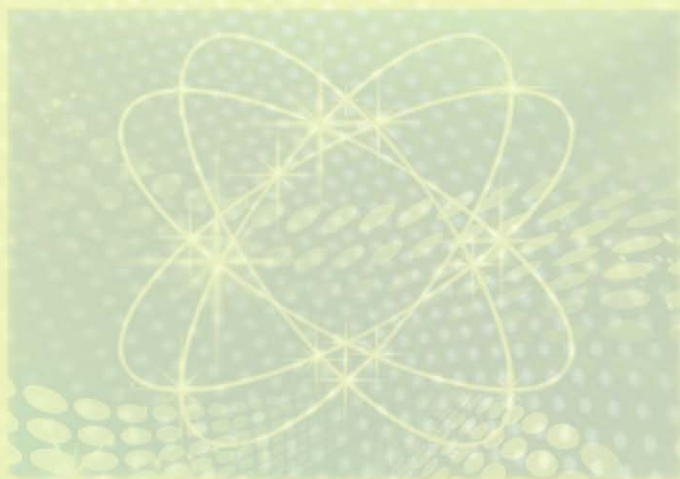


中国中小企业创新与企业家精神

曹焱 著



对外经济贸易大学出版社

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SMEs Innovation and Entrepreneurship in China

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Foreward

There are many books available on small- and medium-sized enterprises (SMEs) and entrepreneurship, so why we need to read this one? Dr Yi Cao's research on SMEs in China, an emerging market is that, excellent as many of these books are, innovation is of paramount importance and therefore calls for more fascinating insights into entrepreneurship studies in the context of China.

With thoughtful and well-written chapters—ranging from organizational cooperation and connections, to the relation between returnee entrepreneurs and internationalisation, and to the analyses on the roles of market orientation and entrepreneurial orientation in SMEs firm performance—this book manages to be both highly readable and thoroughly informative.

This book is the result of Dr Yi Cao's efforts and, although inevitably far from perfect, it provides an up-to-date and comprehensive overview of classic, contemporary and future trends in research across innovation and entrepreneurship in emerging markets. I believe it will be a valuable resource for anyone interested in this field.

Professor WANG, Jiaqiong

The Principal, University of International Business and Economics

A handwritten signature in black ink, reading 'Wangjiaqiong', with a horizontal line drawn underneath the name.

Preface

The main focus of the book is innovation and entrepreneurship in the context of China. It examines, in particular, the effects of factors external and internal to the firm, on Chinese high-technology small- and medium-sized enterprises (SMEs) firm performance. Specifically, this study explicates how and in what manner managerial networking, returnee entrepreneur, market orientation, and entrepreneurial orientation exert influence on high-technology SMEs firm performance in China. Using concepts derived from previous literature, this study develops the hypotheses to test the applicability of some existing theories in the case of high-technology SMEs in China's emerging economy context.

Based on questionnaire data, the analysis of Chinese SMEs in high-technology industry suggests that managerial networks such as political networking and business networking are positively related to new product performance. This study further demonstrates that the link between managerial networks and new product performance is moderated by perceived industry growth. Specifically, the study finds that the positive relationship between political networking and high-technology SMEs new product performance is stronger when perceived industry growth is faster. Findings also show that the positive relationship between business networking and high-technology SMEs new product performance is weaker when perceived industry growth is faster.

This study examines the determinants of internationalisation of high-technology SMEs and the performance implications of such behaviours in China. The expected relationship between the presence of returnee entrepreneur and export performance is not found. Rather, findings show that the presence of returnee entrepreneur has a stronger, positive relationship with high-technology SMEs export performance when technological turbulence is high than when it is low. The study also finds that the previous entrepreneurs' MNEs work experience, inward internationalisation orientation and international networks are positively associated with export performance of high-technology SMEs. Further, findings suggest that institutional support in China is more than background conditions, but it is an active agent which

is positively related to export performance.

Although this study finds the presence of returnee entrepreneur is not related to high-technology SMEs export performance, it cannot completely rule out its potential influence. This study finds that a returnee entrepreneur is positively associated with firm performance of high-technology SMEs. Further, my findings suggest that executives tend to boost firm performance by implementing market orientation and establishing political connections. In addition, the results show that political connection is a moderator affecting the effects of returnee entrepreneur and market orientation on firm performance. It moderates them in such a way that for managers with higher level of political connections there is an even stronger impact of returnee entrepreneur or market orientation on high-technology SMEs firm performance.

This study explores the relationship between entrepreneurial orientation and firm performance of high-technology SMEs in China. The findings confirm that entrepreneurial orientation is positively related to firm performance. Further, this study finds that ties with service intermediaries and institutional support are positively associated with firm performance of high-technology SMEs in China. In addition, the results show that ties with service intermediaries positively affect the performance implication of entrepreneurial orientation. It also finds that the positive relationship between entrepreneurial orientation and high-technology SMEs firm performance will be weaker when the level of institutional support is higher.

The reader is the best judge of the extent to which I have achieved my original aims and attained an appropriate balance within and between chapters. I appreciate any feedbacks and suggestions for improvements to this book.

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List of Abbreviations

<i>Terminology</i>	<i>Abbreviation</i>
Confirmatory Factor Analysis	CFA
Industry-based View	IBV
Institutional Theory	IT
Return on Assets	ROA
Return on Investment	ROI
Return on Sales	ROS
Resource-based View	RBV
Small and Medium-sized Enterprises	SMEs
Variance Inflation Factors	VIFs

Chapter 1

Introduction to the Study

1.1 Introduction

Over the past few decades the landscape of competition in the global economy has been dramatically changed. The rapid technological revolution and increasing globalisation present major challenges to firms' ability to maintain their competitive advantages, thereby driving more and more firms to reconsider how to attain success in the 21st century (Hitt, Keats and DeMarie, 1998). The new competitive landscape requires that firms use the latest technology, continue to develop new product and technology, actively engage in international markets, structure themselves to gain advantage in these markets, develop and maintain strategic flexibility, as well as build a long-term strategic vision that allows entrepreneurs to balance short-term performance with long-term needs (Tan, 2005). In particular, both researchers and practitioners have paid considerable attention to how high-technology small- and medium-sized enterprises (SMEs) survive and grow in the new competitive landscape (Oviatt and McDougall, 1994; Zahra, Ireland, and Hitt, 2000). The growth of high-technology SMEs has not only added more products and services to the market and stimulated market competition, but also offered more employment opportunities and made contribution to improvement of the people's living standards (Chen, 2006; Li and Miller, 2006; McDougall and Robinson, 1990). For example, according to China Statistics Bureau, Chinese SMEs not only account for about 99% of the total number of firms, but also contribute more than 60% of that nation's total gross industrial output, 50% of tax revenues, 70% of import and export trade, as well as 80% of urban employment (Chen, 2006; Gedajlovic et al., 2012; Zhu et al., 2012). With regard to innovation, SMEs have

contributed 66% of patents nationwide, 74% of technological innovations, and 82% of new products (Zhu et al., 2012). However, with the changed dynamics in this competitive landscape, high-technology SMEs arguably suffer from liabilities of newness and smallness relative to their larger established rivals (Lee et al., 2012). Therefore, developing high-technology SMEs has been viewed as both a revitalisation tool for developed economies and a driving force for emerging markets (Li and Atuahene-Gima, 2001; Zhao and Aram, 1995).

Previous literature has suggested that emerging economies are an increasing prominent position in the world economy (Wright, Filatotchev, Hoskisson and Peng, 2005). As Xu and Meyer (2013) contend, emerging markets provide a laboratory for investigating the interaction between firm strategies and local contexts. An emerging economy can be generally defined as a country that often has low-income but with a rapid pace of economic development, and government policies favouring economic liberalisation and a free market system (Hoskisson, Eden, Lau and Wright, 2000). In accordance with Hoskisson et al. (2000), emerging economies not only comprise developing countries in Latin America (e.g., Brazil), the Middle East, Southeast Asia (e.g., India) and Africa (e.g., South Africa), but also transition economies such as China, the former Soviet Union (e.g., Russia), and Central and Eastern Europe. In particular, since China implemented its open-door policy in 1978, China's transition economy is changing from the state-controlled centralist command economy that previously had followed the Soviet model of central planning based on the control of inputs and outputs to market-based socialist economies which place emphasis on entrepreneurial activities (Alistair et al., 2003; Tan, 2001). The sustained economic liberation, perceived as providing tremendous opportunities for many individuals and existing economic units, has given birth to a new diversity in organisational forms and to a plurality of property ownership types (Boisot and Child, 1988, 1996; Nee, 1992; Tan, 2001; Yang and Li, 2008). For instance, one characteristic of China's rapid economic changes has been the relative decline of large SOEs and the privatisation of some SOEs, converting property rights from state sectors into non-state sectors with various types of ownership (Anderson et al., 2003; Choi, Lee, and Williams, 2011; Zapalska and Edwards, 2001). Specifically, new types of business enterprises encompass privately owned enterprises (POEs), township and collective enterprises (TCEs), transformed state-owned enterprises (TSOEs), and international joint ventures (IJVs) (Dana,

1999; Yang and Li, 2008). Those new types of business enterprises have emerged as the important driving forces behind China's rapid economic development. Further, most industries in China have been undergoing structural transformation, which provide complex industrial dynamics that significantly affect firm behaviour and business conduct (Luo, 2003). Thus, Chinese emerging economy can be a rich research context to investigate how new entrepreneurial firms capitalise on growth.

As economic reform continuously transforms China's economy and society, a new class of small privately owned firms, particularly those SMEs in high-technology industry, have been emerged, which are radically different from the state-owned enterprises (SOEs) and are characterised as being more entrepreneurial (Tan, 1996). Given China's rapid development and average annual GDP growth of approximately 10% over the last two decades, its SMEs are presented with deep and broad set of business opportunities related to technological development, market enhancement, and internationalisation (Li, 1998; Gedajlovic, Cao, and Zhang, 2012). As economic reforms proceeded, Chinese SMEs play an increasingly important role in stimulating economic growth, increasing employment, expanding exports and promoting science and technology innovations (Chen, 2006). For instance, according to a recent report from Chinese Association of Small and Medium Enterprises (CASME), it stated that China SMEs have shared 60% of GDP, 50% of taxation, 80% of employment and 66% of patents of the country by 2009. Upon recognising that the low profit margin and the accumulated pollution due to heavily dependence on labour-intensive industries will impede national economic growth, the Chinese government is currently helping SMEs to enhance their technological capabilities with the aim of creating their own competitive advantages (Tang and Tang, 2012). High-technology SMEs are given an increasingly important role in this economic and industrial transformation to a knowledge-based, high value-added and high profit margin economy (Xiao, 2011).

Recognising the importance of new technology SMEs, China is striving to create substantial opportunities for entrepreneurial firms to switch to more innovative ventures and to capitalise on the increasing support provided by the government and its agencies (Tang and Tang, 2012). Chinese policy makers also have made efforts to encourage and enhance entrepreneurial activities in China, such as by initiating 'sparkling programmes' and constructing 'high and new technology parks' in certain industries and regions (Yang and Li, 2008).

Furthermore, the government-sponsored venture capital (VC) funds such as the National Electronic and Information Technology Development Fund that sponsored by the former Ministry of Information Industry makes equity investments in high-growth, technology-based SMEs in the information technology industry (Zhang et al., 2009). The Chinese government has also promulgated several new laws and measures recently to reward innovative activities and nurture long-term innovation among SMEs, including the Law of the People's Republic of China on Science and Technology Progress, the Law of the People's Republic of China on the Promotion of Small- and Medium-sized Enterprises (2002), and Government Procurement Law of the People's Republic of China (2002) (Gu et al., 2009; Liu, Simon, Sun, and Cao, 2011; Tang and Tang, 2012). In particular, in January 2006, the Chinese government adopted 'the National Medium- to Long-Term Plan for Science and Technology Plan (2006-2020)'. For the implementation of the plan, several policy measures were issued by the government and grouped into the following areas: increased budgetary appropriation at all levels of government and its agencies, tax incentives for enterprises innovation, public funding for supporting the absorption of imported technology, government technology procurement, a new strategy for creation and protection of intellectual property rights (IPRs) and technology standards, venture capital and funding mechanisms for new technology SMEs, and so on (Gu et al., 2009; Hutschenreiter and Zhang, 2007).

As important engines for economic development in Chinese emerging economies, high-technology SMEs are confronted with numerous business opportunities, but are simultaneously faced with developing institutions and a legacy of political interference in market activities and economic experimentation (Gedajlovic, Cao and Zhang, 2012; Li and Matlay, 2006). Compared to their counterparts in developed economies, high-technology SMEs have great difficulties in obtaining critical resources (for example, managerial resources and financial resources) from markets because strategic markets and infrastructure (for example, transportation and communication) in emerging markets are severely underdeveloped (Li and Atuahene-Gima, 2002; Li and Miller, 2006; Peng and Heath, 1996). Further, China's economy is still transitioning from government-led to more market-orientated economic regime and remains lacking in some supporting financial infrastructure pertaining to public and private equity markets (Peng and Zhou, 2005). For instance, it seems likely that the SMEs loan guarantee

system in China is still underdeveloped and inadequate. As Zhu, Wittman and Peng (2012) posit, less than 10% of small and private firms can obtain bank loans and less than 1% is able to obtain other external financing from capital market. In addition, in the Chinese venture capitalist industry, funds seem to be typically associated with state-owned banks (Ahlstrom, Bruton, and Yeh, 2007; Zhang et al., 2013). As a result, it is difficult for SMEs to obtain venture capital directly from the internal capital market, as used extensively by entrepreneurs in most industrially developed economies (Hussain, Millman, and Matlay, 2006). Though the opportunity-rich environment gives high-technology SMEs an advantage to survive and growth in the new competitive landscape, those SMEs are also subject to the constraining effects of under-developed institutional infrastructures (Gedajlovic, Cao, and Zhang, 2012). Therefore, high-technology SMEs in the Chinese emerging economy context represent an excellent setting to investigate to what extent both internal and external factors affect new technology SMEs firm performance.

1.2 Domain of the Study

Drawing on previous literature (Hoskisson et al., 2000; McDougall-Covin, Jones, and Serapio, 2014; Wright et al., 2005; Xu and Meyer, 2013), there are three leading theoretical perspectives which guide strategy and firm performance research on emerging markets, ranging from the industrial organisation theory (the industry-based view), the resource-based view of the firm, and the institutional theory (the institution-based view of strategy). Specifically, industry-based view places an emphasis on the importance of the industry conditions. Firms can achieve and sustain competitive advantage by identifying and neutralising all external environmental threats in the industry (Porter, 1980). Unlike the industry-based view, the resource-based view of the firm is concerned with the influence of the firm's heterogeneous resources and capabilities in explicating why firms differ and how they achieve and sustain competitiveness, thereby generating superior economic return for firms (Barney 1991; Barney et al., 2001; Grant, 1991). One might expect resources such as market and industry expertise to be especially critical during early venture development when an entrepreneur is conceiving initial product or service offering (Sullivan and Ford, 2014). Further, drawing on