

Fachbereich 8: Sozialwissenschaften

**Institutional Change and the Evolution of
Entrepreneurial Networks: A Comparison of
Two Chinese Start-up Cohorts**

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CHAPTER 1. INTRODUCTION

1.1 The Puzzles: How Do Entrepreneurs Evolve Their Strategy During Institutional Change?

In the last three decades, transitional economies like Russia, Eastern-Central Europe, and China have been undergoing fundamental and comprehensive institutional change as the formerly centrally planned economies transition toward market-based economies (Hoskisson, Eden, Lau, & Wright, 2000; Newman, 2000; Tan, 2007; Tan & Litschert, 1994). The existing institutions—“including political systems, laws, regulations, financial markets, and underlying assumptions about the purpose of economic activity” (Newman, 2000: 602)—were significantly changed within a short period of time.

The effects of the institutional changes were rather tangible as they implied changes within everyday life and economic activity (Feige, 1997; Swader, 2008; Welter & Smallbone, 2011). Stimulated by such a big shift, scholars have devoted much attention to the understanding of strategic choices during this fundamental transition (Hoskisson et al., 2000). The roles and functions of new rules, resources, and opportunities presented in the new institutional environment and the legacy of old institutional beliefs, values, and practices are evaluated differently in scholarly work, thus obscuring the overall picture of strategic action during the period of institutional change.

Two streams of scholars have contributed theoretically and empirically to this focal research theme. However, because of the divisions in theoretical assumptions and focus, these two streams continuously produce competing and contradictory accounts. One stream of scholars argues that these unprecedented changes facilitate organizational transformation and strategic adaptations. When the existing rules of the game were significantly destroyed and changed, new rules of the game began to emerge and impose pressures on organizations and entrepreneurs to follow and engage in the co-evolution process (Ahlstrom & Bruton, 2010; Peng, 2003; Peng & Heath, 1996; Tan & Tan, 2005). This school emphasizes that firms and entrepreneurs

are motivated and able to move beyond institutional constraints to pursue competitive advantages (Lewin, Long, & Carroll, 1999; Oliver, 1991). Scholars have conducted empirical studies demonstrating that firms and entrepreneurs developed strategic decision making (Soulsby & Clark, 1996) and market learning skills (Jefferson & Rawski, 1995), initiated innovative responses and imitated successful strategies (Keister, 2002a), developed the willingness to take proactive strategies, and were committed to future growth (Tan, 2007).

Another stream of scholars appeals for more research attention to be devoted to strategic inertia during the institutional change phase. This school of thought argues that firms' and entrepreneurs' adaptational patterns are largely influenced by the imprinting effect of founding institutional environments and the existing institutional realities in transitional economies (Hoskisson et al., 2000). When new rules of the game are still not completely known, actors display strategically confused behaviors, and they still likely draw upon and rely on existing rules, norms, routines, and practices, thus demonstrating resistance and an inability to change (Kim, Shin, Oh, & Jeong, 2007; Newman, 2000). Numerous empirical studies reported extensive strategic inertia during the phase of institutional change. For example, firms and entrepreneurs continue to behave in ways that reflect the enduring influence of socialist institutions despite the implementation of market-oriented reforms, thus demonstrating the imprinting effect of founding institutions that impede technological capabilities from developing (Kogut & Zander, 2000) and limit the adaptation of operational knowledge to meet new demands (Kriauciunas & Kale, 2006). Other studies showed that radical institutional transformations did not lead to major shifts in enterprise structures and strategies (Czaban & Whitley, 2000), and relational and cultural constraints still restrain a firm's ability to adapt (Child & Yuan, 1996).

These competing and contradictory theoretical arguments and empirical findings do not provide a clear picture of strategic choice during the fundamental environmental shift. Both schools do not specify *who* is actually affected during the institutional change phase or explicitly investigate *how* firms and entrepreneurs with a distinctive institutional history might respond differently, and yet, they have not uncovered the underlying mechanisms that lead to strategic change and inertia. These critical research gaps stimulated this research endeavor to seek answers to these intriguing puzzles: How do entrepreneurs make strategic choices during the phase of institutional change? Do they adapt to fit the changing institutional environment or do

they exhibit strategic inertia? If inertia is pervasive, why do we still observe adaptations? If change is pervasive, why do we still notice inertia?

To describe the puzzle in terms of which scenario (i.e., strategic change or inertia) is more likely to happen may seem too simplistic. Both strategic change and inertia might be demonstrated during the social change phase. The more intriguing puzzles are: Who is involved in these processes of strategic change and inertia? What are the underlying processes and mechanisms? How does change and adaptation become possible in transitional economies? I seek to shed light on these theoretical and empirical puzzles by focusing on network strategy. The rationales for concentrating on network strategy to reflect on strategic choice are as follows: First, scholars have widely recognized network strategy as a critical organizational and entrepreneurial strategy for business success. Drawing on external resources through networks is an effective strategy to overcome the liabilities of newness and smallness (Baum, 1996; Stinchcombe, 1965). Utilizing the network strategy itself requires strategies such as selecting the right partners (Dacin, Oliver, & Roy, 2007), cultivating trust relationships (Smith & Lohrke, 2008), developing appropriate governance structures (Gulati, 2007; Jones, Hesterly, & Borgatti, 1997), and managing network dynamics over time (Gulati, 1998).

Second, examining “how networks evolve and change over time” (Nohria, 1992: 15) can help to illuminate environmental influences. Similar competing and contradictory arguments exist in the literature. Some studies have argued that environmental shifts cause changes in network size, structure, and tie strength (Baker, Faulkner, & Fisher, 1998; Koka, Madhavan, & Prescott, 2006). Other studies have demonstrated that the initial conditions of organization, alliances, and the environment imprint on a network structure and lead to inertia (Doz, Olk, & Ring, 2000; Marquis, 2003; Milanov & Fernhaber, 2009). Therefore, focusing on a network’s evolution can delineate the relative effect of a founding environment and the changing environment on network patterns.

More importantly, network strategy is an especially valuable strategy in transitional economies (Peng & Jiang, 2005; Peng, 2004; Xin & Pearce, 1996). Its existence and evolution are closely related to the development of regulative institutions and the transformation of informal institutions such as norms, values, and beliefs (Peng, 2003; Peng & Zhou, 2005). By scrutinizing networks, we can gain more insight into how specific institutional elements led to a network’s construction and

how the changes of institutional elements affect the network's evolution. This means that we can better examine the relative influence of the founding and changing institutional environment and solve the puzzles regarding how entrepreneurs evolve their strategy during the institutional change phase.

1.2 Research Purposes and Approach

Research purposes

This study investigates the evolution of network strategy during conditions of institutional change. The objectives of this study are as follows: First, use the empirical data to explore how entrepreneurs construct and evolve their networks (network configurations and networking styles) during the period of institutional change, examine whether they demonstrate network change or network inertia, and specify who is more likely to demonstrate which scenario. Second, unpack the processes and mechanisms of network evolution (network inertia and network change). Third, draw theory from the data by examining effects of the founding institutional environment and the changing institutional environment on network evolution, and specify how exposure to the different founding environments might alter network configurations and networking styles.

A start-up cohort comparative approach

Investigating the evolution of network strategy during the institutional change phase requires examining the relative effect of the founding and changing institutional environment in one research setting. Unfortunately, the extant literature has failed to do so. It does not link firms and entrepreneurs with their specific founding environments and fails to specify how different groups of firms and entrepreneurs responded to the changing institutional environment. Life course theorists have suggested that a cohort of people is embedded in similar structures of an economy and society (Mannheim, 1970) and that “each cohort has a distinctive composition and character reflecting the circumstances of its unique origination and history” (Ryder, 1965: 845). According to life course theorists, historical changes impact cohorts and the succession of cohorts make social change and innovation possible (Ryder, 1965).

This perspective offers a rich source of inspiration and guidance for designing and carrying out this comparative study concerning strategic responses of entrepreneurial cohorts during the period of institutional change. Another source of inspiration for this research came from organizational study, especially from organizational ecology (Hannan & Freeman, 1977; Hannan & Freeman, 1984). According to organizational theorists, organizations entering the market at roughly the same time consist of a cohort which demonstrates similar characteristics (Hannan & Freeman, 1984; Romanelli & Tushman, 1986).

Borrowing the cohort concept from life course and organizational theorists, I developed a start-up cohort comparative approach to achieve the research goals. The cohort comparative approach is an appropriate strategy to investigate and explain the relative effects of history, environmental changes, and strategic choices (Child, 1972; Pfeffer & Salancik, 1978; Romanelli & Tushman, 1986; Stinchcombe, 1965). In this research, I define a *start-up cohort* as a group of entrepreneurs who begin their business venture during the same institutional period. It is a well suited grouping strategy, because it is based on the characteristics of an initial position with respect to the different founding institutional conditions during the institutional transition (Romanelli, 1989; Romanelli & Tushman, 1986: 610).

This approach has two advantages. First, it can manifest the initial link between a population of firms and entrepreneurs and its founding environment. Second, since the “adaptational patterns vary systematically in accord with differences in contextual origins” (Romanelli & Tushman, 1986: 613), using the cohort comparative approach can reveal the relative influence of the founding conditions and the changing environment, and help make sense of entrepreneurs’ strategic responses.

1.3 Research Questions

From the economic sociology perspective, entrepreneurs are seen as economic actors embedded in continuing networks of social relationships (Aldrich & Zimmer, 1986; Granovetter, 1985). This research reconciles scholars’ appeal for examining the causes and consequences of network embeddedness during the entrepreneurial process (Hoang & Antoncic, 2003a) by contextualizing it in the institutional change conditions. It primarily investigates two critical constructs of networks: network

configurations and networking actions.

Network configurations

Network configuration refers to the characteristics and patterns of networks (Samaddar, Nargundkar, & Daley, 2006), such as a network's structure and content (Burt, 1992; Hoang & Antoncic, 2003a; Reagans & McEvily, 2003), tie strength (Granovet.Ms, 1973; Moran, 2005), proximity (Reagans, 2011), diversity (Reagans & McEvily, 2003), and duration (Lee, 2007). Firms operating in different environments achieve business success by constructing a network with different forms of relational and structural embeddedness (Rowley, Behrens, & Krackhardt, 2000: 370). The network configuration depicts a snapshot of its features at a given time. In this study, I focus on three important dimensions of network configuration: network type, tie strength, and diversity.

The way an entrepreneur utilizes different network types can be used to examine how the relevance of different network types have evolved in the context of institutional change (Ma & Cheng, 2010). In this study, I focus on the evolution of three types of networks—social-cultural networks, political networks, and market networks—as a reflection of entrepreneurial reactions to the environmental change.

Under a certain degree of environmental uncertainty and munificence (Uzzi, 1996), and governed by specific relational norms, actors establish different tie strengths (Chen & Chen, 2004; Wang, 2007; Xiao & Tsui, 2007). As the phase of institutional change unfolds, a strong-tie based network is expected to shift to a weak-tie-based network (Peng & Zhou, 2005). Firms and entrepreneurs are expected to forge diverse ties and evolve from cohesion to structural holes (Peng & Quan, 2009). However, only limited empirical work has been conducted to confirm these proposals, and even less is known about the characteristics of different start-up cohorts' network configurations and the underlying mechanisms that lead to plausible differences. Accordingly, I seek answers to the first set of research questions regarding network configurations:

- (1) What are the characteristics of different start-up cohorts' network configurations?
- (2) How might different start-up cohorts differ in their network configurations? What are the underlying processes and mechanisms? How do start-up cohorts'

exposures to different founding institutional environments influence their network configurations during institutional changes?

Networking actions

A network configuration only captures a snapshot of network characteristics. If the network configuration evolves, it should first be reflected in its *networking actions*. To date, little theoretical and empirical work has been devoted to investigating networking actions (Hoang & Antoncic, 2003a; Jack, Dodd, & Anderson, 2008; Jack, Moul, Anderson, & Dodd, 2010; Ring & Van De Ven, 1994). The concept of *networking action* distinguishes itself from a *network* in that it emphasizes process and dynamic dimensions. As a network plays a significant role in the success of entrepreneurial goals, it is crucial to know how ties are initiated, established, governed, and changed.

A clear research focus on networking actions is much needed in studying network evolution in transitional economies. Previous studies mainly focused on the necessity and benefits of networks and stressed strategic shifts of networks during the transition. However, the actual process of networking and the how networking style might change during the institutional change period are far from clear. Therefore, I aim to fill this important lacuna by exploring two critical dimensions in networking actions: tie formation and trust development (Elfring & Hulsink, 2007; Podolny & Page, 1998; Smith & Lohrke, 2008; Vissa, 2010). Linking the start-up cohort approach, I seek to answer a second set of questions:

- (3) How do different start-up cohorts establish ties and develop trust relationships during the phase of institutional change?
- (4) What are the underlying mechanisms that lead to possible differences?

1.4 Chapter Layout

Chapter two reviews the literature of environmental effects on corporate and entrepreneurial strategies, with a special focus on network strategy during the period of institutional change in transitional economies. After evaluating the underlying theoretical debate and contradictory empirical findings, it offers three critiques and proposes theoretical orientations. This chapter continues to familiarize the reader with the history of Chinese institutional change and the development of private

entrepreneurship.

Chapter three presents the research methodology. It comprises two parts. The first part describes the mixed method design, sampling, data collection and analysis procedures, and research validity and reliability. Part two describes the characteristics of respondents' profiles with a comparison of two start-up cohorts' industrial engagement.

Chapters four and five report the empirical findings. Chapter four begins with the description of the distinctiveness between two cohorts' network configurations in three dimensions: network type, tie strength, and diversity. It continues to unpack the underlying processes and mechanisms that led to such differences. Based on these findings, the third section generates the testable propositions for a future test and explorations.

Moving from network configurations to networking actions, chapter five delves deeply into how different start-up cohorts form ties and develop trust relationships during the institutional change period. The analysis of networking actions centers on three types of networking activities: team formation, political networking, and market networking. This chapter shows that two start-up cohorts demonstrate distinctive networking styles: The old cohort's network style is characterized by network deepening, while the younger cohort's is characterized by network broadening. This chapter ends with testable propositions.

Chapter six concludes the dissertation. It begins with a summary and then offers implications for institutional theory, organizational population ecology, and network theory. This final chapter also discusses the limitations, practical applications, and proposes directions for future study.

CHAPTER 2. RESEARCH BACKGROUND AND THEORETICAL ORIENTATION

2.1 Introduction

This chapter provides the theoretical background for this research project and

outlines three critical gaps in the existing literature that will be taken into account in this study. The review sheds light on how the founding and changing environments affect corporate and entrepreneurial strategies, with a special focus on network strategy during the phase of institutional change in transitional economies. It begins with a review of two competing perspectives concerning what impacts environmental effects have on strategic evolution: strategic adaptation and strategic inertia. This discussion points out that existing research has only focused on the task environment in developed economies where “a market-based institutional framework has been taken for granted” (Peng, Sun, Pinkham, & Chen, 2009: 66). Thus, an institutional-based perspective that scrutinizes interactions among institutions, entrepreneurs, and strategic choices can contribute new insights. Following this assessment, the second section is devoted to reviewing existing institutional studies on strategies employed by firms during the institutional change period in transitional economies. Similarly, the review is structured around the debate of strategic evolution with a focus on network strategy.

The third section offers a critical view of previous research on institutional change and network evolution by highlighting three important gaps: First, institutions have three pillars—regulative, cognitive, and normative; however, the current literature has not examined the combination of institutional pillars at a specific period and has failed to investigate how a particular combination impacts networks. Second, previous studies mainly examine or propose the evolution of network structure; yet, they have not closely examined the actual *networking action* and its evolution during the institutional change phase. These two critiques lead to the third one, that is, there is insufficient attention paid to cohorts and divergent adaptational patterns during the period of institutional change. The final section outlines the institutional change phase and the development of private entrepreneurship in China, providing the relevant background for this empirical study.

2.2 The Debate on Environmental Effects

Environmental change and strategic adaptation

How firms and entrepreneurs respond to environmental changes has been a

prominent research topic for strategy scholars. However, within the management and organizational literature, there is considerable debate and controversy on this issue. This debate can be categorized into two perspectives: strategic change and a tendency toward inertia (Boeker, 1989b; Hannan & Freeman, 1984; Rajagopalan & Spreitzer, 1997; Van de Ven, 1993). The first stream of scholars emphasizes strategic adaptation to environmental change (Baum, 1999: 71; Kraatz & Zajac, 2001; Pfeffer & Salancik, 1978). The main arguments are as follows.

First, as the environment changes over time, firms need to make strategic moves to realign themselves with new environmental demands (Zammuto & Cameron, 1985). A shift in their resource supply changes firms' resource needs and organizational structure (Hillman, Cannella, & Paetzold, 2000; Pfeffer & Salancik, 1978). When new opportunities arise, firms and entrepreneurs need to recognize and learn innovative skills to achieve high performance (Carley & Lee, 1998; Shane & Venkataraman, 2000). The emergence of a new environment also devaluates previous legitimate structures and behaviors while demanding new ones (Davis, Diekmann, & Tinsley, 1994) that are realigned with the new environment and avoid illegitimacy (Glynn & Marquis, 2004: 152; Kraatz & Zajac, 1996; Ruef & Scott, 1998).

Second, making strategic changes are not only necessary and beneficial for a firm's survival and performance enhancement in the altered conditions, they are also achievable. Scholars from this stream emphasize the roles played by entrepreneurs, managers, and management teams in monitoring changes and evolving their strategies to fit the new environment (Hrebiniak & Joyce, 1985) or even to reshape their environment (Child, 1972; Miles & Snow, 1978). In short, scholars in this vein state that strategic change is the joint outcome of environmental effects and "intentional strategic adaption" (Lewin & Volberda, 1999); it is necessary, beneficial, and achievable.

Environmental change and network adaptation

The external environment shapes the nature and direction of corporate and entrepreneurial activities over time (Pfeffer & Salancik, 1978). As firms and entrepreneurs strive to catch up with the changing environment, they alter and adapt their networks to realign themselves with the new environment. Drawing upon the transaction cost theory (Williamson, 1975), the resource-dependence theory (Pfeffer

& Salancik, 1978), and the strategic management perspective (Gulati, 1998; Kraatz, 1998), scholars from the “environment change” angle stress the benefits of network change and suggest that networks are flexible enough to be created, adapted, and dissolved as a strategic reflection on the environmental change (Kim, Oh, & Swaminathan, 2006; Lang & Lockhart, 1990; Madhavan, Koka, & Prescott, 1998).

In their comprehensive review, Koka et al. (2006) summarized that changes in two environmental dimensions—environmental uncertainty and resource munificence—affect opportunities (the potential array of inter-firm relations) and resources available for the networks of firms. They worked out a matrix to illustrate how the decrease and increase in these two dimensions lead to corresponding patterns in network changes: network expansion, network churning, network strengthening, and network shrinking. These changes are often necessary and beneficial (Hite & Hesterly, 2001; Koza & Lewin, 1998; Kraatz, 1998). Scholars from this stream also widely acknowledge that network changes are of a strategic nature such as rational calculation, effective monitoring, and strategic adaptation (Bourgeois, 1984; Child, 1972; Hite & Hesterly, 2001; Kim et al., 2006). As Kim et al. (2006: 706) stated, this rational model assumes that if the cost of retaining old ties exceeds the benefits, firms will dissolve these ties and form new ties without much difficulty.

Abundant studies have examined how environmental changes impact differences in network size, structure, tie strength, and tie components. For example, Baker et al. (1998) studied the inter-firm networks between advertising agencies and their clients and found that increasing competition and changing norms increase the rate of tie dissolution. When firms experience high uncertainty, they are likely to strengthen their existing ties to cope with change and uncertainty (Granovetter, 1983; Krackhardt, 1992; Uzzi, 1997). An alternative view suggests that market uncertainty and technological innovations make organizations more likely to form new and diverse ties with others who have marketing and technological capabilities (Khanna, Gulati, & Nohria, 1998).

Scholars from this camp have paid insufficient attention to the constraints of network changes. As Kim et al. (2006: 706) pointed out, organizations still experience difficulties in network change even if they recognize the need for change. Therefore, we still need to pay more attention to the tendency of network inertia. I review this perspective in the following sections.

Founding environment and imprinting effect

In contrast to the strategic adaptation perspective, the strategic inertia perspective suggests that firms and entrepreneurs are constrained in their ability to adapt to changing conditions and that firms actually demonstrate a tendency toward preserving their initial strategies and resist changes (Hannan & Freeman, 1984; Huff, Huff, & Thomas, 1992; Miller & Chen, 1994; Ruef, 1997). Although different reasons can account for strategic inertia, scholars have devoted much attention to the imprinting effect of the founding environment on subsequent organizational behaviors and performance (Dobrev & Gotsopoulos, 2010; Eisenhardt & Schoonhoven, 1990; Kimberly, 1979; Mintzberg & Waters, 1982; Zyglidopoulos, 1999).

In his seminar work, Stinchcombe (1965: 168-169) first proposed that organizations founded in a given environment “must construct their social systems with the social resources available,” and that organizations in subsequent trajectories tend to maintain those systems because “traditionalizing forces, the vesting of interests, and...ideologies may tend to preserve the structure.” This idea has been theorized as the organizational imprinting theory. It argues that the founding environment exerts an enduring influence on the present structures, strategies, and operating practices, thus leading to the inertia (Kimberly, 1979; Kraatz & Zajac, 2001; Schein, 1983). The imprinting effect occurs mainly for the following three reasons.

First, the founding environment imparts certain resources and opportunities that firms can draw upon for their survival and growth (Carroll & Hannan, 2004; Zyglidopoulos, 1999). The resources required during the initial founding period have a lasting influence on firms. For example, Saxenian (1994) compared the historical development of two regional computer company clusters—Silicon Valley and Route 128 near Boston Massachusetts—and discovered that the initial difference in social structure and industrial resources created two different industrial systems. In Silicon Valley, many start-ups generally demand technology/engineering-oriented recruits. In their later recruiting, they still continue to emphasize the technology/engineering skills, despite the equal and increasing importance of administrative and marketing skills (Kriauciunas & Kale, 2006).

Second, newly founded firms need to follow the strategies, practices, and legitimate behaviors that are rewarded by the initial conditions. Boeker found that U.S. semiconductor firms established during the 1950s and 1960s emphasized the

enhancement of their R&D capabilities when the U.S. Department of Defense was their largest buyer. In a later period, the private commercial market became the main buyer, and firms founded in this period placed more emphasis on cost controls and efficiency improvements (Boeker, 1988; Boeker, 1989c; Kriauciunas & Kale, 2006). Dobrev and Gotsopoulos studied U.S. automobile manufacturers and discovered that firms founded under the condition of a legitimacy vacuum invested finite resources to develop routines and processes, but later “become obsolete and generate external misalignment once [the] legitimacy vacuum dissipates” (2010: 1170). Johnson (2007) documented that the political and artistic conditions during the founding of the Paris Opera were imprinted on its organizational trajectory.

Finally, founders exhibit the imprinting effect on a firm’s structure and behavior. The type and duration of a founder’s prior work experience, ability, and network position imbue the nascent organizations with resources and opportunities that impact their later trajectory (Dobrev & Gotsopoulos, 2010; Kimberly, 1979). The founders’ ideas, values, and philosophy also shape and model organizations, and these initial blueprints tend to impact the culture and practices that follow, even after the founders’ departure (Carroll & Hannan, 2004; Hannan, Burton, & Baron, 1996; Pennings, 1982). In the formative period, founders seeking to align their firms to fit into the existing environment (Dobrev & Barnett, 2005) causes the imprinting effect and leads to a misalignment with the new environment (Dobrev & Gotsopoulos, 2010).

Founding environment and network inertia

Realizing the imprinting effect of initial conditions, scholars have challenged the strategic network change perspective by highlighting that organizations’ original relationship with the founding conditions influences the initial network patterns, which are remarkably persistent over time. Drawing on the organizational imprinting theory (Stinchcombe, 1965) and the structural inertia theory of organizational ecology (Carroll & Hannan, 1989; Hannan & Freeman, 1984), scholars from these camps have developed network imprinting and network inertia arguments by asserting that previous ties established during the founding period influence subsequent network trajectories and impede network change (Kim et al., 2006: 705; Marquis, 2003; Milanov & Fernhaber, 2009). From the structural inertia perspective, inertia is not a symptom of “bad management,” rather, it is a result of establishing the well-adjusted

organizational architecture (Barnett & Carroll, 1995; Hannan & Freeman, 1984; Kim et al., 2006). Organizational identity plays a role in constraining rationality, leading to conformity and inertia (Hannan, Pólos, & Carroll, 2007). Therefore, inertia is regarded “as a by-product of the previously successful management of networks that generate synergies for the participating organizations” (Kim et al., 2006: 705).

Within the current literature on network inertia, scholars have conducted empirical studies to understand both how the initial network structure impacts the persistence of network structure over time and how difficult it is to change the network structure. For example, Walker, Kogut, and Shan (1997) demonstrated that because of mutual resource dependence, biotechnology start-ups create a stable network structure at the initial venture stage and that this structure creates a path dependence tendency in later partner networks. Similarly, Gulati and his colleagues (Gulati, 1995; Gulati & Gargiulo, 1999) also found that an organization’s existing partners create a path dependent environment which shapes the formation of subsequent partnerships. Uzzi and Spiro (Uzzi & Spiro, 2005) found that the structure of a small world network in the Broadway musical industry has remained the same for over 90 years despite major changes in the musical industry. Milanov and Fernhaber (2009) demonstrated that the network size and centrality of a new venture’s initial alliance partner impact the subsequent network size.

Although these studies demonstrated the perseverance of network structure over time, research on the antecedents of network evolution still faces substantial challenges (Brass, Galaskiewicz, Greve, & Tsai, 2004). Notably, knowledge regarding the influence of the founding environment on network inertia is very limited (Elfring & Hulsink, 2007; Marquis, 2003). Marquis criticized that “no one has examined either why this persistence occurs or how network structures reflect the social conditions at founding” (2003: 682). In his study, Marquis (2003) tried to fill this gap by examining the lingering effect of the founding conditions on network structures. In his comparative study of U.S. community network structures in 1986 and 2002, he showed that social technology available during the founding period imprints on the community-based interoperate networks and that the network structure still persists despite corporate environmental change.

Taken together, the network inertia perspective derives its arguments from the imprinting effects that founding environments have on new ventures and the initial network partners of organizations. As network partners are also embedded in the

specific environment (Dacin, Ventresca, & Beal, 1999; Uzzi, 1997), it could be an intriguing research agenda to link the founding environment with the initial network partners in order to understand how the initial networks are constructed and how this initial link affects the subsequent trajectories during environmental changes. Marquis (2003) noted that to uncover the mechanisms that lead to the persistence of historically imprinted patterns, a study needs to investigate the institutional structures and the legitimate template of networking actions that are shared by network actors.

2.3 Institutional Change and the Evolution of Networks

Although the investigation into how firms and entrepreneurs evolve their strategy during environmental changes has been a historical theme, studies on institutional change and strategy evolution in transitional economies from an institutional perspective have only been a recent focus. In this section, I first provide the definitions for key concepts and then review competing arguments and outline critical research gaps in the extant literature centering on institutional analysis.

Concepts: institutions and institutional change

North (1990: 3) defines institutions as: “the rules of the game in a society or, more formally, are the human devised constraints that shape human interaction.” In his view, institutions consist of formal frameworks such as “constitutions, laws, property rights” and informal frameworks such as “sanctions, taboos, customs, traditions and codes of conduct” (North, 1991: 97). Scott categorized North’s two types of institutions into regulative, cultural-cognitive, and normative elements or pillars (Scott, 1995; Scott, 2008). These categorizations have also been enriched and extended by other scholars. The *regulative pillar* arises from government legislation, industrial agreements, and standards (Bruton, Ahlstrom, & Li, 2010; Scott, 2008). The *cognitive pillar* includes the taken-for-granted beliefs and values that are based on subjectively constructed and internalized rules and meanings (DiMaggio & Powell, 1991; Scott, 2008). The *normative pillar* introduces prescriptive and obligatory dimensions that comprise values and norms defining what is considered as proper (Scott, 2008: 54-56). These three institutional pillars provide related but distinctive bases of behavioral legitimacy. The regulative pillar stresses conformity to rules, the

normative pillar emphasizes the deeper and moral basis, and the cognitive pillar underlines a common frame of reference (Scott, 2008; Veciana & Urbano, 2008).

Noting North's contribution, Nee and his colleagues bring actors back into the institutional framework, arguing that organizations and individuals pursue their interests in concrete institutional structures (Nee, 2005; Nee & Ingram, 1998). They regard institutions as a system of "choice-within-constraints" (Ingram & Clay, 2000; Nee, 2005; Nee & Ingram, 1998). According to Nee (2005: 55), an institution is defined as "a dominant system of interrelated informal and formal elements—custom, shared beliefs, conventions, norms, and rules—which actors orient their actions to when they pursue their interests." Following this definition, institutional change not only requires rebuilding formal institutions, but also requires the alignment of norms, interests, and networks to coordinate behaviors (Nee, 2005; Nee & Ingram, 1998).

Institutional theory has been criticized for putting more emphasis on explaining the persistence and homogeneity, and as a consequence, institutional change is not well understood (Dacin, Goodstein, & Scott, 2002). North emphasized that "to proceed, we must understand what institutions are and how they evolve" (North, 1997: 495). However, his understanding of institutional change is "overwhelmingly an incremental one," because it "consists of marginal adjustments to the complex of rules, norms, and enforcement" (North, 1990: 83).

Hargrave and Van de Ven (2006) defined the *institutional change* as "a difference in form, quality, or state over time in an institution," and they suggested that changes can be identified by observing noticeable differences in the arrangement at two or more points in time on a set of dimensions (e.g., frames, norms, or rules). Peng (2003) pointed out that although institutional change has gradually emerged as a research focus, scholars have only paid scant attention to the wide-ranging changes in transitional economies. He appealed for more research attention to be devoted to transitional economies, which have been undergoing a shift from central planning to market economies (e.g., China, Russia, East and central Europe). According to Peng, *institutional transition* is defined as "fundamental and comprehensive changes introduced formal and informal rules of the game that affect organizations as players" (2003: 275). He then asked a critical question: In transitional economies, how do organizations make strategic choices during the time of institutional transitions?

Following Peng's influential work, a growing body of research has devoted attention to answering this fundamental question. However, studies still seem to

produce competing arguments and results. Similar to the debate outlined in the preceding text, one strand of research states that institutional change leads to strategic adaptation. Another strand of research, however, asserts that strategic inertia is predominant during institutional change. The following section begins with a review of these two research strands in terms of strategy evolution with a focus on networks and then highlights three important research gaps.

Institutional change and strategic adaptation

Many institutional studies were conducted in developed economies. They typically examined how organizations co-evolve with a changing task environment, such as new market demands, technological changes, and varied industrial conditions (Barr, 1998; Dess & Beard, 1984; Doz, 1996; Lewin et al., 1999; McDougall & Oviatt, 1996; Romanelli & Tushman, 1994). In these contexts, “a market-based institutional framework has been taken for granted, and formal institutions (such as laws and regulations) and informal institution (such as norms and cognitions) have been assumed away as ‘background’ conditions” (Peng, Wang, & Jiang, 2008: 922). Although political scientists have examined the variety of capitalism and institutional differences across nations (Hall, Soskice, & Press, 2001; Howell, 2003), most of these comparisons are still focused on developed economies, without giving much attention to radical and intense institutional changes. More recently, scholars began to look beyond the task environment to explore how organizations make strategic choices during periods of institutional change, especially in the context of transitional economies (Narayanan & Fahey, 2005; Peng, 2003; Peng et al., 2008).

Within the existing literature, one strand of scholars believes that these unprecedented changes prompt firms to change and co-evolve. Drawing on the co-evolution perspective (Lewin & Volberda, 1999), they argue that co-evolution is the joint outcome of institutional change and intentional strategic adaptation. Changes in the political, economic, and social sphere have brought about two major shifts. First, changes in the institutional environment generate new resources, opportunities, and demands (Sine & David, 2003; Tang, 2009). An increase in the scale and scope of the economy facilitates the transactions that engage more parties and requires more coordination (Tan & Tan, 2005: 145). Those changes also alter the logics for legitimate behaviors (Ahlstrom & Bruton, 2010; Gilley, 2008). Second, transitions

from centrally planned economies to market-oriented economies bring about new roles for the state government to play and new rules of the game in which firms and entrepreneurs must seek success (Kornai, 1997; Lin, 2001a; Peng, 2000). Therefore, firms operating in these conditions must attempt to adhere to those changes, respond effectively, and fit into the new environment if they want to survive and grow continuously (Dimaggio & Powell, 1983; Hannan & Freeman, 1977; Meyer & Rowan, 1977; Pfeffer & Salancik, 1978).

A good number of studies have documented strategic adaptation during the institutional change phase. However, most of these studies focused on state-owned enterprises. For example, Boisot and Child's (1988) research discovered that in the initial reform period, the government shifted its focus from administrative control toward market coordination. This shift urged state-owned enterprises to be more proactive and pushed them to "join the system" and co-evolve with it. Nee's early study also found that, under the conditions of partial reform (from 1979 to 1991), collective enterprises efficiently transformed into a hybrid organizational form, because these firms could "double dip in the redistributive and market sectors of the economy" (Nee, 1992: 13). Subsidized by the local government, cadre-entrepreneurs became more oriented toward growth. Using a stage model of transition, Tan and Tan (2005) compared the strategies of state-owned enterprises at two different time periods (1990 and 2002). They confirmed that firms' strategic adaptations co-evolved over time and that these adaptations (e.g., future orientation, proactive and innovative orientation, willingness to take risks) improved their performance.

Institutional change and network adaptation

As an important strategy for organizational and entrepreneurial success, networks have attracted significant research attention from organization and management scholars. Transitional economies provide natural laboratories for scholars who wish to better understand network evolution in the context of institutional change (Danis, Chiaburu, & Lyles, 2010). Scholars associate pervasive network behaviors with the following institutional characteristics: an insufficient legislative framework and unstable policies (Guthrie 1998), a shortage economy and the state allocation of resources (Walder 1986), as well as immature market institutions and insufficient market competition (Guthrie 1998). These problems make market transactions

uncertain and costly. Entrepreneurs and firms, therefore, develop personal networks as a substitute for the absence of formal institutions (Xin & Pearce, 1996). These personal networks are also noted as *guanxi* in the Chinese context, although *guanxi* has been defined at different levels by different scholars (Bian, 1997; Jacobs, 1980; Tsui & Farh, 1997; Yang, 1994). It is generally viewed as interpersonal connections with strong cultural norms. Chen and Chen's (2004: 306) definition provides a concrete definition of *guanxi*. They view *guanxi* as:

[An] indigenous Chinese construct... as an informal, particularistic personal connection between two individuals who are bounded by an implicit psychological contract to follow the social norm...such as maintaining a long-term relationship, mutual commitment, loyalty, and obligation.

Although *guanxi* has deep-rooted cultural elements, some scholars still tend to link the prevalence of the *guanxi* practice to the absence and insufficiency of regulative institutions. Scholars who follow this line believe that the enforcement of regulative institutions in those economies could lead to network adaptations during the phase of institutional change in three dimensions: network intensity, tie strength, and network type.

Network intensity. Scholars under this vain believe that the enhancement of the legal system and market institutions, as well as the integration into the global market would remarkably diminish the reliance on networks, resulting in a further decline of network intensity as the transitional process progresses (Danis et al., 2010; Guthrie, 1998; Peng, 2003). Peng (2003) developed a two-stage model of the market-oriented institutional transition and proposed that when an institutional transition evolves from an early phase to a late phase, the network-based strategy will move to a market-centered strategy (a rule-based, impersonal exchange). Using his empirical study from Shanghai, Guthrie (1998) claimed that the importance of *guanxi* is declining during the course of China's economic transition. Their arguments are based on the assumption that transitional and emerging economies will "eventually converge with developed economies" (Peng & Zhou, 2005: 331). These arguments are very controversial (Carney, 2004; Djelic & Quack, 2003) given the fact that other scholars still showed evidence of networking behavior persisting during the institutional change phase in Russia, Central and Eastern Europe (Batjargal, 2006; Ledeneva, 1998; Ledeneva, 2008), and China (Batjargal, 2007; Keister, 2002b; Potter, 2002; Wank,

2002a, b; Wank, 1996).

Tie strength. Based on the convergence assumption, scholars predict that the strength of ties is also likely to shift from strong-tie-based networks to weak-tie-based networks. Realizing that Peng's (2003) two-stage model fails to capture the heterogeneity of both the institutional transition and network strategies, Peng and Zhou (2005) integrated an intermediate phase into Peng's two-stage model and proposed the evolution of network strength and network content in Asian countries. They argued that in the early institutional period, strong ties serve as a substitute for formal institutions by providing particularistic-based trust and lowering the risk of opportunism and cost. In the intermediate phase, the government's resource control and intervention are decreased and the uncertainty of regulatory policies is reduced. Meanwhile, incentives for firms and entrepreneurs to explore new and diverse ties that could provide various resources and opportunities increases (Madhavan et al., 1998; Rowley et al., 2000). The institutional force and strategic intentions would jointly lead to a shift from strong-tie-based networks to weak-tie-based networks.

Network type. Scholars emphasizing the network adaptation thesis also suggest that different types of networks co-evolve with institutional changes. The existing literature has mainly examined three types of networks—social-cultural networks, political networks, and market networks or business networks (Ma & Cheng, 2010). I review them respectively in the following text.

The *social-cultural network*, also known as an in-group network, refers to ties with family members, relatives, and people with the same cultural background (Fei, [1949] 1992). Under the conditions of high environmental uncertainty and an underdeveloped market, social-cultural networks play a significant role by mobilizing financial resources and providing property protection and labor power (Li, 1996; Peng, 2004). Peng (2004) argued that during the early stages of market reforms, when formal property rights laws were ineffective and market institutions were underdeveloped, kinship networks played an important role in protecting the property rights of private entrepreneurs and reducing transaction costs. He expected that, with the establishment of effective property rights and market institutions, the effects of kinship networks will decline somewhat. Peng and Quan (2009: 15) also suggested that cohesive networks are likely to decline, because they do not provide novel opportunities and resources. Instead, they generate normative and conformity pressures

for cohesion and weaken the ability to adapt to a new institutional environment.

A *political network* refers to ties with government officials, state-owned enterprise leaders, and government entities (Sheng, Zhou, & Li, 2011). A political network offers protection against institutional uncertainty, provides a substitute for the weak legal system and law enforcement (Child, 1994; Peng & Heath, 1996), facilitates access to scarce resources (bank loans, subsidies, land, and timely information) (Sheng et al., 2011), and secures political legitimacy (Ahlstrom & Bruton, 2001; Peng, Tan, & Tong, 2004; Tsang, 1996).

Scholars identify the establishment of political networks as a unique strategy in transitional economies where institutional uncertainty is high (Li & Atuahene-Gima, 2002; Welter & Smallbone, 2011). They believe that when the level of institutional uncertainty and dysfunctional competition are low, the significance of political networks will decline. Nee (1989) has argued that increasing market competition leads to a substitution of vertically structured political networks to horizontal networks with other firms. Li and Atuahene-Gima (2001) found that political networks did not play a role in a new technology venture's product innovation, and they indicated that this may be due to the transaction costs associated with establishing these ties. Recent studies also suggested that using political ties may not improve the performance or "could even become a liability in certain institutional and market conditions" (Sheng et al., 2011: 11) and impede the motivation to compete and adapt (Li, Zhou, & Shao, 2009). Peng and Zhou (2005) proposed that enhancing regulative institutions also have a positive effect in transforming government networks from strong-tie-based into weak-tie networks.

A *market network* refers to corporate ties with business entities, such as buyers, suppliers, customers, and other market collaborators and organizations (Luo, 2007; Sheng et al., 2011). Plenty of studies have demonstrated that in transitional economies, unfavorable institutional conditions and the underdevelopment of market factors reinforce the importance of market networks (Keister, 2001; Peng, 2003; Peng & Heath, 1996). Firms and entrepreneurs cultivate business ties to alleviate institutional constraints, obtain critical resources and opportunities, and secure legitimacy (Ahlstrom & Bruton, 2001; Luo, 2003; Park & Luo, 2001).

As it is often closely related to a firm's performance, the evolution of market networks has attracted increasing attention from both Western and Chinese scholars (Luo & Chen, 1997; Park & Luo, 2001). The extant literature suggests that there are

different scenarios concerning the evolution of market networks. First, as some scholars pointed out, the role of informal business ties will diminish during the transition (Guthrie, 1998; Peng, 2003). Li and Atuahene-Gima (2001) found that government institutional support enhances the effectiveness of new technology ventures' product innovation strategies while business alliances appear to impede the positive effect of product innovation on a firm's performance. Second, given the fact that empirical studies repeatedly confirmed the persistent role of business networks in transitional economies and even in developed economies (Gulati, 1995; Rowley et al., 2000), scholars began to direct their attention to the transformation of business ties. Some scholars identified that business networks play more important roles than political networks in improving performance (Sheng et al., 2011), leading to a shift from political networks to business networks (Tan, Yang, & Veliyath, 2009).

Third, firms may be more interested in establishing ties with a more diverse set of organizations to explore new opportunities. As the market develops and transactions involve more market entities, managers are able to build networks with disconnected organizations. Brokers also like to bridge disconnected people and obtain a benefit for this service (Lin, Peng, Yang, & Sun, 2009). These could transform strong-tie-based networks into weak-tie-based networks (Peng & Zhou, 2005), shifting from cohesive networks to a network rich in structural holes (Peng & Quan, 2009).

Taken together, the previous literature mainly focused on regulative institutional conditions (their absence or improvement) and provided insights into the incentives and functions for establishing or adapting networks during the institutional change phase. Most of these arguments, however, arise from a theoretical framework instead of empirical testing. It still remains unclear what the actual network evolution process is during the period of institutional change (Ma & Cheng, 2010). Questions still remain as to what extent, in what areas, and to whom networks still matter or evolve. The following section reviews competing theoretical arguments and empirical findings in this regard.

Founding institutions and inertia

Institutional theorists typically view institutions as relatively stable and difficult to modify (Brint & Karabel, 1991; DiMaggio, 1988). The institutionalization process and competing institutional logics lead to the resistance of institutional change

(Boeker, 1989a; DiMaggio, 1991; Marquis & Lounsbury, 2007; Scott, 2008: 128). According to Johnson (2007), the founding institutional arrangement, especially informal institutions (e.g., beliefs, norms, and values) “appear... not only in the form of resources that can be strategically mobilized but also in the form of schemas and discourses” that have a long-lasting effect on subsequent trajectories.

Previous studies with a particular focus on the founding environment mainly concentrated on the imprinting effect of the task environment (e.g., resources, technology, the market) and the industrial specific environment (Beckman, Haunschild, & Phillips, 2004; Madhavan et al., 1998; Marquis, 2003; Pfeffer & Salancik, 1978). In those contexts, both formal (e.g., laws and regulations) and informal institutions (e.g., cultures and norms) are taken for granted and less examined (Peng et al., 2009). Therefore, the effect of founding institutions on firms’ strategy choices during the institutional change phase has received little research attention (Marquis & Huang, 2010; Peng, 2003). There are, however, some notable exceptions contributed by two individual studies showing that when there is a shift from a socialist environment to a market-oriented environment in transitional economies, a firm’s socialist imprinting impedes its subsequent development and adaptation.

Kogut and Zander (2000) traced the technological contributions of two Carl Zeiss companies in the GDR (German Democratic Republic) and the FDG (Federal Republic of Germany). By comparison, they demonstrated that the founding institutional environment was important in impeding the development of technological capabilities of the East German firms during the transition: Firms exploited technological opportunities under the socialist context; during the transition to market capitalism, the technologically viable firms failed as their deficiency in technological innovation created pressures on innovation “by plan.” Kriauciunas and Kale (2006) revealed that the imprinting effect of the previously socialist institutional and market environment negatively impacted the capabilities of Lithuanian firms to adapt their operating knowledge. Socialist values, norms, thought styles, and practices were anchored into their regular thought and practices; therefore, these firms continue to behavior in ways that reflect the enduring influence of socialist institutions.

Founding institutions and network inertia

The current literature about network inertia and the knowledge gap, which exists in founding institutions, still lacks a consolidated framework that could examine the underlying processes and mechanisms. Studies have indicated that a possible network inertia exists during the institutional change period. Although Peng and Zhou provided this “finer-grained framework that emphasizes a possible intermediate weak-tie phase” and proposed the evolution of network strength and network content in Asian countries, their propositions haven’t received strong support from empirical testing probably because they recognized that this strategic shift may exhibit an enormous time lag (Carney, 2004; Peng & Zhou, 2005).

The institutionalization of relationship norms in the early period impedes the transforming to weak ties (Beverland, 2005). Schmelzer (2005) studied the influence of institutional changes (before and after 1989) on the tie strength of social networks in East Germany. The result suggested that ties arising on the basis of a scarcity of goods before 1989 led to social relations governed by the norms of reciprocity. Therefore, in the course of the market transition, strong ties and weak ties are not interchangeable, and old relational ties were not adjusted to new market rules.

Ledeneva (1998) and Rose (1999) studied the networks in Russian and Central and Eastern European countries. They suggested that dense networks established to cope with difficulties during the socialist period have continued as means for coping with the present. The interpersonal trust networks established among close kin or ethnic group members during the socialist period might serve to reduce trust in outsiders because transactions rarely occur across group boundaries. Therefore, it might be difficult to break out of the closed trust network to generate a more open network that requires trust in strangers (Rose-Ackerman, 2001a: 436).

2.4 Critiques and Theoretical Orientation

The preceding sections introduced the existing research on environmental effects and network evolution. This section offers a critical review of the existing literature, outlines three research gaps, and establishes the theoretical orientation of this study.

The missing combination of institutional pillars

Institutions are composed of various combinations of elements or pillars, and these pillars vary over time (Scott, 2005). However, different strands of scholars tend to privilege one or another pillar (Greenwood & Hinings, 1996; Scott, 2005). The missing combination of different institutional pillars in one research setting has led to contradictory arguments in the previously described literature. For example, scholars focusing on the regulative pillar tend to advocate network change. The *regulative pillar* arises from governmental legislation and industrial agreements and standards (Scott, 2008: 422). When this formal institutional support is weak, strong interpersonal networks are used as a substitute in transitional economies like China (Xin & Pearce, 1996). Scholars argue that the establishment of more supportive regulative institutions would cause firms and entrepreneurs to transform from a network-based strategy to a market-based strategy (Danis et al., 2010; Guthrie, 1998; Peng, 2003), from strong-tie based networks to weak-tie-based networks; and promote their interests in diversifying networks, bridging structural holes, and developing strategic alliances (Hitt, Ahlstrom, Dacin, Levitas, & Svobodina, 2004; Park & Luo, 2001; Peng & Quan, 2009; Peng & Zhou, 2005). Their framework suggests that enhancing regulative institutions and the continuing globalization would erode old normative and cognitive institutions and facilitate new ones (Guthrie, 1998; Peng, 2003). However, they haven't scrutinized all of the pressures and the continuous influence engendered by old normative and cognitive pillars.

Scholars favoring normative and cognitive pillars tend to emphasize constraints that impede change. The *normative pillar* introduces prescriptive and obligatory dimensions that comprise values and norms defining what is considered proper (Scott, 2008). The dissolution of old ties and the formation of new ties are assumed to be difficult and costly, because they are infused with mutual expectations and anticipated obligations from existing partners, especially in a society like China where there are strong *guanxi* obligations (Chen & Chen, 2004; Luo, 2007). The *cognitive pillar* includes the taken-for-granted beliefs and values that are based on subjectively constructed and internalized rules and meanings (DiMaggio & Powell, 1991; Scott, 2008). The prior social-historical context exerts an enduring influence on current styles of thought concerning networks (Hofstede, 2001; Inglehart & Baker, 2000; Johnson, 2007). Community culture is also crucial in legitimating network behaviors

where imprinting occurs (Marquis, 2003). These scholars stress that changes are path dependent and that the cultural heritage leaves an imprint effect that endures transitions.

In short, the literature identifies how different institutional pillars influence the construction and evolution of networks. However, the literature suffers from three major limitations. First, scholars tend to privilege one or another pillar and no empirical study has explicitly explored the effect of the specific combination and interactions among pillars. Second, institutional pillars are reshaped and contested in times of institutional change (Scott, 2008: 58). Yet, to date, the literature has not closely examined how the three pillars are changing in nature during the institutional change phase and how the specific combination of pillars at different periods shapes networks. Third, previous studies mainly examined or proposed the evolution of network structure. They have not closely examined the actual *networking action* and its evolution during the period of institutional change.

Because of the failure of the contemporary literature to give equal consideration to the three pillars and to examine the responses in one research setting, the following question arises: How do entrepreneurs interpret and respond to institutional change when both formal and informal institutions are considered? The competing perspectives in the literature alert us to the fact that different institutional pillars do co-exist in a given period; equally important is that, in rapidly changing conditions, the nature and contribution of the three pillars may also vary (Scott, 2008). What are the specific combinations of institutional pillars at different periods? How do they affect firms and their founders? These questions urge us to further identify research gaps in the literature and to outline the theoretical orientation in two more aspects: (1) What is the actual process of *networking*? How do the styles of *networking* evolve during the institutional change phase? (2) Do entrepreneurs respond to institutional changes in similar ways, or do entrepreneurial cohorts with different institutional origins respond in different patterns?

Institutional change and the evolution of networking actions

The existing literature provides some insight into the effects of institutional environments on network configurations, however, most of the studies devote less attention to the actual process and networking actions. While those studies emphasize

the necessity and benefits of establishing personal connections and stress the strategic adaptation of network configurations during the transition, we must ask the following question: *How* do firms and entrepreneurs establish connections and develop trust relationships?

This inquiry is crucial to our understanding of institutional effects on networks. Here, a critical gap needs to be filled in linking environmental effects and network configurations. As the network configuration only captures a snapshot of network characteristics, we need to know not only its institutional antecedents but also the actions and strategies that lead to the focal network configurations. If the adaptation or inertia of network configurations occurs, this should be first reflected in networking actions. Thus, it is crucial to know how ties are initiated, established, and governed.

The current literature identifies tie formation and trust development as two critical dimensions of networking actions (Child & Möllering, 2003; Elfring & Hulsink, 2007; Möllering & Stache, 2010; Podolny & Page, 1998; Smith & Lohrke, 2008; Vissa, 2010). In transitional economies, confronted with higher uncertainty and volatility, firms rely on strong commitments and personal trust with pre-existing ties and particular ties to access critical resources and opportunities (Hoskisson et al., 2000; Radaev, 2002; Stark, 1996). For example, Guseva and Rona-Tas (2001) found that banks rely on personal trust and that they tend to use and extend their existing social ties by issuing credit cards to family members and friends of top bank executives.

Scholars hold different opinions about how institutional change can transform tie formation propensity and a trust developing orientation. Child and Möllering (2003) found that when the institutional foundations for trust remain underdeveloped in China, managers of foreign investment firms actively develop and foster trust among their Chinese partners and staff, such as establishing a personal rapport with Chinese staff, locally recruiting managers, and transferring their own business practices to local operations. These strategies are already different from the strategies that simply emphasize developing *guanxi* with Chinese partners, because even Chinese regulative institutional environments still remain weak and the ways that trust is developed is likely to be different from 30 years ago. For example, Hitt et al. (2004) found that with the development of more stable and supportive institutional environments, Chinese firms emphasize their international partners' technological and managerial capabilities more, suggesting that competence is more important in developing a trust

relationship. Tan et al. (2009) found that the new Chinese institutional environment leads to the establishment of a trust system and reshapes business behaviors, while particularistic trust (*guanxi*) has become less important.

Other scholars drew attention to the inertia tendency in tie formation and trust development during the insitutional change period. Powell and Smith-Doerr (1994: 392), for example, noted that “ties that bind may also turn into ties that blind.” Rose-Ackerman questioned whether reciprocal trust established in the early period could be transformed to “trust in rules” in Russia and Central and Eastern European countries. She noted that because of lacking confidence in formal institutions, buyers and suppliers are locked into the existing mutually reinforcing relationships and are reluctant to trade with outsiders (Rose-Ackerman, 2001a, b). After reviewing studies on trust formation in Russia, Cook, Rice, and Gerbasi (2004: 207-208) pointed out that moving from closed networking to open networking is “complex and may rely on the kinds of institutions that arise to manage defaulting.”

Given these competing arguments, the following questions need further investigation: How do entrepreneurs form ties and establish trust relationships during the time of instiitunal change? Do networking actions adopted during the earlier period impact current networking? How do older cohorts and younger cohorts with different institutional origins differ in their networking activities?

Divergent adaptational patterns: cohorts and their origins

Cohort and cohort effect. Entrepreneurs and their firms are not equally endowed with resources and networks during their entry into different institutional periods (Baum & Oliver, 1992; Peng, 2003). It is very important to ask: Who is affected during the institutional change phase and how do they respond? Do entrepreneurs and organizations with different institutional backgrounds respond to the environment in a different way?

Although not directly pointing to entrepreneurial studies, life course theorists provide insights into human’s different response patterns during social change. In the 1920s, Karl Mannheim (1970) noted that a generation (birth cohort) is embedded in similar structures of the economy and the determining influence of this early impression remains predominant throughout one’s life course. Ryder (1965:845) defined a *cohort* as “the aggregate of individuals who experienced the same event

within the same time interval.” Alwin and McCammon (2003) also shared this definition and presented examples of cohorts such as the “college entering cohort” and the “marriage cohort.” Cohort membership, therefore, has been used to “index the unique historical period in which a group’s common experiences are embedded” (Alwin & McCammon, 2003:26); and “each cohort has a distinctive composition and character reflecting the circumstances of its unique origination and history” (Ryder, 1965: 845). With this concept, life course theorists examined how historical changes impact different cohorts and suggested that the succession of the cohorts makes social change and innovation possible (Ryder, 1965).

Borrowing the ideas from life course theorists and historical demographers, organizational scholars incorporated history in analyzing social change and organizational transformation (Aldrich & Ruef, 2006: 179; Isaac & Griffin, 1989). Romanelli and Tushman (1986) proposed that in order to examine the relative effects of history, environmental change, and strategic choice, scholars need an organizational cohort approach — a systematic, comparative, and longitudinal analysis—to specify the characteristics of the organizations at different founding periods and investigate how the differences in environmental origins might lead to systematic differences in adaptational patterns. In organization studies, scholars define a *cohort* as a group of organizations or individuals who experience organizational entry and field entry within the same time frame (Joshi, Dencker, Franz, & Martocchio, 2010; Romanelli & Tushman, 1986). Romanelli and Tushman (1986) proposed to study organizational cohorts, because they believe that “adaptational patterns vary systematically in accord with differences in contextual origins.” For organizational scholars, the concept of a cohort manifests the initial link between a population and its founding environment (Aldrich & Ruef, 2006; Carroll & Hannan, 1989; Romanelli & Tushman, 1986).

Life course theorists use the *period effect* concept to show the relatively uniform impact of social change across different cohorts and they use *cohort effect* to manifest different response patterns among cohorts during social change (Alwin & McCammon, 2003; Bengtson, Cutler, Mangen, & Marshall, 1985; Elder, 1977; Elder & Johnson, 2002; Glenn, 2003; Ryder, 1965). In an organizational context, the period effect “affects all organizations within a population regardless of their ages,” while the cohort effect “occurs when events within a period differentially affect organizations

within successive founding cohorts” (Aldrich & Ruef, 2006: 174).

From the organizational ecology perspective, the initial environment influences organizational birth rates and organizations of the same cohort share a similar environment and destiny. Organizational life changes increase as organizational density (the number of organizations of a particular type) increases, however, at certain high-density levels, the survival rates decline because of the increasing competition (Carroll & Hannan, 1989). Empirical studies have also shown that adaptational patterns vary systematically according to a cohort’s origins, suggesting that environmental changes have a cohort effect on organizations. For example, changes in governance structures and political regimes weaken the relations between an old organizational cohort and political elites; when a younger cohort enters into this environment, they enjoy more benefits (Stinchcombe, 1965). Legal regulative changes have different effects on younger and older organizations (Marx, 1976). During wartime, the shortage of essential resources undermines younger organizations but has little effect on older ones (Aldrich & Ruef, 2006). When a technology breakthrough increases environmental uncertainty and munificence, a new cohort of firms breaks with tradition and initiates the competence-destroying innovation; whereas incumbent firms still heavily rely on traditional sources to enhance their existing competence (Anderson & Tushman, 1990; Tushman & Anderson, 1986). Zajac, Kraatz, and Bresser (2000) also showed that incumbents who are more deeply rooted in previous conditions are less likely to initiate strategic transformations during phases of environmental change.

Institutional changes and divergent adaptational patterns. Transitional economies associated with a punctuated phase transition provide excellent opportunities to study cohort effects. However, only a handful of studies have been conducted to investigate cohort effects in individual life chances (Zhou, 2004; Zhou & Moen, 2001), consumer values and choice behaviors (Hung, Fang Gu, & Chi Kin, 2007), and managerial and entrepreneurial orientations (Egri & Ralston, 2004; Tan & Tan, 2005; Zajac et al., 2000). Ralston et al. (1999) found that a new generation of Chinese managers are converging on Eastern and Western values. Egri and Ralston (2004) also found that in China’s state-owned sector, the recent generation of managers demonstrate more individualistic and entrepreneurial orientations, and they are more likely to act independently.

Tan’s studies evidenced that entrepreneurs of different cohorts demonstrate

different adaptational patterns during China's political, economic, and cultural transition. He (Tan, 2001) showed that changes in the Chinese regulatory environment have a different impact on managers from large state-owned enterprises and entrepreneurs from small privately-owned enterprises: The former ones are less innovative and less willing to make risk decisions than the latter ones. Later, he (Tan, 2005) compared strategic adaptations of newly founded state-owned enterprises (founded after 1990) with those of incumbent state-owned enterprises (founded before 1990). He found that managers from new state-owned enterprises have inherited neither advantages nor liabilities from the past, thus, they are more proactive and innovative and assume more risks than old state-owned enterprise counterparts when faced with a changing institutional environment. Although other scholars did not explicitly compare the adaptational patterns between old and younger cohorts, they argue that new institutional environments facilitate the emergence of new organizational forms and provide new ventures with unique resources and opportunities (Keister, 2009; Luo, 2002; Pang, Shen, & Li, 2011).

Although scholars have examined cohort differences in general entrepreneurial strategic orientations, they have rarely explored how entrepreneurial cohorts might differ in their network configurations and networking actions. In his theoretical framework, Peng (2003) proposed that in later institutional periods, the old entrepreneurial cohort needs to sustain its competitive positions; therefore, this group tends to focus on market-based capabilities instead of networks. In contrast, regardless of the institutional environment, the younger cohort still needs a certain level of networks and this cohort is likely to compete on both networks and capabilities; furthermore, its networks focus less on ties with government officials and more on managerial ties.

Peng's theoretical framework and propositions are influential but controversial (Carney, 2004; Djelic & Quack, 2003). It should be noted that Peng himself and other scholars have not explicitly tested his propositions. Danis and his colleagues (2010) offered an exception by comparing an old cohort with a younger cohort of small- and mid-sized enterprises during the Hungarian transition. They found that the younger cohort's market-based strategy is more important and the managerial networking intensity is considerably lower than that of the old cohort. Their study implies a strategic inertia among the old cohort in adapting to institutional changes. Butler and Purchase (2008) offered another empirical study and affirmed cohort differences in

networking action during Russia's institutional transition. With little exposure to the socialist system and as the formalized legal systems become stronger, a new generation of managers conduct their businesses and operate their networks in new ways: Trust and capabilities become important components and reputation becomes critical for developing trust relationships. The old managers from the communist generation, however, still focused on hierarchical relationships rather than developing a partnership with other companies. Their study also confirms the existence of network inertia among old cohorts in adapting to the changing institutional environment.

Empirical studies that apply the cohort comparative approach can help us verify the competing perspectives on strategic evolution during the institutional change phase and answer the question of *who* is actually influenced during the time of institutional change and *how* do entrepreneurs with different institutional origins evolve their network configurations and networking behaviors. In the following section, I briefly review the transition phase in transitional economies and lay out the background for researching Chinese private entrepreneurship during the transition.

2.5 Institutional Change and Private Entrepreneurship in China

Phase transitions in transitional economies

The large-scale, unprecedented changes in transitional economies provide opportunities to study how organizations respond and make strategic choices during the period of institutional change. North noted that institutional change is “overwhelmingly an incremental one” because it “consists of marginal adjustments to the complex of rules, norms and enforcement that constitute the institutional framework” (1990: 83). Other researchers state that although institutions evolve through relatively long periods of stability (quasi-equilibrium) during which incremental changes take place, institutional change is also likely to occur through a punctuated equilibrium (Gersick, 1991; Tushman & Romanelli, 1985)—discontinuous transformations that demarcate distinct evolutionary stages (Peng, 2003; Tan, 2007: 2).

According to Peng, institutional transitions “seem to be crossroads whereby the

deep structure of old institutions gradually gives way to new ones, thus leading to initially ambiguous but increasingly identifiable points of inflection” (2003: 278). Scholars believe that by bracketing the institutional change into different stages, we can better examine how institutions and strategic choices co-evolve over time (Danis et al., 2010; Zaheer, Albert, & Zaheer, 1999). Peng (2003) first provided a two-phase model of institutional transition—an early phase and a later phase. Following this, he and his colleague (Peng & Zhou, 2005) developed “a more complex and more realistic model” by adding an intermediary phase. The phase transition model became the important theoretical foundation and time framework for studying the evolution of firms and entrepreneurship in transitional economies (Tan, 2007).

Phase transitions and entrepreneurship

Scholars have commonly emphasized the significant role of institutional change in shaping the development of entrepreneurship in transitional economies (Peng & Jiang, 2005; Smallbone & Welter, 2001; Smallbone & Welter, 2009). Smallbone and Welter (2009:64) roughly differentiated entrepreneurial behaviors by two periods—the socialist period and the transition period. In their comprehensive review, Estrin et al. (2005) divided the transition process into three stages which gave rise to different types of entrepreneurship. In the first stage, the planned economy leads to the disruption of the previous resource allocation and opens up opportunities for *Kirznian* type of entrepreneurs (Kirzner, 1997): Entrepreneurs discover and pursue opportunities that are reflected within the adjustment of a relative price system during the transition. Resources and opportunities are channeled through networks (Smallbone & Welter, 2001). In the second stage, the macro economy has been stabilized and the price mechanism has been used to convey the supply and demand of information. These increase the incentives for *Schumpeterian* entrepreneurs (Schumpeter, 1934). These type of entrepreneurs exploit an opportunity outside of the economic sphere and bring it into the market (Alvarez, Barney, & Young, 2010: 26). They develop longer-term projects and unmask needs for new projects and technologies. In the third stage, Schumpeterian entrepreneurship becomes more feasible because market institutions are more developed and provide better mechanisms for resource coordination, information gathering, and contract enforcement. Estrin et al. stated that “changes in environment and opportunities over

time in the transition economies are likely to lead to differences in entrepreneurial endeavor, strategies and personal characteristics” (2005: 698).

Although the phase transition model illustrates the nature of institutional change and its dynamic influence in entrepreneurship in transitional economies, few studies have provided a precise time for each stage and suggested which years mark the turning points. Moreover, the evolutionary model of entrepreneurship also confronts challenges with the inertia argument that the forms of entrepreneurship emerging in the early stages may be anchored and entrenched (Estrin et al., 2005).

Phase transitions and private entrepreneurship in China

A growing body of literature has devoted research attention to China’s institutional change and the development of entrepreneurship. Yang and Li (2008) reviewed the literature published over the course of 26 years from 1980 through 2005 and then extended Peng’s two-stage model and proposed a three-stage model of China’s market transition and entrepreneurship development. They defined Phase I as “the beginning of market transition,” which is characterized by high institutional uncertainty, underdeveloped markets, and the dominance of network-based strategies. They defined Phase II as the “early stage of market transition”—a period when the relationship-based, personalized transaction structure transforms into a more rule-based and impersonalized transaction model. Phase III is defined as “the completion of market transition,” in this period, a rule-based and impersonalized transaction mode begins to dominate the market.

Some scholars bracketed the Chinese institutional change into two or three phases and specified the periods. Tan divided the Chinese institutional transition process into two phases:

[T]he first phase beginning in 1978 with the start of the reform and ending in 1990 with economic sanctions and the Tiananmen Square incident, and the second phase covering the economic transition in the following twelve years leading up to China’s entry into the World Trade Organization (WTO) in December of 2001 (Tan, 2007: 88).

Tan examined these “configurational transitions” (Meyer, Brooks, & Goes, 1990) and revealed that from the first phase to the second phase, entrepreneurs of state-owned enterprises responded with more entrepreneurial strategies aimed at the growth of their firms rather than at satisfying state planners. Bian and Zhang (2006)’s

review specifically focused on private entrepreneurship in China and their demarcation of institutional change roughly corresponds with Yang and Li's (2008) time framework. Bian and Zhang pointed out that although the initial boom of the private sector occurred in the 1980s, private businesses were an anomaly and vulnerable to ideological attacks and economic constraints (HersHKovitz, 1985). Deng Xiaoping's 1992 south China tour gave new life to the development of private entrepreneurship. Since then, the growth of the private sector has accelerated. In 2001, private entrepreneurs gained the right to join the Chinese Communist Party (CCP), which marked the dividing line between the second and third stages of the market transition. In the same year, China entered the WTO, which accelerated the marketization process and its integration into the world economy.

In short, despite the different stage models (two-stage or three-stage), and despite the different focuses (general Chinese entrepreneurship, state-owned enterprise entrepreneurship, or private enterprise entrepreneurship), scholars more or less have come to agree on the following points: (1) China's phase transition provides the opportunity to examine the influence of each stage and how firms and entrepreneurs make strategic choices; and (2) state-owned enterprises and private enterprises share a similar time framework regarding Chinese institutional change.

In terms of private entrepreneurship, the latter two stages are more important. By the 1980s, most socialist countries began to relax restrictions on private entrepreneurship. However, the government still "restricted entrepreneurs' access to raw materials, enacted prohibitive taxes, and continued to control prices." (Keister & Zhang, 2009: 392) Because of the ideological attacks and economic constraints in the 1980s, private entrepreneurship expanded dramatically during the 1990s and early 2000s (Peng, 1997; Peng & Jiang, 2005). The year of 1992 and 2001 mark the significant turning points for private enterprise.

Comparing these phases facilitates a close examination of strategies and it also "enables the explicit examination of how actions of one period lead to changes in the context that will affect action in subsequent periods" (Langley, 1999: 703). This comparative strategy can help us understand how firms and entrepreneurs respond to a radically changing institutional environment, thus, putting the theoretical debate and competing arguments (between the influences of environmental change and the founding environment and between strategic change and strategic inertia) under a

closer and deeper empirical examination.

The development of the private economy in Shanghai

The central characteristic of China's institutional change from a planned economy to a market-oriented economy is the development of the private economy led by an emerging class of entrepreneurs (Yueh, 2009). The development of Shanghai's private economy also echoes China's "phase transition" (Tan, 2007). Although there is no specific document detailing the institutional transition in Shanghai, the development of its private economy can be used to represent its transitional history.

The development history of Shanghai's private economy can be bracketed into three stages: stage one from 1978 to 1991, stage two from 1992 to 2001, and stage three from 2002 until now. Before 1978, the centrally planned economy dominated Shanghai, as the private economy only accounted for 1% of GDP. During the 1980s, the private economy entered into its early stage of development. Because of the ideological barrier and rudimentary market mechanisms, the scale of private business was very small. In 1989, there were only 1,071 registered private enterprises with a gross output of 50 million RMB (*Shanghai private economy yearbook 2008*). The big ideological breakthrough took place in 1992, when the party first endorsed the "socialist market economy" as China's reform goal at the Fourteenth Communist Party Congress (Qian, 1999). The registered number of private enterprises increased from 2,288 in 1991 (with 33,128 employees) to 4,213 in 1992 at a growth rate of 84.1%. In 1994, the number surged up 6.5 times, reaching 17, 214 (with 180,044 employees) (*Shanghai statistic yearbook 1994*).

At the Sixteenth Communist Party Congress in 2002, the Party modified its constitution not only to "encourage, support, and guide the development of the non-public sector of the economy" but also to "allow advanced individuals from other social strata" to join the Party (Jiang, 2002). After 2003, the Shanghai government endorsed preferential policies towards entrepreneurial activities at various levels and in related departments, including financing services, site support, tax concessions, and entrepreneurship training (Wu, 2010; Ye & Yan, 2007). The number of private enterprises increased from 224,662 in 2002 to 498,900 in 2007, and the private economy accounted for 17.5% of GDP at that point. Shanghai's integration into the

global economy accelerated after 2002 when China obtained WTO membership. Some 300 global multinational corporations made investments in Shanghai and 30% of them were thinking about making Shanghai their regional headquarters (Huang, 2008: 179). These multinational corporations also fostered the emergence of agents and developed partnerships with private enterprises (2008).

This brief overview of the development of Shanghai's private economy shows that it resonates well with China's reform of its political and economic systems. Although the Shanghai model—substantially state-controlled and state-led—has been criticized by some scholars (Huang, 2008), the Shanghai government's recent entrepreneurial endeavor to boost its marketization and globalization has also been recognized (Fulong, 2003). A recent study (Ye & Yan, 2007) applied the model from the *Globe Entrepreneurship Monitor* and analyzed Shanghai's entrepreneurial environment. The result shows that the entrepreneurial environment in terms of infrastructure, entrepreneurial opportunity, market openness, financial support, and government programs are better than the world's and China's average. The government is actively designing preferential policies and measures to encourage the youth to undertake business ventures (Zhu, 2007). In short, it is worthy to note that the institutional change may have a selective effect on different start-up cohorts: The younger cohort enjoys more benefits than the old cohort when initially entering into the market. But, how initial exposure to the different institutional periods impact entrepreneurial strategy (e.g., networks) still remains as an open question.

2.6 Summary

The main purpose of this chapter was to review the theoretical and empirical literature related to the environmental effects on network evolution. It began by reviewing the debate on the environmental effects on strategic evolution, with a special focus on network evolution (network change and network inertia). Then it shifted to the institutional study of network evolution during the institutional change period in transitional economies. Which scenario of network evolution is more likely to happen, network change or network inertia? Asking this question may seem too simplistic since both scenarios are evidenced in empirical studies. The more intriguing puzzles are: Who is involved in these processes of strategic change and inertia? What are the underlying processes and mechanism? How do change and adaption become

possible in transitional economies?

I then further critiqued the current literature for failing to answer these questions because of three critical limitations: There is a missing combination of institutional pillars at the specific period, there is less attention paid to the networking actions during the institutional change, and there is insufficient notice given to cohorts and divergent adaptational patterns. This review seeks to provide readers with a deep understanding of the limitations existing in the current literature and points out the theoretical orientation of this study to remedy these limitations and to build further knowledge. A short overview of phase transitions and entrepreneurship during the institutional change period helped to familiarize readers with the research background and the time framework that is adopted in this study.

CHAPTER 3. OBSERVING START-UP COHORTS' NETWORKS

3.1 Introduction

This chapter comprises three parts. The first part presents the research site that was selected, the rationale for a mixed method design, and the selection of samples. It also briefly describes the characteristics of the respondents' profile, with a comparison of two start-up cohorts' industrial engagement. The second part details the data collection procedure, the coding procedure for the data analysis, and the methods utilized to enhance the reliability and validity. The third part offers the conceptualization and measurement of key constructs.

3.2 Research Setting

This study selected Shanghai as the research site. This has two rationales. First, as the "epitome" of China's socio-economic transition (Huang, 2008: 174), Shanghai has been experiencing fundamental institutional changes, and start-up cohorts are also likely to be exposed to different founding conditions (Romanelli & Tushman, 1986). Second, competing institutional pillars are likely to coexist within Shanghai. On the one hand, the norms of *guanxi*, which are deep-rooted in traditional Chinese culture, still remain pervasive (Chen & Chen, 2004; Luo, 2007) in Chinese metropolitan cities like Shanghai and Beijing (Phan, Zhou, & Abrahamson, 2010; Watkins-Mathys & Foster, 2006; Wong & Slater, 2002). On the other hand, new norms, values, and beliefs are likely being diffused during the marketization and globalization process (Guthrie, 1998; Peng, 2003), which places more emphasis on competence, capability, and strategic partnering (Luo, 1997; White, 2001). The comparisons between start-up cohorts' responses to these competing institutional elements can better reflect the effect of founding institutional environments. Therefore, Shanghai provides an ideal research site for examining the response patterns that are based on the cohorts' exposure to these competing pressures, depending on their founding conditions.

Although institutional change is an incremental process, it is likely demarcated by different phases (Peng, 2003; Tan, 2007). China started its reform process in 1978.

However, the period from 1978 to 1991 is not optimal for a start-up cohort comparison because of the hybrid ownership, which makes the identification of start-up behavior difficult to analyze (Nee, 1992). The years 1992 and 2001 mark the significant turning points. In 1992, Deng Xiaoping's "southern China tour" reaffirmed policy support for the private economy and entrepreneurship, and entrepreneurial behavior increased dramatically thereafter. Yet, concrete regulative support is still very weak at this point, while new cognitive and normative pressures to engage in market-based strategies are moderate (Peng, 2003). The year 2002 also marks the beginning of another epoch for private entrepreneurs as the Communist Party of China (CPC) opened party membership to private entrepreneurs and China entered into the WTO (Li & Yang, 2006; Tan, 2007). From 2002, regulative institutions are assumed to be more favorable, and the new cognitive and normative pressures facilitated by the marketization and globalization are also likely more diffused (Carney, 2005; Peng, 2003). A review of the history of Shanghai's institutional change and the development of private entrepreneurship also confirms such a division in the institutional transition phase (2003; 2008).

3.3 Mixed Method Design

Two sets of research questions (framed in the introduction chapter) guided this research; these questions can be reframed as follows: What are the characteristics of different start-up cohorts' network configurations and networking actions? Why are there such differences? What are the underlying processes and mechanisms? In other words: How do start-up cohorts' exposures to different founding institutional environments influence their network configurations and networking actions during the institutional change phase? In order to answer these questions, I employed a mixed method approach because combining qualitative and quantitative methods in this context results in a better understanding of the problem being investigated (Clark, Creswell, Green, & Shope, 2008; Coviello, 2005; O'Donnell & Cummins, 1999).

Qualitative inquiry

First, I treat the qualitative inquiry as my primary methodological focus, because it can help us better understand the evolution of network configurations and

networking actions over time. Scholars have reviewed network-based research in organization and entrepreneurship studies and critically pointed out that few process-oriented studies have been conducted to understand the actual process of network construction—especially the networking actions, such as tie formation, maintenance, and dissolution (Hoang & Antoncic, 2003a; Jack, 2010; Neergaard, 2005; Parkhe, Wasserman, & Ralston, 2006). Hoang and Antoncic (2003a) pointed out that we need more integration between process- and outcome-oriented research to understand how network content, governance, and structures emerge and evolve over time. Therefore, in this study, I adopted an inductive approach to generate the rich, deep, and process-oriented data on network configurations and networking actions (Coviello, 2005; O'Donnell & Cummins, 1999).

Second, a qualitative exploration can facilitate the emergence of new theoretical constructs and lay a solid foundation for the understanding of relationships among constructs such as networks, entrepreneurial processes, and enabling or constraining institutional factors (Jack, 2010; Kim et al., 2006; Peng, 2003). I took suggestions from Hoang and Antoncic (2003a) and employed a qualitative design to understand the impact of entrepreneurial processes on networks and to explore the environmental contingencies on network development. As confirmed by other studies, I believe that semi-structured interviews can provide rich information on the initial founding conditions and explore how different entrepreneurial processes (obtaining resources, spotting opportunities, and securing legitimacy) influence the actual networking actions and network configurations (Elfring & Hulsink, 2007; Jack et al., 2008; Jack et al., 2010).

Third, with the benefits of generating new constructs and building theory, a qualitative historical analysis can advance the understanding of the relationship between institutional changes and network evolution (Nee, 2005; Washington, 2004). The strategic process is sensitive to environmental changes and sequences of events and actions (Gephart, 2004; Pettigrew, 1990). Therefore, I used a longitudinal-retrospective qualitative method to study the research questions through the eyes of respondents and used their perceptions and interpretations to understand institutional changes (Denzin & Lincoln, 1994: 2) and explore how their initial conditions and their perceptions of institutional changes influenced their network evolutions (Beckert, 2010; Doz, 1996; Kim et al., 2006).

In short, scholars believe that many substantive issues in entrepreneurship and network studies can only be asked and analyzed through qualitative methods (Gartner & Birley, 2002; Hoang & Antoncic, 2003a, b; Jack, 2010). This study attempts to develop theory about the way different start-up cohorts construct and evolve their network configurations and networking actions during the institutional change period; therefore, using cases that address “how” and “why” questions in an unexplored area can respond to competing theories and stimulate new theory that is accurate, interesting, and testable for future explorations (Eisenhardt & Graebner, 2007).

Quantitative inquiry

The longitudinal-retrospective and qualitative approach examining the network configurations, networking actions, and their evolutions can be enhanced by quantitative techniques. The benefits of quantitative techniques include: providing quantified information about network content and counts of contacts; highlighting structural features of networks such as density, centrality, and tie strength (Johannisson, 2000); and illustrating correlations and facilitating their comparisons (Jack, 2010).

Realizing these advantages, I embedded the quantitative method within the qualitative research inquiry. The embedded design, according to Creswell, is applied “when one type of data provides a supportive, secondary role in a study based primarily on the other type of data” (Clark et al., 2008: 374; Creswell, Plano Clark, Gutmann, & Hanson, 2003). In this study, I used the quantitative data to support and triangulate the qualitative data. In terms of the specific quantitative techniques, I adopted Burt’s (1992) name-generator procedure to collect detailed information on respondents’ ego-centered networks. I asked respondents to identify a maximum of five important persons in their business venture to ensure the accurate recall of their alters which might be mentioned during the semi-structured interview. This generated the network data—network type, tie strength, the function of ties, and repeated ties—that were used to cross check, triangulate the qualitative data (Creswell, 2003: 195), and facilitate the accurate comparison of two cohorts’ network configurations.

To sum up, the data collection of this study is mainly qualitative driven, accompanied by quantitative techniques. I integrated both methods to examine the network configurations and networking actions during the context of institutional

change, respond to competing theories and arguments, and stimulate new theoretical elements for future explorations.

3.4 Sample

After reviewing the Chinese institutional change phase and the development of private entrepreneurship, I sampled two start-up cohorts based on their entry into the founding institutional period. Cohort A (CA) consists of start-ups that began their ventures during the 1992-2001 period, the period of early stage of market transition (P1), whereas cohort B (CB) consists of start-ups that began their ventures during the 2002-2009 period, the period of deepening of market transition (P2).

The start-ups were selected across industries. This selection was based on three reasons. First, focusing on one industry may reduce potential variations. However, sampling respondents in only one industry who have remained viable over two decades is practically difficult. If there were such respondents, their industries might be limited to some traditional industries, such as manufacturing and clothing that younger start-ups are less likely to engage in, which may make the comparison less plausible.

Second, this study reconciles researchers' appeal for cross-industrial studies of network evolution during the environmental change (Elfring & Hulsink, 2007; Madhavan et al., 1998). From the perspective of organizational ecology (Hannan & Freeman, 1984), start-up cohorts and their industrial engagement are likely to co-evolve with the institutional change. It is a natural process that the old cohort engages in certain industries while the younger cohort engages in certain others.

Third, to reduce the potential contribution of industrial variation to the networks and to enable more rigorous comparisons, I focused on the concrete entrepreneurial process—obtaining opportunities, accessing resources, and gaining legitimacy—that are universal for start-ups across industries (Elfring & Hulsink, 2007) and then examined how start-ups constructed their networks to manage these processes during the institutional change period. Using this strategy, I gained an understanding of the relationships among the thematic constructs and was able to reveal new theoretical insights.

Previous studies considered the entrepreneur's age and organizational stage as

potential variations for entrepreneurial behavior and network configuration (Au & Kwan, 2009: 10; Kessler & Frank, 2009). Therefore, I selected respondents from both cohorts who started their business between the ages of 20-35 years, based on the concern that age could be a factor influencing start-up behavior, which might affect the entrepreneurs' networking behavior. The entrepreneurial or organizational life stage can also correlate with the network evolution (Hite & Hesterly, 2001; Kim et al., 2006); therefore, this sample only includes those respondents whose firms have already experienced emergence and growth (at least early growth).

Following the above-mentioned criteria, I used personal contacts and organizational sources and attended business conferences to identify potential respondents. Ultimately, 33 respondents were identified and interviewed. Table 3.1 provides basic information about the respondents from the two start-up cohorts. In this sample, CA consists of 16 respondents with one female respondent, while CB consists of 17 respondents with three female respondents. The mean age of the old cohort is 42.2 years; for the younger cohort, the mean age is 33.2 years. The younger cohort started their business one year earlier than the old cohort (mean of start-up age for younger cohort is 29; for old cohort it is 30). The education level for both cohorts is high: for CA, 14 respondents have a college or above degree, the other two have a senior high school degree; for CB, all respondents have a college or above degree.

All respondents are engaged in small- and mid-sized enterprises. The number of employees and the value of assets varies widely within both cohorts. A noticeable difference is that more younger cohort respondents ($N=6$) described their companies as an "asset-light company:" there is less desire for tangible assets such as factories and machinery, and more emphasis on human resources and the business model. This is also related to two of the cohort's industrial engagements. The old cohort members are mainly engaged in manufacturing ($N=6$) and the service industry ($N=6$), while the rest are engaged in IT services and electronic production ($N=4$), as well as commerce and trading ($N=2$). For the younger cohort, the service industry is the major industrial engagement ($N=9$), followed by IT services and electronic production ($N=5$). Only three respondents are involved in manufacturing businesses.

From the perspective of organization ecology (Hannan & Freeman, 1977), the differences in the cohorts' industrial engagement reflects the evolution of industry and business organizations in Shanghai. Historically, Shanghai was an important industrial city in China. With the fast development of its service industry after 1998, Shanghai's

industrial structure transformed from “2-3-1” to “3-2-1.” From 1990 to 2000, the service industry grew 13.8% a year. In 1997, the ratio of the service industry was 73.5%; however, the private economy was mainly concentrated in trading, catering, transport, and warehousing industries because of the dominance of the public economy in communication, financial services, scientific research, and technology services, etc. In the beginning of the 21st century, private business began to widely tap into modern service industries—IT services, financing, advertisement, consulting, and so on (*Shanghai private economy yearbook 2005*). In short, the industrial involvement of the two start-up cohorts is congruent with the industrial development in Shanghai.

3.5 Data Collection

This study was carried out in Shanghai from May 2009 through October 2009. Before conducting the interviews, I talked to knowledgeable informants and asked them to view the research questions and design from different perspectives (Eisenhardt & Graebner, 2007). The first knowledgeable informant works as a consultant in the Shanghai Science and Technology Consulting Center. He talked about the history of economic transformation and industrial development in Shanghai. He also used his personal experience and stories to explain the differences among entrepreneurial cohorts and their behaviors. The second expert works as a management professor and a practitioner in a Shanghai business school. He discussed his observations and advised my research design. Invited by the sociology department of a local university, I presented my research design to the sociology faculty and graduate students. After receiving their

Table 3.1
Basic Information of Respondents

| CA | Start-up year | Gender | Start-up age | Age | Business | Employees | Assets (million RMB) |
|-----|---------------|--------|--------------|-----|--|-----------|---------------------------|
| WJS | 1992 | Male | 30 | 47 | Safety manufacturing | 370 | 100 |
| MM | 1992 | Male | 33 | 50 | Home utilities manufacturing | 80 | 1-2 |
| WM | 1993 | Female | 28 | 45 | Logistics | 10 | 1-2 |
| ZRQ | 1994 | Male | 25 | 40 | Electronic equipment production and sale | 100 | 20-30 |
| WJY | 1995 | Male | 25 | 39 | Stone export (1995), venture capital (1999) | 20, 6 | 5, 500 (under management) |
| CCL | 1995 | Male | 28 | 42 | Printing | 100 | 20 |
| LZQ | 1995 | Male | 34 | 42 | Law firm | 50 | 50 (revenue) |
| HDS | 1996 | Male | 34 | 47 | Advertisement | 10 | 3-4 |

| DHC | 1996 | Male | 26 | 39 | IT, multimedia device sales and service | 50 | 20 |
|-----------|----------------------|---------------|---------------------|------------|---|------------------|-----------------------------|
| FPX | 1997 | Male | 35 | 47 | Communication equipment design | 30 | 7 |
| CFB | 1997 | Male | 28 | 40 | Electronic device installation | 3 | — |
| CL | 1997 | Male | 29 | 41 | Electrical machinery production | 300 | 50 |
| YJ | 1999 | Male | 34 | 44 | Calling center | 180 | 120 |
| CB | Start-up year | Gender | Start-up age | Age | Business | Employees | Assets (million RMB) |
| FC | 1999 | Male | 35 | 45 | Clothes production and trading | 150 | 46 |
| XJF | 1998 | Male | 22 | 31 | Machine building | 700 | 300-400 |
| XMH | 2001 | Male | 28 | 35 | Healthcare products sale | 30 | 4-5 |
| ZQ | 2002 | Female | 28 | 35 | Real estate | 450 | 2500 |
| NXD | 2003 | Male | 25 | 32 | Machine building | 600 | 30-40 |
| WB | 2003 | Male | 35 | 39 | Financial outsourcing | 400 | 150 |
| YBQ | 2003 | Male | 26 | 32 | Furniture production | 40 | Asset-light |
| ZD | 2003 | Male | 34 | 42 | Metal casting | 900 | 200-300 |
| YX | 2004 | Male | 24 | 29 | Technology, media, telecom | 200 | 25 |
| ZAM | 2005 | Male | 28 | 32 | Private equity | 6 | 2600 (under management) |
| HDT | 2005 | Female | 35 | 37 | Marriage consulting | 4 | Asset-light |
| YZD | 2007 | Male | 31 | 33 | Private equity | 300 | 200 (under management) |
| YMP | 2005 | Male | 22 | 26 | Smart kids tutoring | 60 | Asset-light |
| WY | 2006 | Female | 26 | 30 | Voice training | 8 | Asset-light |
| JXJ | 2007 | Male | 22 | 25 | Education | 4 | 0.2 |
| YYB | 2006 | Male | 31 | 34 | Catering management and consulting | 25 | Asset-light |
| QCH | 2006 | Male | 29 | 35 | Business management software design | 15 | Asset-light |
| XXT | 2007 | Male | 35 | 37 | Taxation consulting and training | 30 | 2 |
| LXZ | 2006 | Male | 31 | 34 | Electronic communication design | 17 | 0.5 |
| DHY | 2008 | Male | 31 | 32 | IT, MBA membership services | 8 | 0.1 |

comments and suggestions, I revised and enhanced the designs for the data collection and the interview guidelines.

The data collection was mainly an interview-driven approach. I conducted four pilot interviews in Shanghai and Jiangsu.¹ This step helped me understand some practical aspects of establishing access, making contacts, and conducting interviews (Seidman, 2006: 39). Using these interviews, I obtained preliminary codes in Atlas.ti and I sought to understand the relationship among them. This step also helped me refine the interview guidelines and sensitize myself to the following interviews. These interviews were not included in the final analysis.

I conducted all 33 face-to-face interviews. In most cases, the interview was conducted alone between me and the interviewee; in two cases, the primary researcher was accompanied by a researcher and a student assistant, respectively. The interviews typically lasted between 90 to 120 minutes (See Appendix for interview guidelines in Chinese and English). The interview agenda was as follows:

Phase 1. A profile sheet was filled out which detailed the respondent's birth date, gender, ownership type, industry and sector, firm size, education, membership, part-time job, and father's job.

Phase 2. The semi-structured interview began with open-ended questions to elicit information about respondents' venture history and their perceptions of the social, political, and market environment. To address a potential retrospective bias and to yield more accurate information, I employed "courtroom questioning" and "event tracking" interview techniques (Eisenhardt, 1989; Huber & Power, 1985). For example, I asked respondents which problems they confronted during the venturing process, how they solved them, and to whom or to which organization they turned for help. All respondents referred to networks.

Follow-up questions were raised to inquire about the characteristics of networking actions — for example, how they form ties and develop trust relationships — and to identify the features of network configurations. When the information was vague, the respondents were asked to be more specific (e.g., "Please describe in more detail when you say 'friends' in business.").

The interview questions were adapted for the two cohorts. For CA, they were asked questions to help understand the relationships among institutions,

¹ Jiangsu is an industrial province, which borders Shanghai to the south. Jiangsu ranked the second highest GDP per capita of all Chinese provinces in 2009.

entrepreneurial processes, network configurations, and networking in both institutional periods (P1 and P2). They were asked the additional questions to determine whether they changed their networks, and why or why not. For CB, the interview questions were focused on the current institutional period (P2).

Phase 3. After the semi-structured interviews, quantitative data was collected by the name-generator method (Burt, 1992). Respondents (ego) were asked to list a maximum of five names (alters) who were helpful in their venture during the institutional change phase (for CA, P1 and P2; for CB only P2), and then they were asked for information on the communication frequency, closeness, alter background, and the type of help and its importance. This step facilitated re-collecting and cross-checking the network information mentioned during the semi-structured interviews.

Interviews were recorded with the permission of interviewees. Two interviews were partly recorded due to technical problems, thus, I took notes during the conversations, closely paraphrasing the conversation and abbreviating words to keep up. I immediately wrote up the conversations and impressions after the interviews were finished. I also collected company flyers whenever possible as they convey information about a firm's business model, market position, target customers, and networks. The 33 in-depth interviews resulted in approximately 550 pages of transcription. Interviews were transcribed with the help of eight Chinese student assistants. Excerpts of the interviews were translated from Chinese into English as closely as possible.

3.6 Data Analysis

Writing a research diary in the field

Roberts (2007: 67) suggested that the research journal is an essential aid to reflect on past, present, and future experiences. Writing the research journal involves "choices, decisions, reflections, insights and observations within the research process" (Roberts, 2007: 68). During the fieldwork (including the pilot interviews), I wrote in the research diary after each interview was conducted. Referring to Burgess' (1982) typology of field notes, I mainly wrote two types of field notes:

Substantive field notes. These include a description of the context in which the research was conducted: (1) the ways that connections with informants were established; (2) names, places, and events associated with these activities; (3) observations of the research site; and (4) the major content of the conversation beyond the interview questions.

Methodological field notes. I kept records of my personal impressions of situations and my personal involvement. I took notes of emotional relationships and the communicative atmosphere. These notes include: (1) voices, attitudes, gestures, and reactions of informants; (2) my self-reflection on the conversation flow, understanding of the informants, and development of the interview skills.

Given that these two types of field notes overlap and co-occur somewhere in the text, I didn't write them separately, but rather in a combined text. These diaries helped me to reflect on my own "journey" through the research and they are very revealing in terms of the research process, informants' reactions, and my feelings towards these aspects.

Analysis procedures

In this start-up comparative study, I adopted a systematic and constant comparative strategy (Strauss & Corbin, 1998) and analyzed the qualitative data with Atlas.ti—a qualitative data analysis program. Step one, three, and four refer to the coding procedure for the qualitative data analysis. I embedded the quantitative data analysis (ego-centered network analysis) — step two — in the analysis process (Creswell, 2003). I elaborate the four steps as follows.

Step 1: Combining thematic coding and open coding to identify themes and categories. Thematic coding allows a better focus on the research questions. Thematic coding is an "analysis strategy by which qualitative data are segmented, categorized, summarized, and reconstructed in a way that captures the important concepts within the data set" (Ayres, 2008: 867). In this coding strategy, codes may come from an initial conceptual model, review of the literature, previous studies (Ayres, 2008), and reading of the transcripts or other documents such as field notes and printed documents (Gibbs, 2007: 45; Lewis & Ritchie, 2003).

Since this study aims to provide new theoretical insights to the understanding of the relationship among institutional environments, entrepreneurial processes,

networks, and networking actions, I partly used the thematic coding strategy to maintain the research focus. I categorized respondents' accounts of the environment (political, market, and socio-cultural) into perceptions of regulative, cognitive, and normative institutions (Scott, 2008). I categorized three entrepreneurial processes: obtaining opportunities, accessing resources, and gaining legitimacy (Elfring & Hulsink, 2007). These categories served as a "receptacle" for promising insights (Ayres, 2008: 867) into the relationships among these constructs.

I also remained open to new theoretical concepts, elements, and meanings, and amended the list of codes during the analysis as new ideas, new relationships, and new ways of categorizing were detected in the text (Gibbs, 2007: 45). By applying this open coding strategy (Strauss & Corbin, 1998), I identified codes such as "network dependence," "network opportunity," "network inertia," "network change," and so forth.

Thematic coding and open coding are not exclusive (Gibbs, 2007: 46). Synergizing these two approaches not only allows a better focus on the research questions but also remains open to new categories, meanings, and possible theoretical directions for the next stage of the analysis. Applying this strategy, I identified codes such as "network type," "tie strength," "tie formation," "trusting types," and so on.

I moved back and forth between both sources of inspiration (the existing literature and my own data) during the analysis, conceptualizing categories, discovering properties and dimensions, and developing initial hierarchical structures. In this initial step, network differences between the two cohorts began to emerge.

Step 2: Examining the ego-centered network data. I analyzed the ego-centered network data with SPSS and illustrated network configurations of the two cohorts with an ego-centered network visualization tool — Vennmaker. The quantitative analysis consisted of examining the two cohorts' networks in the following aspects: network type, tie strength, and the function of weak ties. These analyses generally confirmed cohort differences.

Step 3: Using axial coding to relate and contextualize the core categories. Axial coding puts the exiting codes together in new ways by connecting subcategories and combining them into categories, by specifying the relationships among codes and delineating a core category around which the other codes revolve (Goulding, 2002: 78; Strauss & Corbin, 1998: 123). I re-assembled the qualitative data and related

categories and subcategories. In this step, I formed a picture of the network configurations and networking actions demonstrated by the two start-up cohorts, and I obtained richer and more precise explanations about these differences. To consolidate and systematically relate the categories, I constantly asked questions like: What? Where? When? How? Why? Digging deeply into these questions helped me to scrutinize the context, networks, and causal conditions and consequences (Strauss & Corbin, 1998: 127).

Step 4: Selective coding and building theory. Selective coding involves identifying the central categories as the vehicle for integrating the other major categories, thereby building and refining theoretical constructs (Benaquisto, 2008: 805). In this step, research needs to show why the phenomena studied works, establish the process behind it, and explain why the theoretical constructs operate together. Richards (2005: 132) phrases it as “show the music not the dance.”

Upon this step, I discovered that founding institutions comprise a specific combination of three pillars—regulative, cognitive, and normative. Entry into the market at different institutional periods imprints on start-up cohorts’ an initial relationship with the founding conditions. It led to network inertia for CA and a distinctive network configuration for CB (compared to CA). In analyzing the evolution of network actions, I discovered that combinations of different tie formation propensities and trust development types led to different networking styles during the institutional change: CA demonstrates the style of network deepening. CB demonstrates the style of network broadening. Therefore, I organized the categories and relationships around the central explanatory concepts of “founding institutions,” “alignment effect,” “network configurations,” and “networking styles,” and further developed theoretical frameworks and propositions for future testing.

I illustrate the core coding categories and relationships in Appendix A and Appendix B. A complete list of contextual codes can be found within Appendix G.

Reliability and validity

In order to enhance both the reliability and validity, I adopted different techniques. To enhance the reliability, I used the following three techniques: First, I documented the analysis process by writing memos and notes (Lewis & Ritchie, 2003), which were later used to aid in data interpretation and theoretical formulation.

Second, I constantly used comparisons to check the consistency and accuracy of the coding (Gibbs, 2007: 96). For example, I compared the codes within each cohort to ensure that text coded the same way was actually similar; I compared the codes between the two cohorts to ensure that they are consistently comparable; I also re-coded three transcriptions and compared the codes with the previous ones to ensure their consistency. Third, I also looked for variations within the two cohorts to ensure “outliers” were not ignored or forced into certain categories but instead used as important sources of adding and enriching the theoretical claims (Lewis & Ritchie, 2003: 275). These processes reduced the potential bias during the data analysis.

To produce an accurate interpretation of the research phenomenon, I used the following techniques to enhance the validity: First, I used both qualitative and quantitative data to triangulate and confirm the findings of network differences between the two start-up cohorts. Second, I also compared complimentary data sources (company flyers), which also confirmed such differences. Using these techniques, I reviewed the data back and forth to check the internal logic and consistency until I achieved a close match between the data and the theory (Eisenhardt, 1989).

Conceptualization and measurement

The conceptualization and operationalization of key constructs might look quite complicated because, for example, the concept of a network can be defined and measured in many ways (Jarillo, 1988; Marsden, 1990; Park, 1996; Wasserman & Faust, 1994). However, several aspects are commonly regarded as important to investigating the networks. In the following content, I first elaborate the conceptualization and the measurement of network configurations, followed by those of networking actions. These will correspond to two empirical chapters—chapter four and chapter five.

Network configuration. As it was defined in the introduction chapter, this concept refers to the characteristics and patterns of networks. In this study, a network configuration includes three sub-categories that are analyzed in chapter four: network types, tie diversity, and tie strength.

Network types. The use of certain network type(s) in a certain institutional context reflects the degree of institutional uncertainty and resource munificence

(Koka et al., 2006; Ma & Cheng, 2010). Based on the nature and exchange content, I identified three types of networks: (1) the social-cultural network, referring to connections with family members, relatives, friends, classmates, and the people who share a common social-cultural background; (2) the political network, which includes connections with government officials and organizations; and (3) the market network, describing connections with other market individuals and organizations.

Diversity. This describes how diverse the market network is across different industries (Goerzen & Beamish, 2005). In the qualitative data, I coded ties concentrated within the same industry as “homogeneous” or as “diverse.”

Tie strength. Referring to the measures of tie strength (Burt, 1992: 125; Marsden & Campbell, 1984), I coded “strong” when respondents mentioned frequent contact and close emotional attachment, and otherwise “weak.” In the quantitative data, frequency was rated on a scale of “several times a week,” “several times a month,” “several times a quarter,” “several times a year,” and “once a year or even less” (from 1 to 5). Closeness was rated on a scale of “very close,” “close,” “so-so,” “not so close,” and “distant” (from 1 to 5).

The following section elaborates the conceptualization and measurement of networking actions that are analyzed in chapter five.

Networking action. This describes the activities that actors undertake to establish networks during the venturing process. In this context, I identified three types of networking actions: (1) team formation, the actions and processes of selecting founding team members and key management team members; (2) political networking, the actions of establishing and maintaining political networks; and (3) market networking, the actions of establishing and maintaining market network.

Pre-existing ties. These are ties that existed before start-up members began their business, such as family members, relatives, classmates, and former colleagues.

Old ties. This concept is applied to CB members. It infers the ties that are reported in P2 but that had already existed before P2.

Trust development. Different forms are identified in the literature based on the content and nature (Luhmann & Davis, 1979; Zucker, 1986). Here, I followed the convention and categorized trust along two dimensions: (1) The first is general trust and particularistic trust. The former encompasses trust in non-specific others. In this study, respondents might trust a stranger, because the latter is acting in accordance with the dominant norms and standards which are safeguarded by institutions (Tan et

al., 2009). Particularistic trust is the trust between specific others. (2) The second is cognitive trust and affective trust. The former is based on individual beliefs about peer reliability and dependability and competence (McAllister, 1995). The second one is grounded in reciprocated genuine care and emotional bonds (Lewis & Weigert, 1985; McAllister, 1995).

CHAPTER 4. THE EVOLUTION OF NETWORK CONFIGURATIONS

4.1 Introduction

How do entrepreneurs make strategic choices (i.e., evolve their network) during the institutional change phase? This primary research puzzle leads to a series of other puzzles that are outlined in the introduction chapter (pages 2-3). In order to answer these puzzles, I outlined two sets of questions that are testable for empirical inquiry (pages 6-7). This empirical chapter is devoted to answering the first set of research questions: What are the characteristics of different start-up cohorts' network configurations? What are the major differences? Why are there such differences or similarities? What are the underlying processes and mechanisms?

As defined in chapter one, a network configuration refers to the characteristics and patterns of networks (Samaddar et al., 2006). Appropriate network configurations and strategic adaptations are particularly valuable for private entrepreneurial success in transitional economies. However, as reviewed in chapter two, the literature provides contradictory theories and arguments about network evolution (network change and network inertia) during the period of institutional change. To date, no specific empirical attempt has been made to understand the actual configuration of private entrepreneurial networks and to examine how entrepreneurs with different institutional origins construct and evolve their networks during the institutional change phase.

This chapter takes readers away from the theoretical debate for a while and brings them into the Chinese context. Section 4.2 describes the differences in network configurations between two start-up cohorts in three dimensions: network types, tie diversity, and tie strength. The ego-centered network analysis uses qualitative data and further confirms these differences. Section 4.3 unpacks the underlying processes and mechanisms and provides a picture to explain why two start-up cohorts with different institutional origins demonstrate different network configurations during the period of institutional change.

4.2 Network Differences between Two Start-Up Cohorts

CA: Network configuration in P1

The data in table 4.1 shows that obtaining resources and discovering opportunities were the two primary entrepreneurial processes during the early stage of market transition P1. The social-cultural network provided vital help at the initial business stage. Family and relatives provided financial, labor, and emotional support. Acquaintances and friends provided human capital, business information, and opportunities. However, those cohesive networks were limited to accessing critical resources and opportunities. To acquire physical and financial resources, and to make deals and find business opportunities, more than half of the respondents ($N=9$) cultivated political networks. The majority of CA respondents ($N=12$) established market networks; however, these connections were mainly (8 out of 12) established with buyers, suppliers, customers, and peers within the same sector and within the same industry in which homogeneous ties were embedded.

How are reliable networks secured? The data reveals that respondents primarily established strong ties (see also table 4.2). Respondents were often involved in social interactions (e.g., dining together, sending gifts, or visiting families) and developed emotional closeness to “hold close” and “strengthen the relationships” with their political and market connections. During P1, the government still controlled critical resources and officials had the power to allocate resources, but with the risk of disclosure and disciplinary action. Cultivating strong ties and interpersonal trust with officials was a reliable option for start-ups. CFB described the ties as “a very close relationship, ... we have the common language and business exchange.” To reduce market uncertainties and transaction costs, and to gain privileged resources and opportunities, respondents also formed strong ties and particularistic trust with their market connections. XJF explained how he established and consolidated relationships with his business friends: “It’s like a relationship with your brothers and friends; you need to reciprocate. Behavior and conduct [in guanxi] are very important.” ZRQ pointed out, “I accumulated a deep friendship with them [my connections]. At least, they recognized me as a good friend.”

Table 4.1
Cohort A: The Evolution of Network Configuration During Institutional Change

| Core codes | Evidence ^a (P1) | Examples ^a (P1) | Evidence ^a (P2) | Examples ^a (P2) |
|--|-------------------------------|---|-------------------------------|---|
| Obtaining resources Political/ Market/ Social-cultural | 6/6/7 | At the beginning, the bank loan was very difficult to get. So I borrowed the money from relatives...I worked in the government for three years. They [officials] thought I was young, very hardworking and close to them...So they gave the printing department to me, and then I started up my business. (CCL) | 5/5/3 | You need to actively contact the government and leaders, letting them know what you are doing. Then you could get their support, such as policy, business and financial support. (YJ) |
| Discovering opportunity Political/ Market/ Social-cultural | 6/7/3 | At the very beginning, they had some difficulties in techniques. So they came to me for help. I accumulated a deep friendship with them. ...So they gave me a couple of projects.... He gave the business to me instead of [giving the business to] his branch. (ZRQ) | 7/14/3 | Market development is mainly based on the previous model: for example, the previous accumulated customers and guanxi. I also asked them to recommend some new customers. Business becomes easier and faster in this way because we know each other relatively well. (DHC) |
| Gaining legitimacy Political/ Market/ Social-cultural | 2/2/0 | When you do the things the government encourages you to do, it will give you certain support...Sometimes, government [officials] are very busy and they can't take care of you. In such a case, you need to actively contact them. Let them know what you are doing. (YJ) | 3/2/0 | Many government officials want to visit our firm. The deputy major visited us last year. It's zero-cost advertisement. The government needs to investigate the situation [of firms], and they need to find good models. (XJF) |
| Political network Strong/weak | 9 9/2 ^b | 9 When I worked in a state-owned enterprise, I tried my best to become familiar with the people from the government. It was helpful for mutual understanding. When I started up my own business, they gave the business to me. (HDS) | 9 8/2 ^c | 9 Because we have emotional exchanges, our personal relationship is built very well. Many things have been mixed together; and we stay in contact very frequently. (CFB) |
| Market network Strong/weak | 12 9/4 ^b | 12 I heavily relied on friends, they are relatively reliable... I always invited them to have meal at my home...I am very grateful for their help. (WM) | 15 10/6 ^c | 15 After a long term, it becomes friendship. Business just needs a simple call...I think I can develop guanxi in any environment. Having a chat over tea and cherishing the kindred spirit... The business will come naturally. This seems very important in China. (HDS) |
| Homogeneous/diverse | 8/4 | At that time, I had very good relationships with industrial peers. We dined together and talked about the business...I relied on them. Actually, the circle was not big. (XJF) | 11/4 | There are some professional training companies, offering consulting in sales and organizational behaviors...However, our company is small. To be honest, we can't afford it. So we grope about and exchange with industrial peers. We share the same problems and they too also don't know how to deal with them. (DHC) |
| Social-cultural network Strong | 10 | I recruited two people [in my team]. One was recommended by a friend. I post the information in the job market, but I thought friend's recommendation was more suitable. Another recruit was my brother colleague. He was our hometown fellow and we already knew each. (DHC) | 6 | At the beginning, my wife and relatives also worked in the firm. In the later stage, I asked them don't work here anymore. We disagree on something. (ZRQ) |

^a This figure lists the number of interviews (out of 16) in which the interviewee indicated the coding themes. Examples are illustrated for the main pattern in each theme. For example, in the code "discovering opportunities," I provide the example of market networks since eight respondents match this pattern.

^b The sum of the ties exceeding the number of interviewees noted in the coding theme indicates a mix of "strong" and "weak" ties.

Table 4.2
Cohort B: Network Configuration in the Contemporary Institutional Period

| P2: Core codes | Evidence ^a | Examples ^a |
|--|-------------------------|--|
| Obtaining resources Political/ Market/ Social-cultural | 7/12/8 | Our firm is a technology supplier. We cooperate with consulting firms. They offer some advices, such as marketing strategies. We also go directly to the potential customers and know their demands. So we can improve our technologies. (QCH) |
| Discovering opportunity Political/ Market/ Social-cultural | 2/13/2 | To develop the project, one approach is through our own research, or through our own partners' network. Another approach is through the professional agencies. Local governments also actively introduce some projects. Or through the industrial symposia. There are many ways. (ZAM) |
| Gaining legitimacy Political/ Market/ Social-cultural | 3/6/1 | I think the business model and market is not mature. I want to improve the market acceptance. So I went to IT firms and high-tech firms because there are many singles....I also collected and integrated the resources: people and gatherings. For example, cooperating with Baihe. net and other firms and opening a salon in Jinmao Tower, letting people know the marriage consulting service. (HDT) |
| Political network Strong/weak | 6 2/4 | It's very difficult to obtain the land in Shanghai. It took us two years to study the market situation and we didn't make any contact with government. We just did it through the market and we got the land via bidding. After that, we communicate with the local government. They were surprised....We didn't get close to the government. I think it is the proper work relationship with the government. (ZQ) |
| Market network Strong/weak | 17 6/15 ^b | Just as the cooperation with Beihe.net. From the beginning, we don't have any contact. But I think we can work together. So I made a cold call to ask if they also had such an intention. Then I visited their firm and discussed the business project. (WY). |
| Homogeneous/diverse | 2/15 | Start-ups must manage four things: technology, capital, talents, and the market. You can't stay in your circle, you must jump out to find those things....Those things are out there, they are not scarce. You need to deal with different persons, being active and selective, you will find those resource and opportunities.(YX) |
| Social-cultural network Strong | 10 | I co-started up with a former colleague, a classmate from MBA school. I think our team is very stable because of our firm friendship. (DHY) |

^a This figure lists the number of interviews (out of 17) in which the interviewee indicated the coding themes.

Examples are illustrated for the main pattern in each theme.

^b The sum of the ties exceeding the number of interviewees mentioned in the coding theme indicates the mix of "strong" and "weak" ties.

CA: Network inertia in P2

Discovering opportunities and obtaining resources were still the primary entrepreneurial processes in P2– the period of the deepening of market transition (see table 4.2). But, the importance of the social-cultural network decreased. However, nine of the respondents still reported the presence of political networks. Among them, some ($N=6$)

maintained their old political connections and some ($N=6$) established new connections.² The market network increased in importance ($N=15$). However, the majority ($N=11$) of CA's market connections were still nested within homogenous networks. Respondents did not take proactive steps to search for and form new connections with a more diverse pool of market entities.

Respondents still largely relied on their old market connections. Some respondents ($N=4$) realized that their businesses were stagnating, or even declining, but they still did not attempt to expand their networks. Respondents ($N=11$) also relied on old market connections to bridge potential businesses and connections. As FC noted: "My relationship with the supplier ... after a long time, it's just like we sing the same song, we have become good friends.... I trust him; if he introduces a new connection to me, I trust him [the third party] ."

During P2, respondents commonly still established and maintained strong ties. For the great majority of respondents (8 out of 9), political ties were strong ties. CFB described how he consolidated his old political ties: "We were very close during that period, and we are even closer now. Because we have emotional exchanges, our *guanxi* is very good. Many things have been integrated and we remain in frequent contact." HDS maintained his particularistic trust with his government "friends" because "after we develop such trust, there are many opportunities. So I love to maintain these relationships." Some ($N=3$) respondents maintained their old political connections and engaged in symbolic interactions with them even though they were not beneficial.

Maintaining old ties and engaging in less proactive expansion consolidates the strength of market ties. In total, the majority (10 out of 15) of the respondents' market networks are identified as strong ties. Telling examples are their relational actions during tough times, such as financial constraints, market decline, and after the financial crisis of 2008. Respondents expressed their willingness to endure hard times and to overcome difficulties with their market ties. FPX described the situation: "We still keep in touch with each other. We want to be partners and friends, but the process is not easy. We need to consider many things.... When he [the partner] is in trouble, I give him a hand; when I

² Respondents overlap in certain themes and codes, such as "maintaining old ties" and "forming new ties," "weak ties" and "strong ties." In this case, three respondents maintained both their old political networks and also established new political networks.

am short of money, he tries his best to help me.” For most of them, the “difficult times” provide opportunities to test their cooperative and relational loyalties. Their market networks appear to withstand these tests due to the long-term accumulation of interpersonal trust during the institutional change phase.

CB: Network configuration in P2

In contrast to CA, CB’s networks demonstrate the following characteristics (see also table 4.2): First, among the CB respondents ($N=10$) who used their social-cultural networks during the venturing process, fewer ($N=4$) reported that they received financial support from family members, relatives, and friends. However, alumni networks played a more important role, respondents ($N=6$) co-founded with, or invited, their alumni to form a management team. Second, fewer ($N=6$) respondents reported that they established political networks. Among them, some ($N=3$) were actively networked with the government. Half ($N=9$) of the respondents reported that they did not need or attempt to establish political networks to access resources and obtain business opportunities. They explained that because market resources and opportunities were dynamic, they preferred to focus on strengthening their own capabilities and on developing their market networks. As NXD explained, “I don’t like to have too much contact with the government; we only need to grasp the general direction where our state is heading. For example, I know there is increasing investment in railway construction. I target the major suppliers and we begin by contacting them.”

Third, the great majority ($N=15$) of CB members preferred establishing networks in an open environment and they explored diverse market ties. Respondents ($N=6$) cooperated with professional agencies, such as consulting firms, financial services, industrial associations, and the media, to obtain expertise, opportunities, and legitimacy. Respondents ($N=5$) also used their diverse connections to win acceptance for their business models. Some ($N=3$) respondents introduced interlocking directorates into their firms. Respondents also criticized traditional Chinese business practices for being overly dependent on guanxi networks, and they were interested in establishing some new practices. YYB began in a traditional industry, the catering service, but according to him,

participating in a well-known national television program is a better and more effective way to promote his business: “I don’t rely on interpersonal guanxi networks because they are limited. Today, more and more people get to know your business via web sites and the media. This is why I value the media; it plays an important role in networking. I think in this new era, one needs some breakthrough thinking [in networking].”

The great majority of CB’s ties are weak ties (see table 4.2). CB members prefer establishing diverse networks that are flexible and more useful for acquiring resources and exploring opportunities than building strong interpersonal connections. For CB members, the latter approach is both time-consuming and limits their ability to achieve their goals. YBQ collected over 3,000 business cards across different industries. During important holidays, he asked his secretary to send greeting messages to each of them as a sign of keeping in contact.

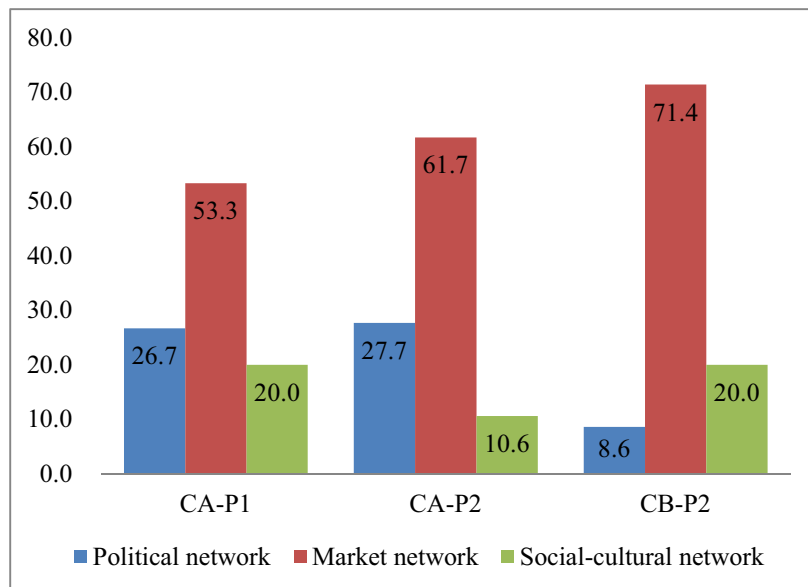
For younger start-ups, gaining legitimacy is a more important entrepreneurial process. Building inter-organizational networks with government and business entities is an effective way to achieve this goal. YX had run a peer to peer broadcasting firm without a license for three years. Although the business ran the risk of copyright infringement, he described himself as a “technological revolutionary.” He spoke about his cooperation with government organizations: “We also coordinate with government organizations, and actively participate in projects. For us, it is a good opportunity to promote our public image.... We can make bold changes and innovations, and we can make sure that we are revolutionaries and not martyrs.” HDT typified an example of pursuing legitimacy via market networks. In China, many young white-collar workers face the problem of finding the right marital partner but they feel shy about seeking marriage counseling services. She tried to establish connections with IT firms and State-owned Enterprises labor unions, and she organized social activities that led to “recognition and promotion” of her business. It is through weak and formal networks with other organizations, rather than via strong interpersonal networks, that younger start-ups achieve market acceptance and organizational legitimacy.

Ego-centered network analysis

Difference 1: network types. Figure 4.1 compares the use of network types between

the two cohorts. For CA, although social-cultural networks decreased in proportion from P1 to P2 (from 20% to 10.6%), the proportion of market networks and political networks remained relatively stable (from 53.3% to 61.7% for market networks, from 26.7% to 27.7% for political networks). In contrast, for CB, the market network (71.4%) significantly outweighed the social-cultural network (20%) and the political network (10.6%). In addition, for CA, almost half of the ties in P2 (22 out of 47) were repeated ties (i.e., also reported as alters in P1), suggesting that CA largely maintained old ties.

Figure 4.1
Comparison of the Use of Network Types



Difference 2: tie strength. I used three measures to compare tie strength: the mean of frequency (test of F), the mean of closeness (test of C) (Burt, 1992; Marsden & Campbell, 1984), and the mean of combining closeness and frequency (test of FC) (Reagans et al., 2004). Table 4.3 reports descriptive statistics of tie strength for CA at P1 and P2. Table 4.4 reports the inferential statistics from the *t-Test*. For CA, a paired-sample *t-Test* using three measures consistently shows that the difference between P1 and P2 is not statistically significant (e.g., $t(13) = -1.01, p = .33$, test of FC), suggesting that the tie strength of CA has not shifted during the institutional change period.

Table 4.3
Paired Samples Statistics: Mean of Tie Strength of Cohort A ^a

| | | Mean | N | Std. Deviation | Std. Error Mean |
|--------|----------|-------|----|----------------|-----------------|
| Pair 1 | F in P1 | 1.882 | 14 | .610 | .163 |
| | F in P2 | 2.136 | 14 | .569 | .152 |
| Pair 2 | C in P1 | 1.657 | 14 | .388 | .104 |
| | C in P2 | 1.618 | 14 | .465 | .124 |
| Pair 3 | FC in P1 | 1.770 | 14 | .339 | .091 |
| | FC in P2 | 1.877 | 14 | .400 | .107 |

a. F=Frequency, C=Closeness, FC=(Frequency+Closeness)/2.

Table 4.4
Paired Samples Test of Tie Strength: Cohort A ^a

| | Paired Differences | | | | | | | |
|----------------------|--------------------|----------------|-----------------|---|-------|--------|----|-----------------|
| | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | t | df | Sig. (2-tailed) |
| | | | | Lower | Upper | | | |
| Pair 1 F(P1)–F(P2) | -.254 | .582 | .155 | -.589 | .082 | -1.631 | 13 | .127 |
| Pair 2 C(P1)–C(P2) | .039 | .376 | .100 | -.178 | .256 | .391 | 13 | .702 |
| Pair 3 FC(P1)–FC(P2) | -.107 | .399 | .107 | -.338 | .123 | -1.005 | 13 | .333 |

a. F=Frequency, C=Closeness, FC=(Frequency+Closeness)/2.

Table 4.5 reports the result from the comparison of tie strength between the two cohorts. Table 4.6 reports the result of the Independent Samples Test. As is shown, the tie strength of CB is weaker than that of CA in P2 (e.g., CB: $M=2.15$, $SD=.50$; CA: $M=1.88$, $SD=.40$, test of FC); however, the difference is not significant (see table 4.6 sig. value in the first three rows). The difference between CB at P2 and CA at P1 is significant by a test of FC and a test of F (e.g., CB(P2): $M=2.15$, $SD=.50$; CA(P1): $M=1.77$, $SD=0.34$; $t(28)=-2.43$, $p=.02$, test of FC). It confirms that, compared to CA, CB tends to establish weaker ties during the initial institutional period.

Difference 3: function of weak ties. Adopting Gargiulo and Benassi's (2000) grouping strategy, I categorized all ego-alter ties into strong ties and weak ties by the mean FC value.

Table 4.5
Comparison of Tie Strength: Cohort A and Cohort B^a

| | Cohort | N | Mean | Std. Deviation | Std. Error Mean |
|--|----------|----|-------|----------------|-----------------|
| F in P2 | Cohort A | 14 | 2.136 | .569 | .152 |
| | Cohort B | 16 | 2.369 | .627 | .157 |
| C in P2 | Cohort A | 14 | 1.618 | .465 | .124 |
| | Cohort B | 16 | 1.940 | .486 | .121 |
| FC P2 | Cohort A | 14 | 1.877 | .400 | .107 |
| | Cohort B | 16 | 2.154 | .499 | .125 |
| F in P1 for Cohort A, F in P2 for Cohort B | Cohort A | 14 | 1.882 | .610 | .163 |
| | Cohort B | 16 | 2.369 | .627 | .157 |
| C in P1 for Cohort A, C in P2 for Cohort B | Cohort A | 14 | 1.657 | .388 | .104 |
| | Cohort B | 16 | 1.940 | .486 | .121 |
| FC in P1 for Cohort A, FC in P2 for Cohort B | Cohort A | 14 | 1.770 | .339 | .091 |
| | Cohort B | 16 | 2.154 | .499 | .125 |

a. F=Frequency, C=Closeness, FC=(Frequency+Closeness)/2.

Table 4.6
Independent Samples Test of Tie Strength: Cohort A and Cohort B^a

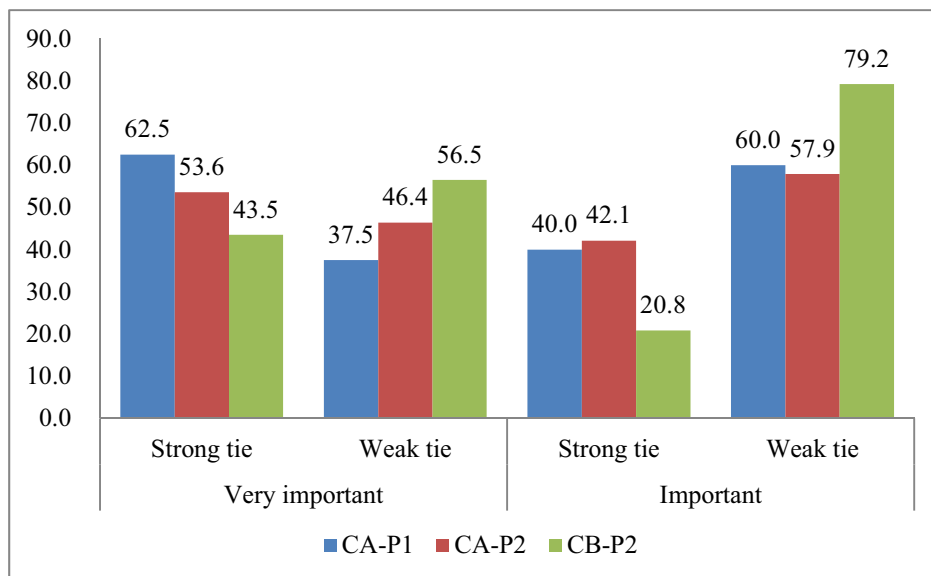
| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|----------------------------------|----------------|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|---|-------|
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | | Lower | Upper |
| F in P2 | 1 ^b | .000 | .984 | -1.060 | 28 | .298 | -.233 | .220 | -.684 | .218 |
| | 2 ^b | | | -1.067 | 27.952 | .295 | -.233 | .218 | -.681 | .215 |
| C in P2 | 1 ^b | .002 | .966 | -1.846 | 28 | .076 | -.322 | .174 | -.679 | .035 |
| | 2 ^b | | | -1.851 | 27.747 | .075 | -.322 | .174 | -.678 | .034 |
| FC in P2 | 1 ^b | .281 | .600 | -1.663 | 28 | .107 | -.277 | .167 | -.619 | .064 |
| | 2 ^b | | | -1.688 | 27.816 | .103 | -.277 | .164 | -.614 | .059 |
| F in P1 for CA, F in P2 for CB | 1 ^b | .054 | .817 | -2.147 | 28 | .041 | -.487 | .227 | -.951 | -.022 |
| | 2 ^b | | | -2.152 | 27.664 | .040 | -.487 | .226 | -.950 | -.023 |
| C in P1 for CA, C in P2 for CB | 1 ^b | .538 | .470 | -1.742 | 28 | .093 | -.282 | .162 | -.615 | .050 |
| | 2 ^b | | | -1.768 | 27.801 | .088 | -.282 | .160 | -.610 | .045 |
| FC in P1 for CA, FC in P2 for CB | 1 ^b | .914 | .347 | -2.432 | 28 | .022 | -.385 | .158 | -.708 | -.061 |
| | 2 ^b | | | -2.494 | 26.498 | .019 | -.385 | .154 | -.701 | -.068 |

a. F=Frequency, C=Closeness, FC=(Frequency+Closeness)/2.

b. 1=Equal variances assumed, 2= Equal variances not assumed.

Weak (strong) ties are identified when each focal FC value is above (below) the mean FC ($M=1.93$). By comparing the importance of the alters' help (either "very important" or "important"), I examined the function of the tie strength. Figure 4.2 reports the results from the comparison of the function of ties between CA and CB. The results show that at P2, in ties which provided "very important" help, 56.5% belong to weak ties for CB; compared to 46.4% and 37.5% for CA at P2 and P1 respectively, suggesting that weak ties tended to be more important for CB than for CA in their business venturing.³

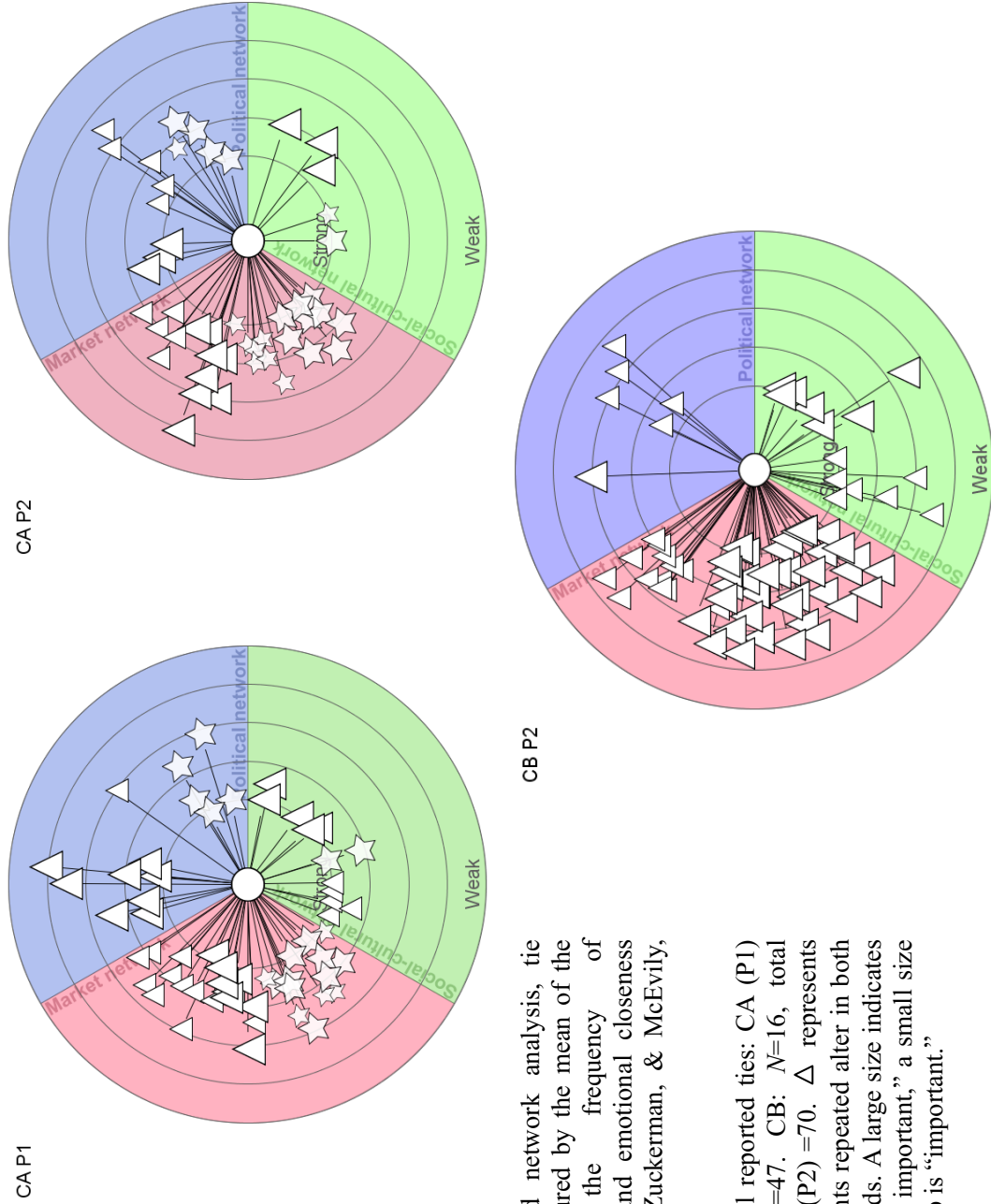
Figure 4.2
Comparison of the Function of Ties



The differences in network configurations between the two cohorts are further illustrated in figure 4.3 via an ego-centered network visualization tool-Vennmaker. The small circle in the center of each plot stands for ego—start-up respondents. The two upper plots represent the ego-centric network of all CA respondents' ties with their alters. The lower plot represents the ego-centric network of all CA respondents' ties with their alters. Each plot has three sections: blue stands for political networks, green for social-culture networks, and light red for market networks. The distance between ego and

³ The chi-square test is not available in multiple response analysis Decady, Y., & Thomas, D. 2000. A simple test of association for contingency tables with multiple column responses. *Biometrics*, 56: 893-896.

Figure 4.3
Comparison of the Ego-Centered Networks^{ab}



^a In ego-centered network analysis, tie strength is measured by the mean of the product of the frequency of communication and emotional closeness (FC) (Reagans, Zuckerman, & McEvily, 2004).

^b CA: $N=14$, total reported ties: CA (P1) =60, CA (P2) =47. CB: $N=16$, total reported ties CB (P2) =70. Δ represents alter, \star represents repeated alter in both institutional periods. A large size indicates that help is “very important,” a small size indicates that help is “important.”

alter measures the strength of ties. The longer the distance, the weaker the tie. As we can see from the figure, compared to CA, CB reported fewer political ties, more market ties, and those ties appear to be weaker. CA still persisted with some of their old ties, CB also used social-cultural networks during the venturing process, however, those ties are mixed with strong and weak ones.

Overall, these results generally confirmed the findings that emerged from the qualitative data: (1) Market networks play a more important role for CB than for CA, as CA members still largely maintain their old ties and political ties. (2) CB is more likely to establish weak ties than CA and these ties play more important roles than strong ties in business venturing, compared to CA. Two points need to be mentioned: (1) Marsden (1990) noted that ego-centered network data may be biased toward strong ties, in that the respondents are less likely to mention their weak ties. Xiao and Tsui (2007) pointed out that if such a bias exists, it would operate in a similar way across all the respondents, and thus, it is still plausible for comparisons. In addition, I tried to reduce the potential bias and to gain more accurate information by triangulating it with qualitative data. (2) Scholars generally use a name-generator to examine personal networks. I noticed that during the name-generator interviews, information on organizational networks emerged (especially from CB as respondents received much more help from organizations instead of from certain individuals). Coding this information into quantitative data is challenging since it is difficult to identify single individuals and to measure the closeness. Therefore, I included this information in the qualitative data analysis. This probably explains why the tie strength at P2 is not statistically significant between CB and CA. The qualitative and quantitative data validated each other and provided more accurate information on network configurations.

4.3 Unpacking the Processes and the Alignment Effect

My research goal is to examine how two start-up cohorts with different institutional origins construct their networks and unpack the processes and mechanisms that lead to such constructions. I reported that old cohorts tend to establish strong interpersonal market and political ties, and they demonstrate network inertia during the institutional change phase. In contrast, younger cohorts tend to establish weak and diverse market ties,

and have fewer and formal political ties. I now provide explanations by analyzing how the three institutional pillars are incorporated to produce forces for these distinctions. Table 4.7 and table 4.8 summarize the underlying processes and mechanisms.

CA: the processes and mechanisms of network inertia

Network bonding. Founding regulative institutions mainly shape the degree of dependence on networks and the availability and openness of network resources. The common problems that CA respondents confronted were as follows: “policies were unstable and fluctuating,” “discrimination against private enterprises,” “difficulties in obtaining bank loans,” “barriers to accessing materials and channels,” “difficult to enter the market without the help of acquaintances,” and so forth. The liability of newness was exacerbated when the start-ups were operating in an unfavorable institutional environment with underdeveloped market conditions. This condition leads to a strong dependence on networks and a limited choice of network partners because of the inadequate resources and insufficient mobility in the market. To overcome these challenges, respondents cultivated strong interpersonal trust networks with their political and market connections. HDS described how he established such networks with government officials:

When I was working in a state-owned enterprise, I tried my best to get to know people in the government. It helped me to understand them. When I started my own business, they could give me some projects.

Establishing new political ties was beneficial for resource acquisition; however, it was also very challenging. To reduce the uncertainties inherent in informal exchanges and to avoid the risks of unwanted exposure, respondents tried to cultivate particularistic trust. After describing the difficulties in obtaining a bank loan, MM explained how he established particularistic trust with an official so as to receive the loan:

At that time, no college students were doing business.... I told him that my parents were government officials as well. So he was a little bit relieved. And then he checked my background and found out that I had joined the party when I was in college, and that I had been a student leader back then. This also increased his personal trust in me. After we became familiar with each other, the loan was

approved.... There was no requirement for a mortgage.

Table 4.7
Cohort A: Institutional Pillars and Network Inertia

| Mechanisms | Evidence | Examples |
|--|----------|--|
| 1. The weak regulative institutional support and the underdeveloped state of the market create start-ups' strong dependence on networks. | 12 | In the early stage [before 2002], all electronic products were imported from abroad, mainly via gray channel like intermediaries.... If you didn't work in this way, you couldn't survive. In our IT circle, everybody knew it. You can say it was an open secret or an unspoken rule; you had no choice, but that was the situations (DHC). |
| 2. The weak regulative institutional support and the underdeveloped state of the market also limit network opportunities and bond the start-ups to certain ties. | 11 | He gave me the [government]projects because he trusted me. He would have worried if he gave them to anyone else...I manage my business within a controllable scope: it is relatively small and there are no problems. If I want to develop, there will be a problem (HDS). The bosses from those companies were very brave. Actually they all had some backgrounds and they could solve the problems [import limitation]. However, I could not because I had no background and no resources. So I had to obtain the goods from them (DHC). |
| 3. Experiencing the institutional incoherence anchors guanxi networks as a coping strategy during the institutional change period. | 9 | [After 2002] The policies became much tighter: for example, customs, taxes and the administration etc. From the perspective of the state, they became more standardized; however, the business became more difficult....Many things are parasitic appendages of the state system. If you still have old guanxi networks, they can still help you sometimes (DHC). |
| 4. Close coupling with traditional cognitive and normative institutional pillars confines network adaptation. | 10 | Under China's macro conditions, business relies on guanxi. As a start-up, if you don't develop your guanxi, you might be thought of as incapable of doing so. This applies to everyone. Guanxi requires long-term cultivation (HDS). I show my enthusiasm and honesty and that I could do solid work. I have some clients who initially were not familiar with me. Eventually, they accepted me and trusted me. Slowly I developed guanxi....Actually, there is old Chinese saying: spur with long accumulation. Only by steady accumulation will people trust you (DHC). |

^a The figure indicates the number of interviews (out of 16) in which the interviewee mentioned the theme.

The institutional uncertainty and inadequate market resource flows also bonded the respondents with their market connections. To obtain critical resources and opportunities, respondents resorted to their existing ties. Previous interactions with old business partners fostered trust and commitment and when the respondents started their own businesses, the old business partners provided timely help. As FPX explained:

We established mutual recognition. First of all, it was the recognition of each other's merits. They felt that we wouldn't screw up. Based on these foundations, we didn't need to worry. If you don't have these two things, you can't get around. I felt that in that environment, we could rely on each other.

Forming ties with new partners can facilitate access to new resources and business opportunities; however, forming new ties requires much more effort. Start-ups mainly cultivate strong ties to foster trust and commitment, as a relational bonding against an uncertain environment and opportunistic behavior. DHC, an early start-up in IT services, confronted difficulties in obtaining IT devices. He explained how he established strong ties with powerful market intermediaries who were engaged in overseas imports:

If you didn't follow them to get the goods, your enterprise couldn't survive. However, in this manner, you faced high potential risks, such as smuggling. Under such conditions, establishing and maintaining guanxi was very important.... So I sent them some gifts and invited them to dinner so as to establish a closeness..

Experiencing institutional incoherence. The prevailing theoretical explanation of network change is that the development of regulative institutions leads to network decline and strategic change (Guthrie, 1998; Hitt et al., 2004; Peng, 2003; Peng & Zhou, 2005). However, actors' perceptions of the institutional environment under changing conditions are influenced by their early institutional experiences; their responses are not always calculative and strategic. First, experiencing early unfavorable regulative institutions reinforces the perception of certainty and predictability provided by strong personal ties. Second, an incoherent perception of the regulative institutional development hinders network adaptation. CA's evaluation of the institutional environment did not indicate a coherent picture that the regulative institutions had become significantly more favorable. Respondents shared the view that P1 was comparatively better than P2, because the early period had created some business opportunities (legitimizing entrepreneurial activity to a certain degree), although it provided less concrete support. Many respondents complained that during P2: "policies are constantly changing," "policies have become tighter," and "there are more regulations and restrictions."

The early experiences and unpleasant institutional journey reinforce perceptions of uncertainty and amplify the role of interpersonal networks. Thus, CA members clung to their informal political networks as protection against uncertainties. For them, exchange opportunities are latent and potentially troublesome issues can be resolved through political connections. For instance, FC continues the habit of chatting and dining with

officials from customs, commodity inspection, and the tax bureaus. As he noted:

Q: So you still keep up these connections?

FC: Yes. But they don't offer any substantial help. They are mainly personal relationships. Like chatting without any business, or wining and dining in the evening. Last week, we dined together, and we talked about the swine flu.... However, when there are some problems, they can still help out.

Respondents noted that during the period of institutional change, market institutions and mechanisms are developing, but the institutional change is also accompanied by intensifying competition and uncertainties. The informal market connections still provide some reliability and predictability in business exchanges. When confronted with business challenges and environmental turbulence, the respondents remained close and endured the challenges together. Some respondents realized that their businesses were stagnating or even declining, but they still did not attempt to expand their networks. As ZRQ remarked:

If there is an opportunity [to find new partners], I will probably try, but I won't try very hard to do that I feel very comfortable doing business with my old partners. There aren't so many conflicts. After all, we know each other very well.

For the majority of CA members, maintaining and establishing interpersonal networks was still a viable option and it became an anchored and re-utilized coping strategy during periods of institutional change.

Close coupling. An early unfavorable institutional environment bonded start-ups with their specific ties and demanded the cultivation of closeness, trust, and commitment. In addition, this bonding relationship was consolidated by the relational pressures imposed by the traditional Chinese culture and norms. The networks of a majority (11 out of 16) of CA respondents did not evolve in a more calculating and strategic direction. Instead, the respondents emphasized building and maintaining harmonious relationships and improving the quality of their existing networks. They closely adhered to traditional guanxi practices that are deeply rooted in routines and scripts. Respondents often conducted business deals through expressive interactions and social events, such as wining and dining. Doing business was also a process of making friends that required following certain routines and etiquettes. As MM put it: "After becoming friends, you

have the capital to talk about it [business].” These cognitive elements are commonly codified and shared between respondents and their network partners. As CFB vividly described:

Normally, when we were doing business, no matter whether with the leaders were from state-owned enterprises or the leaders from private enterprises, the most important thing was that we never talked about money; it was only about emotional communication. It was impossible to show the leaders the order form before the meal; otherwise they would not enjoy the meal. After the meal, the order was naturally approved.

The majority of CA members also closely followed the traditional normative ways of establishing and maintaining guanxi networks, such as reciprocating in guanxi building. As XJF remarked:

They provided you with some information. They are like your brothers and friends. However, you still need to reciprocate. They also value your manner of getting along with them. If you are stingy, they won't recommend you for any projectsYou need to appreciate their help, for example, by giving them some rewards, [and] being generous to them.

Respondents also attached great importance to the accumulation of long-term relationships and to nurturing mutual understanding, obligations, and assurance for continuous exchanges. As FPX stated:

I want to be accepted by them. When we are together, I show them my sincerity. After a long time, personal guanxi is well nurtured. And there might be many opportunities. These opportunities might not be related to business. You can't be too instrumental because it is a long-term process.

Subtle, informal relational norms and rules were also established in the specific exchange relationships. During P2, respondents still conformed to these rules to secure trust and exchange relationships and to avoid disapproval by their old ties. For example, during P2, FPX was still doing business with a third party via an intermediary and he did not “cross the line” to directly connect with the business himself. He explained why:

I follow the rules of the game, I entered the market by this channel [a referral], I

won't break it ... if you break it, you are not on the right track. Why would I do that just for some money?

Close coupling with these traditional cognitive and normative institutions enables one to fit in well with the early institutional environment and ensures access to resources and opportunities. However, it creates an imprint effect in relational governance and impedes adaptation to the changing institutional environment. CA tended to regard environmental turbulence (e.g., a financial crisis) as a chance to show mutual understanding, support, and loyalty. As WJS remarked:

This gives me an opportunity to look more thoroughly into people's hearts. Then I can examine who are long-term and who are short-term [business friends] .

Under such strong and pervasive institutional pressures, deviant behavior can provoke some disapproval in the community. DHC reflected upon his unsuccessful attempt to operate his business without following the intricate guanxi practices:

Actually, one year ago I tried with a friend to operate a business based on a new model, hoping that we could break away from the guanxi practice and we could run the business according to the market. However, after some actual practice, we found that it didn't work. The business still relied on guanxi.... If you don't act in that way, it seems there is no way out. Maybe there is a way out, but not everyone can find it.

I also assessed the data to check whether some new norms and schemas might have been diffused and equally perceived by the two cohorts during P2. CA members shared the feeling that “market competition is intensifying” and that they need to “enhance their internal strength and market capabilities.” However, these pressures did not necessarily motivate them to dissolve their old ties or to forge new, diverse, and weak ties. Being embedded in homogenous and cohesive networks restricted an awareness of external institutional change and limited adaptations to the changing environment.

Global linkages and within-cohort variations. I assessed the within-cohort variations and discovered that a linkage with international partners is a key factor in differentiating some respondents from their cohort peers in the network configuration. For example, at the beginning of the venture in 1997, CL positioned his business and

partners in the global market. As he explained: “I targeted my partners from foreign companies, such as Euro-American companies and Japanese companies. I felt communicating and dealing with them was much easier.” Partnering with international partners during the later institutional period renewed their network configurations. For example, in 2002 CCL cooperated with multinational corporations to expand his print factory. As a serial entrepreneur, WJY co-started a VC firm with returnees from the U.S. in 2007. The strength of these respondents’ ties was weaker than that of their cohort peers. More importantly, they gradually adjusted to international business standards and became strategic in partnering and alliance management. XJF and FC followed the normative way of doing business with domestic partners. However, when they dealt with international players, they followed a relational system that puts more emphasis on competence than on affection and they engaged in instrumental interactions more than expressive interactions. Those weak and formal global networks reduced the likelihood of network inertia and facilitated network adaptation during the period of institutional change.

CB: the process and mechanisms of the distinctive network construction

Network Releasing. Compared to CA’s unpleasant institutional journey, exposure to a relatively favorable regulative institution moderated CB’s dependence on networks and increased opportunities for networking. CB’s general perceptions were: “regulations are relaxed,” “more supportive policies,” and “less bureaucracy and more efficiency.” Beginning in 1998, the Chinese government accelerated the market economy and launched reform measures to improve their bureaucratic capacity (Pearson, 2007). On the one hand, resources and opportunities controlled and distributed by the government were gradually diminished. On the other hand, the Shanghai government started providing more support to new ventures (White, Gao, & Zhang, 2005). These reforms and this policy support appear to have had a selective effect: the younger cohort enjoyed more benefits than the older cohort. Technology-related start-ups reported that government agencies were directly involved in pooling funds, channeling resources, offering tax benefits, and providing administrative support. Others were actively connected by the government to join in cooperation to boost the local economy (ZAM, YZD) and to avoid

tax policies (XXT). JXJ explained how his venture was supported by government agencies:

There are many [supports] . The local government and the center for the transformation of high-tech production. They are constantly helping us. I will move to a new office soon. This office is offered by the Yangpu Start-up Center.... It even found some projects and came to support me.... The college students' innovation funds, technology venture capital, various start-up centers, etc. are all well-connected and supportive.

Table 4.8

Cohort B: Institutional Pillars and the Distinctive Network Configuration

| Mechanisms | Evidence | Examples |
|--|----------|--|
| 1. The relatively favorable regulative institutions and the development of the market moderate CB's network dependence on certain ties. | 16 | State policies are more open and favorable to private enterprises. This expands the area of entrepreneurship. Earlier [After 2002], entering some high-ended field was difficult; now it is not that difficult....We are relying less on government connections, and it is a relatively pure market behavior (WB). |
| 2. The regulative institutional support creates more network opportunities with government entities. | 6 | You need to cooperate with the government in some activities....For the government, it is its political achievements. For us, it is an opportunity to improve our public image....We went out [to the public] to help the Zhangjiang government. The Zhangjiang government also helped us....It was a reciprocal process (YX). |
| 3. The development of market institutions and mechanisms create more network opportunities with market entities. | 15 | In the Intent industry, actually everyone has more or less contact with one another. We know that in the new economy, only cooperation can create opportunities. You come to me and I go to you. So I think in the IT industry, you can find everyone by three to four degrees (YX). |
| 4. Decoupling from and loose coupling with the traditional normative and cognitive pillars facilitate the departure from traditional networking behaviors. | 11 | I think our [entrepreneurial] generation puts more emphasis on the market than on traditional guanxi. It [guanxi] requires much time and energy. That [elder] generation relies on guanxi for some certain reasons. But for us, capability is more important (WB). |
| 5. Coupling with new normative and cognitive pillars facilitates new networking behaviors. | 12 | At the beginning, we had no talent, no market, and no capital. However, we became accepted by venture capital because of our technology.... I then accumulated the users and reputation with the financial support from venture capital, then I negotiated with the content providers, and the chances [of cooperation] became greater (YX). |

^aThe figure indicates the number of interviews (out of 17) in which the interviewee mentioned the theme.

The development of market institutions and mechanisms increased the volume and speed of resource flows, providing CB respondents with an open networking environment when they entered the market. Respondents clearly perceived the tense competition, but they regarded it as a natural process for business ventures and they tried to leverage the

resources and opportunities—external funding, talent, knowledge, joint projects, etc.—with their diverse market connections. Many respondents identified their network partners by spotting complementary needs and then contacted them via “cold calling.” An open network environment also encouraged resource sharing and network bridging. Respondents were connected to third parties via their network partners, accessing and exchanging resources and information. As WB explained:

When I know some other companies are providing personal financial services, I call them directly. They also have such needs, so they won't refuse me if I go after them.... It is a very equal relationship. But you can also find them by referrals.

Decoupling and loose coupling. The sharp contrasts in the two cohorts' network configurations call for a close investigation into the cognitive and normative institutions: Are the two cohorts subject to different institutional pressures, even during the same institutional period (P2)? The data indicates that CB members tend to decouple from traditional cognitive and normative institutions. For the majority of CB members, the routines, scripts, and schemas ingrained in guanxi building were complicated, costly, and inefficient. CB members were less engaged in social expressive interactions (e.g., holding banquets or sending gifts) than CA members, but they were more engaged in task-oriented interactions. Many business and joint projects were negotiated and established within their offices. ZAM described the problems with traditional guanxi practices:

Many things important in Chinese business traditions, such as tactics, mianzi [face], and guanxi are not meaningful. How to build and how to manipulate are too complicated. I would prefer transparent market operations and cooperation based on trust.

Younger start-ups also decoupled from the traditional relational norms and values by avoiding mixing business relationships with friendship, cooperating with loose obligations, and attaching less affective elements. As ZQ remarked: “Very few business relations can be transformed into friendships.” YYB noted how he repositioned his relationship with a previous friend who later became a business partner:

I grouped people into three types: colleagues, friends, and business partners. People can be your good friends, but not your partners; people can be your

partners, but not your friends.... It took some time—like a trial period—to reposition ourselves....Then we decided whether we needed a long-term or short-term cooperation, or no cooperation at all.

Loose coupling became a strategy when respondents perceived some traditional informal pressures but did not necessarily want to follow them. For example, NXD allowed his subordinate to build interpersonal relationships with government officials, while he focused on enhancing the firm's competence and developing a strategic alliance with international partners. Loose coupling simultaneously generates flexible roles, securing appropriateness, and pursuing efficiency.

Coupling. The acceleration of marketization and the integration of Shanghai into the global economy after 2002 facilitated the diffusion of new cognitive and normative elements. The need to strengthen market capabilities and competencies became the dominant beliefs and values that were internalized by CB members from the start when they entered the market. Emphasizing business innovation and value creation was the primary goal of forming ties. For instance, YMP offered elite education courses for “smart kids” at a very high price. His customers were reluctant to register their kids for the courses. To convince potential customers and to attract more customers via “word-of-mouth,” he explained the following:

Our goal is not solely to improve our kids' academic achievements. This can easily be achieved by the schools or the kids' parents. However, we provide elite education. We provide added values and additional services....Our employees all graduated from domestic or overseas top-tier universities.

Obtaining organizational legitimacy is an important entrepreneurial process for new venture start-ups. CB respondents tried to establish networks with prominent and powerful players to signal that they abided by social and institutional expectations. For example, ZQ strategically allied with a high-status firm and invited the director to become a partner, thereby securing bank financing. WB, the finance outsourcing business start-up, explained how he strategized to obtain organizational legitimacy:

We are engaged in financial outsourcing. The foreign banks felt this was acceptable; however, the domestic banks were still cautious. So we adopted a strategy to cooperate first with foreign banks, and then when they [the domestic banks] realized this, negotiations became much easier.

Once they established strategic alliances with powerful players, new venture start-ups tried to use relational legitimacy to attract potential partners and to expand their networks. Coupling with new cognitive and normative elements was summarized by YZD as follows:

Obviously, Shanghai has become a center where business rules have become more and more international; now you have to flow with the rules of the game. In establishing a network, our own capabilities are very important. I try to be selective in establishing ties because we must match resources; time and energy are limited, and one needs to find the right partners.

As the new norms, values, and beliefs were internalized, CB members tended to view environmental turbulence more neutrally and objectively, detaching it from their personal relationships. YX explained: “We all knew it [the financial crisis] was a process, so we treated it objectively.” The firms in which ZAM’s company had invested lost asset value during the crisis; moreover, some of the early investors withdrew capital from his firm. Confronting these downturns and dissolutions of alliances, he remarked:

Every crisis is a process of baptizing. After the crisis, the firms that remain in the market are the good firms. The market has baptized them. We feel reassured when we choose such firms.

The majority of CB members also viewed environmental shocks as a chance to reflect and strengthen firm competence, and to adjust and improve alliances. As QCH remarked:

Suddenly there was a crisis, and it was time to reflect on what I needed to do to catch up and how I should improve our product structure and rebuild and adapt our cooperation.

The above analysis suggests that the new scripts, schemas, and norms were not equally perceived by the two cohorts. Even without the linkages with international partners, CB members perceived the need to enhance their market capability, to engage in instrumental interactions, and to adopt strategic elements in their network formation and management. These scripts and norms were commonly shared and practiced by the younger start-ups.

4.4 Institutional Change, Start-up Cohorts, and Networks: A Framework

I have reported that two start-up cohorts demonstrate distinctive network configurations; I have also unpacked the underlying processes and mechanisms that led to such distinctions. Using these findings, I now propose a framework to offer insights into how founding institutions imprint on networks. The central theme has three components: First, founding institutions at a given period include a specific combination of the three pillars. Second, institutional pillars have different mechanisms in effecting networks and networking. Third, the exposure of start-up cohorts to their respective founding institutional environments impacts their initial network configurations and continues to affect subsequent network trajectories during the period of institutional change.

A changing regulative institution cannot solely explain network dynamics. Previous studies focusing on regulative institutions primarily explain why entrepreneurs need (or need fewer) networks and why they need to adapt their network structures (Guthrie, 1998; Peng, 2003; Peng & Quan, 2009; Peng & Zhou, 2005). This study discovered that the regulative pillar during different phases of institutional change mainly accounts for the different scenarios of network dependency and network opportunity; however, the processes and mechanisms of tie formation, governance, and dissolution are subject to cognitive and normative pillars. These pillars define the appropriate norms, values, and practices under certain conditions. Once the networks have been established, they have their own lives. Thus, we need to examine the institutional pressures and the entrepreneurial responses in transitional economies that are experiencing an intersection of old traditions that are continued and a diffusion of new cognitive and normative elements. That is:

Proposition 1. At different institutional periods, a) the regulative pillar creates different levels of network dependencies (e.g., high or low) and network opportunities (e.g., closed or open), b) the cognitive and normative pillars define and legitimate different (e.g., traditional or new) norms, values, practices, and procedures that govern concrete network behavior.

This framework adds an “alignment effect” to our understanding of the combination of institutional pillars during a given institutional period (Scott, 2008). Exposure to

unfavorable regulative institutions has an imprinting effect by bonding entrepreneurs with specific interpersonal connections. This effect is reinforced by the normative and cognitive elements entrenched in traditional Chinese business culture, which emphasizes emotional closeness, strong commitments, and long-term orientations (Chen & Chen, 2004; Luo, 2007) (see the upper left corner in figure 4.4, the joint force created by three institutional pillars). This alignment creates a tendency for network inertia. During institutional change, the more favorable regulative institutions increase the chances for networking. Meanwhile, new relational norms, values, and beliefs emerge and spread during the period of institutional change, requiring new ways of networking. Thus, these joint forces create the possibility for distancing from conventions and shaping new networking behaviors (see the lower middle corner in figure 4.4, the joint force created by three institutional pillars). Thus:

Proposition 2. The alignment of an unfavorable regulative pillar with strong traditional normative and cognitive pillars creates a strong possibility of network inertia (Situation 1), whereas the alignment of a more favorable regulative pillar with new normative and cognitive pillars creates a strong possibility of a distinctive network configuration (Situation 2).

The responses of entrepreneurs to the changing institutional environment cannot be assumed, but they are closely related to their initial links with the founding institutions. The initial link delimits the legitimate relational system. The latter, in turn, impacts the perception of institutional change that either enables or constrains the network dynamics (Beckert, 2010) (see the upper middle corner in figure 4.4). The founding institutions execute an imprinting effect during the entrepreneurs' entry period, and the responses of the entrepreneurial cohorts are accompanied by different processes and patterns. Thus:

Proposition 3. Founding institutions play a very important role in influencing initial networks and subsequent trajectories. An old cohort is more likely to experience Situation 1, even during institutional change; a younger cohort is more likely to experience Situation 2.

Proposition 4. Network inertia is likely to occur within an older cohort during the process and mechanism of network bonding and close coupling (with traditional cognitive and normative pillars).

Proposition 5. Network differentiation (from the old network configuration) is likely to occur within a younger cohort during the process and mechanism of network releasing and decoupling and loose coupling (with traditional cognitive and normative pillars) and

coupling (with new cognitive and normative pillars).

Acquiring resources, obtaining opportunities, and gaining legitimacy are all important entrepreneurial processes. However, some entrepreneurial processes may be particularly important during specific institutional periods, thereby contributing to different network configurations. As it is shown in figure 4.4, “+” represents the positive relationship with a certain network configuration. For example, when obtaining resources and discovering opportunities are the dominant entrepreneurial process, it is very likely to lead to network inertia, because these processes require cultivating strong interpersonal connections. When gaining legitimacy becomes a more prominent entrepreneurial process, it is very likely to lead to a distinctive network configuration since this requires establishing formal and organizational networks, rather than strong interpersonal connections. Thus:

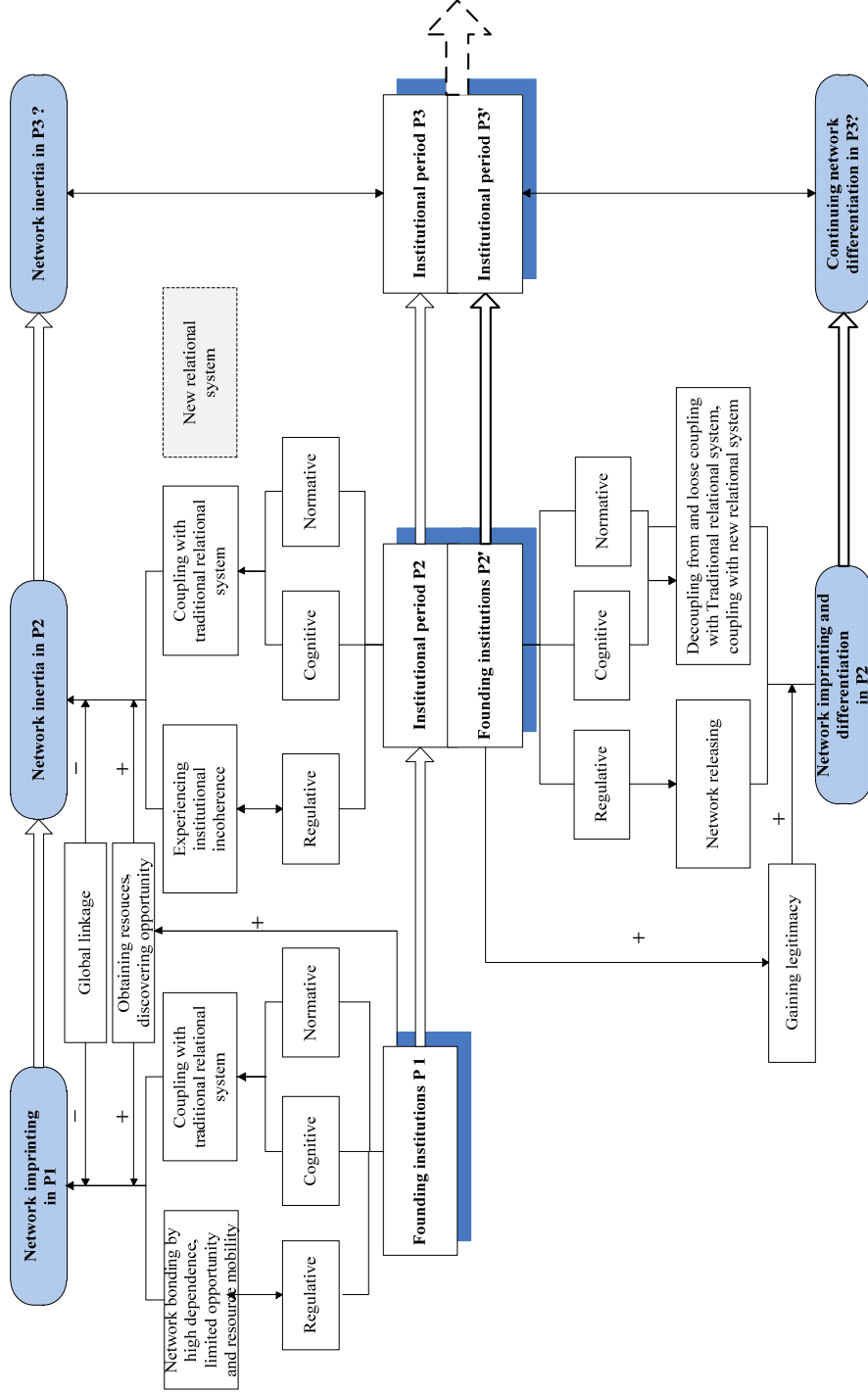
Proposition 6. A certain institutional period gives rise to a certain emphasis in the entrepreneurial process. An emphasis on obtaining resources and opportunities will likely lead to strong informal ties and will increase the possibility of network inertia within an older cohort; an emphasis on gaining legitimacy will likely lead to weak formal ties and will reduce the possibility of network inertia within the younger cohort.

Domestic businesses and networks create a strong force for a homogenous and cohesive network. However, old start-ups with direct business links to global players establish fewer political networks and weaker and more formal market networks. As it is illustrated in figure 4.4, “-” represents the negative relationship between network inertia and global linkages. That is:

Proposition 7. Respondents from the old cohort who have linkages with global partners are less likely to demonstrate network inertia during institutional change.

Figure 4.4 illustrates the emerging theory that is extracted from the data. Although this empirical study focuses on two institutional periods, it suggests that networks established during the two periods (P1 and P2) are very likely to influence the networks in a subsequent institutional period (P3). This remains an intriguing question for a future inquiry. In the next chapter, I will shift the research focus from network configurations to concrete networking actions and examine how the two cohorts differ in their tie formation and trust development processes.

Figure 4.4
Institutional Change, Start-Up Cohorts, and Network Dynamics: A Framework



CHAPTER 5. THE EVOLUTION OF ENTREPRENEURIAL NETWORKING STYLES

5.1 Introduction

How do start-ups evolve their networks during the institutional change period? Do they adapt their networks to fit with the changing institutional environment or do they exhibit network inertia? In the preceding empirical chapter, I outlined the major differences in two start-up cohorts' network configurations and described the underlying processes and mechanisms that lead to such differences. It was criticized in the literature review that knowing the difference of the network structure or a network configuration between two start-up cohorts is not enough, given that a network configuration is only a snapshot and it is determined by concrete networking actions. In this empirical chapter, I will go a step further to bridge the missing link between environmental effects and network configurations by highlighting two networking actions: tie formation and trust development.

This empirical chapter is devoted to answering the second set of research questions: How do different start-up cohorts establish ties and develop trust relationships during the institutional change period? What are the underlying mechanisms that lead to the differences? This chapter helps readers to delve deeply into three concrete networking activities—team formation (section 5.2), political networking (section 5.3), and market networking (section 5.4). Each section elaborates how the two start-up cohorts differ regarding the process of tie formation and trust development with table illustrations. After describing the differences in their networking actions, I theorize two types of networking styles in section 5.5: The old cohort uses the strategy of network deepening while the younger cohort uses the strategy of network broadening. By uncovering these variations in networking actions, readers can gain an in-depth understanding of the differences in network configurations between the two start-up cohorts that were described in chapter four. This chapter further confirms the imprinting effect of the founding institutional

environment in networking styles and points out how institutional change leads to the evolution of networking styles from the societal level.

5.2 Team Formation and Organization Emergence

CA: team formation and evolution

Teaming up. Social networks play an important role during the process of starting new ventures (Aldrich & Zimmer, 1986). When start-ups first begin to take serious steps toward creating their own business, seeking out “trusted alters” and forming a reliable team is a critical step (Aldrich & Kim, 2007; Ruef, Aldrich, & Carter, 2003). In the Chinese context, Deng Xiaoping’s south China tour (in 1992) stimulated a dramatic expansion of private business activities. CA respondents seized this good opportunity and started up their businesses. In P1 (the early stage of market transition), respondents faced problems and challenges spawned by poor property rights protection as well as the underdevelopment of market factors (e.g., raw materials, financial capital, and human resources). Respondents heavily relied on their pre-existing ties to overcome these threats.

Table 5.1 illustrates the information about the propensity of tie formation and trust development when CA and CB formed (or did not form) their teams. Among 16 CA respondents, six respondents started up their business alone and four of them received significant help from their pre-existing ties. Respondents spotted and obtained venturing opportunities from their former colleagues, schoolmates and students, and friends. For example, HDS and CCL both worked in government departments before their start-up was founded; when the government launched reforms to separate the function of government administration from enterprise management, good personal relationships with government officials provided them with opportunities to take over the enterprises and transform those entities into private businesses. WJS helped his elementary schoolmate commercialize safety products when he was lecturing at a local public security college. His students who worked in the public security office helped him open the product market, and soon he embarked on his own business. Those respondents

shared one similarity: They didn't strive to search and team up with other partners; instead, they spotted business opportunities via their pre-existing ties, which facilitated the firm to emerge.

Table 5.1
Team Formation and Trust Development

| CA | | |
|--------------|--|--|
| P1 (N=16) | No management team (N=6) | Obtained start-up opportunities from pre-existing ties (N=4) |
| | Teaming with pre-existing ties (N=10) | Family members, relatives, former colleagues, friends and schoolmates |
| | Trust type | Particularistic trust and affective trust Strong commitment and obligation, providing financial, human resource, and emotional support |
| P2 | Team component and trusting type | Maintain old team members, particularistic trust and affective trust Add new team members, particularistic trust and affective trust, and the emergence of cognitive trust |
| CB | | |
| P2 (N=17) | No management team (N=5) | Conflict with management team in previous work, decided to start-up alone (N=3) |
| | Teaming with pre-existing ties (N=3) | Former colleagues, business partners, and MBA classmates |
| | Trust type | Particularistic trust, cognitive trust, and affective trust Familiarity and proven competence facilitated team formation |
| | Teaming with new ties (N=2) | New industry peers |
| | Trust type | General trust and cognitive trust Face-to-face negotiations, get the better match |
| | Mixing pre-existing ties and new ties (N=7) | New team members from market, former colleagues, alumni, family members, and relatives |
| | Trust type | With new members: general trust, cognitive trust at the initial stage With pre-existing ties: particularistic trust, cognitive trust and affective trust Functional diversity, quicker teaming up, and relatively stable management team |

The majority of CA respondents (N=10) founded their business and drew team members from their pre-existing connections such as family members, relatives, former colleagues, and alumni—those ties also co-existed in the emerging business stage. Respondents did so mainly for two reasons. First, in P1, formal property rights protection was ineffective and market institutions were underdeveloped. The strong lineage ties—characterized by high trust—provided solidarity and informal protections from opportunistic behaviors. Respondents complained that, “policies [for private enterprises] lack standardization,” “policies were inconsistent,” “there was discrimination against the

private enterprises,” and “there was less protection for private enterprise.” Confronted with these situations, respondents ($N=7$) turned to their family members, relatives, and former close colleagues to co-start the business, because they were less likely to take advantage of each other than outsiders.

Second, pre-existing ties involving commitments and obligations facilitated access to resources and opportunities. Respondents complained that bank loans were extremely difficult to get during P1 and that they were in short supply of human resources. Therefore, some respondents ($N=4$) created a business together with family members and relatives, such as spouses, brothers, and brother-in-laws. For example, MM explained that at the time when he started up, not so many people were engaged in private business because the policies were unfavorable and not clear; only family members and relatives would take the risk to invest in the business and offer financial capital, human resources, and emotional support. Some respondents ($N=4$) started a business with close friends, former colleagues, and schoolmates. From their previous social interactions, respondents had developed particularistic trust with these individuals. With a common social identity, those close ties joined the new ventures and devoted their resources, abilities, and emotional support to the business in the initial stage.

Trust development. Most of the CA respondents did not invest much effort to search for team members, but rather transformed their pre-existing ties into team members. Particularistic trust had been established with those who shared common social backgrounds. This prior familiarity equipped respondents and their team members with knowledge about each other’s trustworthiness, abilities, and benevolence. During the process of team formation and team governing, respondents emphasized the affective dimension in strengthening the relationship (table 2).

Respondents who had co-founders and management team members primarily mentioned the following behaviors and activities in establishing and consolidating the relationships: matching the personal character and values, sharing joys and hardship together, and expressing personal care and concerns. Previous interactions with former colleagues and business partners also facilitated mutual understanding of each other’s characters, unique sets of resources, and knowledge and skills. During the firm’s emergence stage, respondents and their pre-existing ties tried to understand and

accommodate different working styles to maintain cohesive and harmonious relationships. Taking FC as an example, he cofounded his business with two “friends” (former business partners). Although these two “friends” were working in different industries, it was their good personal relationship that pulled them together and drove them to start up a business together. As he described his early venturing stage:

At the beginning, it's just like a couple of good friends wanted to do something. We never thought that our company was developing so fast and we never thought about our sales [were so good]. We just thought that if we could survive for 6 years, the company would be matured. Then we can do whatever we want to do [laugh]. We had this idea at that moment.

Back then, FPX was working as a dean of a state-owned research institute. He realized that the market reforms were drawing to a close and that this was going to affect his subordinates' work and life. He felt a sense of calling to take care of his colleagues and provide a shelter from the massive reorganization and layoffs. He vividly described his team formation process:

We [with colleagues] discussed secretly: How large we wanted to make, how to get the money, and how to get the customers.... We wanted to make money all together, making profit alone is not interesting. We needed to overcome the difficulties all together. Then a group of younger men followed me. Our former head who was old and retired knew that we were doing our own business, he came and said to me: "I want to join in."

Team evolution in P2. This study strives to capture how two start-up cohorts form their teams and develop trust relationships, with a focus on the firms' emergence stage. The data also provides some empirical evidence about the evolution of CA's team components and governance.

When the institutions evolved to the current period (the deepening of market transition), firms also developed from an early stage to a later stage (growth, maturity, or decline); some respondents ($N=5$) tried to update team members. ZRQ, for instance, was concerned about disagreements with his spouse on business ideas and operations; therefore, he asked his wife to stay out of the control. LZQ had conflicts with other team members. He thought that, “when an able person works with persons who lack

competence, it is very hard to get along well.” So he re-started a new law office with the people who share his “kindred spirit.”

Other respondents tried to recruit new team members and they still underscored the importance of personality, matching the management philosophy, and personal familiarity. For instance, FC and his two friends managed their company fairly well, with the expansion of the business, they tried to recruit a new vice manager into their team, but the new managers did not fit into their mutually established working styles. He explained:

During the development of our company, everyone takes care of his business. Our cooperation is very stable. However, a vice manager came, his operational philosophy was not harmonious with ours, so he went away after two or three years. Another vice manager also came and left because of the different management philosophy.

CCL provided an example of following the principle of interpersonal relations in recruiting new team members—familiarity with pre-existing ties and referrals via third parties to make the relationship more relationally embedded and to facilitate better matching. He described how he recruited a vice manager into his firm:

We are all in the same circle. Previously we had a cooperation; we are very familiar with each other. The way a management team is recruited is different from general recruitment. A friend’s recommendation adds another layer to the relationship. I had previous interactions with this vice manager and I know his capabilities.

When firms developed from an early stage to a later stage, respondents had hard feelings when some team members left the firm. DHC had a strong emotional attachment to his team members. He was shocked when one of his team members left the firm and started up his own business:

He had a car accident on the way back home and broke his leg. We went there immediately and sent him to the hospital, [treating him] just like my family member. Another colleague and I carried him on the back and climbed six floors. We took good care of him. But after two months, he left and set up his own company. It heavily struck my emotions. Why was it like this? It was unacceptable and I was very sad.

For DHC, this team member's behavior betrayed his trust and probably negatively impacted his trust in other team members. Afterwards, he invited his family members to join the team, which relieved his anxiety:

My brother and sister now joined me in this firm. To put it straightforward, it is for the safety reason. This is an important part.

CB: team formation and trust development

Teaming up. In contrast to CA, CB respondents demonstrate more diversity in team components (see table 5.1). First, five respondents started up their business alone; they didn't receive much help from their pre-existing ties in their previous working units. LXZ and HDT had worked in foreign companies; when they had accumulated sufficient work experience, they decided to start up their own businesses. One of the reasons that other respondents ($N=3$) started their business alone is due to the work and interest conflicts with previous superiors and team members. During the time when these respondents worked as senior managers in their respective firms, NXD and ZD were aware of the prevailing superior-subordinate guanxi practices, which obscured their excellent performance and blocked promotional opportunities. NXD, who previously worked as a division manager in a state-owned enterprise, complained about how he disliked the particularistic relationship and guanxi practices:

Because we were administrated by the organization department of Shandong province. If I couldn't get promotion before 26, it would be more difficult later on. The promotion took place every five to six years. Additionally, the communication among state-owned enterprises was very difficult. People like me without any background really felt uncomfortable. Only those who had a good status and relationships received preferential treatment. We had a boss, he was the son of a director of a government bureau. We did the entire job; however, he was very good at pulling guanxi...(interrupted by a telephone call). I was not used to that culture.

WY reflected upon conflicts among previous team members in a start-up firm:

In the early stage, the team members didn't know each other very well. Therefore the communication problem arose. Everyone's way of doing things, management style

and values were actually very different. These impaired the cooperation really really a lot!

A previous unhappy experience triggers start-ups to become more cautious in choosing team members and more prudent in developing trusting relationships with potential team partners. These respondents decided to start up a business alone. WY, for example, described the criteria of selecting a potential team member:

It's like "once bitten, twice shy." I became very prudent. Is he really suitable for being a partner? What types of capabilities and networks does he have to contribute to the growth of my firms? I won't make a decision until I think these things over.

The great majority of respondents ($N=12$) reported that they co-founded the business or formed management teams during the firm's emergence stage. Among them, some respondents ($N=3$) formed teams with their previous colleagues, business partners, and MBA classmates. Some respondents ($N=2$) searched and formed teams with new partners through a recruiting process. Other respondents ($N=7$) formed teams by mixing pre-existing ties and adding new ties.

YBQ formerly worked in a furniture manufacturing company as a senior manager. When he moved to Shanghai and founded his own company, he staffed the team with his former colleagues. ZQ met Mr. Tian in a short-term joint project; she kept this connection and later decided to follow him, starting up a real estate company. Although ZAM and YZD worked in venture capital companies, their process of team formation shares a commonality. After they accumulated operational experience, they searched for opportunities to team up with industrial peers to start up their own VC companies. They found their partners through an open recruiting process. After the initial contact was made, they met face-to-face with potential partners and negotiated their respective investment philosophies. After that, they decided to join the teams and became the co-founder and key member of nascent VC firms.

Respondents mixed pre-existing ties and new ties in their management teams. Start-ups co-founded firms and formed teams with former colleagues ($N=4$), alumni ($N=3$), and family members and relatives ($N=2$). They ($N=7$) also actively searched, selected, and invited new members from related industries and businesses. Teaming up

with pre-existing ties that they are familiar with can help to generate greater trust and stabilize the teams of nascent firms, reduce conflicts (Nelson, 1989) while increasing satisfaction and cohesiveness among teammates, and thus enhance coordination (Lazer & Katz, 2000; Mullen & Copper, 1994). The formation of younger start-ups' teams and the development of trust relationships with their pre-existing ties are based not only on their liking and cohesiveness—which in part featured as particularistic trust and affective trust—but more importantly, but grounded in their knowledge regarding each other's capabilities and resources. In the case of adding new team members, the capabilities and resources are even more important in team formation and trust development. I elaborate these in the following text.

Trust development. CB respondents emphasized two primary criteria in forming teams and developing trust relationships. First, they considered potential team members' diverse experiences, network resources, and technology and management skills as important factors for teaming up. Respondents obtained such knowledge and information through the following possible ways: prior interactions, other peoples' knowledge of potential team members' reputations, and face-to-face discussions.

Teaming up with a partner they had worked with before or had previous social or economic interactions with could result in a quicker and more efficient development of a team. Although respondents formed teams with their pre-existing ties with whom they had developed particularistic trust and affective attachments, they still underlined the importance of capabilities and market experiences and they used individual competence as an important factor for developing the trust. Through past business experience and personal relations, they knew each other's capabilities and trustworthiness pretty well; therefore, they went into business together. DHY, among many others, explained his team formation process:

The component of a team, for me, the most important thing is its complementarity....I met my partner in the previous company; another one is my MBA classmate. We thought that our team was very stable based on our firm friendship. He [the first partner] has a strong management capability and a very good market sense. He is currently still managing an enterprise with over thousand employees. Another one [the MBA classmate] has worked in this

industry for many years and knows it pretty well. So we discussed and established our team, and then further developed our ideas.

Without prior social and economic exchange relations, one major task that the nascent start-ups had to ensure is whether a potential team member is capable of providing external resources and expertise. Respondents obtained such knowledge from learning and observations in the market and/or from other industrial peers. YX, among others, provided an example of how younger cohort members valued these cognitive dimensions in searching for and developing a reliable relationship with new team members:

This is why I invited Vincent to join our team. He previously worked as a senior executive at Microsoft. He also started up a business and had led a team. Actually, we share many similarities in ideas and vision. After we discovered these, we began to discuss the developmental strategies. Then we moved forward step by step.

Second, respondents stressed the importance of sharing common values and a collective vision in team processes. In teaming up with their pre-existing ties, respondents assessed these elements based on their past experience of interactions and observations of their work values and visions; hence, trust emerged over a period of time. After ZQ joined a short-term project with Mr. Tian, she reflected upon her formal position at a state-owned design institute. She then decided to leave the institute and to follow Mr. Tian to start up their own business:

Because of that design institute, I thought I didn't fit there from a long-term perspective. I am the person who wishes to have a pure working environment and do something consistent with my vision. That is to say, I was looking for such an environment, and then tried to achieve my goals. I am the person who seeks the ideal. I was very luck to know Mr. Tian.

A similar background, joint experience, and shared perspective provide ground for common vocabulary and mutual understanding, which facilitates effective communication and collaboration. For example, WB formed a team with his former colleagues from Lenovo. The common perspective and vocabulary with these members

not only encouraged an effective working relationship, but also sent signals to the market entities and won their trust. As WB explained:

We have been working with each other for many years. Everybody is talking in the same language. These people are very important to me, such as my partners, shareholders, and investors. They are all speaking the same language. The customers notice that, and they bestow the trust in our organizational and managerial team. In this aspect, we are all professional in corporate management and personal management. From the auditor's point of view, they recognize that our company is very professional and has standard governance structures.

Forming partnerships with new potential members is likely to be challenging because of the lack of prior knowledge and familiarity. In order to find the right partner, respondents met face-to-face and discussed whether their values, beliefs, and attitudes could be a match for a shared vision and the expected benefits. ZAM specialized in the mergers and acquisitions business in a consulting firm for several years; after he became familiar with the operational process, he looked for an opportunity to work in a new platform. He found that a private enterprise firm was staffing their team. He then contacted a chief investment officer and received an invitation where they met and chatted with each other. They exchanged information about each others' project experience and vision for future development. After this meeting, he felt that "it was very promising" and he decided to join the team.

Almost half of the CB respondents' teams are mixed with different ties: the mixture of pre-existing ties and new ties and the mixture of members from different backgrounds, such as technology, marketing, and management. In order to form a stable and reliable team, respondents emphasized a collective vision. YX is a good example of this. After describing the different functions of his team members, he emphasized that:

First of all, we need to evaluate whether we have the same common background. I mean, for example, whether we have a common language, common vision in our career, or whether we are similar or close in the starting line and economic condition. In this case, we share the common view. I think it is the background for later cooperation.

5.3 Political Networking

CA: tie formation and trust development in P1

Tie formation. In the earlier institutional period, the government still had considerable power to allocate resources and approve projects (Li & Zhang, 2007). Establishing interpersonal connections with government officials is particularly important to enhance performance among new ventures when the institutional support is weak and resources and opportunities are largely controlled by the government (Sheng et al., 2011). Table 5.2 compares the CA and CB in their political tie formation and trust development. In this study, nine out of 16 respondents used political networks to gain access to resources and business opportunities. Some respondents ($N=4$) contacted their pre-existing ties who were government officials at that time, such as former students and colleagues. Other respondents ($N=5$) established new political connections with government officials.

Trust development. Although political networks facilitate access to critical resources and business opportunities, and reduce risks and uncertainties in a turbulent environment, political networking itself is inherently risky. Lin noted that “guanxi-mediated favor exchange with officials is in large part a collusive act that breaks existing rules and thus involves a risk” (2001b: 163). Violation of the code of conduct could lead to adverse consequences, such as the dissolution of the connection and disciplinary action. To reduce the risk, CA respondents mainly cultivated particularistic trust and affective trust with government officials.

In the earlier institutional period, and due to the prevalence of state ownership, banks mainly financed state-owned enterprises; private enterprises faced financing difficulties, because they lacked financial channels and credit records. Another major challenge confronting private enterprises was obtaining business contracts and deals since many of these opportunities were still controlled by top-down administrative orders. Pre-existing ties with people who were working in the government facilitated informal exchanges based on interpersonal ties and particularistic trust.

Table 5.2
Political Tie Formation and Trust Development

| CA | | |
|-------------|---|---|
| P1 (N=9) | Using pre-existing ties (N=4) | Former students and colleagues working in government entities |
| | Forming new ties (N=5) | Government officials |
| | Trust type | Particularistic trust and affective trust Follow the codes of conduct and avoid risks, engage in affective interactions Familiarization, build and enhance affections through expressive interactions |
| P2 (N=9) | Maintaining and using old ties (N=6) | Ties accumulated and maintained until P2 |
| | Trust type | Particularistic trust and affective trust Consolidate interpersonal connections and affection |
| | Establishing new ties, using old ties to bridge new ties (N=6) | Government officials they didn't know before; old political ties bridge new political ties |
| | Trust type | Particularistic trust and affective trust Follow the established codes, maintain and blend affective interactions in cultivating and consolidating personal relations |
| CB | | |
| P2 (N=7) | Forming new ties (N=6) | Networked or networking with government organizations |
| | Trust type | General trust and cognitive trust Identify interests, demonstrate competence and innovativeness, and maintain work relationship |

WJS had taught in a public security college and some of his students later became officials at a public security office. They helped him open the product market and “smooth and ease the guanxi.” CCL had worked as a staff member in the Shanghai Quality Supervision Bureau, taking charge of the printing department. During the reform period, the bureau needed to eliminate the printing business. After the relocation order arrived, CCL was given the opportunity to take over the printing department and started up his private business. When I asked why he could get such an opportunity and how he developed relationships with government officials, he replied that during his three-year working period, he made a positive impression on his colleagues:

They [officials] thought I was young, very hardworking and close to them. This young man was very nice, very hardworking and had a good personality. So they gave the printing department to me, and then I started up my business.

Particularistic trust had been established in previous interactions; however, when respondents started up their own businesses, they still needed to maintain and consolidate particularistic trust to make sure that those relationships were still secure: Both start-ups and government officials wanted to ensure that the informal exchanges and agreements were closed to outsiders. As this type of trust was built up in a cumulative process, respondents also needed to ensure the quality of their products and services to maintain the informal exchanges. For example, HDS cultivated the particularistic trust with government officials when he was working in a state-owned enterprise. He explained how he consolidated the relationship:

We know each other pretty well. What's more, we had a very good personal relationship. He trusted me when he gave the project to me. He didn't trust other guys. He felt that I was very reliable....I am quite familiar with the government officials. For them, people would cause trouble if they are not familiar with the systems, and the cost is also high. They don't need to worry about what we are doing.... I have worked in the government before. Those working experiences and resources can be used during the venturing process—for example, the project of advertisement in subway stations. They felt relieved when I took the business, the leaders were very satisfied.

For the respondents who did not have pre-existing ties, establishing new political ties was more challenging and demanded more tactics in cultivating trust. To reduce the risks inherent in the informal transactions and avoid the high risk of unwanted exposure, respondents tried to cultivate particularistic trust by building upon mutual agreements concerning appropriate behaviors. MM is a good example of using a political background to avoid risks in the earlier period (see page 69).

FPX's case provides us with insights into the actions of establishing political connections and cultivating particularistic trust to avoid the risk of unwanted exposure. When he initiated his business in electronic production, which was quite different from his previous research job, he described it as "I have nothing." He sought out work with a state-owned enterprise to open the market: Producing the products and delivering them to the military firms via state-owned enterprise. FPX described how he established a personal relationship with a leader of the state-owned enterprise and opened the market:

He was a director [of a state-owned enterprise] at that time. I contacted him and asked him to cooperate. So we [my company and I] produced electronic products and distributed them to him. He then delivered them to the military firm. Actually, he helped me through such a connection. That is to say, we didn't show up, but if there were some technical problems, we would definitely come to help. He provided a very important and timely distribution channel.

During the early period, private enterprises were not allowed to sell products directly to the military firm; when further asked how this trust relationship was built, FPX emphasized both the interpersonal fit and the transactional security (see page 73-74). Such subtle rules were also shared by other respondents and their political connections. As CFB illustrated:

The most important thing is to let them [the leaders in the university] approve your principles of doing things. They don't care about the products so much. They had no idea about them. But still they let me do the business, because they trust me to do it. One important thing is to leave a good image, no side effects. This is the minimal condition. Another important thing is to maintain the service, and maintain good guanxi. If those two things have been done well. It is done!

In order to cultivate and maintain these guanxi networks, respondents were also engaged in developing affective trust, such as actively connecting, demonstrating genuine concerns, and sending favors and gifts, including in their personal life through activities such as dining and wining together, and so on. CFB provided an example of how he “pull[s] the guanxi close” by blurring the social/expressive interaction and business/instrumental interaction at the dinner table. As CFB vividly described his strategies, “we never talked about money; it was only about emotional communication”.

Respondents often invited government officials to visit their companies to strengthen contacts, or they were also often visited by government officials. After CCL set up his private printing business, his firm was frequently visited by his “friends from the government:”

A: We got friends from the government...they visited our firm to check what we need. They could help you. For us, it is a very good opportunity. We also hope our firm could rise to a new level.

Q: Were those the people who you knew from the previous job?

A: Some of them. After I set up this printing company, they were very concerned about me. So they came very often. Some of them were promoted. But there were also some new people.

Respondents were also engaged in exchanging favors and gift giving to generate interpersonal commitments with government officials. XJF, among others, provided an example of how he combined emotional closeness and reciprocal exchanges to produce the particularistic trust and affective commitment:

Good guanxi doesn't come naturally. It's pretty elegant. Can you explain why there is so much cooperation between government officials and businessmen? Why they should help you? You need a special relationship with them, and you need to reciprocate them, don't be so selfish.

CA: tie formation and trust development in P2

In chapter four, I reported that in the later institutional period (P2), respondents ($N=6$) who had established political connections in the early period (P1) continued to maintain and even consolidate those old political ties; respondents ($N=6$) also established new political ties. Digging deep into the data, three patterns seem plausible to account for such maintenance.

First, the informal exchanges and rules that were established in the early period still function in the current period; the early particularistic trust still bonds entrepreneurs and officials in more recent social and economic transactions. For the government officials, the particularistic trust can ensure that government projects are still managed by reliable persons without any trouble. When I asked FPX why he still maintains old relationships with leaders from state-owned enterprise, he replied:

There exists a problem, which is how to obtain trust. Especially like the military firms, we have had the cooperation for quite a long time. They wish this relationship can continue. If I couldn't manage my firm well, it will be a big problem.

He therefore noted that "I follow the rules of the game," and continues to conduct the business via the intermediary (not by himself); he was unwilling to break the "rules"

because he thought “if you break, you are not on the right track. Why should I do it just for some money.”

HDS shared his view why the personal relationships and particularistic trust with his political connections have lasted for 13 years:

The people in the government agencies, can be categorized into two types. One type is the ordinary officials, another type is the people who trust you. They like to find people who are reliable. They are concerned that some things might go wrong, so they are very careful in choosing the people. However, once the trust relationship has been built, there are many opportunities. This relationship is very important.

Second, the increasing instrumental orientation in guanxi cultivation makes old ties appear warmer than new ties. During the market-oriented reforms, the value of networking was directed at more instrumental objectives. Respondents felt an increasing cost in establishing new connections with officials. Compared to particularistic trust and connections established over the long term, some respondents prefer maintaining old political ties rather than adding new ties. MM provided an example of why he still preserves his old political connections in the current period:

My parents are old now, most of the people from this circle [officials that my parents know] were retired. Now the government is just like a big enterprise. Before that [in the early period], they [the government officials] could do a special favor for you and one didn't need to pay for it. But now, if they give you a deal, it involves interests. Therefore renqing [favor] is becoming more difficult, it's not like before any more.

.....

Before that, if one had guanxi, he could do whatever he wanted. Now things are different. The leaders are smart. If one screws it up, they will lose their official positions. Now the leaders have high salaries, they won't take such risk; therefore, they also evaluate the company itself.

Similarly, XMH is still “hanging out, dining and chatting” with his government “friends.” When he needs some help to ease the bureaucratic red tape, he still prefers turning to his old connections. He does not trust government officials he does not know. For him, these officials are annoying and always want to get something from him:

I have a personal relationship with the district mayor, why should I send the gifts to lower officials?! Why should I give them a favor and flatter them?!

Third, old political connections also bridge relationship gaps between entrepreneurs and other officials and/or business partners. The particularistic and affective trust cultivated with government officials have gone through the institutional change; officials would voluntarily bridge business connections and furnish the base for trust and commitment between two parties. As HDS explained:

After I started up the business, I got many deals from the government. For example, the decoration projects of tubes in two Pudong districts. I did it beautifully. The district governor accompanied the firm leaders to visit our company. As you know, I know him very well and he also trusts me. They [the district government] invited several companies for bidding on the new project. However, they preferred me over others. So they talked to the tenderer and I won the bid much more easily.

CFB's case provides an example of when trust and commitment has been established, a small hint can facilitate guanxi bridging:

Q: So you asked them to make recommendations for you?

CFB: Right! I could pull guanxi with them. "The university next to you has a very nice decoration, but there are no monitors." After hearing this, they said, "well, the university president is my friend, I will recommend you to them." So the business came. We have such kind of chemistry.

Similar to cultivating guanxi in the early period, affective interactions—such as keeping in frequent contact, attending social activities together, and including one's personal life—are still common activities in maintaining the particularistic relationships. I was impressed by CFB's story that his small hint could be well received and interpreted by his official friends, I became more interested to know how guanxi works. He continued to explain:

Because we have emotional exchanges, our personal relationship is built very well. Many things have been mixed together and we stay in contact very frequently. Closeness has different meanings. One has to maintain it. Although there may be

no business involved, the guanxi is still very good. If I have free time, we talk about the past or anything. It is really mixed.

According to the two cohorts' narrations, it appears that the old cohort members attach a higher value on the increasing instrumental orientation in guanxi cultivation. However, some old cohort respondents still blend this with affective interactions to cultivate and consolidate relationships. YJ expressed his view on why he persisted to utilize affective elements in cultivating guanxi relationships:

In the West, things get done in a sound system; therefore, personal affection or social networks don't play such an important role. But what happens here? We — Chinese — are traditionally affectionate, and we stress mianzi [the face] a lot. These factors need to be considered. However, with the development of society and the establishment of a sound legal system; when the government's market regulation develops more maturely, renqing [affection and obligation] and mianzi, and so on, will become RELATIVELY weak. But, I don't think the dissolution of these things will occur in our nation.

CB: tie formation and trust development in P2

Tie formation. As was described in chapter four, in contrast to CA, fewer CB respondents ($N=6$) reported that they had political connections. Among this group, some ($N=3$) were actively networking with the government; half of the respondents ($N=9$) reported that they did not need or attempt to establish political networks to access resources and obtain business opportunities.

Trust development. The more favorable regulative institutions are laying the foundations for generating trust between the government and younger start-up firms. CB members mainly develop cognitive trust with government officials and agencies to establish formal networks and cooperation.

CB members started their firms in a much more regulated and transparent environment. The Chinese central government has been creating an institutional environment that is increasingly conducive to entrepreneurship (Gao, Vega, White, & Zhang, 2008: 64). The local government has been playing a direct and active role in supporting new ventures (Blecher & Shue, 2001). According to CB respondents,

Shanghai government agencies — such as the Science and Technology Committee, High-Tech Zone Administration Departments, universities-based incubators, and government supported venture capital funds—all play active roles in supporting new ventures. By providing supportive platforms, the Shanghai government increasingly promotes a positive image among younger start-ups, which facilitates networking and developing trust relationships. This improvement lays the foundation for an enterprising society in which start-ups become confident in these institutions and trust the reliability of other players.

Respondents expressed that they would like to comply with the law, support government initiatives, and maintain formal cooperative relationships without having to cultivate particularistic and affective trust. YX's firm is regarded by the local government as a “superstar company.” He described the government support as follows:

The government actively supports us. In the Zhangjiang district, our company is a superstar private company. Except for the Shengda company, which is a listed company, we are among the top. For the Shanghai propaganda department, “Youku in the north, Tudou and PPLive in the south.”⁴ Therefore, in Shanghai, we are the only one. We receive local government support.

Not only the “superstar company” but also some other new ventures have received government support. As JXJ described, many government agencies are helping his new venture (see page 76). ZD's firm formed a positive cycle with the local government, he described this as follows:

We cooperate with the government. We are doing the business and complying with the domestic laws and regulations. Although I have had little interaction with people from the government, when something happens, I call them and they coordinate it quickly. They feel that I have few troubles, because I conform to the regulations. They feel relieved....This is a good interaction.

When general trust exists, dealing with government officials becomes easier for CB respondents, compared to CA respondents. Some younger respondents skipped intricate processes of cultivating the particularistic trust and affective attachment, directly involved in negotiation. As ZQ explained:

⁴ Youku, Tudou and PPLive are Chinese well-known video sites.

In this region, like the Yangtze River Delt, the average quality of government civil servants is very high. So dealing with this group of people is relatively pleasant. We just talk about the business. If it works, then we do it. If it doesn't work out, then [we] don't do it.

The general trust, backed up by the favorable institutional environment, creates both accountability and norms on which CB members base some degree of trust in the government. It also enhances their willingness and expectations for developing a cooperative relationship with government agencies. For respondents who wanted to develop this kind of relationship, they needed to establish cognitive trust which mainly involves three activities: identifying interests, demonstrating competence and innovativeness, and maintaining work relationships.

Cognitive trust is motivated by self-interest and is established on the basis of the assumption that it is worthwhile to trust one another with the expectation of economic benefits (Doney, Cannon, & Mullen, 1998; McAllister, 1995). In P1, the economic exchange took place between CA members and government officials. However, it was informal and even disgraceful, which should be kept in the closet. For CB members, the nature of political networking differs: They need some resources and opportunities from the government; the government is motivated to support local private enterprises that can generate more output and taxes, which increases fiscal revenue and speeds up local GDP growth. The exchange of these economic benefits operates at a more formal (organizational) level and less at an informal (individual) level.

This transformation has led CB members and government agencies and officials to develop clear goals and expectations for networking and cooperation. ZD's firm, for instance, made significant tax contributions to a local Shanghai government. He traced back why and how a local government official actively contacted and invited him to set up a new factory there:

A deputy director from the Economic and Trade Commission of the Songjiang district tracked my firm. Why did he track my firms? It's NOT because we had special guanxi, but because he had worked in this casting field before. So we were peers! After I moved here, I received great financial support from the commission department. Our firm grew from a small-sized to a mid-sized firm. This was a big

boost.

ZAM and YZD's successful private equity business attracted attention from local governments in provinces and cities that were neighbors of Shanghai. They described how they were actively networked by these local governments to engage in investing in local firms:

ZAM: For the government, they want to attract investment and business. They recommend their good local firms to us. They ask us whether we are interested in investing in these firms.

YZD: There is much cooperation [with the government]. The majority of this cooperation is concentrated on the Yangtze River Delt and the southern Jiangsu province. They act as brokers: They attract funds, coordinate firms, and then connect these two interests.

Demonstrating business competence and innovativeness is another important action in building cognitive trust. YBQ believed that he could obtain business deals from the public sector by demonstrating his firm's competence, rather than via connecting with government officials:

Take the project of the Public Health Center, for example, everybody including the hospital director and the government all thought that our company was the first choice. Because we got the opportunity to demonstrate our capabilities. We didn't have any guanxi with the government; however, after evaluating our company, the government thought they could trust us and they handed this project to us. I think it's because of our comprehensive competence.

Dealing with the government's recommendations of their local firms as investment opportunities, ZAM and ZD insisted on the professional standards in selecting projects. ZAM pointed out the importance of following standards and being selective in choosing projects:

We emphasize our active research on industries. We are doing this to make sure that these projects are those that you want. ... The projects recommended by the government may not be the ones we want to invest....So it is very important to learn about the company, to be insightful and judicious about the decision.

Demonstrating the innovativeness of a business and obtaining cognitive legitimacy is critical for developing cognitive trust. This legitimacy is especially critical for younger start-ups when they are developing novel business models that lack government and public endorsements (Dacin et al., 2007). Without widespread knowledge of their business and activities, start-ups have difficulties gaining support from constituencies. Younger start-ups, therefore, actively diffuse knowledge about their business and send signals to demonstrate that they are reliable and worth connecting with. Take YX as an example, by engaging in P2P business and online broadcasting, he described himself as a “technology revolutionary.” The online broadcasting of TV and movie programs was a hit among young audiences. However, previously he worried that this business model was illegal as it may infringe upon property rights. He expressed concerns about his firm and other firms alike:

Essentially, I think those companies are not bad, we are innovative companies. Focus media, Google, they are all doing innovation. In this process, you inevitably break through something. Focus media operated the business without a license for quite a while. Is it appropriate to crack it down? I don't think it is appropriate. We have operated in online broadcasting without a license for three years. How can I do that?

After describing his concerns, YX continued to explain how he managed to gain government support and endorsements:

First, the company should promote itself. For example, YX is a representative of entrepreneurs, he is also a local entrepreneur. They [the government and officials] need to promote their local enterprises. We also take advantage of nationalism: We are doing independent intellectual property innovation....We also enrich people's entertainment and make their lives comfortable. The state needs harmony and stability. This is actually an important policy.

...

We need to cooperate with the local government and organizations, engage in some activities, and be ready to contribute....One needs to prepare for these actively. For them, they need self-promotion; for us, it is a good opportunity to promote our public image. I often go to different meetings....Our company also provides internship places for college students.

XXT, the tax consulting start-up, often invited finance and tax officials to give lectures at his company. This strategy was quite successful as it attracted many customers who were eager to know more about policy trends. He further explained how his firm got the support from these officials and got them involved in this consulting service.

For the state and government, they needed to know about how the policies are implemented. They needed a platform. So we told them that we just have that kind of platform.

They had a couple of trials. The government officials became interested in explaining [the policies] to us. Actually, policies are like productions, they need to be brought to the market. They became interested in knowing about whether they [policies] are accepted and popular in the market, and whether they could achieve their expectations. So after the policies were introduced, we invited them [finance and tax officials] to explain them. We gave a lot of feedback to them and later on they improved them. We have built effective interactions.

5.4 Market Networking

CA: tie formation and trust development in P1

Using pre-existing ties and trust relationships. Studies found that entrepreneurs tend to mobilize resources and support through their pre-existing ties (Aldrich & Zimmer, 1986). Especially under highly uncertain condition, they turn to those ties and add ties to existing relationships to secure commitments (Beckman et al., 2004; Cook & Emerson, 1984; Yamagishi, Cook, & Watabe, 1998). During the establishment of their business, CA members obtained information, financial support, and business opportunities and emotional support from family members and friends. Those social-cultural ties feature particularistic and affective trust that is not the specific focus in this section. This section focuses on market networking.

Table 5.3 depicts the differences between CA and CB in market tie formation and trust development. CA Respondents who had worked in firms (before they started their own business) all reported ($N=4$) that it was through close relationships established and accumulated with former colleagues and customers that they obtained the following

resources and opportunities: customers, human capital, market knowledge, and business cooperation. Respondents established particularistic and affective trust and further developed these relationships into business partnerships mainly through three activities: knowing someone’s personality and capability, forming informal exchange relationships, and bridging new connections via old ties.

Table 5.3
Market Tie Formation and Trust Development

| CA | | |
|--------------|---|--|
| P1 (N=12) | Using pre-existing ties (N=4) | Former colleagues, customers, and industrial peers |
| | Forming new ties (N=11) | Business connections |
| | Trust type | Mainly particularistic trust and affective trust Benevolence, sincerity, and emotional closeness Engage in expressive interactions and social events |
| P2 (N=15) | Using old ties (N=12) | Stick to mutual obligations and commitments |
| | Forming new ties via referral (N=8) | Using existing ties to bridge new business ties |
| | Trust type | Particularistic trust and affective trust Maintain mutual commitments and obligations, conform to the established rules of informal exchange, mix instrumental and affective interactions, and transfer trust relationships |
| | Forming new ties (N=7) | International and domestic business partners |
| | Trust type | The emergence of general trust and cognitive trust Emphasize fitness and competence, engage in instrumental interactions |
| | | |
| CB | | |
| P2 (N=17) | Using pre-existing ties (N=4) | Former colleagues and customers |
| | Forming new ties (N=16) | Business connections |
| | Trust type | General trust and cognitive trust Actively search, negotiate, and create value, signal competence, build a reputation, leverage and bridge relationships |

If respondents’ personality and capabilities proved to be trustworthy as a result of previous interactions and cooperation with business partners, business opportunities were offered to the new ventures. As FPX explained, “We had the mutual recognition,” one was “the recognition of each other’s merits,” the other was “they felt that we wouldn’t screw it up.”

Respondents also formed informal exchange relationships and tactical rules with their pre-existing connections, which generated particularistic trust and personal commitments. XMH, for instance, described that in previous strategic partnerships, he could sacrifice money for cooperation. He formed an informal exchange and particularistic trust with his previous clients who later became his business partners:

They came to me for cooperation because they thought this guy was nice, they were satisfied with my job. They just gave me partial money from the project. You know, if they cooperate with foreign investment firms, everything is standard and inflexible. They like my style. Some of them tried to cooperate with other firms, but they didn't like that style, so they still came to me.

Having particularistic trust relationships with pre-existing ties is also an intermediary step toward tie formation. Given the limited resource flows and the high uncertainty in the early period, CA members like to bridge connections through pre-existing ties. DHC's former superior introduced a Hong Kong supplier to him when DHC started up his business. This supplier later became DHC's good partner and friend. FC described that a referral through people in the same "circle" was a common way of recruiting and bridging business opportunities:

FC: We are in the same circle, we all came out from the clothing factory. "This is my mentor," "this is my mentee," we all recommended people to each other.

Forming new ties. In P1, the business infrastructure and related institutions were insufficient for underpinning market transactions. Although pre-existing ties provided timely help and reduced the risk of opportunistic behaviors, those cohesive ties were limited in accessing diverse resources and opportunities. The great majority of start-ups ($N=11$) tried to establish new ties to gain access to resources and opportunities. The common pattern of tie formation can be identified as a *guanxi* development process which involves particularistic and affective trust cultivation.

Trust development. Under high institutional uncertainty, actors seek to establish a committed relationship to produce security and reduce opportunism. Honesty and trustworthiness, under this circumstance, are very important for new tie formation. In the initial stage of tie formation, respondents tried to demonstrate their trustworthiness by

showing that they are sincere, honest, and capable; and they always treated their potential business partners respectfully. XJF, for instance, described how he made an impression on his potential business partner and developed a trusting relationship:

It depends on how you communicate with them. You need to make them happy and get along well with them. If they have a good impression of you, they can trust you and provide you with some market information. It strongly depends on how you deal with people.

DHC launched his IT service in 1996, setting up multimedia devices for other companies. The business was initially confronted with small-scale market acceptance. Instead of explaining the implementation and techniques in great detail, he spent a lot of effort in showing his sincerity and enthusiasm to his customers, thus obtaining their trust:

At that time, IT was not popular. So the market development was very very difficult. You needed to tell them what it [the multimedia service] was. I showed my enthusiasm and honesty and that I could do solid work. I had some clients who initially were not familiar with me. Eventually, they accepted me and trusted me. Slowly I developed these relationships.

The social commonality triggers a recall of the past and the discovery of common experiences and mutual friends. This reminiscence brings emotional bonds and facilitates envisioning mutual goals, thus instantly connecting two parties and boosting trust (Chen & Chen, 2004). In the Chinese context, potential parties get familiar with each other typically via self-disclosure of their birthplace, school, and work organization. FPX's case exemplified how this method was used to shorten the interpersonal distance and pave the way for instant tie formation:

I tried to talk to a company in Shanghai directly, the communication was so difficult. However, a guy who was in charge of the technology told me that there was another person working in Beijing, who also graduated from the University of Science and Technology. Then he gave me his [the person working in Beijing] phone number. I called him, he said we would try it together. So we started from a very small business —only dozens of yuan. Now, our products have become their major sources.

To enhance the quality of the relationship with their pre-existing ties and new ties, respondents were engaged in the following expressive interactions to cultivate affective trust: joining social events, reciprocating, and expressing genuine concerns.

Many respondents took social events as an opportunity to build and enhance personal relationships. Through dining and having tea together, respondents nurtured affective trust and commitments. For example, WM obtained much support from her hometown fellows and friends during the initial business stage. As a return and to further consolidate these relationships, she frequently invited these people for meals at home:

We always invite them to our home for meals. This is the way we maintain contacts and draw people closer. At the same time, we discuss how to improve the business. I am still very appreciative of their help. Actually, we just dined together a couple of days ago.

This reciprocal exchange fosters strong feelings of affective attachment and commitment. The initial giving sends signals of the actor's trustworthiness, lays the foundation for future exchanges, and eventually develops the basis on which trust is established (Molm, Takahashi, & Peterson, 2000). ZRQ described himself as an "Engineer of the Weekend" because during his previous work in a state-owned electricity meter enterprise, he offered free technical services to his entrepreneurial friends on weekends. When he started up his own business, these friends trusted him and offered business deals:

At the very beginning, they had some difficulties in techniques. So they came to me for help. I accumulated a deep friendship with them. At least, they recognized me as a good friend. For example, one had a problem with the equipment in Ningbo and then he came to me. I didn't take any salary and I even didn't ask for travel reimbursement.

....

After a couple of times, they thought about whether I had some difficulties. They wanted to reciprocate toward me. I said, "You don't need to thank me, we could cooperate if there is an opportunity." So they gave me a couple of projects....During their firm's development, he gave the business to me instead of [giving the business to] his branch. He trusted me very much!

Affective trust develops when respondents form emotional bonds and demonstrate a genuine concern for exchange with a partner's welfare. If respondents have the opportunity to get familiar with a partner's family, then the trust is even more consolidated. As XJF explained:

After we got familiar with each other, he recognized me. I also felt that he was a nice person. Then I got the chance to know his family and I kept chatting with them from time to time..... I got his good suggestions and ideas.

CA: maintaining and using old ties in P2

The majority of CA members still maintain and conduct business with their old ties and use these ties to bridge other connections. Respondents' old ties established in P1 create a path dependent network environment which shapes the formation of subsequent partnerships and the evolution of networks in P2. This inertia in tie formation is mainly due to the following processes and mechanisms: maintaining a long-term orientation in guanxi cultivation, following existing rules in informal exchange, and relying on old ties to bridge new ties.

Establishing connections and developing trust relationships requires following the social norms of guanxi cultivation: maintaining a long-term relationship, mutual commitment, and obligation (Chen & Chen, 2004). For CA respondents, the appropriate way to build their guanxi network is to show their sincerity, affection, and commitment to the relationships through a gradual and subtle process of exchange. Mixing instrumental and expressive interactions and ensuring their congruence also needs to be a long-term perspective of the relationship. Once guanxi has been formed, start-ups further consolidate these ties through a virtuous cycle of frequent interaction. When this strong particularistic trust has been cultivated, the commitments and obligations still persist in later institutional periods, as WJS described:

After long time, the business can be developed into a friendship. They have helped you before. Interest does exist, strategies are not pure, you have to think about the Jiaoqing (obligation). You need to strike a balance.

Subtle, informal relational norms and rules were also established in specific exchange relationships. In P2, respondents still conform to them to secure trust and exchange relationships, avoiding disapproval from their old ties. For example, in P2, FPX was still doing business with a third party via an intermediary and he did not “cross the line” to connect the business directly by himself (see page 99-100).

Trust cultivated with their strong personal connections facilitates the transference process and bridges some new connections. This may also partially explain why CA members still largely maintain their old ties and do not invest much effort to seek out and form new market connections. XJF described it as “after some years of accumulation, with good guanxi networks, you can easily go around.” FC also trusted his referrals to bridge new ties:

There is a degree of trust. For example, I knew a boss of a firm with 2000 employees and I had a cooperation with him before....His referrals are more reliable because I know his personal character. In this case, we don't need a long time to get right into our relationship.

Although some respondents established new ties by themselves, there was a tendency that they were still engaged in expressive interactions. HDS illustrated how he used “common hobbies and interests” to build a relationship:

I think I can develop guanxi in any environment. Having a chat over tea and cherishing the kindred spirit. We primarily get together not for business, but for hobbies and interests. We are very happy....Cherishing hobbies and interests also helps to establish guanxi. The business will come naturally. This seems very important in China.

CA: establishing new ties and trust development

In chapter four, I described the within-cohort variation for CA's network configurations (see page). The linkage with international partners differentiates some respondents from their cohort peers regarding network configuration. Some respondents ($N=5$) formed new partnerships with international firms, and several respondents ($N=4$) formed new ties with domestic business partners. Most of these ties were formed through

industrial exhibitions, symposiums, the internet, word-of-mouth, and individual searches. Those respondents share some similarities with CB members (this will be discussed in the following text) in tie formation and trust development: Unfamiliar business associates can be trusted but cognitive trust needs to be developed. For example, when they were doing business with those new business partners, they developed a trust relationship by emphasizing business health and competence; they were more engaged in instrumental interactions, rather than affective interactions.

The data suggests that there is an emergence of general trust and cognitive trust, as is demonstrated by some CA respondents. It can be regarded as an adaptation to the new institutional environment; however, the traditional norms and cultural schemes still appear to have some persistent influence in CA respondents which continue to influence their tie formation and trust development. For example, although XJF and FC follow international standards and conduct business with international partners, when they do business with domestic partners, they still emphasize reciprocating and affective interactions as important aspects of cultivating particularistic and affective trust.

CB: tie formation and trust development in P2

Forming new ties. In contrast to CA, CB respondents' perception of the institutional environment in P2 is more positive. This makes CB's tie formation propensity more directed toward adding new ties (see table 5.3); they invest less time and effort in utilizing pre-existing ties to pursue their entrepreneurial goals. Only a small number of respondents ($N=4$) reported that they obtained information, financial support, and customer resources via pre-existing ties, such as personal friends and previous colleagues. The majority of CB members ($N=13$) reach out to new individuals and organizations and form new ties that they have not worked with before. In the initial stage of tie formation, CB respondents mainly focus on three networking activities: expanding their search scope, evaluating the health of prospective partners, and targeting powerful players.

Younger start-ups expand the partner search scope by attending industry symposiums and conferences, alumni meetings, and informal get-togethers to explore opportunities to form new ties. As YX depicted:

Almost in every season, there were VC gatherings. At those gatherings, I actively contacted venture capitalists. I handed my business plan to them. In most cases, they liked to read it and help me analyze its feasibility. If they were interested in it, they would contact me and establish a partnership.

In order to find the right business partners, younger start-ups search, collect, and evaluate information about the potential partner's companies, and check whether it might fit with the partnership and bring added value. After they identified the potential partnership opportunity, based on complimentary resources and skills, some respondents approached the potential partners via cold calls. HDT said that, "I contacted other companies and asked them to engage in the project together." WB explained, "When I know some other companies are providing personal financial services, I call them directly."

During the partner search and selection process, respondents center on the criteria of a partner's technological capability, managerial skill, and market power. For example, ZQ, WB, and ZD strategically chose alliance partners with high status and market positions. This partnering increases the new venture's legitimacy in the eyes of potential partners. WB explained that the regulations of the financial market were still restricted; the business model of financial outsourcing was not well accepted and trusted. However, he strategically initiated the alliance with foreign banks, after his firm obtained a relational legitimacy, his business model was more acceptable among domestic firms (see page 78-79).

Negotiation, value creation, and trust development. After making the initial contact, respondents negotiated specific details of the exchange. The first challenge is how to attract a prospective partner's attention and interest, because small start-up firms are not well known or recognized in the market. For them, the negotiation provides a good opportunity to showcase their skills and reliability of being a preferred partner. During the negotiation phase, respondents underline how their technologies and services can

create a business solution and add value. YMP offers elite education courses for “smart kids” with a high price. His customers were reluctant to register their kids for the courses. To convince his potential customers, he described his market positioning strategy and promised to sell value-added courses (see page 78).

Cognitive trust further develops as the dyadic interaction increases knowledge of the start-up’s competence (Smith & Lohrke, 2008:319). Rather than spending much effort in cultivating affective trust with certain parties, CB members mainly seek to invoke the cognitive process and signal their capabilities, trustworthiness, and reputation through a multitude of connections.

The first possible way of developing cognitive trust is via strategic partnering. Strategic partnering sends signals to other market players that the new start-up is a viable partner because of the relational link with powerful market players (e.g., WB). The second way is to use their team networks. As has been reported in the preceding text—CB respondents formed teams with people from diverse backgrounds and network resources. They also used these links to obtain trust from potential market partners. As WB illustrated:

I think the trust is not based on me alone, it is based on my team. My team members have many contacts with banks. Just like Lenovo Venture Capital, they know your team members, and they have a high trust in us. They know that I won’t blow their money, so they would like to help me.

The third way of developing cognitive trust is to simply focus on every business transaction and use it to gradually build one’s reputation. Respondents care about their reputation a lot, because they think it is important to secure trust, sustain cooperative exchanges, and expand their inter-firm relationships. YBQ emphasized the importance of reputation for developing inter-firm trust:

At the initial stage, word-of-mouth is very important. It’s always difficult to start with, however, if you have a good start, other parties get to know your company, not you personally. They recognize what this company can do and whether it can be trusted. After this stage, you can attract better talent and better customers. Only in that way, the company is able to achieve substantial growth.

Respondents' endeavors to develop trustworthiness and a good reputation pay off in the establishment of relational legitimacy, which increases the likelihood of forging new ties, shortens the time, and reduces the cost in expanding connections. As they form new ties and bring value to these new partners, they also increasingly utilize network resources embedded in these ties with alliance partners, customers, and suppliers. Respondents learned and developed the skills of leveraging these network resources to attract potential partners. YX exemplifies this strategy:

From 2006 and 2007, I adopted another business strategy. At the very beginning, with the financial support from VC, I accumulated customers and a reputation. After I got customers and a reputation, then I negotiated with content providers. They didn't sell you their content simply because I offered a high price. However, once I had a certain amount of customers and a good reputation, then I talked to them, the chances [of cooperation] are much higher.

5.5 Institutional Change, Start-Up Cohorts, and the Evolution of Networking Styles

Table 5.4 theorizes the major differences between CA and CB in their networking actions. I now elaborate these major differences and frame the propositions for future exploration. The high institutional uncertainty increases the likelihood of using pre-existing ties. In the organizational emergence stage, old cohort members confronted with the problem of inefficient property rights protection and the underdevelopment of market mechanisms started up their business by forming teams with family members, relatives, and friends. Teaming up with these pre-existing ties that they are familiar with, on the one hand, can help to reduce opportunistic behaviors, lower the effort of monitoring others (Gruenfeld, Mannix, Williams, & Neale, 1996), and reduce anxiety and unpredictability (Parise & Rollag, 2010); on the other hand, it helps generate high social identity, a strong commitment, and trust. In contrast, younger cohort members started up their business in a more favorable institutional environment — low institutional uncertainty, diverse market resource flows, and widespread entrepreneurship — in which

they could seek out and team up with new partners who have diverse backgrounds and skills. Thus:

Proposition 1. At the respective founding period, during the team formation process, old cohort members are more likely to draw on their pre-existing ties, while younger cohort members are more likely to form new ties or mix pre-existing ties and new ties.

In the early institutional period, the initial discrimination of private firms and insufficient private property rights meant that political networking was of paramount importance (McNally, 2008) in obtaining resources and business opportunities. Start-up members used their pre-existing ties (e.g., family members, relatives, and former colleagues and students) who were working in the government as a short-cut to access these resources. For those who did not have these connections, they actively formed new political connections to reach their entrepreneurial goals. Starting up in a new institutional environment, younger cohort members established fewer political ties. The government encourages entrepreneurship and provides administrative support, especially for technology-related start-ups, thus increasing opportunities for networking with government agencies with whom they have not worked with before. Thus:

Proposition 2. At the respective founding period, during the process of political tie formation, old cohort members are more likely to both use pre-existing ties and form new ties, while younger cohort members are more likely to form new ties.

Table 5.4
The Evolution of Networking Styles

| | Network deepening | Network broadening |
|----------------------------------|--|---|
| Institutional antecedents | | |
| Formal institutions | Unfavorable | Relatively favorable |
| Informal institutions | Strong commitment and obligation | Competence and relational legitimacy |
| Major orientation | Risk reduction | Value creation |
| Tie formation | Mainly rely on old ties | Proactively form new ties |
| Trusting type | Particularistic trust and affective trust | General trust and cognitive trust |
| Focus of trust building | Particularistic trust and affective trust | Cognitive trust |
| Consequences | Small size of networks, strong and homogenous ties | Larger size of network, weak and diverse ties |

When founded in the earlier institutional period, start-ups mobilize resources and seek support from their pre-existing ties (former colleagues and business partners),

because a commitment has been cultivated through previous interactions. Start-ups also actively form new ties to get access to diverse resources and opportunities. For younger cohort members, market institutions and factors are more developed. As such, these cohort members focus more on establishing new ties with market individuals and organizations. Thus:

Proposition 3. At the respective founding period, during the process of market tie formation, old cohort members are more likely to both use pre-existing ties and form new ties, while younger cohort members are more likely to form new ties.

The process of trust development is closely related to the propensity of tie formation. Under high institutional uncertainty, actors seek to establish interpersonal commitments to produce security and reduce opportunism. Start-ups have nurtured particularistic trust and affective trust during previous social and economic exchanges. This trust relationship provides critical support in an environment where trust in strangers is low. In forming new ties, start-ups mainly focus on the following aspects in developing particularistic trust: characteristic fit, benevolence, honesty, interpersonal bonds, informal agreements, and so on. They underline the following aspects in developing affective trust: forming emotional attachments, reciprocating, joining social events, and so on. For younger cohort members, the favorable institutional environment has increased their confidence that most people will not breach a transactional or cooperative contract (either written or psychological). The major task for them in attracting potential partners and forming connections is to develop cognitive trust: evaluating the health of a business, signaling value creation, strategic partnering, and building a reputation. That is:

Proposition 4. In three types of networking —team formation, political networking, and market networking, old cohort members are more likely to focus on developing particularistic and affective trust, while younger cohort members are more likely to have higher general trust and focus on developing cognitive trust.

Previous studies argue that with the decrease in institutional uncertainty, actors will transform from strong-tie-based networks to weak-tie-based networks (Peng & Zhou, 2005), and from closed networks to open networks (Molm et al., 2000). This study demonstrates that because of the informal institutional pressures which emphasize expressive interactions, a long-term orientation, and tie obligations, and because of the

informal exchange agreements already established in past relations, old cohort members still reinforce old ties, add new ties via existing ties, and maintain and develop particular trust and affective trust relationships. That is:

Proposition 5. When founded in the earlier institutional period, in three types of networking, old cohort members are likely to maintain old ties and focus on preserving and developing particularistic trust and affective trust, thus demonstrating inertia in networking action in the current institutional period.

This study also reconciles Beckman et al. (2004)'s categorization of two strategic focuses regarding networking actions. They propose that firms form additional ties with existing partners as a form of exploitation, and form new ties with new partners as a form of exploration. Similarly, Vissa (2010) differentiated between two types of strategic orientations in tie formation: network deepening and network broadening. The former refers to strengthening and maintaining existing ties, and the latter refers to reaching out and establishing new ties. During conditions of institutional change, the founding institutional environments of start-ups shape different networking styles. The networking style of old cohort members can be characterized as network deepening: relying on and consolidating old ties with the development of particularistic trust and affective trust; for the younger cohort, it is network broadening: seeking out and adding new ties with the development of cognitive trust. Thus:

Proposition 6. The founding institutional environment imprints on networking styles. The network style for old cohort members can be characterized as network deepening; while for younger cohort members, it can be characterized as network broadening.

CHAPTER 6. DISCUSSION AND CONCLUSION

6.1 Summary of the Study

How organizations and their founders respond to fundamental environmental change has been a frequent research topic for organization scholars. Although existing research provides some insight into this topic, competing theories and even contradictory arguments do not provide us with a clear picture of how actors respond to fundamental environmental change like institutional change in transitional economies. One stream of scholars argues that these unprecedented changes facilitate the organizational transformation and strategic adaptations (Danis et al., 2010; Guthrie, 1998; Keister, 2002a; Peng, 2003; Peng & Heath, 1996). Another stream of scholars appeals for the attention to strategic inertia during institutional change (Child & Yuan, 1996; Czaban & Whitley, 2000; Kogut & Zander, 2000; Kriauciunas & Kale, 2006).

In chapter two, I outlined the theoretical foundations of both streams. For the first stream, the underlying assumption is that in transitional economies, institutional structures—especially formal institutions—move and will move toward converging with those of developed market economies (Ahlstrom & Bruton, 2006). Although a complete convergence seems unlikely, scholars from this camp generally believe that with the development of regulative institutions, firms and their founders make and will make the strategic shift to realign themselves to fit into new environmental demands. Another stream of scholars argues that firms and their founders are constrained in their ability to adapt to changing conditions; therefore, they demonstrate a tendency to preserve their initial strategies and resist change. As I identified in the introduction chapter, the puzzles are: How do entrepreneurs make strategic choices during the institutional change phase? Do they adapt to fit with the changing institutional environment or do they exhibit strategic inertia? If inertia is pervasive, why do we still observe adaptation? If change is pervasive, why do we still notice inertia? Who is involved in these processes? What are the underlying processes and mechanisms? How does change and adaptation become

possible in transitional economies?

The massive changes in China over the last three decades are undeniable. I frame the proceeding questions as research puzzles because even when we notice such changes, why do we still observe inertia? The real disagreement in the two streams of research is not whether there is change or inertia during the environmental changes, but rather how individual organizations respond to such changes and what might differ in their responses.

Stimulated by these research puzzles, I embarked on this research project to seek answers. Adopting the institutional perspective, I extended the theoretical debate centering on the environmental effects regarding general strategies to network strategies and outlined three critical research gaps in the existing literature: 1) Scholars tend to privilege one or another institutional pillar; few studies have empirically explored the specific combination and interactions among pillars, and how the specific combination at different periods shape networks. 2) Extant studies mainly examine or propose the evolution of network structure; they have not closely investigated actual networking actions and evolutions. 3) Scholars have rarely explored how firm and entrepreneurial cohorts might differ in their network configurations and networking actions.

To fill these critical gaps and solve the puzzles, this study applies a start-up cohort comparative approach. The objectives of this study are: 1) to explore how entrepreneurs construct and evolve their networks and networking actions during the institutional change phase; 2) to examine the effects of the founding institutional environment and the changing institutional environment on networks and networking; and 3) to unpack the processes and mechanisms of network evolution—network inertia and network change.

Two empirical chapters are devoted to understanding the evolution of networks and networking during the period of institutional change and the underlying processes and mechanisms. Chapter four focuses on the evolution of network configurations and the effects of the founding and changing institutional environments. The empirical findings refute the argument that firms make strategic adaptations regarding their networks during the institutional change phase regardless of their origins. After demonstrating the distinctions between two start-up cohorts' network configurations—the old cohort shows

network inertia while the younger cohort shows a novel network configuration—I dive into the data and unpack the processes and mechanisms that lead to such differences. One major finding is that the founding institutions at a given period comprise a specific combination of three pillars (regulative, cognitive, and normative). The exposure to the respective founding institutional environment impacts the two cohorts' initial network configurations and continues to affect subsequent network trajectories.

After revealing the power of the founding institutional environment, chapter four proposes that we need to bring back the institutional origins to investigate the full range of resources and relationships that contribute to the characteristics of firms and their founders in the founding period (Johnson, 2007), and examine how this initial link affects their subsequent strategies. This study suggests that institutional pillars have different mechanisms in affecting networks and networking; therefore, we need to give an equal balance to the three pillars and pay more attention to the effect generated by the combination of the three pillars. This chapter concludes with the proposition that the alignment of regulative, cognitive, and normative pillars of various natures during different periods creates alternative pressures and incentives for entrepreneurial cohorts to adopt legitimate networking behaviors. These institutional pressures and entrepreneurial responses need a closer examination in future research.

Naturally and closely related to the evolution of network configuration is the evolution of networking actions, which unfortunately has received much less attention from scholars. Chapter five highlights two aspects of networking action—tie formation and trust development—and analyzes how and why two start-up cohorts differ in their networking action during the institutional change period. The empirical findings demonstrate that in three types of networking—team formation, political networking, and market networking: old cohort members tend to maintain and consolidate pre-existing ties, and develop particularistic and affective trust; younger cohort members tend to forge new ties and develop cognitive trust with higher general trust backed up by the development of regulative institutions.

Chapter five can be regarded as an extension of chapter four, in which the process and mechanisms for the differentiations between the two cohort's network configurations

are traced in greater depth and are further elaborated. Chapter five confirms and reinforces the findings in chapter four in proposing that institutional uncertainty (mainly engendered by regulative pillars) has a significant influence on tie formation propensity and trust development: higher uncertainty leads to adding ties with pre-existing ties and developing particularistic trust; lower uncertainty leads to forming new ties with a higher general trust. Informal institutions (norms, values, and schemas engendered by cognitive and normative pillars) also have a great impact on trust development: traditional informal institutions emphasize developing and consolidating affective trust; the diffusion of new informal institutions during the marketization and globalization period underlines developing cognitive trust. These findings lead me to theorizing on two distinctive networking styles: the old cohort uses the network deepening style; the younger cohort uses the network broadening style. By shedding light on the process of networking, we now have a clearer picture and more thorough understanding of the network differences beneath the network configurations and have enriched the theory of how founding institutional environments affect concrete networking actions.

6.2 The Evolution of Chinese Entrepreneurship and Networks

When a formerly planned economy was transformed into a market-oriented economy, many institutions underwent dramatic reforms (Lau, Tse, & Zhou, 2002; Peng, 2003). Phase transitions in transitional economies produced generational differences among customers (Hung et al., 2007), managers (Egri & Ralston, 2004), and entrepreneurs (Tan, 2007; Yang, 2007). Chinese entrepreneurship has been a key catalyst in China's rapid growth in the past three decades (Xiang & Teng, 2008). However, current studies on Chinese entrepreneurship have been too general in their accuracy. Considering the diversity of entrepreneurs and their historical backgrounds, researchers proposed the framework of classifying entrepreneurs into different generations. For example, Yang (2007: 203-219) identifies two entrepreneurial generations in China during the institutional change period based on their start-up age, institutional environment, and coping strategy. The first generation opened their business near the end of the 1970s; most of them started their business careers in their 40s and 50s. They had to

deal with changing state policies and employ corresponding strategies to reduce risks and avoid potential penalties. Those strategies include building *guanxi* with government officials and increasing media coverage to legitimize their private businesses. Yang refers to the “second generation” as those who started their business after the first generation, for example, those who “step into the sea” in the early 1990s or later. Xiang and Teng (2008) have a similar categorization of the first generation, but they further divide entrepreneurs who started their business after the early 1990s into two generations. Despite the different categorizations, these studies suggest that the interaction between institutional rules and the market shapes Chinese entrepreneurship and makes the evolution of entrepreneurial strategies possible.

This study reconciles these researchers’ historical perspective, but differs from these studies in two aspects. First, this study employs a start-up cohort approach, compared to the generational perspective that is mainly based on a birth cohort; the former can better capture the relationship between entrepreneurs and their founding institutional environment and examine how the founding and changing institutional environments influence their entrepreneurial behaviors. Second, rather than examining the general entrepreneurial strategies, this study focuses on one important strategy—networks and their evolution during the institutional change phase. This is a novel attempt; however, this study could only examine the differences between two cohorts (starting up the business after 1992) because of the following two reasons.

First, previous studies have examined general entrepreneurship. They do not specify private entrepreneurship; furthermore, these studies mainly stay at the conceptual level without using first-hand data to analyze the evolution of entrepreneurship. As I reviewed in chapter two, although Chinese institutional changes have experienced three stages, private entrepreneurship has only been boosted since the second stage (since 1992). In the first stage (1978-1991), entrepreneurs employed a hybrid form of ownership (combining both state and market elements) to access financial resources and overcome government indifferences (Nee, 1992; Wank, 1999); however, they were still confronted with high risks and uncertainty. Thus, the small scale of private entrepreneurs makes sampling very difficult. Second, most first generation entrepreneurs started their business when they were in their 40s and 50s. By now, most of them have either retired or are approaching

retirement, or have simply exited from the market. Selecting them for the comparison may create a selection bias, because they might not be proactive in their business and networking strategies.

Even though the first generation of private entrepreneurs is not the focus of this study, it is still worth observing and comparing them. Some studies and anecdotes indicate that the first generation of entrepreneurs and managers demonstrate strategic inertia because of the past socialist imprinting and cultural influence. For example, Egri and Ralston (2004) found that managers of the Republican era generation (born in 1911-1949) are significantly more conservative in changing their values because they are highly influenced by Confucianism, which emphasizes the virtues of benevolence, propriety, respect for social hierarchy, and a commitment to collective interests; even though they are later exposed to Western management values, the influence of Western values seems very limited. Yu (2009), a Chinese financial journalist, studied venturing stories of 23 Chinese entrepreneurs from 1978 to 2009 and analyzed the reasons behind the failures of these entrepreneurs. One of the reasons is that entrepreneurs stuck to their old strategies and failed to adapt to the market economy. During the initial reform period, due to the insufficient legal framework (e.g., lack of property rights protection and market regulation), entrepreneurs had to hit the ball within the limits of the court in order to survive and accumulate capital. However, when the legal system was enhanced and market factors were more developed, they still stuck to the old informal and illegal practices and failed to follow the new legal procedures, which ultimately led to their failures.

To date, no scientific studies have been conducted to investigate how the first generation of entrepreneurs have established and evolved their networks during the institutional change period. A business commentator, Wang (2008), noted that most of the first generation entrepreneurs spent 90% of their energy pulling *guanxi*, and invested only 10% in their business operation. This might be an exaggeration. However, it depicts the prevalence of *guanxi* practices during the initial reform period and may explain the failure of first generation entrepreneurs. The younger generation had to look for opportunities in the market. Entrepreneurs from the first generation who attached too much importance to interpersonal connections have gradually faded away or retired. A

new generation exhibiting a focus on customers and products have been rising on the stage and seeking competitive advantages. As this study shows, networks are still continuing to play important roles for business venturing. However, the type of connections have been undergoing a transformation from interpersonal relationships (guanxi) to strategic networks. The entrepreneurial generations and entrepreneurial networks have been co-evolving with Chinese institutional changes.

6.3 Implications for Theory and Practice

By specifying how and why different start-up cohorts demonstrate distinctive network configurations and networking styles during the institutional change period, this research makes significant contributions in the areas of studying institutional change, organizational populations, and network evolution.

Implications for the institutional study of the founding environment

This research has three major implications for studying the effect of the founding environment from the institutional perspective. First, the research findings shed light on how the founding institutional environment imprints on network configurations and networking styles. This study reveals that founding institutions in different periods confer different resources, opportunities, and constraints on entrepreneurial cohorts, delineating and legitimizing the appropriate networking actions and network constructions. Founding institutions lead to network inertia for old cohorts. When the founding institutions are embedded in the changing conditions with the diffusion and actors' perceptions of new norms, values, and practices, they facilitate distinctive networking styles and thus network configurations for the younger cohort. This result contradicts the argument that younger organizations are more likely than older organizations to develop cohesive networks because of the liability of newness (Kim et al., 2006; Stinchcombe, 1965). Without denying that new ventures usually lack specific sets of resources and capabilities that more established firms have accrued (Stinchcombe, 1965), I suggest linking the liability of newness with different founding institutional conditions and examining how

younger firms might benefit from the new institutional environment in terms of resources, opportunities, new norms, values, and schemas.

Second, this research offers a rich and process-oriented institutional study to understand the underlying processes and mechanisms that lead to network differentiation. Institutional change is a compressed and rapid environmental change (Newman, 2000; Peng, 2003). In transitional economies, institutional change punctuated by different phases significantly influences entrepreneurial processes, available resources, and strategies. Thus, the effects of institutions on inertia and change are probably stronger in a changing institutional environment than they are in a relatively stable institutional environment (i.e., developed economies) because of the alignment effect of the institutional pillars at the founding period, even if such a period is relatively short. Not only are the pillars contested but their sources are also subject to change. The underlying mechanisms lie in the alignment of regulative, cognitive, and normative pillars of different natures during different periods, which creates dissimilar pressures and incentives for emulating and practicing legitimate networking behaviors.

This process and mechanism-oriented study also offers implications for institutional theory on change (Greenwood & Hinings, 1996). Inertia and evolutionary change (if any) is likely to exist among the old cohort because of this group's exposure to the alignment of unfavorable regulative institutions with strong traditional cognitive and normative elements. Revolutionary change is more likely to be exhibited by the younger cohort because of their exposure to the alignment of more favorable regulative institutions with the new cognitive and normative elements.

Third, this study also enriches our understanding of the relationships among institutions, cognition, and networks. The uncertainty and incoherence perceived and experienced during the institutional change phase anchors entrepreneurs' interpersonal networks and constrains strategic adaptation. The relational embeddedness with domestic networks limits the alertness and cognition of external institutional change as well as the willingness and ability to adapt and modify behaviors. These two structures (networks and cognition), in turn, are largely defined and influenced by the founding institutional environment. For a new entrepreneurial cohort, changes in the founding institutions facilitate the perception of the cost of close coupling with the intricate traditional

relational system and the benefits of coupling with a new business system, which lead to a novel network configuration. Thus, rather than examining the general response to institutional change, researchers should study the interrelations among institutions, cognitions, and networks to understand how each one influences, facilitates, or constrains the others (Beckert, 2010).

Implications for organizational population theory

This study demonstrates the cohort differences of entrepreneurial networks during the institutional change phase. This has implications for organizational population theory. Organizational ecologists provide a classic example of a cohort effect—density delay. It occurs when population density (the number of organizations of a particular type) during the founding period affects subsequent life chances (Carroll & Hannan, 1989). Organizational ecologists found that population density has a non-monotonic effect on organizational founding and failure rates (Carroll & Hannan, 1989; Hannan & Freeman, 1989). The small number of organizations within a population increases the legitimacy for the whole population and encourages the founding rates. When the number rises to a certain level, the competition for resources discourages the founding behavior and increases the failure rate (Hannan & Carroll, 1992; Hannan & Freeman, 1989). Although the population density argument informs the relationship between the population of organizations and its institutional environment, the direct influence of these relationships has not been investigated (Baum & Oliver, 1992; Zucker, 1989). This study shares Baum and Oliver's (1992) view about the relationship between population density and the institutional environment: conforming to the norms and social expectations of an institutional environment can improve survival chances (Meyer & Rowan, 1977). The more links an organization establishes with its institutions and adheres to institutional prescriptions of appropriate behavior, the more legitimacy and status it can gain (Baum & Oliver, 1992; Meyer & Scott, 1983; Singh, Tucker, & House, 1986). This study not only confirms the interconnections between the organizational population and the institutional environment, but also enriches this interconnection by focusing on the founding institutional environment and the powers it engenders by combining three institutional

pillars. Future studies could explore how the interconnections (their fit or a lack thereof) with regulative, normative, and cognitive pillars impact the performance of start-ups of a certain population.

This research also confirms that start-up cohort members tend to exhibit similar structural features when they enter the market during the same period (Hannan & Freeman, 1984; Stinchcombe, 1965), even if there is a certain degree of variation in industrial engagement. This may be even more plausible in transitional economies than in developed economies, because each institutional period conveys different resources, opportunities, institutional pressure, and ranges of solutions (Peng, 2003; Scott, 2008). This study suggests that organizational populations likely co-evolve with institutional change. A new founding institutional environment increases the diversity of organizational forms (Romanelli, 1991) and new types (populations) of organizations are likely to be established by a younger cohort rather than by an older cohort. The initial founding conditions make network inertia a prevailing reality for an old cohort, whereas the new cohort is likely to be the source of diversity in business communities (Aldrich & Ruef, 2006: 132). However, unlike the idea that new organizational forms must draw on existing stocks of resources and structures and thus are constrained by their founding environment (Romanelli, 1991), this study proposes that a new institutional environment can provide a new population with a different opportunity structure and distinct institutional pressures to conform to, which may facilitate the diffusion of new norms and innovative practices (such as decoupling and coupling). This implies that radical change at a societal level is likely to occur through the succession of younger entrepreneurial cohorts during institutional change. A future study could apply the cohort comparative approach to investigate how organizational populations evolve and how the succession of populations shape and update the business field.

Implications for network theory

This study contributes to network theory and research in three aspects. First, this study contributes to the development of network theory and future empirical orientations by nesting relational embeddedness in institutional embeddedness. The former refers to

the types and strength of relationships in which ties are embedded (Uzzi, 1996). The latter refers to the interconnections between a population and its specific institutional environment (Baum & Oliver, 1992). The latter may reinforce the former and lead to over-embeddedness. For example, closed networks, also found in other post-socialist societies, limit access to new opportunities and lead to network inertia during the institutional change period (Ledeneva, 1998; Rose-Ackerman, 2001a). Although this study only examines the networks of the younger cohort for a short period, I emphasize that embedding in a new institutional environment creates a path for divergent change (Greenwood & Hinings, 1996).

The second insight underscores the logic of “appropriateness” in network formation, evolution, and dissolution, which has been noted elsewhere (Burt, 1987). Similar to Scott (2008: 68), this logic asks “given my role in this situation, what is expected of me for my network behavior?” Strategic network behavior might be perceived as appropriate and necessary in some contexts by some actors who share similar values, whereas in other cases, it may not be appropriate. Thus, the rational calculation and strategic management of networks needs to be validated in different contexts and with different actors.

The third contribution lies in its illustration of networking action which is insufficiently studied in the previous literature (Hoang & Antoncic, 2003a; Slotte-Kock & Coviello, 2010). This study integrates the outcome oriented approach and process oriented approach, offering the critical link between network configuration and networking action by using the mixed method design. Furthermore, this study echoes the recommendation of scholars in exploring the environmental contingences of network processes and dynamics by identifying two distinctive entrepreneurial networking styles during the institutional change phase. The insights drawn from the inductive data on the relationship among the core theoretical constructs (institutions, entrepreneurial processes, networks, and cohorts) generate the testable propositions for future research.

Boundary conditions and alternative explanations

In interpreting the theoretical insights, certain boundary conditions and alternative explanations need to be noted. First, the respondents are engaged in small- and mid-sized

businesses, thus, the results may not apply to large firms. The study of the effect of firm size remains ambiguous in the literature. Some scholars suggest that, due to structural inertia, larger organizations may reduce the speed of dissolving old ties and establishing new ties in a changing environment (Hannan & Freeman, 1984; Haveman, 1993; Kim et al., 2006). Others suggest that large firms demonstrate more sensitivity and a greater ability to adapt—that is why they grow big (Dittrich, Duysters, & de Man, 2007; Romanelli & Tushman, 1986). This study suggests that the effect of firm size on network behavior may be contingent on the firms' and founders' exposure to the founding environment, especially in the context of transitional economies. For example, compared to the firm sizes of CA, those of CB are even smaller; however, members of CB have still more proactively formed strategic networks from the beginning of their ventures.

The second alternative explanation, which is also related to the previous one, is that an emerging market (a new industry and business model) requires strategic action from the new cohort, whereas a traditional market requires less adaptation from the incumbents (Gulati & Gargiulo, 1999). As argued above, I suggest that it is the institutional change that facilitates the emergence of new market fields and allows new norms, values, and practices to emerge and diffuse, and together they stimulate new network configurations. This insight merits further examination of this causal relationship.

The third alternative explanation of network differences between cohorts might be due to an age effect in that older cohorts are less proactive than younger cohorts. The “age effect” suggests that younger entrepreneurs are generally more proactive and likely to take risks than older ones (Cassar, 2006; Harada, 2003; Lynskey, 2004). By comparing network configurations of a younger cohort in the contemporary period with an older cohort during an earlier period, I have shown that even at the similar age when they founded their business, the younger cohort still demonstrates distinctive features. This suggests that the younger cohort is not simply young, rather their proactiveness is significantly more facilitated by their embeddedness in a new institutional environment.

Implications for practice

This study enriches the understanding of how strategic choices are made during the

fundamental institutional change period and how to deal more effectively with challenges associated with such environmental shifts. Managerial practices should focus not only on economic performance but also on the organization-level structures which are reactions to the institutional environment (Guthrie, 1999). Firms and entrepreneurs should be aware that their environmental origins and relational embeddedness might trap them in their own networks and impede the adaptation during the institutional change period. Entrepreneurs from the old cohort should be aware of the potential negative effect of their relational embeddedness. They may reduce network inertia by linking up with international partners and/or with those of younger start-ups, learning and adapting to new relational norms, values, and practices.

Entrepreneurs from the younger cohort should take advantage of the new institutional environment and practice the strategic management of their networks. They may also need to be sensitive and flexible when interacting with entrepreneurs from the old cohort where certain expressive interactions may be still needed. They also need to be conscious of the fact that networks may be “easy come, easy go.” Finding a good match and securing exchanges with partners are both important in effective network management. Long-term cooperative relationships and reciprocal exchanges can also consolidate the network and enhance trust.

For international partners who want to achieve business success in China, the conventional wisdom of establishing *guanxi* (in the traditional sense) prior to a transaction might not work when interacting with younger entrepreneurs. Foreign firms and managers are strongly advised to build relationships first before a commercial transaction (Ambler, 1994). This golden rule is challenged in contemporary China, especially in metropolitan cities like Shanghai where the norms of instrumental interactions in business are widespread. As Möllering and Stache (2010) suggest, there is no fixed model that foreign managers can simply follow when they are doing business in “Rome.” They need to get to know the “Romans,” keep an open mind, and set up common rules that work best in the specific context. I suggest that foreign managers need to realize the differences among entrepreneurial cohorts when engaging in networking and other business activities. It is advisable to contextualize and legitimize networking actions when dealing with Chinese partners of different cohorts.

6.4 Limitations and Future Research

There are several limitations of this study. First, despite the in-depth qualitative interviews combined with the quantitative design, the relatively small sample size may limit its generalizability. Although this study provides theoretical insights into relationships among institutions, entrepreneurial processes, networks, and entrepreneurial cohorts, the causal relationship needs further testing and validation. Therefore, I call for future research to test the propositions with a larger sample using the quantitative method employed here.

Another limitation is that it is a retrospectively-based study since strict longitudinal data (over two decades) was difficult to obtain. According to life course theorists, retrospective data is valuable in analyzing the influence of historical events. However, the quality of data depends strongly on the memory of respondents (Levy, Ghisletta, Le Goff, Spini, & Widmer, 2005). This retrospective data may create recall bias in reporting ties in the way that it may result in an under-representation of weak ties (Lin, 2001a), especially for the old cohort members. This limitation was discussed in chapter three (mixed method design and data collection) and chapter four (page 64). Certain techniques were employed to minimize this limitation, such as “event tracking” interview techniques and the triangulation of qualitative and quantitative data. Nevertheless, this limitation needs to be noted and a future longitudinal study could serve to diminish the impact of a retrospective bias (Fischhoff & Beyth, 1975; Mayer, 2008; Scott & Alwin, 1998).

The third limitation is that this study could only examine the networks of the younger cohort in the contemporary institutional period, which was a relatively short period compared to that of the older cohort. Although the network configuration of the younger cohort in the current period is different from that of the older cohort in both periods, we still need to further test the propositions to understand how members of the younger cohort evolve their networks in the future: Is there continuous adaptation or does stability and inertia set in with the passage of time? If so, how might these be different from that of the older cohort? For the older cohort, does the imprinting effect decrease or increase over time if the cohort members remain in business? Considering these conditions, this study should be regarded as an exploratory one. I call for future

longitudinal panel studies to validate my findings.

The proposed institutional perspective of network evolution suggests important research issues for future explorations. First, future explorations could test the relationships among institutional change, the development of market fields and organizational forms, and network dynamics. In addition, in contrast to their appeal for cross-industry investigations (Elfring & Hulsink, 2007; Madhavan et al., 1998), I propose that future studies could focus on one industry to examine how the entry of entrepreneurial cohorts at different industrial stages during the institutional change phase influences their initial networks and the subsequent trajectories of their networks.

Second, a future study could devote more attention to “failure” cases and employ the longitudinal panel design to further examine the role of the founding institutional environment on network evolution. In this research, only successful and survival firms and entrepreneurs were sampled. It remains intriguing to examine the following questions: Why did others fail? Is it because of the persistence of old ties and traditional networking practices, or because of abrupt changes without stabilizing the connections, or because of the confusion and delayed response during the institutional change period? Future research could follow different cohorts of firms and entrepreneurs over time. This would generate more rich and complete data for hypothesis testing and theoretical advancement.

Third, future research could also enhance the measures and include information on the inter-organizational networks when the ego-centered network analysis technique is adopted. This will generate richer data on both the informal and formal networks and would facilitate a comprehensive examination of network dynamics during the period of institutional change.

Fourth, since this study was initially inspired by life course studies, it is worth highlighting the implications for this perspective. Life course researchers use the Age-Period-Cohort model to study the influences of aging, time period, and cohort membership on social change (Mason & Fienberg, 1985). It is usually impossible to cleanly disentangle age effects, period effects, and cohort effects using cross-sectional data, even with a longitudinal data set. It is still difficult to disentangle these effects because these effects are interwoven to produce the focal phenomena in question (Alwin & McCammon, 2003). Although this study could not clearly disentangle these effects and

separately test the explanatory power of each effect, it does strongly confirm the cohort effect. (1) The institutional change does not have universal influence (period effect) on Chinese entrepreneurs. The distinctive formative experience (Mannheim, 1970) that members of the start-up cohort share during the founding period persists throughout subsequent business activities. The specific networking style and configuration that was adopted at the founding period continues to influence and differ in subsequent response patterns to the institutional change (cohort effect).

(2) The age effect, as discussed in the preceding text, could not simply be used to explain the network inertia for the old cohort (see page 132) and the distinctive networks for the younger cohort. The age effect suggests that people change or do not change as they grow older due the combination of biological, psychological, and social mechanisms (Alwin & McCammon, 2003). This study does not find a strong influence of aging on network behavior, but it does suggest that the duration of ties (long) and the extent of relational embeddedness (high) have more direct effects on network inertia. The younger cohort is not simply young, their proactiveness is facilitated by their embeddedness in a new institutional environment.

Although the cohort effect has been supported to explain network differences, nevertheless, more advanced data (longitudinal panel data) and techniques (Alwin & Scott, 1996; Duncan & Kalton, 1987) are needed to investigate, disentangle, and refine the relationships among age, period, and cohort effects. To examine population-level transformations, we need to embed the interpretations in a historical context. One implication for future research is that we should view aging not only as an organizational-level process, but also view it as embedded in the context of the population and community (Aldrich & Ruef, 2006: 167). For example, being a young venture in an emerging population is different from a young venture in a mature population (Barnett, Greve, & Park, 1994; Ingram & Baum, 1997). The account of the “liability of newness” (Stinchcombe, 1965) and the “liability of smallness” (Aldrich & Auster, 1986) (age effect) needs to be linked with the historical origins (cohort effect) and re-examined in different institutional contexts (period effect). This study suggests that the “liability of newness” could be mitigated by a new institutional environment, while there is a “liability of oldness” that is surprisingly ignored in current research.

Last but not least, future explorations might also investigate how older and younger cohort members interact and influence one another: Does the older cohort transmit its experience and tactics to the younger cohort, or does the younger cohort inject a new mind-set and nourish the old cohort? Regardless, new norms, values, and beliefs are diffused and institutionalized in contemporary China, as “the new cohorts provide the opportunity for social change to occur” (Ryder, 1965: 844).

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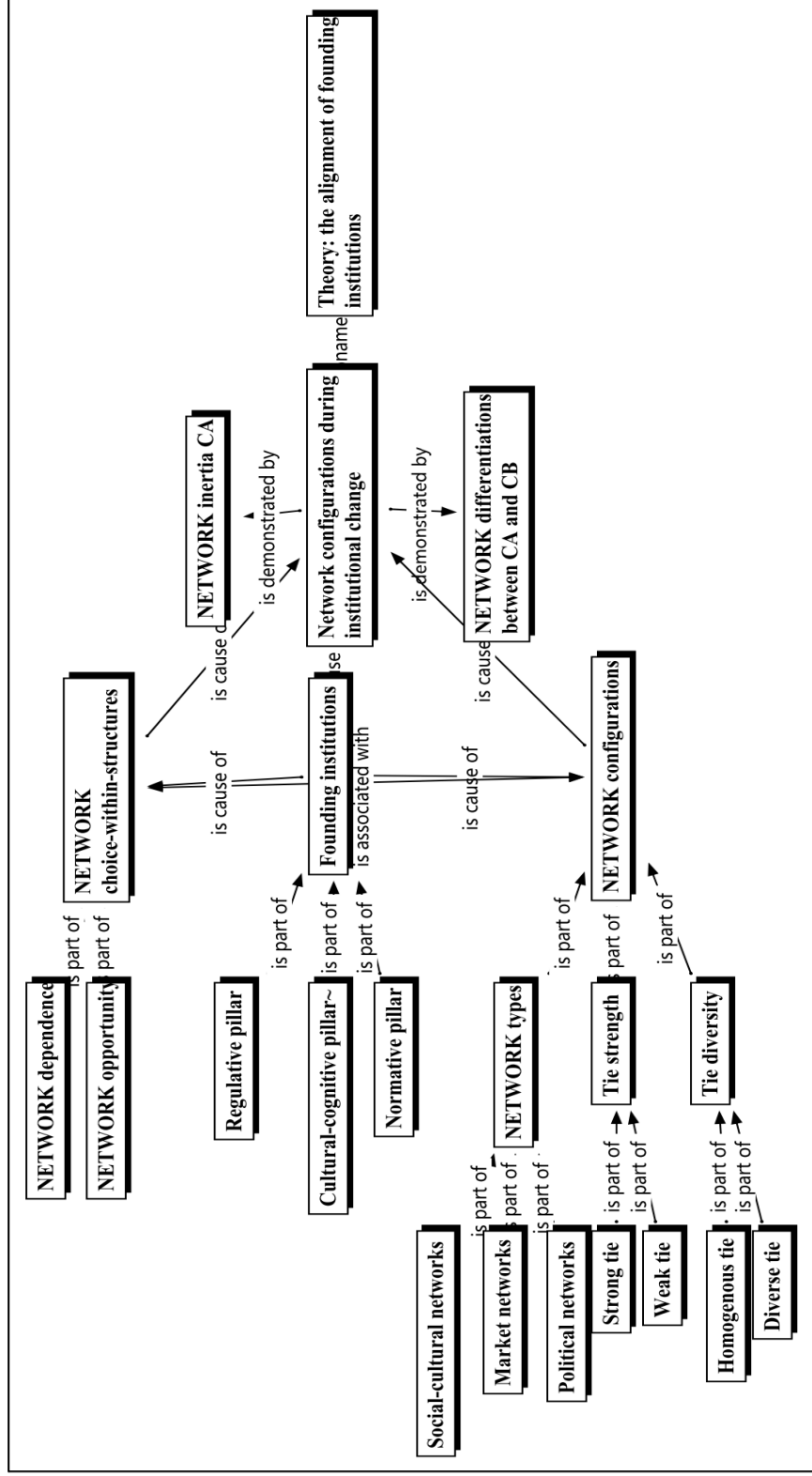
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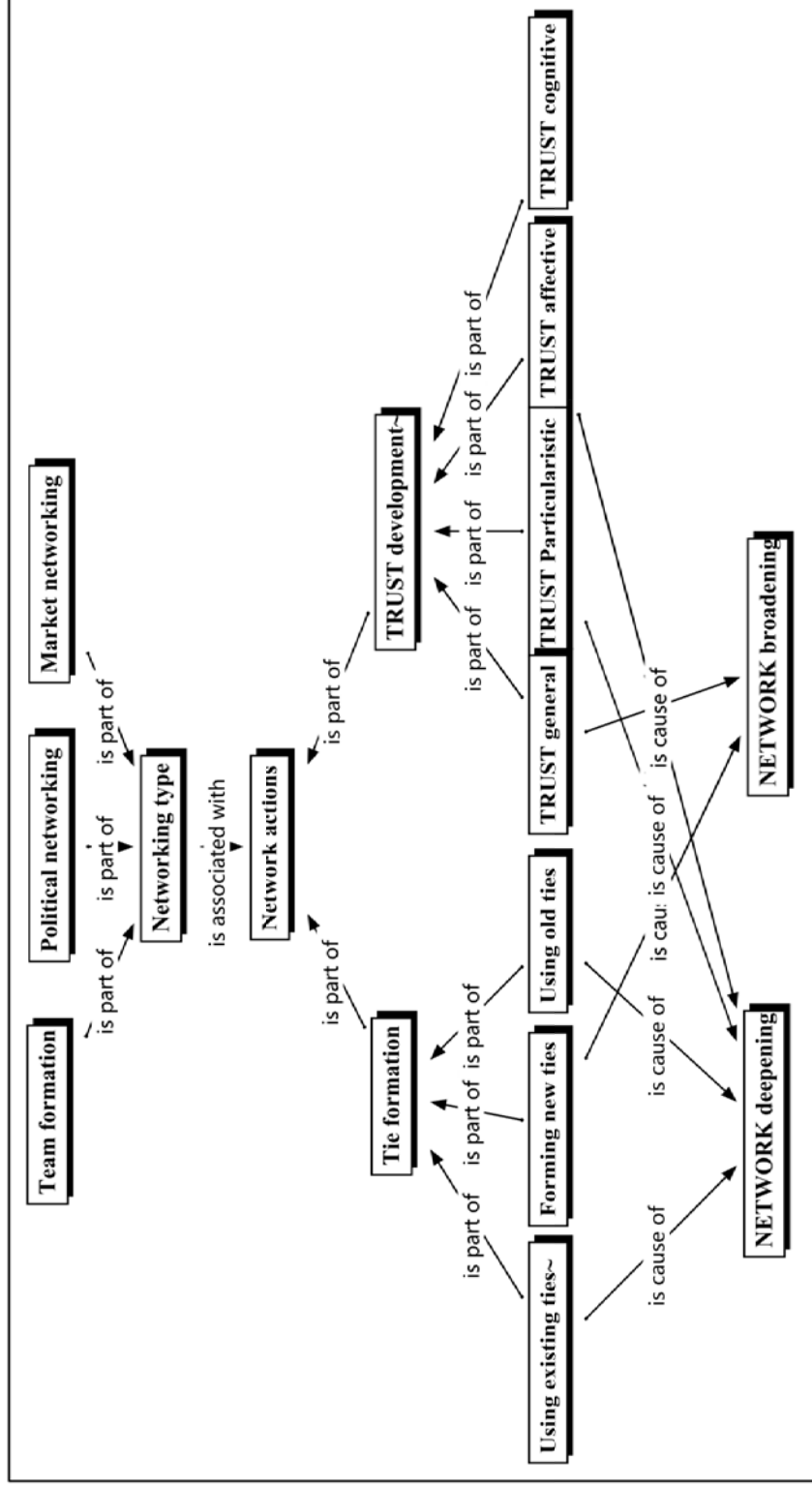
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APPENDICES

Appendix A. Codes Network And Theory: The Alignment Of Founding Institutions



Appendix B. Codes Network And Theory: Network Styles



Appendix C. English Semi-Structured Interview Guidelines

These guidelines list the topics and questions posed to the interviewees. The actual interview questions were adapted based on respondents' cohort membership and network information (e.g., established new connections or maintained old connections) mentioned during the interview.

For Cohort A (Period 1: 1991-2001) and Cohort B (Period 2: 2002-2009)

Can you tell me why you wanted to start up your own business?

Can you describe the external environment you were confronted with when you started up your business? You can start from the political and policy environment.

How about the market environment?

How about the social environment?

What kind of problems were you confronted with during your business venturing in this period?

From whom or from which organizations did you ask for help to solve these problems?

How did you develop relationships with them?

How did you develop trust with them?

For Cohort A (Period 2)

Can you describe the external environment you were confronted with in this period?

What kind of problems were you confronted with during your business venturing in this period?

From whom or from which organizations did you ask for help to solve these problems?

How did you develop relationships with them?

How did you develop trust with them?

Why did you still maintain relationships with your old connections?

For Cohort A and Cohort B

What is the role of networks in your business?

Some people say that there are three types of entrepreneurial networks: social-cultural networks, political networks, and market networks; how much of a role do social-cultural networks play in your business venturing?

How much of a role do political networks play in your business venturing?

How much of a role do market networks play in your business venturing?

Do you want to develop any one of these types of networks for your future business? If yes, which one?

During the development of the market economy, some entrepreneurs think networks become more important for their business, others think networks become less important. How have they been changed according to your business experience?

It has been argued that there have been different generations of Chinese entrepreneurs. For example, the first generation who started up their business in the 1980s; the second generation who started up their business in the 1990s, and the third generation who started up their business after 2000. Do you agree with this categorization?

Do you think you differ from other generations of entrepreneurs, for example, in network behaviors?

When dealing with relationships with others, what kind of values do you hold?

Did the financial crisis have any impact on your cooperation with other business partners? If yes, in which aspects?

Appendix D. Chinese Semi-Structured Interview Guidelines

这份指南列举了针对受访者的一些话题与问题。实际访谈问题随受访者的组别与在访谈过程中提到的网络信息而有所改变。

创业组 A（时期 1： 1991-2001）和创业组 B（时期： 2002-2009）

您能告诉我为什么想要创业吗？

请您描述一下当时创业的外部环境是怎样的？ 您可以先描述政治与政策环境。

市场环境如何？

社会文化环境如何？

在这个时期的创业过程中遇到了哪些问题？

您找谁或者哪个机构解决这些问题呢？

您是怎样和他们建立关系的呢？

您是怎样和他们建立信任关系呢的呢？

创业组 B（时期 2： 2002-2009）

请您描述一下这个时期的外部环境是怎样的？ 您可以先描述政治与政策环境。

市场环境如何？

社会文化环境如何？

在这个时期的创业过程中遇到了哪些问题？

您找谁或者哪个机构解决这些问题呢？

您是怎样和他们建立关系的呢？

您是怎样和他们建立信任关系呢的呢？

为什么您会保持那些以前的关系呢？

创业组 A 和创业组 B

网络在你的业务发展过程中发挥了什么作用？

有些人说企业家有三种网络，社会文化网络，政治网络，和市场网络。社会文化网络在您的业务发展过程中发挥了什么作用呢？

政治网络在您的业务发展过程中发挥了什么作用呢？

市场网络在您的业务发展过程中发挥了什么作用呢？

在未来的业务中，您是否想过要拓展其中任何一种网络呢？如果是的话，是哪种？

在市场经济发展过程中，有些企业家认为网络对业务越来越重要，有些则认为网络越来越不重要，根据您的经历，网络在业务发展过程中发生了怎样的变化？

有人说中国的企业家可以分为不同的代际：八十年代创业的为第一代，九十年代创业的为第二代，2000 年以后的为第三代。您同意这种划分么？

您认为自己与其他代的企业家有何不同吗，例如在网络行为方面？

在处理网络关系时，您有什么指导原则吗？

金融危机对您与合作伙伴的业务有没有什么影响？如果有的话，在什么方面？

Appendix E. English Ego-Centered Network Questionnaire

Please tell me who were the important persons (up to five) to your business development, and describe the following information (Please note that all the information is about the temporal condition).

| No. | Name (abbreviation) | Known year | Age | Frequency | Closeness | Relationship multiple choice | Background | Help content multiple choice | Importance |
|-----|--------------------------|---------------|-----|---|---|---|--|---|--------------------------------------|
| | | | | 1. Several times a week 2. Several times a month 3. Several times a season 4. Several times a year 5. Even less | 1. Very close 2. Close 3. Medium 4. Not close 5. Distant | 1. Family and relatives 2. Fellow-townsmen 3. Schoolmates 4. Former colleague 5. Colleague 6. Former peer 7. Peer 8. Friends 9. Others | 1. Government 2. Financial agency 3. Industrial association 4. Entrepreneurial association 5. Supplier and partners 6. Distributors and customers 7. Management personnel and employee 8. Professional agencies(accounting, lawyer, etc.) 9. Others | 1. Policy 2. Financial capital 3. Technology 4. Production 5. Tax 6. Human capital 7. Know-how 8. Market development and project 9. Career development 10. Networking 11. Organizational management 12. Public image 13. Emotional support | 1. Very important 2. Important |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |

Appendix F. Chinese Ego-centered Network Questionnaire

请您填上对于您的业务发展最重要几个人（最多5个），并请您描述相关特征（请注意，所填内容均为当时情况）

| 时期 | 序号 | 姓名 (拼音 简写) | 何时 认识 | 年龄 | 交往频率 1. 每周几次 2. 每月几次 3. 每季度几次 4. 每年几次 5. 几年一次 6. 更少 | 密切程度 1. 非常密切 2. 密切 3. 一般 4. 不密切 5. 疏远 | 与您的关系 (可 多选) 1. 亲戚 2. 同乡 3. 同学 4. 老同事 5. 当时同事 6. 老同行 7. 当时同行 8. 朋友 9. 其他 (请说 明) | 属于或与之有关 (可多选) 1. 政府 2. 金融机构 3. 行业协会 4. 企业家协会 5. 供应商及其他合作伙伴 6. 分销商或客户 7. 企业内部管理人员与员 工 8. 专业人员 (会计、律师。 记者等) 9. 其他 (请说明) | 对您业务发展 重要程度 1. 非常重要 2. 一般重要 |
|---------------|----|------------------|----------|----|---|--|--|--|--------------------------------------|
| 1992- 2001 | 1 | | | | | | | | |
| | 2 | | | | | | | | |
| | 3 | | | | | | | | |
| | 4 | | | | | | | | |
| | 5 | | | | | | | | |
| 2002- 现在 | 1 | | | | | | | | |
| | 2 | | | | | | | | |
| | 3 | | | | | | | | |
| | 4 | | | | | | | | |
| | 5 | | | | | | | | |

Appendix G. Codes List

| | | |
|---------------------------|-----------------------------|-----------------------------|
| Accumulating networks | Business model | Consumerism |
| Achievement motivation | Business school | Convertible |
| Acquaintance | Business strategies | Cooperation |
| Adaptation | Business strategies, change | Cooperative firms |
| Advertising | Business transition | Cooperative growth |
| Affection | Cadre | Cooperative network |
| Aging | Capabilities | governance |
| Alliance | Challenge and problem | Cooperative network with |
| Alliance consequence | Challenge and problem P1 | government |
| Alliance governance | Challenge and problem P2 | Corporatism |
| Ambitious | CHANGE environment | Cost |
| Arm's length | CHANGE environment | Coterie |
| Association | favorable | Creating value |
| Authority relationship | CHANGE environment | Credibility |
| Avoid risk | relaxing | Cultural-cognitive pillar |
| Background | CHANGE environment | Customer channel |
| Background change | tightening | Customer lost |
| Bad environment | CHANGE environment | Customer relationship |
| Balancing the stakeholder | unfavorable | Dealing with people |
| Bank | CHANGE industry | Deputy to local People's |
| Banquet | CHANGE network | Congress |
| Becoming professional | CHANGE policy | Deputy to People's Congress |
| Being flexible | Character | Develop responsibility |
| Being networked | Chinese social-culture | Developing business |
| Being practical | Clients | Digging people |
| Being selective | Closeness | Dining together |
| Benchmarking | Closeness increase | Discriminated |
| Blind chance | COHORT entrepreneurship | Discussion network |
| Branding | general | Dislike to comply with the |
| Brave | COHORT networks | government |
| Bribing | Cold calling | Distributors |
| Bridging | Collective vision | Diverse tie |
| Bring benefit | College | Do it alone |
| Broker | Commercial based | Do not violate the law and |
| Build wealth | Commercial integrity | discipline |
| Building networks | Common interests | Doing business with |
| Building new networks | Competitor | oversees enterprises |
| Building trust | Congruence with Western | Drop tie |
| Business content | Conservative | Dynamic reciprocity |

| | | |
|---|--|------------------------------|
| Eager for quick success and instant benefit | Family support | Growth temperately |
| Easing strain | Favor giving | Guanxi bridging |
| Education | Female entrepreneurship | Guanxi consequence |
| Effect indirectly | Financial crisis influence cooperation | Guanxi deepening |
| Effect negative | Financial crisis influence general | Guanxi governance |
| Effect not very much | Financing | Guanxi in China |
| Effect positive | Financing bank | Guanxi individual |
| Emotional support | Financing network | Guanxi maintaining |
| Enjoy accomplishment | Financing self | Guanxi no |
| Enthusiastic | Financing social | Guanxi organizational |
| Entrepreneurial capability | Financing team | Hard working and tolerant |
| ENVIRONMENT adapting to | Financing trade | Harvest Resources |
| ENVIRONMENT comparison | Finding customers | Help content |
| ENVIRONMENT disordered | Finding the key person | Help content stable |
| ENVIRONMENT don't care | First barrel of gold | Hitting line balls |
| ENVIRONMENT favorable | First cohort entrepreneurship | Homogenous tie |
| ENVIRONMENT general | First cohort networks | Homophily |
| ENVIRONMENT market | Follow the rules of the game | Human resource |
| ENVIRONMENT not important | Forming new ties | Icing on the cake |
| ENVIRONMENT P1 | Forum | Idealists |
| ENVIRONMENT P2 | Founding institutions | Imitation |
| ENVIRONMENT political | Frequent interaction | Imprinting |
| ENVIRONMENT social-cultural | Friends | In red hat |
| ENVIRONMENT unfavorable | Friends, and business | Inconvertible |
| ENVIRONMENT volatile | Friendship | Increasing competition |
| Essential | Frown upon | Incremental reform |
| Establishing a friendship first | Frustration with previous job | Incubate |
| Evaluating the values of tie | Fulfill myself | Industry |
| Event | Functional diversity | Information |
| Exhibition | Gain experience | Initiating |
| Experience growth | Gathering | Initiating and building |
| Expressive interaction | Generations | Initiating networks |
| Extending | Getting the order | Instrumental |
| External strength | Gift giving | Integrity |
| Fair competition | Give and take | Interest-based relationships |
| Familiarization | Good opportunity | Intermediary |
| Family member and relative | Good quality | Internal strength |
| Family oriented | Government | Internet |
| | Government local | Isomorphism |
| | Government official | Keeping low profile |
| | Government organization | Key person |
| | Grasp information | Knowledge |
| | | Knowledgeable |
| | | Labor legislation |

| | | |
|-------------------------------------|-----------------------------|--------------------------|
| Lack of means of production | Market positioning | NETWORK inertia CA |
| Lack of resource | Marketing | NETWORK informal |
| Lay the foundation | Marketization | NETWORK inter-firm |
| Learning | Media | NETWORK |
| Legitimacy | Membership | inter-organizational |
| Legitimacy lack | Mimicking | NETWORK intra-firm |
| Less competitive | Money management | NETWORK investment |
| Less experienced | More cohesive | practical |
| Less power tactics | More difficult | NETWORK investment, |
| Less significant | More effective | according to the stage |
| Let it be | More motivation | NETWORK investment, less |
| Leveraging | More profit | political |
| Liability of newness | More significant | NETWORK investment, |
| Light-asset | Mutual understanding | more market |
| Long-term accumulation | Needs improvement | NETWORK investment, |
| Long-term investment | Negotiation | more political |
| Look for and accumulate customer | Network actions | NETWORK investment, |
| Looking for projects | Network and interest | social-cultural |
| Lose contact | NETWORK association | NETWORK lacking |
| Lose control | NETWORK averse | NETWORK no |
| Low acceptance | NETWORK bridging | NETWORK norms |
| Lower profile | NETWORK broadening | NETWORK opportunity |
| Macro control | NETWORK change | NETWORK perceived |
| Maintaining | NETWORK changing | NETWORK Period 1 |
| Maintaining network | significance | NETWORK Period 2 |
| Make money | NETWORK | NETWORK persistence |
| Management | choice-within-structures | NETWORK persistence |
| Management training | NETWORK configurations | reason |
| Manufacturing | Network configurations | NETWORK position |
| Market advantage | during institutional change | NETWORK precondition |
| Market behaviors | NETWORK customer | NETWORK preparing |
| Market capability | NETWORK decrease | NETWORK propensity, less |
| Market competition | NETWORK decrease reason | market |
| Market development | NETWORK deepening | NETWORK propensity, less |
| Market element | NETWORK dependence | political |
| Market entry | NETWORK differentiations | NETWORK propensity, |
| Market exchange | between CA and CB | market |
| Market irregular | NETWORK difficulty | NETWORK propensity, |
| Market network inter personal | NETWORK duration | political |
| Market networking | NETWORK dynamics, | NETWORK propensity, |
| Market networks | reason | reason |
| Market-oriented | NETWORK formal | NETWORK propensity, |
| | NETWORK governance | social-cultural |
| | NETWORK industry | NETWORK resourceful |

| | | |
|---|--------------------------------------|--|
| NETWORK risk | Optimistic | Production |
| NETWORK roles and effects, general | Out of the reach | Professional |
| NETWORK roles and effects, market | Over-embedded | Professional agencies |
| NETWORK roles and effects, political | Overseas business | Professional expertise |
| NETWORK roles and effects, social-cultural | Partner selection | Professional training |
| NETWORK TYPE comparison | Partnership | Professionals |
| NETWORK TYPE mixed | Party membership | Providing the solution |
| NETWORK TYPE transformation | Party school | Provocative |
| NETWORK types | Passing information | Prudent |
| NETWORK uppermost | Passion | Pursue ideal |
| NETWORK Western | Patient | Pursue innovation |
| NETWORK with foreign companies | Peer | Real estate |
| Networking difficulty | Performance | Realize interests |
| Networking indeliberately | Personal relationship disinclined | Realize value |
| Networking investment | Personality | Reciprocity |
| Networking process | Vision | Reciprocity low |
| Networking selectively | Pioneering spirit | Recruitment |
| Networking strategies | Planned economy | Reduce cost |
| Networking strategy learning | Plunge into the commercial sea | Reducing tie |
| Networking type | Police college | Reform and open policy |
| Networking values | Policy | Regulative pillar |
| Networking with people at the same lever | Policy ambiguous | Relational legitimacy |
| No objection | Policy easing | Relationship change |
| No strong feelings | Policy implementation | Relationship government and private enterprises |
| Nonprofessional | Policy non-standard | Reputation |
| Normative conformance | Policy prohibiting | Resource exchange |
| Normative creation | Policy standardization | Resource platform |
| Normative pillar | Policy support | Respectful |
| Normative selection | Policy tight | Responsibility |
| Not being bootlicker | Policy unfair | Risk averse |
| Not too economic driven | Policy unstable | Sales |
| Not using existing network | Policy unsupportive | Sales down |
| Objection | Political networking | Second cohort entrepreneurship |
| Open and upright | Political networks | Second cohort networks |
| Opportunistic to strategic planning | Political risk | Seek breakthrough |
| | Position and role | Self-centered |
| | Positioning | Self-determined |
| | Positive thinking | Self-reliance |
| | Predatory state | Self-blamed |
| | Premises | Self-realization |
| | Previous work | Self-reflection |
| | Private enterprise | Sentiment |

| | | |
|-------------------------------|------------------------------|---------------------|
| Service | Theory: the alignment of | Well prepared |
| Service industry | founding institutions | Wholesale loosening |
| Setting up example | Third cohort | Win-win |
| Shallow | entrepreneurship | Word of mouth |
| Similar value | Third cohort network | Work for enterprise |
| Sincere | Tie diversity | Young |
| Small role | Tie formation | |
| Small volume of business | Tie strength | |
| SME | Too much VC | |
| Social-cultural networks | Trade association | |
| Social environment | Trial | |
| SOE | Trouble shooter | |
| SOE reform | TRUST affective | |
| Solitary share | TRUST cognitive | |
| Spin-off | TRUST development | |
| Standardization | TRUST general | |
| Start | TRUST Particularistic | |
| Start-up for better life | Turing point stage | |
| Start-up important | Turn into private enterprise | |
| Start-up intention | Turning point period | |
| Start-up more cautious | Uncertainty | |
| Start-up more important | Undertake social | |
| Start-up planned | responsibility | |
| Start-up process | Undisturbed | |
| Start-up relational aspect | Unfair treatment | |
| Start up by the side of edge | Unfavorable | |
| job | Unintentional | |
| State welfare | Unstable | |
| Staying in touch | Unsupportive | |
| Still significant | Untactful | |
| Strategic planning | Upgrading tie | |
| Strong tie | Using existing ties | |
| Students | Using networks | |
| Supplier, partner and related | Using old ties | |
| Surviving | Value share | |
| Tactics | Variations, environment | |
| Take opportunity | Variations, network | |
| Talents | Variations, relationship | |
| Taxation | VC | |
| Teacher | Very significant | |
| Team formation | Way of thinking | |
| Teamwork | Weak tie | |
| Technological breakthrough | Well-behaved | |
| Technology | Well experienced | |

DECLARATION

I hereby certify that I have written this thesis without any unauthorized assistance. No other sources than those stated in the list of references were used. All quotations from and references to other texts are appropriately cited.

Chenjian Zhang
Bremen, April 9, 2012