The Role of Law in China's Economic Development, in Loren Brandt & Thomas G. Rawski (eds.), *China's* 

Great Economic Transformation (Cambridge University Press).

Clarke, Kevin A., & Randall W. Stone (2008). Democracy and the Logic of Political Survival, *American Political Science Review*, 102, 387-392.

Cohen, Jerome A. (2005). Time to Fix China's Arbitration, *Far Eastern Economic Review*, Jan/Feb., 31-37.

Cooter, Robert D. (2000). The Strategic Constitution (Princeton University Press).

Cooter, Robert D. & Hans-Bernd Schäfer (forthcoming). Solomon's Knot: How Law Can End the Poverty of Nations (Princeton University Press).

Cooter, Robert D. & Thomas S. Ulen (2007). *Law and Economics* (5th ed. Pearson, Addison-Wesley).

Cross, Frank B. (1999). The Relevance of Law in Human Rights Protection, *International Review of Law and Economics*, 19, 87-98.

Dickson, Bruce J. (2003). Red Capitalists in China: The Party, Private Entrepreneurs, and Prospects for Political Change (Cambridge University Press).

---- (2008). Wealth into Power: The Communist Party's Embrace of China's Private Sector (Cambridge University Press).

Elkins, Zachary, Tom Ginsburg, & James Melton (2009). *The Endurance of National Constitutions* (Cambridge University Press).

Ellickson, Robert C. (1993). Property in Land, Yale Law Journal, 102, 1315-1400.

---- (1994). Order Without Law: How Neighbors Settle Disputes (Harvard University Press).

Evans, David S. & Linda S. Leighton (1989). Some Empirical Aspects of Entrepreneurship, *American Economic Review*, 79, 519-535.

Farber, Daniel A. (2002). Rights as Signals, Journal of Legal Studies, 31, 83-98.

Feld, Lars P. & Stefan Voigt (2003). Economic Growth and Judicial Independence: Cross-Country Evidence Using a New Set of Indicators, 19 *European Journal of Political Economy* 497-527.

Feng, Junqi (2011). Zhongxian "Zhengzhi Jiazu" Xianxiang Diaocha [A Study on the Phenomenon of "Politicial Families" in the Middle County], in *Nanfang Zhoumo* [Southern China Weekly], Sept. 1st, 2011.

Finer, S.E. (1979). Five Constitutions (Humanities Press).

Fu, Hualing (2006). When Lawyers Are Prosecuted ... The Struggle of a Profession in Transition, available at: <a href="http://papers.ssrn.com/sol3/papers.cfm?abstract_id=956500">http://papers.ssrn.com/sol3/papers.cfm?abstract_id=956500</a>, last accessed: Dec. 28th, 2011.

Fu, Hualing & Richard Cullen (2011). From Mediatory to Adjudicatory Justice: The Limits of Civil Justice Reform in China, in Margaret Y. K. Woo & Mary E. Gallagher (eds.) *Chinese Justice: Civil Dispute Resolution in Contemporary China* (Cambridge University Press).

Fu, Yulin & Randall Peerenboom (2010). A New Analytic Framework for

Understanding and Promoting Judicial Independence in China, in Randall Peerenboom (ed.) *Judicial Independence in China: Lessons for Global Rule of Law Promotion* (Cambridge University Press).

Garnaut, Ross, Ligang Song, Stoyan Tenev & Yang Yao (2005). *China's Ownership Transformation: Process, Outcomes, Prospects* (The World Bank).

GEM (2008). Global Report, Global Entrepreneurship Monitor, available at: http://www.gemconsortium.org/download/1258059815796/GEM Global 08.pdf.

Gechlik, Mei Ying (2005). Judicial Reform in China: Lessons from Shanghai, *Journal of Asian Law*, 19, 97-137.

Gennaioli, Nicola & Andrei Shleifer (2008). Judicial Fact Discretion, *Journal of Legal Studies*, 37, 1-35.

Ginsburg, Tom (2003). *Judicial Review in New Democracies: Constitutional Courts in Asian Cases* (Cambridge University Press).

Guiso, Luigi, Paola Sapienza & Luigi Zingales (2006). Does Culture Affect Economic Outcomes, *Journal of Economic Perspectives*, 20, 23-48.

Gujarati, Damodar N. & Dawn C. Porter (2009). *Basic Econometrics* (5th ed.) (McGraw-Hill).

Gupta, Anil K. & Haiyan Wang (2011). Chinese Innovation Is a Paper Tiger, Wall Street Journal, July 28th, 2011, available at: <a href="http://online.wsj.com/article/SB10001424053111904800304576472034085730262.html">http://online.wsj.com/article/SB10001424053111904800304576472034085730262.html</a>, last accessed: Aug. 11th, 2011.

Haggard Stephan & Yasheng Huang (2008). The Political Economy of Private-Sector Development in China, in Loren Brandt & Thomas G. Rawski (eds.), *China's Great Economic Transformation* (Cambridge University Press).

Haley, John O. (2007). The Japanese Judiciary: Maintaining Integrity, Autonomy, and the Public Trust, in Daniel H. Foote (ed.), *Law in Japan: A Turning Point* (University of Washington Press).

Hall, Robert E., & Charles I. Jones (1999). Why Do Some Countries Produce So Much More Output Per Worker Than Others, *Quarterly Journal of Economics*, 114, 83-116.

Hallerberg, Mark (2004). Domestic Budgets in a United Europe: Fiscal Governance from the End of Bretton Woods to EMU (Cornell University Press).

Haltiwanger, J. (2006). Entrepreneurship and Job in Growth, in D. B. Audretsch, R. Strom and Z. Acs (eds.), *Entrepreneurship, Growth and Public Policy* (Cambridge University Press).

Harwood, Edwin (1982). The Sociology of Entrepreneurship, in Calvin A. Kent, Donald L. Sexton, and Karl H. Vesper (eds.), *Encyclopedia of Entrepreneurship* (Prentice-Hall).

Henrekson, Magnus (2005). Entrepreneurship: A Weak Link in the Welfare State,

14 (3) *Industrial and Corporate Change* 437-467.

Hipple, Steven F. (2010). Self-employment in the United States, *Monthly Labor Review*, September 2010, 17-32, at http://www.bls.gov/opub/mlr/2010/09/art2full.pdf.

Hofstede, Geert, Niels G. Noorderhaven, A. Roy Thurik, Lorraine M. Uhlaner, Alexander R.M. Wennekers & Ralph E. Wildeman (2004). Culture's Role in Entrepreneurship: Self-Employment out of Dissatisfaction, *in* Terrence E. Brown & Jan Ulijn eds., *Innovation, Entrepreneurship and Culture*, 162-203 (Edward Elgar).

Holmes, Thomas J. & James A. Schmitz Jr. (2001). A Gain From Trade: From Unproductive to Productive Entrepreneurship, *Journal of Monetary Economics*, 47, 417-446.

Hu, Albert Guangzhou & Gary H. Jefferson (2009). A Great Wall of Patents: What is Behind China's Recent Patent Explosion, *Journal of Development Economics*, 90, 57-68.

Hu, Jinguang & Wang, Conghu (2000). Lun Woguo Xianfa Jieshi De Shijian [On the Practice of the Constitutional Interpretation in China], 76 Fashang Yanjiu [Studies in Law and Business] 3-7.

Huang, Kejie (2010). Ningbo Nü Qiyejia Zifen Kang Chaiwei [Female Entrepreneur in Ningbo Self-immolate to Defy Forced Demolition], in *Liaowang Dongfang Zhoukan* [*Oriental Outlook*], Nov. 23rd, 2010, available at <a href="http://www.lwdf.cn/wwwroot/dfzk/society/249797.shtml">http://www.lwdf.cn/wwwroot/dfzk/society/249797.shtml</a>, last accessed: Jan. 13th, 2012.

Huang, Kenneth G. (2010). China's Innovation Landscape, Science, 329, 632-633.

Huang, Yasheng (1996). Inflation and Investment Controls in China: The Political Economy of Central-Local Relations During the Reform Era (Cambridge University Press).

- ---- (2003). Selling China: Foreign Direct Investment During the Reform Era (Cambridge University Press).
- ---- (2008). Capitalism with Chinese Characteristics: Entrepreneurship and the State (Cambridge University Press).

Huber, Evelyne, Charles Ragin & John D. Stephens (1993). Social Democracy, Christian Democracy, Constitutional Structure, and the Welfare State, *American Journal of Sociology*, 99, 711-749.

Inman, Robert P. & Daniel L. Rubinfeld (1997). Rethinking Federalism, *Journal of Economic Perspectives*, 11, 43-64.

Iversen, Torben & David Soskice (2006). Electoral Institutions and the Politics of Coalitions: Why Some Democracies Redistribute More than Others, *American Political Science Review*, 100, 165-181.

Jappelli, Tullio, Marco Pagano & Magda Bianco (2005). Courts and Banks: Effects of Judicial Enforcement on Credit Markets, *Journal of Money, Credit and Banking*, 37, 223-244.

Johnson, Ian (2011). Trial in China Tests Limits of Legal System Reform, *The New York Times*, Apr. 19th, 2011, available at <a href="http://www.nytimes.com/2011/04/20/world/asia/20china.html">http://www.nytimes.com/2011/04/20/world/asia/20china.html</a>, last accessed: Dec. 28th, 2011

Johnson, Simon, John McMillan & Christopher Woodruff (2002). Property Rights and Finance, *American Economic Review*, 92, 1335-1356.

Kieweit, D. Roderick & Mathew D. McCubbins (1991). *The Logic of Delegation: Congressional Parties and the Appropriations Process* (University of Chicago Press).

Kirzner, Israel M. (1973). *Competition and Entrepreneurship* (University of Chicago Press).

---- (1979). Perception, Opportunity, and Profit: Studies in the Theory of Entrepreneurship (University of Chicago Press).

Knack, Stephen (2005). Book Review: The Logic of Political Survival. *Journal of Economic Literature*, 43, 1068-1070.

Knight, Frank (1921). *Risk, Uncertainty, and Profit* (Houghton Mifflin, reprinted 1961).

Kontopoulos, Yianos & Roberto Perotti (1999). Government Fragmentation and Fiscal Policy Outcomes: Evidence from the OECD Countries, *in* James M. Poterba & Jürgen von Hagen eds. *Fiscal Institutions and Fiscal Preference* 81-102 (University of Chicago Press).

Krueger, Anne O. (1974). The Political Economy of the Rent-Seeking Society, *American Economic Review*, 64, 291-303.

La Porta, Rafael, Florencio Lopez-de-Silanes, Cristian Pop-Eleches & Andrei Shleifer (2004). Judicial Checks and Balances, *Journal of Political Economy*, 112, 445-470.

La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer & Robert W. Vishny (1998). Law and Finance, *Journal of Political Economy*, 106, 1113-1155.

---- (1999). The Quality of Government, *Journal of Law, Economics, and Organization*, 15, 222-279.

Lai, Hongyi (2006). Reform and the Non-State Economy in China: The Political Economy of Liberalization Strategies (Palgrave MacMillan).

Landes, David S. (1998). The Wealth and Poverty of Nations: Why Some Are So Rich and Some Are So Poor (W.W. Norton & Company).

Le, Anh T. (1999). Empirical Studies of Self-Employment, *Journal of Economic Surveys*, 13, 381-416.

Lee, Peggy M. & Hugh M. O'Neill (2003). Ownership Structures and R&D Investments of U.S. and Japanese Firms: Agency and Stewardship Perspectives, *The Academy of Management Journal*, 46, 212-225.

Li, Fan (2010). Zhongguo Dalu Xuanju De Zhuangkuang – 2010 Nian 12 Yue 11

Ri Zai Taiwan Daxue Shehui Kexue Yuan Zhuankeban De Jianghua [The Situations of Elections in Mainland China: A Speech at the Specialized Class of the School of Social Sciences at the National Taiwan University on Nov. 12, 2010], available at <a href="http://www.world-china.org/newsdetail.asp?newsid=3339">http://www.world-china.org/newsdetail.asp?newsid=3339</a>, last visited: Nov. 4th, 2011.

Licht, Amir (2007). Entrepreneurial Spirit and What Law Can Do About It, Comparative Labor Law & Policy Journal, 28, 817-862.

Liebman, Benjamin L. (2003). Watchdog or Demagogue? The Media in the Chinese Legal System, *Columbia Law Review*, 105, 1-157.

---- (2007). China's Courts: Restricted Reform, China Quarterly, 191, 620-638.

---- (2011). A Populist Threat to China's Courts? in Margaret Y. K. Woo & Mary E. Gallagher (eds.) *Chinese Justice: Civil Dispute Resolution in Contemporary China* (Cambridge University Press).

Lijphart, Arend (1999). Patterns of Democracy: Government Forms and Performance in Thirty-Six Countries (Yale University Press).

Lucas, Robert E., Jr. (1978). On the Size Distribution of Business Firms, 9 *Bell Journal of Economics* 508-523.

Macaulay, Stewart (1963). Non-Contractual Relations in Business: A Preliminary Study, *American Sociological Review*, 28, 55-67.

Maine, Henry Sumner (1861). Ancient Law: Its Connection with the Early History of Society, and Its Relation to Modern Ideas (John Murray).

McMillan, John & Christopher Woodruff (2002). The Central Role of Entrepreneurs in Transition Economies, *Journal of Economic Perspectives*, 16, 153-170.

Michelson, Ethan (2008). Popular Attitudes Towards Dispute Processing in Urban and Rural China, in *Developments in Dispute Resolution in China* (The Foundation for Law, Justice and Society), available at: <a href="http://www.fljs.org/uploads/documents/Michelson%231%23.pdf">http://www.fljs.org/uploads/documents/Michelson%231%23.pdf</a>, last accessed: Dec. 27th, 2011.

Minzner, Carl F. (2011). China's Turn Against Law, *American Journal of Comparative Law*, 59, 935-984.

Montesquieu, C.S. (1748). *The Spirit of the Laws* (Cambridge University Press 1989).

Montinola, Gabriella, Yingyi Qian & Barry R. Weingast (1995). Federalism, Chinese Style: The Political Basis for Economic Success in China, *World Politics*, 48, 50-81.

Moore, Robert L. (1983). Employer Discrimination: Evidence from Self-Employed Workers, *Review of Economics and Statistics*, 65, 496-501.

Mouro, Paolo (1995). Corruption and Growth, *Quarterly Journal of Economics*, 110, 681-712.

Muller, Dennis C. (2002). Interest Groups, Redistribution, and the Size of

Government, in Stanley L. Winer & Hirofumi Shibata eds. *Political Economy and Public Finance* 123-144 (Edward Elgar).

Murphy, Kevin M., Andrei Shleifer & Robert W. Vishny (1991). The Allocation of Talent: Implications for Growth, *Quarterly Journal of Economics*, 106, 503-530.

Myerson, Roger B. (1993). Effectiveness of Electoral Systems for Reducing Government Corruption: A Game Theoretic Analysis, *Games and Economic Behavior*, 5, 118-132.

Naughton, Barry (1995). Growing Out of the Plan (Cambridge University Press).

Niu, Siyuan & Qianwei Huang (2011). Yanjing Dawang Qianzhai 20 Yi Chutao; Wenzhou Laoban Jiti Shizong Mingdan Fengchuan [King of Glasses Fled with 2 Billion Yuan Debts; Wide Circulation of the Namelist of Disappearing Business Owners in Wenzhou], in *Nanfang Ribao* [Southern Daily], Sept. 27th, 2011.

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

North, Douglass C. & Robert P. Thomas (1973). *The Rise of the Western World: A New Economic History* (Cambridge University Press).

O'Brien, Kevin J. (1990). Reform Without Liberalization: China's National People's Congress and the Politics of Institutional Change (Cambridge University Press).

O'Brien, Kevin J. & Rongbin Han (2009). Path to Democracy? Assessing Village Elections in China, *Journal of Contemporary China*, 18(60), 359-378.

O'Brien, Kevin J. & Lianjiang Li (2000). Accommodating "Democracy" in a One-Party State: Introducing Village Elections in China, *China Quarterly*, 162, 465-489.

Oi, Jean C. & Scott Rozelle (2000). Elections and Power: The Locus of Decision-Making in Chinese Villages, *China Quarterly*, 162, 513-539.

Olson, Mancur (1982). The Rise and Decline of Nations: Economic Growth, Stagflation, and Social Rigidities (Yale University Press).

Pan Xiaoling, Jingjing Yan, Jiaxin Hu & Mengxi Yan (2010). Duoshao Jingying Zhengzai Yimin Haiwai: Tamen Xunqiu Shenme? [How Many Elites Are Emigrating: What Are They Looking For?], in *Nanfang Zhoumo* [Southern China Weekly], June 2nd, 2010.

Parker, Simon C. (2009). *The Economics of Entrepreneurship* (Cambridge University Press).

Pearl, Judea (2009). *Causality: Models, Reasoning and Inference* (2nd ed.) (Cambridge University Press).

Peerenboom, Randall (2002). *China's Long March Toward Rule of Law* (Cambridge University Press).

---- (2010). Judicial Independence in China: Common Myths and Unfounded Assumptions, in Randall Peerenboom (ed.) *Judicial Independence in China: Lessons for Global Rule of Law Promotion* (Cambridge University Press).

Peerenboom, Randall & Xin He (2009). Dispute Resolution in China: Patterns, Causes and Prognosis, *East Asia Law Review*, 4, 1-61.

Peh, Shing Huei (2011). Help Me Up ... So I Can Sue You, *The Strait Times*, Oct. 21st, 2011.

Pei, Minxin, Guoyan Zhang, Fei Pei & Lixin Chen (2010). A Survey of Commercial Litigation in Shanghai Courts, in Randall Peerenboom (ed.) *Judicial Independence in China: Lessons for Global Rule of Law Promotion* (Cambridge University Press).

Persson, Torsten, Gerard Roland, & Guido Tabellini (2000). Comparative Politics and Public Finance, *Journal of Political Economy*, 108, 1121-1161.

Persson, Torsten & Guido Tabellini (2000). *Political Economics: Explaining Economic Policy* (MIT Press).

---- (2003). The Economic Effects of Constitutions (MIT Press).

Powell, G. Bingham, Jr. (2000). *Elections as Instruments of Democracy: Majoritarian and Proportional Visions* (Yale University Press).

Posner, Richard A. (1987). The Constitution as an Economic Document, *George Washington Law Review*, 56, 4-38.

- ---- (2003). Economic Analysis of Law (6th ed., Aspen Publishers).
- ---- (2008). How Do Judges Think (Harvard University Press).

Pound, Roscoe (1910). Law in Books and Law in Action, *American Law Review*, 44, 12-36.

Qian, Yingyi & Gérard Roland (1998). Federalism and the Soft Budget Constraint, *American Economic Review*, 88, 1143-1162.

Qian, Yingyi & Barry A. Weingast (1996). China's Transition to Markets: Market-Preserving Federalism, Chinese Style, *Journal of Policy Reform*, 1, 149-185.

Research Project Committee (2008). 2008 Nian Dibaci Quanguo Siying Qiye Chouyang Diaocha Shuju Fenxi Zonghe Baogao [The Comprehensive Report on the Analyses of Sample Data Covered by the 8th National Private Enterprise Survey in 2008].

Rios-Figueroa, Julio (2006). Judicial Independence: Definition, Measurement, and Its Effects on Corruption – An Analysis of Latin American, Ph.D. dissertation, Department of Politics, New York University.

Robb Alicia M., & Robert W. Fairlie (2007). Access to Financial Capital Among US Businesses: The Case of African American Firms, *Annals of the American Academy of Political and Social Science*, 613, 47-72.

Rodden, Jonathan (2003). Reviving Leviathan: Fiscal Federalism and the Growth of Government, *International Organization*, 57, 695-729.

- ---- (2004). Comparative Federalism and Decentralization: On Meaning and Measurement, *Comparative Politics*, 36, 481-500.
  - ---- (2005). Red States, Blue States, and the Welfare State: Political Geography,

Representation, and Government Policy Around the World, work in progress, prepared for Harvard University Comparative Political Economy Workshop, available at <a href="http://www.ces.fas.harvard.edu/conferences/cpeworkshop/Rodden.pdf">http://www.ces.fas.harvard.edu/conferences/cpeworkshop/Rodden.pdf</a>.

Rose-Ackerman, Susan (1999). *Corruption and Government: Causes, Consequences, and Reform* (Cambridge University Press).

---- (2007). Judicial Independence and Corruption, in Transparency International (ed.), *Global Corruption Report 2007: Corruption in Judicial Systems* (Cambridge University Press).

Sartori, Giovanni (1997). *Comparative Constitutional Engineering: An Inquiry into Structures, Incentives and Outcomes* (2nd ed.) (New York University Press).

Shleifer, Andrei & Robert Vishny (1993). Corruption, *Quarterly Journal of Economics*, 108, 599-617.

Schumpeter, Joseph A. (1934). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle* (Harvard University, Reprinted by Transaction Publishers, 1983).

Shirk, Susan (1993). *The Political Logic of Economic Reform in China* (University of California Press).

Shively, W. Phillips (2008). *Power & Choice: An Introduction to Political Science* (11th ed.) (McGraw-Hill Higher Education).

Shugart, Matthew Soberg, & John M. Carey (1992). *Presidents and Assemblies: Constitutional Design and Electoral Dynamics* (Cambridge University Press).

Sina (2011). Guokao Linian Baoming Renshu Tongji: 9 Nian Zengzhang 16.3 Bei [Numbers of Applicants for the National Exam for Civil Servants: Rising by 16.3 Times Within 9 Years], available at <a href="http://edu.sina.com.cn/official/2011-10-09/1741314785.shtml">http://edu.sina.com.cn/official/2011-10-09/1741314785.shtml</a>, last accessed: Jan. 23rd, 2012.

Sluis, Justin van der, Mirjam van Praag & Wim Vijverberg (2005). Entrepreneurship, Selection and Performance: A Meta-Analysis of the Impact of Education in Developing Economies, *World Bank Economic Review*, 9, 225-261.

---- (2008). Education and Entrepreneurship Selection and Performance: A Review of the Empirical Literature, *Journal of Economic Surveys*, 22, 795-841.

Smith, D. Gordon & Masako Ueda (2006). Law & Entrepreneurship: Do Courts Matter?, *Entrepreneurial Business Law Journal*, 1, 353-368.

The Economist (2011A). China: Vote As I Say, June  $16^{th} - 22^{nd}$ , 2011.

- ---- (2011B). Goons and the Common Man, Jan.  $8^{th} 14^{th}$ , 2011.
- ---- (2011C). State Capitalism in China: Of Emperors and Kings, Nov.  $12^{th} 18^{th}$ , 2011.
- ---- (2012). The Visible Hand: Special Report on State Capitalism, Jan.  $21^{st} 27^{th}$ , 2012.

Tiebout, C. M. (1956). A Pure Theory of Local Expenditures, *Journal of Political Economy*, 64, 416-424.

Tong, Zhiwei (2008). Xianfa Shiyong Ying Yixun Xianfa Benshen Guiding De Lujing [The Application of the Constitution Should Follow the Path Set by the Constitution], *Zhongguo Faxue* [China Legal Science] Vol. 6, 22-48.

---- (2009). Xianfa Shiyong Ruhe Zouchu 'Sifahua' De Qilu [How to Step out of the Wrong Path of Judicialization When Applying the Constitution], *Zhengzhi Yu Falü* [*Politics and Law*], Vol. 1, 10-15.

Torstensson, Johan (1994). Property Rights and Economic Growth: An Empirical Study, *Kyklos*, 47, 231-247.

Treisman, Daniel (2000). The Causes of Corruption: A Cross-National Study, *Journal of Public Economics*, 76, 399-457.

Tsai, Kellee S. (2002). *Back-Alley Banking: Private Entrepreneurs in China* (Cornell University Press).

---- (2007). Capitalism without Democracy: The Private Sector in Contemporary China (Cornell University Press).

Wang, Hanbin (2010). Deng Xiaoping Tongzhi Qinzi Zhidao Qicao 1982 Nian Xianfa [Comrade Deng Xiaoping Instructing on the Drafting of the 1982 Constitution in Person], *Fazhi Ribao* [*Legal Daily*], Mar. 15th.

Wang, Xiaolu (2010). Huise Shouru Yu Guomin Shouru Fenpei [Grey Income and the Income Distribution Among Chinese Citizens], in *Bi Jiao* [*Comparison*], 48, 1-29.

Wang, Xinxin (2011). Song Jiangming Qiuzhi Yanxue Ji [Song Jiangming's Legend of Blood Test for Job Application], in *Zhongguo Qingnian Bao* [*China Youth Daily*], Nov. 9th, 2011.

Wang, Shuna & Yang Yao (2007). Grassroots Democracy and Local Governance: Evidence from Rural China, *World Development*, 35, 1635-1649.

Weingast, Barry R. (1995). The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development, *Journal of Law, Economics, and Organization*, 11, 1-31.

Wennekers, Sander, Andre van Wennekers, Roy Thurik & Paul Reynolds (2005). Nascent Entrepreneurship and the Level of Economic Development, *Small Business Economics*, 24, 293-309.

Whiting, Susan H. (2000). Power and Wealth in Rural China: The Political Economy of Institutional Change (Cambridge University Press).

World Bank (2000). Entering the 21st Century: World Development Report 1999/2000 (Oxford University Press).

Wu, Jinglian (2005). *Understanding and Interpreting Chinese Economic Reform* (Thomson / South-Western).

Wu, Jinglian & Renwei Zhao (1987). The Dual Pricing System in China's Industry,

Journal of Comparative Economics, 11, 309-318.

Wu, Xiaobo (2010). Shiyezhixin Zhengzai Lengque [Aspiration to Industrial Investment is Cooling Down], in *Jing Ji Guan Cha Bao* [*Economic Observation*], July 21st, 2010, available at <a href="http://news.163.com/10/0721/18/6C4TG6U700012Q9L.html">http://news.163.com/10/0721/18/6C4TG6U700012Q9L.html</a>, last accessed: Jan. 18th, 2012.

Xie, Peng (2009). Guojin Mintui: Jidang 2009 [Public Advance and Private Retreat: A Stirring 2009], in *Nan Fang Zhou Mo* [Southern Weekly], Dec. 23rd, 2009.

Yang, Keming (2007). Entrepreneurship in China (Ashgate Publishing Company).

Zhang, Qianfan (2010). A Constitution Without Constitutionalism? The Paths of Constitutional Development in China, *International Journal of Constitutional Law*, 8, 950-976.

Zhao, Lei & Peng Jiang (2011). Laogong Banchang Huoli Buji Laopo Duo Maifang [Husband's Profits from Entrepreneurship Cannot Match Wife's Gains from Real Estate Speculation], in *Xinwen Chenbao* [Shanghai Morning Post], Oct. 4th, 2011.

Zheng, Yongnian (2010). Zhongguo De Zhishi He Caifu Tuichuchao Shuoming Le Shenme? [What Does the Exit Wave of Knowledge and Wealth in China Tell?], in *Lianhe Zaobao* [Nanyang Sin-Chew Joint Morning Post], July 27th, 2010.

Zhu, Ling (2006). Wo Fandui: Yige Renda Daibiao De Canzheng Chuanqi [I Object: The Saga of a Deputy of the People's Congress] (Hainan Press).

## **Appendix: Coding Rules**

Coding is based on the constitution covering the majority of years from 1993 to 2008 when the available data show changes in constitutional texts during this period.

- I. Property Rights Protection
- i. Taking
  - a) v569. **[EXPROP]-**Can the government expropriate private property under at least some conditions?
  - 1. Yes
  - 2. No
  - 96. other, please specify in the comments section
  - 97. Unable to Determine
  - 98. Not Specified

Instructions: Please answer "no" if the constitution explicitly denies the subject of the question and "not specified" if the subject of the question is not mentioned in the constitution.¹⁴⁸

# Coding rule: 149

- 1) Code 1 if 2.;
- 2) Check comments and use discretion if 96,;
- 3) Code 0 otherwise. 150
- b) v570. **[EXPRCOMP]-**What is the specified level of compensation for expropriation of private property? (Asked only if EXPROP is answered 1)
- 1. fair/just
- 2. full
- 3. appropriate
- 4. adequate
- 90. left explicitly to non-constitutional law
- 96. other, please specify in the comments section
- 97. Unable to Determine
- 98. Not Specified
- 99. Not Applicable

Instructions: If the constitution refers to actual value, market value, or the current price, code as full compensation. If the constitution refers to "reasonable" compensation, code as appropriate. Comment on any terms other than those listed in the answer choices.

Coding rule:

¹⁴⁸ The original texts of the Comparative Constitution Project survey instrument are in small font.

The coding rules are applied in the order as numbered.

¹⁵⁰ No constitution is coded 1 for this variable.

- 1) Code 2 if 1.;
- 2) Code 3 if 2.;
- 3) Code 1 if 3., or 4.;
- 4) Check comments and use discretion if 96.;
- 5) Code 0 otherwise;
- 6) Final Code = C/3 where C stands for the intermediate code obtained according to the above rules.
- c) v571. Under what conditions or for what purposes can the state expropriate private property? (Asked only if EXPROP is answered 1)
- 1. Infrastructure, public works-[EXPCOND 1]
- 2. Redistribution to other citizens-[EXPCOND_2]
- 3. National Defense-[EXPCOND 3]
- 4. Land, natural resource preservation-[EXPCOND_4]
- 5. Exploitation of natural resources-[EXPCOND_5]
- 6. Land Reform-[EXPCOND 6]
- 7. General Public Purpose-[EXPCOND 7]
- 90. left explicitly to non-constitutional law-[EXPCOND 90]
- 96. other, please specify in the comments section-[EXPCOND_96]
- 97. Unable to Determine-[EXPCOND_97]
- 98. Not Specified-[EXPCOND_98]
- 99. Not Applicable-[EXPCOND 99]

Instructions: General public purpose includes such formulations as: public utility, interest, or necessity; state-approved usefulness; state or social needs; social interest, purpose, or benefit; common good or interest; and interest of all. Please code "interest of defense" as "national defense."

- 1) Code 4 if 7;
- 2) Code 7-x, where x stands for the number of items chosen from 1., 2., 3., 4., 5., and 6. if any of 1., 2., 3., 4., 5., and 6. is/are chosen;
- 3) Check comments and use discretion if 96.:
- 4) Code 0 otherwise:
- 5) Final Code = C/7 where C stands for the intermediate code obtained according to the above rules.
- d) v572. **[EXPLIM]-**What limits/conditions are placed on the ability of the government to expropriate private property? (Asked only if EXPROP is answered 1)
- 1. certain types of property (e.g. immovable property)-[EXPLIM 1]
- 2. payment must be made within specified time limits-[EXPLIM_2]
- 3. allowed without compensation in times of war/emergency/urgent public need-

## [EXPLIM 3]

- 4. only allowed through legal process or court decision-[EXPLIM 4]
- 90. left explicitly to non-constitutional law-[EXPLIM 90]
- 96. other, please specify in the comments section-[EXPLIM_96]
- 97. Unable to Determine-[EXPLIM 97]
- 98. Not Specified-[EXPLIM 98]
- 99. Not Applicable

Instructions: Please code "other" and make comment if, for example, expropriation can be made only with the owner's consent or if the owner can appeal the expropriation decision. The answer choice "only allowed through legal process or court decision" includes instances in which expropriation can be made only in accordance with the law, requires a court order/judicial decree or if the public purpose must be legally approved. Coding rule:

- 1) Code x, where x stands for the number of items chosen from 1., 2., and 4., if any of 1., 2., and 4. is/are chosen;
- 2) Check comments and use discretion if 96.;
- 3) Code 0 otherwise;
- 4) Final Code = C/3 where C stands for the intermediate code obtained according to the above rules.

# ii. Ownership

- a) v582. Does the constitution mention any of the following intellectual property rights?
- 1. Patents-[INTPROP 1]
- 2. Copyrights-[INTPROP 2]
- 3. Trademark-[INTPROP_3]
- 4. general reference to intellectual property-[INTPROP 4]
- 90. left explicitly to non-constitutional law-[INTPROP 90]
- 96. other, please specify in the comments section-[INTPROP 96]
- 97. Unable to Determine-[INTPROP 97]
- 98. Not Specified-[INTPROP 98]

Instructions: copyright protects intellectual or artistic creations; patent protects inventions.

- 1) Code 3 if 4.;
- 2) Code x, where x stands for the number of items chosen from 1., 2., and 3., if any of 1., 2., and 3. is/are chosen;
- 3) Check comments and use discretion if 96.;
- 4) Code 0 otherwise;
- 5) Final Code = C/3 where C stands for the intermediate code obtained

according to the above rules.

- b) v587. [PROPRGHT]-Does the constitution provide for a right to own property?
- 1. Yes
- 2. No
- 90. left explicitly to non-constitutional law
- 96. other, please specify in the comments section
- 97. Unable to Determine

## Coding rule:

- 1) Code 1 if 1.;
- 2) Check comments and use discretion if 96.;
- 3) Code 0 otherwise.

#### iii. Transfer

- a) v579. **[TRANSFER]-**Does the constitution mention the right to transfer property freely?
- 1. Yes
- 2. No
- 96. other, please specify in the comments section
- 97. Unable to Determine

# Coding rule:

- 1) Code 1 if 1.;
- 2) Check comments and use discretion if 96.;
- 3) Code 0 otherwise.
- b) v580. **[TESTATE]-**Does the constitution provide for a right of testate, or the right to transfer property freely after death?
- 1. Yes
- 2. No
- 96. other, please specify in the comments section
- 97. Unable to Determine

Instructions: Testate or testacy refers to the right to give property. It is NOT the right to inherit, which is the right to receive property and asked about below.

- 1) Code 1 if 1.;
- 2) Check comments and use discretion if 96.;
- 3) Code 0 otherwise.
- c) v581. [INHERIT]-Does the constitution provide for inheritance rights?
- 1. Yes

- 2. No
- 96. other, please specify in the comments section
- 97. Unable to Determine

Instructions: Inheritance refers to the right to receive property.

## Coding rule:

- 1) Code 1 if 1.;
- 2) Check comments and use discretion if 96.;
- 3) Code 0 otherwise.

#### iv. Business

- a) v583. [BUSINES]-Does the constitution provide a right to conduct / establish a business?
- 1. Yes
- 2. No
- 96. other, please specify in the comments section
- 97. Unable to Determine

## Coding rule:

- 1) Code 1 if 1.;
- 2) Check comments and use discretion if 96.;
- 3) Code 0 otherwise.
- b) v588. **[FREECOMP]**-Does the constitution provide the right to a free and/or competitive market?
- 1. Yes
- 2. No
- 96. other, please specify in the comments section
- 97. Unable to Determine

Instructions: Please make a note in the comments section if there are qualifications on the marketplace.

## Coding rule:

- 1) Code 1 if 1.;
- 2) Check comments and use discretion if 96.;
- 3) Code 0 otherwise.

# II. Judicial Independence

i. Anchoring of the highest court

v308. [LEVJUD]-Does the court system provide for any of the following?

- 1. Supreme or Top Court only
- 2. Supreme Court and other courts to be determined by law
- 3. Supreme Court and specific other courts, such as provincial or city courts

- 4. other courts mentioned, but no supreme court
- 96. other, please specify in the comments section
- 97. Unable to Determine
- 98. Not Specified

Instructions: By ordinary courts, we mean non-specialized courts. For example, the Supreme Court, Appellate Courts, and District Courts in the United States. By contrast, specialized courts include the constitutional court, military courts, and administrative courts.

## Coding rule:

- 1) Code 1 if 1., 2., or 3.;
- 2) Check comments and use discretion if 96.; then
- 3) Code 0 otherwise.

### ii. Term length

- a) v321. **[CHFTERM]-**What is the maximum term length for the Chief Justice of the Highest Ordinary Court? (Asked only if HOCCJ is answered 1, or if HOCCJ is answered 4)
- 1. [numbered response]
- 99. Not Applicable

Instructions: Please answer "0" if the term length is not specified, and answer "100" if there is no term length or the term length is the life of the office holder.

#### Coding rule:

- 1) Code 1 if 100;
- 2) Code 1 if 99. and the answer to v329 [SUPTERM] below is 100;
- 3) Check comments and use discretion if there is any;¹⁵¹
- 4) Code 0 otherwise.
- b) v329. **[SUPTERM]-**What is the maximum term length for judges for the highest ordinary court? (Asked only if HOCCJ is answered 2, or if HOCCJ is answered 3, or if HOCCJ is answered 4)
- 1. [numbered response]

Instructions: Please answer "0" if the term length is not specified, and answer "100" if there is no term length or the term length is the life of the office holder.

- 1) Code 1 if 100;
- 2) Check comments and use discretion if there is any; ¹⁵²
- 3) Code 0 otherwise.

¹⁵¹ Code 1 if 0 and the comments show the Chief Justice cannot be dismissed or can hold office until retirement.

¹⁵² Code 1 if 0 and the comments show judges cannot be dismissed or can hold office until retirement.

#### iii. Removal

- a) v371. [JREM]-Are there provisions for dismissing judges?
- 1. Yes
- 2. No
- 96. other, please specify in the comments section
- 97. Unable to Determine

## Coding rule:

- 1) Code 1 if 1.;
- 2) Check comments and use discretion if 96.;
- 3) Code 0 otherwise.
- b) v372. Under what conditions can judges be dismissed? (Asked only if JREM is answered 1)
- 1. general dissatisfaction (i.e. dismissal is fairly unrestricted)-[JREMCON_1]
- 2. crimes and other issues of conduct-[JREMCON 2]
- 3. treason-[JREMCON 3]
- 4. violations of the constitution-[JREMCON 4]
- 5. incapacitated-[JREMCON_5]
- 90. left explicitly to non-constitutional law-[JREMCON 90]
- 96. other, please specify in the comments section-[JREMCON 96]
- 97. Unable to Determine-[JREMCON 97]
- 98. Not Specified-[JREMCON 98]
- 99. Not Applicable-[JREMCON 99]

- 1) Code 0 if 1., 90., 97., 98., or 99.;
- 2) Code 5-x, where x stands for the number of items chosen from 2., 3., 4., and 5. if any of 2., 3., 4., and 5. is/are chosen;
- 3) Check comments and use discretion if 96.;
- 4) Final Code = C/5 where C stands for the intermediate code obtained according to the above rules.
- c) v373. Who can propose the dismissal of judges? (Asked only if JREM is answered 1)
- 1. Head of State (use this choice for single executive systems)-[JREMPRO_1]
- 2. Head of Government-[JREMPRO_2]
- 3. the Government/Cabinet-[JREMPRO 3]
- 4. First (or only) Chamber of the Legislature-[JREMPRO 4]
- 5. Second Chamber of the Legislature-[JREMPRO 5]
- 6. Both Chambers of the Legislature are required-[JREMPRO_6]
- 7. Public Prosecutor-[JREMPRO 7]

- 8. Judicial Council-[JREMPRO_8]
- 9. Public-[JREMPRO 9]
- 90. left explicitly to non-constitutional law-[JREMPRO 90]
- 96. other, please specify in the comments section-[JREMPRO_96]
- 97. Unable to Determine-[JREMPRO 97]
- 98. Not Specified-[JREMPRO 98]
- 99. Not Applicable-[JREMPRO_99]

Instructions: If both chambers must act, then please select "Both Chambers of the Legislature are required." If either chamber can act, then please select both the "First Chamber of the Legislature" and the "Second Chamber of the Legislature."

&

v377. Who can approve the dismissal of judges? (Asked only if JREM is answered 1)

- 1. Head of State (use this choice for single executive systems)-[JREMAP 1]
- 2. Head of Government-[JREMAP_2]
- 3. the Government/Cabinet-[JREMAP_3]
- 4. First (or only) Chamber of the Legislature-[JREMAP_4]
- 5. Second Chamber of the Legislature-[JREMAP 5]
- 6. Both Chambers of the Legislature are required-[JREMAP 6]
- 7. Public Prosecutor-[JREMAP 7]
- 90. left explicitly to non-constitutional law-[JREMAP 90]
- 96. other, please specify in the comments section-[JREMAP 96]
- 97. Unable to Determine-[JREMAP 97]
- 98. Not Specified-[JREMAP 98]
- 99. Not Applicable-[JREMAP 99]

Instructions: If both chambers must act, then please select "Both Chambers of the Legislature are required." If either chamber can act, then please select both the "First Chamber of the Legislature" and the "Second Chamber of the Legislature."

- 1) Code 1 if v372 above is coded 1;
- 2) Code 0 if 90., 97., 98., or 99. is selected for either v373 or v377;
- 3) Code 1 if the different items are selected for v373 and v377;
- 4) Check comments and use discretion if 96.;
- 5) Code 0 otherwise.
- d-1) Removal procedural by the legislature proposal
- v374. **[JREMFIRP]-**What proportion of the vote is needed in the first (or only) chamber to propose the dismissal of judges? (Asked only if JREMPRO is answered 4)
- 1. Plurality
- 2. Majority
- 3. 3/5 Majority

- 4. 2/3 Majority
- 5. 3/4 Majority
- 6. Unspecified supermajority
- 96. other, please specify in the comments section
- 97. Unable to Determine
- 98. Not Specified
- 99. Not Applicable

&

- v375. **[JREMSECP]-**What proportion of the vote is needed in the Second Chamber to propose the dismissal of judges? (Asked only if JREMPRO is answered 5)
- 1. Plurality
- 2. Majority
- 3. 3/5 Majority
- 4. 2/3 Majority
- 5. 3/4 Majority
- 6. Unspecified supermajority
- 96. other, please specify in the comments section
- 97. Unable to Determine
- 98. Not Specified
- 99. Not Applicable

&

- v376. **[JREMBOTP]-**What proportion of the vote is needed in Both Chambers to propose the dismissal of judges? (Asked only if JREMPRO is answered 6)
- 1. Plurality
- 2. Majority
- 3. 3/5 Majority
- 4. 2/3 Majority
- 5. 3/4 Majority
- 6. Unspecified supermajority
- 96. other, please specify in the comments section
- 97. Unable to Determine
- 98. Not Specified
- 99. Not Applicable

- 1) Code 6 if v372 above is coded 1;
- 2) Code 1 if 4. is selected for v373 above, and 1. is selected for v374;
- 3) Code 2 if 4. is selected for v373 above, and 2. is selected for v374;
- 4) Code 3 if 4. is selected for v373 above, and 3., 4., 5., or 6. is selected for v374;

- 5) Code 1 if 5. is selected for v373 above, and 1. is selected for v375;
- 6) Code 2 if 5. is selected for v373 above, and 2. is selected for v375;
- 7) Code 3 if 5. is selected for v373 above, and 3., 4., 5., or 6. is selected for v375;
- 8) Code 2 if 6. is selected for v373 above, and 1. is selected for v376;
- 9) Code 4 if 6. is selected for v373 above, and 2. is selected for v376;
- 10) Code 6 if 6. is selected for v373 above, and 3., 4., 5., or 6. is selected for v376;
- 11) Check comments and use discretion if 96. is selected for v374, v375, or v376;
- 12) Code 0 otherwise.
- d-2) Removal procedural by the legislature approval
- v378. **[JREMFIRA]-**What proportion of the vote is needed in the first (or only) chamber to approve the dismissal of judges? (Asked only if JREMAP is answered 4)
- 1. Plurality
- 2. Majority
- 3. 3/5 Majority
- 4. 2/3 Majority
- 5. 3/4 Majority
- 6. Unspecified supermajority
- 96. other, please specify in the comments section
- 97. Unable to Determine
- 98. Not Specified
- 99. Not Applicable

&

- v379. **[JREMSECA]-**What proportion of the vote is needed in the Second Chamber to approve the dismissal of judges? (Asked only if JREMAP is answered 5)
- 1. Plurality
- 2. Majority
- 3. 3/5 Majority
- 4. 2/3 Majority
- 5. 3/4 Majority
- 6. Unspecified supermajority
- 96. other, please specify in the comments section
- 97. Unable to Determine
- 98. Not Specified
- 99. Not Applicable

&

v380. [JREMBOTA]-What proportion of the vote is needed in Both Chambers to

approve the dismissal of judges? (Asked only if JREMAP is answered 6)

- 1. Plurality
- 2. Majority
- 3. 3/5 Majority
- 4. 2/3 Majority
- 5. 3/4 Majority
- 6. Unspecified supermajority
- 96. other, please specify in the comments section
- 97. Unable to Determine
- 98. Not Specified
- 99. Not Applicable

## Coding rule:

- 1) Code 6 if v372 above is coded 1;
- 2) Code 1 if 4. is selected for v377 above, and 1. is selected for v378;
- 3) Code 2 if 4. is selected for v377 above, and 2. is selected for v378;
- 4) Code 3 if 4. is selected for v377 above, and 3., 4., 5., or 6. is selected for v378;
- 5) Code 1 if 5. is selected for v377 above, and 1. is selected for v379;
- 6) Code 2 if 5. is selected for v377 above, and 2. is selected for v379;
- 7) Code 3 if 5. is selected for v377 above, and 3., 4., 5., or 6. is selected for v379;
- 8) Code 2 if 6. is selected for v377 above, and 1. is selected for v380;
- 9) Code 4 if 6. is selected for v377 above, and 2. is selected for v380;
- 10) Code 6 if 6. is selected for v377 above, and 3., 4., 5., or 6. is selected for v380;
- 11) Check comments and use discretion if 96. is selected for v378, v379, or 80;
- 12) Code 0 otherwise;
- 13) Final code of iii d) = the sum of the intermediate codes of iii d-1) and iii d-2) divided by 12.

#### iv. Salary Setting

v382. **[JUDSAL]**-Does the constitution explicitly state that judicial salaries are protected from governmental intervention?

- 1. Yes
- 2. No
- 96. other, please specify in the comments section
- 97. Unable to Determine

#### Coding rule:

1) Code 1 if 1.;

- 2) Check comments and use discretion if 96.;
- 3) Code 0 otherwise.

#### v. Constitutional Review

v362. To whom does the constitution assign the responsibility for the interpretation of the constitution?

- 1. Any Ordinary Court-[INTERP_1]
- 2. Constitutional Court/Council-[INTERP_2]
- 3. Supreme Court Only-[INTERP 3]
- 4. Special chamber of the Supreme Court-[INTERP 4]
- 5. First (or only) Chamber of the Legislature-[INTERP_5]
- 6. Second Chamber of the Legislature-[INTERP_6]
- 7. Both Chambers of the Legislature are required-[INTERP_7]
- 90. left explicitly to non-constitutional law-[INTERP_90]
- 96. other, please specify in the comments section-[INTERP_96]
- 97. Unable to Determine-[INTERP_97]
- 98. Not Specified-[INTERP 98]

Instructions: If the constitutional court is mentioned in the constitution, you need to check it here regardless if they are explicitly given the power of interpretation. If both chambers must act, then please select "Both Chambers of the Legislature are required." If either chamber can act, then please select both the "First Chamber of the Legislature" and the "Second Chamber of the Legislature."

#### Coding rule:

- 1) Code 1 if 1., 3., or 4.;
- 2) Check comments and use discretion if 96.;
- 3) Code 0 otherwise.

#### III. Antidiscrimination

- i. v550. [CITRIGHT]-Who are the rights mentioned in the constitution granted to?
  - 1. All persons/Everyone
  - 2. All individuals living within the borders of the state
  - 3. All citizens
  - 4. Only native citizens
  - 5. Depends on the right
  - 90. left explicitly to non-constitutional law
  - 96. other, please specify in the comments section
  - 97. Unable to Determine
  - 98. Not Specified

- 1) Code 3 if 1., or 2.;
- 2) Code 2 if 3.;
- 3) Code 1 if 4.;
- 4) Check comments and use discretion if 96.;
- 5) Code 0 otherwise;
- 6) Final Code = C/3 where C stands for the intermediate code obtained according to the above rules.
- ii. v552. **[EQUAL]-**Does the constitution refer to equality before the law, the equal rights of men, or non-discrimination?
  - 1. Yes
  - 2. No
  - 96. other, please specify in the comments section
  - 97. Unable to Determine

- 1) Code 1 if 1.;
- 2) Check comments and use discretion if 96.;
- 3) Code 0 otherwise.
- iii. v553. Which of the following groups does the constitution protect from discrimination/provide for equality for (check all that apply)?
  - 1. Gender-[EQUALGR 1]
  - 2. color-[EQUALGR 2]
  - 3. creed/beliefs-[EQUALGR_3]
  - 4. social status-[EQUALGR 4]
  - 5. Nationality-[EQUALGR 5]
  - 6. financial/property ownership-[EQUALGR 6]
  - 7. Country of Origin-[EQUALGR_7]
  - 8. tribe/clan-[EQUALGR 8]
  - 9. Race-[EQUALGR 9]
  - 10. Language-[EQUALGR 10]
  - 11. Religion-[EQUALGR 11]
  - 12. political party-[EQUALGR 12]
  - 13. Sexual Orientation-[EQUALGR_13]
  - 14. Age-[**EQUALGR_14**]
  - 15. parentage-[EQUALGR 15]
  - 16. Mentally or Physically Disabled-[EQUALGR 16]
  - 90. left explicitly to non-constitutional law-[EQUALGR 90]
  - 96. other, please specify in the comments section-[EQUALGR_96]
  - 97. Unable to Determine-[EQUALGR 97]

## 98. Not Specified-[EQUALGR 98]

Instructions: If none of these groups are mentioned, please select not specified.

#### Coding rule:

- 1) Code x, where x stands for the number of items chosen from 1., 2., 3., 4., 5., 6., 7., 8., 9., 10., 11., 12., 13., 14., 15., and 16., if any of 1., 2., 3., 4., 5., 6., 7., 8., 9., 10., 11., 12., 13., 14., 15., and 16. is/are chosen;
- 2) Check comments and use discretion if 96.;
- 3) Code 0 otherwise;
- 4) Final Code = C/16 where C stands for the intermediate code obtained according to the above rules.
- iv. v556. Does the constitution specifically restrict the rights of any of the following groups?
  - 1. Property Owners-[RIGHTRES_1]
  - 2. Racial/Ethnic/Religious/Linguistic/National Minorities-[RIGHTRES 2]
  - 3. Women-[RIGHTRES 3]
  - 4. Non-Property Owners-[RIGHTRES 4]
  - 5. Peasants-[RIGHTRES 5]
  - 6. Immigrants-[RIGHTRES_6]
  - 7. Elderly Individuals-[RIGHTRES 7]
  - 8. Disabled Persons-[RIGHTRES 8]
  - 90. left explicitly to non-constitutional law-[RIGHTRES 90]
  - 96. other, please specify in the comments section-[RIGHTRES 96]
  - 97. Unable to Determine-[RIGHTRES 97]
  - 98. Not Specified-[RIGHTRES 98]

- 1) Code 9-x, where x stands for the number of items chosen from 1., 2., 3., 4., 5., 6., 7., and 8. if any of 1., 2., 3., 4., 5., 6., 7., and 8. is/are chosen;
- 2) Check comments and use discretion if 96.;
- 3) Code 0 otherwise;
- 4) Final Code = C/9 where C stands for the intermediate code obtained according to the above rules.