Asian Businesses in a Turbulent Environment

Uncertainty and Coping Strategies

Edited by Geng Cui

and T. S. Chan

Asian Businesses in a Turbulent Environment

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Preface and Acknowledgments

The 2014 conference of the Academy of International Business Southeast Asia Region (AIB-SEAR) Chapter returned to Macau 11 years after the SARS (Severe Acute Respiratory Syndrome) epidemic broke out in southern China. The 2003 pandemic, although eventually contained by concerted efforts of nations, created panic across the globe; it brought the local stock markets and housing markets to a new low and the regional economies to a standstill. The 2003 AIB-SEAR annual conference, due to take place in Macau, was canceled. Ironically, both Hong Kong and Macau are referred to as Special Administrative Regions (SARs) of China. The empty streets and shopping malls were a stark reminder of how unexpected events can trigger a shock wave and paralyze the fragile systems that we live in.

Asian economies have been no stranger to crises and uncertainties, such as the Asian Financial Crisis in 1997, the SARS pandemic, and the Financial Tsunami of 2008. How Asian firms cope with crises and remain viable has been of great interest to scholars, practitioners, and policy makers. The theme of the 2014 Macau conference was "Asian Economies and Businesses: Nation States in a Turbulent Environment," based on a suggestion of Professor Shige Makino, who was one of the keynote speakers at the 2013 conference in Bali. At Macau, we were fortunate to have as the keynote speaker Rosalie Tung, then president-elect of the Academy of International Business. Professor Tung shared with the conference participants the challenges facing Asian economies and business organizations.

As both 2013 and 2014 keynote speeches suggested, Asia today commands much attention from business leaders, policy makers, and academic researchers, given the size of its markets, high growth rate, and the increasing wealth of its consumers. The two speakers also converged on the challenges facing business organizations in Asia: external shocks due to increasing globalization of economies, regional strife, and conflicts among Asian nations due to geopolitical reasons. Internally, at home and in the region, Asian firms also face mounting pressure from citizens calling for greater democracy and more transparency of policies, slower growth of economies, environmental protection, sustainable development, the upgrading of innovation capabilities, the drive toward internationalization and overseas expansion, and less reliance on

labor-intensive export-oriented manufacturing, to name a few. Business organizations from Asia and Southeast Asia, in particular, face tremendous challenges, which represent both risks and opportunities. How they meet these challenges and rise above them will make a difference to the growth prospects of these economies and those outside the region.

This is the third book from the AIB-SEAR series initiated in 2012 and published by Palgrave Macmillan and consists of a number of papers selected from the Macau conference and several others from invited authors. Part I of the book focuses on the crises and challenges in selected countries of the region, starting with a conceptual piece on crisis by Frank Ng (Chap. 1) and an analysis of institutions during social movements in Taiwan and Hong Kong by Michael Lin (Chap. 2). They are followed by a study of leadership styles for conflict management by Alfred Wong, Dean Tjosvold, and Eva Khong (Chap. 3).

Part II includes five studies on the strategies adopted by firms from and in China to overcome such challenges. Chapter 4 (Geng Cui, Xiaolin Li, Ling Peng, and T. S. Chan) reviews research on the location, choice, and entry mode of Chinese multinationals. Chapter 5 (Prem Ramburuth, Cindy Qin, and Yue Wang) explores the implications for knowledge transfer and cultural shifts due to China's globalization. Chapter 6 (Hui Xu, Yongchun Feng, and Lianxi Zhou) describes the role of knowledge development in the process of overseas expansions of Chinese firms. Chapter 7 (Ku-Ho Lin, Shi-Huei Ho, and Yao-Ping Peng) presents the application of social capital to develop organizational capability. Chapter 8 (Esther Li) reports on the impact of environmental management on the performance of the international suppliers in China.

Asia is vast and diverse. We regret that we have been unable to include studies of businesses in the Middle East and Central Asia. As a result, this book by no means represents a systematic treatment of the challenges facing Asian firms and the viable strategies for them to sustain continuous growth. Rather, we have attempted to showcase recent research findings from this part of the world and hope to inspire more research on these critical issues.

Completion of this project would not have been possible without the assistance of many people. First, we thank the authors for contributing their research to this book. We appreciate the effort of Professors Shige Makino and Daphne Yiu (Chinese University of Hong Kong) in helping us to solicit quality manuscripts. Our special thanks go to Liz Barlow and her team at Palgrave Macmillan for their patience and encouragement. This project and its predecessors would not have been realized without generous support from the Hong Kong Institute of Business Studies and the capable assistance of Vanessa Chan at Lingnan University of Hong Kong. Lastly, I must thank Professor T. S. Chan, the editor of the series, for his support and partnership in this and other projects, and for his leadership of the AIB-SEAR Chapter over the past 12 years. I wish him the best in his retirement.

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Part I

1
The Multiple Facets of Crisis and Its Impact on IPO Underpricing

Frank W. Ng

Introduction

Asian business and economies are not unfamiliar with global and regional crises. In the last two decades, for instance, Asian firms have been facing many challenges such as the Asian financial crisis (Belderbos & Zou, 2005; Wan & Yiu, 2009), political instability within and among Asian nations (Siegel, 2007; Weiner, 2005), and market liberalization in emerging Asian economies (Dau, 2013; Kumaraswamy, Mudambi, Saranga, & Tripathy, 2012). Turbulent environmental conditions pose challenges to national or regulatory policies (Allen, Chakraborty, & Watanabe, 2011; Huang, Wu, Yu, & Zhang, 2015) as well as international and domestic strategies (Boubakri, Guedhami, & Mishra, 2010; Chung, Lee, Beamish, & Isobe, 2010), which greatly affect firm operations, growth, and survival (Belderbos & Zou, 2005; Chung et al., 2010; Dai, Eden, & Beamish, 2013). As Asian economies are growing and integrating with the global market, firms are expected to deal with more frequent and complex crises in the future. It is important to understand the challenges and uncertainties triggered by these global and regional crises.

There has been increasing inquiry into the contribution to management theories by Asian economies and business research (Bruton & Lau, 2008). The objective of this chapter is to contribute to the literature on global and regional crises by providing a more in-depth theorization regarding the multidimensional characteristics of crisis. This is critical because extant conceptualization only provides a simplified, and sometimes homogeneous, view of crisis (Lengnick-Hall & Beck, 2005), which may not be adequate to capture its complex nature and impact on firms. As such, the discussion attempts to move the current literature forward to enrich the conceptualization and thus the classifications of crisis for future research. In particular, a new construct of crisis uncertainty, which is defined as the difficulty in accurately predicting the nature of upcoming crisis, is developed. The premise is that a particular crisis can be described in terms of three dimensions of crisis uncertainty: (1) crisis-state uncertainty, referring to the likelihood that individuals predict the occurrence of the upcoming crisis; (2) crisis-effect uncertainty, referring to the likelihood that individuals predict the impact of the crisis; and (3) crisis-response uncertainty, referring to the extent to which individuals are likely to evaluate and respond to the crisis.

To illustrate how a multidimensional conceptualization of crisis can be used to account for the differing impact on firm strategies and activities, this chapter will use the example of initial public offering (IPO) underpricing. The equity market is one of the important drivers of economic development and the integration of many emerging Asian countries (Naughton, 1999). Also, it is attractive to many international and domestic investors because of the considerable short- and long-term returns, demonstrated by the high oversubscription rates and underpricing values (Agarwal, Liu, & Rhee, 2008; Reber & Fong, 2006). Yet, due to global and regional crises, the Asian equity markets have also been subject to substantial risks and volatility (Ahmad-Zaluki, Campbell, & Goodacre, 2011; Vithessonthi, 2014). Characterized as a turbulent environment, environmental crisis may hamper the intentions of international and domestic firms to go public in these regions as well as the confidence of potential investors to involve in these IPO markets. Grounded in information uncertainty perspective (Milliken, 1987) and effectuation perspective (Sarasvathy, 2001), different levels of crisis-uncertainty dimensions will influence the quantity and quality of information distribution in the IPO market. When the dimensions of crisis uncertainty are high, the information is of less value. As such, IPO insiders, including the pre-listed firm owners and IPO issuers, as well as IPO outsiders such as potential investors, would find it difficult to accurately predict the likely impact of the crisis. As a result, IPO insiders will strategically alter the selling price of their shares to control for loss affordability and to devise environmental contingencies (Sarasvathy, 2001).

The multidimensional conceptualization of crisis offers theoretical contribution and responds to the call for research into richer conceptualization of crisis (Lengnick-Hall & Beck, 2005) and the impact of external environment on IPOs (Certo, Holcomb, & Holmes, 2009). First, the new concept of crisis uncertainty provides insight through more direct and closer examination of the nature of crisis. Through identifying different facets of crisis, further studies are able to more accurately predict and understand the impact of crisis on Asian businesses and economies. This is especially important for understanding how coping strategies and organizational responses effectively deal with crises (Smart & Vertinsky, 1984). In addition to explaining the varying impact on IPO underpricing, such conceptualization of crisis uncertainty can also be applied to other issues of international business such as international expansions (Chung et al., 2010) and cross-border alliances (Belderbos & Zou, 2005). Second, the multidimensional conceptualization of crisis attempts to generalize to most, if not all, types of crisis and therefore allows researchers to develop new theories or taxonomy in classifying and differentiating among crises. Third, this chapter also contributes to the IPO literature by offering an alternative explanation of uncertainty arising from the external environment rather than from conventional information asymmetry during the IPO process (Beatty & Ritter, 1986; Carter & Manaster, 1990). Finally, in addition to considering firm capabilities and strategy formulations, the multidimensional conceptualization of crisis provides guidance for managers operating internationally to more accurately predict a forthcoming crisis and therefore develop more effective coping strategies.

This chapter starts with a brief review of the past and current research of crisis, and follows by proposing a crisis classification system that may account for the differing impact on firms. Next, this chapter introduces the concept of crisis uncertainty and presents examples of how different levels of uncertainty result in different impacts on IPO underpricing. The chapter concludes with a discussion of potential future research.

Crisis: Discontinuous Environmental Change

In studying the impact of organizational environment on firm strategy and performance, researchers have long examined the role of crisis, or discontinuous environmental change (discontinuous change) (Kraatz & Zajac, 2001; Tushman & Romanelli, 1985). For example, they have studied the impact or context of crises such as environmental jolts (Meyer, Brooks, & Goes, 1990), exogenous shocks (Wan & Yiu, 2009), fundamental environmental shifts (Ginsberg & Buchholtz, 1990), upheaval (Danis, Chiaburu, & Lyles, 2010), and conflicts (Dai et al., 2013). Researchers have also explored their impact on firm activities and performance (Boubakri et al., 2010; Chung et al., 2010; Wan & Yiu, 2009), as well as firm responses in facing and managing changes (Dai et al., 2013; Kraatz

& Zajac, 2001; Lengnick-Hall & Beck, 2005). In general, discontinuous change leads to environmental turbulence, which lowers environmental munificence and increases environmental complexity (Dess & Beard, 1984; Kraatz & Zajac, 2001). It 'transforms fundamental properties or states of the system' (Meyer et al., 1990, p. 94). Also it renders existing operations and strategies ineffective, which gives rise to a number of coping or turnaround strategies, including organizational retrenchment and restructuring, executive turnover, and strategic change (Bruton, Ahlstrom, & Wan, 2003).

Although these studies provide significant contributions, (Meyer, Gaba, & Colwell, 2005; Suarez & Oliva, 2005), they tend to assume, with notable exceptions, that crisis is a unidimensional concept, and have examined relatively simple impact on firms. That is, the literature has yet to examine the nature of discontinuous change. However, especially in Asia, there are many different types of crises due to different causes that result in different influences on firm activities and performance. This chapter aims to contribute to the literature by proposing a multidimensional conceptualization of crisis. First, I will discuss two of the possible crisis dimensions implicitly embedded in the past literature.

Regional Scope

In general, environmental scope refers to the number of environmental elements affected by a particular event or crisis (Suarez & Oliva, 2005, p. 1022). A crisis that affects less elements or components of organizational environment leads to a less complex and thus less uncertain environment (Duncan, 1972). Drawing from this insight, future research can examine the regional scope of crisis, referring to the number of countries and regions affected by a particular crisis. Some crises have international or even economy-wide influences. An example is the Asian Financial Crisis, which resulted in widespread economic adversity among almost all Southeast Asian firms across varied industries. Another example lies in the outbreak of SARS, where its infections spread across Asian-Pacific countries. In comparison, some other crises are more localized or regional. For instance, change of regulatory or federal laws and market liberalizations in a particular country are good illustrations of localized crises, which have less direct impact on firms located in other regions and countries. In the Asian context, crisis can be differentiated as local crisis (affecting one country or region only), Asian crisis (affecting several numbers of Asian countries or regions), or international crisis (affecting both Asian and non-Asian countries or regions).

Regional scope of crisis is important, especially in international business research. First, in the face of a crisis with varying regional scope, multinational corporations (MNCs) will experience different levels of impact and complexities. In the context of Asian business groups (Colpan, Hikino, & Lincoln, 2010), for example, international crisis and localized crisis would lead to different impacts on the internal markets of resources and thus both group and subsidiary performance. Business group attributes, such as vertical and horizontal linkages within the group (Yiu, 2011), are expected to be more effective in mitigating the negative impact of crisis by providing a micro-institutional environment that substitutes for market failures brought by crisis. Second, regional scope of crisis also influences a firm's internationalization strategy (Chung et al., 2010). For example, past studies provided evidence that firms that were established and survived under adverse environmental conditions have knowledge in dealing with environmental turbulence (Swaminathan, 1996). Following this, firms would also have varying preference and performance outcomes for international expansions when the home and host countries experience crises affecting differing levels of regional scopes. Say, based on organizational learning perspective, firms in countries or regions under crisis may prefer entering other countries that are also facing a similar crisis.

Endogeneity of Crisis

Sociologists have distinguished the impact of natural from artificial disaster (Erikson, 1994); the major difference lies in the extent to which humans are endogenous, or involved in initiating and knowing about the outbreak of disaster in advance. Similarly, institutional change theorists have conceptualized different processes and outcomes of exogenous and endogenous institutional changes (Hoffman, 1999). Some changes are initiated by exogenous, episodic forces while other changes are initiated by institutional actors toward their own interests (DiMaggio, 1988). Drawing from this insight, researchers can examine the endogeneity of crisis, referring to the causes or parties that initiate a particular crisis. Take political incidents in Asia as examples. Some of the political changes are relatively exogenous in nature, such as the political unrest in Southeast Asia or change in Korean regimes in the 1980s (Dieleman, 2010; Siegel, 2007), where not many firms and managers were able to predict and realize their occurrence in advance. In comparison, some of the other political changes are more endogenous or predictable, which may or may not be initiated by firms. For example, the transfer of sovereignty over Hong Kong from the UK to China in 1997 is a change that all firms and entities were well aware of ahead of time (Carroll, Feng, & Kuilman, 2014).

Endogeneity of crisis is associated with varying impact on firm strategy and performance. When a country or region experiences exogenous crisis, all firms suffer similarly because they do not have much time or information to evaluate the environmental change, strategic effectiveness, and alternative feasibility. However, when a country or region faces an endogenous crisis, firms will have different degrees of understanding of the upcoming crisis and therefore will likely develop different coping or turnaround strategies (Bruton et al., 2003). For example, the institutional environment plays an important role for MNCs in determining their processes and decisions for internationalization (Brouthers, 2002). From the organizational learning perspective, endogeneity of crisis implies different degrees of information about the crisis, which is therefore expected to affect the evaluation of the institutional attractiveness and institutional configurations (Scott, 2005). Another example lies in the impact on the headquarter-subsidiary relationships (Hoenen & Kostova, 2014). Following border agency perspective, endogeneity of crisis is expected to affect headquarter expectations and subsidiary monitoring, and therefore leads to different subsidiary performance.

Regional scope and endogeneity of crisis deserve further examination and conceptualization. This chapter attempts to conceptualize the multidimensional facets of crisis through uncertainty perspective by proposing a new concept of crisis uncertainty, where a crisis can be described in terms of three crisis-uncertainty dimensions.

Crisis Uncertainty and IPO Underpricing

Why IPOs Underprice

The IPO literature has examined several reasons for IPO underpricing, which refers to the difference between the close price on the first listing day and initial offer price. On average, IPO underpricing returns vary among countries but generate significant returns (Certo et al., 2009). Conventional wisdom holds that underpricing represents the extent of ex ante uncertainty due to informational asymmetry among IPO stakeholders, including IPO insiders (i.e., the IPO firm owners and underwriters) and IPO outsiders (i.e., potential investors) (Beatty & Ritter, 1986). The reputations of underwriters and auditors are therefore associated with the level of IPO underpricing (Carter & Manaster, 1990). More recent research examined the role of lock-up periods to mitigate the exploitation of such ex ante uncertainty by IPO insiders to generate personal gains (Brav & Gompers, 2003). This perspective assumes that all IPO stakeholders are seeking to close the gap of information asymmetry. Another perspective suggests that underpricing is a signaling and advertising mechanism to attract potential shareholders (Allen & Faulhaber, 1989; Booth & Chua, 1996). While potential investors view information asymmetry here as investment opportunities, IPO insiders consider IPO underpricing as a confidence in future cash flow (Brau & Fawcett, 2006). Therefore, high oversubscription rates boost up the IPO aftermarket price. This perspective assumes that IPO stakeholders are opportunistically searching for such information asymmetry. Both perspectives share the common understanding that an IPO is regarded as a corporate entrepreneurial behavior and that information asymmetry hinders the accurate prediction of the actual valuation of stock price and firm quality, and therefore leads to IPO underpricing.

Although researchers have paid relatively less attention to the relationship between external crisis and IPO performance, we have some insight into the connection. Global and regional crises can affect the external opportunities of all IPO stakeholders. For example, environmental uncertainty affects the availability of financial alternatives (Marshall, 2004) as well as managerial understanding of the environment (Walters, Kroll, & Wright, 2010), both of which influence the accurate valuations and thus IPO performance. Also, turbulent environmental conditions lead to a 'cold' IPO market (Agarwal et al., 2008; Certo et al., 2009), which is characterized by low IPO volume and underpricing, due to lower interest from both IPO issuers and investors. Building on these notions, this chapter utilizes uncertainty perspective to examine the impact of crisis on IPO underpricing.

Crisis Uncertainty

Environmental uncertainty has its roots in understanding environmental change, where it is generally defined as the inability to accurately predict the likelihood of future changes in the environment (Downey & Slocum, 1975). Among various conceptualizations of uncertainty, Milliken's (1987) work laid the foundation for the theorization that perceived environmental uncertainty in describing the general environment extended across a particular period. Managers can experience three types of environmental uncertainty: state uncertainty, effect uncertainty, and response uncertainty. State uncertainty refers to the uncertainty of the change in general environmental states. Effect uncertainty concerns the cause-and-effect relationships between the environment and organizations. Response uncertainty addresses uncertainty regarding decision making and outcomes (Milliken, 1987, pp. 136–138).

Parallel to this line of development, this chapter builds on prior conceptualization of perceived environmental uncertainty and proposes the construct of 'crisis uncertainty'. Crisis uncertainty is defined as the difficulty in accurately predicting the nature of upcoming crisis. Although it is built on past ideas of perceived environmental uncertainty, crisis uncertainty is conceptually distinct as it is explicitly an event-specific concept. While perceived environmental uncertainty applies to managerial perceptions of the general environment, or of particular environmental aspects, for a period of time, crisis uncertainty focuses on the uncertainty of a particular major environmental event. In other words, the unit of analysis for crisis uncertainty is the event of change.

Crisis uncertainty is proposed to consist of three dimensions: (1) crisis-state uncertainty; (2) crisis-effect uncertainty; and (3) crisis-response uncertainty. Each dimension of crisis uncertainty pertains to the occurrence, impact, and response in facing a particular crisis. The higher each dimension of crisis uncertainty is, the more difficult and thus less likely it is for firms to predict the corresponding dimensions of crisis. In particular, the first dimension, *crisis-state uncertainty*, is defined as the likelihood in predicting the occurrence of crisis. High levels of crisis-state uncertainty imply that firms are less likely to predict the occurrence in advance. The second dimension, *crisis-effect uncertainty*, is defined as the difficulty in predicting the impact of crisis. High levels of crisis-effect uncertainty imply that firms are less likely to predict both the short- and long-term impact of crisis uncertainty during the crisis. The third dimension, *crisis-response uncertainty*, is defined as the difficulty in predicting the response in dealing with a particular crisis. High levels of crisis-response uncertainty imply that firms are less likely to predict and evaluate the effectiveness of particular strategic responses to deal with the crisis.

In this chapter, the premise is that a particular crisis can be described in terms of these dimensions of crisis uncertainty. Take a hurricane for example. Firms experience three types of crisis uncertainty in facing an approaching hurricane. Crisis-state uncertainty represents the extent to whether and when a hurricane will approach the firm's location. Even if the weather forecast predicts the hurricane, it does not directly cue the potential impact. Crisis-effect uncertainty represents the extent of potential impact of the hurricane, such as the physical destruction of operational facilities and disruption of normal operations. Finally, crisis-response uncertainty indicates the ambiguity to respond to coping with the direct disruption of the hurricane, as well as whether a new strategy should be carried out in the aftermath of the disaster. Table 1.1 lists and defines the three dimensions of crisis uncertainty.

Table 1.1 Crisis uncertainty dimensions

Crisis uncertainty	**Definition**	**Hurricane example**
Crisis-state uncertainty	Difficulty in predicting the occurrence of discontinuous change	Whether and when a hurricane will approach
Crisis-effect uncertainty	Difficulty in predicting the impact of discontinuous change	What is the potential impact of the hurricane
Crisis-response uncertainty	Difficulty in predicting the response in dealing with a particular discontinuous change	Whether and how to respond to cope with the disruption of the hurricane

Table 1.2 Fundamental types of crisis and corresponding levels of crisis uncertainty

Crisis-state uncertainty	**Crisis-effect uncertainty**	
	Low	High
Low	Low-low Crisis uncertainty: low	Low-high Crisis uncertainty: medium
High	High-low *Crisis uncertainty: medium*	High-high *Crisis uncertainty: high*

In addition, crisis may be identified and classified when these dimensions are considered simultaneously. In particular, crisis-state uncertainty and crisis-effect uncertainty describe and relate to different aspects of uncertainty brought by a crisis. Therefore, by considering the two dimensions as either high or low, combinations of different levels of crisis uncertainty dimensions would lead to four possible fundamental types of crises. For example, as shown in Table 1.2, a crisis with high crisis-state uncertainty and high crisis-effect uncertainty (high-high crisis) is more unpredictable in terms of its occurrence and impact. That is, it is initiated so suddenly that few actors adequately understand its arrival. Its actual impact on firms and their environments is also unknown. On the contrary, a crisis with low crisis-state uncertainty and low crisis-effect uncertainty (low-low crisis) is more predictable in terms of its arrival and impact. It can be a long-term pending crisis that a lot of actors have acknowledged is uncertain and therefore are better prepared to deal with it. They are more likely to formulate, implement, and evaluate appropriate coping strategies to address the uncertainty of the low-low crisis. Future research should further examine these fundamental types of crisis, where different types of crisis bring different levels of crisis uncertainty.

Drawing on information uncertainty perspective (Milliken, 1987) and the effectuation perspective (Sarasvathy, 2001), environment serves as source of information about resource availability and industry competition (Dess & Beard, 1984); and uncertainty results from imperfect information (Rotschild & Stiglitz, 1976). Therefore, in the IPO context, uncertainty does not simply arise from information asymmetry between IPO insiders and outsiders, it can also result from crisis or other uncertainties that provide varying volume and value of information to all IPO stakeholders. That is, the expectation and accuracy of valuation of the newly listed firms will be further discounted by crisis. Information of high crisis uncertainty represents low quantity and quality, where it may reduce the possibilities to accurately understand and predict the possible impact of the crisis, as well as to evaluate the IPO activities. Under highly uncertain and unpredictable conditions, Sarasvathy (2001) proposes that economic actors would focus on the controllable aspects of the environment, and make decisions based on affordable loss or acceptable risks, especially in the entrepreneurial settings. Also, economic actors would be keen on exploiting environmental contingencies instead of existing internal resource and knowledge. In such uncertain context, pre-listed firm owners and IPO issuers would consider strategic actions including altering the initial offer price to control for loss affordability and to seek environmental contingencies (Sarasvathy, 2001).

From the insiders' view, pre-listed IPO owners and IPO issuers are exposed to greater risks in achieving liquidity (Booth & Chua, 1996) or cashing out (Brav & Gompers, 2003) under high crisis uncertainty. Also, unlike in non-crisis periods, the signaling or advertising functions of IPO underpricing is less salient during crisis. Although crisis imposes greater challenges in accurate valuations, the insiders have greater incentives to achieve successful IPO as environmental contingencies under affordable risk, and thus reduce underpricing.

Proposition 1 IPO facing crisis have lower IPO underpricing than IPOs before the crisis.

The following sections address how each dimension of crisis uncertainty influences IPO underpricing and develops the propositions for future research.

Crisis-State Uncertainty The first dimension of crisis uncertainty is crisis-state uncertainty, which is defined as the likelihood in predicting the occurrence of crisis. It addresses uncertainty in understanding the kind of crisis that is coming, as well as when and how likely it is the particular change will arrive. As Milliken (1987, p. 136) remarked, 'an inability to predict whether Congress will deregulate one's industry as well as uncertainty about whether a key labor union will call for a nationwide strike' are manifestations of crisis-state uncertainty. Crisis-state uncertainty is of high value when an individual is less able (1) to realize the pending crisis; and (2) to predict when such change is likely to approach. On the other hand, crises that progress through prolonged periods of discussions and heightened awareness in the environment can be characterized by low crisis-state uncertainty. Some other unexpected crises, such as the Asian financial crisis, can be characterized by high crisis-state uncertainty. It is important to note that crisis-state uncertainty is event-specific and therefore a low crisis-state uncertainty of a particular crisis does not infer that the environment is stable.

IPO stakeholders are more likely to receive clearer and more accurate information regarding the likelihood of occurrence of the pending crisis if the crisis is of low crisis-state uncertainty, as opposed to a crisis of high crisis-state uncertainty. In such a situation, additional crisis-state uncertainty does not further discount IPO valuations. In the valuation process, pre-listed shareholders and IPO issuers would be likely to consider the upcoming crisis. They have greater extent of loss affordability for the 'worst-case scenario' in the IPO activity. Also more plentiful environmental contingencies lead IPO stakeholders to view more opportunities in the environment other than the IPO. As a result, they have fewer incentives to reduce IPO underpricing.

Proposition 2 IPOs facing crisis with low crisis-state uncertainty have higher IPO underpricing than that with high crisis-state uncertainty.

Crisis-Effect Uncertainty The second dimension of crisis uncertainty is crisis-effect uncertainty, which is defined as the difficulty in predicting the impact of crisis. It addresses uncertainty in understanding how the original environmental condition is distorted by the crisis and how the particular crisis progresses. Crisis-effect uncertainty is high when an individual is less able (1) to understand the changing pattern amid a particular crisis; and (2) to predict the ultimate and accumulated impact of the crisis. When a certain crisis creates a predictable or relatively stable impact, it can be characterized by low levels of crisis-effect uncertainty.

What firms need to be concerned about is the potential severity and timing of the effects of the crisis. Alternatively, when a particular crisis undermines environment through continuous fluctuations without indication of short-term and long-term impact, it can be characterized by high levels of crisis-effect uncertainty. Therefore, the duration of the crisis is positively related to the crisis-effect uncertainty.

IPO stakeholders are more likely to accurately evaluate the possible consequences of the impact of the pending crisis if the crisis is of low crisis-effect uncertainty, as opposed to a crisis of high crisis-effect uncertainty. Similarly, additional crisis-effect uncertainty does not further discount IPO valuations. Although the pending crisis creates ambiguities in the valuation process, IPO insiders are likely to anticipate the short- and long-term influences of the crisis on the stock performance. Once they are prepared for the affordable risk situations and evaluate potential environmental contingencies, they have fewer incentives to reduce IPO underpricing.

Proposition 3 IPOs facing crisis with low crisis-effect uncertainty have higher IPO underpricing than that with high crisis-effect uncertainty.

Crisis-Response Uncertainty The third crisis uncertainty dimension is crisis-response uncertainty, which is defined as the likelihood in predicting the response in dealing with a particular crisis. Distinct from the other two dimensions of crisis uncertainty, crisis-response uncertainty relates to uncertainty regarding how firms, specifically IPO firms, strategically respond to the crisis. It accounts for how likely available or feasible response options are for dealing with a particular crisis, and how predictable the outcomes of each response action are. Crisis-response uncertainty is of high value when an individual is less able to (1) identify and formulate well-developed or feasible alternatives and (2) confidently evaluate the effectiveness of the decision to be made in alleviating upcoming disturbance and grasping newly created opportunities (Meyer, 1982). On the other hand, when a certain crisis can be faced in advance and relevant knowledge to deal with it effectively is present, it can be characterized by low levels of crisis-response uncertainty. That is, crisis-state and crisis-effect uncertainty of a crisis determines the effectiveness of response strategies (Ashill & Jobber, 2010).

IPO stakeholders are more likely to receive information of high value regarding whether and how the firm is likely to deal with the pending crisis if the crisis is of low crisis-response uncertainty, as opposed to a crisis of high crisis-response uncertainty. In a similar vein, additional crisis-response uncertainty does not further discount IPO valuations. As potential stakeholders are sensitive to the upcoming strategic responses of the to-be-listed firms, which significantly influence their future market performance and thus their returns, pre-listed owners and IPO issuers would be more likely to take these strategic responses into consideration. These IPO insiders would more actively formulate strategic responses under affordable risks to assure potential investors about the positive future despite concurrent adverse environmental conditions.

Proposition 4 IPOs facing crisis with low crisis-response uncertainty have higher IPO underpricing than that with high crisis-response uncertainty.

Preliminary Evidence

Hong Kong provides an appropriate empirical setting for examining the impact of crisis. Hong Kong has faced several global and regional crises in the last two decades, including the bursting of the tech bubble in 2001, the outbreak of SARS in 2003, and the 2008 Global Financial Crisis.

Figure 1.1 depicts the quarterly IPO underpricing trends during the period of 2000–2013. As shown, IPO underpricing dropped drastically, with similar patterns, during the two financial crises (indicated by dashed lines). For example, the Global Financial Crisis in 2008 was initiated by the financial meltdown in the USA in late 2007, and resulted

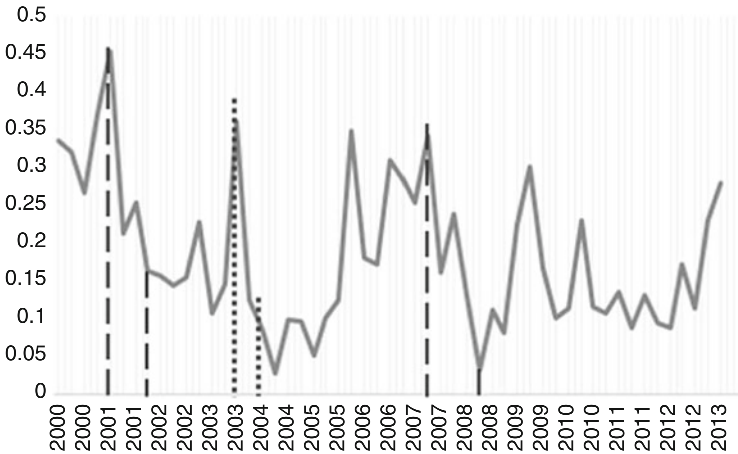

Fig. 1.1 Quarterly IPO underpricing in Hong Kong, 2000–2013

in the threat of total collapse of too-big-to-fail institutions, the bailout of banks by governments, and downturns in stock markets around the world. In the case of Hong Kong, IPO underpricing dropped by 90 % from the 2007 peak to the end of 2008. More robust analysis is necessary in the future to examine the impact on IPO underpricing.

To illustrate the difference in dimensions of crisis uncertainty, IPO underpricing also dropped drastically during the 2003 SARS outbreak (indicated by dotted lines). While SARS also disrupted the economy of Hong Kong, the outbreak differs from the two economic crises in terms of duration and impacts. That is, it is expected to have different levels of crisis-effect uncertainty. As shown in Figure 1.1, the crisis of the SARS outbreak had different impacts on IPO underpricing in terms of its duration, intensity, and patterns. It is plausible because SARS (or disaster in general), compared to the economic crises, appeared suddenly and created entirely unexpected shocks to business environments and decision makers in firms. However, it is easier to predict a disaster's departure as the situation becomes more controllable and more knowledge is gained. Therefore, it is expected that an environmental crisis, or disaster, will have different impacts on IPO underpricing than an economic crisis.

Discussion and Conclusion

Global and regional crises are common, especially for Asian business and management. They have wide impact across many business functions and strategies. In the IPO context, crisis provides information of lower volume and quality that challenges the accurate valuations of IPO offering prices, as well as the understanding of the future prospect. However, a unidimensional conceptualization of crisis may be inadequate in understanding its complex impact and addressing more frequent and complex future crises. This chapter aimed to contribute to the literature by providing a more in-depth theorization of the nature of crisis, in particular proposing a multidimensional conceptualization of crisis. The primary objective was to provide a framework for conceptualizing crisis that offers a theoretical explanation of differing impact on firm strategies and activities.

In addition to identifying different fundamental types of change, future research should also explore 'crisis theories', or modify existing theories in accounting for the differential impact of crises. To the best of my knowledge, there is thus far no concrete theoretical perspective explaining the impact of crisis, or discontinuous change. Drawing from conventional environmental munificence and complexity, or punctuated equilibrium perspective (Tushman & Romanelli, 1985), existing literature on environmental change offers explanations contrasting the environmental conditions of stability with that of turbulence or adversity. A 'crisis theory' should be able to (1) link the impact of crisis to its direct and moderating impact on firm performance and consequences and (2) differentiate varying impact among different dimensions or types of crises. Hopefully the multidimensional conceptualization of crisis is an initial step to shedding light on future crisis-related research. It is believed that the conceptualization of crisis uncertainty in this chapter is applicable to other types of crises, industries, and firm strategies and actions. For instance, internationalization strategy and headquarter-subsidiary relationships are promising areas worthy of further examination under the rubric of crisis uncertainty.

The multidimensional conceptualization of crisis may also have implications for research design and methodology. Currently, most, if not all, research considers crisis as an environmental or event contingency, and does not directly or explicitly measure the occurrence and impact of crisis. In developing the multidimensional conceptualization of crisis, future research would develop appropriate operationalization for each dimension of crisis. Also this may enrich the examinations of the impact of crisis. For example, variance-based analysis (Calof, 1994) or Bayesian statistics (Hahn & Doh, 2006) may guide future research endeavors when different dimensions of crisis affect different aspects of firm outcomes.

Finally, crisis is an environmental or contextual issue that has effects across levels of interests. It is not difficult to understand the impact of crisis, ranging from firm operations, industry competitions, and regional dynamics to international complexities. However, most current crisis research solely focuses on one level of interest. Multidimensional conceptualization would lead to a more comprehensive understanding of crisis. For example, a dimension of crisis would not lead to firm-level changes but explain significant industry-level variations. This multi-level perspective of crisis may give rise to several theoretical advancements on crisis-related research.

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2

Switching Focus Between the Three Pillars of Institutional Theory During Social Movements

Michael Yiu Man Lin

Introduction

Institutional Theory states that organizational actors making rational decisions construct around themselves an environment that constrains their ability to change further in the long run (DiMaggio & Powell, 1983). This process is called isomorphism. It can occur because non-optimal forms are selected out of a population of organizations or because organizational decision makers learn appropriate responses and adjust their behavior accordingly (DiMaggio & Powell, 1983). According to Scott (1995), there are three pillars of isomorphism, namely regulative, normative, and cognitive. A brief review and discussion of these pillars by scholars will be elaborated in the following sections. Recent research regarding Institutional Theory has moved forward from investigating a firm's behavior under static institutional environments to more dynamic ones (Child & Tsai, 2005; Dacin, Goodstein, & Scott, 2002) as well as putting more focus on "deinstitutionalization", that is, "the processes by which institutions weaken and disappear" (Scott, 2001, p. 182). However, there is limited research that addresses how firms can be contradictive toward the three pillars during turbulence or crisis. Previous research took note of the size of the impact that the pillars exerted on institutions in different stages (Bruton, Ahlstrom, & Li, 2010; Trevino, Thomas, & Cullen, 2008; Yiu & Makino, 2002). However, few have investigated whether firms can make decisions that are simultaneously in favor of one particular pillar and against another. This chapter aims to extend the theory by not only investigating the impact size of the different pillars on a firm's actions, but also incorporating the sign, (i.e., either positive or negative) of the relationship between the pillars and the firm's actions under political turbulences and social movements.

This chapter makes theoretical contributions in several areas. First, it helps extend the boundary conditions of Institutional Theory by providing a better understanding of the interactions and relationships among the three pillars and their respective relationships with both institutionalization and deinstitutionalization, especially under political turbulences and social movements. By articulating how and why firms make decisions that can potentially contradict outcomes predicted by a certain pillar under extreme situations, we provide more insight for future research to use Institutional Theory to predict a firm's strategy.

Second, this chapter can help extend our understanding toward social movements and civil disobedience. Most existing research regarding these two areas is related to sociology or political science. The most relevant research to firms and their strategies can be found in the study of corporate social responsibility (Brammer, Jackson, & Matten, 2012; Campbell, 2007). Many researchers have laid down the conditions in which firms are more likely to be socially responsible, and have discussed the associated implications. Past research from other perspectives has explored the relationships between social movements and corporate control (Davis & Thompson, 1994), social movements and diffusion in organizations (Strang & Soule, 1998), social movements and creation of new organizational forms (Rao, Morrill, & Zald, 2000), and so on. However, few have looked into political turbulence from the perspective and lens of Institutional Theory, which can help explain the reasons firms implement certain strategies.

First, this chapter starts out with a brief review of the literature on Institutional Theory to identify the important aspects that help us focus on discussion of the conditions under which institutionalization and deinstitutionalization will occur. Second, it also briefly reviews the literature regarding each of the three pillars of Institutional Theory so as to clarify how these three pillars can explain, as well as predict, a firm's behavior. This can help us evaluate the situations in which it is possible for a firm to act consistently with one particular pillar while behave oppositely with another pillar. Third, to demonstrate how firms will behave during social movements and understand the rationales for this behavior, the chapter thoroughly reviews the Sunflower Student Movement in Taiwan and the Umbrella Revolution in Hong Kong. We can assess the impact of these demonstrations on the changing behaviors of Taiwanese and Hong Kong firms using the theoretical model proposed here. Fourth, it introduces the theoretical model and the related propositions to assess the conditions under which firms will make decisions that are contrary to one or some of the pillars of Institutional Theory. In the model, social movements are theorized to be important moderators for explaining the effect of different pillars on firm behaviors. Finally, this chapter elaborates the practical limitations for the model and proposes future research directions in this area.

Institutional Theory and Isomorphism

Merging concepts elaborated by Greif (2005) and Scott (2001), institutions are defined as "a set of norms, rules and values operating in a given environment that help generate a regularity of behavior among actors affected by that environment". Research in Institutional Theory has examined the causes of isomorphism, the factors that lead organizations to adopt similar structures, strategies, and processes (Davis, 1991; Deephouse, 1996; DiMaggio & Powell, 1983; Mezias, 1990; Palmer, Jennings, & Zhou, 1993; Tolbert & Zucker, 1983). Isomorphism is defined as the resemblance of a focal organization to other organizations in its environment (DiMaggio & Powell, 1983). Institutional Theory has proven to be a popular theoretical foundation for exploring a wide variety of topics in different domains ranging from institutional economics and political science to organization theory (DiMaggio & Powell, 1991). It is traditionally concerned with how organizations gain legitimacy by conforming to the rules and norms of the institutional environment (Meyer & Rowan, 1991; Scott, 2008). Hence, Institutional Theory is concerned with regulatory, social, and cultural influences that promote survival and legitimacy of an organization rather than focusing solely on efficiency-seeking behavior (Roy, 1997). However, institutional theorists recognize that organizations may vary in the degree to which they conform to changes in their external environment (DiMaggio & Powell, 1983; Judge & Zeithaml, 1992).

Like isomorphism, legitimacy is a crucial concept in Institutional Theory, serving as the "anchor-point of a vastly expanded theoretical apparatus" (Suchman, 1995, p. 571). Legitimacy is defined as a status conferred by social actors (Ashforth & Gibbs, 1990; Salancik & Pfeffer, 1978). A legitimate organization is one whose values and actions are consistent with that social actor's values and expectations for action (Galaskiewicz, 1985; Salancik & Pfeffer, 1978). There are two endorsements related to legitimacy as defined by Deephouse (1996, p. 1025): Regulatory endorsement is the acceptance of an organization by the state agencies that formally regulate it. Public endorsement is the acceptance of an organization by the general public. These two endorsements are very much related to the three pillars of institutional forces discussed in the following sections.

Three Pillars of Institutional Forces

The reasons why organizations behave similarly when the industry evolves are due to institutional forces. The three pillars of institutional forces were summarized by Scott (2008) in a similar way to how DiMaggio and Powell (1983) defined the three major types of isomorphism that drive different organizations to behave similarly.

The Regulative Pillar (Coercive Isomorphism)

According to this pillar, institutions guide behavior by means of the rules of the game, monitoring, and enforcement as they obey the same rules. Since they obey the same rules set by the government, they are forced to act similarly or else they will face legal sanctions. As a result, certain common patterns can be observed among different institutions in the same area. Institutionalization is the process through which activities are repeated and given common meaning (Scott, 2001). Laws and restrictions assert constraints and these rules provide guidelines for new entrepreneurial organizations. This can lead to organizational compliance with laws and also individual compliance with laws. Institutions should be more similar in this pillar in regions that have a strong government and well-established legal system.

The Normative Pillar (Normative Isomorphism)

This pillar is mostly related to appropriateness and social obligation. Scott (2008) further refined this as values (what is preferred or considered proper) and norms (how things are to be done, consistent with those values) that people conform to. These established ground rules make institutions believe it is morally and socially unacceptable if they do not follow them. Hence, it becomes the firm's social obligation as well as a social necessity to comply with the rules (March & Olsen, 2005); otherwise, society will not accept the firm's existence. For example, some societies expect restaurants to use "open kitchens", allowing consumers to witness what is going on in the restaurant though it is not illegal not to do so. Alternatively, some other societies discourage restaurants from using open kitchens because it may communicate to consumers that they are not respected. To conclude, professional organizations act as the disseminators of appropriate organizational patterns, which are then adopted by other organizations (Björkman, Fey, & Park, 2007).

The Cognitive Pillar (Mimetic Isomorphism)

The last pillar puts more emphasis on the individual level in terms of culture and language. Institutions "mimic" other more successful and established organizations to make sure their actions comply with the "taken-for-grantedness" and preconscious behavior that people in the region barely think about (DiMaggio & Powell, 1991; Meyer & Rowan, 1991). These are the values embedded in and agreed upon by the people, of which they might not be consciously aware. It concerns the cognitive nature of individuals and it can differ greatly across different cultures. For example, in terms of parental relationships, friendship and mutual respect are more emphasized in most western countries while strictness and upward respect are seen as necessary in eastern countries. There is no absolute right or wrong embedded in one's value and cognitive sense nor are people always aware of them, yet it is important for firms to understand and acknowledge these embedded values in their decision making. In order to attain recognition from the public, firms will copy the model, strategy, and even the values adopted by the relatively successful and established organizations.

In the next section, we use two recent social movements to demonstrate how firms change their behaviors during these events.

The Sunflower Student Movement in Taiwan (March–April 2014)

The Sunflower Student Movement began in 2014 as a response to a service-trade agreement signed between Taiwan and mainland China. The students of the Sunflower Movement occupied Taiwan's Legislative Yuan and continued their sit-in for 24 days (Smith & Yu, 2014).

On June 29, 2010, after months of negotiations, China and Taiwan signed the Economic Cooperation Framework Agreement (ECFA). It was a breakthrough economic cooperation agreement since the split between two sides in 1949 after the Chinese Civil War. Following the conclusion of the ECFA, both sides began talks on a service-trade agreement. This agreement, the Cross-Strait Service Trade Agreement (CSSTA), was the major reason that the movement broke out. Ironically, the expected economic benefits of the CSSTA are skewed toward Taiwan—for the 64 service industries that will be opened to investors in China, 80 service industries in China will be opened to Taiwanese investors (Mo, 2013).

The Sunflower Movement protesting the CSSTA was initiated by students, mostly from universities, and they had the following four demands (Culpan, 2014):

1 That the legislature review and renegotiate the trade services agreement
2 That the legislature implement an oversight bill monitoring future cross-strait agreements
3 That the legislature pass that oversight mechanism before the services agreement is reviewed
4 That the government hold a citizens' constitutional assembly.

Initially, President Ma Ying-jeou ignored their demands and requested that the students leave the Legislative Yuan as soon as possible. However, more people came to the Legislative Yuan to support the students with food and supplies—they even set up a 24-h medical center there. President Ma offered to meet the students 7 days after the occupation started. Since he could not promise to meet all the demands of the students, the students were reluctant to meet him. On April 6, the president of the Legislative Yuan, Wang Jin-pyng, announced that further review of the CSSTA would be delayed until the legislature passed an oversight mechanism for future cross-strait deals, a concession to one of the main demands of the students (Smith & Yu, 2014). The students claimed a victory for their movement and they stopped the occupation 3 days later.

Throughout the entire movement, aside from hundreds of thousands of individuals, and even the overseas public, many firms did offer vocal support publicly to the students and some of them, especially local Taiwanese firms, even offered drinks and food. Surprisingly, some owners of these firms (Li, 2014) admitted that they could benefit economically from the very agreement the students were protesting. Aside from the aforementioned small firms, some large firms such as the Taiwan Semiconductor Manufacturing Company Limited insisted that employment opportunities should be left over to Taiwanese and therefore they would not participate in the CSSTA despite the fact that it might bring economical profit to its firms. Some firms had pointed out that the agreement may bring them short-term economic gain but they also worried about the leak of technology and patents (Passion Times Hong, 2014). More importantly, they worried about the unemployment situation of Taiwanese local workers after the implementation of the agreement because more firms might choose to relocate their production lines to Mainland China due to lower costs. Economically, it might be beneficial for them because they can reduce the cost of recruiting workers even if they choose to retain their production lines in Taiwan. However, most firms opposed the agreement due to one reason: to protect the dignity of the Taiwanese and to avoid following in Hong Kong's footsteps. I will review the Umbrella Revolution in Hong Kong next. Then, I will discuss firms' actions during these periods of unrest using my proposed model for explaining the shift of institutional forces among the three pillars of Institutional Theory.

The Umbrella Revolution in Hong Kong (September–December 2014)

Starting in late September 2014, thousands of protesters occupied the main thoroughfares of Hong Kong and demanded the opportunity to elect their own chief executive in 2017 (Chan, 2014). The pro-democracy movement was coined the Umbrella Revolution because the protestors used umbrellas to defend themselves from the tear gas fired by the Hong Kong police.

Before the breakout of the revolution, the Hong Kong Federation of Students, which represents university students in Hong Kong, and the Scholarism group arranged a coordinated week-long boycott of classes starting on September 22, 2014. This was in response to the August 2014 decision by the Standing Committee of the National People's Congress (NPCSC) to reform the Hong Kong electoral system. The NPCSC announced that the civil nominations of the chief executive would be disallowed. Many people feared this would lead to selection bias or even pre-judgment of the chief executive, therefore making the election disingenuous. As analyzed by Chan (2014), this NPCSC decision was more conservative than the community had expected. Not only did it exclude any possibility that a candidate favored by the pan-democrats would be successfully nominated, it also left little room for the middle-ground options that had been discussed in Hong Kong in 2013 and earlier in 2014. On September 26, 2014, Scholarism arranged a legitimate (as agreed to by the Hong Kong police) protest near the government offices in the Central Government Complex. Afterward, they occupied the Civic Square for the public without permission from the police, and the police used pepper spray and tear gas to disperse the crowd.

When "Occupy Central with Love and Peace" (later referred to as the Umbrella Revolution) started on September 27, 2014, there were plenty of individuals and firms who voiced their support to the occupying students and citizens, especially after the tear gas attack by the

Hong Kong police on September 28, 2014. The protestors started occupying the shopping districts in Mong Kok, Causeway Bridge, and Admiralty. They called for the NPCSC to withdraw its August decision and requested a genuine election of the chief executive in 2017. As time went on, during which the Hong Kong government did not offer much help except to send government officials to meet with student leaders on October 21, 2014, there was an increasing sense of dissatisfaction from the public that led to violent confrontations with the protestors. During the meeting on October 21, similar to the students in Taiwan, the student leaders in Hong Kong raised the following four demands:

1 Withdrawal of the NPCSC decision in August 2014
2 Endorsement of civic nomination for the election of the Chief Executive
3 Abolition of functional constituencies in the Legislative Council
4 A clear timetable to achieve these objectives.

There was no longer a call for the resignation of the current chief executive, though the demand for the abolition of functional constituencies had been added (although this has been a long-standing issue in the democratic reform of the Legislative Council).

The government only offered to submit a report to the central government setting out in an impartial manner the public sentiment that was expressed after the NPCSC decision in August 2014 and offered to continue the dialogue with the protestors. Since none of their demands were addressed, the student leaders decided to continue the occupation activities. As the dissatisfaction from the public grew, due to the inconveniences brought upon them by the occupation, some individuals applied for a temporary restraining order from the Court, thus leading to the end of the revolution on December 3, 2014. Unlike Taiwan's Sunflower Student Movement, the Umbrella Revolution ended in failure.

The detailed reasons for, and consequences of, the Umbrella Revolution are outside the scope of this discussion. The major focus of this chapter is on the change in firms' behavior during this period. Without a doubt, the occupying activities were illegal and many participants received notice from the Hong Kong police after the movement and were accused of breaking the law. However, many major business firms such as J. Walter Thompson Company, Weber Shandwick, and Madcradle had publicly stated that they respected their employees' decision to participate in the protest during working hours and would not punish their behaviors.[1] Firms in many other industries such as the medical field, public health sector, community sector, and legal sector construction sector offered different kinds of support to the protestors for free. This is clearly surprising as the entire movement was beyond debate illegal and providing free support would result in economic loss to these firms.

Similarities and Differences Between the Two Social Movements

Undoubtedly, many people are interested in comparing the Sunflower Movement in Taiwan and the Umbrella Revolution in Hong Kong due to their astonishing similarities in timeline and location. There were only 6 months in between the two movements, and the two places are only 2 h away from each other by flight. However, in order to develop a better understanding of the strategies firms use to cope with uncertainties and social movements, it is important for us to acknowledge certain distinguished similarities and differences between these two social movements.

Similarities

Apart from timeline and location, both movements shared a few similarities. First, both movements were initiated by students. People in both places shared similar views and took similar stances, mainly students against the authority/government. Students in both places successfully aroused the public to their requests and views and even garnered practical support from the public as well as some firms. Second, the numbers of people attending the movement were reported to have substantially increased after the authority reacted forcefully to the students' protests. Third, students of both movements occupied streets, blocked traffic, sustained sophisticated tent cities, and defied attempts at police dispersal and gangster intimidation. Fourth, students and participants in both movements received praise worldwide for being peaceful during the protests. They did relatively insignificant physical damage as compared to many protests across the world. Last, they both targeted not only their local administrations, but those institutions' complicated ties with the Chinese Communist Party (CCP), as well as the CCP itself. Whether or not some of the tactics adopted by the protestors during the

1 Regarding the partial list of firms that supported the class and work boycott activities, please visit the page https://www.facebook.com/HKLaborStrike?fref=pb&hc_location=profile_browser.

Umbrella Revolution were copied from those used by the participants of the Sunflower Movement is beyond the focus of this discussion. Instead, the focus is on the way in which these similar features affected business firms' decision making and coping strategies.

Differences

Despite the fact that both movements did share a number of similarities, some contrasts were identified. It is important to acknowledge the differences so as to understand how firms in these two different areas may have adopted different strategies during their decision making. First, the aims of the two social movements were different. While the Sunflower Movement was mainly targeted to fight against the ruling Chinese Nationalist Party (KMT) and aligned business elites' alleged collusion with authoritarian China to pass a highly controversial trade deal, the Umbrella Revolution was asking for "genuine universal suffrage" (i.e., the right to elect a leader of their own choosing). As mentioned, firms (Li, 2014) in general in Taiwan could benefit from the trade deal yet those in Hong Kong generally had nothing practical to gain or lose from the electoral reform. Hence, it is even more surprising for firms in Taiwan to support the Sunflower Movement. Second, protestors in the Sunflower Movement were more concentrated in one particular area, the Legislative Yuan, while those in the Umbrella Revolution were more dispersed in terms of their occupation. Hence, the Umbrella Revolution in Hong Kong brought more inconvenience to more different types of firms, and the public, in terms of external costs. Therefore, it would be more understandable if firms in Hong Kong did not support the revolution. Lastly, regarding the Sunflower Movement, it was largely ignored by the global press, but its demands were met, and it led to the November 2014 mid-term electoral defeat of the ruling party, and likely redirected Taiwan's geopolitical future. Comparatively, the Umbrella Revolution in Hong Kong has not yet achieved its goal of "genuine universal suffrage" despite the movement being covered by the global press. To a certain extent, the strength of a government's or authority's resilience can be a potential moderator for firms to adopt their strategies.

Proposed Model and Propositions

Throughout both the movements in Taiwan and Hong Kong, a number of firms in different sectors offered support to the protestors who were conducting illegal activities. And in doing so, these firms did economic harm to themselves. Assuming institutions are rational, why do firms engage in this kind of strategy? Similar questions have been proposed by the literature on corporate social responsibility. Campbell (2007) investigated the related topic using the lens of Institutional Theory. He suggested that corporations will be more likely to act in socially responsible ways when they are relatively strong in financial performance and operating in a healthy economic environment, when the competitive environment is moderated, when there are strong and well-enforced state regulations, when there is a system of well-organized and effective industrial self-regulation in place, when there are strong monitoring agencies in place in the environment, and when they operate in an environment where normative calls for such behavior are institutionalized. Campbell (2007) used all three different institutional forces to argue the moderating and mediating effects of the aforementioned situations on the social responsibility behavior of firms. This helps to explain why firms might choose to sacrifice short-term economic profits for long-term viability by enhancing social responsibility. However, this does not explain why firms would choose to support illegal activities. Figure 2.1 illustrates my proposed model for explaining precisely this.

While the approach of this chapter is similar to Campbell's, it is different in several ways. First, as mentioned, the protests supported by the firms are illegal in nature and socially irresponsible. As suggested in terms of the regulative pillar in Institutional Theory, firms would not choose to offer such support because it is not legally appropriate to do so. Apparently, some firms decided to offer support to the two respective governments during both movements in 2014, and this can be explained by the regulative pillar. However, some firms engaged in behaviors and strategies directly opposed to what this pillar suggests. Does this mean that deinstitutionalization took place? I would suggest an alternative way to explain such a phenomenon, mainly that the effects exerted by the cognitive and normative pillars overshadowed the effects exerted by the regulative pillar. Firms do want to protect the employment opportunities of the locals in Taiwan and firms do want to help citizens to secure the genuine election of the Chief Executive in Hong Kong. These two motives can be explained by the morally governed normative pillar and taken-for-grantedness cognitive pillar, respectively.

Proposition 1 Corporations will be more likely to shift their focus from the regulative pillar to the normative and cognitive pillars in formulating their strategies and behavior when there are movements that are fighting for the interests of the majority.

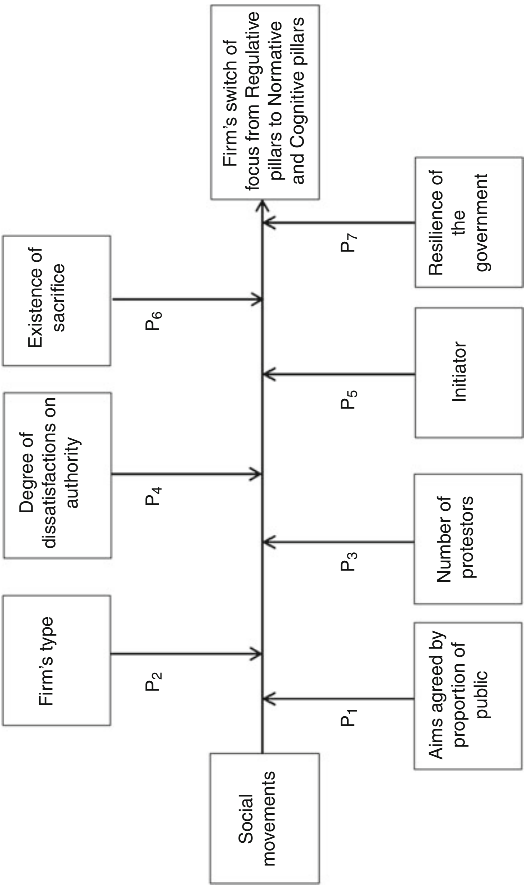

Fig. 2.1 Proposed model

Second, in comparison to MNCs, local firms were observed offering support to the protestors. Despite the fact that both types of firms abide by the same laws and system, their behaviors differ substantially during political movements. Many representatives of the firms did explicitly state that their love for, and roots in, the local environments were the main reasons they chose to support the students and movements. In contrast, many MNCs in Taiwan had expressed vocal support for the service-trade agreement signed between Taiwan and mainland China and called for the protests to end as soon as possible. Local firms may believe that they carry more responsibility to safeguard the values and roots of their home territories compared to the MNCs.

Proposition 2 In comparison with the MNCs, local corporations will be more likely to shift their focus from the regulative pillar to the normative and cognitive pillars in formulating their strategies and behavior when there are social movements.

At the beginning of both movements, relatively few firms offered public support to the students. However, taking the September 28, 2014, incident in Hong Kong as an example, where the Hong Kong police used both pepper spray and tear gas to attack the protestors, many firms announced that they would offer support to the protestors and the movement in various ways. This can be explained by two possible reasons: First, because there were more protestors after the tear gas incident and more firms would have agreed that it was morally responsible and culturally acceptable to offer support to the protestors. Second, the firms themselves had a negative cognitive feeling about the actions performed by the police. I would argue that both of these explanations are correct.

Proposition 3 Corporations will be more likely to shift their focus from the regulative pillar to the normative and cognitive pillars in formulating their strategies and behavior when the movements are supported by more people in the territory.

Proposition 4 Corporations will be more likely to shift their focus from the regulative pillar to the normative and cognitive pillars in formulating their strategies and behavior when there is dissatisfaction and negative feeling toward the authority in the territory.

Throughout the social movements, many representatives of the firms, as well as the protestors, issued statements such as "protecting the students", "fight for the next generations", and "stand up for the students". Compared with previous related movements in both territories that were not initiated by students, corporations offered relatively more public support to the social movements. It is taken for granted that students are more innocent and less driven by personal self-interest than others. With this belief embedded in the society, it is morally more appropriate to support the courageous actions of the students. Thus, firms are more likely to shift their focuses among the pillars.

Proposition 5 Corporations will be more likely to shift their focus from the regulative pillar to the normative and cognitive pillars in formulating their strategies and behavior when the movements are initiated by students.

Relating to the differences between the two social movements, it would be understandable to draw some potential moderators between the social movements and the affected firms' shift of focus from the regulative pillar to the normative and cognitive pillars in formulating their strategies and behavior. As mentioned, firms in Taiwan generally can benefit from the service-trade agreement between Taiwan and China. Therefore, it would certainly take more effort for Taiwanese firms to support the Sunflower Movement opposing the trade agreement. However, these firms may act against their profit-making objectives in order to do good by the people and places where the social movements occur. Hence, firms may be even more tempted to shift their focuses among the pillars when they do sacrifice practical benefits or profits for supporting the social movement.

Proposition 6 Corporations will be more likely to shift their focus from the regulative pillar to the normative and cognitive pillars in formulating their strategies and behavior when they experience sacrifice in supporting the social movement.

One of the reasons for the differences in the outcomes of the two movements was the resilience of the government. Past research has indicated that normative and cognitive pillars are more prevailing in a developing economy (May, Puffer, & McCarthy, 2005; Mccarthy & Puffer, 2008). While this chapter acknowledges that both Taiwan and Hong Kong are not developing economies, the political structure is much more complicated in Taiwan than it is in Hong Kong. Firms will be more reluctant to shift their focuses among the pillars when they are facing a more formally developed authority.

Proposition 7 Corporations will be more likely to shift their focus from the regulative pillar to the normative and cognitive pillars in formulating their strategies and behavior when the places they are located have a less resilient and formally developed authority.

Conclusion and Future Research Directions

By bringing out the relatively large-scale social movements that occurred in Taiwan and Hong Kong in 2014, the effects of the social movements on the switch of firm's focus between the three different pillars of institutional forces are studied and could be moderated by the seven propositions mentioned in the above model. Prior to this contribution, isomorphism has been studied to a great extent and all three pillars are used to explain why firms behave similarly when the industry evolves. In more recent papers, deinstitutionalization is also studied to allow researchers to understand more about when and in what situations firms would no longer be similar to one another. However, this chapter offered different approaches by investigating both the directions and the impacts of three different institutional forces as suggested by the three pillars. It is said that it is possible for firms to switch their focus from one pillar to another during rare events such as social movements. The effects are even more obvious under certain circumstances as mentioned in the propositions outlined previously.

By investigating the possibilities for why institutions may turn away from a particular pillar in favor of other pillars, we can gain insight into why firms can still behave similarly despite not using traditional approaches. In this chapter's context, social movement serves as a catalyst for firms to diverge and converge. For example, different types of firms such as local institutions and MNCs would have diverged their attentions to different pillars, but firms under the same category would have converged their focus on the same pillars. By exploring the interests in this area, firms' behaviors and strategies can be explained using the lens of the three pillars of Institutional Theory. Furthermore, the model discussed in this chapter can be extended to investigate topics such as entry choice strategy, remedial actions after natural disasters, mergers and acquisitions strategy, and choice of raising capital strategy. For instance, it is possible that firms might choose to shift their focus among the pillars after completing an acquisition or an IPO activity.

To conclude, this chapter made theoretical contributions in various areas. First, it extended Institutional Theory by investigating the possibilities of shift of focus between three different pillars. Second, it contributed to the literature on rare events and social movements by using a different perspective for scrutinizing firms' behaviors and strategies under these special circumstances using the lens of Institutional theory. Third, it outlined several situations in which firms are more likely to act against the regulatory pillars, and this can potentially be very important for both firms and government in making their respective decisions. For example, firms understand in which situations they can choose to put more focus on the moral appropriateness and cognitive values of the people rather than on simply obeying the rules set by the authority. In contrast, the government needs to understand when the majority of firms might choose to disobey its orders, making it difficult to enforce its policies in the region.

Practically, when firms face turbulent situations or rare events as demonstrated by the two social movements discussed in this chapter, they are likely to change their strategies to cope with the uncertainties. Whether firms should shift their focuses from regulative pillars to normative and cognitive pillars during the decision-making process depends on different factors. However, it can be essential for the firm, especially in the long term, to make the correct decisions during uncertainties as this can be a great opportunity for firms to drastically improve their statuses. However, there are two sides to every coin always. Since the public can always better recall crucial decisions made by an individual or a firm during rare events, making the wrong decision can be disastrous. By evaluating whether the social movements are supported by majority of the people in the territory and. more importantly, the firm's employees, as well as whether they hold any negative feelings toward the authority, coupled with those factors such as position of the authority and the existence of sacrifice for the decisions made, firms can consider whether to turn their focuses from the regulative pillars to the normative and cognitive pillars (i.e., putting more focus on the moral standard adopted by other firms in the industry as well as the cognitive preferences and behavior held by the majority of the public). For example, firms can change their selling strategies by providing discounts to people who support the social movements. Although this may risk offending the authority, which is not likely to be appropriate in the view of the regulative pillar, it may improve the firm's reputation among the public in the territory as well as its long-term profits and even its relationship with employees. Researchers can work on this area in the future as this may yield a huge reward by understanding how firms change their decision-making procedures and focuses during uncertainties and rare events.

An interesting phenomenon was observed during the aforementioned two social movements, that is, the notably contrasting reactions from local firms and the MNCs, where local firms seemed to provide more support to the students during the social movements. The difference between the two types of firms related to the ease and pace of their switch from focusing on the regulative pillar to the normative and cognitive pillars is worth more in-depth investigation. This alone can be a fruitful direction for future research.

Despite its potential exploration in this research area, this chapter, similar to every other paper, has its own limitations. First of all, it relies only on news coverage and reports, as well as some social media, in formulating the propositions related to the relationship between the social movements and the affected firms' focus on different pillars. Due to limited and considerably new data, it would be challenging for researchers to build an empirical paper based on these two social movements. However, there is definitely opportunity for researchers to further assess whether it is practical to continue building on this area. Furthermore, these two social movements have several commonalities as previously discussed. These commonalities can result in similar conclusions when investigating firms' behaviors. Researchers can further study other types of social movements that have occurred in other countries to see if similar propositions can be formed. Undoubtedly, it would also be challenging because the cultural elements and moral appropriateness aspects can differ quite substantially in other regions, especially when compared to the locations where the two movements discussed in this chapter occurred. Nevertheless, no matter whether the conclusions are similar to or different from the ones presented in this chapter, it can be worthwhile for researchers to continue exploring.

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3

Respectful Leadership for Managing Conflict to Cope with Market Turbulence

Alfred Wong, Dean Tjosvold, and Eva Khong

Organizations worldwide must cope with market turbulence and rely upon their strategic and other leaders to identify issues and problems before they become crises as well as develop effective, practical solutions to do so. However, leaders can sometimes be too stressed, biased, and defensive in recognizing emerging issues, thereby allowing problems to fester and making them difficult to manage (Waldman, Ramirez, House, & Puranam, 2001). In addition, leaders and employees are apt to have quite different ideas and proposals about how the organization should cope with the changing marketplace. These changes pose complex challenges that stimulate wide debate about possible approaches and often engender disbelief that leaders' proposals are adequate to meet these challenges.

Fortunately, conflict among leaders and employees does not inevitably lead to ineffective cognitive processing and biased, ineffective solutions. Researchers have documented that it is not the occurrence of conflict that interferes with challenging decision making but how these opposing ideas are dealt with (Tjosvold, Wong, & Chen, 2014). Indeed, the cooperative approach to discussing conflict can result in widespread appreciation of the issues organizations confront, understanding of various proposals, and the integration of the best ideas to develop widely accepted creative solutions.

But how can these cooperative discussions be promoted? This chapter argues that leaders can develop styles that help employees feel that they have cooperative, mutually beneficial relationships and are able to discuss their ideas open-mindedly. Leaders can express their views forcefully but in such a way as to encourage their colleagues to express their own. They can ask questions to understand each other's views and integrate them into high-quality solutions that they want to implement. This chapter presents results of three recent, related studies that directly support our theory that leadership styles are more effective when they develop cooperative conflict capabilities among employees and managers. To help readers appreciate the empirical base for the support of this theory, we provide more detailed information about the methods used in one of the studies.

Conflict Management in Organizations

Organizational researchers typically divide their work into areas of study such as teams and performance management. But conflict occurs in all areas, including within leadership, in teams, and between departments. Managing this conflict is vital for the organization's effectiveness. Conflict also spills out across organizations. For example, marketing specialists must deal with conflicts within their firm and also with their customers (Tjosvold & Wong, 1994). Successfully dealing with conflict can produce positive effects across organizations as well. In one study, supply chain partners able to manage conflicts improved product quality and reduced costs, plus strengthened their relationships (Wong, Tjosvold, Wong, & Liu, 1999). Conflict offers a way to understand organizations as a whole as well as their dependence on other organizations.

Studies discussed in this chapter show that leaders can be effective to the extent that they help employees manage their conflicts cooperatively and constructively. Conflict management research is updating our understanding of effective leadership. Considerable research indicates that leaders can be successful through quality relationships (Graen & Uhl-Bien, 1995). Less recognized is the notion that leaders and employees cannot allow frustrations to brew; they need to manage their conflicts to develop quality relationships (Chen, Liu, & Tjosvold, 2005). Quality relationships are useful because they promote constructive conflict, which results in employee involvement and performance (Chen & Tjosvold, 2007).

Researchers have developed a wide range of styles that leaders can adopt. Traditionally, researchers distinguished between people- and productivity-oriented leaders. Later, researchers argued that leaders can adopt a transformational style. Recently, leadership styles of servant, service, ethical, and so on have been developed to understand the great variety of ways that managers can lead employees.

This chapter proposes that though they may choose among different styles, managers should help employees manage their conflicts cooperatively and constructively. The proposition is that helping employees manage their conflicts is an important mediator between leadership style and outcomes.

The first section of this chapter discuss cooperative conflict management. The second section describes a sample of leadership styles. The third section reviews empirical studies showing how cooperative conflict management mediates between different leadership styles and effectiveness. The final section discusses the theoretical and practical implications of these studies.

Cooperative Conflict Management

Researchers have proposed that conflict is both an inevitable aspect of teamwork and potentially highly promotive of team performance (De Dreu & Gelfand, 2008; Deutsch, 1973). Although conflict has traditionally been considered destructive, studies have found that conflict has great potential to contribute to team and organizational effectiveness (De Dreu, Van Dierendonck, & Dijkstra, 2004). Group researchers have shown that giving voice to minority views and heterogeneity of perspectives can improve group functioning (Tetlock, Armor, & Peterson, 1994). Expressing opposing views directly to one another and listening open-mindedly can be useful for problem solving and task accomplishment (Kruglanski & Webster, 1991). It is how conflicts are managed, not conflict itself, that contributes to group performance (De Dreu & Weingart, 2003; Pelled, Eisenhardt, & Xin, 1999).

Conflict is defined as incompatible activities: one person's actions interfere, obstruct, or in other ways make the behavior of another less effective (Deutsch, 1973). Deutsch argued that whether conflict is handled cooperatively or competitively drastically affects the dynamics and outcomes of conflict management.

Team members can emphasize their cooperative goals; as one moves toward goal attainment, so do the others (Deutsch, 1980). They recognize that their success is tied to one another. Consequently, they tend to view a conflict as a mutual problem that needs common consideration and an integrative solution. The emphasis on cooperative goals results in mutual exchange and an open-minded discussion, which in turn develops effective, mutually beneficial resolutions that reaffirm the relationship. With this mutual affirmation and success, team members develop the confidence that they can handle their conflicts and continue to do so successfully. Repeated success in handling conflicts leads to high-quality, implemented solutions that contribute to team performance.

Alternatively, team members can emphasize their competitive interests; as one succeeds in goal attainment, it makes others less likely to reach their goals. They tend to view a conflict as a win-lose struggle; if the other wins, they lose (Deutsch, 1980). People who emphasize their competitive interests tend to avoid direct discussions, or instead engage in tough, closed-minded discussions and attempt to coerce others to do their bidding. This approach undermines decision making and relationships. Consequently, team members do not have confidence in handling their conflicts. With low levels of confidence, they are not able to use their conflicts to solve problems and work productively.

Studies have shown that managing conflict cooperatively promotes team and leadership effectiveness (Alper, Tjosvold, & Law, 2000; Tjosvold, Wong, et al., 2014). Cooperative conflict has been found to help managers and employees resolve issues, strengthen their relationships, and work productively together (Tjosvold & Tsao, 1989), even among those who are culturally diverse (Chen, Tjosvold, & Su, 2005).

In one study, top management teams that managed conflict cooperatively and not competitively provided strategic, effective leadership to their organizations (Chen, Liu, et al., 2005). In another study, 368 employees in a call center who developed cooperative goals and the skills to discuss issues open-mindedly not only strengthened their relationships and attitudes but improved customer service by answering phones on time, decreasing the number of customer complaints, and reducing turnover (Tjosvold, Chen, Huang, & Xu, 2014).

This chapter explores the role of leadership styles in cooperative conflict. We argue that recent studies indicate that respectful leadership styles are effective as long as they develop cooperative conflict management among employees.

Leadership Styles

Researchers have proposed various styles that leaders can use to be effective. Indeed, researchers and managers have long thought that leaders have considerable impact on organizational success (Ogbonna & Harris, 2000). More recently, they have begun to understand that leaders may have effects not just on individuals themselves but also on how employees relate to one another. Leaders have been found to have especially powerful effects on team performance (Dionne, Yammarino, Atwater, & Spangler, 2004). Researchers have begun to explore mechanisms that might affect individual performance such as procedural justice, trust, and leader-member exchange (Wang, Law, Hackett, Wang, & Chen, 2005) but also such mechanisms as team potency and cohesion whereby leaders improve team performance (Bass, Avolio, Jung, & Berson, 2003).

Productivity and People Orientation

A traditional research approach distinguishes leaders in terms of their orientation, such as whether they are thought to emphasize people or productivity (Bass, 1990). However, Argyris and Schön (1996) have vigorously argued that a leader's espoused values may confuse and obstruct especially when they are inconsistent with the leader's actions.

Leaders who value productivity want employees to follow procedures and instructions so that they work effectively and get things done. Leaders who value people are supportive and concerned about employees as individuals. Overall, research indicates that people values may be particularly useful for such outcomes as satisfaction and productivity values are useful for task accomplishment (Bass, 1990; Judge, Piccolo, & Ilies, 2004).

People values would seem to be particularly influential with team members. Productivity values may be very useful for helping organizational teams coordinate their efforts efficiently in order to complete their assigned tasks. Studies also suggest that employees need to feel supported and directed in order to work effectively (Tjosvold, 1987).

Doubts have been raised about whether leader production and people values really have much constructive impact. An important limitation of most research on leader dimensions is that these values have been measured through employee questionnaires. Employees though are not simply objective observers but use their own implicit theories to interpret and report on their leaders (Lord & Emrich, 2000). Employee responses reflect their experience and framework as well as their leader's values and behavior. Employees may not accurately perceive leader values or find them credible (Argyris & Schön, 1996). Indeed, recent research has largely ignored leader values despite their long history (Hunt & Dodge, 2000).

However, research on the effects of leader values on the interaction among team members may help to make production, people, and participative leadership research more current and useful (Schaubroeck, Lam, & Cha, 2007). The first study presented in this chapter argues that leader values can alter the interaction among followers influencing team effectiveness. This study then might add to the body of research on the mediators between the values of leaders and their effects on employees (Jung & Avolio, 2000).

Transformational Leadership

For more than two decades, transformational and charismatic leadership theory has been a focus of academic and applied research (Bass, 1985). According to Bass (1985), transformational leaders behave in a charismatic manner, inspire followers' higher-order motivation, provide intellectual stimulation, and treat followers with individualized considerations. Contrasting the earlier leadership theories that described leadership behavior in terms of providing direction and support as well as reinforcement behavior, transformational leadership emphasizes "symbolic leader behavior, visionary and inspirational messages, nonverbal communication, appeal to ideological values, intellectual stimulation of followers by the leader, display of confidence in self and followers, and leader expectations for follower self-sacrifice and performance beyond the call of duty" (Shamir, House, & Arthur, 1993, p. 578).

Transformational leaders are thought to provoke strong emotional responses in followers (Druscat, 1994). Followers have been found to change their beliefs, values, capabilities, and motives to increase their performance beyond self-interest for the benefit of an organization (Bass, 1985, 1990). The theory of transformational leadership supports prior theories on charismatic leadership (House, 1977) and visionary leadership (Sashkin, 1988). Many leadership scholars argue that transformational, charismatic, and visionary leadership can be treated as equivalent, although others argue that they are distinct (Yukl, 1999). In any case, many leadership scholars agree that these types of leadership partially overlap in theorizing and measures and accept their convergence (House & Shamir, 1993; Judge, Woolf, Hurst, & Livingston, 2006). Walter and Bruch (2009) proposed that one type of leadership could be studied to gain insight into the other two leadership styles. Our second study explores the dynamics and outcomes of transformational leadership.

Servant Leadership

Servant leaders are focused on serving employees and this service also inspires and leads them (Boone & Makhani, 2012). Greenleaf (1977) argued that people who are excellent servants can be very effective leaders. As they are driven by a desire to serve others and go beyond their own self-interests and assist followers effectively, they show followers how they can serve each other and their customers (Luthans & Avolio, 2003). Whereas many managers are oriented to getting followers to complete organizational tasks and support organizational goals, servant leaders are very much concerned with serving followers (Greenleaf, 1977). Therefore, followers are willing to reciprocate by serving each other and their customers. Servant leaders lead by example; their service to followers results in quality service to customers (Hunter et al., 2013).

Recent research has clarified that servant leaders are oriented toward strengthening individual employees as persons as well as developing a sense of community, consensus, and service among followers. Servant leaders want followers to work together productively as they also stimulate individual development. Followers should enhance themselves in the context of serving one another and their customers. Servant leadership is the focus of our third study.

Empirical Studies

In this chapter we theorize that regardless of leadership style, leaders can be all the more effective if they encourage employees to cooperatively manage their conflicts. Cooperative conflict management helps team members facilitate constructive discussion of their various ideas so that they can solve problems and coordinate their efforts. This collaborative problem solving results in both team and leader effectiveness. This section reports on the three studies that support our theory. It also provides more background on one of the studies so that readers have the opportunity to understand and appreciate the empirical support for the theory more fully.

Study 1: Productivity and People Orientation

Leading teams effectively is a challenge for organizations in many countries. This first study proposes that leaders who value people, productivity, and participation help teams work effectively and capably by encouraging team members to discuss their diverse views open-mindedly (Bhatnagar & Tjosvold, 2012). The final response set of the study consisted of 138 managers and 382 employees from 127 firms across India. Team leaders (managers) indicated their participation, people, and productivity values and team members (employees) rated team leaders' constructive controversy and their effectiveness and performance. Structural equation analysis suggested that productivity values affect constructive controversy as well as team effectiveness and productivity. However, contrary to expectations based on the idea that India is a collectivist society, people values were not predictive. The study's findings and previous research suggest that leader productivity values coupled with cooperative conflict management provide a foundation for effective teamwork in India and perhaps in other countries as well.

Study 2: Transformational Leadership

This study developed a model in which transformational leadership affects team coordination and performance through the conflict management approaches adopted by team members (Zhang, Cao, & Tjosvold, 2011). Data were collected from three different sources in a lagged design from 108 teams in a large enterprise in China. Results support the reasoning that transformational leadership promotes team coordination and thereby team performance by encouraging teams to adopt the cooperative approach to conflict management. However, the competitive approach to conflict management was not found to intervene in the link between transformational leadership and team coordination and the resulting performance. These results suggest that transformational leadership helps team members manage conflicts for their mutual benefit. This is an important mechanism through which transformational leadership enhances team coordination and, in turn, achieves higher team performance.

Study 3: Servant Leadership

Researchers have shown that the effectiveness of leaders depends to a great extent on their capacity to develop productive teamwork among followers. This study proposed that servant leadership, as it emphasizes service to others, team consensus, and the personal development of individuals, lays the groundwork for effective coordination among team members so that together they serve their customers (Wong, Liu, & Tjosvold, 2014). The study collected data from 113 customer service team leaders and 285 team members from a sample of consumer electronics retailers in Beijing, China. Our findings indicate that teams with servant leaders are able to discuss their disagreements, frustrations, and difficulties cooperatively and work out solutions for the benefit of the team and their customers. These results provide support that improving the capacity to manage conflict cooperatively can be a useful means for servant leaders to enhance teamwork and customer service in China and perhaps in other countries as well. We discuss this study in more detail in the sections that follow.

Methods

Participants

We recruited a sample of consumer electronics retailers in Beijing, China, through contacts of professors and graduate students of a university in Beijing. We had the support of top- and mid-level management for the study and provided confidentiality of responses. For each set of questionnaires, sales team members had to complete one survey and sales team leaders had to complete another. The contact person in each firm helped us distribute the questionnaires and collect them once completed. The final sample size comprised 113 sets of questionnaires from 113 team leaders and 285 team members.

Team size ranged from 2 to 11 members, with an average of 3.5 members per team. Apart from the team leader, we recruited at least one-third of the members in each sales team to answer the questionnaire. There were 230 male and 55 female members. Of these members, 600.4 % were aged 25–34 years and 23.2 % were aged 25 years or younger. Team members with sub-degrees comprised 49.5 % and those with a senior-level high-school education comprised 29.2 %. More than half (56.5 %) of the members had worked with their leaders for a period from 1 to 5 years. There were 99 male and 14 female team leaders. Of these leaders, 54 % were aged 25–34 years and 38.1 % were between the ages of 35 and 44. The leaders were all mid-level managers; 48.7 % of them had bachelor degrees, 34.5 % had sub-degrees, and 16.8% had senior school education. We devised an anonymous coding system to match each team member's survey with a survey administered to her or his sales team leader. We assured respondents that the numbers on the survey were for matching purposes only.

Measures

Servant Leadership Behavior We adopted the scale developed by Ehrhart (2004) to measure the servant-leadership behavior of the sales team leaders. This scale consists of seven major categories of servant-leadership behavior: (1) forming relationships with subordinates; (2) empowering subordinates; (3) helping subordinates grow and succeed; (4) behaving ethically; (5) having conceptual skills; (6) putting subordinates first; and (7) creating value for those outside of the organization (Ehrhart, 1998). We used one item to represent each of the seven dimensions. A sample item is "Our team leader creates a sense of community among team members". This seven-item scale had a Cronbach's α (alpha) of 0.89.

Respondents were asked to rate each of the items on all measures of this study on a five-point scale, ranging from 1 = "strongly disagree" to 5 = "strongly agree" (see Appendix for all the items of the study's measures).

Conflict Management Approaches We adopted scales from a questionnaire study conducted in North America to measure conflict management approaches in self-managing teams (Alper et al., 2000). These scales were developed from a series of experimental and field studies and have been tested with strong evidence of reliability and validity (e.g., Chen, Tjosvold, & Su, 2005; Chen, Tjosvold, & Liu, 2006). The four-item cooperative approach subscale measured: (1) the emphasis on mutual goals; (2) understanding everyone's views; (3) orientation toward joint benefit; and (4) incorporating different positions to find a solution that is good for all. A sample item is "Team members treat conflict as a mutual problem to solve" (see Appendix).

The four-item competitive approach subscale measured team members' assumptions concerning whether conflict is win-lose and the use of pressure to get others to conform to their views. A sample item is "Team members treat conflict as a win-lose contest" (see Appendix). The results of a CFA supported the two-dimensional cooperative-competitive structure of the scale ($\chi^2 = 32.40$, $df = 25$; RMSEA = 0.051; CFI = 0.99; NNFI = 0.98). The alpha coefficients for the cooperative approach and the competitive approach are 0.87 and 0.95, respectively.

Team Coordination Team coordination was measured with a scale developed by Hackman (1983a, 1983b) that is widely used in organizational studies (e.g., De Dreu, 2007; De Dreu & Van Vianen, 2001). A sample item from this four-item scale is "The members of your team work together in a smooth fashion". The alpha coefficient for this scale is 0.78.

Quality Customer Relationships Relationship quality is an overall assessment of the strength of a relationship (Garbarino & Johnson, 1999; Smith, 1998). Relationship satisfaction is conceptualized as a critical indicator of relationship quality (Crosby, Evans, & Cowles, 1990). We assessed whether a team has high-quality customer relationships with an adapted scale developed by De Wulf, Odekerken-Schröder, and Iacobucci (2001). Team leaders were asked to rate this scale. A sample item from this three-item scale is "This team has high-quality relationships with its customers". The alpha coefficient for this scale is 0.88.

Data Aggregation

Since the team is the unit of analysis, we have to aggregate the data of servant leadership and conflict approaches collected at the individual level to the team level. However, an aggregation should be justified by theoretical as well as empirical arguments (Rousseau, 1985). Regarding servant leadership scores, there has been an ongoing debate about whether leadership perceptions among members of a team can be aggregated (Dansereau & Yammarino, 1998). Although some researchers have had doubts that leadership perceptions can be shared among members of a team, other researchers have argued that consistent perception of leadership might occur because a leader is likely to lead his or her followers consistently (Dansereau & Yammarino, 1998). In addition, the exchange and processing of information about the leader among team members is also likely to contribute to their consistent perceptions of leadership. For conflict management scores, such reasons as frequent team interaction, team boundaries, and team history help contribute to team members sharing consistent perceptions of their conflict management approaches. Previous empirical research also provides strong evidence for the shared perceptions of leadership and conflict approaches among members of a team (e.g., Alper et al., 2000; Bass et al., 2003).

We used James, Demaree, and Wolf's (1984) procedure to estimate the within-team agreement to determine whether we could aggregate individual scores on servant leadership behavior and conflict approaches within each of the teams in this study. Specifically, we computed an r_{WG} value for each scale within each of the 113 teams. In addition, we conducted an ANOVA for each of these variables on individual level data. These values indicated convergence within teams since the between-group mean square is significantly higher than the within-group mean square (Kenny & KaVoie, 1985). Taking together the results of these tests, we concluded that the within-team ratings were homogeneous enough to be aggregated.

Model Testing Structural equation analyses were used to test the proposed model connecting servant leadership, cooperative conflict and competitive conflict approaches, team coordination, and quality customer relationships. The covariance structure analysis of the interrelationship among these constructs was analyzed using LISREL8 (Joöreskog & Soörbom, 1996).

In addition to evaluating the overall model fit and specific parameter estimates, a nested model test was used to evaluate the argument that a conflict management approach mediates the link between servant leadership and team coordination and quality customer relationships.

Results

Table 3.1 shows the fit indices of the different models in the nested model test. The Mediating Effects model, or the theorized model, was compared with the Full Effects model and the Direct Effects model. The difference in model fit among the nested models can be tested using the chi-square difference test (see for example, Bollen, 1998; Kaplan, 2009). As the difference between the Full Effects model (least restrictive model) and the Mediating Effects model was insignificant ($\Delta\chi^2=5.04$, $df=2$; *n.s.*), it suggests that the Mediating Effects model provides a similar fit as the Full Effects model. In other words, imposing restrictions of zero direct effects from servant leadership to team coordination and quality customer relationship does not significantly deteriorate the model fit. The Mediating Effects model is therefore more preferred than the Full Effects model because of its parsimony. The Mediating Effects model was also compared with the Direct Effects model. Results suggested that the Mediating Effects model has better model fit than the Direct Effects model.

Path coefficient results of the accepted Mediating Effects model help to explore the findings more specifically (Fig. 3.1). Servant leadership had a significant positive impact on cooperative conflict ($\beta=0.72$, $p<0.01$) but a negative though not significant impact on competitive conflict ($\beta=-0.03$, *n.s.*). Cooperative conflict had a significant positive impact on team coordination ($\beta=0.23$, $p<0.05$) and quality customer relationships ($\beta=0.17$, $p<10$). Competitive conflict management had a non-significant positive impact on team coordination ($\beta=0.04$, *n.s.*) and quality customer relationships ($\beta=0.03$, *n.s.*), respectively. Path coefficient results generally support the study's hypotheses, except that the paths from servant leadership to competitive conflict management and from competitive management to the outcome variables were not statistically significant.

Discussion

Confronted with turbulent markets, organizations must see, think, and act anew. Often, market challenges provoke debate and anxiety among leaders and employees alike about how the organization can respond. Traditionally, this disunity of ideas has been thought to paralyze organizations leaving them vulnerable to market changes. However, research has documented that it is not conflict itself that undermines an organization's ability to cope with turbulence. Rather,

Table 3.1 Full effects, mediated effects, and direct effects models

	χ^2	**df**	$\Delta\chi^2$	**NNFI**	**CFI**	**IFI**	**RMSEA**	**SRMR**
Full Effects model								
Servant leadership has direct links to cooperative and competitive conflicts, team coordination, and quality customer relationships; cooperative and competitive conflicts have direct links to team coordination and quality customer relationships	299.68	211		0.95	0.96	0.96	0.061	0.089
Mediating Effects (theorized) model								
Servant leadership has direct links to cooperative and competitive conflicts; cooperative and competitive conflicts have direct links to team coordination and quality customer relationships	304.72	213	5.04 (*n.s.*)	0.95	0.96	0.96	0.062	0.095
Direct Effects model								
Servant leadership and cooperative and competitive conflicts have direct links to team coordination and quality customer relationships	340.86	213	41.18**	0.93	0.94	0.94	0.073	0.18

Notes: χ^2 is the model chi-square; $\Delta\chi^2$ is the change in model chi-square

NNFI non-normed fit index, *IFI* incremental fit index, *CFI* comparative fit index, *RMSEA* root mean square error of approximation, *SRMR* standardized root mean square residual

**$p<0.01$

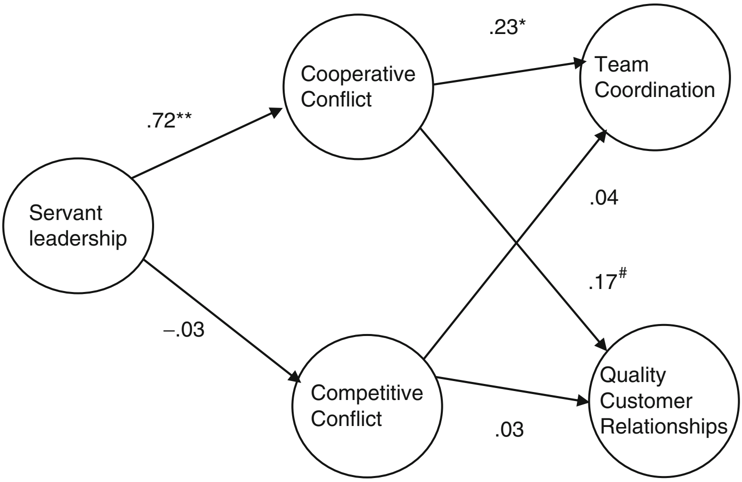

Fig. 3.1 Path estimates for hypothesized model
*#p<0.10, *p<0.05, **p<0.01*

it is how conflict is discussed and managed. Indeed, leaders should not avoid conflict, pretend that it is not present, or blame it for organizational paralysis. Leaders should facilitate open-minded, cooperative discussion, which has proved very useful for identifying and solving problems and developing integrated ideas that lead to the creation of new solutions that further help organizations respond to market challenges and other issues.

Our study results provide strong evidence that while managers can use a variety of styles that help their teams perform productively, they are more effective when they use their styles in ways that help their employees manage their conflicts cooperatively. Emphasizing productivity and related values, acting transformationally, and being servant-leaders were found to be effective strategies. These leadership styles are empowering for they help followers make use of their various ideas and tackle frustrations in ways that help them coordinate their efforts and solve problems jointly.

The three studies summarized together provide strong support for the value of linking the literatures on conflict and leadership. They suggest the value and, indeed, the need for conflict and organizational researchers to collaborate more in understanding important organizational dynamics and outcomes.

Recently, researchers have emphasized that leaders may have more powerful and constructive effects on teams than on individuals (Druskat & Wheeler, 2003). Studies reviewed further document that leadership can have powerful effects on team effectiveness by affecting the coordination among team members (Burke et al., 2006; Dionne et al., 2004). The leadership studies reported in this chapter underline the value of cooperative conflict management among teams for realizing effective coordination and team performance.

An important underlying mechanism for how effective leadership styles result in open, cooperative conflict management may be that these styles develop high-quality relationships among team members. Servant leaders communicate that they are committed to serving others by helping them achieve their goals and by developing a sense of community where members help each other reach their objectives. Research has underlined that relationships with highly cooperative goals lay the foundation of direct give-and-take conflict management (Tjosvold, 1998). To the extent that they have cooperative goals, employees are more likely to engage in open and direct discussions and to make these discussions constructive.

Theoretical Implications

Our research used Deutsch's (1973) theory of cooperation and competition to identify alternative ways that conflicts can be managed. Considerable evidence supports the theory that whether team members emphasize their cooperative or competitive goals very much affects the dynamics and the consequences of conflict management (Alper et al., 2000; Deutsch, 1973, 1980; Tjosvold, 1998).

To complement the research on the dynamics and outcomes of conflict management, research is needed on the antecedents of conflict management. Leadership has been thought to affect how team members deal with their differences (Podsakoff, MacKenzie, Moorman, & Fetter, 1990; Zhang et al., 2011). Respectful, supportive leadership styles with their emphasis on serving others may be viewed as modeling suppression of individual needs and feelings to sacrifice oneself for the good of others. Indeed, servant leadership may seem to be fertile ground for avoiding and smoothing over conflicts, not discussing them directly and openly. However, studies show that servant leadership as well as people and productivity leadership and transformation leadership, lay the foundation for team cooperative conflict management.

Practical Implications

Coping with turbulence is a complex challenge for many organizations. The resulting crisis atmosphere typically stimulates leaders and employees to develop ideas and proposals about how their organization should respond. Indeed, the resultant diverse ideas can further frustrate leaders and employees as they try to develop an effective plan for the organization. But considerable research has documented that it is not conflict itself that paralyzes and divides leaders and employees but how conflict is managed (Tjosvold, 1981). This chapter helps to identify how leaders can develop productive conflict management among organizational members.

Findings reported in this chapter have important practical implications for enhancing leadership and teamwork through conflict management. Respectful leaders were found to develop cooperative team goals and open discussion. These leaders can strengthen their effects by using research on the antecedents to cooperative goals (Tjosvold & Tjosvold, 1995). They can encourage team members to develop a common identity, common tasks, integrated roles, personal relationships, and shared reward distributions that reinforce cooperative goals (Hanlon, Meyer, & Taylor, 1994; Tjosvold & Tjosvold, 1995).

Respectful leaders can also help team members develop relevant skills to discuss their views openly and cooperatively. Team members can be trained to express their ideas, positions, and feelings directly without repercussion. Previous studies provide suggestions for developing cooperative conflict skills (Tjosvold, 2008). For example, leaders and followers can put themselves in each other's shoes and see the problem from each other's perspectives. They can seek mutually beneficial resolutions and integrate the best ideas to create new solutions. They can work out the solution that is most beneficial to all and implement it. Team members are aware that they should use their conflicts to coordinate team effort and integrate their ideas to serve customers effectively.

Managers and researchers have long believed that leadership is necessary for effective teams and organizations. However, we need much more progress in understanding the nature of productive leadership. This chapter reported on studies documenting that contrary to the belief that effective leaders and conflict are incompatible, conflicts can in fact be very useful for effective leadership. Conflict management can maintain and strengthen quality relationships between managers and employees, and managers can have an enduring impact on people and their productivity. Learning how to manage their conflicts cooperatively has the potential to help managers and employees become highly effective and develop productive, humane organizations.

Appendix

Team Member Questionnaire

Servant Leadership

1 Our team leader creates a sense of community among team members.
2 Our team leader tries to reach consensus among team members on important decisions.
3 Our team leader makes the personal development of team members a priority.
4 Our team leader does what he or she promises to do.
5 Our team leader balances concern for day-to-day details with projections for the future.
6 Our team leader works hard at finding ways to help team members be the best they can be.
7 Our team leader emphasizes the importance of giving back to the community.

Cooperative Conflict

1 Team members encourage a "we are in it together" attitude.
2 Team members seek a solution that will be good for all of us.
3 Team members treat conflict as a mutual problem to solve.
4 We work so that to the extent possible we all get what we really want.
5 Team members combine the best of positions to make an effective decision.

Competitive Conflict

1 Team members demand that others agree to their position.
2 Team members want others to make concessions but do not want to make concessions themselves.
3 Team members treat conflict as a win-lose contest.
4 Team members overstate their position to get their way.

Team Leader Questionnaire

Team Coordination

1 Team members are good at coming up with ways to complete their tasks.
2 Team members have very little misunderstanding about what to do.

3 Team members are effective at getting things done quickly.
4 Team members work together in a smooth fashion.

Quality Customer Relationships

1 This team has high-quality relationships with its customers.
2 This team is happy with its relationships with its customers.
3 This team is satisfied with relationships it has with its customers.

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Part II

4

Cultural Distance, Host Regulatory Quality, and Location Choice: A Hierarchical Analysis of Chinese Multinationals

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Introduction

In comparison with their counterparts from developed economies, emerging market multinational corporations (EMMNCs) are from different societies and economies and are likely to have distinctive motives, patterns, and development paths for their foreign direct investment (FDI) (Gaur & Kumar, 2010; Luo & Tung, 2007, Mathews, 2006). While the existing theories of firm internationalization are largely based on studies of Western economies and firms, the rise of EMMNCs presents significant challenges as well as opportunities for theory development. Among many decisions that they make when expanding overseas, the location choice of EMMNCs is an area that has not been studied as much. Specifically, the effect of the host institutional factors such as cultural distance and regulatory quality has attracted much attention and needs both theoretical development and empirical investigation. Traditionally, cultural difference is considered a barrier for firms to expand overseas (Johanson & Vahlne, 1977). Thus, everything else being equal, multinational corporations (MNCs) tend to first choose culturally similar countries as their targets before moving on to distant or dissimilar places (Kogut & Singh, 1988; O'Grady & Lane, 1996). However, this argument may not hold, especially for firms from emerging market economies (Thomas & Grosse, 2001). For instance, many MNCs such as those from China tend to invest in culturally distant countries.

Another critical and yet controversial issue is the effect of the host institutional quality, especially regulatory quality, on the location choice of EMMNCs. While high regulatory quality in general improves the efficiency of business transactions and attracts foreign investors, some scholars believe that high regulatory quality presents a significant challenge for EMMNCs who are more familiar with environments of lower regulatory quality, and are thus naturally more attracted to such locations (De Beule & Duanmu, 2012). Moreover, the home institutional embeddedness of EMMNCs, especially government relationship, has been deemed to influence their internationalization behaviors (Buckley, Cross, Tan, Xin, & Voss, 2008; Xu & Li, 2002).

Given the research gaps, it is necessary to explore the mechanism underlying EMMNCs internationalization behavior and to examine the effects of both home-based and host-based institutional factors. Drawing from prospect theory and recent theoretical development, we develop a number of testable hypotheses about the effects of cultural distance, host regulatory quality, and home government relationship. The results based on the data from 1557 overseas subsidiaries of Chinese MNCs show several interesting findings and have meaningful implications for understanding the internationalization of emerging market multinationals.

Relevant Literature

EMMNCs

The globalization of the world's economies has led to an increasing number of studies of firms' internationalization. The leading theories of internationalization, including the transaction cost perspective (Anderson & Gatignon, 1986), the Ownership Location Internalization (OLI) framework (Dunning, 1988), the knowledge development process model (Johanson & Vahlne, 1977), the resource-based view (Barney, 1991), and more recently institutional theory (North, 1990), are largely based on studies of firms from developed economies and emphasize the firm-specific advantages (FSAs) and the gradual process of knowledge development. In recent decades, MNCs from emerging market economies have expanded rapidly in international markets and this has attracted much interest from scholars in international business as extant theories cannot adequately explain the internationalization process of firms from less developed economies.

EMMNCs are different from their counterparts from developed economies in many aspects, particularly as they arise from different time periods and face different international environments (Gaur & Kumar, 2010). Thus, a thorough understanding of motivations, paths, processes, and performances of EMMNCs requires new theoretical approaches that can take into account the unique aspects of EMMNCs. The first major difference between EMMNCs and developed country MNCs lies in their respective motivations for overseas investment. While the existing theories emphasize the ownership advantages for minimizing transaction costs and scale economy from overseas operations, motivations of EMMNCs are quite different, including seeking natural resources and/or strategic assets as well as the better institutional environment in foreign countries, or avoiding the institutional constraints at home, just to name a few (Buckley et al., 2008; Child & Rodrigues, 2005). The biggest challenge for them is the lack of proprietary technologies, brand power, and distribution capabilities. Thus, for many EMMNCs, overseas investment or internationalization may not be the end, but often the means to acquire strategic assets and proprietary knowledge, especially research and development (R&D) capabilities. Since such capabilities cannot be developed at home within a short period, EMMNCs often invest overseas to upgrade their technology and product capabilities (Child & Rodrigues, 2005).

Recent theoretical development in this area has outlined the mechanism for such asset-seeking activities, including the springboard perspective (Luo & Tung, 2007) and the linkage, learning, and leverage (LLL) framework (Mathews, 2006). As Yeoh (2011) has found, mainstream internationalization models are more effective in explaining exploitative learning in terms of utilizing the firm's existing knowledge stock in the early stages of internationalization, while the emerging internationalization models (e.g., the LLL framework and accelerated internationalization) are more helpful in explaining exploratory learning in terms of seeking novel knowledge flows in firms' later stages of internationalization.

Meanwhile, other scholars have investigated the specific capabilities and resources of EMMNCs, which propel them to expand overseas. Sun, Peng, Ren, and Yan (2012) outline several comparative ownership advantages for EMMNCs including (1) national-industrial factor endowments, (2) dynamic learning, (3) value creation, (4) reconfiguration of value chain, and (5) institutional facilitation and constraints. Dunning (2006) acknowledges that some ownership advantages of firms indeed follow rather than lead their internationalization, and that the competitive advantages of EMMNCs are very likely to be different from traditional MNCs. However, he stresses that all MNCs have to possess "some unique and sustainable resources, capabilities" or favored access to markets that are protected or augmented through FDI (Dunning, 2006).

While many studies have focused on the motivations of EMMNCs and their investment patterns as well as the host country factors (Peng, Wang, & Jiang, 2008), empirical studies of the market selection and entry mode decisions of EMMNCS are particularly lacking.

Location Choice

Aside from the firm-specific ownership advantages, locational advantages represent another important factor in the internationalization of firms. Location-specific factors represent the special advantages accruing to firms operating at a particular location, thus making the location choice a critical factor for the internationalization of firms. Several host country factors including size of market and economic growth indicated by gross domestic product (GDP), and physical proximity have been found to affect such decisions (Buckley & Casson, 2002). Similarly, previous studies of location choice have mostly focused on firms from developed economies to invest in other developed economies and the developing countries (Makino, Lau, & Yeh, 2002). Since research on EMMNCs is a recent phenomenon, studies of their location choices are few and not easy to find.

Recently, there has been renewed interest in the location choice of multinationals (Buckley, Devinney, & Louviere, 2007; Buckley & Hashai, 2004; Demirbag, Tatoglu, & Glaister, 2010; Dunning, 2009; Galan, Gonzalez-Benito, & Zuniga-Vincente, 2007; Makino et al., 2002; Yuan & Pangarkar, 2010). First, due to rapid globalization of the world economy, critical resources for developing competitive advantages no longer reside in one country or region (Dunning, 2009). Thus, aside from minimizing transaction costs, firms expand into other countries for various reasons such as asset exploitation and exploration (Buckley & Hashai, 2004; Makino et al., 2002). Second, the rise of multinationals from developing countries, especially from emerging market economies, has received much attention in recent years. Thus, the growing outflow of FDI from emerging countries like China offers a unique opportunity for theoretical development and empirical research of the factors that drive the internationalization of firms (Buckley et al., 2008; Child & Rodrigues, 2005).

A number of studies suggest that EMMNCs tend to invest in culturally distant countries (Yuan & Pangarkar, 2010). To some extent, this is similar to the internationalization behaviors of Japanese firms and those latecomers from newly industrialized countries (NICs), which targeted developed economies for their overseas investment either to be closer to their customers or to upgrade their technology capabilities (Makino et al., 2002). However, there are also important differences between firms from NICs and the EMMNCs. NICs have small domestic markets that do not allow the import substitution route for economic development. These are usually former colonies or close allies of western countries, and thus are more familiar with the institutional environment of those countries. The emerging market economies such as China, India, and Brazil, however, are developing countries with a large domestic population, and up until 20 or 30 years ago, had pursued a domestic substitution policy. Thus, EMMNCs face very different environments at home and overseas. How these institutional factors affect their location choice is the focus of this study.

Institutional Factors

Among many factors that influence location choice decision, cultural distance (CD) and other institutional factors have received much attention. An institution is a set of "multifaceted, durable social structures made up of symbolic elements, social activities, and material resources" (Scott, 1995). These structures can provide guidelines and resources for acting as well as prohibitions and constraints on action. Culture is part of a country's informal institutions, including conventions, codes of conduct, and norms of behavior (North, 1990). The traditional viewpoint considers cultural distance a barrier to overseas investment because it poses certain risks or uncertainty, according to the knowledge development process theory or "Uppsala Model" (Johanson & Vahlne, 1993). Researchers from this view suggest that MNCs should enter countries by observing the sequence of geographic proximity, or cultural similarity (Bilkey & Tesar, 1977; Vernon, 1971). In other words, MNCs should first enter culturally similar countries to gain experience in FDI operations before moving on to culturally distant ones. According to this view, cultural similarity has its benefits, such as rapid information dissemination and easier extension of firms' existing marketing mixes (Davidson, 1980). Thus, everything else being equal, MNCs tend to choose culturally similar countries as their targets (Kogut & Singh, 1988; O'Grady & Lane, 1996).

However, the effect of cultural distance on location choice has been mixed. Support for the Uppsala model has been inconsistent. For instance, both Benito and Gripsrud (1992) and Sullivan and Bauerschmidt (1990) failed to find cultural distance to be a predictor of FDI sequence, perhaps due to the similarity in labor costs among countries within the same cultural cluster. Meanwhile, some scholars hold the opposite view that cultural distances imply less competition, thus more chances for success and better risk-adjusted return (Gomes & Ramaswamy, 1999; Kim, Hwang, & Burgers, 1993). Besides, cultural distance may contribute to enhancing the knowledge and adjustment capability of firms in the long run (Vermeulen & Barkema, 2001).

In light of globalization and the development of information technology, the traditional disadvantages of cultural distance could be offset, as acculturation has been easier to achieve. (Kuo & Fang, 2009). Moreover, the illusion of cultural similarity may breed carelessness, lack of due diligence, and lead to suboptimal performance (O'Grady & Lane, 1996). The empirical study on Canadian retailers entering America confirmed this argument (Evans, Lane, & O'Grady, 1992; O'Grady & Lane, 1996). Malhotra and Sivakumar (2011) suggest that firms seek the optimal level of cultural distance between the host and the home country to maximize a firm's investment in a foreign country given its market potential. The authors find that cultural distance and market potential have curvilinear and interaction effects on the level of equity participation.

Empirical studies have found that many MNCs tend to choose culturally distant countries as their targets (Thomas & Grosse, 2001). In effect, China's MNCs behave similarly when expanding overseas. For example, Huawei, a telecommunications equipment company, invested in India (1999) and Syria (2000) in its early years of internationalization. Haier selected the USA as its first location for FDI activities. Another case is the auto manufacturer Chevy, which invested in Iran and Argentina when it decided to go abroad. All these countries are culturally distant from China, and vary from developed countries to developing ones. The distinctive behavior of China's MNCs when selecting locations in the process of internationalization does not follow the logic of the conventional theories. This indicates that China's MNCs have motivations and development paths that are different from those of multinationals from developed countries. Dunning (1988), meanwhile, argued that larger cultural distance between home and host markets rather encouraged FDI as a way of overcoming transactional and market failures.

Moreover, researchers have examined the role of formal institutions on the location choice of firms. Regulatory systems are part of a country's formal institutions, including regulatory rules, and political and judicial regulations, and so on (North, 1990). The regulatory dimension covers the government policies that govern or regulate business activities (Kostova, 1997) and that have tremendous impact for incoming foreign firms. First, regulatory quality affects the transaction costs of businesses (Coase, 1937). For FDI activities, these include the cost of setting up a business, following the host government rules and regulations such as registration and licensing requirements, export and import regulations, and taxes. If MNCs plan to enter a particular host country, the transparency and fairness of these rules are important factors (Hoshi, Balcerowicz, & Balcerowicz, 2003; Johnson, Kaufmann, & Shleifer, 1997). Second, strong regulatory institutions play an important role in the protection of intellectual and private (foreign) property and in attracting foreign investors (Naghavi & Leahy, 2010). Finally, good regulatory institutions contribute to less information asymmetry and corruption, and lower political uncertainty or risks (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1998; Mauro, 1997). Taken altogether, MNCs are more attracted to host countries with strong regulatory institutions and avoid those countries where institutions are poor (Du, Lu, & Tao, 2012; Grosse & Trevino, 2005; Kwok & Solomon, 2006).

While regulatory quality attracts FDI, it also presents a challenge, especially for firms from emerging market economies because they may not be familiar with the new regulatory environment, and the cost of compliance can be high. De Beule and Duanmu (2012) found that better rule of law, regulatory quality, and control of corruption are important for Indian firms but not for Chinese firms in their foreign acquisitions, and political stability proves to be a negative estimator for both countries. This counterintuitive effect fades when the deal is large and the profitability of the target is high. In the mining industry, for instance, both Chinese and Indian acquisitions are more likely to take place in resource-rich countries with unstable political environments, poor rule of law, and deficient control of corruption. These companies may be strategically motivated to invest in countries with institutional backgrounds similar to their own so that they have less competition and a better chance to succeed. Also, some of these companies' acquisitions in the mining sector in more developed countries have been blocked, highlighting the liability of foreignness.

Research Gaps and Objectives

Clearly, EMMNCs are different in several key aspects from their Western counterparts and present challenges for the existing theories. In comparison with their counterparts from developed economies, EMMNCs often operate in essentially low-tech, labor-intensive, emerging market contexts. They operate in an institutional environment that is different from those of advanced economies. They tend to be young, investing in culturally distant countries that have different regulatory institutions from home. Thus, the effect of cultural distance and host regulatory quality on location choice may be different for firms from advanced economies. When predicting their location choices, the traditional delineation of different motives for FDI may be less meaningful (Dunning, 2009).

The Investment Development Path (IDP) theory suggests that MNC managers tend to match their FDI motives with the relevant type of location-specific advantages available in the recipient host countries (Narula & Dunning, 2000). To integrate the separately developed economic and institutional-cultural perspectives on foreign location choices, there is agreement among international business scholars on the need to study the combined influence of location choice determinants (Dunning, 2009; Flores & Aguilera, 2007). Moreover, for firms from transitional economies such as China, their own institutional embeddedness at home such as their government relationship has received little attention in the research of location choice. The exact effect of these factors, and their interactions, on the location choice of EMMNCs warrants systematic investigation.

Research Framework and Hypotheses

To reconcile the inconsistent findings about the role of cultural distance and institutional quality and to shed light on the location choice of EMMNCs, the assumptions about the homogeneity of cultures and firms need to be relaxed (Shenkar, 2001). While minimizing transaction cost and improving operational efficiency are paramount for international businesses, other motives such as learning and asset seeking are equally important, especially for EMMNCs. In fact, cultural distance may prove to be an attraction for EMMNCs, as culturally distant markets may have less competition, and the management knowledge from a different culture may be an important asset (Shenkar, 2001). Meanwhile, firms also consider the formal institutional factors such as the regulatory quality of a host country. Strong regulatory institutions at the host countries are generally associated with greater transparency, lower transaction cost, and more efficient operations. However, we believe that the benefits of regulatory quality may vary depending on the location and the motives of firms.

Aside from the effect of host country institutions, the home institutional embeddedness and its interaction with host countries' characteristics also affect the location choice of overseas investment (Davidson, 1980; Kang & Jiang, 2012). In effect, government-directed comparative advantages through market intervention, ranging from information supply to subsidy, have helped many EMMNCs to become formidable players in the international marketplace (Aggarwal & Agmon, 1990). Such institutional embeddedness is reflected in the influence of government and its agents in shaping firm strategies for overseas expansion through enforcing home institution environment (Buckley et al., 2008; Scott, 2002). Government regulations and policies also affect firms' strategic change or adaptation in different ways, such as changing the governance relationship between government agents and firms, increasing or limiting resources for firms, and affecting the market situation (Xu & Li, 2002).

Therefore, in this study, we focus on the effect of both host- and home-based institutions on the location choice of EMMNCs and propose the following theoretical framework (see Fig. 4.1). For host institutional factors, we focus on cultural distance and regulatory quality. First, we revisit the literature on the effect of cultural distance on location choice. We draw from prospect theory and propose the hypothesis regarding the effect of cultural distance and regulatory quality on location choice for EMMNCs and the moderating effect of the host regulatory quality. Then, we examine the home institutional embeddedness of firms and propose the moderating effect of home government relationship on the host regulatory quality.

Cultural Distance

The transaction cost perspective cannot explain why many firms from developing countries tend to enter culturally distant countries. Thus, it is necessary to examine the differences between these two groups of MNCs. For MNCs from advanced economies, their primary motive for overseas expansion is to exploit their competitive advantages and to

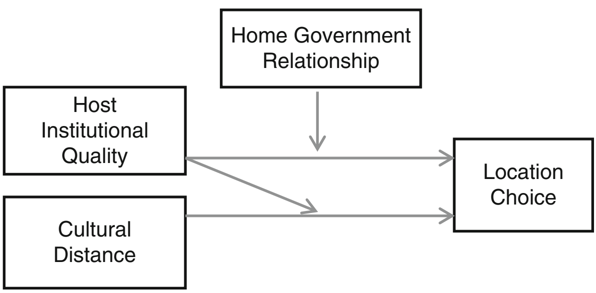

Fig. 4.1 The research framework on the location choice of EMMNCs

maximize the return on investment by increasing the scale economy. Cultural distance may present an obstacle for efficient extension of their existing strategies. For EMMNCs, who often lack the firm-specific advantages, their motives for investing overseas are more often associated with "exploratory learning" (i.e., seeking strategic assets such as resources, technology, and marketing capability) (Yeoh, 2011). Culturally distant countries seem to be more attractive for such types of learning as these countries are more likely to provide the type of "complementary resources" that EMMNCs lack (Nachum & Wymbs, 2005).

Prospect theory can help shed light on the preference choices of, and the differences between, MNCs from developing countries and those from developed ones (Kahneman & Tversky, 1979). Prospect theory suggests that decision makers may consider loss more serious and may ask for a higher price when they already own an item, resulting in loss aversion. This is certainly true for firms from developed economies, which often have advantages in advanced technology and product quality, thus view cultural distance as a significant risk. In contrast, firms from developing countries often lack these competitive advantages such as ownership of advanced technologies and management know-how, and thus may consider cultural distance a lesser risk. Therefore, MNCs from developing countries and those from developed ones may differ in their reference point. Furthermore, cultural distance may make the host country more attractive. From the perspective of learning and upgrading their capabilities (Mathews, 2006), MNCs may consider culturally distant countries more attractive, as they have much more to gain or learn from entering such countries. When studying inward FDI in Mexico, Thomas and Grosse (2001) found that increasing cultural distance between home and host countries leads to higher levels of FDI. Cultural distance may contribute to enhancing the knowledge and adjustment capability of firms in the long run (Vermeulen & Barkema, 2001).

Since the opening of China more than three decades ago, the reforms and influx of FDI have led to rapid economic growth and brought about tremendous changes across the spectrum of the society and culture by learning and experimenting with the market mechanism (Jiang, Chen, & Liu, 2010). However, the remnants of the communist ideology continue to influence various aspects of life in the country, including economic activities (Karouni, 2009). Given the slow changes in sociocultural norms that may be lagging behind the economic reality, it is not surprising that firms may view culturally distant countries as more attractive as investment destinations for business expansion, which can also help them avoid the institutional constraints at home (Buckley et al., 2008; Child & Rodrigues, 2005). Furthermore, firms may view culturally distant countries as attractive because they provide more complementary resources and knowledge (Nachum & Wymbs, 2005). Therefore, based on the preceding arguments, we believe that the effect of cultural distance on EMMNCs may be different from that on firms from advanced economies and propose the following hypothesis.

H1 For China's outward FDI, MNCs tend to invest in host countries with greater cultural distance.

Host Regulatory Quality

As EMMNCs strive for legitimacy in foreign locations, they tend to avoid markets with repressive institutional constraints and prefer those with market-supported institutions (Kang & Jiang, 2012). In effect, empirical studies indicate that business-friendly regulative institutions have a strong influence on FDI inflows (Bevan, Estrin, & Meyer, 2004; Grosse & Trevino, 2005). Relatively easy paths to legitimacy contribute to the weakening of disadvantages arising from the "liability of foreignness" (Hymer, 1976; Luo & Mezias, 2002). It is reasonable to suggest that EMMNCs tend to invest in the countries where they can easily gain legitimacy to minimize the negative effect of the liability of foreignness.

In comparison with the less developed institutional environment in China, the regulatory quality in host countries represents for Chinese MNCs both a big attraction as well as one way to avoid the misaligned institutional environment at home (Buckley et al., 2008; Child & Rodrigues, 2005). Despite their familiarity with such an environment, poor regulatory quality in host countries, especially the less developed countries, present a significant challenge. Thus, when entering less developed countries (LDCs), Chinese firms tend to seek out those with higher regulatory quality. Meanwhile, developed economies already have strong regulatory institutions, which may put greater pressure on EMMNCs in terms of seeking legitimacy and credibility. However, there tend to be less variation among developed economies in the regulatory quality, which does not significantly influence the location choice of EMMNCs. Based on these analyses, we can hypothesize that:

H2a Host regulatory quality positively affects Chinese MNCs location choice when the target country is a less developed country (LDC).

H2b Host regulatory quality does not affect Chinese MNCs location choice when the target country is a developed country (DC).

In the meantime, formal institutions can affect informal constraints, that is, national culture through two mechanisms: complementarity and supersession (North, 1990). For the complementary mechanism, institutions can lower information, monitoring, and enforcement costs and hence make informal constraints possible solutions to complex exchanges (Milgrom, North, & Weingast, 1990; North, 1990). In contrast, the supersession mechanism means that the formal rules may be "enacted to modify, revise, or replace informal constraints" (North, 1990). With the change of social and economic environment, some countries have to develop institutions deliberately to overrule and supersede those informal constraints that no longer meet the needs of new situations. Transitional economies such as China represent a good example of the supersession mechanism in that they have continuously changed their institutions to attract foreign investment (Wernick, Haar, & Singh, 2009).

The formal and informal institutional dimensions affect location choices of MNCs both directly and interactively (Beckert, 2010). The supersession mechanism affects the role of both cultural distance and host regulatory quality in the location choice of foreign firms. However, cultural distance does not serve as a barrier or deterrent for foreign investors, as reflected in the increasing flow of FDI into the transitional countries. Likewise, despite the cultural distance that may attract Chinese firms to other LDCs, those countries with strong regulatory institutions may deter Chinese firms from making investment in these locations because firms tend to adopt the exploitation strategies in such countries and the high institutional quality does not provide additional benefits. Thus, when cultural distance is great, Chinese firms tend to be attracted to countries with lower regulatory quality, which makes it easy for them to exploit and extend their existing strategies. On the other hand, as regulatory quality is high in most developed economies, this moderation role of host regulatory quality does not apply. Based on this argument, we hypothesize that:

H3a Host regulatory quality negatively moderates the effect of cultural distance on the location choice of less developed countries.

H3b Host regulatory quality does not moderate the effect of cultural distance on the location choice of developed countries.

Home Institutional Embeddedness

For China's MNCs, their home institutional embeddedness, especially their political connections or relationship with the government, plays an important role in their overseas expansion, and such a role is particularly relevant when investing in countries with great cultural differences and low regulatory quality (Buckley et al., 2008). The Chinese government has taken numerous measures encouraging outward foreign direct investment (OFDI) through administrative fiat or economic policy of "Reform and Opening up to the Outside World" (Buckley et al., 2008). The specific measures include low-cost capital, subsidies, export duty refunds, privileged access to raw materials and other inputs, and simplified procedures of investing in specific countries. These policies encourage MNCs to expand overseas by offsetting their ownership and location disadvantages abroad (Aggarwal & Agmon, 1990). The home institutional embeddedness provides competitive advantages for MNCs' overseas investment in similar markets abroad, which are characterized by uncertain economic development, opaque regulatory conditions, and weak market-enhancing institutions (Buckley et al., 2008; Erdener & Shapiro, 2005). Such home institutional embeddedness helps Chinese MNCs deal with the complex conditions in the countries with low-quality institutions (Buckley & Casson, 2002). Empirical studies show that Chinese MNCs are more competitive than those from industrialized countries in the developing country markets (Yin & Bao, 2006). Thus, home government relationship proves to be an important comparative ownership advantage for Chinese firms, especially when they invest in other LDCs where government relations may play an important role (Aggarwal & Agmon, 1990; Sun et al., 2012).

Obviously, the degree of support that firms receive varies depending on their relationships with the government. Firms with closer governmental relationship tend to receive more support from government agencies (Faccio, 2006; Hillman, Zardkoohi, & Bierman, 1999; Sheng, Zhou, & Li, 2011). Those receiving more governmental support need to provide legitimate reasons for this support, either through ownership or through regulations (Peng, 2000). The large state-owned enterprises gain much support from the government and are protected by the central government when going overseas (Ambler & Witzel, 2004; Child & Rodrigues, 2005; Morck, Yeung, & Zhao, 2008). Thus, close governmental relationships provide a strong backing for MNCs, especially when they invest in other LDCs that tend to have lower regulatory quality.

However, among the developed economies, investment and other regulatory institutions tend to be better developed, leading to greater transparency and efficiency of cross-border operations. The role of home institutional embeddedness tends to be more limited in developed economies. Consequently, we hypothesize that:

H4a Governmental relationship positively moderates the relationship between host country regulatory quality and location choice in the less developed countries.

H4b Governmental relationship does not moderate the relationship between host country regulatory quality and location choice in the developed countries.

Research Methodology

Variables and Measurement

In this study, the dependent variable is location of country, which falls into four categories: (1) less developed countries from Asia, (2) less developed countries from other regions (LDCs other than Asia), (3) developed countries (DCs, i.e., those from North America, West Europe, and Japan), and (4) newly industrialized countries (NICs, e.g., South Korea, Taiwan, Hong Kong, and Singapore). These categories are consistent with the country classification used by Kuncic (2012). It should be noted that LDCs from regions other than Asia are often institutionally weak, while DCs are often institutionally strong.

The independent variables are cultural distance, host country regulatory quality, and home governmental relationship. First, we measure cultural distance by integrating the dimensions of the GLOBE Project into one composite dimension (House, Hanges, Javidan, Dorfman, & Gupta, 2004). We then calculate the cultural distance between China and the host country. Regulatory quality is measured by averaging the ten dimensions of regulatory institutions based on the data from the World Bank (www.doingbusiness.org), which include starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts, resolving insolvency, and so on. Home governmental relationship is measured by a questionnaire in a survey of China's MNCs. We included five items to measure the governmental relationship in terms of (1) their connections with government agencies, (2) support from the government in areas of financing, (3) locating investment partners, (4) identifying investment opportunities, and (5) solving problems in the host countries.

The Survey

The data on firms' location choice in foreign markets and firm background variables were collected through a survey of mainland Chinese firms using the questionnaire developed by the authors. A major multinational research company was commissioned to conduct the survey using its proprietary panel of executives of Chinese companies that had some international businesses at the end of 2009. These companies come from four major manufacturing sectors: (1) food and beverages, (2) textile and apparel, (3) electric machinery and electronics, and (4) transportation and other equipment. Firms in banking, finance, and natural resources were excluded as their OFDI behavior often reflects government agenda instead of firm behavior. All these firms are indigenous Chinese firms or joint-stock companies in which Chinese partners are the majority owners.

First, we drew a random sample from 1132 firms from these industries from the research company's database based on the preceding criteria. Then, the research company delivered the questionnaires by regular mail and email to top executives who were either in charge of or familiar with their company's international operations. After 2 weeks, follow-up phone calls and email reminders were sent to those panelists who had not responded. Finally, we collected 301 completed questionnaires, resulting in a response rate of 26.6 %. At the end of the survey, research assistants placed phone calls to 10 % of the respondents randomly to verify their identities and responses to the survey.

Control Variables

The control variables are firm size, firm age, industry category, ownership, entry mode, and the level of economic development of the countries. Firm size is measured by the total number of employees, while firm age refers to the number of years in operation. Ownership includes four types: (1) state-owned enterprises (SOEs), (2) collective firms, (3) private firms, and (4) foreign invested enterprises (FIEs). Industry category falls into three types: (1) heavy industry, (2) light industry, and (3) service industry. Entry mode falls into five categories: (1) license, (2) joint venture (JV) with less than 50 % ownership, (3) JV with more than 51 %

ownership, (4) wholly owned subsidiaries, and (5) mergers & acquisitions (M&A). The first four entry mode variables are recoded into dummy variables. The level of economic development of host countries is measured by the GDP per capita of each country using data from the World Bank. The data sources of the aforementioned variables are shown in Table 4.1.

The Results

The data cover 301 Chinese MNCs with 1557 subsidiaries spreading across 42 countries. The distribution of subsidiaries across countries is shown in Table 4.2. Before running the regression models with interactions, we checked for the collinearity of the interaction variables. The analysis shows that the variance inflation factor of cultural distance and regulatory quality is 1.071, thus much less than 10, indicating no collinearity between cultural distance and regulatory quality.

Table 4.1 Data sources of the variables and measurements

Variables	**Measurement**	**Data source**
Location	Target country	Survey
Cultural distance	Cultural difference from China	GLOBE Project
Host regulatory quality	Economic Freedom Index	Doingbusiness.org
Home government relationship	5 Items	Survey
Industry	3 Types with 2 dummy variables	Survey
Firm size	Number of employees	Survey
Investment types	3 Types with 2 dummy variables	Survey
Entry mode	5 Types with 4 dummy variables	Survey
Ownership	4 Types with 3 dummy variables	Survey
International experience	Years of overseas investment	Survey
Economic development	GDP per capita	World Bank

Table 4.2 Distribution of subsidiaries

Country category	**Number of subsidiaries**
Less developed countries in Asia	222
Less developed countries other than Asia (LDCs)	323
Developed countries (DCs)	689
Newly industrialized countries (NICs)	323

Data Analysis

To analyze the data, we adopted the method of hierarchical linear model with the necessary control variables, independent variables, and their interactions (see Table 4.3). We used the first group of less developed countries in Asia as the default choice, thus we do not show these results. From Table 4.3, it can be seen that cultural distance positively affects Chinese MNCs' location choice when the target countries are less developed countries from other regions (coefficient=0.093, $P<0.001$), when the target countries are developed ones (coefficient=0.346, $P<0.001$), and when the target countries are NICs (coefficient=0.066, $P<0.01$). The results are consistent with Hypothesis 1, which we presented earlier in the chapter.

Table 4.3 A hierarchical linear model of location choice

Independent variables	LDCs	NICs	DCs
Firm size	–0.136	–0.822	0.017
Ownership			
SOEs	0.608	0.992	1.021
Collective	0.737	3.371*	1.456
Private	0.595	1.074	1.241
Industry category			
Heavy industry	0.148	–0.428	–1.786
Light industry	0.735	–0.041	–0.816
Internationalization experience	0.132*	–0.011	0.031
GDP of host country	0.00004	0.00064†	0.00081†
Type of FDI operation			
R&D	0.379	1.224†	2.063†
Manufacturing	–0.945*	–2.437***	–1.922†
Entry mode			
Licensing	–1.835†	1.042	–0.976
JV 50% and below	–1.433†	0.147	–0.457
JV 51% and above	–1.112	1.411	0.372
Wholly owned	–0.665	1.194	0.528
Cultural distance (CD)	0.093***	0.066**	0.346***
Regulatory quality (RQ)	1.834**	2.931***	1.597
CD*RQ	–0.061***	–0.041*	–0.009
Government relations (GR)	0.479	–0.451	–3.964
CD*GR	0.007	0.010	0.062
RQ*GR	1.307*	1.185*	0.390

Notes: ***sig. ≦ 0.001; **sig. ≦ 0.01; *sig. ≦ 0.05; †sig. ≦ 0.10

The results also show that host country regulatory quality significant affects Chinese MNCs' location choice, depending on the stage of economic development or the country type. For the less developed countries from other regions, host country regulatory quality positively affects the location choice of Chinese MNCs (coefficient = 1.834, $P < 0.001$). Meanwhile, it negatively moderates the effect of cultural distance (coefficient = –0.051, $P < 0.01$). This means that when investing in the less developed countries, host country regulatory quality is an important factor for Chinese MNCs and diminishes the effect of cultural distance to some extent. Interestingly, for the newly industrialized countries, the results are consistent with those of less developed countries (coefficients of RQ and RQ*CD are 3.080 and –0.036, respectively). This is not surprising as NICs are not yet developed economies. Together, these results lend support to Hypotheses 2a and 3a. Thus, as shown in Fig. 4.2, host country regulatory quality can offset the risks or uncertainties associated with cultural differences in less LDCs and NICs. However, when investing in the developed countries, host regulatory quality does not have a significant effect on location choice or moderate the effect of cultural distance (Table 4.3), thus supporting Hypotheses 2b and 3b.

The results also indicate that although home government relationship does not affect the location choice of firms per se, it has a significant moderating effect on the host regulatory quality, depending on the type of country (Table 4.3). When entering the LDCs and NICs, home government relationship can contribute to the international expansion into these countries (coefficient = 1.307 and coefficient = 1.185, respectively) (Table 4.3). In contrast, when entering the developed countries, home government relationship does not have a significant moderating effect (Table 4.3), thus providing support to Hypotheses 4a 4b. Meanwhile, home government relationship does not directly moderate the effects of cultural distance. As shown in Fig. 4.3, these results suggest that home government relationships do not mitigate the effect of cultural differences, if any, but help firms to cope with the pressure of higher regulatory quality only in the less developed countries and newly industrialized economies, where institutions are still not yet the strongest. However, such effect does not apply to the developed countries.

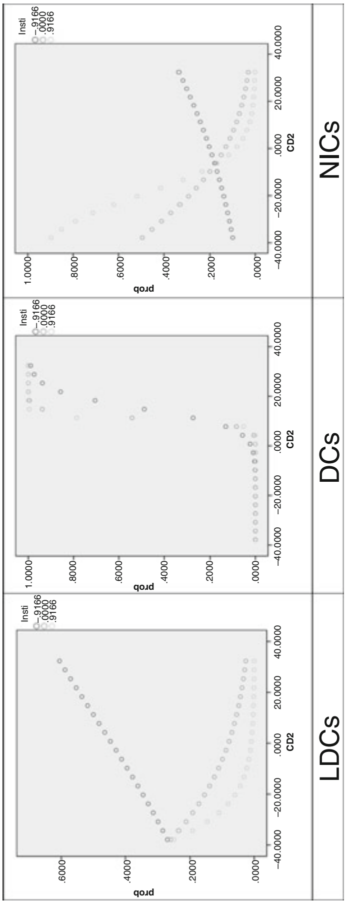

Fig. 4.2 Interaction of CD and RQ

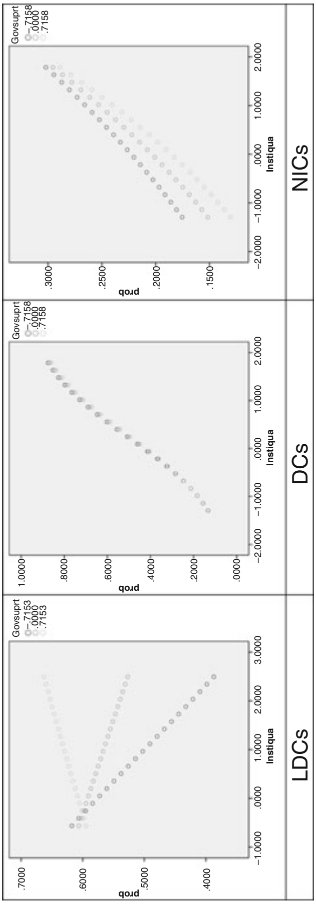

Fig. 4.3 Interactions of RQ and GR

Discussion

Findings and Implications

As suggested, EMMNCs and those from China in this case, are attracted to culturally distant countries rather than culturally similar ones. Even among countries with the same level of economic development, culturally distant countries have proved to be very attractive for Chinese multinationals. This is inconsistent with the traditional view of cultural distance (Johanson & Vahlne, 1993; Kogut & Singh, 1988; Kuo & Fang, 2009), and reveals to an extent its inapplicability to emerging market multinationals. Conventional thinking emphasizes the negative effect of cultural distance and neglects the potential benefits of investing in and learning from culturally distant locations. Today, the undesirable effect of cultural distance may have diminished somewhat. One important attraction of cultural distance is its lower level of competition (Gomes & Ramaswamy, 1999; Kim et al., 1993). At the same time, cultural distance encourages firms to adapt and upgrade their capabilities (Vermeulen & Barkema, 2001). Therefore, different from MNCs of developed countries, EMMNCs from developing countries can gain from the potential benefits of cultural distance. This may also be related to the motivation of China's MNCs because culturally distant countries are the prime destinations of Chinese exports and offer opportunities for accessing advanced technologies and upgrading capabilities.

Meanwhile, regulatory quality is critical for Chinese firms to enter the less developed countries as well as the NICs. In countries where regulatory quality is low, there may be tremendous risks that may lead to huge losses for firms in times of uncertainty. Such risks may deter MNCs from investing in these countries, although they may be culturally distant and somewhat attractive. Facing these risks, host regulatory quality becomes a critical factor that protects MNCs from possible damages or losses. Moreover, for both LDCs and NICs, host regulatory quality diminishes the attraction of distant cultures. Regulatory institutions provide the ultimate security for the property of MNCs (North, 1990; Scott, 1995). If the institutions in the host country are strong, the operating risks can be substantially reduced. Meanwhile, home government support might provide added protection, thus attracting Chinese MNCs to invest in LDCs and NICs, especially those with better regulatory quality. In contrast, for the developed countries where the institutions are well developed, the effects of regulatory quality and home government connections are not significant because uncertainties and risks can be systematically monitored and controlled there.

These findings suggest that EMMNCs are not particularly concerned with regulatory quality when entering developed countries. In contrast, when entering the less developed countries, and even NICs, EMMNCs take host country regulatory quality into account. Furthermore, although home government relationships do not directly influence EMMNCs' location choices, they do exert some influence by helping EMMNCs deal with the institutional constraints in host countries where regulatory institutions are not yet well developed.

Limitations and Future Studies

This study has tested the effects of cultural distance, host country regulatory quality, and home government relationships on the location choice of China's MNCs. The results show that both cultural distance and host country institutions influence location choices depending on the stage of economic development among the host countries. However, some limitations remain, and we encourage future researchers to tackle these challenges. We have discussed two conflicting views of how cultural distance affects the location choice of MNCs and proposed that cultural distance may be an attraction for EMMNCs. However, the exact mechanisms are yet to be identified. Future studies may go one step further to explore exactly how cultural distance attracts EMMNCs to these locations. There are possible mediators or moderators that can enhance the attractiveness of culturally distant locations. For example, cultural distance may encourage firms to develop their adaptive capability, which may affect the location choice of firms.

We have examined the role of home government relationship in affecting the location choice of firms. Political relationship or government connections are only one aspect of the home institutional environment. Other aspects of home institutions such as culture, and norms and regulations ought to be considered as well. Since MNCs grow up in the environment of their home countries, they should show some level of home institutional embeddedness, which plays a critical role in their future internationalization activities. It will be fruitful to study the interactions between home institutions and host institutions. Lastly, we did not consider the effects of management experience or the leadership team of MNCs. Often, MNCs recruit senior executives from the host or other similar countries. Whether or not the composition of top management can help EMMNCs navigate the institutional environment in the host countries is something to be explored.

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5

China as a Center for Innovation? Implications for Knowledge Transfer and Culture Shifts

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Introduction

Asia today presents the world's most dynamic business environment. Within Asia, facilitated by the participation of a large number of Chinese companies in international business, primarily through inward and increasingly through outward foreign direct investment (FDI), China's globalization has contributed to the dynamic (and sometimes turbulent) business environment. This environment is characterized by endless opportunities, swift changes in technologies, and continuous institutional reforms, all of which have major implications for how multinational corporations (MNCs) from the West, and local companies from within the Asia region, can plan for their long-term survival. This chapter aims to enhance our understanding of the changing behavior of China-based subsidiaries, the capabilities gained as a result of inward FDI, and the implications for the broader Chinese society. For foreign companies operating in China and Asia, such an understanding can play a crucial role in influencing and informing strategies to cope with the growing influence of Chinese companies and their emerging capabilities and innovations, be they competitors, suppliers, customers, or strategic partners.

Traditionally, the literature on the relationship between inward FDI and Chinese companies' competitiveness suggests that, through joint ventures with MNCs and wholly foreign-owned enterprises, China has learned and gained considerable knowledge about new technologies and advanced managerial and marketing know-how (Lu, 2000; Wu & Callahan, 2005). The literature tends to present the country as a knowledge receiver rather than a knowledge contributor to the rapidly developing global economy (e.g., Wang, Tong, & Koh, 2004).

However, more than three decades after China launched its economic reforms, with knowledge stock accumulating and emerging talent pools developing, especially with the unlimited availability of science and engineering talent (Manning, Massini, & Lewin, 2008), China is playing a more important role in terms of making contributions to the global knowledge base. China's globalization has the potential to have a tremendous effect on the global economy in terms of knowledge contribution and sharing. Nevertheless, there is a lack of related studies to help us understand just what the potential is for such knowledge acquisition, innovative developments, and transfer in China's globalization process.

The study discussed in this chapter seeks to provide insights into the area. Factors identified as playing an important role in cross-border knowledge development, knowledge sharing processes, and innovation include the social, political, cultural, and technological. Specifically, the literature (e.g., Bhagat, Kedia, Harveston, & Trandis, 2002) notes the impact that national culture has on the knowledge transfer process. In the context of China, given its complicated and unique cultural environment (Buckley, Clegg, & Tan, 2006; Gannon, 2001; Hung, 2004), and its global aspirations, the impact of culture on knowledge transfer is deemed to be significant. At the same time, massive knowledge inflows to China, increased capabilities, and global business opportunities are all expected to have an impact on values in Chinese culture. Scholars such as Ralston et al. (1995), for example, have investigated and identified the changing values of Chinese managers and noted the implications for changing social norms and values. However, few studies have focused on *how* this culture shift is related to knowledge flows to and from China via FDI.

Using MNCs in the information technology (IT) industry in China as a case, this chapter seeks to provide insights by exploring knowledge transfer patterns to and from China-based subsidiaries, the extent of capabilities development, and innovations in technology. It also provides insights by examining whether national culture does interact with knowledge transfer. Exploratory research questions (Marschan-Piekkari, Welch, Penttinen, & Tahvanainen, 2004) seek to identify the types of knowledge that flow between the headquarters of MNCs in the IT sector and their subsidiaries in China, trends and patterns in the knowledge transfer process, factors that might inhibit or facilitate the knowledge transfer processes and innovative practice, the impact of culture and cultural differences, and the implications of specific Chinese culture traits for the knowledge sharing process, and changes that might occur. The study is a component of a larger mixed methods investigation and presents findings in relation to the qualitative dimension. It has implications for understanding the increasingly important function of knowledge acquisition and its transfer in China-based subsidiaries. It also suggests the potential for China emerging as a center for new knowledge and innovation.

The following section briefly reviews the literature and proposes a theoretical model. Later sections describe the research method and present the findings through the analyses of in-depth case studies. The chapter ends with a discussion of the implications of the findings and a summary of the contributions.

Literature Review

FDI and Knowledge Transfer

Traditional economic theory identifies market-seeking, efficiency-seeking, and resource-seeking as motives of FDI, aimed at gaining access to foreign markets, seeking efficiency by taking advantage of lower labor cost in the host country, and gaining access to natural resources (Caves, 2007; Dunning, 1993). As firms expand overseas for increased competitive strength, the competition is becoming increasingly intense in the global business environment (Vandermerwe & Chadwick, 1991). Knowledge- or capability-based resource and innovation, hence, become critical factors for firms to compete in the globalized arena. On the one hand, outward FDI is undertaken by firms aiming to exploit their resources and capabilities overseas (Dunning, 1993). On the other hand, outward FDI enables firms to access technology, control strategic assets, and acquire complementary resources from overseas (Lall, 1983; Tolentino, 1993), with the potential for facilitating knowledge generation. The key competitive advantage of MNCs lies in their abilities to exploit locally created knowledge worldwide and in their capabilities to transfer knowledge within organizational networks characterized by separation in time, space, culture, and language (Birkinshaw, Hood, & Honsson, 1998). Therefore, FDI has been viewed as an important vehicle for transfer of knowledge (Borensztein, De Gregorio, & Lee, 1998; Findlay, 1978). While MNCs are achieving their goals through cross-border knowledge transfer, FDI recipient countries can take advantage of the knowledge transfer process in enhancing local innovation capabilities and in inspiring and stimulating local knowledge creation. FDI by MNCs is considered to be a major channel for developing countries to access cutting-edge technology and existing best practices from developed countries. MNCs, especially those from developed countries, generally have advanced technology and management skills, and high levels of investment in research and development (R&D). Through knowledge transfer within MNCs, knowledge diffusion occurs, normally from the developed world to emerging economies. The rate of economic growth of an emerging economy, to some extent, depends on the extent of adoption and implementation of new technologies and other management knowledge that are already in use in leading countries (Borensztein et al., 1998). Borensztein et al. (1998) also argue that FDI contributes to economic growth only when a sufficient absorptive capability of the advanced technologies is available in the host economy.

In addressing the effects of knowledge transfer within MNCs on local knowledge creation in the host country, the literature (e.g., Cheung & Lin, 2004) observes several important channels through which inward FDI can benefit innovation in the host countries. First, knowledge spillover takes place through labor turnovers, whereby local firms obtain the know-how of MNCs by luring away their employees, and vertical diffusion occurs from foreign firms to their local suppliers and business partners. Second, inward FDI has a 'demonstration effect' on local R&D activities, inspiring and stimulating local innovators to develop new products and processes.

For example, in their study, Qi and Li (2008) showed positive spillover and demonstration effects in the business context in China. In an earlier study on foreign high-tech R&D centers in China, Walsh (2003) found that foreign R&D investments in China provided Chinese partners with technological know-how that local enterprises otherwise would not have had access to or have been able to develop independently. Clearly, China is taking advantage of knowledge inflows through FDI in facilitating local knowledge creation and enhancing local capabilities, especially in the area of technology, thereby enabling it to move up the value chain.

Walsh (2003) further indicated that, while foreign R&D centers are contributing to China's impressive high-tech growth, they are contributing as much, or even more, to the high-tech development and production capabilities of foreign companies. In other words, China is not only absorbing knowledge, but also contributing to knowledge creation and diffusion through inward FDI, a contribution that is expected to increase as more foreign R&D centers are established in China. However, very little empirical evidence exists for understanding the types of knowledge that are transferred from China-based subsidiaries back to MNCs, for gauging how the China-based subsidiaries and their employees are coping with the knowledge transfer processes, and for evaluating the extent of new knowledge contributions and innovations that China-based subsidiaries might make.

Knowledge and Knowledge Transfer

In order to understand knowledge diffusion in a global economy, it is necessary to define knowledge and understand why knowledge and knowledge transfer are important from the resource-based perspective.

Knowledge is defined as a dynamic human process of justifying personal beliefs as part of aspiration for the truth (Nonaka, 1994; von Krogh & Grand, 2000). Distinguished from data and information, knowledge is a mix of framed experience, important values, contextual information, and expert insights (Nonaka, 1994). Organizational knowledge is created through the synthesis of thinking and actions of individuals who interact with each other within and beyond the organizational boundaries (Nonaka, 1994; Nonaka & Takeuchi, 1995). It resides not only in the codes and routines that guide organizational action, but also in and between individuals within the firm (tacit knowledge) (Lindsay, Chadee, Mattsson, Johnston, & Millett, 2003). Knowledge, especially tacit knowledge, is appreciated as the most unique and inimitable resource that leads to a firm's sustained competitive advantage (Birkinshaw, 2001; Mahoney & Pandian, 1992; Spender, 1996). It is imperfectly imitable (cannot be copied well by other firms), which ensures that the knowledge holder can achieve sustained competitive advantage by preventing external competitors from copying the knowledge easily (Barney, 1991). However, it also results in the difficulty of knowledge transfer between two units within a firm (Jensen & Szulanski, 2004; Kogut & Zander, 1993). Scholars have argued that it is not the knowledge itself but the ability to acquire, store, share, and apply the knowledge that is one of the most critical capabilities for building and sustaining competitive advantage (Barney, 1991; Barney et al., 2001; Peteraf, 1993).

The competitive advantage of MNCs lies in their ability to exploit locally created knowledge worldwide, and in their capabilities to transfer knowledge within organizational networks characterized by separation through time, space, culture, and language (Birkinshaw et al., 1998; Buckley & Casson, 1976; Kogut & Zander, 1993; Schlegelmilch & Chini, 2003).

Gupta and Govindarajan (1991, 1994) examined the linkage between organizational knowledge and the strategic roles of subsidiaries. They assert that the patterns of knowledge flow can be captured by focusing on the direction (i.e., inflow or outflow) and the magnitude of these flows in which a subsidiary engages. Based on the knowledge flow pattern, subsidiary roles can be classified into four categories: (1) global innovator (high outflow, low inflow), (2) integrated player (high outflow, high inflow), (3) implementer (low outflow, high inflow), and (4) local innovator (low outflow, low inflow). The model has implications for China-based subsidiaries in terms of identifying just where they are positioned in these strategic patterns of knowledge flow, how their roles are perceived by the headquarters and home countries of MNCs, and the extent of their contributions to knowledge transfer in a global economy.

National Culture and Cross-Border Knowledge Transfer

Culture is regarded as one of the most important contextual variables that impacts on the knowledge transfer process (Bhagat et al., 2002; Chow et al. 2000; Li & Scullion, 2006). Holden (2001) even argues that knowledge management in the global economy is essentially a form of cross-cultural management, involving acts of cross-cultural exchange. As knowledge is created by individuals and embedded in certain cognitive and behavioral contexts (Grant, 1996), during the knowledge transfer process, knowledge holders transmit their culture-specific sets of values and frames of reference when receivers absorb the knowledge based on their cultural context (Nonaka, 1994; Polanyi, 1966). Scholars such as Tung (1993) further argue that societal culture is the more important determinant of success in technology transfer from industrialized to developing countries.

Some researchers (e.g., Bhagat et al., 2002; De Long & Fahey, 2000; Li & Scullion, 2006) view cultural distance as an obstacle in the knowledge transfer process and have argued that it has a negative impact on knowledge transfer, either in relation to intensity of knowledge flows or effectiveness of knowledge transfer. Others (e.g., Almeida et al., 2002) contend that national culture can also act as an incentive for knowledge transfer across national borders. They found that firms linked to specific cultures and countries, such as Japan, may be motivated to learn from their partners with different cultural linkages.

Focusing on the context of Chinese culture, a few studies have provided empirical evidence on the impacts of national culture on the knowledge transfer process. For example, in their studies, Chow et al. (2000) and Javidan et al. (2005) noted that people from a collectivist culture, such as China, behave differently toward in-group and out-group members, and are much less willing to share knowledge with out-group members. Buckley, Clegg, and Tan (2006) indicated that Chinese specific values, such as *Guanxi* and *Mianzi*, have impacts on knowledge transfer, while researchers such as Ralston et al. (1990) pointed to the changing values of managers in China and their striving to develop capabilities evident in managers in Western countries. Underpinning such findings is a growing propensity for learning in China, and aspirations not only for knowledge acquisitions but knowledge generation and, ultimately, growth and innovation. Consequently, cultural awareness in the knowledge transfer process, in the context of China, and the potential for generating value-added knowledge and local experience has gained significant attention.

Cultural Environment in China

Chinese culture has evolved for more than 2500 years, and was initially influenced by three molding forces: Confucianism, Taoism, and Buddhism (Fan, 2000; Yau, 1988). Confucianism, in comparison to Taoism and Buddhism, has been paid more attention in the research on Chinese culture (e.g., Fernandez, 2004; Hofstede & Bond, 1988) given its status as the official philosophy throughout most of China's history. The key principles of Confucian teaching include the following: (1) the stability of society is based on unequal relationships between people; (2) the family is the prototype of all social organizations; (3) virtuous behavior toward others consists of treating them as one would like to be treated oneself; and (4) virtue with regard to one's tasks in life consists of trying to acquire skills and education, working hard, not spending more than necessary, being patient, and persevering.

These values are similarly reflected in the work of Lockett (1988), who identified the key features of Chinese culture in relation to organizations as being (1) respect for age and hierarchical position; (2) group orientation; (3) the concept of face; and (4) the importance of relationships. In yet another classification, Yau (1988) categorized Chinese cultural values into five groups: (1) man to nature; (2) man to himself; (3) relational orientation; (4) time orientation; and (5) personal activity. The values in his model are largely characterized by an emphasis on harmony with nature and people, abasement as an expression of modesty and humility, the Confucian doctrine of hierarchical relationships, practical-mindedness of realism, the rules of proper behavior entailing rights and responsibilities, and the appreciation of collective rather than individual talents.

The dimension of Confucian dynamism in Hofstede's (1991) framework, perhaps the most well-known classification of cultural values, is of particular relevance to this study. Initially based on the findings of the Chinese Value Survey (Hofstede & Bond, 1988), it specifically focuses on Chinese culture. This dimension highlights the values associated with *Long-Term Orientation* (future rewards, perseverance, and thrift) and *Short-Term Orientation* (past and present focus and rewards). In their comparative study of managers in China, Hong Kong, and the USA, Ralston et al. (1993) found that the *Long-Term Orientation* scores were highest for China, followed by Hong Kong, and then the USA. They also identified Confucian dynamism as being characterized by a respect for tradition, along with a strong desire to save face (*Mianzi*).

Despite limitations to Hofstede's framework, several researchers (e.g., Pheng & Yuquan, 2002; Scarborough, 1998) have examined Chinese culture by applying Hofstede's (1998) model. Consistent with Hofstede's (1993) analysis and scores, their results suggested that Chinese culture is characterized by long-term orientation, large power distance, and collectivism, with long-term orientation demonstrating the highest ranking.

Among the most prominent characteristics of cultural values in China, *Guanxi* and *Mianzi* have been widely discussed in the literature on cross-cultural management (e.g., Leung & Chan, 2003; Li & Wright, 2000; Wood, Whiteley, & Zhang, 2001). The impacts of *Guanxi* and *Mianzi* on knowledge transfer have also been discussed (Buckley et al., 2006). *Guanxi* has been increasingly used to refer to the networks of personal connections that people cultivate and utilize to gain access to resources that may bring them some advantage, which they might not be able to acquire without such connections (Stockman, 2000). Even though some researchers, such as Guthrie (1998), suggest that, in the transition of the Chinese economy, the extension of a legal-rationale order will gradually make *Guanxi* less significant, *Guanxi* still plays an important role in the business world in China (Buckley et al., 2006). Like any culture, Chinese culture is dynamic and there is evidence of change, with researchers such as Fan (2000) suggesting that traditional Chinese culture is being challenged in modern China, and the exposure to other cultures and value systems (e.g., in MNCs located in China) is accelerating the change.

Method

To contextualize the knowledge flows, and capture patterns in the flows and their relationship to national culture, an exploratory multiple-case study (Yin, 2003) was conducted in the subsidiaries of MNCs in the IT industry in China. The IT sector provides an ideal context for the research because most global IT firms operating in China have originated from Western countries and reflect significant cultural distance.

Moreover, the local operations of these firms require a significant amount of knowledge transfer from the home countries.

This study focuses on the qualitative component of a large empirical study. It involved invitations to managers from 36 foreign IT firms listed on the China Foreign Enterprise Directory (2007) to participate in in-depth interviews. Specifically, we contacted senior and middle managers from these firms (subsidiaries of MNCs from the USA, Europe, Japan, and Singapore that are located in China) to seek permission for qualitative interviews. A total of 15 managers from two large firms (headquartered in the USA and Germany, respectively) responded positively, and were willing to make available for interview managers from several levels, including a cross section of managers located at both the headquarters and China-based subsidiaries. This provided a valuable opportunity for gaining in-depth information about knowledge transfer processes in China. Consequently, the in-depth interviews and case studies that were developed focused on these MNCs and their China-based subsidiaries. For confidentiality, the names of the companies are not revealed.

The 15 semi-structured in-depth interviews were conducted during multiple interview sessions in each company. Lasting between 60 and 100 min, the interviews were conducted using the interviewees' native language, either English or Chinese, for optimal knowledge and data acquisition (Marschan-Piekkari et al., 2004). A semi-structured interview schedule was used to ensure consistency in the data collection. Key questions included the following:

- What is the nature of the knowledge that flows between the headquarters of MNCs in the IT sector and their subsidiaries in China, and what is the balance of the flows?
- Is there evidence of a 'status quo' in patterns of knowledge transfer or indications of changing trends in the Chinese context, including the creation of local knowledge?
- Are there factors that are likely to inhibit or facilitate the processes of knowledge transfer in China?
- Does culture and cultural orientation/difference impact on the flow of knowledge between MNCs/headquarters and their China-based subsidiaries? If so, what is the nature of this impact?
- Are there specific issues relating to Chinese culture that may influence the knowledge transfer process and, if so, how are these being managed?

The interviews were transcribed (transcripts in Chinese were translated into English) and reviewed to ensure rigor in the transcription process. Through multiple readings of the transcripts, the data was sorted into categories and appropriate themes to address the research focus of the study and key issues canvassed (Creswell, 2003; Miles & Huberman, 1994).

Findings

Type of Knowledge and Patterns of Transfer

The qualitative data from this study showed that all participants appreciated the importance of knowledge and saw sharing knowledge within the global network of MNCs and their subsidiaries as vital in achieving sustainable competitive advantage. The knowledge types identified as being transferred to China-based subsidiaries include the following: technology related, product and marketing related, business process related, soft skills related, and culture-related knowledge. Technology-related knowledge includes expertise in a range of relevant technologies and skills in the use of related tools, as well as innovation and the ability to innovate. Product- and marketing-related knowledge involves an understanding of the global and local markets, and expertise in designing products based on customer needs and requirements. Soft skills include both process management and people management skills. Culture-related knowledge refers to the understanding of the cultural environment, the legal system in China, and how to do business in China's environment. The key knowledge types identified as being transferred from China-based subsidiaries back to the MNCs are essentially related to knowledge about the Chinese local cultural and legal environment. Table 5.1 provides a summary.

Researchers have argued that MNC subsidiaries in emerging economies are more likely to be receivers of knowledge than providers, given that the knowledge base of young subsidiaries is usually weak (Lyles & Salk, 1996; Wang et al., 2004). This is partially supported in this qualitative study, as indicated in the following comments:

> This subsidiary is still relatively young. So, at this moment, what we are learning from the headquarters, such as product knowledge and business process, is more than what we can export back to the whole MNC. (Expatriate Manager, Company A)

> So far, 80 % of new technology used in our lab in China is developed overseas, mainly in the US and Europe. (Head of Research, Company B)

Table 5.1 Knowledge transfer to and from China-based subsidiaries

Knowledge categories	**Inflows**	**Outflows**	**Related expertise and knowledge**
Technology related	✓		• Expertise in technology • Innovation and ability to innovate • Skills in the use of related tools and technologies
Product and marketing related	✓		• Understanding of global market • Understanding of local market • Expertise in designing products according to customers' needs and requirements
Process related	✓		• Business process expertise
Soft skills	✓		• Process management skills • People management skills
Culture related	✓	✓	• How to do business in China • Cultural environment in China • Legal system in China (IP protection related)

However, the data also indicated predictions for changes in knowledge transfer patterns in both MNCs and subsidiaries located in China. Clearly, China-based subsidiaries are expecting to upgrade their technological knowledge in the near future, as indicated in the following observation:

> Even though China is still a receiver of technological knowledge at present, it will be a totally different case in 5 years. Technological distance between China and other developed countries, such as the US and European countries, is diminishing. The one-way knowledge transfer will be replaced by a two-way knowledge exchange very soon… (Vice President, Company B)

Furthermore, the data provided indications of a growing confidence on the part of local Chinese managers in their ability to contribute to the knowledge creation process, and growing recognition of their emerging capabilities as global knowledge contributors, as indicated in the following comment:

> We are accumulating knowledge and experience, and actually have already started creating innovations that can gradually be shared

> with global teams. I believe the top management team at headquarters has already noticed the change. They are becoming convinced more than ever by our capabilities, and having growing confidence in funding new projects in China… Increasingly we are working with global teams to make contributions to global innovations… (Local Chinese Manager, Company A)

Evidence of the impact of such emerging changes in an increasingly dynamic and positively changing environment is the establishment and evolution of R&D centers in China (Walsh, 2003). Initially, MNCs in the IT industry, which established R&D centers in China, were seeking lower cost developers with Chinese language skills, specifically for the task of localizing and customizing the products of the MNCs to satisfy customer needs in the local market. More recently, however, the scenario has begun to change, creating a turbulence of its own. R&D centers are increasingly becoming a platform through which MNCs are able to recruit highly qualified talents to facilitate global innovations within the MNCs' boundaries. The cost of hiring highly qualified researchers in China is actually quite high, contrary to the more familiar objective of MNCs expanding into China, namely the low-cost and highly skilled labor pool. As the head of one research center from Company B indicated:

> People always think the cost of hiring a research fellow in China is very low. It is not true. We pay research fellows in China as much as we pay them in the US. First class hires first class, second class hires third class. No matter where you are, either in China or in other countries, if you want to be the best in the global market, you need to hire the best talents and you have to pay more.

This evolving phenomenon suggests that China-based subsidiaries are increasingly adding to their contributions and climbing up the value chain by playing more innovative roles in the global network of MNCs. Even though all interviewees believed that China-based subsidiaries are currently receiving more knowledge than they are exporting back to headquarters or other peer subsidiaries, it is expected and becoming evident that subsidiaries in China will play more important roles in innovations within the boundaries of MNCs before long. In terms of the model devised by Gupta and Govindarajan (1991), China-based subsidiaries could be seen as moving to become 'global innovators' and 'integrated players', as discussed further in the next section.

Knowledge Transfer and Subsidiary Roles of MNCs in China

Findings in this study revealed that China-based subsidiaries are currently playing the role of *implementer* much more than that of *innovator*. At the firm level, however, there are shifting trends that indicate that Chinese managers are catching up in terms of experience and expertise. At the same time, there is clear evidence that while national culture may be seen as playing a strategic role, it is not the basis upon which MNCs determine what role China-based subsidiaries should play within the organization and in the global context. Quality, best practice, and the availability of talent appear to be more important. As a senior executive from Company A indicated:

> Take Taiwan as an example, it is the OEM centre for the world because Taiwan is already aligned with international practices and Taiwan knows the rules of the game in the Western world. But the competitive advantage of Taiwan is disappearing as Mainland China is learning very fast. … However, it may take another 20–30 years for Chinese senior managers to know how to do business following the global rules of the game. That's why there are many senior managers from Taiwan and Hong Kong working for multinationals in China. … MNCs cannot find qualified senior managers within China, but this situation will be changing in about 5–6 years.

Clearly, the opinion of senior executives and managers, both from headquarters and China-based subsidiaries, is that the structure of the talent pool in China will be changing dramatically and quickly. There is evidence of increasing confidence that Chinese managers will soon take their place in senior management roles and cope with the growing expectations in relation to knowledge creation and knowledge transfer in MNCs.

Such comments confirm that there is a strong relationship between the subsidiary strategic context and knowledge transfer between subsidiaries and headquarters. As the levels of strategic readiness change, so will the extent of knowledge transfer on the part of Chinese managers in China-based subsidiaries, as is evident in the following comments:

> There is no doubt that the more knowledge sharing there is, the closer the relationship between this subsidiary and headquarters. We have effectively applied what we learned from headquarters and, hence, received recognition and trust from headquarters. That is why headquarters has confidence in this subsidiary and assigns us more projects. (Chinese Director, Company A)

> I believe in the next 3–5 years, we will become 100 % owner and decision maker for some products and of course for these the knowledge outflows from China to the US will exceed knowledge inflows. (Vice President, Company A)

These are, indeed, dynamic changes in terms of knowledge acquisition and skills development that are occurring in China and are expected to occur in the broader Asian context.

Culture and Knowledge Transfer

Consistent with the literature (e.g., Bhagat et al., 2002), the findings suggest that culture and culturally related issues play an important role in knowledge transfer. This is illustrated in the following observation:

> Needless to say, national culture is an important issue in knowledge spillovers. Knowledge sharing in a company involves communication between employees, and communication with a colleague from a different cultural background is difficult. … Language barriers, different values [systems], and so on make it difficult for people from different cultural backgrounds to understand each other. Explaining the difference to the other party from a different culture is even more difficult sometimes. … It is hard. You just cannot ignore the cultural difference when you work in an environment such as a foreign owned company. (Research Director, Company A)

Language barriers, concern of losing face (*Mianzi*), and high-context communication styles have been observed to hinder knowledge holders from sharing their knowledge with others, and to influence the capability of Chinese employees to acquire knowledge. For example, evidence indicates acknowledgment by both local Chinese and expatriate managers that employees in China tend to be afraid of asking questions and keep silent in meetings because admitting that they did not understand is considered ‘losing face’ in Chinese culture.

> Chinese people sometimes make others feel they are not willing to express themselves and share ideas with others. That is not because they want to protect their knowledge and do not intend to share with others. Chinese employees are afraid of losing face just if they say something wrong or say something in a wrong way. (Local Chinese Manager, Company B)

The negative impact of these constructs on knowledge flows between headquarters and subsidiaries is evident in the observations of two expatriate managers who experienced the 'silence' in meetings when they first started working in China. As one of them described:

> If you are afraid of losing face, you will never learn. Without asking any questions and making clarifications, you may make big mistakes and actually will lose more face than by asking questions. (Technology Manager, Company A)

However, given the potential for change in patterns of behavior, and the potential influence of MNC organizational culture and expectations, the study provided some evidence of a changing scenario in China-based subsidiaries, as is evident in this observation by an expatriate manager:

> People are learning from their failures and realize that it is important to seek clarification and ask questions when they communicate with each other. Chinese employees are getting used to asking questions and making comments during presentations and discussions.

The findings also suggest that other traditional values in Chinese culture are changing. For example, in relation to the dimension of collectivism, qualitative findings suggest that Chinese employees are more intent on placing individual benefit before group benefit, especially given the hyper-competitive business environment. This finding is consistent with some existing studies (e.g., Ralston et al., 1995; Li et al., 2007) and reinforced in comments such as the following:

> Getting awards and making money is important for Chinese employees here nowadays. Team work is important, but work must meet individual needs too. I didn't see our Chinese employees putting the priority of their team's success ahead of their individual interests, no matter if it is a local or global team. (Director of Engineering, Company A)

> Chinese people nowadays are much more industrially oriented and survival is the most important thing. In this circumstance, people won't put group benefit in front of their individual benefit… (Local Chinese Manager, Company B)

Further evidence of change can be observed in the fact that Chinese people seem more willing to take risks, which is somewhat different from the traditional image andt characteristics of low risk and high uncertainty avoidance linked to Chinese culture, as indicated in the following comment:

> Nowadays, Chinese people are getting more aggressive. They like taking risk. It seems nobody cares about uncertainty. People care about money in this society… Chinese people and culture [have] changed a lot. People aren't worried about uncertainty any more, the only thing they care about is 'don't do something stupid'… (Chinese Executive, Company A)

MNCs, to some extent, through their knowledge transfer processes, are influencing the values of their Chinese employees and modifying the way of doing business in China. As mentioned by most of the Chinese managers and executives, China is showing signs of transforming from a people-ruled society into a law-ruled society. Communication styles are changing as well, with more Chinese managers and employees communicating with and learning from their colleagues at their headquarters and peer subsidiaries. As Chinese employees gain more confidence, so will the role they play in the knowledge transfer process increase. Interviewees consistently believed that, with the continued development of the economy and transition of culture in China, the role of China-based subsidiaries is likely to be changing simultaneously.

Discussion and Conclusions

This exploratory study confirmed several earlier findings in the literature relating to knowledge flows between China-based MNCs and their subsidiaries, contradicted others, and provided new findings that are indicative of a quiet 'turbulence' and sea change in the Chinese business context.

In uncovering the knowledge flow patterns in a sample of firms in the IT sector, this study provides an indication of emerging trends in the strategic role that China will play as it navigates its way through subsidiary relationships and partnerships in the global economy. The findings of this study demonstrate that currently, although China is still mainly a knowledge receiver, it is gradually and confidently acquiring knowledge and expertise through FDI by MNCs. This is consistent with extant studies (e.g., Borensztein et al., 1998), which argue that emerging economies use FDI as a vehicle to access advanced knowledge from developed economies. More interestingly, the findings also show new trends in knowledge transfer patterns to and from China-based subsidiaries. With knowledge accumulation, China-based subsidiaries are improving their absorptive capability and developing a sufficient pool of knowledge and talent that will ensure that FDI contributes to significant economic growth. Consequently, China-based subsidiaries are becoming more capable in their contribution to the global knowledge transfer network through MNCs.

The findings also imply that different stages of FDI may be related to various knowledge transfer patterns and MNC subsidiaries roles. While MNC subsidiaries mainly act as knowledge receivers at the early stage of FDI, they may emerge as knowledge contributors at a later stage through knowledge accumulation. It is important for MNCs with maturing subsidiaries in China to take initiatives to utilize the innovation capabilities and locally generated expertise to facilitate their global innovation and, hence, to compete successfully in the global market. In order to take advantage of the readiness of China-based subsidiaries in knowledge sharing, MNCs may need to adjust their strategies and structures based on their stage of investment in China.

This study also highlights the impact of culture in the knowledge acquisition and transfer processes, and the cultural changes that are occurring in China. While most studies in knowledge transfer to and from emerging economies, like China, have given significant attention to knowledge domains such as technology, innovation, and management skills, culture-related skills seem to have been ignored. Hofstede (1994, p. 221) argues that intercultural encounters in the context of 'development' cooperation will be productive only if there is a two-way flow of knowledge: (1) technical know-how from the donor to the receiver and (2) cultural know-how about the context in which the technical know-how should be applied from the receiver to the donor. Likewise, in the FDI and MNC contexts, future management studies may need to pay more attention to the primacy of cultural expertise, given that cultural competence is one of the key resources an MNC must draw on in order to succeed in the global market. This is supported by an executive in this study, who noted that 'lack of understanding of Chinese culture may lead to strategic decision failures in either the local or global markets.'

This study further implies changing values of Chinese managers from the IT industry, and the possible relationship between culture shift and knowledge transfer. The transitional evolution of Chinese culture is itself evidence of this phenomenon. The core values of national culture appear to be stable, yet they can be directly influenced by everyday experiences within the evolving sociopolitical context, and change over time (Hofstede, 1991; Smith & Schwartz, 1997). The evolving sociopolitical context in China is driven by various factors, both internally and externally. For example, internally it is driven by the transition from a centrally planned economy to a market-based economic system, and externally it is driven by globalization. Findings in this study imply that globalization, in terms of the spread of knowledge and cultural features around the world, could be an external driver of the culture shift in China. Massive FDI flows, accompanied by massive knowledge flows to China, actually bring values from other cultures to China and, to some extent, change Chinese culture and values, even though 'to what extent' might be a question to be investigated in a future study. Through knowledge transfer within MNCs, Chinese employees are gaining not only technological expertise and management skills, but also an understanding and acceptance of the different cultural values originating from their headquarters, or from other parts of the MNC. Conversely, a bridging of the cultural gaps between Chinese managers from local and home-country contexts, and a development of greater synergies, can only lead to more common understanding and stronger knowledge flows.

A limitation of the study is that the 15 interviews were conducted in only two companies from the IT industry. While qualitative analysis based on data collected from these two companies provided valuable insights and understanding, the limited sample size has implications for generalization of the findings. Interpretations of the results, therefore, must be sensitive to this constraint. We suggest that more evidence needs to be collected from a greater subset of industries and larger pool of MNCs with China-based subsidiaries, in order to broadly characterize China's role in global knowledge transfer and the interactions of national culture and cross-border knowledge transfer.

In conclusion, using the IT industry in China as a study context, this chapter explored the knowledge flow patterns in China-based subsidiaries, and identified some of the changing values of Chinese managers in the IT industry. The study makes a contribution and has implications for both business academicians and practitioners in several ways. First, it provides insights into the emerging role of China in global knowledge creation and transfer as an outcome of substantial FDI. Second, it signals indicators of China's impending shift from knowledge 'implementer' to 'global innovator'. MNCs may need to adjust their strategies and structures in response to the development of China-based subsidiaries, especially in terms of readiness in knowledge sharing. Third, the study implies potential impacts of MNC knowledge transfer on the changing Chinese cultural values, which need to be examined in a broader sample of industries and larger pool of MNCs with China-based subsidiaries.

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6
Market Knowledge Development of Indigenous Chinese Firms for Overseas Expansion: Insights from Marketing Ambidexterity Perspective

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Introduction

With the intensifying of economic globalization, emerging Asian businesses have started increasing their important roles in the creation and capture of global value chains. However, due to the lack of foreign market knowledge, most of them face significant challenges for overseas expansion. In the case of China, a large majority of indigenous Chinese firms still operate at the low end of the global value chain and occupy a relatively weak position in the global market environment. In response to the environmental challenges, Chinese international enterprises may need to adapt and act as living organisms characterized by constant evolution for self-improvement (Bouée, 2013). This means that they should not only make full use of their existing resources and capabilities, but also persistently strive for breakthroughs by developing new ones (Teece, 2014). Thus, international enterprises need to continuously explore and exploit the market by reconstructing and updating their own resources and capabilities (McGrath, 2013). By focusing on marketing exploration and exploitation, scholars have identified their important roles in improving firm capabilities for achieving better performance in foreign markets (Hsu, Lien, & Chen, 2013; Vorhies, Orr, & Bush, 2011). However, relatively little is known as to how marketing exploration and exploitation are related to improved foreign market adaptation and sustainable competitive advantages (Day, 2014).

Previous studies mostly adopt the "Capabilities–Strategy–Performance" (CSP) framework in exploring how international enterprises develop competitive advantages and achieve superior performance, while ignoring how enterprises acquire their capabilities (Day, 2011, 2014). It has recently been theorized that a firm's market knowledge development is a fundamental resource upon which the firm upgrades its capabilities for superior performance (Morris, Hammond, & Snell, 2014; Vorhies et al., 2011). We aim to extend this line of research by addressing how international enterprises enhance their market adaptation through foreign market knowledge development. For emerging market firms such as those from China, the pathways to overseas expansion are often different from those for their counterparts from the more developed economies (e.g., Luo & Tung, 2007). Specifically, in order to overcome the liabilities of foreignness stemming from their less developed country images, emerging market firms likely find upgrading capabilities and market adaptation more desirable (Lu, Zhou, Bruton, & Li, 2010; Zhou, Barnes, & Lu, 2010). Therefore, the current study builds on the theoretical foundation of marketing ambidexterity to examine the mechanism through which market knowledge development of Chinese international enterprises impacts their capabilities and foreign market adaptation. In this regard, the study brings to the fore market knowledge development and marketing ambidexterity for a better understanding of the internationalization behavior of emerging market firms in Asia.

Literature Review

Market Knowledge Development

Market knowledge development is the process through which firms develop specific knowledge of consumers and competitors based on their understanding of the external environments (Hult, Ketchen, & Slater, 2004). As a manifestation of market orientation, the concept of market knowledge development is referred to as market information acquisition, analysis, dissemination, sharing, and other activities (Vorhies et al., 2011). Firms acquire their market knowledge either from external parties such as collaborators, competitors, universities, and research institutions or from independent collection and analysis of market information, which turns into market knowledge through sense-making and processing (Hult et al., 2004). During the process of market knowledge development, companies need to maintain constant internal communication to connect the new knowledge to existing knowledge, in order to come up with a new understanding of market conditions and facilitate the dissemination and sharing of market knowledge (Moorman & Miner, 1997). A high level of market knowledge can help firms reduce operational risks or uncertainties resulting from cultural distance (Musteen, Datta, & Butts, 2014) as well as improve firms' organizational identification and foreign market adaptation (Cayla & Pealoza, 2012; Magnusson, Westjohn, Semenov, Randrianasolo, & Zdravkovic, 2013), thereby helping to improve market performance and competitive position (Vorhies et al., 2011).

There are several perspectives concerning market knowledge development. One is where researchers mainly focus on the sub-processes of information search, analysis, sense-making, dissemination, and sharing. For instance, Morgan et al. (2003) hold that the process of market knowledge development is one of acquisition, analysis, distribution, and dissemination of market information. Furthermore, Hult et al. (2004, 2007) argue that market knowledge development is the sense-making and processing of market information. Another perspective explores the antecedent factors impacting market knowledge development. Researchers mainly analyze how firms acquire market knowledge to improve their business performance. For example, Tolstoy (2010) notes that firms can create and integrate market knowledge through network development. Musteen et al. (2014) find that small and medium-sized enterprises (SMEs) acquire foreign market knowledge by building an international network to enhance their internationalization performance. Further, market knowledge development is viewed as a resource from a social network perspective (Grant, 1996; Inkpen & Tsang, 2005; Malhotra, Gosain, & El Sawy, 2005).

Market Adaptation

Market adaptation refers to the ability of a firm to sense market risks and opportunities and then react accordingly (Cayla & Pealoza, 2012; Trondsen, 2012). It is an important indicator to gauge a sustainable competitive advantage and also signals the ideal market conditions of international enterprises (Cayla & Pealoza, 2012). Furthermore, market adaptation also means that firms are capable of responding in a timely manner to market signals, potential opportunities and threats, which could embody to the organizational flexibility and marketing strategy flexibility (Benner & Tushman, 2003; Cayla & Pealoza, 2012).

Benner and Tushman (2003) point out that firms need to increase their incremental technological innovation so as to improve market adaptation in a static environment, whereas they need to increase their breakthrough technology innovation in a dynamic environment. Cayla and Pealoza (2012) claim that organizational identity can affect organizational learning and strategies for overseas markets, thereby affecting foreign market adaptation. Magnusson et al. (2013) hold that cultural intelligence of export managers can affect the marketing flexibility of firms, thereby impacting their export market adaptation and performance. In spite of the theoretical advances, market adaptation still suffers from insufficient inquiry. It seems that the improvement of market adaptation requires continuous acquisition and application of market knowledge in a balanced manner.

Marketing Ambidexterity: Exploration and Exploitation

Although the notion of organizational ambidexterity has been widely studied in the strategic management literature (Boumgarden, Nickerson, & Zenger, 2012; Cao, Gedajlovic, & Zhang, 2009; Fernhaber & Patel, 2012; Minoja, 2012), the scholarly study of marketing ambidexterity is still in its early stages (Vorhies et al., 2011). Both marketing exploration and marketing exploitation are higher-order corporate capabilities that can improve firm-specific marketing capabilities, such as customer relationship management and brand management (Vorhies & Morgan, 2005; Vorhies et al., 2011).

Recent studies have approached marketing ambidexterity primarily from two perspectives: strategic marketing behaviors and marketing capabilities (Fang, Lee, & Schilling, 2010; Prange & Schlegelmilch, 2009; Vorhies et al., 2011). From the perspective of strategic behaviors, researchers argue that marketing exploitation refines or enhances the skills and procedures associated with existing marketing strategies, including strategies for segmentation, positioning, distribution, and marketing mix, while marketing exploration challenges the existing marketing strategies and introduces new strategies for market segmentation, new products, and marketing channels (Kyriakopoulos & Moorman, 2004). From the perspective of marketing capabilities, researchers stress that marketing exploration and exploitation are two basic adaptive processes for firms to respond to environmental changes. Specifically, marketing exploration refers to a firm's capability of developing new skills, processes, and marketing competency by applying new market knowledge (Kyriakopoulos & Moorman, 2004), while marketing exploitation means that an enterprise improves or redefines its existing capabilities and processes to increase valuable output (Atuahene-Gima, 2005; Vorhies et al., 2011). In spite of all the previous scholarly discussions of marketing ambidexterity from varying perspectives, it is generally acknowledged that a high level of marketing exploration and exploitation can help firms enhance marketing strategies, tactics, and procedures, thereby improving firm-specific marketing capabilities and achieving improved business performance (Tamayo-Torres, Gutierrez-Gutierrez, & Ruiz-Moreno, 2014).

Balance of Marketing Exploration and Marketing Exploitation

Previous studies have shown that a firm's ability of integrating exploitation with exploration can give it a significant competitive edge over other firms that fail to effectively do so (Kyriakopoulos & Moorman, 2004). March (1991) argues that both exploration and exploitation are important corporate capabilities, and firms need to strive for a balance between them in order to more effectively achieve competitive advantages and superior performance. If a firm only focuses on exploration while ignoring in-depth development and utilization of newly acquired knowledge, over time it may suffer from reduced return on investment and increased business risks. Similarly, a firm that focuses on exploitation alone may fall victim to a shortage of new ideas and suffer from a potential stiffness (Atuahene-Gima, 2005), thus leading to severe path-dependence, which would also likely increase potential risks or uncertainties in the marketplace.

In the same way, marketing studies also show that a firm's ability to effectively integrate both marketing exploration and exploitation, thereby striking a balance between the two types of learning activities, tends to positively influence firm performance (Aspara, Tikkanen, Pöntiskoski, & Järvensivu, 2011; Yang, Zheng, & Zhao, 2014). On the one hand, faced with a complex and turbulent market environment, firms need to constantly improve existing marketing strategies and processes through marketing exploitation; on the other hand, once the market environment has undergone radical changes, a reliance on marketing exploitation to improve the existing marketing strategies and processes may defeat the purpose, so firms need to develop new marketing strategies and processes or create new marketing capabilities through marketing exploration. However, most firms are invariably challenged by the availability of marketing resource allocation, the conflicts of short- and long-term goals, maintaining the existing markets and developing new markets, and addressing the gap between current and future customer demand (Aspara et al., 2011; Tollin & Schmidt, 2012), such that firms are called upon to strive for a balance in developing marketing ambidexterity to achieve market adaptation.

Hypotheses and Conceptual Model

Market Knowledge Development, Marketing Exploration, and Marketing Exploitation

In the conventional theories of firm internationalization, market knowledge development and resources are theorized as fundamental to the success of overseas expansion (Johanson & Vahlne, 1977, 1990). However, there are alternative perspectives concerning the mechanisms or processes underlying organizational learning toward international markets. Market knowledge development can enrich a firm's resource reserves, yet knowledge resources alone may not be directly related to a firm's international performance. Vorhies et al. (2011) identified the important roles of marketing exploitation and exploration in transforming knowledge resources into firms' capabilities, especially in a highly competitive market environment. According to the prevailing marketing theory (Atuahene-Gima, 2005), a high level of market knowledge feeds the process of marketing exploration and exploitation with information of larger quantity and higher quality.

As far as international enterprises are concerned, market knowledge development aims to meet the information needs of firms resulting from activities of marketing exploitation and marketing exploration. First, firms equipped with rich international market knowledge can effectively collect and process information about customer needs, competitor trends, and market demand so as to take the appropriate marketing measures for exploration or exploitation. Second, marketers can apply the existing market knowledge to promote the gradual improvement of existing marketing processes and strategies as well as the existing marketing capabilities, thereby propelling the enhancement of specific firm capabilities including corporate brand management and customer relationship management (Vorhies et al., 2011). Last, firms enriched by international market knowledge can promote the collection of new information about customers and competitors and consequently identify potential market opportunities by processing and analyzing the information so as to drive breakthrough changes, promote corporate innovation, and develop new marketing processes and strategies, thereby creating new marketing capabilities (Kane & Alavi, 2007; Tamayo-Torres et al., 2014). Thus, we put forward the following hypotheses:

H_1 Market knowledge development of international enterprises has a positive influence on their marketing exploration.

H_2 Market knowledge development of international enterprises has a positive influence on their marketing exploitation.

Marketing Exploration and Marketing Capabilities

Once the changing market conditions render inapplicable the original basic assumptions made about customers and competitors, marketing exploration can facilitate the acquisition of new marketing capabilities and capture of market opportunities (Vorhies et al., 2011). In this sense, when a firm undergoes radical market changes, improving existing marketing approaches alone makes it difficult to win market acceptance. Instead, firms need marketing exploration in order to effectively improve and innovate their marketing approaches to create and retain new marketing capabilities, thus enabling firms to adapt to the newly identified or changed customer needs.

To appeal to different markets and customers, not only do international enterprises need to reconstruct and utilize their existing knowledge resources, but they are also urged to constantly develop and configure new market-based resources to enhance their marketing capabilities (Morgan, Vorhies, & Mason, 2009; Vorhies, Morgan, & Autry, 2009). Strong marketing capabilities assist international enterprises in developing new skills and processes by exploring new marketing approaches, thereby creating and enhancing firms' capabilities. Only in this way are international enterprises able to adapt themselves to the changing market and customer requirements and win market opportunities. Weak firm capabilities are likely to lead to the loss of emerging market opportunities and firms are thus deprived of the opportunity to effectively enhance their marketing capabilities, which in turn speaks to the loss of competitive advantages and deteriorated performance. Therefore, the following hypothesis is proposed:

H_3 Marketing exploration of international enterprises has a positive influence on their marketing capabilities.

Marketing Exploitation and Marketing Capabilities

Marketing exploitation involves the activities associated with the utilization of existing resources or capabilities to improve product quality, service quality, and brand image (Kyriakopoulos & Moorman, 2004; Vorhies et al., 2011). Defined as an attempt at progressive improvement, these activities are characterized by little interference with existing processes and relevant to incremental knowledge and innovation

(Atuahene-Gima, 2005). Marketing exploitation can help improve firm capabilities of managing existing brands and customer relationships (Vorhies et al., 2011).

For international enterprises, market turbulence and complexity necessitates the constant updating of existing capabilities. Most managers are inclined to use a progressive approach to improve corporate marketing capabilities. This approach promotes gradual changes in resource allocation, system processes, and practices based on the understanding of market fundamentals (Vorhies et al., 2011) instead of redesigning the entire marketing process and activity, so it can only develop marketing capabilities to a limited extent (Zollo & Winter, 2002). Through marketing exploitation, firms can quickly and effectively enhance their marketing capabilities, thereby gradually creating continued expectations and value for customers (Leonard-Barton, 1995; Vorhies et al., 2009, 2011). This leads to the following hypothesis:

H_4 Marketing exploitation of international enterprises has a positive influence on their marketing capabilities.

Marketing Ambidexterity and Marketing Capabilities

Although international enterprises can improve their marketing capabilities through marketing exploitation, too much dependence on marketing exploitation is likely to lead to outdated marketing programs, which makes it difficult to further upgrade marketing capabilities, thus increasing operational risks in the marketplace (Atuahene-Gima, 2005). Similarly, although international enterprises can improve their marketing capabilities through marketing exploration, too much dependence on marketing exploration and frequent reorganization of marketing resources and processes may be counterproductive to effective improvement of marketing capabilities. Therefore, firms may need to integrate marketing exploration and exploitation so as to gain the benefits from both aspects of organizational learning.

March (1991) theorizes that seeking a balance of exploration and exploitation can help firms achieve optimal performance. For international enterprises, marketing exploitation activities can moderately improve marketing capabilities in that they avoid the major changes to marketing management programs (e.g., brand management and customer relationship management) brought about by the introduction of new products, services, approaches, or technologies (Leonard-Barton, 1995). Meanwhile, international enterprises also need to make radical changes to their marketing capabilities (Atuahene-Gima, 2005) and promote innovation of resource allocation through market knowledge development, thus contributing to enhanced marketing capabilities. In this regard, international enterprises need both marketing exploration and exploitation (Kyriakopoulos & Moorman, 2004) in order to effectively enhance their marketing capabilities. However, over-reliance on marketing exploration or exploitation may exert a deteriorating or negative impact on firms' marketing capabilities. In line with the observations of Vorhies et al. (2011), the following hypotheses are put forward:

H_{5a} The relationship of international enterprises' marketing exploration and their marketing capabilities is regulated by marketing exploitation; that is, the higher the level of marketing exploitation the weaker the relationship between marketing exploration and marketing capabilities.

H_{5b} The relationship of international enterprises' marketing exploitation and their marketing capabilities is regulated by marketing exploration; that is, the higher the level of marketing exploration, the weaker the relationship between marketing exploitation and marketing capabilities.

Marketing Ambidexterity and Market Adaptation

Marketing exploration can help international enterprises explore innovative marketing strategies and processes available to meet future market and customer needs, promote the survival and growth of enterprises in the long run, and improve their market responsiveness and market adaptation (Magnusson et al., 2013). However, too much reliance on marketing exploration activities could bring higher business costs and risks and negatively impact long-term firm performance and growth (Vorhies et al., 2009, 2011). Focused on improving the efficiencies of existing marketing activities and processes, marketing exploitation helps international enterprises improve existing international marketing strategies and processes to adapt to the changing market environment, thereby improving market responsiveness and promoting rapid growth as well as improved internationalization performance. But too much reliance on marketing exploitation will hinder marketing exploration activities and over time impact market responsiveness and marketing innovation of enterprises, thereby adversely affecting firms' growth and further expansion and long-term performance (Vorhies et al., 2011). International enterprises need to achieve a balance in their activities of marketing exploration and exploitation, such that they can effectively improve their market responsiveness and market adaptation. Therefore, the following hypotheses are proposed:

H_6 Marketing exploration of international enterprises has a positive influence on their market adaptation.

H_7 Marketing exploitation of international enterprises has a positive influence on their market adaptation.

H_{8a} The relationship of international enterprises' marketing exploration and their market adaptation is regulated by marketing exploitation; that is, the higher the level of marketing exploitation, the weaker the relationship between marketing exploration and market adaptation.

H_{8b} The relationship of international enterprises' marketing exploitation and their market adaptation is regulated by marketing exploration; that is, the higher the level of marketing exploration, the weaker the relationship between marketing exploitation and market adaptation.

Marketing Capabilities and Market Adaptation

Previous studies hold that marketing capabilities play an important role in driving market adaptation (Morgan et al., 2009), but limited evidence exists. Relevant studies find that firm-specific marketing capabilities such as brand image, reputation, and cultural intelligence can exert an important influence on a firm's market adaptation (Cayla & Pealoza, 2012; Magnusson et al., 2013). This is because marketing capabilities reflect firms' understanding of the marketplace, thereby influencing marketing strategy and processes, which are the keys to firm capabilities of adapting to market conditions. Given the turbulent and complex market environment in which international enterprises operate, international enterprises with strong marketing capabilities can adjust their marketing strategies, tactics, and processes and other activities in a timely manner, and quickly adapt to changing market conditions through deployment of marketing resources and capabilities. Therefore, the following hypothesis is proposed:

H_9 Marketing capabilities of international enterprises have a positive influence on their market adaptation.

Built upon the theoretical arguments and hypotheses just discussed, Fig. 6.1 presents the conceptual model of the current study. This framework reflects the central ideas of Vorhies et al. (2011) with the extension of market adaptation needed by emerging market firms for overseas expansion.

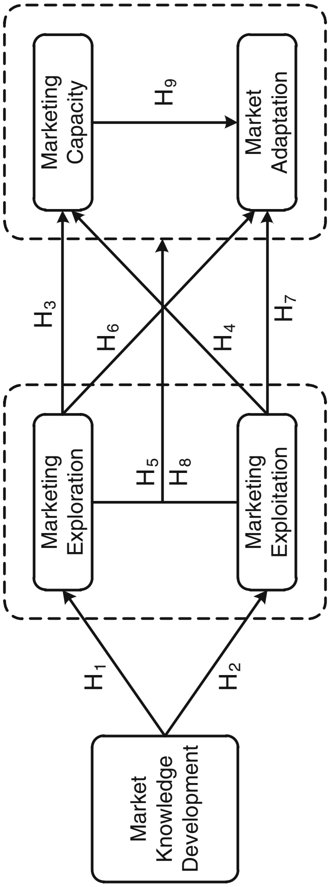

Fig. 6.1 The conceptual model

Methods

Data Collection and Sampling

For this study, Chinese international enterprises were chosen as the research setting, and questionnaire surveys were conducted with senior managers from those firms located in Beijing, Shanghai, Tianjin, Guangdong, Zhejiang, Jiangsu, Shandong, Liaoning, and Heilongjiang provinces. These areas were selected for the study because of the following reasons (1) according to the "Foreign Trade Situation Report of China (2013)" issued by the Ministry of Commerce of PRC, the aforementioned provinces and cities all have a relatively high foreign trade volume and a large number of international enterprises sharing certain characteristics; (2) "2012 Statistical Bulletin of China's Outward Foreign Direct Investment" jointly issued by the Ministry of Commerce of PRC and other governmental agencies shows that international enterprises in these regions enjoy a relatively high level of internationalization in that not only are many of them engaged in export trading, but also they make outward foreign direct investment, which reflects the research interest of the current study; and (3) international enterprises in these areas see notable differences in industry sector, local market conditions, and age at internationalization, among others. The diversity and complexity of the sample can help to enhance the validity of the study (Martin & Eisenhardt, 2010).

Data was collected through interviews with MBA and EMBA program trainees in the aforementioned geographic regions. The respondents generally met the following two selection criteria: (1) they should be corporate executives and familiar with their company's marketing strategy, marketing processes, and business performance and (2) they are or used to be involved in international operations. The fieldwork was carried out between June 2013 and June 2014, and a total of 500 questionnaires were issued with 279 recovered. After identifying and excluding the questionnaires that did not meet research requirements, a total of 106 valid questionnaires were obtained, resulting in an effective response rate of 21.2 %. The descriptive statistics of the sample enterprises are presented in Table 6.1.

Variables and Measures

To ensure the reliability and validity of variable measurement, this study adapted established scales in the relevant literature. Except for control variables, all the variables in this study were measured using a seven-point Likert scale (1 = strongly disagree; 7 = strongly agree).

Table 6.1 Descriptive statistics

Firm characteristics	Descriptors	Sample size	Percentage
Number of employees	Less than 1000	17	16.04
	1000–5000	25	23.59
	More than 5000	64	60.38
Years of internationalization	5–10 years	21	19.81
	11–15 years	37	34.91
	More than 15 years	48	45.28
Marketing staff	Less than 100	29	27.36
	100–500	67	63.21
	More than 500	10	9.43
Overseas sales in whole	Less than 20 %	35	33.02
	20 %–50 %	58	54.72
	More than 50 %	14	13.21
Ownership	State-owned	19	17.93
	Privately owned	87	82.08

The dependent variable under study is market adaptation (MAD) of international enterprises. This study reviewed the existing literature and found that market adaptation of international enterprises generally involved three aspects: (1) market responsiveness, (2) market growth, and (3) market performance (Cayla & Pealoza, 2012; Magnusson et al., 2013; Poulis & Poulis, 2012). After refinement and purification of the scales, a total of five items were compiled and used as indicators for market adaptation.

Market knowledge development as an independent variable consists of four dimensions: (1) market information acquisition, (2) dissemination, (3) analysis, and (4) knowledge sharing (Vorhies et al., 2011). In turn, this study applied the scale of Kohli et al. (1993) to measure the acquisition and dissemination of market information and the scale of Hult et al. (2004) to measure the analysis of market information and the sharing of market knowledge. After refinement and normalization of the scales, a total of eight items were adapted for market knowledge development.

The intermediate variables are marketing exploration (MER), marketing exploitation (MEI), and marketing capabilities (MCA). This study refers to the scale of Vorhies et al. (2011) to measure marketing exploration and exploitation. After amendments and a pretest with selected respondents, a total of eight items were retained, of which four items each were operationalized for marketing exploitation and exploration, respectively. Firm capabilities of customer relationship management and brand management are important manifestations of an international enterprise's marketing capabilities (Vorhies et al., 2011). Therefore, this study adapted Vorhies's and Morgan's scale to measure marketing capabilities of international enterprises. A total of four items were used as indicators for marketing capabilities.

In previous studies, firm size (ESE), marketing team size (MDE), age of internationalization (IAF), and nature of business (COP), among others, have an important influence on market behavior and performance of international enterprises. As a result, researchers typically approach these factors as control variables (Hult et al., 2004; Vorhies et al., 2011). In response, this study also controlled for those variables so as to minimize potential confounding effects.

Deviation Test

The questionnaire responses may suffer from the problem of common method variance since the information was provided by the same respondent. This study applied Harman's one-factor test to all the questions for an exploratory factor analysis and found that the first common factor has the loading of 19.055% and not a single factor can account for most of the variation in this case. Meanwhile, the study, as proposed by Podsakoff, MacKenzie, Jeong-Yeon, and Podsakoff (2003), calculated the partial correlation coefficients among the variables, after controlling for the first common factor in the exploratory factor analysis (Podsakoff et al., 2003). The results identify significant partial correlations among the variables, which means that the current study has no significant problem of homologous variance before going through the subsequent stages of data analysis.

Results

Reliability Test

In this study, Cronbach's α coefficient and the composite reliability (CR) were calculated as the indicators of reliability. As calculated by IBM SPSS Statistics 20.0 software, the Cronbach's α coefficients of market knowledge development, marketing exploration, marketing exploitation, and market adaptation were 0.927, 0.831, 0.856, 0.863, and 0.887, respectively. Table 6.2 shows the results of confirmatory factor analysis using IBM SPSS AMOS 20.0 software, where the CR of each variable was between 0.78 and 0.90, all of which were greater than 0.7. This indicates

Table 6.2 Results of confirmatory factor analysis

Variables		**Items**	**SFL**	**CR**	**AVE**
MKD	MKD_1	We poll end users at least twice a year to assess the quality of our products and services	0.778	0.931	0.628
	MKD_2	We closely monitor our competitors to determine potential or missed opportunities	0.740		
	MKD_3	We have interdepartmental meetings at least once a quarter to discuss market trends and developments	0.749		
	MKD_4	We share information effectively between marketing and other departments	0.907		
	MKD_5	We regularly analyze new marketing ideas to assess their potential merit	0.778		
	MKD_6	We routinely organize market information in a meaningful way	0.790		
	MKD_7	We regularly develop a shared understanding of the available marketing information	0.806		
	MKD_8	We frequently develop a shared understanding of the implications of marketing activities	0.778		
MER	MER_1	Continually developing new marketing procedures that are very different from others developed in the past	0.703	0.834	0.558
	MER_2	Routinely introducing new marketing procedures which are daring, risky, or bold	0.718		
	MER_3	Consistently using market knowledge to develop new marketing processes which deliver different outputs from existing processes	0.730		
	MER_4	Using marketing knowledge to break the mold and create new marketing processes not used before	0.829		
MEI	MEI_1	Consistently reexamining information from previous projects and/or studies to modify existing marketing processes	0.781	0.859	0.604
	MEI_2	Routinely adapting existing ideas when developing new marketing processes	0.716		
	MEI_3	Incrementally and routinely improving our existing marketing procedures	0.773		
	MEI_4	Focusing changes in marketing procedures on improving efficiency	0.835		

(continued)

Table 6.2 (continued)

Variables		Items	SFL	CR	AVE
MCA	MCA_1	Focus on meeting customers' long-term needs to ensure repeat business	0.781	0.864	0.614
	MCA_2	Routinely enhance the quality of relationships with attractive customers	0.719		
	MCA_3	Maintain a positive brand image relative to competitors	0.760		
	MCA_4	Consistently establish desired brand associations in consumers' minds	0.867		
MAD	MAD_1	Compared with competitors, the company on the market reaction speed	0.787	0.889	0.615
	MAD_2	Compared with competitors, the company in the market strain capacity	0.762		
	MAD_3	Compared with competitors, the company's sales revenue growth	0.755		
	MAD_4	Compared with competitors, the company's market share growth	0.790		
	MAD_5	Compared with competitors, the company's pre-tax profit growth	0.824		

that the scales used in this study have satisfactory internal consistency, thus speaking to acceptable reliability of questionnaire design.

Validity Test

The validity of measurement scales includes content validity and construct validity. In terms of content validity, the scales used in this study are all derived from scholarly work, and each variable is measured using standard scales with pretests and refinements. Therefore, the final version of the questionnaire used in this study meets the requirements of content validity.

Construct validity of measurement scales comprises convergent validity and discriminant validity. This study tested both dimensions using confirmatory factor analysis. First, indicators such as the goodness of fit, standardized factor loading (*SFL*), and average variance extracted (*AVE*) were calculated to test the scales' convergent validity. As can be seen in Table 6.2, the indicators for the goodness of fit of the proposed framework all achieve a desired or less than desired level, where $\chi^2/df = 1.972$, $RMSEA = 0.037$, $NFI = 0.934$, $NNFI = 0.941$, $CFI = 0.947$, $GFI = 0.952$. *SFL* of each question lies in the range of 0.703 ~ 0.907 with statistical significance ($P<0.010$), while *AVE* lies in the range of 0.558 ~ 0.628, significantly higher than 0.500, statistically speaking. Second, the study tested the discriminant validity of the scales by observing whether the square root of *AVE* for each variable was greater than the correlation coefficient between paired variables, and the results are presented in Table 6.3. The square root of *AVE* for each variable is greater than the correlation coefficient between paired variables, which means that the variables under study have good discriminant validity.

Correlation Test

To understand the interrelationship between the variables, this study calculated Pearson correlation coefficients. As shown in Table 6.3, market knowledge development is positively correlated with both marketing exploration ($\beta=0.393$, $P<0.01$) and marketing exploitation ($\beta=0.547$, $P<0.01$); both marketing exploration ($\beta=0.471$, $P<0.01$) and marketing exploitation ($\beta=0.422$, $P<0.01$) are positively correlated with corporate marketing capabilities; both marketing exploration ($\beta=0.538$, $P<0.01$) and marketing exploitation ($\beta=0.479$, $P<0.01$) are positively correlated with marketing capabilities; marketing capabilities are positively correlated with market adaptation ($\beta=0.433$, $P<0.01$). All these positive correlations are identified with statistical significance.

Structural Equation Model Analysis

Structural equation modeling (SEM) with AMOS 20.0 software was used to examine the hypothesized model. Structural modeling results show that the hypothesized model fit the data well ($\chi^2/df=2.032$, RMSEA=0.041, NFI=0.929, NNFI=0.937, CFI=0.943, GFI=0.949). Figure 6.2 presents the overall structural model with path coefficients.

H_1 states that international enterprises' market knowledge development is positively related to marketing exploration. Our results provide support for the hypothesis ($\beta=0.387$, $P<0.001$). H_2, which states that international enterprises' market knowledge development is positively related to marketing exploitation, was also supported ($\beta=0.571$, $P<0.001$). H_3, which states that marketing exploration is positively related to marketing capacity, received support as well ($\beta=0.396$, $P<0.001$); H_4, which states that marketing exploitation is positively related to marketing capacity, also received support ($\beta=0.407$, $P<0.001$). H_6 says that marketing exploration of international enterprises has a

Table 6.3 Descriptive statistics and correlation coefficients

Variables	**Mean**	**S.D.**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
ESE	2.443	0.757	N.A.								
MDE	1.821	0.582	–0.061	N.A.							
IAF	2.255	0.769	–0.069	0.078	N.A.						
COP	1.820	0.358	–0.105	0.029	–0.046	N.A.					
MKD	5.491	1.247	–0.078	0.078	–0.034	0.139*	0.792				
MER	5.274	1.322	–0.049	0.128*	0.056	0.203**	0.393**	0.747			
MEI	5.639	1.387	–0.032	0.111	0.019	0.051	0.547**	0.569**	0.777		
MCA	5.328	1.062	–0.049	0.026	0.065	0.059	0.469**	0.471**	0.422**	0.784	
MAD	5.207	1.413	–0.090	0.083	–0.044	0.171**	0.494**	0.538**	0.479**	0.433**	0.784

Note: ** $P<0.01$ (two-tailed), * $P<0.05$ (two-tailed); Square root of variables' AVE are on the diagonal; *N.A.* = Not Applicable

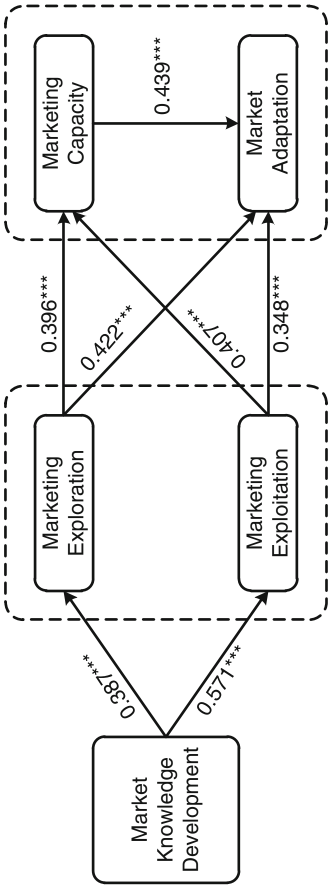

Fig. 6.2 Structural equation modeling results

positive influence on their market adaptation. Our results support this hypothesis (β=0.422, P<0.001). Similarly, H_7, which states that marketing exploitation is positively related to market adaptation, received support as well (β=0.348, P<0.001). Finally, results support the contention of H_9 that marketing capabilities of international enterprises have a positive influence on their market adaptation (β=0.439, P<0.001).

Regression Analysis

For the purpose of testing interactions among the variables of interest, a series of multiple regression models were run. Table 6.4 presents the results.

Moderating Effects Analysis

In Model 3 and Model 4, the interactions of marketing exploration and exploitation exert a significantly negative impact on marketing capabilities (β=–0.229, P<0.01) and market adaptation (β=–0.267, P<0.01), respectively. Possible explanations could be that marketing exploitation activities may play a negative regulatory role in the interaction between marketing exploration and marketing capabilities or market adaptation. Alternatively, marketing exploration activities may also play a negative regulatory role in the interaction between marketing exploitation and marketing capabilities or market adaptation. To accurately test the arguments as stated in H_5 and H_8, the study analyzed the moderating effects of marketing exploitation and marketing exploration, respectively.

Table 6.4 Regression analysis results

	MER	**MEI**	**MCA**	**MAD**
Variables	**Model 1**	**Model 2**	**Model 3**	**Model 4**
ESE	–0.072	–0.056	–0.046	–0.067
MDE	0.066	0.078	0.067	0.025
IAF	0.091	0.061	0.017	0.019
COP	0.163*	0.137*	0.098	0.102
MKD	0.391***	0.572***	0.322***	0.431***
MER			0.406***	0.418***
MEI			0.409***	0.352***
MER * MEI			–0.229**	–0.267**
R^2	0.147*	0.294***	0.621***	0.586***
ΔR^2	0.143*	0.239***	0.378***	0.445***

Note: N=106; Values are standardized coefficients; ***P<0.001, **P<0.01, *P<0.05

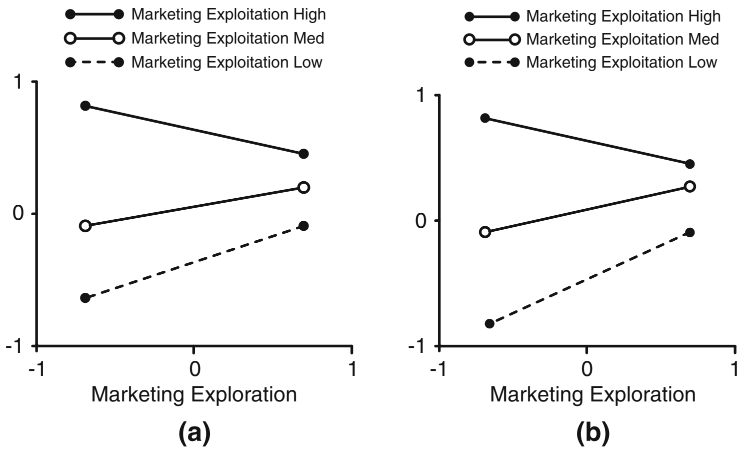

Fig. 6.3 Moderating effects of marketing exploitation

With respect to the moderating effect of marketing exploitation, this study divided the scores of marketing exploitation variable into three groups (high, medium, and low) (Schoonhoven, 1981) and calculated the regression coefficients between the international enterprises' marketing exploration and their marketing capabilities and market adaptation as shown in Fig. 6.3. Figure 6.3a shows that for a low or medium level of marketing exploitation, the improvement of marketing exploration can significantly enhance marketing capabilities, whereas for a high level of marketing exploitation, improved marketing exploration not only fails to improve marketing capabilities, but also leads to reduced marketing capabilities. It can be seen that the higher the level of marketing exploitation, the weaker the relationship between marketing exploration and marketing capabilities, thus supporting H_{5a}. Similarly, Fig. 6.3b shows that for a low or medium level of marketing exploitation, the improvement of marketing exploration can significantly enhance market adaptation, whereas for a high level of marketing exploitation, improved marketing exploration not only fails to improve market adaptation, but also results in reduced market adaptation. It can be seen that the higher the level of marketing exploitation, the weaker the relationship between marketing exploration and market adaptation, thus supporting H_{8a}.

Similarly, with respect to the moderating effect of marketing exploration, the current study divided the enterprises under study into three groups (high, medium, and low) according to their scores of marketing

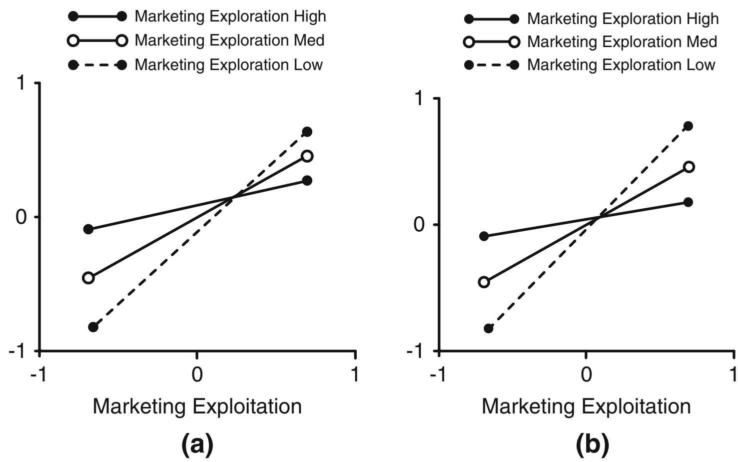

Fig. 6.4 Moderating effects of marketing exploration

exploration variable, and the regression coefficients were calculated regarding the interaction between the international enterprises' marketing exploitation and their marketing capabilities and market adaptation as shown in Fig. 6.4. Figure 6.4a shows that for a low or medium level of marketing exploration, the improvement of marketing exploitation can significantly enhance marketing capabilities, whereas for a high level of marketing exploration, improved marketing exploitation leads to a reduced impact on the improvement of marketing capabilities. It can be seen that the higher the level of corporate marketing exploration, the weaker the relationship between marketing exploitation and marketing capabilities, thus supporting H_{5b}. Similarly, Fig. 6.4b shows that for a low or medium level of marketing exploration, the improvement of marketing exploitation can significantly improve market adaptation, whereas for a high level of marketing exploration, improved marketing exploitation leads to a reduced impact on the improvement of market adaptation. It can be seen that the higher the level of marketing exploration, the weaker the relationship between marketing exploitation and market adaptation, thus supporting H_{8b}.

Conclusion and Discussion

Built upon the perspective of marketing ambidexterity (Prange & Schlegelmilch, 2009; Vorhies et al., 2011), this study highlights the importance of balancing marketing exploration and exploitation in shaping a firm's marketing capabilities and market adaptation in international markets. In doing so, we reveal the mechanisms underlying an international enterprise's market knowledge development and behavioral outcomes. This study extends the ambidexterity theory (March, 1991) by showing that the key to upgrading marketing capabilities and achieving market adaptation lies not in the extent to which the firm is oriented toward marketing exploitation or exploration, but the extent to which the firm is engaged in a simultaneous pursuit of both types of learning activities, such that the interaction between them enables the inherent limitations of one to be overcome by the other. At the same time, this study focuses on the knowledge development of emerging market (Asian) enterprises and provides some beneficial reference for future research. Although foreign knowledge development for international business can be traced back to the Uppsala model in the 1970s, our contribution lies in revealing a strategic balance of marketing exploitation and exploration in relation to market adaptation for the success of overseas expansion. Such coping strategies seem to reflect how emerging Asian businesses deal with risks or uncertainties facing their international operations. To a large extent, our research confirms a similar market orientation of Chinese international enterprises to that observed by Vorhies et al. (2011) in the more developed economies.

Through market knowledge development, indigenous Chinese firms can significantly improve their marketing ambidexterity and related activities, thus improving their marketing capabilities. These firms should consciously develop market knowledge, consistently accumulate knowledge resources, and enhance their identity and legitimacy in the international market and upgrade firm-specific marketing capabilities (Vorhies et al., 2011; Zhou, Wu, & Barnes, 2012). Meanwhile, international Chinese firms should also accumulate and utilize their existing knowledge reserves through the development of market knowledge to help managers make the right marketing decisions and continuously improve and innovate marketing strategy, tactics and procedures, and other activities. Such initiatives would reduce risks or uncertainties facing emerging market firms while not compromising their growth opportunities in international markets.

Thus, in line with the arguments of Vorhies et al. (2011) and Cayla and Pealoza (2012), marketing exploration and exploitation are considered as higher-order firm capabilities, and improved marketing ambidexterity would enable international enterprises to upgrade their marketing capabilities. Due to higher levels of liabilities of foreignness associated with emerging market firms' unfavorable country images, we point out the importance of market adaptation for helping the firms to gain a foothold in the international markets. The improvement of market adaptation is dependent on the enhancement of marketing capabilities, which are likely to be driven by their marketing ambidexterity, such that the firm's marketing strategy, policies, and processes can accommodate for the changes in the marketplace. Achieving a strategic balance between marketing exploration and exploitation activities is likely to be an effective coping strategy for the success of overseas expansion among Asian firms.

It should be acknowledged that the current study is subject to certain limitations. First, the study analyzes cross-sectional data only. Future research may conduct longitudinal surveys to acquire an in-depth, process-oriented understanding of market knowledge development and marketing ambidexterity activities in international enterprises. Second, the use of multiple respondents from each firm would help improve the validity of the research. Alternatively, more rigorous measures could also be developed so as to capture a richer domain of the key variables of interests. Third, the current study shows that a balanced development of marketing exploration and exploitation influences marketing capabilities and market adaptation. Future research may further explore the contingent conditions such as market dynamics or competitive intensity. Analyzing how different types of marketing ambidexterity can influence marketing capabilities and market adaptation seems to be an area of fruitful research.

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7
The Application of Social Capital to the Construction of Organizational Capability

Ku-Ho Lin, Shi-Huei Ho, and Yao-Ping Peng

Introduction

Small and medium-sized enterprises (SMEs) have played a significant role in the economic development of Taiwan over the last decade. However, with the rise in competitive pressure in both local and foreign markets, and the rapid changes in technologies and environments, such firms should work to constantly accumulate, adjust, and update internal knowledge, resources, and core competitive capabilities. Helfat and Peteraf (2003) stressed the importance of dynamic capabilities, and noted that the developmental direction and path of capacity would change significantly over time. This means that analysis of firm performance should focus on development of capabilities rather than exploration of resources, thus moving from the static view of the resource-based theory to a dynamic view of capability. According to the dynamic capability view, firms should face a changing environment with good flexibility and adaptability (Teece, Pisano & Shuen, 1997), while the development of capabilities is highly based on best practice (Daniel & Wilson, 2003). Eisenhardt and Martin (2000) believe that dynamic capability is a concrete process, and one that refers to integrating, relocating, and acquiring resources, or taking advantage of resources to seek and even create market changes.

However, SMEs are exposed to more serious problems than larger firms, such as liabilities associated with foreignness and newness (Oviatt & McDougall, 1994; Sethi & Guisinger, 2002) and scale difference (Musteen, Datta, & Butts, 2014). If SMEs do not consider the risks and opportunities brought about by international and global competition (Lu & Beamish, 2001; Oviatt & McDougall, 1994), they may not survive in the market in the long run. Moreover, most previous studies have stated that effective dynamic capabilities are conducive to enhancing performance and lowering the failure rate (Helfat & Peteraf, 2003; Zott, 2003), although the uncertainties due to turbulent foreign markets may lead to different results (Gupta, Smith, & Shally, 2006). Taiwanese firms face problems such as low added value, slower growth, and lack of competitive advantage due to their focus on low-tech, labor-intensive export-oriented manufacturing. These firms also face challenges in developing their specific capabilities to enhance performance. A review of the literature on SMEs clearly shows that many authors have noted the importance of social capital and firm networks—and the benefits, like knowledge, that can arise from these—from which SMEs can obtain the resources they require (Bierly, Damanpour, & Santoro, 2009; Van de Vrande, De Jong, Vanhaverbeke, & De Rochemont, 2009). However, few studies have examined the relationship between network attributes and performance (Musteen et al., 2014), especially in the context of Taiwan, where SMEs account for 98 % of the economy. For this reason Taiwanese SMEs were chosen as the research sample in the current work.

To effectively respond to market opportunities and competitive threats, scholars believe that international companies should work to integrate their own resources with the diversified resources that can be obtained from overseas suppliers in order to create a greater capability for differentiation (Dyer & Hatch, 2006; Kotabe & Murray, 2004; McEvily & Marcus, 2005). Firms should thus establish strategic relationships with each other in order to obtain valuable knowledge assets from their partners. The resources that originate from strategic relationships and leverage effects are called inter-firm social capabilities (Nahapiet & Ghoshal, 1998; Yli-Renko, Autio, & Tontti, 2002). However, previous research on social capital carried out at the firm level examined the relationship between the establishment and maintenance of inter-firm relationships and performance, thus neglecting the ability of internal members to coordinate external resources and information. Therefore, social capital can be divided into two forms, intra-firm and inter-firm (Adler & Kwon, 2002). Comprehensive intra-firm social capital allows the utilization of intra-firm knowledge and resources, enabling firms to be more responsive to the challenges brought about by globalization (Griffith & Harvey, 2004; Francis, Ananda, & Jyotsna, 2009).

In addition to working to improve intra-firm coordination capability, the members of such networks should also process and share the valuable information and knowledge that can be acquired from the external environment (Zaheer & Bell, 2005). Most previous research thus focused on how to apply the knowledge and information acquired from partners to enhancing competitive advantage and performance, but there exists a Black Box between the information acquired from external firms and the environment and the enhancement of firm performance, as such works failed to consider this issue from a process perspective (McEvily & Marcus, 2005). This study thus examines some questions on the relationship between antecedents and consequences in this context, and asks whether the valuable information, resources, and knowledge derived from intra-firm and inter-firm social capital can have direct, positive effects on firm performance. It has been noted that the dynamic view has now replaced the static, strategic view of resource advantages (Barnett, Greve, & Park, 1994) in studies that explore how firms recombine and integrate their resources to adapt to the changes in the market and technology, and this new view is based on the concept of dynamic capabilities. In addition to setting forth how to develop capabilities (Helfat & Peteraf, 2003; Zollo & Winter, 2002) and exploring the influence of such capabilities on firm performance and survival (Adner & Helfat, 2003; Helfat & Raubitschek, 2000), some researchers have explained how the links between resources, capabilities, and competitive advantage (i.e., improved performance) are a development process, with the resources forming the capabilities, while the capabilities influence firm performance (Barney, 1991; Chang & Gotcher, 2007). As capabilities have a positive influence on performance, the question arises as to how firms should develop the capability to confront an ever-changing market environment. Zott (2003) claimed that since the dynamic capabilities of different firms may differ, they will have different effects on firm performance, which agrees with the research findings of Adner and Helfat (2003). O'Reilly and Tushman (2008) divided dynamic capabilities into exploitative and explorative capabilities. They claimed that the routines, procedures, and skills required by exploitative capabilities are fundamentally different from those needed by explorative capabilities. Therefore, this study aims to discuss the influence of the valuable information, resources, and knowledge acquired due to dynamic capabilities, as expressed in intra- and inter-firm social capital, and how this relates to improving organizational performance. The conceptual model examined in this study is presented in Fig. 7.1.

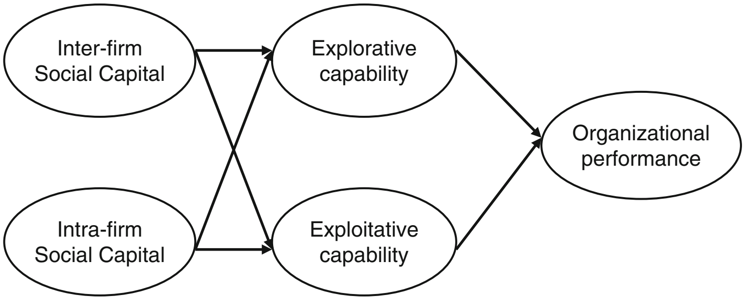

Fig. 7.1 Conceptual framework

Literature Review and Hypotheses Development

Dynamic Capability View

Organizational capability is the skill of an enterprise to coordinate and integrate resources and effectively apply the resources to meet threats of external competition (Hill & Jones, 1998). With the enhanced institutionalization of enterprises, organization members are bound by existing cognitive and behavioral tendencies, as well as the decision-making inspiration mode, leading to the formation of organizational inertia (Nelson & Winter, 1982; Hannan & Freeman, 1984) and a greater danger of sinking into a competence trap (Levitt & March, 1988; Levinthal & March, 1993). Leonard-Barton (1992) pointed out that core rigidities often occur once an organization forms its core capability, which eventually will not only fail to bring about competitive advantages, but even hinder further development. In order to eliminate problems like organizational inertia and core rigidities, Teece and Pisano (1994) put forward the concept of dynamic capabilities in accordance with the RBV. In long-term competition, continual construction of dynamic capabilities is needed to maintain persistent competitive advantages (Teece et al., 1997). Emphasis on environmental changes and strategies can help firms to achieve appropriate adaptation, integration, and reconfiguration of both the internal and external skills and resources required to address changes in the environment. Zollo and Winter (2002) divided the evolutionary process of knowledge and capabilities into stages of generative variation, internal selection, replication, and retention by using the concepts of variation, selection, and retention from the traditional evolutionary paradigm. Some scholars also add explorative and exploitative capabilities to the evolutionary stages of knowledge and capability building (March, 1991). Explorative capabilities emphasize the generation of new perceptions and ideas, or variations of existing ones, and the selection of the most appropriate of these. Conversely, exploitative capabilities emphasize behavioral mechanisms, that is, the ways used to spread the best ideas to all the relevant components of the organization (Levinthal & March, 1993) and then improve the implementation of internally specified tasks through individual absorption (Zollo & Winter, 2002).

The majority of related studies (Dougherty & Hardy, 1996; Pennings & Harianto, 1992; Teece et al., 1997; Schreyögg & Kliesch-Eberl, 2007) agree that the development of firm capabilities can establish or strengthen an enterprise's competitive advantages in a turbulent environment. In view of the time needed to develop capabilities, and the fact that results of any learning process are often highly idiosyncratic, a manager must decide which capabilities to develop and invest in, and then devise strategies for doing so (Schreyogg & Kliesch-Eberl, 2007). Thus, managerial decisions as to what capability to develop, or which ones to develop concurrently, are also strategic decisions. This study employs the dynamic capabilities view to explain the trade-off between explorative and exploitative capabilities, along with the effects of this relationship on organizational tensions.

Direct Effects of Explorative and Exploitative Capabilities on Organizational Performance

In this study a firm is seen as pursuing two distinct and conflicting capabilities, each benefitting the organization: explorative and exploitative. If it has both capabilities then an organization can not only improve operational efficiency (profitability, market share, and productivity), but also promote innovative performance (new product development, new market development, environmental adjustment, and flexibility). Based on existing studies of organizational ambidexterity, the current work divides organizational performance into organizational effectiveness (relative product quality, new product success, and customer retention), growth/share (sales level, growth rate, and target market share), and profitability (ROE, gross margin, ROI) (Narver & Slater, 1990; Slater & Narver, 1994; Jaworski & Kohli, 1993; Lubatkin et al., 2006; Han & Celly, 2008).

Examining new alternatives is the essence of explorative capability (March, 1991), which thus is a source of new technology and knowledge (Rothaermel & Alexandre, 2009) as well as a type of innovation capability. Explorative capability is the foundation of organizational growth, and firms in competitive environments that lack resources and industrial development capacity will apply this capability to seek opportunities for growth and innovation (Hurley & Hult, 1998). In the context of greater internationalization, Prange and Verdier (2011) indicate that an effective explorative capability can enable firms to dynamically make use of value-adding or disruptive capabilities in order to achieve new and innovative competitive advantages. Disruptive capabilities can help organizations to change their basic structures, enabling them to overcome the problems of path-dependence and inertia, thus encouraging organizational growth. Accordingly, explorative capability can not only can create new products and services as well as develop new markets (Jansen, Van den Bosch, & Volberda, 2006), but also enable organizations to develop more appropriate structures. Firms can align themselves with changes caused by both the market environment and future customer demand by adopting a structural change approach based on organizational re-integration and restructuring (Katila & Ahuja, 2002; He & Wang, 2004). Therefore, we hypothesize:

H1 The strength of explorative capability is positively related to organizational performance.

Exploitative capability is a type of dynamic capability, involving activities like path-dependent learning and knowledge storage. Firms tend to stress the development of existing markets, not extending to new ones until they accumulate adequate capabilities. As this will reduce the uncertainties inherent in explorations and experiments, this approach can also improve survivability (Prange & Verdier, 2011). Slater and Narver (1994) proposed that continuous learning can help firms track and respond to consumer demand, enabling them to capture market opportunities while providing suitable target products so as to promote profitability, sales growth, and customer retention. The accumulation of experience and lessons makes enterprises aware of how to avoid repeating mistakes, how to reduce production and transaction costs, and how to strengthen their capabilities of mutual understanding as well as problem coordination and solving (Jiang & Li, 2009). According to Prange and Verdier (2011), firms that focus on exploitative capabilities can survive in the short term by effectively exploiting their existing resources, knowledge, and routines. Therefore, we hypothesize:

H2 The strength of exploitative capability is positively related to organizational performance.

Social Capital View

In addition to physical capital and human resources, the social resources of a firm, also termed as social capital, are also production factors, and are considered the fourth type of capital influencing the competitive power and economic development of companies (Coleman, 1988; Nahapiet & Ghoshal, 1998). Based on the RBV, Nahapiet and Ghoshal (1998) regarded social capital as an organizational resource, and defined it as the existing or potential resources in a firm's network relations that are acquired or transferred by individuals or social organizations. Both the position and relationships that firms have within a network may affect the ability to acquire resources and thus achieve relational rents and competitive advantages (Uzzi, 1997; Dyer & Singh, 1998; Yli-Renko et al., 2002). In other words, social capital is a valuable resource that is non-substitutable and cannot be acquired through imperfect imitation, as it exists in network ties. Social capital can be in two forms, intra- and inter-firm (Adler & Kwon, 2002; Yli-Renko et al., 2002; Li, 2004; Tsai, Huang, & Ma, 2009). External social capital is conducive to the acquisition and assimilation of idiosyncratic knowledge (Dyer & Hatch, 2006; McEvily & Marcus, 2005), and comprehensive intra-firm social capital will facilitate the utilization of intra-firm knowledge and resources, so as to enhance the responsiveness of multinational corporations in facing global challenges (Griffith & Harvey, 2004). Firms with good internal structures are not only better at facilitating the coordination and sharing of resources (Persson, 2006; Tsai & Ghoshal, 1998), but can also expand their managerial learning to new environments through lasting, repeated interactions (Yli-Renko et al., 2002). Therefore, this chapter adopts the research results of Adler and Kwon (2002), Yli-Renko et al. (2002) and Tsai et al. (2009) to divide social capital into intra- and inter-firm components.

Inter-firm Social Capital

The research on inter-organizational relationships/inter-firm relationships and networks is mainly focused on the repeated interactions (via resources, friendship, and information) that occur among a group of actors (such as individuals, teams, and organizations), why such actors are engaged in certain interactions in different environments, and what these interactions and the positions of the related actors result in (Oliver, 1990). However, there is no agreement on how to measure the variables of inter-firm social capital. For instance, McEvily and Marcus (2005) stated that joint problem solving is an important mechanism in inter-firm embedded ties that can increase competitive capabilities (Uzzi, 1997; Tsai et al., 2009) and facilitate tacit knowledge transfer, while information sharing and trust are the antecedents that can obtain competitive capabilities from embedded ties. According to the research focus of the current study and based on the related research results, this chapter proposes that inter-firm social capital covers bridging ties (structural dimension), joint problem solving (relational dimension), and shared values (cognitive dimension). The value of a network structure mainly comes from two aspects: on one hand, the members of the network have valuable knowledge that is required by the main firms; on the other hand, the main firms are able to put the acquired knowledge into effective use. Firms in a superior structural position may be better able to enhance their performance than others and are capable of acquiring and applying more knowledge (Zaheer & Bell, 2005). Nahapiet and Ghoshal (1998) stated that network members can use bridging ties to share ideas and thus produce new knowledge instead of merely transferring existing information. Firms can therefore acquire and create more new knowledge and advanced (creative) ideas from their interactions, which can then be applied to practice, and produce new, creative products and services, so as to improve their exploitative and explorative capabilities. McEvily and Marcus (2005) stated that joint problem solving plays an important role in the development of competitive capabilities, and that both parties bear a responsibility to maintain a relationship in order to confront their common problems together (Heide & Miner, 1992). Such cooperative agreements contain common routines or mechanisms that are followed by both parties. Whenever a problem appears, partner firms will seek solutions together through coordination (Uzzi, 1997), and thus they may develop an exclusive language by which to transfer complex tacit knowledge (Hansen, 1999), enhancing their learning and information-acquiring capabilities. Tiwana (2008) stated that the shared value among members in a network can enable the firms to absorb each other's ideas (Regans & McEvily, 2003), which aids in the transfer and integration of tacit knowledge, lowers distrust and uncertainty, and boosts mutual coordination and problem solving (McEvily & Marcus, 2005). Therefore, we hypothesize:

H3a Inter-firm social capital is positively related to explorative capability.

H3b Inter-firm social capital is positively related to exploitative capability.

Intra-firm Social Capital

Intra-firm social capital refers to the interaction mode among all members within an organization (Burt, 1992; Nahapiet & Ghoshal, 1998), and a good intra-organizational network structure will enable members to acquire information from their interactions (Nahapiet & Ghoshal, 1998), and so obtain new technical knowledge quickly (Kogut & Zander, 1992; Tsai & Ghoshal, 1998). In a tight network structure the employees of each organization can transfer knowledge and information through lasting and repetitive interactions and communication, enhancing their managerial learning, obtaining new market environment information (Yli-Renko et al., 2002), and improving the capability of combining new and existing knowledge (Li, 2004). Moreover, a good inter-organizational network structure integrates various activity processes and facilitates the coordination of scattered resources and activities (Gupta & Govindarajan, 2000; Persson, 2006), which is seen as an important integrated mechanism (integrative mechanism) (Tsai et al., 2009). With regard to the structural dimension of intra-firm social capital, Tsai et al. (2009) claimed that internationalized firms should adopt the two most important integration mechanisms: the information-based mechanism and the people-based mechanism. The information-based mechanism can effectively deal with many intra-organizational routines and a lot of information, and thus provide timely information to facilitate the communication between firms, ensuring the transfer, flow, and sharing of information (Hartmann, Trautmann, & Jahns, 2008). If firms can constantly share knowledge and information they can quickly understand customer demands through continuous adjustments, and thus respond better to them. In addition, the people-based mechanism is effective in converting newly acquired knowledge to usable contents. Organizational ability, organizational learning, and organizational creativity all come from the expression of individual capabilities. The existence of a good people-based mechanism is conducive to the interpersonal communication between group members. In other words, significant communication can help integrate the existing knowledge of members and unique information from the market, helping firms to interpret the knowledge, endow it with meaning, and transfer it into organizational routines (Li, 2004; Yli-Renko et al., 2002). Through the people-based mechanism, firms can effectively internalize and routinize external knowledge and information, thus enhancing the existing knowledge base by creating new knowledge in combination with the original knowledge (Tsai et al., 2009).

Trust is seen as an important factor in organizations, and is always an antecedent variable for cooperation between intra-organizational members. When trust exists between members they will be more willing to share knowledge and resources, thus enhancing communication and resource recombination (Tsai & Ghoshal, 1998). When members trust each other they will engage in more interactions and exchange more resources and information, and even communicate about creative ideas. Moreover, when intra-organizational members share knowledge through effective communication they need to have a set of common knowledge (Cohen & Levinthal, 1990) to facilitate the combination of different types of knowledge, so as to apply this effectively and create new ideas. The establishment of this common knowledge is based on the degree to which members share a common language, vision, and mechanism. This significant sharing mechanism will enable firms to get access to knowledge programs and improve the effectiveness of searching for information. When organizational members share a common vision, they will be more likely to know the behaviors of each other, thus reducing misunderstandings and facilitating the easy exchange of ideas and resources (Tsai & Ghoshal, 1998). Therefore, we hypothesize:

H4a Intra-firm social capital is positively related to explorative capability.

H4b Intra-firm social capital is positively related to exploitative capability.

Methodology

Data Source

This study first modified scales developed in the extant literature to conform to its research goals. Thirty firm managers in Taiwan were selected as subjects for the pre-test questionnaire. The results of this pre-test confirmed the appropriateness of the wording as well as test reliability and validity, and the formal questionnaire was compiled after deleting some inappropriate items. The database of the Allied Association for Science Parks Industries in Taiwan was used to create a sample list, which was filtered by company business. A total of 1000 questionnaires were sent out and 237 copies were received. After eliminating three invalid questionnaires, the effective response rate was 23.4 %. All respondents were from the top management teams of their firms such as chief executive officers (CEOs), representative directors, managing directors, or directors.

Assessment of Variables

The questionnaire variables were developed from scales available in the previous literature. Except for firm size and firm age, all questions were answered using a seven-point Likert scale. Five items on explorative capability and four on exploitive capability were taken from He and Wang (2004), Lubatkin et al. (2006), Menguc and Auh (2008), and Cao, Gedajlovic, and Zhang (2009). We asked the respondents to state how their firms divided attention and resources between exploitive and explorative activities over the previous 3 years. The self-assessed estimate of sales sections contained nine questions assessing organizational performance, taken from Narver and Slater (1990, 1994), Jaworski and Kohli (1993), Lubatkin et al. (2006), and Han and Celly (2008). Market orientation was measured by 15 questions taken from Narver and Slater (1994).

Inter-firm social capital is based on the external networks of firms, including vertical relationships, horizontal relationships, and social relationships, in which firms can get access to valuable intangible assets, like knowledge and resources, to enhance their competitive advantage. Referring to the research results of Dhanaraj, Lyles, Steensma, and Tihanyi (2004), McEvily and Marcus (2005), and Tiwana (2008), this study takes bridging ties (structural dimension), joint problem solving (relational dimension), and shared value (cognitive dimension) as variables to measure inter-firm social capital.

Intra-firm social capital refers to internal members' coordination of structure, routines, and processes. Effective communication, interaction, and coordination between internal members are conducive to facilitating business operations and reducing management and other costs. Referring to the research results of Tsai and Ghoshal (1998), Yli-Renko et al. (2002), and Tsai et al. (2009), this study discussed the main elements of intra-firm social capital, such as the information-based mechanism (structural dimension), people-based mechanism (structural dimension), trust (relational dimension), and shared vision (cognitive dimension).

This study controlled two other variables that might affect the model: firm size and age. According to RBV, size (the number of fulltime employees) has a positive effect on resource allocation. It was thus taken as a control variable, expressed in the model as the number of employees a firm has. Since firm age (the number of years since inception) expresses a firm's development stage with regard to acquiring new knowledge and technology, and is associated with its explorative and exploitive capabilities (Zahra, Sapienza, & Davidson, 2006; Cao et al., 2009), this attribute also served as a control variable. Following Lubatkin et al. (2006), both size and age were transformed by their square roots because their distributions depart from normality.

Results and Analysis

This study used partial least squares (PLS) graph to analyze the data. This approach is particularly suitable for the exploratory nature of this study (Julien & Ramangalahy, 2003; Lee et al., 2006; Tsang, 2002) and for this reason has been used in other export studies (e.g., Lages et al., 2009a). The PLS model is estimated using an iterative ordinary least squares (OLS) regression-like procedure, with overall variance used as the primary measure of model adequacy. The PLS estimation procedure partitions the data into blocks of attributes that are related to a specific construct, and then provides estimates of the parameters in each block sequentially and iteratively until the differences between successive iterations are extremely small (Vandenbosch, 1996). Since the algorithm proceeds block by block, it works well with small sample sizes, as used in this research, and does not require multivariate normality when estimating parameters (Chin, 1997; Choi & Sy, 2010). The PLS model consists of two sets of relations: outer and inner. The outer relations are concerned with the relationships among the observed variables and latent constructs, while the inner relations refer to those between different latent constructs (Chin, 1997). The analysis was undertaken in two steps. First, the measurement models were examined for a satisfactory level of validity and reliability (Fornell & Larcker, 1981). Second, the structural model was run to test the hypotheses.

Measurement Model

Table 7.1 summarizes the descriptive statistics of the scales, with confirmatory factor analysis (CFA) and LISREL 8.54 software (Jöreskog & Sörbom, 1992) used to measure reliability and validity. The construct validity of the scales was verified in terms of convergent and discriminant validities. According to Fornell and Larcker (1981), evaluation standards for convergent validity are as follows: (1) standardized factor loading greater than 0.5; (2) Average Variance Extracted (AVE) greater

Table 7.1 Measurement

	1	2	3	4	5	6	7	8	9	10	11	12
Bridge ties	**0.74**											
Joint problem solving	0.54	**0.63**										
Shared value	0.44	0.39	**0.74**									
Information-based	0.54	0.38	0.51	**0.81**								
People-based	0.39	0.19	0.27	0.70	**0.7**							
Trust	0.40	0.30	0.31	0.58	0.56	**0.72**						
Shared vision	0.18	0.18	0.22	0.30	0.22	0.46	**0.67**					
Explorative	0.53	0.21	0.30	0.53	0.56	0.58	0.28	**0.79**				
Exploitative	0.26	0.09	0.07	0.28	0.31	0.19	0.10	0.55	**0.69**			
Effectiveness	0.25	0.35	0.02	0.30	0.21	0.24	0.42	0.26	0.31	**0.81**		
Growth	0.28	0.26	0.07	0.25	0.21	0.19	0.30	0.29	0.32	0.78	**0.8**	
Profitability	0.37	0.22	0.32	0.41	0.35	0.25	0.24	0.36	0.27	0.53	0.66	**0.8**
Cronbach'α	0.77	0.55	0.83	0.90	0.87	0.81	0.76	0.89	0.77	0.87	0.80	0.87
CR	0.78	0.57	0.83	0.89	0.82	0.81	0.62	0.89	0.78	0.85	0.80	0.88
AVE	0.55	0.4	0.55	0.66	0.49	0.52	0.45	0.62	0.47	0.59	0.58	0.66

Note: *** $p<0.001$. Diagonal (bold) elements are square roots of the AVE; note that AVE is not applicable for single-item measures.

than 0.5; and (3) Composite Reliability (CR) higher than 0.7. The evaluation standard for discriminant validity is that the square root of AVE, for one dimension should be greater than its correlation coefficient with any other dimension(s).

Table 7.1 shows the AVE for all dimensions is greater than threshold value of 0.5. The CR values of all dimensions exceed 0.7. As suggested earlier, all items in the measures of exogenous variables are significantly explained by the related factor (i.e., they converge to this factor). This means that all items converge to their corresponding dimensions, giving good scale convergent validity. Lastly, as results in Table 7.1 show, the correlation coefficients of all the dimensions are less than the square root of AVE, showing that each dimension in this study has good discriminant validity.

Structural Model Results

Although PLS does not provide statistics to measure overall model fit, we used path coefficients (recommended to be at least 0.20), variance due to path (recommended to be > 0.015), and bootstrap t-values (recommended to be >1.96; $p<0.05$) to test the hypothesized paths of the structural model. Figure 7.2 shows the variance explained in the endogenous constructs, the path coefficients, and the results of hypotheses testing.

As shown in Fig. 7.2, we found support for five out of the six hypotheses presented in this chapter, with the bootstrap t-values for one path and its respective path coefficient failing to achieve the recommended cut-off points, rejecting H3b. Specifically, the findings suggest that explorative capability and exploitative capability positively affect organizational performance (0.137, $p<0.1$; 0.350, $p<0.01$), and thus H1 and H2 are supported. The findings also suggested that inter-firm social capital affects explorative capability (0.207, $p<0.001$), but not exploitative

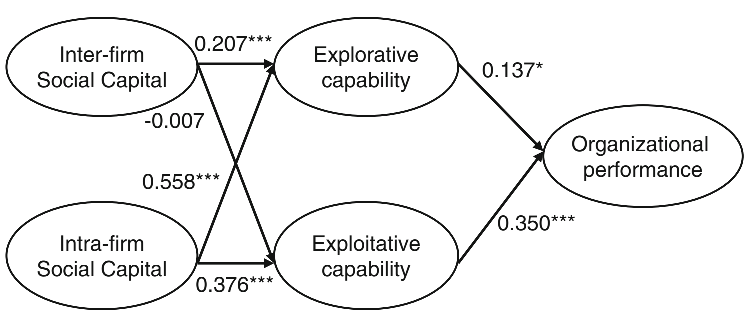

Fig. 7.2 Path analysis

capability therefore accepting H3a and rejecting H3b. The results showed that intra-firm social capital positively affects explorative capability (0.558, $p<0.001$) and exploitative capability (0.376, $p<0.001$). Consequently, support was found for H4a and H4b.

Discussion

This study was conducted with the objective of shedding light on what impact social capital has on a firm's performance. The results support the notion that social capital is a critical antecedent to firm capabilities, and thus indirectly influences organizational performance.

The Impact of Inter-firm Social Capital on the Development of Explorative and Exploitative Capabilities

The contracts established between firms explicitly define the boundaries between cooperative partners, thus imposing certain restrictions on the development of a partnership. However, social relationships can break through these boundaries. If firms establish a trusting and long-term affirmatory relationship, they will put more resources and energy into information exchange (Moberg, Culter, Gross, & Speh, 2002). In order to develop and maintain competitive advantages, firms will share their capabilities and knowledge internally and then transfer these into their exclusive capabilities through a process of internalization. Inter-firm social capital can overcome obstacles to the development of competitive advantages, and by using formal and informal interactions in the problem-solving and coordination processes firms can develop existing resources into appropriate configurations and social structures (Griffith & Harvey, 2004; Wang & Wei, 2007), thus realizing the free exchange of knowledge, lowering the cost of obtaining knowledge, and enhancing the ability to recognize useful knowledge (Yli-Renko et al., 2001) to facilitate learning (Dyer & Nobeoka, 2000). Moreover, Tiwana (2008) believes that the shared values between partners can enable firms to acquire each other's ideas (Regans & McEvily, 2003), thus aiding the transfer and integration of tacit knowledge and reducing distrust and uncertainty so that both parties can solve problems concerning their cooperation (McEvily & Marcus, 2005). If a closer relationship is established between firms then they will be more willing to share tacit or complex knowledge (Uzzi, 1996; Moran, 2005; Tsai et al., 2009). However, the results of the current work show that inter-firm social capital does not have any influence on exploitative capability. This may be because the cost of relationship maintenance is not in direct proportion to the effectiveness of exploitative capability development, indicating that relationships established for mutual investment and problem solving are not only based on common interest, but also reciprocal exchange. Once such a relationship changes, the exclusive investments made in a reciprocal relationship will be exposed to risks. This is also supported in Wong (1988). In the Chinese concept of a relationship, the adaptations needed for relationship maintenance are seen as a special investment, which cannot be transferred to other objects. Once the relationship is broken, both parties have to pay a high 'relational cost'. As Asian firms rely more heavily on relationships than Western ones, which rely more on contracts, an overreliance on interpersonal relationships or social factors to maintain their business environment will result in less flexibility in the face of a very dynamic environment, thus limiting the firms' adaptability and viability (Hatum & Pettigrew, 2006).

The Impact of Intra-firm Social Capital on the Development of Explorative and Exploitative Capabilities

As intra-firm social capital enhances explorative and exploitative capabilities, we need to clarify two issues: How do firms transfer the information and knowledge acquired to explorative and exploitative capabilities, and what transfer method should be adopted to achieve this? Intra-firm social capital is a kind of relational resource that can enable intra-organizational members to engage in close and in-depth social interactions (Davidsson & Honig, 2003; Persson, 2006; Tsai & Ghoshal, 1998) that enhance the efficiency of transferring of information, knowledge, and other resources (Auh & Menguc, 2005), thus creating shared visions, norms, and values among different departments. If intra-firm members have high levels of cognitive differences of the knowledge base (perception, interpretation, and value adjustment), misunderstandings will result and this will lower the efficiency of knowledge integration (Tsai & Ghoshal, 1998). Firms should thus work to create a lasting cognition environment to encourage members to engage in social interaction and establish mutual trust so that they can share their cognitions, expressions, and meaning-interpretation mechanisms (Dyer & Nobeka, 2000), such as consensus and common experiences in terms of language, encoding, and other aspects. In this way, misunderstandings can be prevented in communication, and knowledge-sharing efficiency can be enhanced to increase a firm's competitive power through enhanced explorative and exploitative capabilities (Dyer & Hatch, 2006; Kotabe & Murray, 2004; McEvily & Marcus, 2005; Tsai et al., 2009). The results of this study show that intra-firm social capital can effectively enhance explorative and exploitative capabilities. In other words, firms should work to create an information-sharing environment, cultivate members' ability to interpret external information and knowledge, and lower internal cognitive differences. By developing an effective organizational learning process, new knowledge can be accumulated and existing knowledge stores and structures can be updated, so that enterprises can constantly enhance their existing capabilities to develop new ones.

The Impact of Capability Development on Organizational Performance

Our study found that both explorative and exploitative capabilities have positive effects on organizational performance. A capability is a combination of a series of routines, procedures, and activities (Peng, Schroeder, & Shah, 2008). Routines contain the knowledge acquired by firms to complete a certain activity, which exist in an organizational environment through the interactions that occur among resources. Capabilities thus come from dynamic interactions with the knowledge base that firms create and accumulate internally (Teece, 2006). However, a dynamic environment can mean that a firm's knowledge store may fail to meet its needs, and thus firms are encouraged to cultivate new capabilities to maintain their competitive advantages (Rothaermel & Alexandre, 2009).

The nature of this kind of activity is to help firms acquire new knowledge and integrate it with the existing knowledge in their knowledge stores (Cao et al., 2009), thus enhancing and restructuring their functional attributes (Zollo & Winter, 2002). Organizational learning plays an important role in the process by which capabilities and knowledge develop based on each other. This is a kind of control-feedback mechanism which can constantly adjust errors, update organizational memory through conscious and unconscious learning, and reinforce firms' explorative and exploitative capabilities, creating more valuable products in an existing market or expanding the market to meet customer demands in order to improve organizational performance (Lubatkin et al., 2006).

Managerial and Theoretical Implications

The results of this study have some important managerial implications, specifically for managers located in remote areas. First, organizations with higher intra-firm social capital can explicitly transfer externally acquired knowledge into commonly shared knowledge. This finding offers insights concerning establishing inter-organizational formal or informal communication and integration platforms that can integrate external knowledge with existing professional knowledge, as well as reinforce explorative and exploitative capabilities. Second, our findings also suggest that SME managers should work to develop close inter-organizational relationships and establish a superior network position. Establishing alliance relationships with external firms in order to obtain complementary resources and knowledge is a relatively practical way to achieve this. An alliance relationship is a long-term partnership established by firms through a contract or an agreement for the purpose of structuring and accumulating social capital. Third, how firms are able to provide high-quality products largely depends on the dynamic capabilities of their stable organizational structures. Organizations established under dual structure (Simsek, 2009) are better able to deal with the problems concerning knowledge integration brought about by greater internal complexity and diversity, enabling firms to identify valuable knowledge and relevant information so that the two activities designed to complete different tasks can effectively exist within the same organizational structure (Menguc & Auh, 2008). Finally, SMEs should attach great importance to creating, obtaining, and transferring knowledge in face of fierce market competition in order to enhance their core competitiveness and reduce uncertainty. It is suggested in this chapter that SMEs should also try to span the boundary between intra- and inter-networks to enhance the knowledge transfer between main internal members (e.g., knowledge interpretation, supplier searching, bargaining, and trade negotiation), in addition to exploring the value and function of the social network in enhancing the dependence between internal members (e.g., acquiring key technology, expertise, and rare resources).

For researchers, this study differs in two ways from similar works that report location effects. First, most earlier studies are focused on external social capital, but a strong complementary effect cannot be realized without firms enhancing their process of internalization. This study also takes a different view to most of the literatures on social capital, and proposes that such research should not focus only on inter-organizational social capital, but also consider intra-organizational social capital (Jansen et al., 2006). What is more, previous studies on dynamic capabilities only conceptually discuss how these enable firms to respond to changes in the market and technology, but do not explicitly discuss the features of these capabilities, such as explorative and exploitative capabilities (March, 1991; Cao et al., 2009; Kristal, Roth, & Huang, 2010). This study thus contributes to the organizational performance research by developing a conceptually driven framework underpinned by dynamic capabilities to better understand the effects of social capital on a firm's ability to develop critical capabilities, which in turn impacts organizational performance. While the theoretical model and results are beneficial for future organizational performance research, they also highlight a clear need for further development of the concept of dynamic capabilities to incorporate the effects of social capital as an antecedent influence.

Future Research Directions

This research adopts cross-sectional data to examine inter- and intra-firm social capital, and thus the results cannot explain how these issues change over time. In this regard, it is suggested that future researchers can carry out longitudinal studies to examine the different stages of relationship development, accumulation of social capital, and co-evolution of organizational dynamic capabilities. Besides, this study used the electronic manufacturing industry as its research object and the results may not be generalizable to other businesses. Although some researchers obtained similar conclusions in different industries, such as the new product development industry (Andriopoulos & Lewis, 2009), more work should be carried out in other industries; multi-country or multi-industry studies are also warranted in order to explore whether industry and country of origin effects have played a significant role in determining the results observed in this study.

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8

Environmental Management Practices and Performance of International Suppliers Located in China: How Does Relationship Learning Matter?

Esther Ling-yee Li

Introduction

Environmentalism and sustainability requirements have become increasingly important issues of concern in Asian economies, for domestic firms as well as multinationals operating in Asian countries. Increasing government regulations from both the home and host governments and institutions, consumer movements, and activities of environmental groups have affected the operations of firms and put increasing pressure on them to respond to the calls for greener supply chain activities (Branzei, Ursacki-Bryant, Vertinsky, & Zhang, 2004; Lee, Kim, & Choi, 2012). On the positive side, early adopters of green supply chain management (GSCM) practices in China found that green operational practices and superior performance tended to go hand in hand (Zhu and Sarkis 2004). To address pressures from various stakeholders under the environmentalism and sustainability movement, it becomes timely and critical to research how suppliers located in Asia learn to adjust their environmental management practices and improve performance as a consequence.

Knowledge has been upheld as the key resource to create sustainable advantage, and its role has been increasingly recognized in the strategic management field. In the quest for sustainable performance, theorists in the environmental management domain (Hart & Dowell, 2011) advocate taking the learning route. Through higher-order learning, firms learn to manage different stakeholder expectations; firms learn in an exploratory manner to develop different innovative green products; and firms learn to save by exploiting different green production processes. Yet, there is little research examining how suppliers' and buyers' high-order learning of environmental practices might affect a firm's international performance. As an exception, Sharma and Vredenburg's study (1998) found that environmental practices are associated with some distinct organizational learning capabilities that in turn account for the firm's competitiveness. This implies that a firm's ability to learn from its many stakeholder relationships to come up with a shared interpretation of environmental issues and updated environmental responsiveness measures is critical to its competitive strength. In short, international suppliers are expected to undertake relational learning so as to address the environmental pressure from foreign buyers. Relational learning is arguably the key missing link between environmental practices and competitive outcomes. Previous empirical studies examining the direct effect of environmental practices reported that environmental practices using pollution-prevention technologies (Christmann 2000; Stead and Stead 1995), involving innovative proprietary technologies (Porter and Van der Linde 1995), and taking place with an early timing of environmental investment (Nehrt, 1996, 1998) could lead to markedly improved environmental performance. The extant studies examined the direct effect of environmental practices on a firm's competitiveness and performance and hence ignored the intervening learning processes. This study focuses on this unexplored issue and proposes a framework for understanding the predictors and outcomes of supplier–buyer relational learning in the environmental management context.

Framed within the resource-based view (RBV) of the firm, the current inquiry investigated into the resource impact of environmental management practices on building up international supplier/buyer relational learning to address environmental concerns that in turn leads to competitive advantages and superior performance outcomes. The key insights of the RBV for sustainability research are twofold (Connelly, Ketchen, & Slater, 2011). First, the RBV upholds that sustainability practices, being characterized as firm specific, socially complex, path dependent, and inimitable and non-substitutable, can provide competitive advantage. Second, given that firm resources are limited, sustainability efforts should consider how they might be maintained or renewed over time. For instance, for International Paper, the largest pulp and paper company in the world, its ability to remain competitive depends on its ability to nurture and maintain its forestland for future harvesting (Floyd, Vonhof, & Seyfang, 2001). As the basis for sustainable competitive advantage resides in a firm's resources and in how the firm structures, bundles, and leverages those resources, there is an implied resource–capability–competitiveness linkage. Following the resource–capability–competitiveness logic, resources do not directly influence competitive advantage. As a corollary, proactive environmental management practices (a resource) could directly influence supplier–buyer relational learning used to address environmental pressures (a capability), but it should not affect a firm's competitive advantage. Anchored in the RBV, the current inquiry used a sample of Chinese international supplier firms' different environmental management practices to account for the varied extent of supplier–buyer relational learning used to address environmental pressures in those firms. The resultant findings serve to provide empirical substantiation of the link between a firm's resource and learning capability under the environmental management domain.

Within this background, the present study seeks to achieve the following research objectives:

1 To examine the direct effect of environmental management practices on supplier–buyer relational learning
2 To investigate the direct effect of supplier–buyer relational learning on competitive market performance
3 To explore the direct and indirect effects of environmental management practices on competitive market performance.

Supplier–Buyer Relational Learning as a Dynamic Capability

Dynamic capabilities consist of a set of *specific and identifiable processes* that, although *idiosyncratic* to firms in their details and *path dependent* in their emergence, have *significant commonality* in the form of best practices across firms, allowing them to generate *new, value-creating strategies* (Eisenhardt & Martin, 2000). As strategies of proactive environmental responsiveness were associated with the emergence of a capability for high-order learning (Sharma & Vredenburg, 1998), knowledge and information flow have been identified as critical strategic attributes affecting a firm's environmental performance (Etzion, 2007). In this study, supplier–buyer relational learning refers to the ability of a supplier to engage its buyers in joint learning activities that give rise to shared interpretation of environmental issues and updated responsiveness for environmental purpose.

A Theoretical Model of Predictors and Consequences of Supplier–Buyer Relational Learning to Address Environmental Challenges

The present theoretical model is presented in Fig. 8.1. Underlying the relationships depicted here is the theoretical perspectives of the RBV and contingency theory. Based on the RBV of the natural environment (Hart, 1995; Hart & Dowell, 2011), the capability of the involved supplier to engage its buyers in learning activities to address changing environmental issues is closely connected to the supplier firm's resource investments in formal environmental planning, systems and procedures, employee training, and participation. Figure 8.1 illustrates the central research question: Does environmental knowledge integration fully or partially mediate the effect of a firm's environmental resource base on its competitiveness outcome?

The Mediating Role of Supplier–Buyer Relational Learning on the Link Between Environmental Resources and Organizational Performance

Based on the RBV of the firm (Barney, 1986, 1991; Wernerfelt, 1984), scholars have unpacked the organizational resources and capabilities that link environmental strategy to organizational performance (Hart, 1995; Hart & Dowell, 2011). Sharma and Vredenburg (1998) found that proactive environmental strategies were associated with the development of valuable organizational capabilities such as continuous innovation, organizational learning, and stakeholder integration that in turn explain the outcome of competitive advantage. Christmann (2000) also showed that while a firm's implementation of "best practices" for environmental management did not result in a cost-saving advantage in itself, such implementation practices required the support of complementary innovation and implementation process capabilities to achieve the expected cost-saving advantage.

Fig. 8.1 A conceptual model of structural relationships of supplier–buyer relational learning with its predictor and outcome

Although the resource–capability–competitiveness linkage was implicitly derived in some previous resource- based studies, other studies (Bowman and Haire 1975; Bragdon and Marlin 1972; Chen and Metcalf 1980; Fogler and Nutt 1975; Hart and Ahuja 1996; Klassen and McLaughlin 1996; Russo and Fouts 1997; Spicert 1978) using larger samples of firms to empirically analyze the financial performance effects of environmental strategies brought inconclusive results (Christmann 2000). Results were conflicting in that some studies showed a positive relationship (e.g., Nehrt, 1996) and other studies reported no or negative relationships (e.g., Stead & Stead, 1995). This lack of resolution calls for additional research to examine the potential mediating role of other complementary capability assets required for gaining the different competitive advantage and organizational performance from different environmental strategies.

In this study, supplier–buyer relational learning is proposed as the other critical complementary dynamic capability that serves as the linking mechanism bridging a firm's internal environmental management resources with its external supplier–buyer relationships to account for the firm's international performance outcomes.

Internal environmental management resource domains refer to a systematic collection of organizational investment efforts that are required to move the firm from one environmental strategy stage to the next (Hart, 1995). Specifically, four such resource domains have been identified: (1) training investment in employees' environmental skills; (2) formal investment in environmental planning, reporting, and performance appraisal; (3) investment in organizational competencies in environmental management; and (4) investment in effort in participation and integration of environmental issues in corporate strategic planning (Buysse & Verbeke, 2003). It has been asserted that as a kind of strategic resource, environmental management domains can help a firm address its organization-environment boundary-spanning activities, and improve cooperation and coordination among supply chain members (Dyer, 2000). In keeping with the strategic management perspective, researchers in the green supply chain area (Lee et al., 2012; Paulraj, 2011) put emphasis on a relational view to account for the mediating effect of environmental collaboration between suppliers and buyers. Relational competences developed through inter-firm collaboration enable firms to acquire rent-yielding resources and capabilities that are unique and hard to imitate (Harrison et al., 2001), and help the firm to obtain sustainable competitive advantage and improved organizational performance (Paulraj & Chen, 2007; Sambharya & Banerji, 2006). The adoption of internal environmental management serves to increase transparency and openness of inter-firm business processes, help suppliers build trust and credibility in the relationship with buyers, and ultimately enhance relational efficiency (Zacharia, Nix, & Lusch, 2009), which in turn contribute to business performance (Lee et al., 2012).

For suppliers located in emerging markets with outsourcing and offsourcing operations for foreign buyer firms, cooperation and collaboration with buyer firms is critical. In order to comply with the varied environmental regulations in producing parts and components for different foreign countries, suppliers need to cooperate, collaborate, and learn from the involved buyers regarding complex regulations that must be compiled in various international markets (Lee, 2009; Lee & Klassen, 2008). Cooperative learning among the suppliers and buyers in the form of inter-firm interaction routines not only improves total environmental impact of existing products and reduces waste along the supply side (Geffen & Rothenberg, 2000; Handfield, Walton, Seeger, & Melnyk, 1997; Klassen & Vachon, 2003), but also helps to design new socially superior products and modify existing processes for better operational efficiencies (Darnall, Jolley, & Handfield, 2008; Lao, Hong, & Rao, 2010; Pagell, Wu, & Wasserman, 2010; Wittmann, Hunt, & Arnett, 2009). It is expected that supplier–buyer relational learning can enable the synergetic combination of resources and capabilities between supplier and buyer partners, and can help create complementary endowments that are more valuable, rare, and difficult to imitate (Dyer & Singh, 1998). Thus, supplier–buyer relational learning can serve as a critical mediator that better accounts for how the firm's environmental management resource domains contribute to its international performance outcomes. This leads to the following hypothesis:

Hypothesis 1 Supplier–Buyer relational learning mediates the relationship between environmental resources and international performance.

Research Methodology

Sample Selection and the Resultant Sample Characteristics

This study defined its population as manufacturing firms that have production facilities set up in China, and that sell their outputs to foreign buyers in overseas countries. This study used the 2012 Directory of the Hong Kong Electronics Fair as its sampling frame, and a systematic random sample of 1000 firms was drawn from this directory. This target sample was considered appropriate because the exhibitor firms were manufacturing firms located in the mainland who joined this trade show held in Hong Kong in order to promote their products to overseas buyers. A copy of the survey instrument was provided via personal delivery to each of the 1000 randomly drawn exporting firms. Of the 600 firms that agreed to complete the questionnaire, 305 fully completed the questionnaires, resulting in a 50.8 % response rate. The response rate is comparable to the rates reported in other studies involving exporting firms (Bodur, 1994; Cavusgil & Zou, 1994; Kaynak and Kuan, 1993). The remaining companies declined to take part in the survey due to an excessive workload, absence of the responsible manager, or a company policy prohibiting the disclosure of business information. In order to determine whether the characteristics of the respondents differed from those of "non-respondents", 50 non-respondents selected from the same sampling frame were asked to provide some basic background information regarding the structural characteristics of their firms. Data analysis showed that the characteristics such as firm size, international experience, and ownership type did not differ significantly between non-respondents and respondents.

The final usable sample comprised 305 private manufacturing firms that export to overseas markets. The exporting manufacturers came from two industrial sectors: lighting equipment (37 %), and electrical and electronic appliances (53 %). With respect to firm size, 28.5 % were small firms with 100 or less employees and 41.1 % were medium firms with 101–300 employees. The rest were relatively big firms with the number of employees ranging from 301 to 3000. With regard to international experience, one-third of the sample firms had more than 10 years of international experience, another third had 5–10 years' experience, and the rest had less than 5 years' experience. The present sample covers small and medium-sized enterprises (SMEs) from different industries and international experience backgrounds. The study's sample characteristics serve to extend the generalizability of its resultant findings to multiple industries, and internationalization stages.

Survey Instrument and Measurement Design

The survey instrument used for this study was developed through a comprehensive review of the natural RBV, the dynamic capability theory, the stakeholder management perspective, and the green supply chain literatures. It takes the form of a structured questionnaire consisting of three major parts: the first part collected information on the firm's background characteristics and its adoption of internal environmental management practices; the second part referred to the top managers' perceptions of the inter-firm learning routines pursued to integrate environmental knowledge and practices; and the last part focused on the perception of the firm's international market performance. Prior to the commencement of the full-scale study, the questionnaire was administered to ten exporting firms in China through personal interviews. This pre-testing step ensured that ambiguity of wording was minimized.

Multiple-item scales were used to operationalize most of the variables. Internal consistency and validity considerations of multi-item constructs were assessed through alpha coefficients and confirmatory factor analysis. First, the key construct "environmental management resource" was operationalized by adopting the measurement of Buysees and Verbeke (2003). Specifically, this study measured top management's resource support for environmental management with an 11-item, seven-point Likert scale which captures the extent to which the firm has already implemented an internal environmental management system (1 = not considered, 4 = under planning, 7 = already implemented). Second, based on the established measures for relational learning (Selnes and Sallis, 2003), this study used a ten-item, seven-point Likert scale to capture the degree to which pollution prevention practices were developed out of higher-order learning between the focal supplier firm and its major international buyers (1 = hardly any, 4 = some, 7 = plentiful). Third, this study measured organizational benefits as a consequence of environmental pursuits in terms of a firm's international market performance. It used a seven-item, seven-point Likert scale (1 = much worse, 4 = more or less the same, 4 = much better) to measure a supplier's average international market performance in the last 3 years relative to its major competitors in forms of relative sales growth rate, relative profit growth rate (Menguc, Auh, & Ozanne, 2010), relative market share growth rate (Baker & Sinkula, 2005), and relative return on investment rate (Zhu & Sarkis, 2004).

Analysis and Results

Data analyses are presented in two steps: (1) validation of the measurement model and (2) hypothesis testing.

Validation of Measurement Model

A four-factor measurement model is estimated in this study. Confirmatory factor analysis (CFA) reveals that all factor loadings are greater than 0.40. The measurement model also provides an acceptable fit to the data: $X^2_{(428)} = 1923.11$; root mean squared error of approximation (RMSEA) = 0.11; confirmatory fit index (CFI) = 0.93; normed fit index (NFI) = 0.91; incremental fit index (IFI) = 0.96; standardized root mean square residual = 0.065. The reliability estimates (Cronbach's alpha, composite reliability, and average variance extracted [AVE]) for the different multi-item constructs are shown in Table 8.1. Support is obtained for convergent validity in the present scales, as the factor loadings are significant in the measurement model ($t > 1.96$; Anderson & Gerbing, 1988), and the AVE estimates are equal to or greater than 0.50 (Bagozzi & Yi, 1988). The descriptive statistics, inter-construct correlations, and discriminant validity indices are shown in Table 8.2. In support of discriminant validity, the squared correlations between any two constructs are less than the AVE estimates of the corresponding constructs for all pairs (Fornell and Larker, 1981).

Results of Hypothesis Testing

After the measurement model was confirmed, we estimated the structural equation model using LISREL8 software. Results for the standard error of the mean (SEM) are reported in Table 8.3. As shown in Table 8.3, the results of the SEM model provided a perfect fit to the data: $X^2_{(450)} = 1199.96$; confirmatory fit index (CFI) = 0.96; root mean squared error of approximation (RMSRA) = 0.07. The results in Table 8.3 indicate that environmental management resource had a significant, positive, and direct impact on supplier–buyer relational learning ($b = 0.34$, $p < 0.01$). On the other hand, the impact of supplier–buyer relational learning on the firm's international market performance was significant and positive ($b = 0.33$, $p < 0.01$). Furthermore, Table 8.4 reported the confirmative factor analysis findings of rival models. The nested chi-square tests show that the goodness of fit for the full mediation model is not significantly worse than the partial mediation model, while the direct effect model has significantly poorer fit. The full mediation model is therefore preferred due to parsimonious reason. It is a general principle that if the chi-square is not significantly larger, a model with fewer paths is preferred. These findings give support to Hypothesis 1.

Discussion and Implications

The bulk of extant strategic management research has already addressed the key role that stakeholder pressures and expectations can play in shaping a firm's environmental strategy (e.g., Frooman, 1999; Harrison, Bosse,

Table 8.1 Confirmative factor analysis

Variables	**Factor loadings**	
Environmental Management Resources: α=0.93, CR=0.93, AVE=0.54	**Estimate**	**S.E.**
Our top managers are involved in formulating environmental policies.	0.72	n/a
Our middle managers are involved in implementing environmental policies.	0.75	0.06
We have formal plans for environmental management.	0.81	0.06
We have official manuals detailing environmental procedures.	0.86	0.06
We have employee training programs on environmental management.	0.86	0.06
We have an internal reporting system about environmental issues.	0.85	0.06
We audit our environmental performance and report on it in our external communications.	0.71	0.06
We have a reward and penalty mechanism for environmental performance.	0.67	0.06
We are gearing up for registration with ISO 14000 in order to demonstrate our seriousness in dealing with environmental issues.	0.52	0.06
We use “total quality management programs” to solve our pollution problems.	0.59	0.06
We use cross-functional teams to identify environmental problems, develop solutions, implement strategies, and evaluate them.	0.63	0.06
Supplier-Initiated Relational Learning to Address Buyers’ Environmental Concerns: α=0.94, CR=0.94, AVE=0.60		
We adjust our common understanding of end-users’ environmental needs and behavior.	0.69	n/a
We adjust our common understanding of products and marketing strategies of major competitors we face in the green market subgroup.	0.77	0.06
We adjust our common understanding of environmental marketing practices.	0.81	0.06
We adjust our common understanding of trends in environmental technology.	0.83	0.06
We adjust our common understanding of environmental product design.	0.85	0.06
We evaluate, and if necessary, adjust our operating routines and procedures for environmental purposes.	0.82	0.06
We evaluate, and if necessary, adjust our delivery routines in environmentally friendly ways.	0.75	0.06
We evaluate, and if needed, update our products’ environmental design.	0.79	0.06

(continued)

Table 8.1 (continued)

Variables	Factor loadings	
Environmental Management Resources: α=0.93, CR=0.93, AVE=0.54	**Estimate**	**S.E.**
We evaluate, and if needed, update our products' environmental production.	0.79	0.06
We evaluate, and if needed, update our managerial systems for ISO 14001 purposes.	0.59	0.06
International Market Performance: α=0.90, CR=0.89, AVE=0.68		
The company's sales growth is better than that of its major competitors.	0.84	
The company's market share growth is better than that of its major competitors.	0.89	0.04
The company's profit growth rate is better than that of its major competitors.	0.68	0.12
The company's return on investment is better than that of its major competitors.	0.75	0.13

chi square=1923.11, df=428. RESEA=0.11, CFI=0.93, NFI=0.91, IFI=0.93, SRMR=0.065

Table 8.2 Descriptive statistics, correlation, and discriminant validity[a,b]

		Mean	S.D.	(1)	(2)	(3)
(1)	Environmental management resource	4.84	1.48	(0.74)		
(2)	Supplier–buyer relational learning	5.05	1.13	0.47	(0.77)	
(3)	International market performance	4.93	1.12	0.23	0.25	(0.82)

[a]The square root of AVE is given in parentheses
[b]All correlation coefficients are significant at 0.01 level

& Phillips, 2010; Sharma and Henriques, 2005). Scholars (e.g., Hart, 1995; Hart & Dowell, 2011; Paulraj, 2011) called for timely research to look beyond stakeholder pressures as antecedents, and extend strategic management research by examining how the RBV, dynamic capabilities, and relational views work together to address the key concerns of the firm's customers as a major stakeholder and hence enhance its performance. Taking into account firm-specific environmental resources, and interfirm relational learning capabilities, this study documents the combined effect of these factors in achieving international market performance. In short, this study makes a twofold significant contribution to the strategic management literature by demonstrating the importance of firm-specific resources and relational capabilities in promoting firm performance.

Table 8.3 Results of structural equation model (full mediation model)

Dependent variable	**International market performance**		**Supplier–buyer relational learning**	
Independent variables	**Beta**	**S.E.**	**Beta**	**S.E.**
Environmental Management Resource (1)	0.33**	0.07	0.24**	0.06
Supplier–buyer Relational Learning (2)			0.39**	0.06
R^2	0.11		0.39	
Adj. R^2	0.11		0.39	

Note: *$p<0.05$, **$p<0.01$

[a]Standardized coefficients (beta) are reported

[b]Adj. R^2 is computed by $1-(1-R^2)\times(n-1)/(n-k)$

Table 8.4 Confirmative factor analyses

Models	χ^2	**df**	C_{min}**/df**	$\Delta\chi^2$	Δ**df**	**RMSEA**	**CFI**	**IFI**	**Std. RMR**
Partial mediation model	1192.86	447	2.55	–	–	0.07	0.96	0.96	0.06
Full mediation model	1199.96	450	2.55	7.10	3	0.07	0.96	0.96	0.06
Direct effect model	1289.27	450	2.81	96.41**	3	0.08	0.96	0.96	0.19

*$p<0.05$, **$p<0.01$

Note: Thresholds are C_{min}/df<3; CFI>0.90; IFI>0.90; Std. RMR<0.09; RMSEA<0.10

The current research model postulated that supplier–buyer relational learning mediates the link between a firm's environmental resources and its performance. The in-depth mediation analyses provided empirical support for the full mediation effect of supplier–buyer relational learning under examination. Basically, the present findings implied that supplier-buyer relational learning is a relational capability that can enable supplier firms to (1) gain access to resources, (2) learn new capabilities, and (3) combine these relational resources in unique and collaborative ways, thereby realizing competitive advantages and leading to superior performance. More specifically, since emergent pollution prevention and product stewardship strategies rely more heavily on capabilities that cut across organizational boundaries, supplier partners can play an invaluable role in influencing the sustainable innovation for buyer firms (Dyer & Singh, 1998). International buyer firms are, therefore, well encouraged to initiate sustainable practices earlier along their supply chains that not only serve to reduce the total environmental impact, but also draw on the resources and capabilities of their supplier partners to innovate, grow, and attain organizational sustainability (Paulraj, 2011). In sum, the current findings point to the critical role of supplier–buyer relational learning as a kind of relational capability that enables supplier firms to combine cross-organizational complementary resources in unique ways, realize competitive advantages, and achieve sustained performance over time (Hunt and Davis, 2008; Pagell et al., 2010).

Limitations and Future Research

The limitations of this study are discussed with the purpose of identifying opportunities for further research. First, this study is parsimonious in nature and covers only one strategic antecedent. Thus, future research should incorporate other predictive factors within the domain of the RBV and dynamic capabilities. On top of environmental management resource domains, researchers might consider additional internal factors (like top management's environmental sensitivity and entrepreneurship orientation) and relational antecedent factors (like long-term relationship orientation and supplier involvement). Second, the current research is one of the few empirical studies on green supply chain management (GSCM) that explored from a global supply chain perspective. Given the dependencies developed among trading partners, suppliers from emerging markets and their international buyers are expected to learn from each other and draw on each other's resources and capabilities to innovate and grow. Yet, due to the distance, language, and cultural diversity involved (Miller & de Matta, 2008; Ueltschy, Ueltschy, & Fachinelli, 2007), these new risk factors occur along the entire global supply chain (Manuj and Mentzer, 2008) and represent additional challenging contexts for future studies. Additional research effort is called for to examine how cultural distance and relationship orientation may moderate the impact of green supply chain management (GSCM) practices on the local firms' business and relational performance in terms of product quality, inventory control, lead time, and supplier-buyer trust. Finally, the present sample was drawn from the electronics and lighting industries and the results may not have strong external validity. Since the EU's new directives on electronic equipment and substances came into effect, the electronics industry has been more mature in adopting green supply chain practices. Most of the survey respondents in this study have implemented ISO 14001 standards of environmental management. To increase the generalizability of this research, future research might repeat this study for comparative analysis in different industries and in different countries.

In light of the theoretical and intellectual contributions made by this study, the clear implication is that learning from foreign partners and collaborating with them can upgrade the capabilities of Chinese firms for sustainable development. It is not surprising to see that a large number of Chinese manufacturers have already joined the ISO 14001 scheme in compliance of their foreign buyers' green procurement requirements. Nonetheless, it would be encouraging for future studies to provide research evidence that substantiates how the Chinese manufacturers keep learning from their green buyers and keep improving their environmental practices over time, and eventually capture benefits of green supply chains.

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