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RESEARCH ARTICLE

Chengde You, Jianqi Zhang, Xi Li, Wenwen An

How Market-*Guanxi* Ambidexterity Affects Adaptive Capability in China's Transition Economy

Abstract Whether market- and *guanxi*-based strategies are complementary or substitutable in shaping adaptive capability is a critical yet controversial issue. This paper tackles this problem by adopting the ambidexterity perspective. Specifically, using a sample of 185 Chinese private firms, this study examines the independent and interactive effects of market orientation (MO) and *guanxi* orientation (GO, i.e., emphasizing on building business and political ties) on adaptive capability of firms in transition economies. Our results suggest that both direct impacts and complementary impacts of MO and GO strongly exist in shaping firms' adaptive capability, indicating the importance of "strategic ambidexterity." These findings have several theoretical implications for studies on ambidexterity and adaptive capability, and practical implications for firm strategies in transition economies.

Keywords market-*guanxi* strategies, ambidexterity, adaptive capability, transition economy, market orientation (MO), *guanxi* orientation (GO), China

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Chengde You (✉)
School of Business Administration, Jimei University, Xiamen 361021, China
E-mail: youchengde@163.com

Jianqi Zhang
Lingnan College, Sun Yat-sen University, Guangzhou 510275, China
E-mail: lnszjq@mail.sysu.edu.cn

Xi Li
Lingnan College, Sun Yat-sen University, Guangzhou 510275, China
E-mail: tongxin_053@163.com

Wenwen An
Lingnan College, Sun Yat-sen University, Guangzhou 510275, China
E-mail: anwenwen@mail2.sysu.edu.cn

1 Introduction

As the global economy becomes increasingly turbulent, many firms, and especially those in transition economies, are facing critical challenges in maintaining and renewing their traditional business models. In such cases, adaptive capability as a key dynamic capability is considered vital to help firms adapt to environmental changes through integrating, building, and reconfigurating internal and external competences (Teece, 2007; Teece et al., 1997). Nevertheless, how to cultivate adaptive capability remains an unsolved problem in the field of strategic management (Wang and Ahmed, 2007; Lavie, 2006).

Following the strategic choice theory (Child, 1972), a firm's strategic orientation guides the pattern of strategic decision making and the holistic way in which the firm behaves and competes, playing a key role in the cultivation of adaptive capability (Zhou and Li, 2010; Gatignon and Xuereb, 1997). The extant literature has identified two major yet somehow competing types of strategic orientation in transition economies. On one hand, market orientation (MO), which is defined as a firm's strategic response to market needs and competitors' actions in aiming to create superior customer values (Narver and Slater, 1990), is increasingly adopted by more and more corporate executives along with the progress of economic freedom. On the other hand, *guanxi* orientation (GO), which emphasizes building good managerial ties with business partners and government officials to enable bilateral flows of personal or organizational transactions (Peng and Luo, 2000; Park and Luo, 2001), is still very popular in doing business (Luo et al., 2012; Fan et al., 2012).

Interestingly, continuous and fierce debate remains about how MO and GO interact. Some scholars stress *guanxi* as the complement for formal market practices (Xin and Pearce, 1996; Peng and Luo, 2000). This implies that *guanxi* sometimes assists market functions, such as obtaining market information, interpreting regulations, and enforcing contracts (Khanna and Palepu, 1997). However, other studies indicate that too much emphasis on *guanxi* in business activities would crowd out market-based actions (Luo et al., 2012). Then a puzzle emerges—Should firms in a transition economy choose "either/or" or "both/and" strategies of MO and GO to cultivate their adaptive capability?

This study represents an effort to solve this puzzle by leveraging the ambidexterity perspective. In recent decades, the paradigm of how to reconcile the contradiction in business units has gradually shifted from trade-offs

("either/or" logic) between two disparate or conflicting ends to pursuing the two ends simultaneously ("both/and" logic, also called as ambidexterity) (Lavie et al., 2010; Tushman and O'Reilly, 1996). Applying ambidexterity perspective to the strategic management domain, we argue that a proper match between MO and GO could create market-*guanxi* ambidexterity. In other words, combining MO that centers on creating superior customer value and GO that highlights the business habits and relational norms, firms could gain a complementary effect in the resource integration and reconfiguration that help them more effectively adapt to changing environment. We tested our hypotheses by using a sample of 185 private firms in China, the leading transition economy in the world.

The motivation for this study is threefold. First, we contribute to the organizational ambidexterity literature by applying it to the strategic management domain. While most prior studies focus on ambidexterity in technological innovation, organizational learning and interfirm alliance (e.g., Auh and Menguc, 2005; Jansen et al., 2006; Lavie and Rosenkopf, 2006), we examine its application in the fruitful field of strategic decision making, and find a complement between MO and GO in transition economy context. Second, we try to theorize *guanxi*-related strategy, an important strategic orientation of firms in transition economies (Peng, 2003), to be a new antecedent of adaptive capability. This would be a necessarily complimentary work to previous dynamic capability research nested in the Western context that almost focused on market-related factors. Third, we also contribute to the *guanxi* literature (Xin and Pearce, 1996; Peng and Luo, 2000; Luo et al., 2012) by analyzing its complex role in building an emerging but crucial firm capability, i.e., adaptive capability, which would engage in the debate on whether *guanxi* is still useful as market-based economic freedoms move forward in transition economies such as China.

2 Theoretical Background

2.1 Strategic Orientation and Adaptive Capability

Traditional resource-based view (RBV) suggests that valuable, rare, inimitable and non-substitutable resources are core sources of competitive advantages and superior performance (Barney, 1991, 1995). Yet, RBV is criticized for adopting a static analysis perspective, from which resources are sticky and hard to adapt to

changing environment (Teece et al., 1997). Thus, firms have to build up dynamic capabilities to deal with dramatic environmental shifts. Dynamic capability refers to a firm's capacity to integrate, build, and reconfigure internal and external competences to cope with turbulent environments (Teece et al., 1997).

With the external environment becoming more and more complex and uncertain in recent years, firms' ability to respond to changing environment effectively, i.e., adaptive capability, has gained attention and prevalence in both academic and practical fields. Adaptive capability, which is regarded as a key form of dynamic capability (Zhou and Li, 2010), reflects firms' ability to identify and exploit opportunities, and ability to reconfigure resources and orchestration. It emphasizes firms' flexibility to reorganize their internal resources quickly to accommodate to constantly changing external requirements (Gibson and Birkinshaw, 2004). Capturing the essence of dynamic capability to match corporate resources, organizational structures and ever-changing strategic needs, adaptive capability is crucial to firms' survival and development (Zhou and Li, 2010).

Cultivating adaptive capability in transition economies like China is particularly important because firms here face unprecedentedly challenges and an unpredictable environment due to fast economic development and incremental institutional reforms (Zhou and Li, 2010; Liu et al., 2013). The academic literature has already identified several sorts of antecedents of adaptive capability, such as environment turbulence (Eisenhardt and Martin, 2000) and organizational learning (Zollo and Winter, 2002). Among all these causes, the stream that emphasizes the key role of executives and their strategic making patterns in the formation of adaptive capability, is gaining preponderance (Augier and Teece, 2009). More specifically, recent work has recognized the direct link between strategic orientation, which refers to the processes, practices, principles, and decision-making styles that guide firms' activities (Lumpkin and Dess, 1996), and adaptive capability (Noble et al., 2002).

Strategic choice theory (Child, 1972) posits the basic logics of the relationship between strategic orientation and adaptive capability. Different from population ecology scholars (Hannan and Freeman, 1977, 1984), who claim that organization is the choice of external environment evolution, strategic choice scholars argue that organizations actively adapt to environmental changes through predicting market changes, making timely decisions, and carrying out relevant actions (Child, 1972). That is, a firm's strategic orientation shapes its

strategic decision making and directs its resource acquisition, allocation and utilization. Therefore, different strategic orientations should lead to distinct operating procedures and activities, which in turn affect the diverse evolution of firms' adaptive capability (Gatignon and Xuereb, 1997; Conant et al., 1990; Miles and Snow, 1978; Atuahene-Gima and Ko, 2001).

2.2 Market Orientation vs. *Guanxi* Orientation

Market orientation (MO) is a widely-adopted strategic orientation in Western contexts (Kohli and Jaworski, 1990; Day, 1994), which emphasizes the importance of customers and competitors, and treats creating superior customer value as the priority. Market-oriented firms tend to promote the collection, dissemination, and responsiveness of market intelligence to serve customer needs (Kohli and Jaworski, 1990). Since firms with high MO can sense and capture shifts of customer needs and competitors' actions quickly and response accordingly, they could achieve a high level of adaptive capability to fit environmental changes (Zhou and Li, 2007). Despite of this theoretical clarity, prior literature shows little empirical evidence on the relationship between MO and firms' adaptive capability (a notable exception is Zhou and Li, 2010, who explore the impacts of customer orientation and competitor orientation on dynamic capability).

In transition contexts like China, *guanxi* orientation (GO) is another common strategic orientation besides MO (Peng and Heath, 1996). During the institutional reform, firms often rely on informal personal relationships to fulfil many functions of market (Khanna and Palepu, 1997). GO brings resources and information that are beneficial to firms' responses to environmental changes and consequently the formation of adaptive capability (Acquaah, 2007). Although scholars start to focus on the role of network capability in capability evolution (Chen and Wu, 2011), they have paid less attention to the crucial role of GO on firms' adaptive capability, particularly on whether business ties and political ties function similar or not in shaping adaptive capability in transition market contexts. Hence, how GO affects adaptive capability still needs further exploration.

In transition economies, the market-based strategy and *guanxi*-based strategy often coexist. Then, a more intriguing question is whether MO and GO have positive or negative interactive effects on the formation of adaptive capability.

These two strategies have innate tensions in terms of thinking logics as well as resource and managerial attention allocation, yet they may also provide useful support for each other. Till now, researches on the value of these two strategic orientations have different and uncompromising emphases, which are controversial to some extent. Therefore, the interaction between MO and GO in constructing adaptive capability is of importance and necessity.

2.3 Strategic Ambidexterity of MO and GO

Organizational ambidexterity theory provides new insights for dealing with issues on whether MO and GO are complementary or substitutable. Earlier studies suggest that organizations should seek an explicit trade-off between two ends, such as exploration and exploitation (Miller and Friesen, 1986; Ghemawat and Ricart Costa, 1993). The opposing nature of two ends in one continuum derives from several stylized facts, such as resource-allocation constraints, organizational inertia, desirable organizational outcomes, and managers' cognitive preferences (Lavie et al., 2010; March, 1991). However, the emerging organizational ambidexterity literature (Tushman and O'Reilly, 1996; Gibson and Birkinshaw, 2004; Lavie et al., 2010) argues that contradictory things can coexist and succeed simultaneously, because: (1) resource scarcity is relative. For example, the scarcity is less severe in large corporations than in small firms; moreover, strategic alliance is an effective way to acquire external resources to minimize the resource scarcity. (2) Some leaders have paradoxical thinking and are capable of integrating opposite agendas (Rothernberg, 1979). For example, Steve Jobs, the icon of Apple Inc., can think both logically and creatively. He merged crazy rock and roll, fashionable industrial design, nerd science and "ugly" profit motivation to create Apple's miracle (Isaacson, 2011). (3) Organizations can become ambidextrous via creating loose and coupling structures, training employees' paradoxical thinking, and cultivating ambidextrous culture atmosphere (Tushman and O'Reilly, 1996; Gibson and Birkinshaw, 2004).

The organizational ambidexterity hypothesis is firstly applied to the balance of exploration and exploitation in organizational learning (e.g., Auh and Menguc, 2005; Baum et al., 2000; Liu et al., 2011), followed by the balance of incremental innovation and radical innovation in technological innovation (e.g., Abernathy and Clark, 1985; Tushman and Anderson, 1986), efficiency and

flexibility in organization design (e.g., Adler et al., 1999; Jansen et al., 2006), and continuity and change in organizational adaptation (e.g., Brown and Eisenhardt, 1997; Tushman and Romanelli, 1985). In recent years, the notion of ambidexterity is introduced to the field of strategic management, providing new insights of strategic thinking. Taken Porter's competitive strategies as an example, traditionally speaking, firms must choose between cost leadership and differentiation; otherwise, firms mixing the two will "stuck in the middle" (Porter, 1980). Yet, from the perspective of organizational ambidexterity, firms can reconcile the tension between low cost and differentiation through strategic ambidexterity, which refers to implementing two competing strategies simultaneously (Han and Celly, 2008). The present study follows this research trend and echoes the call for applying organizational ambidexterity viewpoint to understanding corporate strategies in the Chinese context.

Experiencing the transition from a central planning to a market economy system, China is seeking continuous adjustments of its economic structure and developing approach. In order to adapt to this complex institutional environment, firms need to delicately balance their market- and *guanxi*-based strategies. On one hand, confronting an increasingly competitive market, organizations should adopt market-based strategies (e.g., MO) to satisfy diversified and varied customer requirements (Peng and Heath, 1996; Zhou et al., 2005). On the other hand, *guanxi*-based strategies (e.g., GO) are also necessary to help organizations gain political legitimacy and offset external threats and uncertainties (Xin and Pearce, 1996; Peng and Luo, 2000). However, these two types of strategies reflect different strategic tendencies and follow nearly opposite dominant logics, showing the difficulties of fully balancing them (see Table 1 for the detailed comparison).

Therefore, clarifying ways to the desired balance between opposing demands of these two strategies is of high need. Although there lacks studies on explicitly choosing "either/or" or "both/and" market- and *guanxi*-based strategies, several scholars have implied that these two strategies constitute an ambidexterity. For example, Luo and Rui (2009) pointed out that MNCs from emerging economies must carry out both market- and *guanxi*-based activities to offset the liabilities of latecomers and ensure the success of internationalization. In fact, the more dynamic and complex the business environment in China becomes, the more important the contradictory demands should be achieved simultaneously. In other words, organizations should shift their attention from "either/or" to "both/and."

Recently, Li et al. (2013) argue that emerging market firms need to develop market-political ambidexterity to manage influences from both markets and governments simultaneously, and then to embrace external opportunities and threats.

Table 1 Comparison between Market-Based Strategy and *Guanxi*-Based Strategy

	Market-based strategy	*Guanxi*-based strategy
Level	Organization	Individual (entrepreneur or TMT)
Characteristics	Formal, impersonalism	Informal, personalism
	Towards issues, rational and objective	Towards people, sensitive and subjective
	Focus on customer value and innovation	Focus on reliability and harmony
	Tend to break current equilibrium	Maintain current stability and unity
Thinking logic	Brief, immediate, clear expression	Complex, circuitous, try to figure out each others' underlying intentions
	Consider something as it stands, contracts constrained, ask for nothing in return	Stress personal favours, obligation and returns
Values	General values	Unique values
	Team formed by equal individuals; Distinct public and private people	Differential sequence pattern composed of unequal individuals; Distinct close and distant people
Attention	Customer needs	Preferences of executives at other firms and government officials
	Competition	
	The change and trend of technological innovation	The change and trend of policies and regulations
Time and effort allocation	Market research	Serve others
	Product development	Give feasts and present gifts
	Strategic deliberation	Public activities
Relevant knowledge	Explicit knowledge	Tacit knowledge
Implementation	Through market transactions and pricing	Through *guanxi* and closeness
	Open and transparent	Secret and even black-box operation
	Clear and specific internal regulations and procedures	Obscure internal regulations and procedures
Supportive external environment	Society with rule of law, law is above all	Society with rule of man, power and personal favours is above all
	Developed laws and regulations	Underdeveloped laws and regulations

Specifically, we argue that the ambidexterity of MO and GO exists due to requirements of coping with the dualities in economic, institutional, and cultural backgrounds in China. That is, the duality of central planning and market

economy system exists due to the gradualism institutional reform (Liu et al., 2011); the duality of Western theories and Chinese practices exists due to the special Chinese socialism (Luo and Rui, 2009); and the duality of cultural elements (e.g., *yin-yang* philosophy) exists due to the acceptance of two sides of a same coin (complementing with and transforming into each other) in Chinese traditional philosophies. The ambidexterity of MO and GO is a strategic response for dealing with these dualities and adapting to complex situations where multiple forces simultaneously impact. Based on the above arguments, a strategic ambidexterity involving both MO and GO should be incorporated into the broad conceptual framework of organizational ambidexterity, and this strategic ambidexterity may cultivate firms' adaptive capabilities in transition economy context (see Fig. 1)..

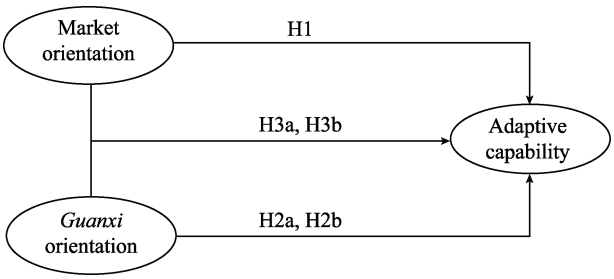

Fig. 1 Research Model

3 Hypothesis Development

3.1 The Effect of MO on Adaptive Capability

MO emphasizes the importance of responding to market information and customer needs, thus treating the creation and maintenance of customers' value as a priority (Slater and Narver, 1998). Relying on closely tracing customers and competitors, market-oriented firms could seize the advantage of timely information acquisition, which facilitates opportunity seeking and leveraging. The previous literature also indicates that the acute observation of changing environment is a key premise of firms' adaptation (Lawson and Samson, 2001). Once customer demands change, market-oriented firms are capable of reconfigurating resources rapidly enough to develop appropriate new

products/services and improve processes, resulting in an advanced adaptive capability (Day, 1994; Slater and Narver, 1998).

In addition, MO stresses treating resource profile and market information as a whole and firms should allocate and utilize them across functions uniformly to better serve customers (Narver and Slater, 1990). Thus, cross-functional coordination enhances the effectiveness of firms' responses to turbulent environment, by successfully integrating multiple functions to pursue opportunities (Jaworski and Kohli, 1993). Therefore, we propose that:

Hypothesis 1 (H1): MO is positively related to adaptive capability of firms in transition economies.

3.2 The Effects of GO on Adaptive Capability

This study has adopted two forms of *guanxi*: business ties and political ties, to characterize a firm's *guanxi*-based strategies (Peng and Luo, 2000; Luo et al., 2012). Political ties refer to top executives' personal connections with various levels of government officials, including central and local government officials, and officials of industrial supportive and regulative institutions (Peng and Luo, 2000). Chinese governments still have considerable power to approve projects and allocate key resources, such as land, bank loans, quotas, and entry licenses. In recent years, central and local governments have released many supportive policies to encourage firms' strategic transformation and technology upgrading. Firms who have better relationships with government officials can gain more political-linked resources, creating an advantage in their renewal. In addition, government officials control critical information on industrial planning, and industrial regulation. Those firms that have better personal connections with government officials can acquire "insider" information more promptly, which is valuable for modifying their strategic planning and pursuing first-mover advantages in the related industry (Acquaah, 2007; Luo et al., 2012). In short, a firm's GO of building good political ties is beneficial to adaptive capability through providing access to resources, information and legitimacy in advance.

However, political ties are a double-edged sword. Overly relying on connections with government officials is likely to diminish firms' autonomy and independency that harm their adaptation. First, firms' daily decisions and managements will be intervened by governments if burdened with heavy debt of favours from political ties. As there are no free meals, all the benefits firms

acquire from the governments have to be paid back in certain forms (Yang, 1994). Overly close relationships with governments will induce government intervening firms' operation and make firms not work as an autonomous entity in the market, leading to the potential misfit with requirements of changing environment (Warren et al., 2004).

Second, large amounts of money and manager's attention have to be devoted to build and maintain better political ties, occupying the otherwise attention of addressing environmental shifts. What's more, the tenure of government officials is relatively short, which means that managers must cultivate and develop new relationships continuously to keep relevant benefits. This decreases their time, effort, and motivation to seek market information, resulting in poor responding to environmental changes (Zhou et al., 2005).

Third, overly close connections with government officials may lower firms' ethical standards and even lead to law-breaking activities, because actions with political ties are often in the "grey zone" of laws (Warren et al., 2004). Some firms may abuse their political ties that lead to ossified thinking logics, hindering the formation of adaptive capability. In conclusion, we argue that the positive effects of political ties will decline after reaching a threshold. Thus, we propose that:

Hypothesis 2a (H2a): Political ties have an inverted-U shaped relationship with adaptive capability of firms in transition economies.

Business ties refer to top executives' personal connections with their counterparts in other firms (such as suppliers, customers, and competitors) (Peng and Luo, 2000). Possessing personal relationships of higher quality can bring trust, more contracts, and the integration of resources from other entities (Xin and Pearce, 1996), constructing the foundation of adaptive capability. Besides, better business ties can facilitate the sharing and dissemination of key information and tacit knowledge (Park and Luo, 2001), which is conducive to focal firms' quickly sensing the changing market and making appropriate responses, for the following reasons.

First, better connections with suppliers provide firms with access to high quality materials, good service, and timely delivery. Firms can also have longer payment period, and enjoying more slack spaces to respond to the changing market (Peng and Luo, 2000). Second, better connections with customers are beneficial to capture the preferences of customers more precisely. Thus, firms'

adaption in product-market domains will be targeted more appropriately (Chen and Wu, 2011). Third, better connections with other top executives in peer firms can facilitate information sharing, resource integration, alliances building, and address environmental changes together (Acquaah, 2007). In particular, many private firms in China experience poor performance due to the recent global economic turbulence. Better connections with peers could promote collective cooperation by resisting external threat together, thus enhancing every party's adaptation to the changing environment. Thus, we propose that:

Hypothesis 2b (H2b): Business ties are positively related to adaptive capability of firms in transition economies.

3.3 The Interactive Effect of MO and GO

From the perspective of organizational ambidexterity, we argue that in the Chinese context of institutional transition and cultural tradition, MO and GO are more likely to perform as complementarity. On one hand, ambidexterity/duality is rooted in Chinese Yin-Yang philosophy and social culture. Academics indicate that Chinese have a long tradition of upholding harmony and holistic perspectives, thus they are more likely to seek compromises while encountering conflicts and resolving opposing actions (Ji et al., 2000; Cheung et al., 2003). Therefore, executives who were born and grew in this specific context get used to and are even good at balancing two competing ends, such as market- and *guanxi*-related strategies. On the other hand, private firms in Chinese institutional transition often face liability of smallness. It is generally more difficult for them to acquire resources, reputation, and so forth. The pressure to implement market- and *guanxi*-related strategies simultaneously is higher for them to survive and develop (Peng, 2003; Luo and Rui, 2009). Even though some top executives themselves are not good at "ambidextrous" or paradoxical thinking, they tend to build a team with capable and complementary members and form ambidextrous leadership structure. Briefly, Chinese firms shape "market-*guanxi*" ambidexterity through paradoxical thinking or leadership structure duality to pursue adaptation and survival in the background of macro institutional and cultural ambidexterity.

Existing literature has suggested that the paradoxical thinking ability of the leader or top management teams is a key premise of coping with internal tensions (Smith and Tushman, 2005). We believe that Chinese private firms can realize the co-existence of market- and *guanxi*-related strategies through individual

paradoxical thinking or ambidextrous leadership structure. In short, by combining MO, which centres on creating superior customer value, and GO, which highlights the business habits and relational norms, firms could gain a complementary effect in the resource integration and reconfiguration that help them adapt to changing and complex environment more effectively. Since GO can be further classified as building political vs. business ties, we next specifically examine the interactions between MO and the two types of GO on firms' adaptive capability.

The interaction of MO and political ties. MO can enhance the effect of political ties on adaptive capability. First, with higher level of MO, firms' usage of political ties is more focused and targeted. MO highlights collecting and analysing market information to create superior customer value (Kohli and Jaworski, 1990), which can offer references and criteria on what should be acquired via political ties and whom they should interact with. Second, being closer to market may adjust the cognitive bias and fixed thinking logic brought by political ties and enhance firms' ability on predicting and responding market changes. More specifically, based on closer connections with customer and market, firms can make more objective judgements on the business environment and avert biased governmental influences and bureaucratic practices. Thus, when firms' decisions surround customers' needs and competitive actions, their political ties bring more benefits to deal with changes appropriately.

Political ties can also contribute to MO's effect on firms' adaptation. As mentioned above, the Chinese governments still control many key information and resources (Peng and Luo, 2000). With better political ties as conduits of these information and resources, firms are able to minimize the delay of responding to customers' demands and facilitate the implementation of MO. In addition, in some situations, political ties act as a "protection umbrella", resisting various external intervenes and threats. Thus, political ties favour MO to serve customers better and offset risks brought by dynamic conditions (Luo et al., 2008). Based on the above discussion, we propose that:

Hypothesis 3a (H3a): MO and political ties have a positive interactive effect on adaptive capability of firms in transition economies.

The interaction of MO and business ties. MO promotes the effect of business ties to be more targeted and reliable. First of all, with higher level of MO, firms gain more precise and appropriate information from business ties. This helps

firms predict, confirm, and respond to market changes more quickly. At the same time, various resources derived from business ties can be integrated more efficiently to support MO strategies and thus the adaptation to environmental changes (Chung, 2011; Li et al., 2008). Moreover, the effect of business ties on adaptation is more reliable aiding by MO. While the role of business ties may be interrupted by the turnover of executives, MO is advantageous to formalize and institutionalize the cultivation and maintenance of business networks, shifting the personal relationships to more stable inter-organizational networks.

Business ties are also helpful to the implementation of MO to enhance adaptive capability, for the following two reasons. First, business ties enhance the implementation of MO by more conveniently access to market information from business partners (Li et al., 2008). Second, business ties can perform as the lubricant of inter-organizational cooperation, and enable firms to gain trust from suppliers and customers, which facilitates the integration and reconfiguration of resources from different entities. For example, to pursue MO goals, Avon successfully introduced its unique direct-selling model to China through the brokage of its business partners (Chung, 2011). Thus, we propose that:

Hypothesis 3b (H3b): MO and business ties have a positive interact effect on adaptive capability of firms in transition economies.

4 Methods

4.1 Sample and Data Collection

To test our hypotheses, we collected survey data from private enterprises in the Pearl River Delta area of China. This area is one of representative regions with evolutionary economic reforms and fast institutional transitions in China. We designed our questionnaire based on previous established scales (e.g., Narver and Slater, 1990; Peng and Luo, 2000; Zhou and Li, 2010) and asked 20 firms randomly in advance for pilot tests. Slight adjustments have been done to make the questionnaire more reasonable and friendly for interviewees according to feedbacks from this pre-test.

A list of 435 executives (e.g., CEO, VP, senior managers) with basic information was randomly generated from a population of members of Guangdong Federation of Industry and Commerce. We sent questionaries to those managers and contacted with them through telephones or emails. In the

following three months, we received 247 responses. Among them, 28 were incomplete with missing data or unclear answers, and 34 were filled by those who were not top executives. Therefore, we eventually got 185 usable questionnaires with a response rate of 42.53%. The sample distribution shows that 22.7% of respondents are board of directors, 36.76% are the general managers, and 40.54% are top management team members. The industry distribution shows that 55.14% are manufacturing firms, 44.86% are service companies. The scale of firms shows that 2.7% are of large size firms, 21.08% are medium size firms, and 76.22% are small size firms.

We assessed the non-response bias by comparing the key organizational characteristics between respondents and non-respondents. The result did not find any significant differences in terms of ownership, age, size and industries at the 0.05 level. Thus, non-response bias was not concerned in this study.

As this study collected data through questionnaires, common method variance was likely to exist because the data of independent and dependent variables were all collected from the same corporate executive. Based on Podsakoff and Organ (1986), we used Harman's one-factor test to test the common method variance. Common method variance would exist if (1) a single factor, or (2) a general factor account for the majority of the covariance when all the constructs were entered into a single factor analysis. As we can see from this test, neither of these showed up in the analysis, providing the evidence that common method variance was not a serious problem in this study.

4.2 Measurement

All the measurements were based on the relevant prior literature and proved to be valid and mature measures. We adopted a 5-point Likert scale in the measures (1 = strongly disagree; 5 = strongly agree). The measurement of adaptive capability is based on Zhou and Li (2010) and mainly investigates the firm's ability of coping and adapting to market and environmental changes. MO (i.e., the indicator of market-related strategy) is measured by items adopted from Narver and Slater (1990) and Zhou et al. (2008). More specifically, we treat MO as a second order factor, which includes three sub-factors: customer orientation, competitor orientation and cross-functional coordination (see Table 2b). Political ties and business ties (i.e., the indicator of *guanxi*-related strategy) are measured by items based on the studies of Xin and Pearce (1996) and Peng and Luo (2000).

The detailed information about each measurement can be seen in Tables 2a & 2b.

Based on previous studies, we also controlled the effects of organizational size and age, industry type, technological orientation and environmental turbulence in the regression model. Technology orientation was adopted from Gatignon and Xuereb (1997), which captures firms' willingness and readiness to pursue and accept state-of-the-art technologies. Environment turbulence was adopted from Miller (1987), measuring the degree of change and unpredictability of market environments.

Table 2a Constructs' Reliability and Validity

Constructs and items	Loading	Cronbach's α	AVE	C.R.
Adaptive capability		0.820	0.653	0.848
1. We are capable of reacting properly to changes in the market	0.77			
2. Our existing competency can withstand changes in the industry	0.92			
3. Our existing competency can withstand the challenges brought about by external environment crisis	0.72			
Business ties		0.775	0.555	0.788
Our senior managers have good connections with managers of:				
1. Our suppliers	0.74			
2. Our buyers or distributors	0.81			
3. Our competitors	0.68			
Political ties		0.912	0.782	0.915
1. Our senior managers have good personal relationships with officials in various levels of governments	0.91			
2. Our senior managers have good connections with officials in regulatory and supporting organizations, such as tax bureaus, state banks, and commercial administrative bureaus	0.82			
3. Our senior managers have good relationships with regional government officials	0.92			
Market orientation (see Table 2b for sub-items)		0.812	0.615	0.827
1. Customer orientation	0.81			
2. Competitor orientation	0.80			
3. Inter-functional coordination	0.74			

Note: C.R. refers to composite reliability, AVE refers to average variance extracted.

Table 2b Market Orientation: Reliability and Validity

Constructs and items	Loading	Cronbach's α	AVE	C.R.
Customer orientation		0.782	0.690	0.869
1. Our business objectives are driven primarily by customer satisfaction	0.83			
2. Our strategies are driven by beliefs about how we can create greater value for customers	0.80			
3. We emphasize constant commitment to serving customer needs	0.86			
Competitor orientation		0.737	0.620	0.830
1. We regularly share information concerning competitors' strategies	0.82			
2. We emphasize the fast response to competitive actions that threaten us	0.81			
3. Our top managers regularly discuss competitors' strengths and weaknesses	0.73			
Inter-function coordination		0.726	0.588	0.811
1. We regularly communicate information on customer needs across all business functions	0.75			
2. We frequently discuss market trends across all business functions	0.79			
3. All of our business functions are integrated in serving the needs of our target markets	0.76			

4.3 Reliability and Validity

We used SPSS 16.0 and LISREL 8.80 to test the construct reliability and validity. The result of reliability test indicated that Cronbach's α for each construct exceeds the suggested minimum of 0.7, indicating good internal consistency, which supports sufficient reliability.

We used confirmative factor analysis to assess the construct validity. The result showed that the measurement model fit well with the observed data (CFI = 0.99, GFI = 0.95, NFI = 0.96, RMSEA = 0.062, and χ^2/df = 1.17). In addition, average variance extracted (AVE) values of each construct were greater than the cut-off point of 0.5, in supporting of the convergent validity. Discriminant validity test was based on the following logic: if the square root of AVE is larger than the correlation between each pair of constructs for that construct, this construct has sufficient validity (Fornell and Larcker, 1981). Table 3 showed that the square roots of AVE are greater than all the correlation values on its row and column, therefore confirming the discriminant validity.

Table 3 Correlation Matrix and Discriminate Validity

	Mean	S.D.	1	2	3	4	5	6	7	8	9
1. Adaptive capacity	3.82	0.676	**0.808**								
2. Market orientation	3.99	0.529	0.240**	**0.784**							
3. Business ties	4.08	0.648	0.258**	0.398**	**0.745**						
4. Political ties	3.58	1.046	0.164**	0.187*	0.090	**0.884**					
5. Firm age	2.92	1.026	0.076	–0.013	–0.053	0.152*	1				
6. Firm size	1.26	0.500	0.145*	0.001	–0.039	0.230**	0.254**	1			
7. Industry type	0.55	0.499	0.019	0.047	0.002	0.186*	–0.051	0.005	1		
8. Technology orientation	3.38	1.011	0.232*	0.359*	0.244*	0.261*	0.074	0.183*	0.016	1	
9. Environment dynamism	3.61	0.755	0.178*	0.124*	0.202*	–0.046	–0.045	–0.059	0.135	0.144*	1

Note: ** indicates correlation significant at the 0.01 level (two-tailed), * indicates correlation significant at the 0.05 level (two-tailed). The data on the diagonal (in black font) is the square root of AVE of the construct.

4.4 Regression Analysis

We centralized all the variables to avoid multi-collinearity problems. Variance inflation value (VIF) of each construct was much lower than the cut-off point of 10, indicating no multi-collinearity problem. A hierarchical regression analysis was used to test our hypotheses. We put the constructs into the regression model step-by-step based on the suggestions of Cohen (2003). Table 4 showed the final regression results with the dependent variable as adaptive capability. Model 1 included all control variables. Model 2 included the main effect constructs. The result indicated that MO had a significant positive effect on adaptive capability ($\beta = 0.156$, $p < 0.01$), which supported hypothesis 1. It also supported hypotheses 2a and 2b as political ties had a significant inversed-U effect on adaptive capability (β value of the square of political ties = –0.115, $p < 0.05$) and business ties had a significant positive effect on adaptive capability ($\beta = 0.285$, $p < 0.01$). In Model 3, the moderators and interaction items were entered into the regression equation, and the results indicated a positive effect of interaction constituted by MO and business ties on adaptive capability ($\beta = 0.161$, $p < 0.05$) and a positive effect of interaction constituted by MO and political ties on adaptive capability ($\beta = 0.177$, $p < 0.05$). Thus, hypotheses 3a and 3b were both supported.

Table 4 Hierarchical Multivariate Regression ($N = 185$)

	Model 1	Model 2	Model 3
Step 1 (control variables)			
Firm age	0.048	0.085	0.058
Firm size	0.13*	0.106	0.072
Industry type	–0.081	0.051	0.023
Technology orientation	0.255***	0.117**	0.173*
Environment turbulence	0.193***	0.146***	0.135**
Step 2 (main effect)			
Market orientation		0.156***	0.176***
Political ties		0.127***	0.214**
Political ties squared		–0.115**	–0.242***
Business ties		0.285***	0.278***
Step 3 (interaction effect)			
Market orientation* Political ties			0.161**
Market orientation* Business ties			0.177**
R^2	0.132	0.218	0.287
Adjusted R^2	0.082	0.139	0.19
ΔR^2 (Sig.)		0.086***	0.069***
F value	2.639**	2.032***	2.781***

Note: * indicates $p < 0.05$, ** indicates $p < 0.01$, *** indicates $p < 0.001$ (two-tailed).

5 Discussion

Using the data of private firms in China, this study investigates the effects of MO and GO on adaptive capability. The findings show that MO has a significantly positive effect on adaptive capability. It indicates that paying close attention to customer needs and creating more value for customers are effective rules to improve firms' adaptive capability to cope with challenges in the hostile business environment. This study also finds out different impacts of informal relationships with business partners and government officials on adaptive capability. On one hand, business connections are positively related to adaptive capability, through increasing mutual trust, promoting cooperation, and facilitating information sharing and resource integration. On the other hand, political connections have

an inverted U-shaped effect on adaptive capability. Although political ties are beneficial for firms to get resources and legitimacy and adapt to environment, too much political ties require large amounts of money and attention and diminishes firms' autonomy on market-oriented decision making. Thus, political tie is a double-edged sword, which can be harmful to firms' adaptation if over-employed. Moreover, positive interactions of business ties and political ties with MO on adaptive capability are also supported, indicating the importance of market-*guanxi* ambidexterity.

5.1 Theoretical Contributions

We attempt to make theoretical contributions in three aspects. First, this paper represents a proactive effort to combine organizational ambidexterity and strategic orientation and has implications for both research fields. Organizational ambidexterity is an emerging paradigm in management research, but existing knowledge about ambidexterity leaves a relative blank zone in strategic management (Raisch and Birkinshaw, 2008). Our research investigates the impact of strategic ambidexterity on adaptive capability, providing new insights and extending the boundary of strategic thinking. Moreover, relying on the perspective of ambidexterity, our research proposes a new insight on the controversial topic of 'complementary or substitutable' relationship between market- and *guanxi*-based strategy in transition economies (e.g., Goldstein, 1995; Luo et al., 2012). This study argues that market- and *guanxi*-based strategies constitute an ambidexterity due to the requirements of coping with the dualities in the economic, institutional, and cultural background in China. This represents a further attempt to address strategic choice issues in transition economies (e.g., Peng, 2003).

Second, we enrich studies on antecedents to adaptive capability. Besides empirically examine the relationship between MO and adaptive capability, we also try to theorize GO, an important strategic orientation for firms in transition economies (Peng, 2003), to be a new antecedent of adaptive capability. Theoretical reasoning based on ambidexterity perspective and empirical results indicate that both direct impacts and complementary impacts of MO and GO strongly exist in shaping firms' adaptive capability. Our findings highlight that by properly matching business and political ties and MO, managers in transition economy can more easily reach their business objectives, even in fast changing

contexts.

Third and lastly, this research complements prior studies on the mechanism of how managerial networks function. Existing studies generally argue that social capital embedded in managerial ties would be positively influencing dynamic capability (Acquaah, 2007; Chen and Wu, 2011). Differently, this study finds out that over close political ties can harm to adaptive capability, which contributes to a more nuanced understanding of *guanxi* dynamics.

5.2 Practical Implications

This study provides important practical implications for managers as well. First, focusing on customers and competitors are of continuous importance to strategic decision making, especially since China transits toward to more market-based economy. With higher level of MO as decision making rules, firms' opportunity seeking and identification will be facilitated (Slater and Narver, 1998), and responses to external opportunities or threats will be more effective (Jaworski and Kohli, 1993), thus improving firms' adaptation to the changing environment.

Second, private enterprises should strive to cultivate paradoxical thinking in this complicated and changeable environment like China. With ambidextrous skills of applying both high MO and high GO, firms may enjoy a better competitive position in their industries and better survive and prosper in dynamic conditions.

Third and lastly, managers should be fully aware of the function of political ties as a double-edged sword. While maintaining good *guanxi* with government officials continues to be a useful strategy, attention must be paid to avoid arrogant decisions that neglect customer needs under government protection (Luo et al., 2012). For managers who are keen on building political ties, always keeping a clear mind to understand the independence and autonomy is especially important. They should avoid chasing the business model of colluding with government officials and ensure the company's indispensable strategic flexibility and environmental adaptability.

5.3 Limitations and Future Research

There are limitations in our study, which offer directions for future research. First, using cross-sectional data to test our hypotheses is hard to capture the dynamic

process of the capability evolution. Thus, longitudinal research is preferred in the future to depict the mechanism of how strategic orientation influences adaptive capability dynamically. Second, future research can explore the effect of strategic orientation on adaptive capacity in other regions of China or other transition economies, or firms with different ownerships. Third, factors such as organizational resources and structures (Raisch and Birkinshaw, 2008) other than paradoxical thinking and cultural traditions may also impact the organizational ambidexterity. Future research can explore their impacts on the usefulness of market-*guanxi* ambidexterity.

6 Conclusion

This research explores whether market- and *guanxi*-based strategies play complementary or substitutable roles in shaping adaptive capability. Results of a survey of 185 private firms in China reveal that both MO and business ties positively influence adaptive capability, whereas political ties have inverse U-shaped impact on it. Furthermore, a proper match between MO and GO is important to enhance adaptive capability of transition economy firms. The outcomes of this study call for an ambidextrous decision making to adapt to environmental duality influences from both markets and governments in transition economies.

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