A person is shown from the chest up, holding a globe. The globe is covered with a map that has a blue tint. The map shows various geographical features and labels, including 'INDICKY' and 'OCEAN'. The person's face is partially visible on the right side of the frame, looking down at the globe. The overall background is a dark blue gradient.

# China Rules

Globalization and Political Transformation

Edited by Ilan Alon, Julian Chang,  
Marc Fetscherin, Christoph Lattemann  
and John R. McIntyre

Foreword by Tarun Khanna



## China Rules

*Also by Christoph Lattemann*

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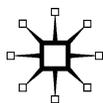
# **China Rules**

## **Globalization and Political Transformation**

Edited by

Ilan Alon, Julian Chang, Marc Fetscherin, Christoph Lattemann  
and John R. McIntyre

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# Foreword

I was grateful to have been asked to keynote the conference, *China Goes Global*, held by a consortium of universities at the Harvard Kennedy School in 2008. While events regarding China and India, or the so-called BRIC countries, are increasingly numerous, it is rare to find a collection of a large number of serious scholars and observers dedicated to understanding any one of these countries in the depth that this event did.

On my initial perusing of the draft papers at the conference stage, my thoughts gravitated to two issues, one on which China is a leader and one on which it is a laggard. The issues refer, first, to the resurgence of the state, and, second, to the emasculated role of civil society in China.

Why are these of interest to a conference focused on China going global? That is an easy question to answer for the first topic, most of the outbound investment from China is in the form of entities controlled by the state, including conventional state-owned-enterprises but also the newer sovereign wealth funds. It is easier to understand both antecedents and consequences of the globalization of state-controlled entities with a deeper appreciation of the political economy of the Chinese state, as a number of papers and presentations at the conference did skillfully. And the rest of the world can learn about some aspects of the management of state-owned enterprises, particularly at a time that even market-based economies are being forced by rampant financial distress to accept a greater role for the state.

As an example, consider the energy industry. Increasingly, China, Russia, the Middle East, and other oil-producing regions are ensuring that a greater percentage of the world's oil resources are in the hands of state-owned enterprises, muscling aside the Western "majors" (BP, Amoco, Total, Exxon). Even joint ventures between state-owned enterprises are becoming more common—for example, consider a Kuwaiti investment in a US \$5 billion refinery in Guangdong province, a Saudi crude oil facility on Hainan Island, and a potential Saudi Aramco-Sinopec joint venture. Clearly understanding the motivations of state-owned enterprises is key.<sup>1</sup>

What about civil society? A vibrant civic consciousness exists in China, of that there can be no doubt. The response by Chinese citizens to provide aid to victims of the Chengdu earthquake in Sichuan province

in May 2008 provided recent evidence. But civic consciousness has not been allowed to develop unfettered in China. It is true that there are several hopeful changes—for example, media is free to discuss most economic issues—but several more are feasible. Ultimately, a robust civil society will ensure a fuller consensus among the Chinese people for all manner of issues, including the nature and extent to which China remains open to the outside world.

Social scientists learn from variation, and inter-country experience comparisons are an important source of such variation. Consider the China-India comparison, a subject of recent interest to me.<sup>2</sup> The strength of the Chinese state is brought starkly into relief by comparing it to India's; and the weakness of China's civil society is likewise highlighted by comparing it to the efflorescence of India's. It was refreshing to comparative reasoning reflected in the conference papers, presentations and discussions.

Of course, these issues are merely illustrative, certainly not the only ones of great salience. The assembled papers provide information—descriptive, clinical information as well as information more in the vein of hypothesis testing—on a range of topics concerning why, how, and where Chinese firms have gone global, and to what effect.

It gives me pleasure to commend this collection to any serious observer of China, academic, policymaker or manager.

TARUN KHANNA  
Harvard Business School  
Harvard University  
Cambridge, MA  
January 2009

## Notes

1. Rawi Abdelal, Ayesha Khan, and Tarun Khanna. Where oil-rich nations are placing their bets. *Harvard Business Review*, 86 (9) (September 2008): 119–128.
2. Tarun Khanna. *Billions of Entrepreneurs: How China and India Are Reshaping Their Futures and Yours*. Harvard Business School Press, 2008.

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# Introduction

*Ilan Alon, Julian Chang, Marc Fetscherin,  
Christoph Lattemann, and John R. McIntyre*

The literature on the globalization of Chinese enterprises is gradually coming of age. A few books and landmark articles have been produced in recent years (examples include Nolan & Zhang, 2002; Matheus, 2002; Zeng & Williamson, 2004; Child & Rodrigues, 2005; Buckley, et al., 2007; Alon & McIntyre, 2008). But numerous research gaps remain. This book represents an effort to address research questions that have emerged in this growing important literature. The extant literature, particularly in the West, reflects a demand for a fuller, more operational and testable understanding of changing Chinese institutions, resource capabilities, and evolving structural forms, in the context of a rapidly restructuring global economy.

Because of the systemic features of the Chinese political economy the Chinese approach to firm internationalization yields new and often unexplored patterns of behavior. Tarun Khanna noted in the Preface to this volume that a distinguishing hallmark of Chinese outbound investment is that it is primarily undertaken by state-controlled enterprises, organically tied into the Chinese political economy. Market-based industrial organization has not been considered the final solution to issues of Chinese firm internationalization. This may reflect lessons that reach beyond the scope of our work at a time when the state seems to be stepping in to rescue capitalism in leading postindustrial economies.

Undoubtedly, China's opening to the world economy has impacted on its domestic political economy. But the "puzzles" of China's economic development, identified by Shaomin Li, continue to yield a complex pattern of outbound internationalization (Li, 2008, pp. xiv–xvi). This volume seeks answers to these dilemmas and to shed light on the evolving "rules of the game" that govern Chinese outbound firm internationalization in a challenging context of political transformation.

This book has its origins in a research conference held at the Harvard Kennedy School, Harvard University, in October 2008. Scholars from over 20 countries (including Australia, Bangladesh, Brazil, Canada, China, Denmark, the United Kingdom, France, Germany, Hong Kong China, India, Israel, Japan, Norway, Puerto Rico, Singapore, Spain, Switzerland, the Netherlands, and the United States) and connected to Asian and management research centers, universities, multilateral development institutions, gathered in Cambridge, Massachusetts, on October 8, 2008 to reflect on these topics. Coorganized by the Harvard Kennedy School's Asia Programs, the Crummer Graduate School of Business, and Rollins China Center, the Georgia Institute of Technology's Center for International Business Education and Research, and the Potsdam University's Chair for Corporate Governance and E-Commerce, with support from the Humboldt Foundation of Germany, among others, the best research papers presented and discussed at the conference were subsequently selected through a competitive referee process for inclusion here.

This research volume is organized along three main axes or parts, moving deductively from the general environment to specific landmark case studies:

1. Political economy and governance
2. International trade and investment patterns
3. Industry cases.

## **Political economy and governance**

The development of the Chinese multinational corporations (MNC) is a new feature of globalization. In the context of the globalization of Chinese MNC, the first part deals with the political economy and governance of China. The contemporary discourse of Chinese enterprise internationalization will be discussed from different theoretical perspectives. These show how the internationalization of Chinese enterprises will reshape global competition, and how the new corporate governance structures impact on the long-term performance of state-owned enterprises (SOEs) in China.

In Chapter 1, which functions as a kind of overview chapter, Francis Schortgen provides insights on the environmental context of internationalizing Chinese firms, focusing on the political economy. The combination of officially sanctioned support for a so-called "Go-Out" (*zou chu qu*) strategy, "Deep Reform" (*shenhua gaige*) commitment, and

extensive institutional and interactional changes of China's domestic political economy space has resulted in aggressive, diversified, and omnidirectional outward internationalization of the Chinese economy. Against the backdrop of the recent high-profile overseas expansion attempts of Chinese business entities, the chapter discusses the perceptions of, and reactions to, the international ambitions of Chinese enterprises, advancing two inter-related propositions. First, contemporary discourse on China remains significantly influenced by ideological distortion and the notions of hegemonic decline and counter-hegemonic challenge. Cold War ideological framing may prove politically, economically, and/or geostrategically expedient for advanced industrial economies that will have to contend with the growing international aspirations of China's emerging global businesses and their attendant impact on international economic affairs and competitiveness. At the same time, however, such framing also significantly downplays the fundamental changes and developments in China's domestic political economy space since the late 1970s in economic reform and transformation. Second, analysis and arguments surrounding the unfolding internationalization of Chinese enterprises have merely served to reinforce widely held misperceptions and myths governing the understanding of China's political economy—particularly concerning state power and control, and general rationale and motivations for outward enterprise internationalization.

While the internationalization of the Chinese economy is not new, this internationalization has seen the addition of a nascent and rapidly accelerating new dynamic—the *outward* internationalization of Chinese enterprises. Francis contends that such reactions are, in large measure, the result of misperceptions and misunderstandings of the evolving structural, institutional, and interactional dynamics that have come to define China's transitional political economy space. The purpose of this chapter is to argue the urgent need for a critical and comprehensive reappraisal, using a context-sensitive approach, of the underlying assumptions that continue to inform and, indeed, shape much of contemporary discourse on China. A context-sensitive approach is essential for escaping the limiting and constricting views of the “China challenge” or “China threat” schools of thought.

Current discourse on China remains influenced by ideological rigidity and an outdated understanding of the unfolding and evolving dynamics of China's political economy. Additionally, from a U.S. perspective, China's rise and its implications for the world overwhelmingly tend to be seen through the prism of geopolitics and national security, leaving little room for alternative views. The result has been to frame China's

rise as a counter-hegemonic challenge to the United States, lending further credibility to the “threat” perception. Such interpretation is often rooted in the neorealism school of thought in international relations. Bringing contextualization back into discourse on China and the evaluation process of Chinese enterprise internationalization provides a better understanding of evolving Chinese institutions.

Chapter 2 dovetails well with Chapter 1’s institutional and political economic focus. In this chapter Gloria Lan Ge and Daniel Z. Ding show the effect of the institutional environment on Chinese firm’s internationalization. Their study seeks a theoretical explanation for the rapidly growing internationalization of Chinese firms from an institutional perspective. Based on a critical review of institutional theories and newly emerging theories on MNCs from emerging economies, it explores the institutional factors underlying the surge of Chinese outward foreign direct investment (OFDI) at government, industry and corporate levels. These three levels form a conceptual framework that allows China researchers to better understand the significant conditions influencing modes and patterns of the internationalization process of Chinese MNCs.

Linkages, leverages, and learning capabilities form the capacity of Chinese MNCs to globalize their operations. The institutional framework complements industry- and resource-based theories and, in the context of China, help provide an understanding of emerging trends. As institutional environments in China continue to change, so will the internationalization processes of Chinese MNCs. The pace of internationalization is likely to continue to accelerate in years to come.

Chapter 3, authored by Professors Williamson and Yin from the Judge Business School of the University of Cambridge, brings the resource-based perspective to the study of Chinese competitiveness in global markets. The chapter examines the question of how the internationalization of Chinese enterprises will reshape global competition as Chinese companies bring new sources of competitive advantage to the global market as well as replicating the advantages enjoyed by incumbent multinationals in China.

Despite obvious capability gaps, the authors argue that emerging Chinese multinationals enjoy distinctive competitive advantages based on their primary capabilities in cost innovation and that these advantages are well attuned with the future demands of a changing global market. At the same time, they explain how the globalization phenomenon itself is helping accelerate the rate at which Chinese companies can fill their existing capability gaps. The emerging global playing field is, thus, being shaped by the emergence of Chinese firms.

The race to the future of global competition is shaped by both Chinese companies and established multinationals seeking to adjust their capabilities to fit a new set of key success factors. An important implication is that Western multinationals who continue to think about emerging Chinese competition solely in terms of “catch-up” risk missing the necessity to augment their own capabilities to stay globally competitive. Given the changing global competitive environment, at the micro level, firms should focus on developing dynamic capabilities, and not rely on the strengths and endowments of the past.

In Chapter 4, Olivier Roche discusses Chinese privatization as an evolution without revolution. While private firms in China now form the majority of the manufacturing sector, the government keeps control of key sectors. But, even in the SOEs of key sectors, a process of corporatization is taking place. The chapter discusses the corporatization process of recently listed SOEs in the oil and petrochemical sectors, highlights the changes in corporate governance and in the investment decision-making process following corporatization, and analyzes the impact corporatization is likely to have on the long-term performance of these organizations.

From a corporate governance perspective, firms in China behave differently from those in the West: they are willingly to disclose a vast amount of data regarding the size of their investments, but seem reluctant to discuss the benchmarks and criteria used by management and the board to approve these investments. Chapter 4 analyzes the pre- and post-initial public offering (IPO) performance of three Chinese oil companies, which are benchmarked against oil companies in other emerging markets. The analysis uses both quantitative data provided by these institutions and qualitative data gathered from discussions with analysts of these industries.

In the case of China, short-term improvements in performance were made possible by aligning management incentives with operating efficiency. However, such improvements are unlikely to be sustainable over a long time period because the capital allocation process has remained aligned with government objectives. In many instances, the Chinese government has encouraged the financing of projects that, while contributing to the country’s development, do not deliver financial results aligned with firm’s objectives to maximize profits.

When analyzing the positive impact of a privatization, most of the research based on quantitative methodologies considers the dollar amounts of capital investments without assessing the “quality” of the potential return of an investment program made after the listing.

Chapter 4 contributes to the understanding of the corporatization of Chinese multinational by adding and analyzing the rationale and assumptions underlying post-IPO investment programs with different time horizons.

For investors in recently corporatized Chinese companies, an investment decision should be based on the actual valuation of the company and the short-term improvement in efficiency that can realistically be achieved. Beyond the short term and the positive momentum that could be triggered by higher commodity prices, the upside potential for the long term is likely to be capped by management decisions that continue to reflect the interests of the majority shareholder (i.e., the state). Improved disclosure and a more transparent investment decision-making process would represent meaningful steps towards the elimination of the many hidden inefficiencies that still plague these organizations.

## **International trade and investment patterns**

Part II assesses international trade and foreign direct investment (FDI) by Chinese firms and their impact on developed countries. The effects of China's policy and regulatory change on OFDI are outlined, and a Sino-EU Intra Industry Trade and FDI analysis explores the nature of the challenge facing the European Union (EU).

Chapter 5, at the outset of Part II, covers trade and investment in to and out of China, by comprehensively reviewing the last three decades of foreign investment in China. Hinrich Voss, Peter J. Buckley, and Adam R. Cross systematically evaluate the evolution of FDI in China in the context of institutional reform. Reforms since the late 1970s have been gradual and systematic, liberalizing the economy and directing resources towards global integration. China has evolved from a position of marginal relevance in terms of OFDI to becoming an important source country, especially among developing countries. Taking an institutional theory perspective, the chapter assesses the development of China's OFDI since 1978 and traces the effects of policy and regulatory change on the scope and quantity of OFDI. Institutions in China are changing towards purposeful application of law. This chapter reviews the extant literature on Chinese OFDI, Chinese laws and regulations, and Chinese government publications to assess the effects of institutional change on Chinese outward foreign direct investments.

Voss, Buckley, and Cross find that China's institutional environment has had a strong influence on OFDI in providing investment barriers to some firms while strongly supporting investments by others. The

barriers have changed over time from direct administrative barriers to government supported market barriers. A full understanding by policymakers and businesses in host countries of Chinese OFDI must be grounded in a better understanding of the institutions, their change, and their impact on the trading and investment environment.

Chapter 6 provides an empirical evaluation, focusing on trade, rather than investment, as a measure of China-EU integration. William Xiaojun Wei measures the Sino-EU15 Intra Industry Trade (IIT) in the period from 1990 to 2003 before the EU enlarged into 25 nations in 2004 and analyzes EU15 firms' FDI activities, which have been shaping and building China's trade performance through inter-firm trade as well as intra-industry trade, particularly between 1995 and 2000. In order to give a first-step appraisal of intra-industry merchandise trade between the EU15 and China, standard Grubel and Lloyd (GL) indices are computed for the year 1990, with 2003 as a comparison. In addition, a dynamic analysis of IIT is employed in order to show the contribution of IIT and net trade (NT) change in the growth of total trade (TT) between the EU15 and China for the same period. The changes of TT, IIT and NT by product category are shown at the two-digit level under NACE (Classification of Economic Activity in the EU). The sample covers 99 manufacturing products (defined at the two-digit level under NACE) regrouped into 15 different categories.

The findings disclosed that IIT between the EU15 and China in certain product groups has risen dramatically. In addition, the high increase of IIT in these product groups, both in low-tech categories as well as high-tech categories, explained the fact that a significant part of the growth in Sino-EU15 trade is due to IIT. For example, in the high-tech categories, about half the increase in EU15-China trade in machinery and equipment as well as in professional and scientific instruments industries in which IIT/TT (i.e., GL) has increased over the period, is actually explained by IIT. Higher IIT ratios in such industries classified as high tech suggests that the differentiation between two dissimilar economies follows a pattern more similar to those of similar economies. Foreign Direct Investment theories offer an explanatory framework. For this phenomenon, is explained by FDI.

In the case of China and the EU, increasing intra-industry trade between the EU15 and China has largely been shaped by EU15 firms' FDI activities in China. Economic and trade relations between the EU15 and China have developed in step with the former's sluggish growth and the latter's dramatic emergence in the global trading economy since the 1990s. Dynamism in bilateral trade, a chronic growth of the EU15 trade

deficit, changes in IIT and increasingly important role of EU15 firms' FDI activities in China are the foremost features of Sino-EU15 economic and trade relations. The direct effect of EU15 FDI in promoting China's position in global competitiveness in international trade is evident.

In Chapter 7 Louise Curran also examines the EU-China relationship, by focusing on textiles, shoes, and African examples. The chapter explores the development of the EU's policy in China, in particular in relation to trade defense issues (textiles, shoes) and China's role in Africa, and analyzes the development of the relationship between the EU and China, using published sources—media, official documents, research papers etc., and suggests that the manner in which the EU has sought to respond to the challenges posed by the integration of China into the global economy frequently lacks coherence. This incoherence, which has its roots in different national interests, needs to be addressed if an effective EU approach is to be developed. Harmonious relationship with different ideologies can be difficult to achieve because of possible misinterpretations and conflict and, on the trade front, protectionist policies, quotas, antidumping lawsuits, rigid import requirements, etc. At the political level, it is vital that both the EU and China articulate more clearly their priorities and difficulties within this growing relationship.

Inconsistency, in particular within the EU, which represents multiple countries with differing interests in China, complicates the relationship and makes it more difficult for the Chinese side to develop its own policy priorities. For business, the inconsistencies in the EU's approach to China also complicate decision making. The extent and level of debate undertaken by EU member states on China-related questions makes the outcomes difficult to predict. Vacillating between protectionism and more liberal policies, the EU marketplace remains a potentially difficult one, especially for low-cost Chinese goods. In addition, EU sensitivities about the activities of other world powers in their zone of influence need to be taken into account in Chinese operations abroad.

While Chapter 7 considers how the EU and China differ on the question of Africa, in Chapter 8, Amir Shoham and Mosi Rosenboim show how Chinese investment in Africa was shaped. In recent years, the international economic relationship between China and Africa has changed. Chinese trade with and investment in Africa have grown dramatically. Chinese FDI in Africa has two unique characteristics: first, it is government-funded, controlled and navigated. Second, the main motivation for China's ODI in Africa is securing the future supply of natural resources for the growing Chinese economy. These unique

characteristics require a new approach to explain the development of China's international investment in Africa over time. Chapter 8 offers a theoretical model which makes for a more thorough understanding of current and future flows of investment from China to Africa. A new, four-stage theoretical model was developed to predict the ODI of China in Africa as function of three parameters: 1) China's future needs for natural resources; 2) international GDP growth rates as compared to China's growth rates and 3) the political risk in the host country. Empirical research supports the claim that China's FDI to Africa is negatively affected by political risk. That is, the Chinese investors prefer to operate with less political risk. Investment in a politically risky country is a growing reality out of necessity, not choice.

Chapter 8 argues that if the world economy continues growing rapidly, intense competition for natural resources will sharpen between developed and developing countries. In such a situation, Chinese policymakers will encourage greater ODI to African economies to secure a constant flow of those resources to China. The growth rate of the Chinese economy is likely to continue to be a major factor in importing from and investing in Africa.

## **Industry cases**

Part III describes developments in certain China industries, such as natural resources, telecommunications, electronics, and the automotive industry, and explains companies and government strategies to gain access to global natural resources. This final part provides an application of the book's analytical frameworks by detailing select cases that illustrate the evolution of Chinese changing governance and organizational rules and continued path towards a leading role in world trade and investment.

Chapter 9 initiates the part by examining how Chinese natural resource-seeking firms are aided by their government. Hongmei Gao suggests that a major drive for Chinese growth is, not unsurprisingly, Chinese companies' appetite for natural resources, especially energy and raw materials from Africa, the Middle East, Latin America, North America, Oceania, and Russia. The chapter investigates the history and patterns of Chinese companies' global hunt for natural resources, and synthesizes Chinese government policies. Textual analysis allows researchers to examine patterns of symbolic meaning. About 80% of the textual materials analyzed in the chapter were in the Chinese language, emanating from various reputable online and journal publications. The

websites were obtained from search engines such as Google, yahoo, and sohu as well as related Chinese and English news sites such as chinadaily.com, peopledaily.com, sina.com.cn, gdfair.com, bbc.com, and cnn.com. In addition, Gao also visited relevant websites of the major Chinese financial and policy organizations.

One key element of Chinese companies' search for resources comes from the Chinese government's strong support in international relations policy, and financing. Based upon textual analysis of over 2,000 Chinese and English web pages, Chapter 9 shows the location and strength of Chinese companies' global hunt for natural resources and the Chinese government's support strategies for this movement. The three major areas of support include China's strive for harmonious international relations, positive policies supporting ODI, and favored financial status provided for ODI. China aspires to be more than the world's low-cost manufacturer: through global mergers and acquisitions, China is repositioning itself as a major player in a multipolarity world.

Another strategic industry, telecommunications, is examined in Chapter 10. Here Wei Liang focuses on the case of China's 3G domestic mobilization under global competition. The chapter discusses China's ongoing mobile telephony next generation network build-out through the interplay of a dynamic market with vast demand, an increasing production capacity and policy promotion by the Chinese government. It highlights the policy changes in China's innovation and standards strategy, particularly in the International Trade Commission (ITC) sectors, and the impact they are likely to have on the global competition. While government policies and regulations on its new standards strategy are largely transparent, information related to the decision-making process and divergent interest and preferences among the MNCs, globally orientated or domestic-competing Chinese producers, foreign and Chinese governments are mainly available through the author's interviews with Chinese government officials, United States Trade Representative (USTR) officials and representatives from Chinese domestic telecom producers and operators. This analysis relies heavily on the qualitative data gathered from discussions with government officials and enterprise representatives.

The findings confirm China's status as the biggest manufacturing base of telecom equipment, the existence of socialist bureaucratic politics, government regulatory preferences, and the advantage of a vast domestic market and export potential. Together, these factors contribute to China's technology capacity, which will eventually bring more

leverage to enable the country to compete within the global market through the application and development of “homegrown” standards and technologies.

When considering the promising market potential of China’s home-grown Time Division Synchronous Code Division Multiple Access (TD-SCDMA) standard, the chapter suggests that China has failed in many cases to commercialize and internationalize its indigenous standards. Even if China’s Telecommunications data (TD) standard may win a decent market share in China, it is still too early to predict its success in the global market.

Under pressure from the U.S. and the EU governments, a compromise is likely to be reached soon; it is also likely that the Beijing government will deploy all three international standards and build three separate networks. In other words, this costly effort to promote home-grown standards will not prove a feasible policy option for most other developing countries which also hope to gain competitive advantages in the global information communications technologies (ICT) market. In the meantime, MNCs are playing an increasingly important role in China’s crafting of its standards strategy in general, a path followed by multinationals from other major countries in the past.

In Chapter 10, Ganeshan Wignaraja and Rosechin Olfindo analyze the conditions surrounding successful automotive and electronics firms in China. Existing macro- and industry-level studies attribute China’s rapid export growth to factors such as outward-oriented policies, foreign investment, and an abundant labor supply. However, little is known about the determinants of export success at the firm level. Drawing on recent developments in the literature on international trade and innovation, the chapter explores micro-level factors that affect export behavior of over 800 electronic and automotive firms in China. The results confirm that, in both sectors, exporting is associated with foreign equity, firm size, and technological capabilities. The chapter also highlights the influence of educated managers for export success in the electronics industry and skilled employees in the automotive industry. The empirical findings underline the role of foreign investment, human capital, and technological capabilities as key factors for export success in liberalizing developing economies.

The book ends with concluding comments on the major themes and findings presented in the three parts and identify areas for future research.

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## **Part I**

# **Political Economy and Governance of China**

# 1

## A Contextual View of Chinese Enterprise Internationalization

*Francis Schortgen*

### Introduction

This simply is not a market-based transaction. China is not a market economy—that’s a legal fact and an interpretation that China agreed to as part of its accession to the World Trade Organization.

C. Richard D’Amato, July 13, 2005

We handed China the money they are using to try to buy Unocal ... And now we’re telling the Chinese, please keep investing in our bonds but you can’t invest what amounts to a sliver of their surplus in an oil company. That’s really confused and hypocritical on our part.

Clyde V. Prestowitz, July 24, 2005

The early years of the twenty-first century have ushered in a range of far-reaching milestones for both the Chinese and world economies. First, China’s process of (re)integration with the global economy (Lardy, 2002) culminated in the accession to the World Trade Organization (WTO) in 2001. Combined with sustained economic reform and restructuring efforts in the domestic political economy sphere, China’s race to the market (Story, 2003) has induced a gradual, yet irreversible, convergence towards internationally accepted norms and standards of economic interaction and increasingly market-conforming business strategies. A second critical development, meanwhile, has been China’s emergence as a source of foreign direct investment (FDI), alongside its continuing attractiveness as a leading destination of global FDI (Cai, 1999; Deng, 2004; Wu & Chen, 2001). Spearheading the still comparatively

small but rapidly expanding outward FDI wave are increasingly assertive Chinese enterprises with global ambitions.

In both academic and policy circles, the meaning and implications of China's rise and rapidly expanding global ambitions have in relatively short order begun to command center-stage in debates and research, focusing on international economic, political, and security/geostrategic dimensions. Dominating the contemporary China discourse are two distinct schools of thought. Proponents of the so-called "China Threat" school tend to adopt a more alarmist, hysterical tone based on misconceptions and misperceptions regarding the drivers, motivations, and implications of China's inexorable rise to great power status, oftentimes raising the specter of inevitable confrontation (Bernstein & Munro, 1997; Gertz, 2002; Mearsheimer, 2006; Menges, 2005; Roy, 1996). The "China Challenge" school, meanwhile, offers a more comprehensive, well-balanced, and objectively rational evaluation of the likely implications of China's rise. Rather than arguing the inevitability of a zero-sum outcome resulting from China's rise in the twenty-first century, it grapples with the possibilities of cooperation, coordination, accommodation and adaptation, offering a distinctive antidote to narrow threat perceptions (Bergsten, Freeman, Lardy, & Mitchell, 2008; Bergsten, Gill, Lardy, & Mitchell, 2006; Wang, 2007). The primary issues of concern discussed by this school of thought are of a more broadly socio-economic rather than a primarily geostrategic/security nature (Fishman, 2005; Kyngé, 2006; Shenkar, 2006; Preeg, 2005; Zeng & Williamson, 2007).

The scrutiny of, and reactions to, a number of high-profile attempts by leading Chinese enterprises to expand their global reach, beginning in 2002, appear to suggest that the "China Threat" arguments have tentatively prevailed in the contemporary China discourse. This appears especially to be the case in advanced industrial countries rather than developing economies. I do not suggest that any and all such arguments are a priori misplaced or exaggerated, for China's rise undoubtedly presents the world with substantive challenges and concerns. Yet they need not and must not be exclusively viewed with unbridled and deterministic pessimism and resistance. The scope of this chapter is largely limited to U.S. perceptions of, and reactions to, China's accelerating enterprise internationalization in the early twenty-first century.

I advance two inter-related arguments designed to conceptualize the major observable trends in the China debate, and to highlight potential analytical weaknesses and challenges. First, I seek to demonstrate the extent to which the present conceptualization of China remains burdened by ideological distortion/discomfort, globalization discontent,

and perceptions of a counter-hegemonic challenge. In fact, the deliberate creation of a “threat” perception could be construed as a defensive reaction to such a purported counter-hegemonic challenge. Anticipating such an eventuality, the Chinese government has already discontinued advocating China’s “peaceful rise” (*heping jueqi*), opting instead for the term “peaceful development” (*heping fazhan*) to attenuate concerns that “rise” might inadvertently communicate a more aggressive intent (Guo, 2006; Zheng, 2005).

Second, I intend to outline and dispel prominent myths and misperceptions of China’s political economy space. Though expediency of debate and analysis may explain their unquestioned adoption and embrace as *facts*, such myths and perceptions, based on a historical understanding of China’s political economy space, may neither accurately capture contemporary reality nor acknowledge the implications of far-reaching changes that may have occurred over the years. Indeed, similar to the framing effect of “Big Ideas,” they “tend to foreshorten debate, unleash emotions, and create false realities” (Halper & Clarke, 2007, p. 5).<sup>1</sup> Given such an eventuality, I aim to shed light on China’s contemporary political economy space by focusing on structural-institutional and motivational dimensions, for the resulting contextual clarification is a precondition for value-free, objective evaluation of Chinese enterprise internationalization in the twenty-first century. “Structural-institutional” views pertain to issues of state ownership of (and control over) industrial enterprises, the extent of central state involvement in economic affairs, and the typology of Chinese enterprise structures. “Motivational” factors, on the other hand, focus on the ambitions and motivations behind the unfolding enterprise internationalization process. Is the accelerating commitment to *outward* internationalization driven by ominous, strategic political goals? Are commercial motivations the primary drivers? Or is it possibly a hybrid of political-commercial factors?

This study documents a fundamental concern with current assessments of Chinese enterprise internationalization, namely a general lack of requisite conceptualization and contextualization of China’s contemporary political economy dynamics. The Mexican Nobel laureate, writer and poet Octavio Paz once noted, “In general, Americans have not looked for Mexico in Mexico; they have looked for their obsessions, enthusiasms, phobias, hopes, interests—and these are what they have found” (Paz, 1985, p. 358). A similar observation extends to contemporary interpretations of China generally, and the rising internationalization drive of Chinese enterprises, specifically. Shenkar (2006, p. 21)

cautions against the magnitude of China's economic challenge possibly triggering a backlash in the U.S. driven by "geopolitics, animosity perceptions, and other 'nonrational' considerations." The increasingly global ambitions of Chinese enterprises appear constrained by "bogus fears" (*Economist*, 2005) and misgivings over corporate China's emerging competitive challenge (Zeng & Williamson, 2007).

In light of this dynamic, a substantive recalibration of the China discourse is not merely advisable, it is necessary. As Hutton (2006, p. 3) astutely observes, China "requires our understanding and engagement—not our enmity and suspicion, which might be self-defeating, creating the very crisis we fear." In the Skocpolian spirit, the single most promising guarantee for an objective and well-balanced China discourse lies in bringing rational contextualization back in.<sup>2</sup> As Pierson (2000, p. 72) notes, "systematically situating particular moments (including the present) in a temporal sequence of events and processes... can greatly enrich our understanding of complex social dynamics." Thus, it is my contention that placing the development of China's political economy in a similarly contextual perspective lends greater analytical objectivity to the assessment of Chinese enterprise internationalization.

Setting the stage for the subsequent contextual analysis of Chinese enterprise internationalization, I will begin by offering a brief overview of its general dynamics and trends. The ideological framing of China's *outward* enterprise internationalization is the subject of the section titled "Ideological incongruity and counter-hegemonic challenge." Special attention will be devoted to the notions of hegemonic decline, power cycles, and shifts in the nature and distribution of global wealth and power as possible explanatory variables behind observed reactions to the unfolding overseas expansion of Chinese enterprises. In the section titled "Misconceptions of China's political economy space," I shed a clarifying light on prevailing misconceptions and myths that have measurably contributed to a distorted understanding of China's political economy. Building on the previous sections, the "Old perceptions die hard" section aims to debunk a set of lingering doubts and misunderstandings surrounding enterprise internationalization, focusing in particular on purported ominous political and/or strategic goals, national security concerns, and government support. This will be followed by a few concluding remarks.

### **Chinese business goes global—Opportunity? Threat?**

In a sign of expanding global ambitions, corporate China has begun to dramatically expand its international presence in recent years (Alon &

McIntyre, 2008; Child & Rodrigues, 2005; Yang, 2005; Yeung & Olds, 2000; Zhang, 2005, 2003). Chinese businesses are gradually establishing themselves as aggressive, and determined entities, aiming to enhance their competitiveness, build up credible brand power, push into new markets, secure access to critical raw material sources, and diversify business risks (Hong & Sun, 2006, pp. 615–616). Further contributing to *outward* enterprise internationalization are three inter-related developments: the rising global economic interdependence; China's opening up to the outside world at an early stage of national economic development; and, the overall effect of prior *inward* internationalization (Zeng & Williamson, 2007, pp. 16–17).

The Chinese government has publicly stated its hope to see 50 mainland Chinese enterprises break into the ranks of the Fortune Global 500 companies by 2010. As of 2007, a total of 29 companies have already achieved that goal, up from three in 1994 when Chinese companies first began to feature in this ranking. An additional indicator of accelerating enterprise internationalization is the robust growth of Chinese *outward* FDI flows. Cross-border mergers and acquisitions (M&A) currently constitute the most visible manifestations of Chinese overseas investment activities. The number of Chinese cross-border M&A purchases over the 1987–2005 period peaked in 2003 with a total of 73 confirmed activities (Table 1.1). Though that number subsequently dropped to 58 purchases in 2005, the combined value of these purchases rose 220% to nearly US \$5.3 billion, indicative of Chinese enterprises' growing determination to pursue value-adding targets. Though clearly marginal compared with the aggregate world total of outward FDI flows, China is nevertheless beginning to assert itself as a viable and expanding source of outward FDI (Table 1.2).

Recent overseas expansion attempts by Chinese businesses have resulted in as much fortune as misfortune. Even so, the commitment to internationalization is likely to grow only further in the years ahead.

Table 1.1 China's cross-border M&A purchases

	1990	1995	2000	2001	2002	2003	2004	2005
Number of deals	3	13	35	22	35	73	59	58
Combined value (US \$ millions)	60	249	470	452	1,047	1,647	1,125	5,279

Source: UNCTAD, World Investment Report 2006

*Table 1.2* China's FDI trend (US \$ million; % of gross fixed capital formation in parentheses)

FDI flows	1990–2000 (annual average)				
	2002	2003	2004	2005	
Inward	30,104 (11.3)	52,743 (n/a)	53,505 (8.6)	60,630 (8.0)	72,406 (9.2)
Outward	2,195 (1.0)	2,518 (n/a)	–152 (n/a)	1,805 (0.2)	11,306 (1.4)
<b>FDI stocks</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>2004</b>	<b>2005</b>
Inward	1,074 (n/a)	20,691 (5.4)	193,348 (17.9)	245,467 (14.9)	317,873 (14.3)
Outward	n/a (n/a)	4,455 (1.2)	27,768 (2.6)	35,005 (2.1)	46,311 (2.1)

Source: UNCTAD, World Investment Report 2006. n/a = not available

Meanwhile, corporate China's accelerating outward orientation has spawned as much suspicion and controversy in advanced industrial countries as it has generated comparatively broader goodwill and acceptance in many developing economies. Particular sticking points in the ensuing debates in advanced industrial countries include the timing of China's internationalization, its scope and intensity, and underlying motivations and implications. Indeed, China's economic strength and global ambitions are invariably coming under heightened scrutiny in advanced industrial countries. Comprehensive and generally objective analyses notwithstanding (Bergsten, et al., 2006; Fishman, 2005; Kynge, 2006; Peerenboom, 2007; Shenkar, 2006), the possibility of accelerating Chinese enterprise internationalization triggering a "Sinophobia" eerily reminiscent of the Japan-bashing that accompanied the perceived "Japan Challenge" (Anderson, 1981; Emmott, 1993; James, 1990) in the 1980s is not altogether unrealistic.

In the 1980s, nothing helped galvanize opposition to the economic expansion of Japan, Inc. more than the stoking of irrational fears. Moderate voices counseling for a more objective analysis of the scope, intensity, and motivation behind this competitive threat (Prestowitz, 1988) drowned in a cacophony of populist and economic nationalism. Fears of the emerging Chinese business challenge undermining the very foundation of Western economic and business competitiveness in the near-term may still be largely misplaced. And, while near-term complacency is not a prudent or advisable course of action either, bracing for such an eventuality with good policies requires an ability and willingness to recognize and accept reality (Steingart, 2008, p. xii). Understanding China's competitive challenge requires requisite domestic

and international political economy contextualization. In recent years, the distribution of wealth and power in the international system has manifestly begun to shift from the West to the East (Mahbubani, 2008; Prestowitz, 2005; Zakaria, 2008). In more ways than one, the reality of a globalizing world is providing new opportunities for emerging markets to catch up with developed countries, unlock their potential and emerge as credible challengers of the established economic and/or political status quo. Ultimately, the question is not so much *whether* China can globalize and *if* change is possible—China has been on a continuous trajectory of socio-economic change and gradual political “adjustment” since 1978. Rather, the question is: Are advanced industrial economies willing and able to adjust to the new globalization dynamic (Agtmael, 2007; Amsden, 2001) and accommodate a rising China in the international business arena?

In the remainder of this chapter, I will address this question through the perspective of U.S. perceptions of, and reactions to, Chinese enterprise internationalization, making two related claims. First, I contend that the contemporary China discourse remains significantly influenced by ideological distortion and the notions of hegemonic decline and counter-hegemonic challenge. Second, I intend to debunk widely held misperceptions and myths governing the understanding of China’s political economy—particularly concerning state power and control, and general rationale and motivations for outward enterprise internationalization. Insisting on contextual analysis of Chinese enterprise internationalization is essential to counter alarmist conceptions of a very real and growing China Challenge. Clinging to outdated perceptions and beliefs will merely delay a critical reappraisal of both the nature and the likely implications of this challenge.

As Hundt (2006, p. 5) notes, “[T]o date, Americans have scarcely grasped the dimensions of China’s impact, yet already time is short.” Erecting protectionist barriers and stoking the fires of populism and economic nationalism will not attenuate the challenge. Rather, it will likely hinder timely adjustment to the new dynamics of competition and interaction and further delay a coherent policy response to the Chinese business challenge down the road.

### **Ideological incongruity and counter-hegemonic challenge**

The Chinese Communists are just such great capitalists. They’re just unbelievable capitalists masquerading as Communists.

Jim Cramer, December 25, 2006

Whether China will continue its peaceful rise to great power status or will become more aggressive over time, the incontestable fact is that it will inevitably challenge the position and national interests of other powers in the international system. In this context, the unfolding and expanding process of enterprise internationalization represents a critically important economic and commercial means of projecting power and influence. Broader strategic and political motivations may also, at times and to varying degrees, influence and direct this particular application of power and influence. Yet, it is by no means a foregone conclusion that this constitutes a primary, as opposed to a more subsidiary, rationale in most instances.

Undergirding many of the attempts to curtail overseas ambitions of Chinese enterprises is a general sense of incredulity and unwillingness to countenance that China, which remains a nominally socialist/communist state, could possibly somehow be rejecting command-economy-style planning and organization as well as socialist/communist ideology in favor of more market-conforming mechanisms, entrepreneurial vitality, and protocapitalist goals. This, in turn, is complemented by the perceived need to meet China's counter-hegemonic challenge so as to sustain the unipolar moment (Krauthammer, 1991) enjoyed by the United States since the early 1990s and retain the "unparalleled opportunity...and indeed a special responsibility to continue to set the political tone for the world community, affirming the basic values of...economic competition that lie at the heart of American society, and now also a larger part of world society" (Nau, 1990, p. 11) amid an expanding debate over the prospects of *relative* American decline (Zakaria, 2008).

In the first instance, the willingness to accept the claim of purportedly exclusive commercial ambitions of China's "capitalist communists," and hence the potential of successful future Chinese overseas investment expansion, rest on a successful bridging of the divide between alarmist and attention-grabbing perceptions and the contemporary reality of China's political economy space. A first step towards achieving that goal involves a clearer understanding of the contextual dynamics that give rise to sustained ideological rigidity and to rumored revisionist ambitions of the Chinese leadership.

### **Capitalist communists?**

Much of the contemporary China discourse remains bound up in the Big Idea of "communism," producing an increasingly ill-conceived framing context. Indeed, judging by contemporary trends, the combination of communism and China appears (broadly speaking) to be more of an

oxymoron than a reflection of reality. As a result of sustained economic reform and restructuring efforts, China has successfully embarked on an irreversible transition from a command-economy to an increasingly market-conforming economic structure. Yet there remains a lingering dichotomy between the Maoist-era perception of China as a socialist, communist entity and the reality of contemporary China, as defined by deepening marketization—extending even beyond the economic realm and into the political realm, with authority relations gradually giving way to exchange relations (Lin, 2001)—and an accelerating embrace of market-conforming practices (Li, 2006).

China's past remains a ready yardstick to conceptualize the reality and motivation of contemporary China. The importance of historical antecedents in developing a grounded analysis of China is certainly not to be doubted. The prevailing construct in the current China discourse—“(Maoist) Communist China”—suggests that the ideological underpinnings of Maoist China (1949–1976) invariably continue to define perceptions of China in the twenty-first century. Further strengthening this view is the fact that the Chinese Communist Party (CCP) still enjoys its holds on power, thus further solidifying the belief that China's political and economic spaces could not possibly have undergone institutional evolution, change, and/or adaptation over time (Gilley, 2008; Shambaugh, 2008).

In many instances, analysis of Chinese internationalization, especially if approached from an institutionalist perspective, fails to adequately grapple with the dichotomy between utopia and actual development or modernity (“dualism of goals”) in communist/socialist economic systems. The dilemma of trying to achieve successful modernization while at the same time aspiring to create a classless society has been widely discussed in the relevant scholarly literature. According to Löwenthal (1970), in the long run this dualist pursuit will transpire into modernization, all the while edging out any remnants of utopian ideals.

In studying communist/socialist economies undergoing economic transitions, it is not only relevant but necessary to come to terms with how the dilemma between development and utopia has defined and continues to reshape the institutional and interactional dimensions of political economy space. As Brus (1988, p. 434) succinctly puts it, “in the course of post-revolutionary development the utopian goals of communism in power are gradually fading away when confronted with the need to solve real political and socio-economic problems.”

Ideological rigidity and incredulity (Mahbubani, 2005, pp. 114–115) dramatically rose to the surface during the controversy over China

National Offshore Oil Corporation's (CNOOC) unsolicited takeover bid for Unocal. The nature of CNOOC's commercial ambition, it was argued, could not possibly be considered a market-transaction because "China is not a market economy" (D'Amato, 2005). Similarly intended to call into question the inherent motivation behind the proposed deal was the charge that CNOOC was nothing more than a corporate vehicle of a "Communist dictatorship" (Lohr, 2005).

Accepting the possibility that a socialist/communist system could possibly have turned into an incubator for capitalist dynamics rivaling those of established free market economies is as difficult for vested interests in the United States to comprehend as it is to conceive that "non-democratic rule of China has worked—perhaps better than a premature democracy ever could have" (Mahbubani, 2005, p. 119). A still widespread reliance on a *presumptive* rather than *diagnostic* understanding of contemporary China is responsible for extending the vision of Maoist China to the contemporary context, leading to serious misconceptions and blindness to far-reaching changes since the late 1970s in all aspects of Chinese society. Apart from influencing the overall reaction to China's rise in the international system, the misconceptions resulting from an inability to differentiate the normative/symbolic and operational contexts (Kim, 1981) have also cast serious doubts and misgivings over the goals and motivations of Chinese enterprise internationalization.

Embracing the contextual emphasis of a *diagnostic* approach allows for a clearer picture of how early commitments to modernization and economic development, combined with critical junctures in post-Mao China's transition from plan to market (Kleinberg, 1990; Naughton, 1995; Story, 2003), have gradually resulted in China's capitalist market reforms, leading to a "post-communist personality" (Wang, 2002) and gradual waning of the erstwhile Maoist-era communist state structure (Walder, 1995a).

Apart from the ideological backdrop, reluctant acceptance of (and adjustment to) Chinese enterprise internationalization also flows from the strategic and national security implications and counter-hegemonic concerns presented by China's rise.

### China's "unpeaceful rise"

Does China's ascendance in the international system pose a threat or an opportunity? This is a question that has been endlessly debated in think-tanks and academic as well as policymaking circles. The literature on the topic, as previously alluded, ranges from cautiously optimistic and moderate views—a school of thought I have labeled *China Challenge*—to

decidedly pessimistic and alarmist interpretations. Rather than weighing the merits and demerits of each approach, I aim to briefly identify critical situational factors that have allowed the *China Threat* school to command substantial sway in the policymaking circles and garner a more than comfortable basis of support among the general public. In the context of the previously discussed ideological preconceptions, these conditions are of critical relevance in making sense of much of the documented reactions to Chinese enterprise internationalization to date.

Following the end of the Cold War, the United States, as the sole remaining superpower, began to adjust and gradually grow accustomed to the reality of unrivaled primacy and power in the international system (Ikenberry, 2002). In its 2002 National Security Strategy, the U.S. government unequivocally affirmed its determination to “strongly resist aggression from other great powers—even as we welcome their peaceful pursuit of prosperity, trade, and cultural advancement.” To date, the record of such a commitment looks decidedly bleak, especially when measured against China’s ascendance in the international system.

The internationalization of Chinese enterprises understandably gives rise to a multitude of concerns, including some of immediate and national security relevance. Even so, the overseas ambitions of China’s businesses are near-exclusively viewed from a unidimensional strategic perspective of imminent counter-hegemonic challenge. Modern-day China’s early internationalization process may well have fit this description. In the 1950s, China had envisioned joining and shaping the development of a socialist world economic system (Kirby, 2006). The contemporary dynamic of internationalization, on the other hand, is not so much driven by military and political considerations as by a desire to achieve the goal of a well-off society (*xiaogang shehui*) by 2020 and pursue a process of peaceful development by emphasizing trade and global economic integration.

Nonetheless, structural realists continue to see China’s rise first and foremost as a counter-hegemonic challenge (Mosher, 2000)—in the geostrategic and military sense—to the United States in the twenty-first century, leading to inevitable conflict (Bernstein & Munro, 1997; Carpenter, 2005; Menges, 2005). As Mahbubani (2005, p. 101) aptly notes, “[T]hese thinkers are culturally programmed to believe that China will behave like a normal European power, and engage in a military, not a cultural or political race with America.” This narrow focus, he further argues, blinds them to the fact that “[U]nlike Japan in the early twentieth century, China will feel lesser compulsion to expand militarily to demonstrate its power” (Mahbubani, 2005, p. 100).

Further reinforcing the U.S. determination to stave off the perceived Chinese counter-hegemonic challenge is a manifest shift in the global distribution of wealth and power from the West to the East (Mahbubani, 2008; Prestowitz, 2005; Zakaria, 2008). In fact, this trend coincides with the *relative* economic decline of the West—including the peculiar ill-effects (and subsequent global contagion) of the financialization of the U.S. economy (Phillips, 2008), and the dramatic rise to prominence of Asian and Middle Eastern sovereign wealth funds.

Yet, China's ascendance, happening at a time of relative economic decline of the United States, does not imply an inevitable and comprehensive power transition in the near future. Even if that were the case, there is no indication, or historical precedent, to suggest that China aims to be a revisionist power in the international system (Zhang, 2004). In fact, China sees its national interests best served by cooperation rather than rivalry with the United States and recognizes that "trade and economic integration provide a surer path to economic prosperity and peace" (Mahbubani, 2005, p. 108).

Facing the specter of a growing internationalization push of Chinese enterprises—aimed at the pursuit of prosperity and trade—the United States is gradually reverting to protectionist and economic nationalist positions and employing populist rhetoric as a means of fending off their overseas ambitions. Ironically, this strategy is likely to be futile and unhelpful from a political and economic standpoint (Wall, 1996).

At a time of expanding globalization and economic interdependence, *selective* adherence to free market principles will ultimately trigger backlash. On the one hand, it will damage the expected commitment of the U.S. to defend, maintain and expand free markets (Mandelbaum, 2007, p. 34) and dilute liberal economic ideology (Chang, 2008, 2002).<sup>3</sup> Moreover, it could help further weaken the acceptance of the "Washington Consensus" approach to development in favor of the growing attractiveness of a "market-authoritarian" alternative in the form of a "Beijing Consensus" or "China Model" (Callick, 2007). The relative decline of U.S. soft power, amid the growing success of China's own "charm offensive" (Kurlantzick, 2007), merely reinforces this eventuality. Finally, it might prove to be a near fail-safe mechanism to encourage China into becoming a true "strategic competitor" rather than "strategic partner" in the international political and economic systems.

The literature on hegemonic stability (Keohane, 1980; Krasner, 1976) and power transition (Gilpin, 1981; Kennedy, 1987) offers valuable explanations to the understanding of hegemonic decline. Critical factors contributing to how hegemonic powers react to challenge and

decline include the strength of economic relationships and the degree of ideological solidarity, and specific motivating and facilitating factors (Rock, 1989). The extent of the U.S.–China economic and trade relationships has been extensively discussed in the political economy and international relations literature. Meanwhile, the ideological rigidity and incredulity that a socialist/communist system could evolve into a breeding ground of vibrant market-conforming and protocapitalist commitments has previously been addressed. As far as responses to perceived hegemonic challenges are concerned, the motivating and facilitating factors oftentimes tend to grow out of domestic political coalitions and their perception and interpretation of the emerging challenge (Lobell, 2003; Rogowski, 1989). Seen from the vantage point of advanced industrial countries, the response to China's internationalization wave includes carefully crafted and pointedly delivered sound bites meant for domestic political consumption and delivered with the intent of galvanizing domestic support for thwarting emerging competitive challenges, whether geopolitical and geostrategic, or economic and commercial.<sup>4</sup>

Having elucidated the broad context that has fueled suspicions of and resistance to China's enterprise internationalization, let us now turn our attention to a set of prevailing myths that further underlie the aforementioned ideological rigidity and analytical misperceptions.

## **Misconceptions of China's political economy space**

The brushstrokes applied to the analytical canvass of Chinese enterprise internationalization should not, and in fact must not, be preconceptions or broad generalizations drawn from historical perspective without being properly contextualized. Given three decades of economic reform and restructuring, China's political economy space has unquestionably evolved in substantial and substantive ways. In the remainder of this chapter, I will shed light on the breadth and depth of this change by broadly focusing on structural, institutional, and interactional aspects of China's political economy space.<sup>5</sup>

### **Structural-institutional myths**

The Chinese State is generally associated with the notions of strong, centralized state power and capacity. From a comparative perspective, this misconception draws at least partially from the belief that China's economic development approach largely follows the Asian developmental state model. Though that may be true from a motivational

and goal-oriented point of view, the structural-institutional reality of China's political economy space remains qualitatively different from the classical developmental state model in significant respects.

China lacks a strong central, autonomous and instrumental pilot agency similar to Japan's Ministry of International Trade and Industry or South Korea's Economic Planning Agency at similar stages of development and economic internationalization. Compared with Japan and South Korea, China's sheer geographical size is a critical impediment to centralized administration and implementation of a developmental agenda by a strong bureaucracy and designated pilot agency.

Rather than simply buying into the notion of *generalized* state capacity, inherent *unevenness* of state capacity across policy areas (Skocpol, 1985) should be acknowledged, as should the adaptability of state capacity, which Weiss (1998) terms "transformative capacity." In the case of China, the state made far-reaching adaptations in terms of institutional arrangements, further underlining the need for a reevaluation of the "central state power and control" myth.

#### *The myth of the strong central state*

In debating the role of the state in the internationalization process of Chinese enterprises, it is certainly more appropriate to talk about a fragmented developmental state than to assume that the central government is uniformly in charge of economic decision-making. In fact, ever since the onset of economic reform and opening up to the outside world in the 1980s and the establishment of special economic zones, central government power and control over the commanding heights of economic decision-making has grown increasingly decentralized. Experimentation with various developmental strategies, meanwhile, led to a hybrid model of governance that left a "great deal of leeway to localities to experiment with a variety of innovations within a limited geographical area" (Xia, 2000, p. 62).

Decentralization is not a feature commonly associated with a purportedly strong Party-State. Nor, for that matter, has it been a consistently defining feature of modern Chinese economic history. In fact, since 1949 the Chinese polity has experienced several centralization-decentralization cycles during the Maoist era (1949–1976) before decentralization—much of it in the form of local state corporatism (Oi, 1995; 1992)—emerged as an enduring feature of the post-1978 era of economic reform and opening-up.

The early formative years of Maoist China (1949 to mid-1950s) constitute the first phase of centralization. Influenced by the development

strategy adopted in the Soviet Union under Joseph Stalin, Mao Zedong turned towards nationalization of the economic sphere and established a system of central planning, ushering in a period of economic and political “Stalinization” (Li, 2006, 2001). Within a few years, however, problems related to excessive centralization began to manifest themselves. Identifying the “relationship between the central and the local authorities” as one of the problems in a speech in 1956, Mao Zedong helped lay out the principles and rationale leading to the first wave of decentralization (1957–1959) in China’s political economy space.

Decentralization gradually de-emphasized the central planning feature of China’s economic organizational structure in favor of a “double-track system of economic planning,” characterized by substantial devolution of authority, resources and power. Designed in particular to address the problems of motivations and incentives for actors at the provincial and local levels of China’s economic structure, the decentralization push also led to a weakening of control and monitoring functions, resulting in a critical loss of effective coordination and accuracy of information exchanged between the localities, provinces, and the center.

Following the disastrous impact of the Great Leap Forward (1958–1960), the central bureaucracy once again took charge to reinstate effective control and coordination. This recentralization effort (1959–1963) targeted in large measure the problems of soft budget constraints that had earlier led provincial and local governments down the path of excess investment and duplication of inefficient sources of production, which hastened the collapse of the early decentralization experiment (Lin, Tao, & Liu, 2006).

By the mid-1960s, the recentralization effort had brought most enterprise structures under the control, supervision, and direction of central authorities. At the same time, however, there were also renewed concerns that it merely impeded incentives for production, hampered local initiatives, and stymied degrees of financial and administrative autonomy that were crucial to development, and severely restricted the mobility and distribution of much-needed factors of production. The resulting economic stagnation was exacerbated further by the chaos and violence of the Great Proletarian Cultural Revolution (1966–1976).

Following the Red Guard Phase (1966–1969) of the Cultural Revolution, a second major decentralization cycle ensued, resulting as much from the commitment to reinvigorate socialist economic development as from the economic disagreements between Maoists and the factions led by Liu Shaoqi and Deng Xiaoping. By September 1968, the renewed

decentralization effort had led to the set-up of revolutionary committees that created a semiautonomous, multilayered institutional structure resembling a “decentralized-planning or a decentralized-command economy” (Dernberger, 1972, p. 1063).

If decentralization in a planned economic system had spurred economic growth, provided incentives, and raised the overall motivational basis of producers, it became an indispensable feature of the post-1978 economic system where increasingly market-conforming reforms gradually began to eke out the remnants of a traditional socialist, centrally-planned economic system. The nurturing of “local developmentalism” emerged as an appropriate formula to overcome obvious challenges related to policy coordination and bureaucratic supervision (Heilmann, 2008). If the resulting institutional arrangements and complexities of interactions were still a far cry from the laissez-faire minimalist state model, they certainly put the Chinese political economy on a drastically new course, away from that charted by a traditional centrally planned Leninist state.

Having emerged out of Maoist legacy, the subsequent institutional changes that have been introduced at the hands of a local corporatist state ensured that the resulting system differs markedly from the original. Not only is the bureaucracy increasingly employed to facilitate market production, but local governments wield administrative power to fund corporate growth as well. In addition, local governments are being transformed from simple regulators into advocates of local enterprises, in line with the transformation from administrators into entrepreneurs (Walder, 1995b). The political and economic agendas of cadres at the provincial or local levels of government oftentimes reflect vested interests that do not necessarily conform (at least at an operational level) in the strictest sense to the official views and policies articulated by the central government. Economic decentralization, argues Oi (1995, pp. 1145–1146), is encouraging local officials to “maximize local rather than national interests,” resulting in a tighter “relationship between banks, finance and tax offices, and county, township and village officials.”

### *Evolving state-enterprise ownership and control structures*

The myth of a strong central state in China, as documented in the brief historical review above, is largely misplaced. To the extent that state power and control is reflected in the enterprise internationalization dynamic, it is not so much a reflection of ideological zeal as of calculated efforts to improve business competitiveness and address domestic political conditions.

A secondary misconception of China's contemporary political economy concerns the question of ownership and control of Chinese enterprises. The debate surrounding CNOOC's bid for Unocal confirmed a widely held assumption that Chinese companies invariably remain subject to strict governmental control and ownership. Yet, seen from the vantage point of post-1978 developmentalism, it becomes readily apparent that the confluence of economic and fiscal decentralization has sowed high-yielding seeds of change as far as the interactional dynamics of enterprise and state actors in China's political economy space are concerned.

The extent of the transformational process of economic and political institutions in the reform era is captured in the "dual marketization" that has come to define China's transitional political economy. It refers to "an economic market where the exchange of goods, services, and resources takes place between economic actors" existing alongside "a political market where exchange takes place between economic actors and state agents and among state agents themselves with regard to the use of state authority and assets" (Lin, 2001, p. 17). In fact, China's political economy space increasingly came to resemble a multilayered institutional environment punctuated by a range of adaptive informal institutions and mechanisms (Tsai, 2006; 2002). The gradual change from authority relations to exchange relations (Lin, 2001) and de facto institutionalization of economic and fiscal decentralization has been reshaping the scope, breadth and depth of relationships, cooperation and dependence between the various enterprise and state actors. This process is likely to grow ever more pronounced given a continually deepening marketization of China's economy (Li, 2006).

State-owned enterprises (SOEs) have dominated the industrial landscape of centrally planned economies, and China had been no exception. Yet, over the course of three decades of economic reform and transition from a planned economy to a more broadly market-conforming economic environment, the state-enterprise sector has been on a consistently downward course. A steady decline of central planning influence among state enterprises and urban collectives, coupled with significant expansion of transactions outside the state plan, in turn triggered an intensified competition for customers and resources, and a strong focus on profit making at the expense of political control and ideological indoctrination (Lin, 2001, pp. 33–36). Correspondingly, economic activities of a nonstate economic sector operating alongside the official state sector started expanding drastically (Green & Liu, 2005; Yusuf, Nabeshima, & Perkins, 2006).

Beijing will inevitably retain a certain degree of control and influence over *strategic* industrial sectors. Also referred to as “lifeblood” or “pillar” industries, they include automotive, electronics, machinery, iron and steel, oil and petrochemicals, aviation and aerospace, pharmaceuticals, and construction sectors. It is, however, somewhat inconceivable that it will (want to) retain the breadth and depth of ownership commonly attributed to socialist regime structures. The “grasp the large, and let go of the small” policy of SOE reform captures the pragmatism and contextual dynamics surrounding the Chinese State’s commitment to a reduction of state ownership of industrial assets. To the extent that state involvement in, and influence and/or control over, certain industrial sectors and enterprises persists, it is more a reflection of domestic political and economic considerations—notably the commitment to achieve a harmonious (*hexie shehui*) and well-off society (*xiaogang shehui*) through a managed phase-in of large-scale privatization (Green & Liu, 2005) than a desire to cling to old planned-economy legacies (Naughton, 1995).

In fact, since the 1990s the Chinese government has taken steps towards divesting significant amounts of state assets. This privatization and ownership diversification drive is reshaping the essence of China’s political economy in important ways. Partly the result of a desire to improve enterprise efficiency, the transformation (*gaizhi*) process is also linked to advances in marketization (with regional differentiation) and to the rising influence of the private sector economy (Garnaut, Song, Yao, & Wang, 2001). Additionally, following China’s accession to the WTO, the survival of many state firms hinges ever more on their willingness to submit to an evolution in ownership structure away from a wholly state-owned/state-controlled structure to a more diluted ownership level and commensurate reduction of state control (Liu & Woo, 2001).

Beyond that, it is important to recognize that state control of enterprise structures may be either absolute (*guoyou juegui konggu*) or relative (*guoyou xiangdui konggu*) and can be exercised by either the central government (i.e., national SOEs) or by lower levels of government, such as provincial or municipal authorities (Holz, 2003). Various government layers (central, provincial, local) may still hold significant degrees of “indirect control” (Yusuf, Nabeshima, & Perkins, 2006, pp. 86–90), but direct control rights are increasingly falling under the purview of enterprise management rather than state planning commissions and industrial bureaus. The suggestion, then, that the central government a priori exercises complete control and ownership privileges over SOEs, is rapidly being undermined by developments in China’s political economy

space. Yet, it remains a lingering myth in much of the contemporary enterprise internationalization discourse.

### Motivational foundations

Causal explanations for China's expanding enterprise internationalization abound. However, given the continued pervasiveness of structural-institutional misperceptions, the framing of China's rise through a rigidly ideological lens, and the Big Idea of counter-hegemonic challenge, an understanding of the real underlying motivational and facilitating factors influencing enterprise internationalization remains rather elusive. To put the previously discussed framing of the China discourse into comparative perspective, and to counter the rigid and negative determinism of the China Threat school, I will put the "political rationale" argument in context and gauge the influence effect of economic globalization and business competitiveness dynamics on China's outward internationalization.

#### *Political rationale*

From a political perspective, putting emphasis on economic reform and development in the post-Mao era seemed necessary, albeit not sufficient to overcome the haunting legacy effect of the Cultural Revolution and the socio-economic dislocation it had brought on. Deng Xiaoping and the reformist elements in China's political hierarchy were keenly aware that the excesses and devastation of Mao Zedong's "last revolution" (MacFarquhar & Schoenhals, 2006) could likely call into question the continued political legitimacy of the CCP. If the Party were to secure its political hold on power, a simple distancing from the Maoist legacy clearly would not be nearly enough. It was imperative to fill the vacuum left by the demise of Maoist ideology with a solid alternative. That alternative proved to be a drastic overhaul and reorientation of the management of economic affairs and economic development. Breaking down the proverbial Great Wall and paving the way for reintegrating with the global economy, beginning with *inward* internationalization, proved indispensable steps towards meeting that goal.

The ideological bankruptcy of the political system that ensued with the demise of the communist moral and political order in the former Soviet Union and its Eastern European satellite states in the 1990s has left the Chinese Communist Party with nothing but the "economic" mandate of heaven (*tianming*). The achievement of *xiaogang shehui* by 2020 hinges to a critical extent on the ability to secure the various factor inputs needed to sustain current economic growth rates. The reality

and seriousness of the situation, meanwhile, has not been lost on a Chinese government keenly aware of the destabilizing spiral that can result from failure to maintain social harmony and stability. In order to guard against short-term pressures and problems, the government has been committed to providing an environment that proves conducive to, and actively encourages, further liberalization and marketization, with the aim of mitigating as best as possible the likely challenges and demands on China's political, social, and economic systems. Promoting *outward* internationalization alongside efforts to sustain and expand *inward* internationalization, all the while capitalizing on the beneficial trickle-down effects, ranks among the most promising options to assuage a range of economic fault lines (Wolf, Yeh, Zycher, Eberstadt, & Lee, 2003) and social concerns that are weighing increasingly heavily on the minds of China's political cadres.

*It's economic globalization, stupid!*

It was only a matter of time before Chinese companies were going to capitalize on the reciprocity notion of trade and investment in an increasingly interdependent and interlinked global economy. The notion of market access, certainly, never was to remain a unidirectional arrangement. Just as foreign multinational companies (MNCs) have flocked to China in the hope of tapping the proverbial one billion consumer market, so too have Chinese enterprises grown increasingly determined to pursue a similar potential for growth and development in overseas markets. Although their overseas ambitions are driven by corporate strategy calculations and motivations that differ from MNCs of advanced industrial countries, the sudden and purportedly disruptive emergence of Chinese enterprises on the global scene, I contend, is primarily a contextual reflection of China's peculiar twenty-first-century domestic political economy circumstances and conditions.

Following a two-decade near-exclusive focus on attracting *inward* FDI, the growing competition from foreign MNCs in the domestic Chinese marketplace, unless countered, is bound to seriously undermine or at the very least retard the international competitiveness of Chinese companies. Consequently, their gradual *outward* internationalization appears (at last partially) to derive from a rational calculation that business competitiveness and viability will stand to greatly benefit by tapping new markets, benchmarking against established global players in advanced industrial countries, acquiring crucial technology, attracting management know-how, building up international brand recognition,

and boasting internationalizing businesses that complement China's undisputable rise to prominence in global economic terms.

In many ways, *outward* internationalization embodies the determination of both political and business leaders to capitalize on the opportunities presented by economic globalization. Meanwhile, a lack of contextual nuance to detect the institutional and interactional patterns informing this trend, combined with the belief that this latest China Challenge represents but the most disconcerting consequence of economic globalization yet, will only unduly detract from the inherent opportunities presented by China's embrace of economic globalization.

### **Old perceptions die hard**

Having argued the importance of contextualization to accurately assess the nature of China's contemporary political economy space as well as to better understand the motivational and facilitating factors behind enterprise internationalization, I briefly discuss the most commonly held (mis)perceptions and fears surrounding the Chinese state, Chinese enterprises and their interlinked internationalization motives.

Doubts and misunderstandings regarding the underlying political and strategic motivations, national security concerns, and purportedly unfair trade practices (e.g., government subsidies) have more or less consistently been influencing the assessment of Chinese enterprise internationalization in recent years. While this may not be an exhaustive list, it nevertheless provides a rather instructive window on the general framing and analysis of Chinese enterprise internationalization.

### **Part of a broader plan?**

Concerns and worries over the trade and investment influence effect (Hirschman, 1945) of China's strengthening position in the global economy fuel one side of the debate over the unfolding trend of high-profile Chinese overseas commitments. However, for some analysts, and as consistently argued by the Chinese side, which finds itself increasingly hard-pressed to make the case for the exclusively commercial nature of such business transactions, the policy implications of these moves generally hold out the promise of a "win-win" outcome (Wu, 2005, pp. 20–21).

A second and more pressing cause for concern centers around the rumored ulterior motives of corporate China's internationalization

drive, especially those of state-owned, state-controlled, and/or loosely state-affiliated enterprises (Pomfret, 2008). For illustrative expediency, I will restrict my discussion to the energy sector. In fact, the contextual factors shaping the overseas activities of Chinese national energy companies offer a credible alternative to the charge that such companies are *merely* corporate vehicles of a communist dictatorship. Careful scrutiny of the institutional and interactional space of China's energy sector shows that the combination of enterprise reform, price liberalization, and the adoption of management incentives and competition has begun to blur the national oil companies-government relationship (Houser, 2008). Second, specific economic and business interests tend to influence overseas investments of these national energy companies, above and beyond stated government policy. Third, the wave of internationalization is rather more attributable to Chinese enterprises' comparatively higher risk threshold and initial concern over market share rather than return on investment.

Compelling though they may be in terms of helping to alleviate undue fears and concerns over ulterior political or strategic motives, these views are (not yet) widely shared. A comparison with Russia's energy sector may prove instructive in further contextualizing China's internationalization drive as well as the extent of state involvement.

The overall political and economic contexts that Russian and Chinese energy companies are operating in are fundamentally different. The combination of assumed similarities between the two countries and the Russian government's tendency in recent years to use oil and gas as a foreign policy weapon may indirectly have led to comparing China's national oil companies to their Russian counterparts, and hence exacerbating concern over their possibly ulterior political and/or strategic goals.

First, Russia has demonstrated a noticeable nostalgia for the political power and influence in world politics that had dissipated with the collapse of the Soviet Union. Under Vladimir Putin, Russia has taken significant steps to reclaim at least some measure of great power status. The overabundance of natural resources—noticeably oil and gas—has bestowed on Russia an economic supply and influence effect (Hirschman, 1945) the Russian government has not hesitated to capitalize on in recent years, as demonstrated by recurring Russia-Ukraine gas disputes since the winter of 2005–2006. China, on the other hand, does not need to wield coercive leverage in order to present itself as a credible economic power. Its economic reform track record and sustained high growth rates, combined with a promising market potential that

continues to lure massive FDI inflows, has the country blessed with implicit power recognition.

Notwithstanding similarities in authoritarian leadership styles, a second differentiating factor that helps to invalidate looking at China through the Russian lens is that whereas power politics appear to dominate energy decisions in Russia, economic rationale and demand are driving the internationalization of China's energy sector. Whereas Russian state-owned energy companies leverage a competitive advantage that bestows coercive power—that is, control of energy resources and exporting them to other countries—China's energy companies are engaged in a veritable race to secure energy sources. To the extent, then, that political considerations play a role in the Chinese context, above and beyond market or commercial considerations, they are geared primarily towards ensuring an uninterrupted flow of energy imports so as to sustain economic growth rates and thus help to maintain social stability and harmony.

### **National security concerns**

The drumbeat of national security concerns, meanwhile, is a direct and convenient outgrowth of lingering skepticism over what the rumored political and/or strategic ends of enterprise internationalization might be. Political grandstanding and hysterical warnings of a purported communist threat promise to be the most expedient means to thwart overseas forays of Chinese enterprises.

Assessing FDI inflows through the national security lens (Graham & Marchick, 2006) is not limited to Chinese overseas investments. Yet, Chinese FDI inflows have drawn peculiar attention in recent years. From a political economy perspective, invoking national security may be a convenient cover for what otherwise could be perceived as blatant economic nationalism and protectionism. Such tendencies may be a consequence of globalization discontent and the competitive challenges embodied by a globalizing world or, as previously alluded, an unwillingness to accept that the latest, and arguably most formidable, commercial challenge to reach the shores of advanced industrial countries could possibly have emanated from a socialist-communist base. From an economic perspective, however, it should also be obvious that allowing Chinese enterprises to make large-scale investments and pursue M&A activities carries inherently fewer risks than relying on China to help finance the national debt of, and hence accumulate sizable financial leverage over, developed countries.

### Government financial support

Financial backing by the government for a wide range of overseas business deals has done much to reinforce speculations that overseas forays of Chinese enterprises may well harbor more ominous political and/or strategic goals above and beyond hard-nosed commercial interests.

Chinese government support for, and financing of, a national team of enterprise groups shares similarities with the prior Japanese and South Korean developmental models where the government, through the allocation of subsidies, made a transition from banker to entrepreneur, using the subsidy to decide what, when, and how much to produce. Through its major policy banks, China actively supports internationalizing SOEs to help them overcome the competitive disadvantages resulting from late industrialization and to even out the level playing field in international competition. While critics (in most instances, justifiably so) deride this as unfair trade and investment practices, it should also be noted that China is by no means the only country that relies on government banks in “promoting the nation’s interest in external trade and investment” even if the terms of support may be different (Evans & Downs, 2006).

The reasons for the Chinese practice resulting in greater levels of scrutiny, skepticism, and resistance may be a reflection of the changing dynamics of the international system. Whereas Japan and South Korea were critical players in the Cold War containment of communism in Northeast Asia—and their neo-mercantilist trade and investment practices were deemed acceptable to nurture fast, visible and quantitative economic growth to stave off the appeal of socialism/communism domestically—China remains (albeit *only* nominally) a socialist state in the twenty-first century. It furthermore has in recent years come to be seen more as a “strategic competitor” than a “strategic partner.” Additionally, the onset of globalization, in an ironic twist, helped to dampen the openness of world markets that benefited Japan and South Korea during their overseas internationalization. In fact, it has resulted in a gradual but sustained increase in economic nationalism and protectionism. Under these circumstances, state financing of overseas activities is bound to draw greater attention than before, even if the rationale for such support may not be all that different from the government support once extended to Japan’s *keiretsu* or South Korea’s *chaebol*.

### “No investigation, no right to speak”

The stated intention of this study has been to invite a critical, objective, and comprehensive assessment of (1) the various assumptions informing

the contemporary China discourse, particularly a deeply contextual framing of both Chinese motivations and intentions behind enterprise internationalization, and (2) the U.S. reaction to and interpretation of it. Despite the potential near-term benefits of domestic political grandstanding and rhetoric, emotion- and ideology-driven interpretations and/or inaccurate appreciation of the complex and still-evolving dynamics of China's political economy space carry high costs over the medium to long term. At best, they may detract from manifest opportunities for deepening engagement and cooperation with China on a global economic level; at worst, they may undermine China's commitment to "peaceful development" and, ironically, conjure up the very challenge alarmist elements frantically warn about.

It is better to adjust and adapt to the global ambitions of China's enterprises than to thwart their expansion as much and as long as possible, for short-term success in that area carries the distinct danger of breeding complacency and nurturing an ill-advised sense of comfort and security in the medium to long term. Furthermore, embracing and adapting to China's internationalization will strongly influence China's economic behavior. On the one hand, it likely will encourage China to internalize international norms, rules, and principles and it will help shape domestic policy regimes and regulatory frameworks (Zhang, 2003). On the other hand, it will also strengthen China's commitment to be responsible member of the international community.

The sad reality, though, is that proponents of the "China Threat" school of thought seem as of yet oblivious to the long-term, counter-productive effect of a China discourse steeped in misperception and images of a China that is no more. "Our perceptions of the place," a former Beijing bureau chief of the *Washington Post* noted recently, "have more to do with how we look at ourselves than with what's actually happening over there." (Pomfret, 2008: B01)

This chapter is intended not as confirmation or repudiation of perceptions and arguments of diverging schools of thought about the causal nature and implications of China's rise and expanding internationalization. Rather, it is to highlight the glaring absence of contextual evaluation and explanation in much of the contemporary assessment of Chinese enterprise internationalization.

A full appreciation of, and ability to effectively respond to, the challenges *and* opportunities associated with Chinese enterprise internationalization requires an assessment of China's political economy that is grounded in objective contextual relevance. However, no concerted effort has yet been made to impose the discipline of contextual framing

to the China discourse. As we move forward in the twenty-first century and as we face the inevitable specter of China's rise, bringing contextualization back in is no longer simply an intellectual choice; it is an undisputable analytical and conceptual necessity.

## Notes

1. With regard to the China context, the authors assert, "The debate in the United States over China policy must move beyond depictions of a cunningly rapacious monolith...so that the policy discourse on China is anchored by fact..." (Halper & Clarke, 2007, p. 16). For a more detailed exposition of the dangers and implications of letting the China discourse, and more importantly, U.S. policy toward China be influenced by "Big Ideas" and "laced with passion" (199), see the authors' discussion in chapter 9 ("The Acid Chapter"), pp. 199–251.
2. Stressing the importance of contextualization in the study of international business are Toyne and Nigh (1998). One of the few studies explicitly linking the contextual reality of China's economic transition to international business practice is Child Tse (2001).
3. A cartoon capturing the politically and ideologically charged atmosphere surrounding the CNOOC's bid for Unocal in 2005, depicted a frantic Western business official catching up to his Chinese counterpart, who had just completed a buying spree on the international business market, and declaring, much to the consternation and surprise of the latter: "By 'Free Market Economy,' we meant *your* market for *our* economy."
4. This is reminiscent of the former U.S. House of Representatives Speaker, Tip O'Neill's adage, "All politics is local." See O'Neill & Hymel (1994). For a more detailed analysis of this trend, see Mayhew (1974), and Fenno (1978).
5. My argument derives from a highly valuable model proposed by Ekiert and Hanson (2003) to study the dynamics of transition in Central and Eastern Europe after the fall of Communism.

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# 2

## The Effects of the Institutional Environment on the Internationalization of Chinese Firms

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### Introduction

In the last three decades, China has proved to be one of the largest and fastest growing transitional economies in the world. China became the world largest recipient of foreign direct investment (FDI) for the first time in 2002 (OECD, 2003). A large number of studies have been conducted on inward FDI in China (e.g., Buckley, Clegg, & Wang, 2002; Chadee, Qiu, & Rose, 2003; Huang, 2003). Growing hand in hand with FDI inflow, China's outward FDI has been steadily increasing. According to the Statistical Bulletin of China (China National Statistic Bureau, 2007), by the end of 2006, the cumulative total of China's outward FDI reached US \$90.63 billion, which makes China the largest outward direct foreign investor among all developing countries.

In the most recently released 2008 Fortune Global 500 list, the number of Chinese companies increased to 29 (Fortune, 2008). China now boasts the largest number of companies on the list among emerging economies (surpassing South Korea's 15). According to China's Ministry of Commerce (MOFCOM), in the first half of 2007, China's outward FDI reached US \$7.8 billion, which was a 21.1% increase compared with the same period in 2006. US \$2.9 billion, about 37.2% of the total US \$7.8 billion, was in the form of acquisitions (Chen, 2007).

The phenomenon of the increasing internationalization of firms from China and other emerging economies has attracted a lot of research attention (e.g., Luo & Tung, 2007; Mathews, 2006; Yiu, Lau, & Bruton, 2007).

Early studies on multinational corporations (MNCs) from emerging economies (e.g., Kumar & Mcleod, 1981; Lecraw, 1977; Ting, 1985; Wells, 1983) were based on the assumption that traditional internationalization theories could be applied to such firms (Lau, 2006). However, more recent studies on MNCs from emerging economies have generally recognized inevitable and significant gaps in applying traditional internationalization theories to MNCs from emerging economies (Buckley, Clegg, Cross, Liu, Voss, & Zheng, 2007). Researchers have called for new perspectives in analyzing the internationalization of MNCs from emerging economies, such as the latecomer perspective (Child & Rodrigues, 2005; Warner, Ng, & Xu, 2004) and the springboard perspective (Luo & Tung, 2007). Some studies have been devoted to extending and adapting traditional internationalization theories to provide a better understanding of emerging MNCs (e.g., Mathews, 2006).

In their review of research on corporate strategy in emerging economies, Wright, Filatotchev, Hoskisson, and Peng (2005) suggested that institutional theory is the most useful perspective compared with transaction cost theory, resource-based theory, and agency theory. They further argued that research on emerging economies has pushed the research frontier of institutional theory. However, the answers to research questions, such as how institutions matter, remain a subject of considerable debate. There has been a call for more studies on the institutional impact of the internationalization of emerging MNCs. Dunning (2006) pointed out that researchers should incorporate institutional factors into their internationalization frameworks in future studies, because the institutional capabilities of firms and the incentive structure and enforcement mechanisms of home and host countries increasingly affect MNC activities, particularly those from emerging MNCs.

Similarly, researchers generally agree that institutional factors impact on the internationalization strategies of Chinese firms (Child & Rodrigues, 2005). However, few studies have examined the underlying institutional drivers of the internationalization of Chinese firms. In order to fill the research gap, this study addresses the research question of how institutional factors affect Chinese MNCs' internationalization strategies. We argue that, especially at the macro level, China's institutional environment in general offers a favorable environment for internationalization and the Chinese companies gravitate toward strategies that take advantage of these opportunities. However, factors, such as the transitional economy and underdeveloped financial market lead to many institutional constraints, which force Chinese companies to adopt strategies to overcome those constraints.

The rest of this chapter is organized as follows. First is a review of the development stages of Chinese MNCs and the relevant literature to provide some background information for the study. Second, we review some key literature on institutional theories and their application in international business (IB) research, which lays the foundation for our analyses. Third, we examine the institutional environment of Chinese MNCs at government, industry and corporate level. We conclude by offering a discussion and suggestions for future research directions.

## **Internationalization of Chinese firms**

### **Development of Chinese MNCs**

From the negligible amount of US \$0.1 million (Cai, 1999) of outward FDI at the beginning of its economic reforms in 1979 to US \$21.16 billion in 2006 (China National Statistic Bureau, 2007), China has traveled a long way to become the largest outward foreign investor among all developing countries. Several studies have traced the evolution of the internationalization process of Chinese firms (e.g., Cai, 1999; Tseng, 1994; Warner, et al., 2004; Yang, Jiang, Kang, & Ke, 2008). Although slightly different classifications of stages of development of Chinese MNCs exist (e.g., Warner, et al., 2004; Yang, et al., 2008), we identified four stages in the growth of Chinese MNCs in light of the promulgation and implementation of laws and regulations that govern China's overseas investments. A brief description of each of the four stages is as follows.

#### *First stage: 1979–1983*

Chinese outward FDI did not start to develop until the government's adoption of its "open-door" policy at the end of the 1970s. During this early stage, China's outward FDI was insignificant as a foreign economic activity (Cai, 1999). Thus, China's annual FDI outflow had a modest increase from US \$35 million in 1980 to US \$93 million in 1983 (See Table 2.1). The most common form of investment was to set up representative trade offices in designated overseas markets (Warner, et al., 2004). Early outward FDI activities were mainly conducted by centrally controlled state-owned enterprises, especially those long-established corporations specialized in foreign trade (Cai, 1999). During this period, all the outward FDI, no matter of what form or size, needed to be reported to and approved by the State Council of the People's Republic of China. There existed no specific laws regulating outward FDI at that time.

Table 2.1 China's outward FDI, 1979–2006 (US \$ million)

Stage 1		Stage 2		Stage 3		Stage 4	
Year	Amount	Year	Amount	Year	Amount	Year	Amount
1979	0.5	1984	134	1993	4,400	1999	1,770
1980	35	1985	629	1994	2,000	2000	920
1981	9	1986	450	1995	2,000	2001	6,890
1982	44	1987	645	1996	2,110	2002	2,518
1983	93	1988	850	1997	2,560	2003	2,855
		1989	780	1998	2,630	2004	5,498
		1990	830			2005	1,2261
		1991	913			2006	17,634
		1992	4,000				

Sources: Various sources

Main English sources include: United Nations Conference on Trade and Development (UNCTAD); United Nations Centre on Transnational Corporations (UNCTC)

Main Chinese sources include: Ministry of Commerce of the PRC (MOFCOM); State Administration of Foreign Exchange (SAFE)

### *Second stage: 1984–1992*

The second stage was characterized by the codification of a body of regulations, for the first time, promulgated by the state, to govern overseas operations and investments. In May 1984, the former Ministry of Foreign Trade and Economic Cooperation (MOFTEC) issued a Circular on the Approval Principle and Procedure for overseas business and investment. In the following July, MOFTEC released a set of Interim Provisions on the Approval Procedure and Administrative Measures on Establishing Overseas Non-trading Joint Ventures. Nolan (2002) noted that the inception of such a regulatory regime coincided with the rapid and diversified growth of external activities by China's MNCs.

In 1985, China's outward FDI reached US \$629 million, almost five times that of the previous year, and, by 1992, it further increased to US \$4 billion (See Table 2.1). Compared with the previous stage, Chinese overseas investments tapped into a more diversified range of industries at this period. A noteworthy phenomenon was that many manufacturing firms became involved in outward FDI, which had previously been dominated by the foreign trade corporations (Cai, 1999).

### *Third stage: 1993–1998*

MOFTEC started preparing administrative measures on overseas Chinese enterprises in 1993. At this stage, a robust advance in the performance

and integration of overseas investment activities by Chinese MNCs occurred. The number of overseas businesses owned by Chinese firms grew rapidly, as did the types of industries involved and the number of foreign countries that were entered. In 1991, China had around 2,000 overseas enterprises located in 93 countries. Remarkably, by the end of 1997, the figure had increased to 5,356 overseas enterprises, dispersed across more than 140 countries (Warner, et al., 2004).

*Fourth stage: 1999–present*

Since the end of the 1990s, the Chinese government issued a series of policy documents aimed to encourage firms to “go out” by simplifying the procedure of application and approval of foreign investment. China’s policy on outward FDI also became increasingly formalized in this stage, and included the (1) 2004 Interim Administrative Measures on the Approval of Overseas Investment Projects (by the National Development and Reform Commission, NDRC); the (2) 2004 Circular on the Supportive Credit Policy on Key Overseas Investment Projects Encouraged by the State (by NDRC and the Export-Import Bank of China); and the (3) 2005 Provisions on Issues Concerning the Approval of Overseas Investment and Establishment of Enterprises (by MOFCOM) (UNCTAD, 2006).

The government’s “going-out” policy initiatives and the increasingly formalized regulations led to a sharp rise in outward FDI from Chinese firms. At this stage, firms began to organize and structure their overseas investments proactively and systematically. There were many cases of successful Chinese overseas investments. For instance, Haier, the largest household appliances producer in China, set up a manufacturing site in South Carolina in the United States. The Wanxiang Group, one of the largest automobile parts producers in China, built a successful marketing network across Europe and America via its American subsidiary, Wanxiang American Corporation (Warner, et al., 2004). Some recent high-profile international acquisitions and takeover bids by Chinese companies have reflected their improved competency in managing corporate activities across national borders. For example, on December 7, 2004, Lenovo agreed to pay IBM US \$650 million in cash and US \$600 million in stocks and assume US \$500 million in debt to acquire IBM’s personal computer (PC) business. The transaction—the first merger ever of a major US corporation and a top Chinese company—expanded Lenovo’s PC business fourfold, giving it an annual income of about US \$12 billion (Asia Times Online, March 11, 2005).

### **Studies on Chinese MNCs**

With rapidly growing outward FDI from China, the newly emerging Chinese players in the global markets have prompted an upsurge in research interest. However, empirical studies on the process of internationalization and strategies used by Chinese firms are still scattered (Yiu, et al., 2007).

The early studies on China's outward FDI (e.g., Wall, 1997; Zhan, 1995) focused on government policy issues, that is, how government policies influence the growth of outward FDI by Chinese firms. Wu and Chen (2001) outlined the historical development of China's outward FDI by examining the companies' motivations, industries, and geographical distribution. They noticed that the motivations for Chinese outward FDI shifted from being driven by political reasons in the early stages to market seeking and asset exploitation. These early studies were conducted at the national level, while little attention was paid to firm-level factors. Their analyses were based on macro-level data from MOFTEC, China's Statistics Bureau, and other official sources, as well as data from the United Nations Conference on Trade and Development (UNCTAD).

Given that the growth of Chinese MNCs and their presence in the international market is a newly occurring phenomenon, most recent studies have adopted a case-study method (e.g., Child & Rodrigues, 2005; Deng, 2003, 2004, 2007; Liu & Li, 2002; Warner, et al., 2004). Deng's three studies (Deng, 2003, 2004, 2007) adopted Dunning's OLI paradigm as the framework and categorized the motivations of Chinese MNCs as market-seeking, resource-seeking, efficiency-seeking, and strategic asset-seeking. Liu and Li (2002) and Young, Huang, and McDermott (1996) focused on the internationalization processes of the Chinese MNCs. Both studies found that Chinese MNCs invested heavily in developed countries, with the primary motive of obtaining advanced technologies. In depicting the evolutionary process of Chinese MNCs, Warner, et al. (2004) explored the extent to which Chinese MNCs have been able to "catch up" with their Western counterparts because of their "late development." They also emphasized the significant role played by technology transfer as an enabling factor in the "catching up" by the Chinese MNCs. Different from the mainstream FDI theory assuming that firms internationalize to exploit competitive advantages, Child and Rodrigues (2005) argued that Chinese MNCs are generally making outward investments to overcome their competitive disadvantages and that Chinese MNCs regard internationalization as the means to equip themselves to gain competitive strengths. Child and Rodrigues (2005) further argued that

examining Chinese MNCs provides an opportunity to extend existing FDI theories, as China may provide new insights regarding the impact of the institutional environment on internationalization.

In searching for major determinants of China's outward FDI, Buckley, et al. (2007) empirically tested whether capital market imperfections, institutional factors, and ownership advantages had influenced China's outward FDI. Based on official Chinese FDI data collected between 1984 and 2001, Buckley, et al. (2007) found that market size and the host country's natural resource endowments strongly attracted Chinese MNCs, which did not shy away from countries with high political risks, such as African countries. Government liberalization on trade and investment has had a positive influence on stimulating China's outward FDI and relationship assets constitute a special ownership advantage for Chinese MNCs.

### **Institutional theory and its application in international business research**

The rise of institutional perspective in the social sciences can be traced back to the 1970s, while its adoption by IB and strategy scholars is a more recent phenomenon, since the 1990s (Peng, Wang, & Jiang, 2008). According to institutional theory, systems surrounding organizations affect organizations' behaviors and decisions (Scott, 1995). Institutions are created from rules and constraints that affect a firm's strategic choices, and firms are players bounded by formal rules (e.g., laws and regulations) and informal constraints (e.g., norms and self-imposed codes of conduct) (North, 1990). Researchers have examined the impact of institutional factors from economic perspectives (e.g., Coase, 1998; North, 1990) and sociological perspectives (DiMaggio & Powell, 1983; Scott, 1995).

The early studies on adopting an institutional perspective in IB research mainly focused on the influence of the institutional environment on the foreign market entry modes of MNCs. They suggested that the choice of entry mode is a result of the organization's responses to isomorphic pressures arising from both a firm's external environment and its internal organizational practices and routines (e.g., Davis, Desai, & Francis, 2000; Dikova & van Witteloostuijn, 2007; Yiu & Makino, 2002). Chan and Makino (2007) examined the legitimacy rationale behind the choice of the subsidiary ownership structure among MNCs from an institutional perspective. They argued that MNCs are likely to accept a lower ownership stake in exchange for external legitimacy when they are under strong pressure to conform in the host country. MNCs are likely to take

a higher ownership stake in response to strong internal pressure from parent companies to sustain their internal legitimacy. In these studies, the institutional distance between the home and host country has been an important research concept (Dunning & Lundan, 2008). The three types of institutions, namely the normative, regulative, and cognitive institutions, identified by DiMaggio and Powell (1983) and Scott (2001) have been frequently used to analyze institutional differences.

In their discussion of new theoretical perspectives on MNCs, Dunning and Lundan (2008) emphasized that to explain the growth of the MNCs, it is necessary to bring together different theoretical viewpoints, for instance, institutional theory, resource-based theory, transaction cost theory and knowledge-based theory.

Oliver (1991) applied the convergent perspectives of institutional and resource-dependence theories to their prediction of firms' strategic responses to the institutional environment. In response to pressures to conform to the institutional environment, organizations may behave differently. As such, Oliver (1991) identified five strategic responses ranging from passive action to active resistance, including acquiescence, compromise, avoidance, defiance, and manipulation. Based on Oliver's strategic responses (1991), Witt and Lewin (2007) argued that a firm's response to avoiding the perceived misalignment between its needs and the home country's institutional conditions is another explanation for outward FDI.

Dunning (2006) pointed out that the eclectic OLI paradigm lacks institutional content, and it is important to incorporate institutional factors in the future extension of the model. Inspired by North (1990, 2005), Dunning and Lundan (2008) argued that institutions affect all three components of the paradigm, and they further examined how such impacts occur. In analyzing the institutional effect, Dunning and Lundan (2008) argued that it is necessary to separate it from other influences on the activities and strategies of MNCs. For example, regarding the ownership advantage, it is possible to identify formal and informal institutions at the level of the firm, and institution-based advantages (Oi) can be distinguished from asset-based(Oa) and transaction-based (Ot) based advantages. Dunning and Lundan (2008) concluded that the OLI paradigm can be viewed as a means of exploring and evaluating the impact of country- and firm-specific institutions on the value-adding activities of MNCs.

In their recent study, Peng, et al. (2008) proposed that the institution-based view together with the existing industry- and resource-base views form a strategic tripod. They suggested that the institution-based view

added new understanding in four substantive research areas, that is, on antidumping as an entry barrier; on competition in and out of India; on the growth of firms in China; and on the corporate governance in emerging economies. They argued that the institutional perspective offered a complementary view when the industry- and resource-based theories could not provide a full explanation. As pointed out by Williamson (2000), recognizing the importance of the institution is a first step, while identifying the analytical logic is the second, followed by understanding the underlying mechanism. Peng, et al. (2008) acknowledged that they had embarked on a journey and they called for more IB research on how institutions matter.

In this chapter, we endeavor to address this “*how*” issue with a focus on the institutional impact on the internationalization of Chinese MNCs. China has undergone almost three decades of economic reforms and a rapidly growing private sector contributes more than one-third of economic output. However, the state control of the Chinese economy is still prevalent (Scott, 2002). According to Morck, Yeung and Zhao (2008), among the 30 Chinese MNCs with the largest amount of outward FDI in 2004 and 2005, almost all were giant, state-controlled companies. Lenovo, the world’s fourth-largest PC maker, was listed on the Hong Kong Stock Exchange in 1994. Some 27% of Lenovo is owned by the state-run Chinese Academy of Science. Although more than two-thirds of Lenovo’s top executives are non-Chinese and the company stresses that the Academy of Science has no board members and that it does not interfere with the company’s operations, there is little doubt that Lenovo gets support from its close ties to government for its global ambitions (*Financial Times*, 2008). The institutional environment is therefore very likely to shape the internationalization decision of Chinese firms (Buckley, et al., 2007). Different from the focus of many previous studies on the institutional differences between home and host countries (e.g., Davis, et al., 2000; Dikova & van Witteloostuijn, 2007; Yiu & Makino, 2002), this study emphasizes the impact of the institutional environment of the home country, China in this study. In the following sections, we propose a three-level analytical framework of the institutional environment and discuss in detail how institutional factors affect the internationalization strategies of Chinese MNCs.

### **The effects of the institutional environment**

The study of institutional underpinnings has largely been ignored in the field of strategic management (Dunning & Lundan, 2008; Lehrer, 2001).

A notable exemption is Oliver (1997), in which a process model of sustainable competitive advantages of firms was proposed with the process affected by both resource-based and institutional factors. Inspired by Oliver (1997), our study integrates the institutional perspectives with the newly emerging theories of MNCs from emerging economies to examine the internationalization strategies of Chinese MNCs.

The extant internationalization theories, such as Vernon's Product Life Cycle theory (1966), the internalization process model (Johanson & Wiederheim-Paul, 1975; Johanson & Vahlne, 1977) and Dunning's Eclectic Paradigm (1980) were formulated during the time when outflow of FDI was dominated by MNCs from developed countries. In recent years, the growth of FDI from emerging economies has accelerated, with some high-profile acquisitions by MNCs from emerging economies (e.g., Lenovo from China, the Tata Group from India). The differences between the MNCs from developed countries and those from emerging economies in relation to FDI (i.e., in their motivations, advantages and paths) have pushed researchers to seek extensions of the existing IB theories (Luo & Tung, 2007). One of the most prominent contributions in this development of theory is Mathews' Linkage, Leverage and Learning Model (the LLL model hereafter) (Mathews, 2006).

Adopting Peng's (2001) resource-based view in an international setting, Mathews (2006) argued that the internationalization of MNCs from emerging economies depends on their abilities in linkage, leverage and learning. To acquire competitive advantages externally, MNCs from emerging economies tend to use networks to link up with other firms or institutions. Wells (1998) found that developing-country MNCs choose partnerships and joint ventures over wholly owned subsidiaries as a means of gaining entry into foreign markets. After establishing such linkages, MNCs from emerging economies seek ways to leverage the resources. Repeated application of linkage and leverage processes may result in a learning effect whereby the firm performs such operations more effectively. Mathews (2006) argued that the three Ls can be built up in a cumulative fashion and that the emergence and accelerated internationalization of MNCs from emerging economies can be explained well by this model.

In his comments on Mathews's model (2006), Dunning (2006) acknowledged that Mathews made two contributions. First, Mathews (2006) provides an explanation for why and how MNCs from emerging economies achieve internationalization despite their lack of resources and international experience. Second, the LLL model provides a dynamic model of internationalization, which is different from the static points

of view in traditional internationalization theories. Dunning (2006) agreed that OLI and LLL might well be complementary to each other and each captures different facets of the features of MNCs. At the end of his paper, Dunning (2006) pointed out that future studies need to incorporate institutional factors in both the OLI and LLL frameworks. In the following section, we examine how the institutional environment in China has impacted the linkage, leverage and learning capabilities of Chinese MNCs and how this impact has further shaped their internationalization strategies.

According to institutional theory, economic actions are embedded in structures of social relations (Granovetter, 1985). Oliver suggested that “institutionalized activities are the result of interrelated processes at the individual, organizational, and interorganizational level of analysis” (1997: 700). Davis, et al. (2000) pointed out that a firm’s institutional environment should include other organizations within a firm’s industry or peer group. Hall and Soskice (2001) also suggested that differences in corporate strategy can be conditioned by the institutional support available to firms at the regional or sectoral levels, in addition to specific institutional factors on the national level. Therefore, our analyses of the effects of institutions on the internationalization of Chinese MNCs are centered on the institutional environment at multiple levels, that is, the government, the industry, and the corporate level.

### **Government level**

The Chinese government has played a very important role in the internationalization process of Chinese firms. China’s “going-out” strategy was envisaged in the mid-1990s and formally adopted in the late 1990s and early 2000s (UNCTAD, 2006). The “going-out” strategy is a complementary component of the “open-door” policy promulgated in 1978 (Li, 2005). The state encourages giant state-owned businesses to become internationally competitive corporations through listing on domestic and overseas stock markets, increasing research and development expenditures, and acquiring other businesses (Nolan, 2002). China aims at developing a large number of Chinese MNCs that are internationally competitive through public offerings, mergers and acquisitions, restructuring and cooperation (Beijing Municipal Committee for Foreign Economic and Trade, 2008). Indeed, China’s outward FDI in recent years would not have grown so fast without official encouragement from the government.

It is difficult to estimate the actual scale of government endorsement, because Chinese firms may not be willing to fully reveal the amount

of support that they received from government agencies (Child & Rodrigues, 2005; Meyer & Scott, 1983). Warner, et al. (2004) observed that acquisitions are becoming a “normal” way for Chinese firms to enter and penetrate a foreign country (p. 340). They speculated that the state’s sponsorship and funding support are key factors that make these acquisitions possible, considering the huge amount of money involved in some of the acquisitions. Even though we cannot exactly know the scale, format, or amount that the state and its agencies provided directly to Chinese firms in their internationalization processes, we can at least assess the government’s impact on the firms’ capabilities in terms of resource linkages, leverage, and learning.

Although firms in emerging economies are constrained by the resources available from markets because of institutional voids in the financial, labor, and product markets, researchers have argued that firms can gain legitimacy and resources by becoming embedded in the dominant institutions that control resources in the emerging market (Peng, 2003; Peng & Heath, 1996; Peng, Lee, and Wang, 2005). As such, it is important for firms in emerging economies to develop connections or linkages with the government, as governments in emerging economies often have considerable power in resource allocation. This is the case in China as well. Li (2007) observed that it is evident that Chinese firms are more effective in internationalization due to their strong governmental ties.

Having a good relationship or *guan xi* with the government is just the starting point. Chinese firms have recognized that it is more important to know how to use or to leverage the linkages in their internationalization process. On the other hand, the Chinese government has been well aware that providing firms with capital or resources alone is not enough. The more important role for the government is to create a supportive environment that stimulates more firms to “go out.” In recent years, the Chinese government launched a series of policy initiatives to support and facilitate outward FDI, for example, by actively participating in various bilateral and multilateral arrangements to protect overseas investment (UNCTAD, 2006), gradually relaxing foreign exchange controls, and providing preferential credit for overseas investment. In October 2004, the NDRC and the Export-Import Bank of China (EIBC) issued a circular to promote such overseas investments as (1) projects that promote the export of domestic technologies, products, equipment and labor; (2) overseas R & D centers that utilize advanced technologies and managerial skills; and (3) M&A that could enhance the international competitiveness of Chinese enterprises and accelerate their entry

into overseas markets. The EIBC also provides special loans for overseas investments through its export credit plan and accelerates the process of project screening (UNCTAD, 2006).

The organizational learning taking place in those firms that make use of the linkage and leverage process allows the firms to perform these operations more effectively and to achieve better performance in international markets. At the same time, interactions between the firms and government can have substantial influence on government policies. For example, one of the findings of a 2005 survey of Chinese firms having overseas investments pointed out that the restrictions on the use of foreign exchange were too stringent (Yao & He, 2005). The response by the State Administration of Foreign Exchange to abolish quotas on the purchase of foreign exchange for overseas investments on July 1, 2006 reflected the willingness of the government to interact with the firms and to take action to address firms' concerns.

As reviewed above, one of the major motivations for outward FDI for Chinese MNCs is asset exploration and asset seeking (Liu & Li, 2002; Young, et al., 1996). The government's policy orientation toward building world-class Chinese MNCs has strongly motivated Chinese firms to "go out" to obtain scarce resources, advanced technology, and other critical strategic assets. This strong government incentive helps us to understand why and how Chinese MNCs can catch up with their Western counterparts (Warner, et al., 2004). The learning capabilities of Chinese MNCs and the willingness of the Chinese government to adapt their policies (a learning process by the government itself) partially explain the accelerated pace of the internationalization of Chinese firms.

### **Industry level**

Murtha and Lenway (1994) argued that a government's abilities to implement industrial policy would affect firms' international strategies. Governments use industrial policies to allocate resources in an attempt to achieve long-term national economic objectives, including sustained high economic growth and enhanced international competitiveness. Lodge (1990) pointed out that the successful implementation of industrial strategies relies on collaborative interactions between governments and businesses. Murtha and Lenway (1994) proposed a model that highlights the mechanism by which institutions and firms interact to shape industrial policy preferences and their implementation.

Park, Li, and Tse (2006) argued that industrial policy together with the decentralization of political control and ownership reform are the primary institutional changes undertaken to implement market liberalization in

China. The Chinese government has played a significant role in shaping its industries and has been using industrial policies to make selective resource allocations, for instance, by providing more financial support to the so-called pillar industries, such as the petroleum, steel, automobile, and telecommunication industries (Park, et al., 2006). The taxation policy is another tool used by the Chinese government to direct industry development. In June 2007, China's Ministry of Finance announced that China cut or eliminated export tax rebates on 2,831 commodities, or about 37% of the total number of items listed in the customs tax regulations (Ministry of Commerce, 2007). The major objectives of this new policy were to discourage the exportation of products that required high energy and resource consumption and caused environmental pollution and to push firms and capital investment to move into high-tech and high value-added industries.

Yiu, et al. (2007) argued that firms in transitional economies are facing an institutional environment with continuous economic liberalization and lower environmental munificence. These institutional components have posed special challenges to the firms in transitional economies (Yiu, et al., 2007). This is particularly the case for Chinese MNCs. China's economy has undergone significant changes, since it embarked on its transition from a centrally planned economy to a market-oriented economy in late 1970s. China's formal access to the World Trade Organization (WTO) at the end of 2001 further pushed the liberalization and openness of the economy, and all the transitional protective provisions have now expired. Chinese firms are now facing a much more competitive environment. The intensive competition has driven Chinese firms to go overseas.

Competition pressure from giant Western MNCs has also forced Chinese firms to seek cooperation and linkages and to leverage their combined resources. The various associations at the industry level provide such a platform. The functions of industry associations in China vary widely by industry. Some of them just act as liaisons among firms, while some take a more proactive role, such as to pool resources and capabilities of firms in the industry for overseas investment projects. For example, the Guangdong High-tech Industry Chamber actively built five resource databases, including a government database, an entrepreneur database, a technological experts database, a finance relations database, and a media database. This organization provides information on services to its 6,000 member firms, such as information technology, financing, business, and overseas investment. The Chamber successfully organized around 20 member firms to invest in high-tech

development zones in Vietnam via its connections with local chambers of commerce and other organizations for economic cooperation (Guangdong High-tech Industry Chamber, January 2008).

With strong support and assistance from the local Chinese government, numerous economic development zones and high-tech parks have been established in various coastal cities and provinces. Firms in the high-tech parks are clustered in telecommunications, electronics, software engineering, and other high-tech industries. High-tech parks serve as effective incubators for firms actively seeking new technologies and strategic partners from global sources. Many successful firms in these high-tech parks have expanded their businesses abroad and invested aggressively overseas. The support and assistance offered by this unique institutional structure facilitate the building of linkages and leveraging of resources by Chinese firms.

### **Corporate level**

Due to the weakness in the institutional environment, Chinese firms have had to overcome many institutional restraints and barriers embedded in the Chinese context and they use networks or relational assets to overcome the institutional voids. As such, it is important to examine the institutional environment not just at the government and industry levels, but also at the corporate level.

Dunning (1995) suggested that the ownership advantage in the eclectic paradigm should include relationship assets, which refers to the ability to engage in beneficial relations with other firms or actors to gain access to resources controlled by them. Relational assets, or networking skills, have been recognized in previous studies as important factors in understanding the internationalization strategies of firms from emerging economies (e.g., Buckley, et al., 2007; Child & Rodrigues, 2005; Yiu, et al., 2007).

Studies on emerging economies find that foreign firms introduce new technologies and new management techniques to emerging economies (Meyer, 2004). Establishing relationships with foreign firms provides opportunities for firms in emerging economies to enhance their technological and innovation capabilities, and, hence, to increase their competitiveness (Hitt, Li, & Worthington, 2005). In the international market, partnering with foreign firms also allows firms from emerging economies to have better access to foreign markets (Hout & Hemerling, 2004). Leveraging relationships with foreign firms gives firms from emerging economies opportunities to learn and absorb new knowledge and technologies.

Partnerships with foreign firms have allowed many Chinese manufacturers to grow rapidly, among which many are becoming increasingly important international competitors. One typical example is Galanz, a Chinese firm in the microwave oven industry. Galanz started manufacturing for original equipment manufacturer (OEM) clients in 1993. Up to 2009, Galanz has forged relationships with around 250 MNCs. By acquiring production facilities and the related technologies from MNCs, Galanz expanded its production capacity at a speed unlikely to be achieved by any other means. Within ten years, Galanz increased its annual microwave oven production volume from 10,000 to 12 million and established itself as the largest microwave oven producer in the world. As of the time of writing, about one-third of the world's new microwave ovens are produced by Galanz (Ge and Ding, 2008).

Yiu, et al. (2007) pointed out that networks in emerging economies are substitutes for undeveloped external markets. Business groups offer a way to alleviate weak institutions in capital, labor, and product markets in emerging economies (Khanna & Palepu, 1997). Business groups are sets of firms bound together by formal and informal ties that take coordinated actions (Khanna & Rivkin, 2001). Giant state-controlled business groups have emerged rapidly since the 1980s in China (Keister, 1999). On the one hand, the rapid growth of business groups in China can be regarded as the firms' responses to market imperfections. On the other hand, their rapid growth can be viewed as a result of the active encouragement and assistance from the state. The Chinese government regards business groups as a quick way for Chinese firms to expand in size and gain market power to ensure better competitive positions in international markets.

There is evidence that the internationalization process of Chinese MNCs has been influenced by prestigious entrepreneurs (Child & Rodrigues, 2005) who provide critical strategic leadership that leads to firm's success. Their capabilities to think strategically and to identify overseas market opportunities proactively, to obtain institutional support from the authorities, and to make use of all personal overseas connections and resources add momentum to firms' internationalization.

## **Discussion and conclusion**

The three-level institutional analysis in this study provides a clear picture of the international strategies and major characteristics of the internationalization of Chinese MNCs. Strong government endorsement leads to the dominance of giant state business groups in Chinese MNCs,

and mergers and acquisitions have become the significant means for overseas investments among Chinese firms. Chinese MNCs are primarily driven by market seeking and strategic asset seeking, that is, natural resources and cutting-edge technologies, rather than by asset exploitation. They select investment locations mainly based on the company's strategic objectives, disregarding political risks and psychic distance. In an attempt to catch up with incumbent MNCs from developed economies, Chinese MNCs accelerate their process of internationalization by leaping forward or jumping through traditional stages. They actively seek opportunities to build linkages with foreign strategic collaborators and leverage their resources and capabilities for achieving international objectives.

Our framework for institutional analysis emphasizes the dynamics of the institutional environment. China's further integration into the global economy and the interactions of the government and firms have led to a highly dynamic and fast changing institutional environment in China. The research bodies under the State Council periodically conducted surveys on Chinese MNCs. The constraints and barriers they encountered and their demands become the subjects of new policy initiatives. For example, the recent abolishment of the quotas on the purchase of foreign exchange for overseas investments reflected the willingness of the government to change its policies to address firms' concerns. On the other hand, Chinese MNCs innovatively leverage supportive institutions for additional resources and new capabilities. They use their linkages with government, industry associations, and other corporations as relational assets to help to achieve objectives that they cannot achieve otherwise.

Although the Chinese institutional environment has fueled great momentum for outward FDI since 1999, there still exist various restraints and barriers to internationalization. Chinese firms have to go through a lengthy, multi-layer approval procedure before they can proceed with any overseas project. The volumes of required documents include a project proposal; a project feasibility report; an overseas investment application; a joint venture intention, contract and constitution; opinions and comments by the industrial bureau; verifications of funding sources and investment risks by the foreign exchange bureau; opinions and comments by the Chinese consulate in the host country; and many others. It is not uncommon that it takes more than eight months for these documents to get approved by multiple government agents at the ministries that are jointly in charge of overseas economic activities. This complex and time-consuming approval procedure frustrates and delays

many Chinese firms, and it might cost them valuable market opportunities in the highly dynamic global market. There are loud voices demanding the simplification of the approval procedure and replacement of the restrictive approval system with a voluntary registration system to speed up the overseas investment process (Ge & Ju, 2007).

Hall and Soskice (2001) pointed out that comparative political economy and business studies are two disciplines that are often disconnected. This study contributes to the literature by adopting an institutional perspective to examine the impact of institutions on the internationalization strategies of Chinese MNCs, and it thus has built a connection between the two disciplines. However, we have to acknowledge some limitations of this study. There are institutional factors that we have not addressed here, for instance, China's foreign exchange rate system. On July 21, 2005, after more than a decade of strictly pegging the Chinese currency RMB to the U.S. dollar at an exchange rate of 8.28, the People's Bank of China announced a 2.1% appreciation against the dollar, a starting point to reform the exchange rate regime (PBOC, 2005). However, in the following years, China accumulated the world's largest foreign reserve resulting from its huge trade surplus, especially with the United States. As a result the Chinese RMB has been under continuous pressure for further appreciation. It has been said that this is similar to what Japan faced in the mid-1980s (Masaki, 2005). As a result of the 1985 Plaza Accord, the value of the Japanese Yen increased sharply against the U.S. dollar, which prompted Japanese manufacturers to move their production bases abroad. If the Chinese RMB is further appreciated significantly, say by 20 or 30%, will this lead to more outward FDI by Chinese firms? This is an interesting topic for future research regarding the impact of the movement of the Chinese RMB on the outward FDI of Chinese firms.

The existing literature on Chinese MNCs mainly focuses on pre-entry motivations and less attention is given to the challenges of post-entry integration (Morck, et al., 2008). Surveys on Chinese firms with overseas investments showed that the success rate for overseas investments by state-owned enterprises was less than 50% (Zhao & Yan, 2003). In addition to the lack of experience and the lack of competitive advantages in overseas markets, institutional barriers and restraints may also negatively affect the overseas performance of Chinese MNCs. More research is needed in this area in the future.

In conclusion, this study adopts an institutional perspective to explain the surge in China's outward FDI. Specifically, we propose that the institutional factors at the government, industry and corporate levels affect

firms' linkage, leverage and learning capabilities, which shape firms' internationalization strategies. As North (2005) argued, it is difficult to use the standard models of economic and political theory to explain China and the secret of China's success is the creation of institutions that readily adapt to changing circumstances. We anticipate that, with national economic development priority given to further globalization of Chinese firms, the Chinese institutional environment will inevitably change to be even more supportive to facilitate the internationalization of Chinese MNCs in an ever more vigorous way.

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# 3

## Racing with the Chinese Dragons

*Peter J. Williamson and Eden Yin*

### Introduction

Chinese companies have begun to “go global.” High profile examples include Lenovo’s US \$1.75 billion takeover of IBM personal computer business in 2004; Huawei, which has implemented its telecommunications network equipment solutions in over 100 countries, maintains a network of 12 R&D centers around the world; and appliance maker Haier, whose brand ranked 86th in the top 500 most influential global brands (World Brand Laboratory, 2006). Less widely recognized, however, is the fact that scores of other, little-known Chinese companies have begun to carve out significant (and sometimes even dominant) global market shares in numerous industries as diverse as port machinery, medical equipment, and pianos (Zeng & Williamson, 2007, p. 19). This evidence suggests Chinese companies have the potential to powerfully reshape global competition.

At the same time, many commentators have also pointed out the handicaps Chinese companies suffer in their quest to rapidly become significant global players. These include weak brands, lack of proprietary technology, inexperience in adapting their offerings to the myriad of local consumer tastes and market environments around the world, a limited number of managers with international experience, and the fact that they generally lack well-honed organizations with global reach that their multinational competitors have built up over decades (e.g., Nolan & Hasecic, 2000; Nolan, 2005; Hutton, 2007). These commentators conclude, therefore, that the possibility of Chinese multinationals outpacing their Western counterparts remains remote.

In the face of these two opposing views, the question of whether Chinese companies will become powerful competitors that reshape

global competition across a wide variety of industries, technologies, and market segments is of considerable interest both for business practitioners who must develop strategies for the future global market and for academics for whom the process by which latecomers from a large and dynamic economy such as China might parlay country-specific advantages into firm-specific competitive advantages and augment their initial resource endowments is critical to better understanding important aspects of competitive dynamics. In this chapter, we attempt to shed light on these important issues. Specifically, we will examine how the vector of requirements for success in global environment might be changing; how well the existing capability endowments of global incumbents and emerging Chinese companies position them to deliver against these future requirements; and how the dynamics of capability building to fill the gaps in “market fit” faced by both these sets of competitors might play out.

While acknowledging the handicaps faced by Chinese companies as they compete globally, we argue that some of the future requirements for global success will match capabilities where the Chinese companies are already strong. For example, the share of emerging markets in world gross domestic product (GDP) is growing, “value-for-money” segments are becoming increasingly important within developing and even developed-country markets, large retailers like Wal-Mart, Carrefour, and Tesco are developing global reach, many markets are becoming more volatile, and competition between individual firms is being replaced by competition between networks of alliances involving multiple, inter-linked players. These changes play to some of the strengths of Chinese companies. Specifically, their capabilities in “cost innovation,” their flexibility and dynamic capabilities, and their experience in building “relationship-based” networks which require a long-term perspective of an organization that is not under the constant pressure from its shareholders as in the case of most Chinese firms. At the same time, these changes in the requirements for global success present established multinationals with the challenge of building new capabilities and restructuring their existing business models. It is incorrect, therefore, to see the globalization of Chinese companies simply as a game of “catch-up” with established multinationals. Instead, the next round of global competition is a more subtle race, one in which Chinese companies are exploiting unique advantages that are well attuned the needs of tomorrow’s global market, while attempting to the historic gaps fill in their capability base as rapidly as possible. Established multinationals, meanwhile, are looking for ways to continue to leverage their existing competences

while adapting and building new capabilities to meet the changing requirements of global competition (some of which are closely aligned with capabilities in which Chinese companies already excel).

We argue that in this “race to the future,” two considerations are critical. First is the quality of “fit” between what the global market demands and the different vectors of capabilities emerging Chinese and established multinationals are able to build. Second is the level of friction each group of companies respectively face in filling gaps to create the capability vectors they need for future global success. On a theoretical level, this chapter therefore seeks to contribute to unification of the “market positioning” (Porter, 1980) and “resource-based” views (Wernerfelt, 1984) as determinants of competitive advantage, as well as to further explore the concept of “cost innovation” (Zeng & Williamson, 2007) as a new source of advantage. On an empirical level, this is the first study to examine the globalization of Chinese companies through the lens of a quest for future market fit across a variety of different industries.

The chapter is structured as follows. The section on Resource based view and the quest for market fit outlines the framework for our analysis based on the concept of market fit as a way of unifying the market-positioning and resource-based views of competitive advantage. Using this framework, the section on Traditional sources of global competitive capabilities and advantage lays out the traditional sources of global competitive advantage advanced by the strategy literature. The section on Differential barriers and capability constraints faced by Chinese firms in their quest for global market fit discusses the barriers Chinese firms face in matching these traditional advantages that are already enjoyed by many of their established global competitors. The section on Changing capability requirements for global competitive success then introduces the forces that are shifting the requirements for future global success. The section on Distinctive capabilities of China’s emerging dragons demonstrates why the distinctive capabilities of Chinese firms are well attuned the demands of the future global market, while the section on New gateways offered by globalization for the dragons shows how globalization is acting to allow emerging Chinese companies to catch up more quickly in those areas where their capabilities are currently weak. The section on Strategies for incumbent MNCs to match dragons’ distinctive capabilities discusses the strategies established western multinationals can follow to respond to this formidable challenge. In the final section, we summarize our main conclusions and discuss the study’s limitations and implications for future research.

## Resource based view and the quest for market fit

A major contribution of the resource-based view of the firm (RBV), which originated from Penrose (1959) and formalized by Wernerfelt (1984), Barney (1986, 1991) and Amit and Schoemaker (1993) among others, was to model the firm as a dynamic portfolio of capabilities.<sup>1</sup> The profitability of a firm in the RBV models is driven by the rents these capabilities and resources are able to produce. These rents, in turn, were postulated to depend on low substitutability, imperfect tradability, and slow and costly imitability of the capabilities and resources that the firm had in its portfolio. Little attention, however, was initially given to how the demand for the services of these capabilities and resources impacted their scarcity and hence their value.

Subsequent work (e.g., Powell, 1992; Verdin & Williamson 1994) emphasized that value was generated by the “fit” between a firm’s distinctive RBV capabilities and the market demand for the services these capabilities could produce. In this formulation, the competitive advantage of a particular firm any point in time depends on the level of “fit” between its capability portfolio and the demands of the market and industry environment in which it operates (so called “market fit”). It also depends on the quality of the firm’s “meta-competence” in integrating their capabilities—what Kogut and Zander (1992, p. 391) called “combinative capability.”

Over time, the degree of fit between a company’s competences and the market needs, and hence its competitive advantage, will change. This change will depend on (1) the nature of changes in the market environment, (2) the nature of capability gaps, that is, whether the capabilities that any particular class of firms (e.g., established multinationals or Chinese companies) lacks are easy or difficult to build or imitate; and (3) How skilled any particular class of firms is at building or imitating new capabilities—what Teece, Pisano, and Shuen (1997) have called “dynamic capabilities.”

In the face of significant changes in the capabilities and services demanded by the global market (detailed below), we believe this “battle of capabilities” model of competition provides a useful way of conceptualizing the competition between established multinational companies (MNCs) and globalizing Chinese companies that is now emerging. The model suggests that we need to consider four factors respectively: the requirements for success in the global market; how these requirements might be changing; the vector of capabilities enjoyed by China’s emerging global companies; and finally, the vector of capabilities enjoyed by

established MNCs (including dynamic capabilities). In what follows, we therefore discuss each of these key elements.

### **Traditional sources of global competitive capabilities and advantage**

The first elements to be considered in the battle of capabilities model outlined above are the current sources of competitive advantage in the global market. These are, of course, many and varied. Some of the most important sources of advantage identified in the literature, however, include global economies of scale in manufacturing, branding and/or R&D; the capability for effective adaptation to the tastes and requirements of local markets; the capability to optimize a global supply chain that exploits quality-cost differentials from different sources; the capability to serve global customers who require a consistent global offering wherever they buy around the world (Bartlett, Goshal, & Birkinshaw, 2004); and the capability for effective global knowledge management to leverage pockets of dispersed and differentiated knowledge around the world (Doz, Santos, & Williamson, 2001). As argued by the RBV literature, many of these capabilities confer competitive advantage because they are slow and costly to build. As we detail in Table 3.1 they reflect accumulated experience and rely on large stocks of intangible assets and well-developed global organizational structures and processes—a vector of capabilities that leading MNCs have built up over decades (or sometimes more than a century).

As newcomers to the global game, Chinese companies generally face formidable gaps in the vector of capabilities necessary to reap these traditional sources of competitive advantages. Even more important, for the future, is the fact that they often face significant barriers to filling these gaps. The height of these barriers varies significantly across

*Table 3.1* Traditional sources of global advantage

<b>Source of advantage</b>	<b>Capability vector</b>
Global scale economies	Existing scale
Manufacturing	Intangible assets
Branding R&D	R&D skills and processes
Local adaptation	Experience in local subsidiaries, processes
Global supply chain	Existing relationships and network, processes
Global customers	Global account management processes
Global knowledge management	Knowledge capture and sharing processes

industries, depending on the technological and market environment that characterize the business.

### **Differential barriers and capability constraints faced by Chinese firms in their quest for global market fit**

The handicaps faced by Chinese companies in their quest to achieve global market fit based on these traditional sources of competitive advantage are particularly acute in four types of industry environment: (1) businesses where the market is immature or nonexistent in China or the developing world; (2) industries in the early stages of the product lifecycle; (3) complex, systemic businesses; and (4) industries where strong brands provide a critical advantage. Each of these industry environments requires capabilities that most Chinese firms severely lack while also making it difficult for them to catch up.

#### **Limited Size of the Chinese and Developing Markets**

Where the Chinese market is small, Chinese companies do not have much opportunity to build volume and experience at home before venturing into the global market. Worse still, if developing-country markets for a product or service are small or nonexistent, Chinese competitors cannot use a strategy of building volume in peripheral, emerging markets where skills honed in China are most applicable and competition from established multinationals is arguably less intense. The limited size of the Chinese and developing markets compared with the global market, therefore, acts as an impediment to the ability of the dragons to challenge global incumbents.

The investment banking sector, especially merger and acquisition (M&A) services, is a good example. Just five years ago regulatory restrictions meant the M&A market in China was virtually nonexistent. Even by 2005, China accounted for less than 2% of global M&A activity by value; while total M&A in the developing world was only 5%. The U.S. market accounts for nearly half of global activity and the European Union (EU) countries a further 40%. As a result, Chinese banks and financial services companies had little or no opportunity to develop their skills, experience, and scale in this sector before facing the tough competition in the broader global market.

#### **Immature industries**

Emerging Chinese multinationals also face significant barriers to building the capabilities necessary for global competitive advantage where a

dominant technology has not yet emerged. Without a dominant technology it is difficult to climb aboard an experience curve that leads to reduced costs through economies of scale and learning. As a result, even when the Chinese do enjoy potential advantages in cost structure, for example, they have trouble leveraging them up. Moreover, when a new business is emerging and early adopters are the target customers, it is novel functionality that drives the demand, rather than value for money. Technological uncertainty and an immature market comprising early adopters, therefore, play to the strengths of established multinationals that enjoy capabilities in well-honed R&D processes and are experienced in mobilizing global knowledge.

These impediments are aptly demonstrated by the lack of Chinese penetration in the mobile phone handset business early in its product lifecycle. While proprietary base technologies were competing for pre-eminence, the Chinese competitors were at a disadvantage in relation to their established global rivals. They lacked sufficient knowledge and strength in the base technology and the global experience to drive proprietary approaches into the market. While the pace of technological change remained rapid—a characteristic of the early product lifecycle—Chinese firms struggled to get reliable products out in a timely manner. Potential Chinese cost advantages were blunted by an inability to keep up with a fast-moving product lifecycle and the cost penalties associated with the need to buy key bits of proprietary technology from their Western competitors. Not surprisingly, the dragons' fire was sapped and, despite losing money, they made little headway in gaining market share.

### **Systemic businesses**

A third industry characteristic that exposes the limitations of the Chinese companies' vectors of capabilities is what economists call a *systemic* value network—in other words, industries in which a successful competitor needs to manage a complex, largely indivisible system of activities in order to deliver an attractive offering to the customer. Fast-moving consumer goods (FMCG) industries such as ready-made foods, snacks, or personal care products are good examples. These industries do not generally involve particularly high technology, but getting them right involves coordinating a complex, interrelated system that brings together sophisticated market research and product development; global sourcing of nonstandard, natural raw materials; manufacturing processes that must work as a continuous flow; and complex logistics that must take account of product variations (such as the shelf-life of

different foods) and sophisticated marketing campaigns. The value delivered to the final consumer is only as good as the weakest part of this systemic network. Because a successful competitor must orchestrate the entire system to get the right result, it is not clear where the Chinese can insert their cost innovation wedge. This is a key reason that, even in China, multinational firms such as Procter & Gamble, Unilever, L'Oréal, and Henkel have dominant positions in many FMCG sectors such as personal care products and cosmetics.

The drug business is another example. Traditional approaches to drug development used by the pharmaceutical industry are highly systemic, involving research, development, and clinical testing teams working together to use their tacit knowledge of interrelated, often proprietary processes.

Where Chinese companies cannot easily “slice and dice” the value chain into separate activity modules that require only simple interfaces and minimal coordination to deliver value to the end customer, they are unable to break in to the global market by using a focused set of capabilities to master just one part of the chain. Instead they would have to tackle the complete complement of activities at once with the risk of failure caused by the handicaps they face in other activities or the fact that their limited resources would be spread too thin. This tends to undermine the Chinese multinationals' competitive traction.

### **Intangible assets**

The final factor that impedes the advance of Chinese competition is the importance of intangible assets, such as brands or proprietary technology and experience that are slow and costly to build. Where these assets are critical to competitive success, the Chinese as latecomers are disadvantaged. Take the case of branded businesses. The power of any Chinese advantages, such as low cost, tends to be blunted in businesses where the bulk of customers will not even try a new supplier if they do not recognize the brand. In some industries customers are not prepared to take the risk that seemingly attractive Chinese offers might turn out to be a mirage.

Retailing is a prime example of the kind of industry in which Chinese retailers face considerable intangible asset barriers. In addition to the importance of a strong retail brand—enjoyed by the likes of Wal-Mart, Carrefour, or Tesco—success in retailing involves a plethora of intangible assets including relationships, knowledge about supplier management, logistics, shelf-space control, display, merchandizing, and sales-force training.

Since labor costs are driven mostly by local wage rates, it is difficult for the Chinese to transfer the cost advantage to retail operations overseas. One reflection of the intangible asset advantage enjoyed by established global players over their emerging Chinese competitors is the fact that the 50 largest global retailers have entered the Chinese market (Carrefour has 68 stores, for example, and Wal-Mart is close behind with 62). While local competitors are fast imitating the capabilities of the global retailers, it is unclear that Chinese retailers will be able to quickly develop the capabilities necessary to succeed outside China.

### **Consigned to perpetual catch-up?**

Overall, looking at the vector of capabilities that is required to unlock traditional sources of global competitive advantage and the barriers newcomers face to building these capabilities, might lead to a pessimistic conclusion about the likely success of emerging Chinese multinationals in the global market. Indeed many commentators, such as Nolan (2005) and Nolan and Hasecic (2000), argue that due to the lack of critical capabilities required to compete in today's global marketplace, Chinese firms can survive only at the low end of the global value chain. However, we shall argue for a much more positive view on the future global competitiveness of Chinese companies. Our reasoning is twofold. First is that the requirements for future success in the global market are changing significantly. While we do not contend that this will render the powerful vectors of capabilities enjoyed by incumbent MNCs obsolete, we do argue that changes in the global market are opening up an important gap between their existing capability set and the requirements to succeed in tomorrow's global environment. Second is that the Chinese companies have their own set of distinctive capabilities that incumbent MNCs not only lack but will face barriers in matching. Taken together, these two factors lead us to characterize the situation rather differently: as a race between incumbent MNCs who need to augment their capabilities to prosper in a new global competitive landscape, and emerging Chinese multinationals (which we dub the Chinese dragons) with the potential to exploit distinctive advantages that are already well tuned to the new global realities, but who simultaneously need to fill their historic capability gaps. Viewed in this way, China's emerging dragons are not solely playing a game of catch up. Rather, both the incumbent multinationals and the Chinese dragons are in a race to the future from different starting points. From this perspective, the prospects of the Chinese newcomers in the quest to become significant global players appear considerably brighter.

### **Changing capability requirements for global competitive success**

At least four, long-term forces are creating changes in the requirements for global competitive success. First and foremost, emerging markets, especially the BRIC (i.e., Brazil, Russia, India, and China) and VISTA (i.e., Vietnam, Indonesia, South Africa, Turkey, and Argentina) are becoming increasingly important as drivers of demand. As the *Economist* (2006) recently pointed out, by 2005 the combined GDP of emerging and developing economies had risen to above half of global GDP when measured at purchasing-power parity.<sup>2</sup> On average, developing country markets are also growing much faster than those in the developed world. The capabilities to succeed in emerging markets, therefore, will be decisive in the next round of global competition.

Yet these capability requirements are often substantially at variance with those associated with success in a world where global demand was dominated by consumers in the developed world (Pralhad, 2004). In order to unlock the mass market in these countries, a step-change in the price/performance ratio and value for money are required. Also frequently required are successful suppliers to possess capabilities in dealing with inadequate infrastructure, both hard (such as transportation and IT infrastructure) and soft (such as legal and regulatory processes). These market environments demand the capability to successfully find routes to market and communication strategies that will be effective despite under-resourced and unreliable distributors and can appeal to inexperienced, often first-time buyers. The social, cultural, and political characteristics of these markets often demand experience in “relationship-based” approaches to business, rather than certain and well-defined contracts, and possibly a greater appetite for risk. Almost by definition, because these markets are in transition, they are characterized by rapid and often unpredictable change which, in turn, demands high levels of flexibility.

As we will see, this vector of required capabilities is potentially a much better fit with the strengths of China’s emerging dragons than to those of even experienced MNCs that dominate today’s markets.

A second important shift in the global market stems from the fact that China’s 1.3 billion people (including a potentially active labor force of 800 million) cannot move from economic isolation to become an integrated part of the world economy without a downward pressure on global labor rates. And that process, which began in 1978 when China started to open up to the world, still has a long way to go: there are at least 500 million Chinese still to move from low-productivity agriculture to be efficiently employed in manufacturing and services, even before

we take account of another 1 billion that might make this transition in India and other developing countries over the next decades. While these shifts continue, and there is little reason to suppose they will stop, at the macro level downward pressure on wages will continue. These forces have led real income levels of a significant segment of the working population in the developed world to stall or even to decline (especially among less-skilled workers in the North America and Europe). Many also feel their job security is under threat. As a result, a substantial, and growing market segment of consumers in the developed world has become acutely focused on seeking out the lowest prices and best “value for money.” Again, the emerging Chinese multinationals may be well equipped to prosper from this growing segment that demands “every day low prices” and increased value for money.

Third, global retailers become ever more powerful in determining the success or failure of companies, even the most established ones. Companies such as Wal-mart, Carrefour, and Tesco have gained unprecedented influence over the global market due to their global distribution networks, and they are the gatekeepers who decide what products are available to the final customers. With the aim of strengthening their bargaining position against their existing, dominant MNC suppliers and to deliver improved value for money to their customers, it may be in the interest of these large retailers to foster the emergence of new Chinese global competitors.

The story of how Haier broke into the mass market in the U.S. is a good example. Haier’s CEO, Zhang Ruimin, recalled: “I set my U.S. general manager the target of half of the top ten retail chains in the United States. He said it was impossible—it took famous brands like General Electric, Whirlpool, and Maytag decades to do that. Eventually we came up with a way forward: we erected a huge billboard displaying the Haier brand and some of our products on the road outside Wal-Mart’s headquarters in Arkansas. Seeing the advertisement from his office window, Wal-Mart’s head of purchasing began to inquire into Haier and its capabilities.” This led to Haier working closely with Wal-Mart to fine-tune its product designs and marketing. As well as getting product onto U.S. shelves, the relationship with Wal-Mart helped the Chinese company overcome its lack of in-depth understanding of the United States and learn to better tailor its products to fit U.S. consumer needs. In exchange, Wal-Mart reaped benefits from adding a new supplier capable of offering products with outstanding value for money. Today a large proportion of Haier’s U.S. sales come from the top ten retailers—Wal-Mart, Lowe’s, Best Buy, Home Depot, Office Depot, Target, Sam’s

Club, Costco, Circuit City, and Sears. The pattern is the same in Europe and Japan, where Haier's sales are concentrated in the top five retailers. From a standing start 25 years ago, Haier is already global number four in white goods, just behind the leaders from the United States, Europe, and Japan, each with more than 100 years of history.

Fourth, as supply chains become both more interdependent with continued globalization and leaner (under the pressure to drive out buffers and reduce costs) they are arguably more likely to be positioned on a "knife-edge" in the sense that disruptions in far-flung parts of the world that used to be isolated now reverberate globally. Combined with increased geopolitical risks, the threat of terrorism, and more extreme weather patterns associated with global warming, it can be argued that global markets are becoming more volatile. Should this prove to be the case, success in tomorrow's global market will demand high levels of corporate flexibility and the capability for rapid adjustment in the face of unpredictable pressures and events. Again, the emerging dragons reared in a fast changing, volatile and hypercompetitive Chinese environment may have better capabilities to thrive than corporate bureaucracies that grew up in a more stable era where developed, and more protected national markets dominated.

In sum, these considerations suggest the changing demands of the global market will reward companies with the capabilities to succeed in an environment where developing markets comprise the largest and fastest-growing part of world demand; acutely price and value-for-money consumers make up a significant and rising segment of developed markets; global concentration in global retailing places ever-greater cost pressures on suppliers; and increasing volatility in the global environment demands ever greater high flexibility and risk tolerance from corporations. Despite obvious gaps in their capabilities to thrive in yesterday's global market, therefore, an important question is whether emerging Chinese multinationals enjoy some capabilities that will be distinctively advantageous as this new round of global competition unfolds.

### **Distinctive capabilities of China's emerging dragons**

If Chinese companies are to succeed in going global they clearly need a source of competitive advantage that not only sets them apart from established global players, but also compensates for their disadvantages as newcomers. Their Chinese home base provides a number of country-specific advantages (CSAs). Perhaps most important among these is the

benefit of a large pool of low-cost, low-skilled labor that can be parlayed into low manufacturing cost. But this alone is insufficient to act as such a source of competitive advantage in the global market because foreign companies are also readily able to exploit this low-cost labor advantage either by setting up manufacturing in China or outsourcing manufacturing and other basic operations to domestic companies in China.

Nor do potential CSAs deriving from widespread state ownership provide a sustainable source of competitive advantage capable of underpinning Chinese companies going global. Chinese companies often have hybrid shareholding structures that involve substantial ownership by a variety of national, provincial, and local governments, mixed together with publicly listed shares and equity held by management. State interests have provided many of the leading Chinese companies with initial advantages in the form of hard assets, capital, and intellectual property made available to them at more cheaply than the prevailing value of these assets on world markets. But beyond this initial endowment, significant ongoing subsidies or special support from the state cannot be relied upon for most companies. Rather, once restructured and partially privatized, they are generally forced to stand on their own feet and often compete against other firms with hybrid ownership in the market (Zeng & Williamson, 2003).

Chinese companies wishing to succeed globally, therefore, have been forced to find radical new ways of using Chinese cost advantages so as to parlay their country-specific advantage into firm-specific advantages (FSAs) which would be difficult for rivals, both foreign and domestic, to replicate (Rugman, 1981) and that equip them to successfully compete in the global market. In this section we explore three types of unique capabilities that might afford Chinese companies FSAs: "cost innovation" capabilities (Zeng & Williamson, 2007); combinative capabilities; and dynamic capabilities.

### **Cost innovation capabilities**

Cost innovation has been defined as the strategy of using Chinese cost advantage in radically new ways to offer customers around the world dramatically more for less (Zeng & Williamson, 2007). China's emerging dragons have built capabilities for various types of cost innovation.

First, they have developed strategies and organizational routines (Nelson & Winter, 1982) that have allowed them to offer customers high technology at low cost. Computer maker Dawning, for example, has worked out how to put supercomputer technology into the low-cost servers that are the everyday workhorses of the world's IT networks. This

novel strategy is difficult for established firms to replicate because their own internal processes are designed to deploy high technology into a restricted range of high-end products and segments. Established global competitors also have a disincentive to imitate this strategy for fear of interrupting the cycle whereby they maximize their profits along the product lifecycle by only slowly migrating new technology from high-priced segments toward the mass market.

Second, the emerging Chinese multinationals are finding processes that enable them to offer customers with a wide choice of product varieties or customization at prices that are competitive against incumbents' standardized, mass-market offerings. Goodbaby, for example, offers a product line of over 1,600 types of strollers, car seats, bassinets, and playpens—four times the range of its nearest competitor—all at mass-market prices.

Third, Chinese companies are developing strategies that use their low costs to reduce the break-even of producing specialty products. This enables them to reduce the risk of trying to “explode” hitherto niche markets into volume businesses by dramatically lowering prices. For example, consumer appliance maker Haier has transformed the market for wine-storage refrigerators from the preserve of a few wine connoisseurs into a mainstream category sold through America's Sam's Club at less than half the then-prevailing price. Haier has captured a 60% market share of the expanded U.S. market (measured by value). Incumbents have found it difficult to match this FSA because it would require them not only to access CSAs in China, but also to completely re-engineer their existing business models which are based around the assumption that specialty products must forever remain low-volume and high-priced.

These cost innovation capabilities are likely to provide the emerging Chinese dragons with an increasingly important source advantage in the next round of global competition we have argued is emerging, that is, one where improved value for money is key to competing in the growth markets of the developing world, the expanding value-for-money segment in developed markets, and in an era of increasing global concentration of retailing. Early signs are that it can act as a powerful tool enabling the Chinese dragons to build FSAs that, in turn, allowing them to break into the global market and begin to build multinationals capable of competing well beyond the bottom end (Zeng & Williamson, 2007).

Some specific company examples of this successful emergence of Chinese multinationals based on cost innovation capabilities include Galanz, which now supplies more than one in two microwave ovens sold in the global market; Wanxiang, the world's largest producer of

universal joints, which has established an industry fund to buy U.S. firms in auto components (it is already talking to struggling Delphi); BYD, the world's second-largest maker of rechargeable batteries; CIMC which controls 55% of the global container industry across all segments from low to high end; Shanghai Zhenhua Port Machinery Company (ZPMC), which has a 54% share of the world market for harbor cranes; and Pearl River Piano, which has won 15% of the U.S. market (40% in upright pianos) in just five years, and is the global volume leader, producing around 100,000 pianos every year.

### **Combinative capabilities**

Another capability the emerging Chinese dragons are using to meet the needs of a changing global market is the capability to deliver variety and customization to the global market at low cost. This is what Haier's CEO, Zhang Ruimin, has dubbed "re-combinative innovation": creating new, improved models by recombining existing ideas and technologies in novel ways, rather than by developing additional products internally from scratch.

For established global players with deep pockets and ambitious development staff, it is easy to be sucked into the idea that successfully differentiating means funding new R&D. But for Chinese companies with limited resources in a hurry to find a way of meeting global demand for improved value for money in both developing- and developed-country markets, a lavish, long-term R&D project is not a viable option. Instead, they look for ways to innovate on the cheap and avoid reinventing the wheel. The "not invented here" mentality is a luxury the emerging dragons simply cannot afford. As latecomers to the global market, meanwhile, learning from others anywhere in the world comes naturally. So it is perhaps not surprising that the Chinese have come up with the idea of cutting the cost of innovation through recombinative innovation.

A classic example is Haier's approach to the launch of a new, high-performance line of washing machines. Haier's observed that washing machine technology and design in Asia, Europe, and North America had historically followed independent development paths. Each had different advantages and drawbacks. European machines, for example, used less water; American ones were usually faster; while Asian models generally made better use of electronic sensors.

Lacking the baggage of decades in the industry that led companies from different parts of the world to vehemently disagree on the relative merits of the different approaches, Haier decided to make a machine that combined the best of all three. This model harnessed a single engine to

create two separate washing actions: one emulating the washing action of an American machine and the other mimicking the European approach to removing dirt. Adding the kind of electronic sensing and control circuitry found in a typical Japanese machine completed the product.

The result was a machine that used only half the water of conventional machines and achieved close to 50% improvement in cleaning power at twice the speed. As an added benefit it also reduced the wear and tear on garments by 60%. It is true that none of the underlying technology was really new. But this capability for low-cost recombinative innovation was awarded the only gold medal for any new product presented by the industry at the International Invention Expo held in France in May 2004.

### **Dynamic capabilities**

The Chinese dragons also show evidence of strong dynamic capabilities: high levels of flexibility, rapid learning, and the ability to deal with uncertain and ambiguous change. In no small part, they have developed these capabilities out of necessity, in order to succeed in the unique conditions of their Chinese home market.

Since the early 1980s, China has been implementing the economic reform that has fundamentally destabilized the old system and brought China into an extended period of transition towards a much more modern, but still in many ways uncertain, new structure. Since then, almost every aspect of Chinese society has been redefining itself and critical dimensions of society have been in a constant state of flux. This economic reform by its very nature is experimental—there is no real precedent to follow. Firms that operate in such an environment have to deal with tremendous uncertainty and ambiguity. Nothing is well defined and rules and regulations in many areas are not even written down. In fact, the national policy for economic reform in China is officially dubbed “cross the river by touching and following the riverbed pebbles.” Therefore, Chinese firms have themselves become highly experimental, and, uncertainty and ambiguity are part of their daily lives. Over these years Chinese firms that survived the rapid changes have developed an ability to operate under colossal uncertainty and successfully pursue a “trial-and-error” business practice. They have dealt with uncertainty by being highly flexible and agile: they are required by the external environment to quickly adapt to create fit between their business and the marketplace.

This high level of flexibility and agility is also deeply rooted in Chinese culture, which advocates a pragmatic approach towards issues

in life. Chinese firms are seldom rigid and dogmatic. On the contrary, they believe whatever approach that solves their problems is the best approach. This is captured in the now famous quote from the late Deng Xiaoping, who orchestrated China's first phases of economic and social reform, commenting that: "the good cat is the one that catches mice, no matter whether it is black or white"—which accurately reflects the pragmatic spirit of Chinese culture and its business.

Another peculiarity of China's corporate structures is hybrid state and private ownership. This often leads to a greater separation between ownership and control, and more management autonomy in practice, than in many established MNCs. This, in turn, means that Chinese management has the elbow room to make decisions quickly, largely independent from constraints imposed by shareholders, and that would be impossible for Western managements under the constant short-term pressure of the corporate governance and capital markets. Paradoxically, therefore, the Chinese system has given the managers of leading Chinese firms a great deal of leeway to pursue highly flexible strategies that have honed their dynamic capabilities.

Consider some examples. ZPMC, now the world's leading supplier of port machinery won an early deal by accepting the customer's demand for a delivery lead time so tight that established MNCs in the industry regarded it as impossible. Through extraordinary efforts ZPMC was on track to meet the deadline, but disaster loomed when it failed to get a slot in the shipping schedule of the only carrier with the capacity to transport the finished cranes to its customer. Facing heavy penalties and the prospect of being lumbered with a reputation for unreliability, ZPMC took a bold move to ensure on-time delivery: it bought a 60,000-tonne cargo ship for US \$2 million, converted it into a crane carrier and sailed its four-crane order direct to the customer! What was originally force majeure subsequently became a channel for reinforcing ZPMC's customer-service orientation, allowing the company to break into new markets against entrenched competitors. "Whatever needs the customer has," said the CEO, Guan Tongxian, "we will satisfy them." The company now has a fleet of eight specialized vessels that greatly improves its levels of efficiency and customer service, which in turn provides a significant competitive advantage against its rivals.

HiSense, now one of China's leading exporters of television sets, also epitomizes these dynamic capabilities. Proudly displayed in the exhibition room at company headquarters is a TV that the company customized especially for an African distributor when the company received its first international order in the early 1990s. It does not seem much

out of the ordinary until you turn it on: this TV has a special capability to automatically adjust its brightness according to the ambient light intensity. In Africa, TVs are used in a wide variety of situations—in bright sunshine and black storms, sometimes outdoors. Such a capability therefore made perfect sense. But most of the companies the African customer originally contacted had refused even to entertain the idea of light-adjustment because, far from being straightforward, such a function required R&D, redesign of the circuitry, and installation of new production equipment.

Even though the market was dominated by Japanese and Korean competitors, HiSense was able to use its flexible low-cost R&D and design capabilities to create a product that could still be profitable in a low-price emerging market despite requiring customization that competitors found too expensive. This turned out to be the market breakthrough HiSense was looking for. On the back of the light-adjusting TV's success, their air conditioners and refrigerators started to enter the market. Sales jumped from a few thousand to 25,000 appliances per month. The company was to become the second-largest player in the African market.

Up until 1995 Huawei still made most of its then-modest US \$200 million total sales to telecoms operators in rural China. However, even at that time its Chairman, Ren Zhengfei, already had an ambitious goal for Huawei to “become a world-class, leading global telecoms equipment manufacturer.” Huawei's first target was a small provider of mobile telephony services in Hong Kong, the then fledgling Hutchison Telecom. Hong Kong was also the first region in the world to demand that consumers be offered number portability—the ability of users to change to a new telecoms provider while still keeping their existing number. Reengineering the telecommunications equipment and software to accommodate this—then-novel—requirement posed challenges. Hutchison found itself boxed into a corner because the best offer Hutchison's European equipment suppliers had come up was a six-month implementation time. Huawei saw its chance to become a first-mover: it committed to complete this innovative application in just three months and at a lower cost than its competitors. By dedicating a large team of Chinese engineers looking for a cost-innovative solution to Hutchison's problem, Huawei kept its promise. With its first satisfied customer outside mainland China, albeit an operator in tiny Hong Kong, Huawei was launched on the road to globalization. Today Huawei sells US \$16 billion of telecommunications equipment, 70% in markets outside China, giving it a 30% share of the global market in 2007.

*Table 3.2* Competitive advantages of the Chinese dragons in tomorrow’s global market

<b>Trends in the global market</b>	<b>Capabilities of the Chinese dragons</b>
Increasing share of emerging markets in global demand	Cost innovation Combinative capabilities
Increasing share of value-for-money segments in developed country markets	Cost innovation Combinative capabilities
Concentration of global retailing	Cost innovation Combinative capabilities
Rising volatility in the global market environment	Dynamic capabilities and risk tolerance

This evidence suggests that the emerging Chinese dragons enjoy a unique set of capabilities—cost innovation, combinative capabilities, and dynamic capabilities—which fit well to the changing demands of the global market in the new round of global competition that has begun. These advantages are summarized in Table 3.2 above.

Of course, the competitive advantages afforded by these capabilities need to be set against the considerable advantages enjoyed by established MNCs that we described in the section Traditional sources of global competitive capabilities and advantage. Both benefit from different vectors of distinctive capabilities and at the same time suffer from gaps in the capability base, many of which correspond to their rivals’ strengths. The resulting race where each group, MNCs and the Chinese dragons, seeks to leverage their existing capabilities while compensating for their respective capability gaps suggest two sets of questions. First, what relative level of barriers does each group of future competitors face in closing their respective capability gaps? Second, is there scope for accelerating progress towards the optimum vector of capabilities through alliances between established MNCs and Chinese firms? The final sections of this chapter seek to address these issues.

### **New gateways offered by globalization for the dragons**

The gateways being opened up by globalization of the world economy that are enabling emerging Chinese multinationals to quickly fill their historic capability gaps and become a potent force in global competition

despite being latecomers include:

- The increasing use of “outsourcing” by established multinational companies.
- The increasing modularization of products and services from automobiles to software and financial services.
- The so-called “Global Knowledge Economy” and the drive to codify more and more of the world’s knowledge so that it can be handled by IT and communications systems.
- A more fluid international market for talent and professional services.
- A more open market for corporate control, allowing the Chinese to acquire foreign companies.

In the following section we explore how each of these trends is acting to open opportunities to speed up the process and reduce the risks of building powerful Chinese multinationals.

### **Outsourcing**

As global competition heats up, the cost pressures on U.S., European, and Japanese firms have led to a boom in their use of outsourcing (Brown & Wilson, 2005). Established multinationals are concentrating on the activities whose returns are most attractive and where they see the potential to build competitive advantage, leaving other pieces of the chain—both basic manufacturing and routine services—to be supplied by others. This drive toward more focused businesses in the West has also led to the global value chain being cut into ever-finer slices.

Carving up the global value chain and outsourcing less attractive activities makes a lot of sense as a way of boosting profitability. But it is also having an important side-effect: outsourcing is opening up a new gateway through which Chinese dragons can penetrate into the heart of the world economy.

In the past, when established multinationals were much more vertically integrated than they are today, a challenger was faced with replicating an entire complex system of activities in order to compete effectively. In today’s deintegrated, global value chains, where many of the participants concentrate on just one or two activities and the integrators at the top of the chain use a plethora of subcontractors and outsourced services, Chinese companies can get a foothold in the industry by capturing just one slice. Globalization and deintegration of supply chains have had the side effect of reducing the barriers to entry for new

comers like the Chinese dragons. Once they have established a beachhead they can then use the weight of their cost advantage and capabilities for rapid learning to relentlessly expand into other activities along the chain. Starting out as junior partners, they can eventually become major players.

The case of the rise of the auto parts maker Wanxiang is a good example of how high levels of outsourcing in the auto industry have opened gates through which the Chinese have been able to enter, even while their capability bases are still narrow. The company's name, which translates as "universal joint," is a reminder of the way it was able to enter the world market by focusing all its limited resources on just one product—universal joints—courtesy of the global auto makers that chose to outsource this humdrum component. Wanxiang was able to concentrate on manufacturing only universal joints and still be economically successful because falling barriers and more efficient transportation meant it could operate just one large-scale operation to serve global market demand in the remote town of Ningwei where it enjoyed the world's lowest costs but where foreign competitors probably lacked the local knowledge or willingness to operate.

Focusing all its human and financial resources on building a company specializing in universal joints allowed Wanxiang to pull in front of its rivals. With relentless attention to improving quality and reducing cost in this narrow product range, Wanxiang was able to win the business outsourced by first-tier auto suppliers such as Delphi, Bosch, and Visteon in 40 countries to become the largest supplier of universal joints in the world, producing over 25 million units per annum.

One part at a time, Wanxiang then gradually expanded its product offers from universal joints to other parts of the driveline, and then to parts of a brake system, and subsequently to the whole chassis. Fast growth in the United States based on its cost and process advantages helped Wanxiang to quickly graduate from a third-tier supplier of a minor component to become a tier-one supplier of subassemblies to Ford and GM.

Since 2003, Wanxiang has also run the American Manufacturing Fund, an investment vehicle that is devoted to acquisitions of auto components makers in the United States. It then extended its acquisition strategy to other parts of the world. By 2005, Wanxiang had acquired, merged with, or established 30 companies in 8 countries, including the United States, England, Germany, Canada, and Australia, 18 of which it controls outright.

### **Modular products and services**

Another gateway being opened up by globalization is the modularization of value chains (Fleury & Fleury, 2007). In some industries, the slicing and dicing of the global value chain is so far advanced that the chain has come to resemble a series of “plug-and-play” modules. This kind of modularity is a familiar principle in the computer business, for example. Different companies can independently design and produce components, such as disk drives or operating system software, and those modules will fit together into a complex and smoothly functioning product because the module makers obey an accepted set of design rules. When a dominant design emerges in a particular industry, modularity increases efficiency and speed of innovation. But modularization, like outsourcing, also helps frame a well-defined gateway through which emerging Chinese firms have entered the global market even while they have a limited set of capabilities.

Creating a mobile phone handset, for example, used to be a black art known only to a few global players, so entry of the Chinese dragons was forestalled. For years the big three producers—Motorola, Nokia, and Ericsson—together controlled around 80% of the Chinese market, while other foreign manufacturers, including Philips, Alcatel, Siemens, and Sony, shared the rest. Chinese companies started to enter the market only in 1998, and in the first few years struggled to gain a foothold in their home market, let alone break into the business abroad.

Since 2000, however, as the technology has matured, the value chain has been broken down into different modules, from radio frequency circuits to reduced instruction set computing chips and applications software. The interactions between each of these modules are now regulated by a codified set of standards available to all. Specialist companies such as Wavecom of France, which makes radio-frequency modules, and Bellwave of Korea, which specializes in mobile phone design, offer the core building blocks of mobile phones. This means new entrants can launch a phone by “picking and mixing” these modules to create a distinctive product.

The Chinese competitors grabbed the opportunity opened up by modularization with both hands. Companies such as Ningbo Bird, Amoi, TCL, and Konka launched attractive phones by combining third-party modules with the help of Korean design houses. Modularization has allowed the dam that had held back the Chinese for a decade to be broken; Chinese handset producers captured 55% of the Chinese market in 2003, up from a mere 8% in 2000. By 2006 Ningbo Bird announced that it had signed contracts to sell customized handsets to

ten global operators, including Vodaphone and AT&T. Meanwhile, it was rapidly penetrating emerging markets for handsets, for example, in Mexico, where it was selling phones at the rate of 300,000 per annum. Global leaders such as Nokia and Motorola are fighting back aggressively against the expansion of Chinese handset competition—obviously the game is far from over. But the message is clear: modularization provided the key that opened the global market to Chinese competition.

### **Codification of knowledge**

The corollary of global supply chains becoming modular is that knowledge becomes more codified. And once knowledge that used to be tacit becomes codified, it can be digitized. It is then only a short step into the global knowledge base and onto the information superhighway. Increased codification of knowledge and rapid advances in communications, not least the emergence of the Internet, mean that it is much easier for Chinese firms to fill information gaps and to keep up with leading-edge developments anywhere in the world. The CEOs of Chinese high-tech firms we interviewed, such as Dawning and TechFaith, all explained that they were now just a few months behind the global industry leaders in knowing what was happening on the cutting edge. For knowledge that is still not accessible by digital means, it is now much easier for Chinese companies to establish subsidiaries to act as their “eyes and ears” in hotbeds of new technology, customer applications, or competitor intelligence around the world. Many of the emerging dragons have therefore established a network of overseas offices for just this purpose. Huawei, for example, maintains a research and development center just down the street from Ericsson’s headquarters in Stockholm.

The increasing codification of knowledge is relevant to helping multinationals from emerging markets successfully execute all the generic strategies discussed above. But it is particularly important in enabling the “global first-mover” strategy because of the need to access knowledge available around the world to complement local technologies in ways that enable the company to become a global innovator.

### **Globalization of the markets for talent and services**

Another important trend that is powering Chinese firms’ ability to mount an attack on world markets, despite their lack of international experience and gaping holes in their knowledge bases, is the increasing globalization of the markets for talent and business services.

In the 1990s, it was very unusual to find an experienced Western expatriate working for a Chinese company. But as the global market

for talent becomes more fluid, Chinese companies now employ dozens, sometimes hundreds, of foreign experts both to fill their knowledge gaps in China and to help establish their subsidiaries abroad.

The Pearl River Piano Group is a good example. The company's CEO, Tong Zhi Cheng, recognized that to meet the competitive requirements of the global market he would have to upgrade the company's capabilities. His approach began by searching the world for expertise. His first hire was Charles Corey, former general manager of U.S. company Wurlitzer's piano plant. Corey's background had been in quality control, and he was regarded as a world expert. Pearl River's first foreign consultant, he ended up working with the company for more than ten years, helping it, as Tong puts it, "overcome dozens of technological problems" (*Yangcheng Evening News*, 2004). In 1993 Pearl River hired two German experts to assist in improving the quality of their toning process. The quality improvements they achieved allowed Pearl River to raise prices by 10%. Over time, the company hired more than ten world-class consultants to assist in improving every aspect of piano making, from design to production to final finish.

Looking back, Tong observed:

Without the help and guidance of these foreign experts there are some obstacles in piano making that we probably wouldn't have solved by ourselves in a lifetime! The fees of these foreign experts were extraordinarily high compared with the salaries of local people, but the technology and know-how they brought is the accumulation of hundreds of years of experience. After absorbing these insights we can use them generation after generation. No matter how high the price, it is worth it. We had to tighten our belt, learn the technology first, and then eat (*Yangcheng Evening News*, 2004: 3).

Likewise, as the market for corporate control has become more open throughout much of the world, and especially in developed economies, the Chinese dragons have benefited from increased opportunities to use mergers and acquisitions to accelerate their international expansion and to capture assets, capabilities, and know-how that would otherwise take years to replicate. When it acquired IBM's PC business, Lenovo not only quadrupled its sales from US \$3 billion to US \$12 billion per annum, catapulting it into the number-three slot worldwide (behind Dell and Hewlett-Packard), it also gained the distribution in 116 countries that IBM had built up over decades. As part of the acquisition Lenovo also secured a broad-based strategic alliance with IBM that gave

it the right to use the IBM trademark on its personal computers under license for a period of five years. Lenovo also acquired full ownership of the “Think” family of brands. Along with these benefits came the assets of IBM’s personal computer division, including over 10,000 IBM employees, 40% already located in China, 25% stationed in the United States, and 35% elsewhere. IBM also agreed to ongoing marketing-support and demand-generation services through its existing sales force of 30,000 professionals and through IBM.com. IBM Global Financing and IBM Global Services, the number-one IT services organization in the world with powerful existing enterprise channels, are preferred providers to Lenovo for leasing and financing services, and for warranty and maintenance services, respectively.

Of course, as U.S. congressional disquiet—over the attempted acquisition of the American oil and gas company Unocal by China National Offshore Oil Corporation in 2005 and Haier’s early interest when Maytag came up for sale—has demonstrated, the market for corporate control is not yet fully open to Chinese companies, even in the self-styled citadels of the free market. But the dragons will continue to knock at the doors of companies coming up for sale as they seek to use acquisitions to speed up their push into global markets. And there is mounting evidence that the door to Chinese global expansion through acquisitions is opening. According to the German consulting firm Klein and Coll, Chinese firms acquired 278 German companies in 2003 alone. Most were small, with revenues of between US \$1 million and US \$10 million, but possessed know-how, patents, respected brands, and distribution relationships that their Chinese buyers hope to use to shortcut some of the slower stages of their global capability building agenda (Rabe & Hoffbauer, 2005).

The internationalization of professional service firms has also opened a new gateway through which Chinese companies can catch up with world best practice. McKinsey & Company, for example, has large offices in both Beijing and Shanghai. Over two-thirds of their assignments are for Chinese clients. Lenovo has a US \$200 million brand-building and PR contract with Ogilvy & Mather, part of the global WPP advertising and marketing services group. Since 1997, Huawei alone has spent more than US \$70 million in consulting fees to hire IBM, Hay Group, Towers Perrin, PricewaterhouseCoopers, and FhG to help it build up management systems, introduce best practices, and improve operation efficiency in many areas. Such investment in upgrading its processes and management capabilities has been invaluable in helping Huawei keep up its fast pace of growth. Meanwhile, many of the world’s leading accounting and law firms are also working for Chinese companies.

Because China is the world's fastest-growing market for machinery and equipment (between 2000 and 2004 it accounted for nearly two-thirds of the global growth in fixed capital investment) suppliers of capital goods are falling over themselves to get a share of the Chinese market. This buying power means many Chinese companies are able to demand that their suppliers provide extraordinary levels of technical advice and support. This gives the Chinese a golden opportunity to absorb new technology and learn world best practice, accelerating the pace at which they can catch up with established multinationals.

These diverse aspects of globalization are all converging on at least one point: they are jointly breaking down the barriers that Chinese companies would otherwise face in their quest to become global players and opening up new gateways through which they can enter the global game. These gateways are particularly important in enabling the "global consolidator" and "global first-mover" strategies, as both rely on a relatively open international market for corporate control, talent and services to access the intangible assets on which these strategies depend.

Overall, therefore, it is evident that because the Chinese are entering a world economy that is already highly globalized, their potential to match the accumulated capabilities of multinational enterprises is likely to be faster, more powerful, and more pervasive across industries and markets than anything we have seen in the past—Japanese and Korean giants such as Toyota and Samsung included.

### **Strategies for incumbent MNCs to match dragons' distinctive capabilities**

Theoretically it should be possible for established MNCs to maintain their global market fit by building capabilities for cost innovation, combination, and dynamics. But can they do this at home? Or are these capabilities dependent on accessing advantages uniquely available in China? The capability for cost innovation enabling a company to deliver high technology at low cost, for example, might depend on being able to tap into sources of technology that are available more cheaply in China than elsewhere and leveraging the low-cost pool of Chinese engineers. On the other hand, dynamics capabilities and recombinative innovation could be built back at home base if established MNCs applied the same principles as the emerging dragons. These advantages do not necessarily depend on operating in China.

### **Giving China a new global mandate**

While it is possible for established MNCs to execute this response from their home base, arguably China is the best environment in which to try to hone these skills. This suggests that to get ahead in the coming battle of capabilities, MNCs can improve their chances by giving China a new global mandate within their organization. This implies transferring the global mandate for running certain businesses, products, or worldwide customer segments, including strategic decision-making, to China.

Few companies have yet taken the step of giving their Chinese subsidiaries global responsibility. One of the pioneers here is Intel. Intel has been expanding aggressively in China since the early 1990s. Around the mid-1990s, when most multinational PC firms still saw China as a market where they could extend the lifecycle of their obsolete models, Intel decided to promote the latest technology in the Chinese market. Since then it has built five plants in China, all using the latest technologies. To tap into China's distinctive technological developments, Intel Capital has invested in almost 50 companies in China and in 2005 it set up a US \$200 million Intel Capital China Technology Fund to take shares in promising technologies emerging there.

Perhaps the most significant realignment of China's role in Intel's global network, however, came in August 2005, when Intel announced that global responsibility for its Channel Platforms Group (CPG) would be shifted to Shanghai. This was the first time Intel had ever transferred the global leadership of one of its five major strategic business units (SBUs) outside the United States. Intel's rationale for giving the global mandate for CPG (whose charter is to expand Intel's worldwide presence by accelerating global channel growth through innovative business models and platform solutions tailored to meet local market needs), is instructive.

In addition to China's huge market potential, an Intel vice president William Siu noted that running the SBU from China would be particularly important in allowing it to unlock potential demand in emerging markets and in the cost-competitive segments of the developed world that required advanced technology at demanding price points. Put another way, Intel has given China a global mandate to help it leverage the unique capabilities it can access in China to help maintain fit with the changing requirements of global markets—a strategy that the headquarters alone was less well equipped to pull off.

Philips is another company that has taken the step of giving its Chinese subsidiary the global mandate for a business unit. Its global

business supplying TV sets—from R&D through design, manufacture, and global marketing—is now managed from China. General Electric, meanwhile, has transferred its global mandate for CT scanners to China—a move that was instrumental in kick-starting a virtuous cycle that has won GE Medical global dominance in the sector.

As yet, however, such examples are rare. We believe that, in joining the coming battle of capabilities, more and more multinationals will need to consider running global business lines—especially where cost innovation, combinative and dynamic capabilities could be decisive—from a Chinese base. In the quest to maintain fit with the changing requirements of the global market, it is clearly time to rethink the role of China subsidiaries in building global competitive advantage.

### **Combining complementary capabilities through alliance**

An alternative strategy for successfully responding to the changing demands of the next round of global competition might be to find a way to combine the strengths of an established MNC—its technology, systems, brands, and the experience and reach of its existing subsidiaries—with the unique capabilities in cost innovation, combination, and dynamism enjoyed by the emerging Chinese dragons. Such an alliance should be an unbeatable force in global competition. A pipe dream? In fact, this is exactly what a new breed of partnerships between Western and Chinese firms in the global arena is beginning to do. In their wake, the shape of global competition may well be set to change.

Consider the recent developments in the global auto industry. Wishing to reposition itself to take advantage of the Chinese market opportunity and to access the unique capabilities that Chinese auto makers possess in the area of cost innovation, Chrysler formed a strategic alliance with Chery on July 4, 2007. This strategic alliance is designed to capitalize on the Chery's unique strength in the areas of product R&D, manufacturing, and cost control ability in middle- and small-sized vehicles, and at the same time utilize Chrysler's strengths in branding, marketing, and management in developing major automobile markets in North America and Europe. Over the next three years, Chrysler expects to launch 12 new vehicles spanning three different global market segments as the product of its partnership with Chery by "using complementary competitive advantages to achieve win-win outcome through collaboration."

This strategy is very different from the alliance strategies that have been pursued since the early 1980s by most, if not all, previous Sino-foreign strategic partners, which focus on "using foreign advanced technologies in

exchange for Chinese domestic market access.” As the CEO of Chrysler, Tom LaSorda, put it: “Chery has tremendous competitive advantage in the R&D and production of smaller cars. Forming strategic alliance with Chery will strengthen the competitiveness of Chrysler in this segment. It is a new strategic partnership, which allows us launch new products much faster and at a much lower cost.”

For Chinese firms, what they gain from such strategic alliances are some of the critical capabilities that they lack for success in the global market including certain advanced technologies and proprietary know-how, strong brands, management and marketing skills, and other intangible assets, such as insights on foreign markets and customers. Commenting on the role of alliances in filling these gaps, an industry expert commented that even though Chery products are highly regarded in China, they are “a bit further away from being ready for the U.S. market than Chery thought.” Chinese auto makers “are woefully unprepared to provide after-sales support in the U.S. They have no comprehension of what’s required in this area.” The critical capabilities to fill this gap are what Chrysler can offer to Chery in return.

## **Conclusions**

As they globalize, emerging Chinese multinationals face significant handicaps in their quest to rapidly become significant global players, including weak brands, lack of proprietary technology, inexperience in adapting their offerings to the myriad of local consumer tastes and market environments around the world, a limited number of managers with international experience, and the fact that they generally lack well-honed organizations with global reach. But the global competitive environment is entering a new era when, in addition to the traditional requirements for global success, rewards will depend on having the capabilities to prosper where developing markets comprise the largest and fastest-growing part of world demand, acutely price and value-for-money consumers make up a significant and rising segment of developed markets, global concentration in global retailing places ever-greater cost pressures on suppliers, and increasing volatility in the global environment demands ever greater high flexibility and risk tolerance from corporations.

These changes in the global market are tilting the global competitive environment in ways that play to the strengths of Chinese companies—specifically, their capabilities in “cost innovation,” their combinative and dynamic capabilities, and their experience in building “relationship-based”

networks. At the same time, the changes in the requirements for global success present established multinationals with the challenge of building new capabilities and restructuring their existing business models.

It is incorrect, therefore, to see the pursuit of global aspirations by Chinese companies simply as a game of “catch-up” with established multinationals. Instead, the next round of global competition is a race, one in which Chinese companies are exploiting unique advantages that are well attuned to the needs of tomorrow’s global market, while attempting to bridge the historic gaps in their capability base as rapidly as possible. Established multinationals, meanwhile, are looking for ways to continue to leverage their existing competences while adapting and building new capabilities to meet the changing requirements of global competition.

Both groups of competitors face substantial barriers and frictions in their paths towards this goal that arise from the fact that the required capabilities are slow and costly to build—the very characteristics that qualify them as sources of competitive advantage. But we have argued that very phenomenon of globalization is helping accelerate the rate at which Chinese companies can fill their existing capability gaps by opening up new gateways in the form of: outsourcing, modularization, codification of knowledge, and creating more open markets for international talent and corporate control.

In this “race to the future,” the essential choice is between two main strategies: either to try to build the necessary future capabilities to fill the gaps that arise from the limitation of your own corporate heritage, or to form an alliance which brings together complementary capabilities accumulated by Chinese and Western players with the aim of maintaining fit with changing demands of the global market. Whichever path you choose, responding to the changing demands of the global market means recognizing that your current set of capabilities is likely to be found wanting unless it is expanded. In the case of established MNCs this requires an acceptance that as Chinese companies globalize they will challenge incumbency by bringing to the global competitive game a new set of capabilities in cost innovation, combination, and dynamism that is increasingly in demand among global consumers. Above all else, it will be success in achieving this shift in mind-set that determines which companies can continue to prosper when racing with the dragons in the next round of global competition.

While we are confident of these broad conclusions, this study has a number of limitations that suggest directions for future research. First might be to look beyond the case-study evidence presented here and to

conduct a large-scale survey to empirically test key hypotheses implied from this study. Second, would be to broaden the analysis beyond the limited number of industries, such as automobiles, consumer electronics, and machinery, to see whether the key theses remains valid across a more diverse sector of industries. Third, might be to test the theoretical framework based on “battle of competences” aimed at maintaining global market fit using evidence drawn from firms globalizing from bases in other developing countries such as India and Brazil that have been establishing strong presence in the global markets in a number of important industries.

## Notes

1. There is considerable ambiguity of terminology in RBV literature. Following Amit and Schoemaker (1993), we refer to capabilities as “a firm’s capacity to deploy resources, usually in combination, using organizational processes, to effect a desired end” (p. 35). Competence is used as a general term for resources, capabilities and competences as defined by various authors. Given their wide acceptance, however, use terms “vector of capabilities,” “combinative,” and “dynamic capabilities.”
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# 4

## The Corporatization of the Chinese Oil and Petrochemical Industries: Evolution without Revolution

*Olivier P. Roche*

### Introduction

This chapter discusses the relationship between structural changes, governance, and performance improvement in the so-called “privatization” of three Chinese oil companies and aims to determine if governance and long-term performance of these organizations could be improved through a “corporatization” process implemented without substantial changes in the institutional, ownership, and legal structures of the country. Before highlighting some propositions and findings, a theoretical foundation will be laid out to provide a context for the debate surrounding these issues. The first part of the theoretical background section discusses the governance issues facing companies in emerging markets in general and in China in particular. These are mainly related to ownership structures and the behavior of the various entities controlling the organizations whose shares are being listed. The second part of this section sets out the premises by providing the theoretical framework regarding the measurement of performance in terms of both the criteria used and the time period considered. It also presents the arguments that are subsequently reviewed in the context of the so-called Chinese corporatization/privatization process. The next section discusses methodology issues and the paucity of data to assess the validity and quality of the investment decision-making process in these organizations. This is followed by a discussion section which includes a descriptive review of the restructuring of the oil sector in China. Preliminary findings

indicate that the modernization process has enabled these organizations to successfully implement the state agenda without changing the fundamental nature of these businesses. For these Chinese companies, short-term improvements in performance were made possible by aligning management incentives with operating efficiency. However, such improvements are unlikely to be sustainable over a long period because the capital allocation process has remained aligned with government objectives. Capital investments did increase significantly post-initial public offering (IPO) and large dollar amounts can seem impressive on the surface; but without a way to assess the “quality” or real potential return of these investment programs, they may not be the success they appear to be. In this chapter it is posited that a partial listing represents a corporate evolution that is unlikely to improve an organization’s long-term efficiency. Such improvement could possibly be achieved through privatization, that is, a radical change of ownership control that aligns capital expenditure decisions with long-term objectives to improve the organization’s operating efficiency and growth performance.

Notwithstanding the above suggestion, the underlying rationale and the implementation process to privatize an organization or an industry are complex and involve the consideration of many parameters. A radical change of ownership may favor the interests of certain stakeholders (e.g., shareholders) at the expense of others (e.g., end-users, downstream industries, employees) and this may not be feasible in the short run. Furthermore, in the Chinese context, the long-term improvement of the efficiency of one organization or industry sector is only one variable in the economic development equation that has to be resolved by decision-makers. Therefore, the purpose of this chapter is not to offer a simplistic solution to a complex issue, but rather to highlight the ambiguities and shortcomings of a compromise solution that aims at changing the appearance of an organization to tap the vast resources of the international capital markets without, in fact, changing the substance of its governance structure.

## **Theoretical background and proposals**

### **Governance issues and the agency theory: The corporatization vs. privatization debate**

There is an abundant and well-established literature on the agency theory (Alchian & Demsetz, 1972; Berle & Means, 1932; Coase, 1937; Zahra & Pearce, 1989). According to this theory, a principal–agent relationship exists when one party (the agent) is entrusted to perform a particular task

or activity on behalf of another party (the principal) (Jensen & Meckling, 1976). The price paid for using an agent is called the agency cost and it varies depending upon the interests and priorities of the agent, as well as his/her attitude towards risk, which may not be the same as that of the principal. Two possible sets of internal mechanisms have been put forward to reduce the agency costs. The first set aims at ensuring the alignment of the principal's interest with the agent's interest through the introduction of incentive mechanisms. In one example, Jensen and Meckling (1976) propose that the amount of firm ownership by the agent be increased. This could be achieved through bonuses/shares and/or stock options. The second set involves the implementation of supervisory mechanisms to curb any opportunism the agent might consider using to deceive the principal. In this regard, Fama and Jensen (1983) detail the role of the board of directors in controlling the agent's behavior and discuss the need to establish organizational structures that separate the ratification and monitoring of decisions from their initiation and implementation. In addition to these two internal mechanisms, a firm can also be disciplined by competition from others. Capital and labor markets also monitor agent performance (Fama, 1980).

While the premise of the agency framework and its substantial contribution to organization theory is well established (Eisenhardt, 1989), a study of the Chinese example is particularly relevant since it explores a new approach that combines a higher degree of autonomy for the agent with the introduction of profit-maximized minority shareholders and a public ownership that remains dominant. The relationship between these three parties (management, minority shareholders, and the state) and its impact on overall organization performance is central to the corporatization versus privatization discussion.

Before entering this debate, however, the rationale underlying the need for change in one particular sector, the oil sector, must be examined in order to understand the dilemma facing Chinese authorities and the originality of the solution that has been implemented. During the mid-1990s, China went from being a net exporter of oil to becoming a net importer, and the gap continues to widen between domestic demand and local supply. Slightly more than 35 million tons of oil were being imported in 1997. In 2007, China produced 186.7 million tons of oil and the gap between production and consumption was about 180 million tons, placing China second only to the United States as the world's largest oil consumer (BP Global, 2008).

China is expected to remain a net importer of oil for the foreseeable future, and this change of position has had profound strategic

and economic implications for the country, particularly because the increased need stimulates exploration and development activities to produce more oil locally in an attempt to curb the exponential growth of imports. This requires massive injections of capital in order to modernize local production facilities. At the same time, since this is a core sector that is vital for the country's development, it is perceived as critical that the state remain in control. In the context of the late 1990s, the challenge for the Chinese government was to transform three state-owned enterprises (SOEs) into international players that could compare favorably with other international oil companies. This organizational change was necessary for these SOEs to tap the international financial markets and provide them with a more appropriate legal structure to develop their overseas operations. At the same time, however, the state had to remain in control to ensure that the primary objectives remained the development of the country and the satisfaction of its own energy requirements.

As the gap between the available local oil supply and the country's demand widened, the substantial outflow of foreign currency became a pressing concern since payment for oil with local currency was not an option. Faced with this challenge, the Chinese government had few alternatives available but to change the status quo. On this point, it is worth noting that while this chapter focuses on the oil industry, the governance and business issues discussed here apply to public enterprises involved in other industries as well. Indeed, beyond the oil industry, Wei (2002) describes two possible options to "commercialize" Chinese public enterprises: "The strategies of commercialization include corporatization, a scheme of approximating the private sector model of incorporation within the context of public ownership, and privatization, a scheme of total adoption of the private sector model by selling public ownership to private hands" (p. 219).

However, in an industry that is considered a strategic or core sector, the high degree of autonomy implied by privatization was not considered acceptable. By default, corporatization was considered a more appropriate means to achieve the government objectives in that it increased the autonomy of the agents while it retained government control to promote public interest. Wei's characterization of corporatization fits the Chinese context well, particularly the use of the word "approximating," because after their partial listings, the Chinese oil companies presented all the characteristics of Western corporations in terms of their governance structure (i.e., CEO, board of directors, audited accounts, etc.). However, these "cosmetic" modifications did not actually change

the nature of the organization in terms of the decision-making process for their long-term strategies. Ultimately, these organizations remain SOEs in nature. Indeed, Qian (1996) contributed a full description of the process of allocation of control rights to the corporatization debate, claiming that past reforms of SOEs in China have, in theory, delegated many *effective control rights* to agents (i.e., managers) in order to improve the efficiency and performance of their organizations. These “control rights” allow the managers (appointed by the government) to use state assets and to distribute and enjoy the income generated by these assets. However, the ultimate ownership rights, such as the selection and dismissal of top managers, approval of large investment projects, and veto of large asset disposals, still remain the prerogative of the government.

The literature is almost unanimous in reporting the shortcomings of the way the Chinese handled control rights. Qian (1996) emphasizes the fact that the allocation of effective control rights and income is not entirely clear. This has negative consequences on a country with so many stakeholders, including central policymakers, local officials, and managers. Indeed, according to Cheung and Poon (2001), these three major groups of stakeholders seek to optimize three rather different rationalities, “namely, *economic rationality* (concerns about productivity and differentiated rewards); *bureaucratic rationality* (concerns about uniformity and hierarchy); and *social distributional rationality* (concerns about egalitarianism and reducing class and urban-rural disparities)” (p. 508).

In addition to the various agendas, because the central government, with its Byzantine and multilayered Chinese administration, retains the ultimate control over the assets, there are inherent potential and actual conflicts of interest in the relationships between the three groups of stakeholders. Local officials are concerned by possible future reallocations of assets by a central planning committee; managers worry about local official interferences and the imposition of local taxes and fees; and central planners are reluctant to loosen control over the managers who have shown a propensity to relegate state assets for personal use in the past.

For Cheung and Poon (2001), the corporatization process was, from the outset, fundamentally flawed in five respects:

**(1) The property rights issue:** China’s enterprise reform has not successfully clarified either property rights or the discrete roles of state and enterprise. There is confusion because multiple government departments and agencies assume the roles of both shareholders and administrators.

The fragmentation of the ownership function has led to what Broadman (1999) calls the privatization of assets with a simultaneous socialization of liabilities. In addition, since no one is fully responsible for the company's results, managers have more autonomy and, in many cases, can abuse their power.

(2) **The agency issue:** Board members and senior members of the management team are appointed and dismissed by the government. In theory, this should provide a certain degree of control. However, more often than not, the appointment decision is based upon political designs rather than professional competence and performance. As well, many of the agencies and departments in charge of managing state assets do not receive the timely and accurate information necessary to exercise their supervisory functions.

(3) **The alignment between performance, risks, and rewards:** Management responsibilities, incentives, and rewards are not based on SOE performance; instead, perks such as housing, private cars, and other advantages are attached to various functions. The perks included in the remuneration package of these executives provide little incentive to take risks and change the status quo in these organizations; and whereas the state enterprise reform succeeded in solving the managerial incentive problem in the short term, it does not promise to be effective in the long term. The current managerial incentives lead to short-term profits; however, at the present time no system exists to ensure that the most qualified people are hired for these positions. Moreover, good performance does not necessarily imply that the manager will stay with the company because in the end, "bureaucrats rather than capitalists" retain the authority to hire, promote and fire (Zhang, 2006). As a result, managers may be making their decisions based on a different type of criteria, more political than financial, in order to please bureaucrats who can facilitate or hurt their chances for further promotion.

(4) **The investment decision:** For Child and Yuan (1996), the investment decision-making process is the litmus test to show how far the reforms have been implemented, since it involves the mobilization and allocation of substantial economic resources. There are two dimensions that describe how outside forces affect the decision-making process of an enterprise: one is the degree of institutional control over enterprise governance and the other is the degree of enterprise dependency on external resource providers. According to the authors, the key challenge is to move from a situation with a high degree of control/dependency to one with a lower degree. Institutional control/dependency is a multidimensional concept. Their article examines the institutional control

exercised by the government with regard to the three main stages of the investment process, initiation, design/detailing of projects, along with final authorization. At the same time, Child and Yuan (1996) describe multiple facets of the institutional dependency:

one is *material* in the form of requirements for the investment funding itself, for access to operating resources, licenses, and so forth. Another is *relational* in the form of personal ties between managers and higher officials which provide channels for mutual support and reciprocal favors, including support for the authority of managers who were originally appointed from above. A third facet is *cultural* in the sense that dependency is maintained by a shared sense of what is appropriate between managers and higher officials, derived from social norms, including those of the politico-economic system (p. 64).

**(5) The conflicting role of the state as the controlling shareholder:**

Wei (2002) comments that in an SOE, the state is the owner, supervisor, manager, and creditor. In this regard, even if the state limits its role to these four activities, it creates a challenging situation since, for example, owners and creditors typically have different agendas. And to make things even more complex, the state has, in addition to its responsibilities at the enterprise level, responsibilities at the macroeconomic level (e.g., social, economic, policymaking, etc.), which suggest potential conflicts of interest. The classical example is the often-mentioned reluctance of the government to lay off a massive number of employees or divest nonperforming assets of an SOE, either of which might improve the economic and financial performance of the enterprise by reducing its cost structure.

While there is broad agreement on the above shortcomings of the Chinese corporatization process, there does not seem to be a consensus regarding the government's ultimate objectives. The literature is split into two groups. The first one sees corporatization as "a first step in the right direction" that will be followed by other incremental reforms in the same direction until ultimately the Chinese system will closely "approximate" the market economy of the Western world (Ma, 1998). The second group sees corporatization as an opportunistic move that does not fundamentally change the Chinese system but rather adjusts it in order to improve its efficiency in the limited way necessary to face an environment that is becoming more and more global. With this perception, ultimately the government intends to remain in control and

therefore the “approximation” of the Western system is, and is expected to remain, distant.

Broadman (1999) belongs to the first group. He is a practitioner who was a senior economist at the World Bank (China Operation) from 1993 to 1997. He recognizes the shortcomings of the present system and very pragmatically acknowledges the challenge facing the government in its reform endeavors. That said, he proposes a comprehensive policy agenda which includes, among other measures, the further reduction of state subsidies, the creation of a policy framework for creditors to exercise their bankruptcy rights, and several measures to improve corporate governance. On this last point, his proposal is quite bold for China. He believes that an ownership diversification (such as corporatization) carried out through transparent and competitive procedures is only a first step. Investment on behalf of the state should also be managed by independent professionals whose remuneration is linked to performance. Finally, these initiatives should be accompanied by the development of a market for corporate control to provide an outlet for merger and acquisition activities to be transacted through competitive forces. Broadman (1999) concludes:

In the near term, reforms should follow a two-track approach: strengthening the overall institutional framework, especially, with respect to property rights, corporate governance incentives, and competition and other market-based forms of checks and balances; and further reducing the state’s ownership in the enterprises to minority, passive stakes managed by independent professionals. In the medium term, the state should completely withdraw from involvement in the enterprises in inherently competitive sectors (p. 55).

On this sensitive subject, the author is careful not to be too specific with regard to the timetable of these reforms.

Indeed, according to the authors belonging to the second group, a government minority position is unlikely to happen in the near future. Some reforms, such as the development of the financial markets or the improvement of the legal framework, will be implemented to improve the system. Certain improvements could also come through the introduction of bankruptcy rights and minority shareholder rights. However, mass corporatization without substantial changes in market-oriented institutions is unlikely to solve the agency issues (Zhu, 1999). Other authors, including Wei (2002), offer arguments along the same lines, not imagining that privatization of the assets in China will occur in

the foreseeable future. Public ownership has a historical significance in China and the contribution of SOEs is considered critical to the country's development. According to Wei, "in China, it is still a popular view that public ownership is superior to private ownership" (p. 225). From this perspective, the former is perceived as the economic foundation of social justice, a structure necessary to avoid social and economic polarization within Chinese society. In this context, the implementation of Broadman's bold agenda seems unlikely to occur on schedule, if at all.

### **Performance measurements and impacts of privatization**

The most influential empirical study on the effects of privatization in developing countries, by Galal, Jones, Tandon and Vogelsang in 1992, sponsored by the World Bank, yielded a positive relationship between profits and privatization. The authors analyze the actual postprivatization performance of 12 large firms, principally a variety of airlines and regulated utilities in Britain, Chile, Malaysia, and Mexico, and compare the actual performance of these firms to predictions of how they might have done had they not been divested. The study documents net welfare gains in 11 of the 12 cases reviewed which equal, on average, 26% of the firm's predivestiture sales revenue. The World Bank's empirical analysis was followed by a study on the financial and operating performance of newly privatized firms by Megginson, Nash, and Randenborgh (1994), which will be referred to henceforth as the MNR study. While "financial and operating performance" is a narrower concept than "welfare gains," the findings in both studies support the positive impact of privatization. More specifically, the MNR study provides evidence that profitability, real sales, operating efficiency, and capital investments increase significantly after privatization. In addition, firms reduce their leverage ratios and increase their dividend payments over the same period. The MNR study was limited to companies that were sold to the public through a share issue, rather than by other methods such as a direct sale to another company. Reviewing the offering prospectuses of the firms listed in the Candoy-Sekse and Palmer (1988) study, the authors of the MNR study distinguish four categories of share issues:

- (1) Flotations where the government initially had majority or total share ownership and made an initial public offering of either its entire ownership stake or of a majority voting share;
- (2) offerings where the government had majority voting control of a company that also had publicly traded shares, and the state sold enough stock

in a secondary offering to lower its stake below 50 percent; (3) transactions in which the government had voting control and allowed the firm to make a primary share issue in which it did not participate, thereby losing voting control; and (4) offerings in which the government had voting control both before and after the initial public share issue and simply sold a minority stake to private investors (Megginson, et al., 1994, p. 419).

The authors identify the first three types of share sales as “control privatizations,” and call the last type “revenue privatizations,” an important distinction that refers to the underlying motivations of the state when it decides to privatize assets. As such it adds to the discussion on corporatization versus privatization in the first section of this chapter, even though these concepts differ somewhat since, in terms of governance, a corporatization implies substantially more than simply raising revenue.

These first two reports are followed by a study by Boubakri and Cosset (1998), the BC study, which shares conclusions similar to those of the MNR study, even though there are three aspects which differ. First, the BC study sample is larger and includes a greater number of companies from emerging markets. Second, in addition to companies privatized through public share issues, it also includes those privatized through direct sales to one or several investors, as well as those privatized with a combination of both techniques. Third, in order to remove differences between pre- and postprivatization performance due to economy-wide factors and to isolate the effect of privatization from the impact of macroeconomic changes on the financial and operating performance of SOEs, the BC study uses a combination of raw and market-adjusted accounting performance measures. Although their findings are consistent with the MNR study, they offer different perspectives on some important issues, including partitioning the data into the following four categories:

1. **Competitive and noncompetitive firms**, since competition can greatly improve monitoring possibilities and also provide incentives for productive efficiency;
2. **Upper-middle-income and lower-middle-income countries**, in order to determine whether postprivatization performance varies in concordance with the level of economic development;
3. **Partially and totally privatized firms**; and
4. **Control privatizations**, in which the government surrenders voting control, versus revenue privatizations, in which the government

sells a minority ownership stake and does not surrender voting control.

A review of the above subsamples shows that “privatization yields greater benefits for companies operating in developing countries with high income per capita and for companies whose governments surrender voting control” (Boubakri & Cosset, 1998, p. 1084).

Finally, a fourth study, by D’Souza and Megginson (1999), uses the same methodology and a similar sample but during a later time period (i.e., 1990–1996, versus 1961–1990 for MNR and 1980–1992 for BC). Overall, the results for this study are consistent with the MNR and BC studies, although, by contrast, changes in employment and relative capital expenditures do not seem to increase significantly. More interestingly, however, this study documents significant differences in performance improvement between competitive and noncompetitive firms. Although the MNR and BC find relatively insignificant differences between these subsamples, the study by D’Souza and Megginson finds that firms in noncompetitive industries perform significantly better on a broad array of measurements, including profitability, efficiency, and financial leverage.

Notwithstanding the above differences, these four studies yield consistent findings with regard to the positive impact of privatization on firm operating performances (e.g., efficiency and output), as well as on profitability and dividend payments. Similarly, the findings are consistent for ownership and control: performance seems to improve more when a government surrenders voting control, as opposed to retaining it.

On the other hand, these studies have a limited analysis of capital expenditures and their impact on long-term performance. They document postprivatization increases in capital expenditures with a ratio of the amount of investments divided by sales. The fraction by itself does not explain the economic rationale behind making these investments, nor does it imply a rate of return. In addition, the period considered is relatively short; therefore, the “quality” of the investment decision-making process and its impact on the company’s long-term performance are beyond the scope of these studies. It could be argued, however, that these are key issues when reviewing different scenarios in which the government retains or surrenders control and that these are important criteria often considered by institutional investors.

Indeed, a more recent study notes that for many Chinese economists the privatization reform failed to improve the profitability of SOEs: “It is widely reported (and most people believe) that one third of SOEs

make explicit losses, another one third make implicit losses, while only one third are slightly profitable" (Zhang, 2006, p. 132). There is a wide range of opinions about the success or failure of the SOE reform. This divergence of views is not only due to the difficulties of measuring performance but also due to the fact that results depend upon the period during which performance is measured.

Jefferson and Rawski (1994) consider China's experience with enterprise reform. Their study reviews conditions prior to the reform initiatives of the late 1970s and describes the impact of the new policies on the structures, conduct, and performances of state-owned industries during the 1980s. According to these authors, the overall impact of reform on the structural environment surrounding SOE operations emerges from a review of three categories of changes: autonomy, incentives, and competition. As far as autonomy is concerned, they note that increased autonomy does not eliminate intrusive regulation; state agencies frequently refuse to allow enterprises to exercise their new prerogatives, especially with respect to foreign trade, employment and financial management. With regard to incentive, the authors emphasize the positive link between companies' profits or retained earnings and the fact that since about 1980, state-owned enterprises were allowed to retain a part of their profits. Finally, reform has meant an expansion not only of markets, but also of the challenges posed by domestic and foreign competitors. This phenomenon was previously observed by Naughton (1992) who attributes the decline of state enterprise profitability to the continuing erosion of barriers that formerly protected them from the competition of collective firms, imported products, and others within the state sector.

Jefferson and Rawski (1994) further analyze how these changes in structure affect industrial performance. From this macro perspective, their study observes consistently improving results, including varying aspects such as the expansion of overseas sales or the acceleration of innovative activities by the state industry. While acknowledging China's success in reversing a long period of stagnation in productivity, the authors are quick to point out that important weaknesses remain, especially in the two areas of finance and ownership. They believe that ownership reform has the potential to unlock further productivity gains in both state and collective industry. Unfortunately, the article lacks adequate descriptions of optimum ownership structures and the timetable of such reforms.

At a more micro level, numerous studies have analyzed firm performance. Although not specific to China, the frequently cited studies by

Ritter (1984, 1991) include an extensive analysis of the price behaviors of IPOs of common stock in many countries. Following the IPO, a high initial return is often followed by a long run of poor performance. However, it is worth noting that these studies focus on stock performance which, depending upon the time frame, is not always an accurate proxy of firm performance.

Sun, and Tong, et al. (2002) examine how government ownership affects the performance of Chinese SOEs and determine that, overall, the results “strongly suggest that government ownership has a positive and significant impact on firm performance” (p. 19). While this study is to be commended for raising one of the most important questions in the Chinese context, the analysis supporting the findings presents certain weaknesses. Methodological issues, such as the period considered (in this case just before the Asian crisis), the exact definition of stock performance and the impact of the listing location on stock performance, diminish the conclusiveness of their findings. However, if their results are accurate, then the logical question arises: Why should the Chinese government allow SOEs to go public in the first place? The authors attempt to preempt this question by commenting that the relationship may be nonlinear. For instance, when an SOE begins selling a small portion of shares to the public, the firm’s performance improves, whereas after a certain point, these sales are correlated with poorer firm performance. The authors conclude, “100% government ownership is not good, but no government ownership is not good either. The optimal government ownership may be somewhat in between” (Sun, and Tong, et al., 2002, p. 19). This, once again, leaves unanswered the critical issue of how much control the government should exercise and its impact on the firm’s long-term performance.

A more recent study by Gu (2003) provides interesting insight into the relationship between IPO performance and state ownership. The author shows that the IPOs of the early 1990s demonstrate “extremely high short-term returns, decreasing returns over time and poor long-term performance” (p. 107). This is followed by a detailed and convincing explanation of these “extraordinarily” high short-term returns which, he suggests, are caused by the lack of alternative investment opportunities, the “bandwagon effect” and the agency problem. However, the study does not explore thoroughly enough the explanation for the dismal long-term performance. The author concludes, perhaps rather hastily, that the principal contribution of his study is the revelation that IPOs in China are “systematically under-priced” (p. 107).

The above study is particularly interesting from an investor's point of view. Based on these findings, a short-term investment in these companies would seem warranted, while a long-term investment, less so. However, beyond the timing of the investment, this study is less convincing regarding the explanation of this low initial valuation, particularly for investments open to foreign investors. As any investment banker who has dealt with government officials and institutional investors knows, the word "valuation" is a "Pandora's box." If anything, the outcome of the valuation process of an SOE with complex operations is rarely systematic and almost always relative. In the H-share market open to foreign investors, there are always alternative investment opportunities available in other countries and rarely is there a "bandwagon effect." Valuation is essentially market-driven. Yet in these markets former Chinese SOEs still command a steep discount at the IPOs. This is because international investors look not only at the short-term improvement potential of each SOE, but also at an array of other criteria, both quantitative and qualitative, such as the long-term commitment of the government to improve efficiency, the organization's governance, as well as the long-term potential improvement of the company's operating performance. For that reason, there is a fine and usually blurred line between a share issue that is actually "under-priced" and one that is priced at a steep discount to take into consideration high agency costs. These higher costs reflect, among other things, the contradictory interests of: (1) a management team that tends to emphasize short-term gains; (2) a majority shareholder that has a long-term political and social agenda; and (3) other minority shareholders whose simple objective is to maximize the return on their investment.

In summary, the literature on performance has focused on short-term measurements; for the longer term, criteria are more likely to target the estimate of the amount of capital expenditures necessary than the "quality" of the investment decision, in terms of return as well as its long-term impact on the company's bottom line. While for governance some progress has been noted, it remains unclear whether or not the Chinese government intends to cross the line between "revenue privatization" and "control privatization." Currently, the objective of the Chinese government is not aligned with firms' objectives to maximize profits. As Chen (2000, p. 47) points out, "the government has strong incentives to deviate from the profit maximization objective to pursue its own goals, such as employment provision, material balance in input-output, trade promotion, political constraints and stabilization, etc., at the cost of firm efficiency" (quoted in O'Connor, Deng, & Luo, 2006, p. 174).

In this context, the author posits that the Chinese government is unlikely to cross the above-mentioned line and that: (1) corporatization represents a limited adjustment to the corporate governance structure that was made to achieve specific and limited objectives; (2) corporatization has not changed the nature of the SOEs and has left the agency issue essentially unresolved; and (3) corporatization has led to a modest and temporary increase in performance pre- and post-IPO; however, the upside potential for a sustainable long-term improvement remains elusive.

## **Methodology**

The author was involved in the listing of the three oil production organizations, Petrochina, Sinopec, and CNOOC. To support the above propositions, the privatization process of these three SOEs was analyzed based on the information they provided, for example, information memorandum and annual reports, as well as discussion with analysts of the oil sector during that period. The oil sector was selected for two reasons. First, the oil industry lends itself to cross-border comparisons. Oil is an internationally traded commodity and companies operate and compete based on a limited number of easily identifiable business benchmarks, such as lifting costs and finding and development costs. International investors seeking opportunities in emerging markets use these standardized measures to compare the performance and competitiveness of oil companies with various ownership structures operating in different political and social environments. Second, there are vital yet contradictory interests for the state to reconcile in this sector, a situation that can act as a catalyst to reveal agency flaws more easily than might others.

Looking at the privatization of these three Chinese SOEs, a three-step analytical process was followed to examine: (1) the premise of the privatization process and the industry structure prior to the IPO; (2) the limited improvement in operating performance and governance over the short term; and (3) post-IPO decisions about capital allocation and the potential impact of these on the companies' long-term performances, both in terms of operating efficiency and growth performance.

From the outset, it should be noted that while these Chinese organizations willingly disclose a vast amount of data regarding the nature and the size of their investments, they seem reluctant to discuss the benchmarks and criteria used by management and the board to approve these investments. Hence, foreign investors have learned to rely more on international comparisons as well as on a combination of qualitative

and quantitative data to assess the value and the long-term potential of an investment in an SOE. In the case of China, the use of qualitative criteria is warranted since quantitative data are unreliable, if at all available. For example, Western multinationals have been approached by Chinese oil companies as potential partners to finance infrastructure projects. In many instances these offers have been refused, either due to a lack of information, such as no mention of a rate of return, or due to insufficiently attractive returns. However, it could be inferred that the Chinese organizations that decide to proceed further with these same projects may not be improving their profitability and efficiency over the long term. Indeed, for these Chinese oil companies there is a pattern of decision-making that raises concern among the minority shareholders as to their managements' ultimate priorities. In the absence of hard data that may not be available for years to come, it is the analysis of this pattern that is used to support the propositions.

### **Discussion: The corporatization of the oil and petrochemical sectors in China**

The IPO process of the three Chinese oil companies studied spanned a period of about two years between the early 1999 and early 2001. Ultimately, all the shares of these companies were subscribed. Taking into consideration the complexity and size of these offerings, the corporatization of the Chinese oil and petrochemical sectors was considered a success for China. To achieve these objectives, the Chinese government, assisted by its foreign advisors, presented convincing investment cases to international institutional investors.

In 1983, the Chinese government agreed to remove the refining and petrochemical assets that were under the supervision of the Ministry of Petroleum and to place them under the authority of a new entity called the China National Petrochemical Corporation (or Sinopec). Sinopec's mandate was to conduct refining and petrochemical production as well as to oversee the distribution of downstream products such as polyethylene and gasoline. Shortly thereafter, the upstream assets (i.e., the oil and gas production) of the Ministry of Petroleum were transferred to form the China National Petroleum Corporation (CNPC), subsequently called Petrochina. A few years later, in 1988, a third company, the China National Offshore Oil Corporation (CNOOC), began independent operations in offshore oil and gas exploration and production. In 1996, the State Council established a fourth player, the China New Star Petroleum Corporation (CNSPC), which included both onshore and

offshore exploration and production activities but which was substantially smaller than the other three.

Based on the analysis of the Chinese oil industry market structure pre-IPO in 1999, no “industrial logic” appears to underlie this restructuring. Excluding the relatively small assets of CNOOC and CNSPC, the horizontal split of the bulk of the country’s remaining assets in the oil, refining, and petrochemical industries created two large monopolies, each involved in either upstream or downstream activities and dependent upon the other for the proper operation of their production facilities. Petrochina (upstream) had the monopoly for oil production but had to sell its output to Sinopec (downstream) who, in turn, had no other option but to buy most of its oil requirements from Petrochina. In addition, CNSPC had substantially fewer onshore and offshore activities than the other three; from the outset, its future as an independent company was uncertain. Indeed, with the opening of China to the global economy, this first attempt at a reorganization could not last for long.

A second wave of restructuring began in 1998 with the objective of successful IPOs for the three largest companies. The main emphasis this time was to greatly increase the degree of vertical integration within the two larger companies and to split China’s onshore oil and gas industry more along geographical lines. In order to accomplish this, the government approved a plan involving a massive exchange of assets, which entailed the transfer of refining and chemical production facilities from Sinopec to Petrochina and the return transfer of some of Petrochina’s oil fields. In addition, CNSPC assets were merged with those of Sinopec.

Following this second round of restructuring, the three companies were ready for a partial listing (see Table 4.1). Both Petrochina and Sinopec were vertically integrated (oil, refining, and petrochemicals) with upstream and downstream production facilities similar to other Western oil majors, while CNOOC had offshore oil production facilities comparable to other Western offshore producers. To some extent, the strengths and weaknesses of each company reflect 20 years of reorganization based on a variety of bureaucratic rationales as well as industrial pragmatism.

### **The Chinese Sisters**

The term “Chinese Sisters” is used in reference to the Seven Sisters that dominated the oil industry until the mid-twentieth century: Standard Oil of New Jersey, Standard Oil Company of New York, Standard Oil of California, Royal Dutch Shell, Anglo Persian Oil Company, Gulf Oil, and Texaco.

*Table 4.1* The Chinese oil industry market structure and major players (pre-IPO: 1999)

In %	Petrochina	Sinopec group	CNOOC	CNSPC & others
<b>The Chinese oil industry market structure</b>				
Crude oil production	67	22	10	1
Natural gas production	64	9	17	10
Distillation capacity	38	48	–	14
Ethylene production	31	62	–	7
Business focus	Vertically integrated E & P† focus	Vertically integrated refinery petro-chemical focus	Offshore E & P†	Onshore offshore E & P†
E&P† characteristics	High gas exploration potential	Mature fields Low potential	High oil and gas exploration potential	High oil and gas exploration potential
Number of employees	480,000	520,000	1,000	n/a

†Exploration and Production

### *Petrochina*

With almost all its earnings from its oil and gas exploration and production segment, Petrochina was presented as an “oil play” company (i.e., highly leveraged to oil prices). Since most of its oil fields were old, there was limited growth potential in its upstream business, with the exception of its gas segment. Downstream, the development of the company’s business was expected to be modest, since it had a limited asset base in the refining and petrochemical segments (see Table 4.2). The IPO performance in the winter of 1999 was, nevertheless, considered a success. With highly inefficient operations, Petrochina was presented as a “cost-cutting story” with great potential. The implementation of substantial savings at the operating level was expected to deliver a significant boost to the company’s bottom line.

### *Sinopec*

Earnings from this company were subject to chemical and refining cycles as well as oil prices. It presented a balanced upside potential by

Table 4.2 Strengths and weaknesses

Company	Sinopec integrated	Petrochina integrated	CNOOC Offshore E&P
Market size			
Upstream	Small	Dominant	Small
Downstream	Dominant	Moderate	n/a
Growth outlook	Good	Moderate	Excellent
Leverage to crude oil price	Moderate	High	High
Leverage to chemical cycle	High	Low	n/a
Asset portfolio quality			
Upstream	Low	Fair	Good
Downstream	Fair	Low	n/a
Competitive threat	Moderate	Low	Low
Cost-cutting program impact on profitability	High	High	Low
Operational efficiency	Poor	Poor	Good
Governance	Low	Low	Medium

combining revenue growth with cost efficiency improvement. However, Sinopec sustained the same inefficiency as Petrochina, creating the impression that, in the short term, the value of the company resided in its ability to reduce its expenses. In the long term, however, Sinopec was more than just a “cost-cutting story.” The company’s network of gas stations is situated in the geographical location with the best upside potential for growth (i.e., along the coastal area) and at the time of the IPO, in the fall of 2000, the company had benefited from a few years in a highly protected environment and had succeeded in positioning itself as the leader in one of the fastest growing markets in the world. Profits from this segment were expected to increase by more than 100% over a period of five years.

### CNOOC

With oil and gas exploration and production as its core activity, CNOOC was presented as an “oil play” with high growth potential. Unlike the other two companies, it had a relatively uncomplicated structure and was only involved in oil and gas production. At the time of its IPO in early 2001, the company had already streamlined its operations and was considered extremely efficient, even by Western standards. As a result, it was presented as a “growth story” with a very substantial upside potential. It had substantial proven and probable reserves of oil; fresh capital

was now required to develop the production of its oil fields. Overall, a double-digit growth in the company's production was considered reasonable over the next ten years.

Once the three companies were listed, the first phase was successfully completed. As mentioned, CNOOC's operations were already streamlined prior to its IPO; however, the anticipated substantial gain in efficiency that provided the central argument for the successful privatization for the other two integrated oil producers did not materialize. In addition, certain capital allocation decisions made around this time raised serious concerns regarding their long-term performance potential and the sustainability of their efficiency gains.

### **Improvement in operating performance and governance: Mixed results**

With the exception of CNOOC, which produces only oil and gas, all the other companies used in the following benchmarking exercise are "integrated" oil companies. This means that their production facilities include not only oil and gas fields (Exploration and Production, or E & P), but also refineries, petrochemical plants and networks of gas stations. That said, the E & P divisions of these integrated companies are significant contributors to their overall profitability; therefore, the assessment of the performance of these segments is important for the efficiency valuation of each within its peer group. In the oil business, there are many measures available to estimate a company's cost efficiency, but finding and development costs and production costs (also called lifting costs) are the most important ones needed to arrive at an estimate of a company's upstream cost structure. Since the management of an oil company has little or no control over the price of oil and gas, effective control of production costs is one of the most important profit variables that management can influence over time.

Table 4.3 seeks to systematize the comparison of various operating functions and other fundamental characteristics of these integrated oil companies. It shows that, with the exception of CNOOC, the Chinese Sisters did not compare favorably with other SOEs in the former Soviet Union and in Latin America. For Petrochina and Sinopec, growth potential is limited. In addition, and unlike the other companies, improvement in their outlook can only come from a reduction in their finding and development costs and lifting costs. Indeed, looking at their cost structure, there is ample room for improvement. Three years after their listing was successfully completed, cost efficiency improvement has been marginal, at best.

*Table 4.3* Governance and company fundamentals

<b>Foreign oil producers</b>	<b>Petrobras</b>	<b>Perez</b>	<b>Lukoil</b>	<b>Surgutneftegas</b>
Country	Brazil	Argentina	Former Soviet Union	Former Soviet Union
Market size				
Upstream	Dominant	Medium	Dominant oil	Dominant gas
Downstream	Dominant	Medium	medium	medium
Growth outlook	Excellent	Excellent	Good	Good
Leverage to crude oil price	High	Low	Very high	Very high
Leverage to chemical cycle	Low	Moderate	Low	Very low
Asset portfolio quality				
Upstream	High	High	Fair to high	Fair to high
Downstream	Fair	Fair	Fair	Fair
Competitive threats	Moderate	Moderate	Moderate	Moderate
Cost-cutting program impact on profitability	Low	Moderate	Moderate	Moderate
Operational efficiency	Good	Highly efficient	Fair to good	Good
Governance	Medium	Medium/high	Low	Low

For example, after initial successes in the reduction of its lifting costs, Petrochina’s performance leveled off considerably. In fact, improvement in cost efficiency was limited post-IPO. Lifting costs at US \$4.32/boe (or barrel of oil equivalent) in 2003 (Bacani, 2003, par. 24) were still considered high by oil analysts. Subsequent data seems to confirm that cost efficiency remains a concern. The 6-K forms provided to the Securities and Exchange Commission in March 2008 reveal that “in 2007, the lifting cost for the oil and gas operation of the Group was US \$7.75 per barrel, representing an increase of 15.0% from US \$6.74 per barrel in 2006” (SEC, 2008, p. 16). The reason for such a substandard performance has to do with the economic agenda of the majority shareholder. In the case of Petrochina, the company has invested a substantial amount of capital in the development of aging oil fields in the northern part of the country. As a result, the domestic production has remained at

a constant level, instead of falling rapidly, thus reducing the need for high-priced imports by that same amount of dollars. However, the additional extraction is costly and, as a consequence, operating costs are likely to follow an upward trend in the foreseeable future. This risk was highlighted in 2007 by Fitch Ratings which affirmed Petrochina's Long-Term Foreign Currency Issuer Default Rating at "A" but at the same time noted the rising lifting costs that were largely due to the expansion of production activities in unproductive and aging fields, including some located in remote areas with access issues (Fitch Ratings Agency, 2007, pp. 28–29).

The same logic applies to Sinopec, which had lifting costs in excess of US \$6/barrel at the time of its IPO. The company has been unable, for political and social reasons, to shut down its less efficient fields and facilities. To be fair, lifting costs of all major oil producers have increased substantially since 2004. With higher oil prices, there is a strong incentive to lift oil from any source, even if it means higher operating costs. In this scenario, the focus shifts from cost efficiency improvement in the upstream facilities (i.e., oil) towards cost efficiency improvement in the downstream production facilities (i.e., refineries and petrochemical plants).

Having said that, a comparison with other oil companies' upstream cost structures can be revealing. The lifting costs of Petrobras in Brazil were around US \$7.65 towards the end of 2007 with most of its oil exploration activities offshore where operating costs are usually much higher. The Russian company Lukoil, which has more onshore activities and is more comparable to Petrochina and Sinopec, had lifting costs around US \$3.58 per barrel during the same period.

In regards to the governance, the single line at the bottom of Table 4.4 provides a summary of an extensive analysis made by analysts in the oil

*Table 4.4* Capital expenditures (in RmB Billion)

Company	Sinopec integrated	Petrochina integrated	CNOOC offshore E&P	Total
2002	42.5	75.5	6.8	124.8
2003	47.4	86.4	8.3	142.1
2004	68.2	98.9	12.8	179.9
2005	67.3	124.8	16.6	208.7
2006	83.9	148.7	23.0	255.6
2007	109.3	181.6	26.9	317.8

*Source:* Securities and Exchange Commission, company annual reports

industry on various parameters including ownership structure, operating transparency, financial transparency, management quality, dividend policy, and payment, influence of minority owners, relations with other stakeholders and more. Since ownership structure is only one of many parameters in this analysis, these results lead to some interesting observations, including that less state ownership does not always guarantee superior governance.

In the early 2000s, the privatization of oil industry assets was most advanced in Argentina, where the government had no stake in companies involved in the country's energy sector. By contrast, Brazil's government was still in a position to wield significant control over oil and gas as the controlling shareholder of Petrobras, still owning about 55% of the voting capital. That said, Petrobras was meant to operate at arm's length from the government, which had directed the company's board to pursue a strategy that would add value to all shareholders. At the time of this evaluation, the management had a track record of doing just that over a period of three years, which explains the relatively positive rating of the company.

Russia's oil and gas sector was ranked as the second most privatized; however, while this is positive, it does not necessarily imply better governance. Indeed, a lack of corporate governance rules reduces the potential advantages of private ownership in this country. The management and representatives of the financial industrial groups that gained almost unbridled control over the privatized oil companies (often without paying full market value for their stakes) have used their power to take advantage of minority shareholders and further entrench their own positions. As a result, and although the government controlled only 15% of Lukoil, the Russian companies ranked poorly on governance.

Although the situation is quite different in China, the Chinese Sisters ranked very close to their Russian counterparts, albeit for different reasons. In China the government is still clearly in control. On the one hand, it has a strong incentive to push its energy companies towards rapid modernization and to keep their affiliates profitable, enabling them to make the necessary capital investments to accomplish their objectives. On the other hand, the political and social agendas have not changed. In addition, and although senior management of the three companies have stock options, their holdings do not reach the level of their Russian counterparts. Therefore, for international investors, the major risk in China was not perceived as one in which senior management would make decisions in their own interest, but rather one in

which they would make decisions in pursuit of government priorities, at the expense of the minority shareholders.

### **Assets allocation and capital expenditure: Serious concerns**

Following the IPOs, capital expenditures increased substantially, and this noticeable trend supports findings made in the extant literature. In terms of investment size, the corporatization process seems to have had a positive impact on these three companies. However, investments expressed in volume do not reveal essential information with regard to the capital allocation process and the anticipated long-term performance of these large investments.

Unfortunately, since 2004, the investment patterns of the three Chinese oil companies would tend to show that the concern highlighted by international investors was not unfounded. Indeed, there is evidence that these companies have been investing in projects or making management decisions that do not maximize either long-term returns or their shareholders' wealth. The adopted investment strategies lend credence to the possibility that corporatization was simply a means to achieve an end which, in this case, might have been to tap private resources in order to finance what could more accurately be called a public agenda.

If this is the strategy that has been pursued, then two consequences seem possible. First, operating efficiency improvements may be capped; and second, the long-term potential of these companies may be limited. The following three types of transactions support the above conclusions.

**(1) Inability to divest nonperforming assets with low internal rate of return (IRR) and high operating costs.** During the restructuring process of the oil and gas, refining and petrochemical sectors, Sinopec inherited many old and inefficient production facilities, particularly in the downstream sectors; many of the 25 refineries and 17 petrochemical plants that existed at the time of its IPO were estimated by foreign engineers to be subscale (*ICIS News*, 2002). From an economic point of view, it is deemed preferable to shut down refineries or petrochemical facilities that cannot be streamlined or upgraded. In that case, to boost its long-term return, the company could divest domestic assets with marginal rate of return and increase its investments in the highly lucrative E & P segment via overseas acquisitions. However, post-IPO investment decisions would tend to show that Sinopec is not always prepared (or not allowed) to exit from marginal businesses.

**(2) Investment in aging or subscale assets with low growth potential and high operating costs.** In a typical example, Petrochina invested

a sizable amount in the aging Daqing oil field located in the northern part of the country. It is the company's largest field, providing 48% of their total liquid production. Despite substantial investments, the field's production declined between 1997 and 2002. As a result, the company's overall domestic production went down over this period. Furthermore, the recovery techniques for old fields are very expensive and, as noted earlier, this plays a role in Petrochina's struggle to reduce operating costs in its upstream businesses. As noted earlier, Chinese Sisters' inability to reduce the operating costs of their oil production facilities and to eliminate inefficiencies is less of a concern during periods of high oil prices. Nevertheless, during those periods the inefficiencies and high operating costs of the downstream facilities that use oil as feedstock (i.e., refining and petrochemicals) are highlighted, as is the awareness of the lack of an economic rationale underlying long-term investments in these less profitable downstream industries, such as has happened in the last few years. Indeed, the recent decision by CNOOC to buy small refineries in the Shangdong province is difficult to understand from a business point of view. These "teapot" refineries can typically process less than 10,000 barrels a day; therefore, they are not considered economically viable and many counsel that they be shut down (Su, 2007). However, for political and social reasons, such as the fact that jobs are scarce in some areas, these refineries are allowed to continue to operate.

**(3) Investments in new assets with lower rates of return.** CNOOC is involved in the development of pipelines and liquefied natural gas (LNG) facilities without firm industry regulatory structures or definitive off-take agreements in the Hong Kong and Guandong markets. For projects of this size and cost it is normal business practice to secure off-take agreements that specify price and quantity before construction begins; the internal rate of return (IRR) of the project is thereby known in advance. Unfortunately, this was not the practice followed in China; the government was confident that the pipeline network was in the country's best interest, so the SOEs were encouraged to finance and start the construction of these infrastructure projects without knowing their overall profitability.<sup>1</sup> Meanwhile, foreign multinational companies such as Shell, ExxonMobil, and Gazprom, apparently not convinced by the feasibility studies, the economics and the potential earnings of these projects, have thus far declined participation. Activities in the upstream business (i.e., oil and gas extraction) are more profitable and deliver higher returns, compared with the infrastructure construction projects such as pipelines. Hence, Western E & P companies are

reluctant to be involved in the financing of large infrastructure projects unless such involvement is necessary for logistical reasons.

CNOOC is not the only Chinese oil company investing in new assets with low or uncertain returns. In 2006, Petrochina announced the groundbreaking ceremony or the beginning of the construction of the Tarim chemical fertilizer production project. This project is located in a remote area close to Mongolia and the new facilities, according to the company's management, should boost the economic development in the region. Fertilizer production facilities often offer low return since their output is sold to farming communities at subsidized prices. However, given the sensitive nature of the fertilizer industry and the need to maximize volume to avoid costly imports, this investment was allowed to proceed. Subsequently, in 2007, Petrochina announced its plans to build a pipeline from Turkmenistan to China to transport the natural gas. At that time, the management declined to say how much capital would be required to finance this project.

While the above investments are very different in nature, one notable constant is that in each of these cases management seemed unable or unwilling to provide basic estimates on the project's IRR or the return on average capital employed of the entity in charge of its development.

Last but not least, there are those investments that have "no return." For instance, in 2004 the government announced the creation of a 375-million barrel strategic reserve. At that time China had begun to build the first of four storage facilities which ultimately would be holding a total of 102 million barrels. These initial facilities, the first of which was completed in 2006, were later to be supplemented by underground facilities in various locations around the country. China's long-term goal is to store 90 days' worth of net imports or about 400 million barrels. At this stage it is not clear how the infrastructure facilities and the purchase of the oil itself are being financed. Since these projects are strategic, by definition, data are confidential and the information is unlikely to be made available to foreign investors. However, one way or another, Chinese oil companies may be "convinced" to contribute resources to these projects of national interest.

## **Conclusion**

For the first round of privatization, China seems to have successfully achieved its main objective. There has been a substantial injection of much needed capital from the general public and foreign investors to

finance the modernization of SOEs; however, these organizations continue to be plagued with the same governance and performance issues, even after this partial privatization. More fundamentally, this capital injection has been achieved without compromising the position of the Chinese state as ultimate owner and, in most cases, without compromising its social and political agenda.

What remains to be seen, however, is how well the Chinese government can succeed in raising further capital overseas while meeting the increasingly stringent requirements of investors without jeopardizing its position as a majority shareholder. Without any progress on property rights, legal protection for its minority partners, etc., further sales of shares will be difficult to achieve on the international markets unless the shares are issued at a discount. In this context, the fine line between systematically under-priced offers and IPO shares offered at a substantial, but negotiated, discount could become even less clear in the years to come.

As to the performance of the “privatized” companies, the results are mixed. Short-term improvements were made possible by aligning management incentives with operating performance. However, such improvements have a limited impact over a longer period of time, due to the fact that the capital allocation process remains aligned with government objectives. Within a completely different system and for different motives, the Chinese “solution” has actually triggered governance issues that are similar to the ones facing companies in the Western world; namely, the maximization of short-term performance at the expense of the long-term development of the organization’s net worth.

The above statements offer important implications for investors in China and for the timing of their investments pre- and post-IPOs. For SOEs that have been corporatized, the author proposes that the long-term potential for improvement remains limited unless and until a more drastic change of ownership occurs. In other words, at the time of the IPO, an investment decision should be based on the actual valuation of the company and the short-term improvement in efficiency that can realistically be achieved. Beyond the short-term and positive momentum triggered by high oil prices, the upside potential is usually capped by management decisions that continue to reflect the interest of the majority shareholder (i.e., the state).

In May 2007, Petrochina disclosed that it had discovered one of the largest oil fields ever located, the Jidong Nanpu field, with the equivalent of more than 7 billion tons of crude oil and natural gas reserves.

At that time, the market outlook for the company looked particularly favorable: the West Texas Intermediate oil prices were averaging about US \$70 per barrel with a projected oil price average above US \$100/barrel for 2008. This positive outlook generated an upward momentum for Petrochina's share prices. Yet over the same period, long-term and institutional shareholders such as Fidelity and Berkshire Hathaway sold their shares of the company. It is not clear at this stage what triggered such significant and emblematic divestments. Petrochina's controversial and highly publicized investments in Sudan may have been a factor. This vote of no-confidence may also reflect the prevailing view among these long-term investors that, since its IPO, Petrochina has benefited in the short run from the support of the state and of a protected market. However, moving forward, as the government attaches more importance to the development of the country's own energetic infrastructure and to safeguarding consumers' interests, the three Chinese Sisters may be forced to invest in projects with low returns and to sell their products at prices which do not properly reflect their cost structure, thus capping their long-term profitability.

In view of the above, one could certainly argue that a more drastic change of ownership, the type that follows a privatization, for example, would increase the pressure to change the governance of these organizations in a more substantive way. Perhaps the management team and the members of the board of directors would be selected based on different criteria. As a result, the return on investment threshold and the investment decision-making process could be substantially altered. Furthermore, institutional and large investors could benefit from obtaining timely information as to the rationales underlying large capital expenditures. Eventually, these changes would positively affect the long-term efficiency and financial performance of these organizations.

As mentioned in the introduction, the purpose of this chapter is not to offer a simplistic solution to a complex issue. The outright privatization of organizations in strategic sectors, such as oil, is unlikely to be on the agenda, at least in the short-term. It would involve far-reaching changes in pricing mechanisms for critical products like fertilizers that are still controlled by the government, and this may not be acceptable for certain stakeholders, such as farming communities. As well, the energetic independence of the country may be perceived as far too important for the state to relinquish its control. That said, one could contend that, short of a control privatization, the long-term performance of these organizations would be enhanced by a more transparent investment decision-making process. Without relinquishing control, a better disclosure of strategic

options as well as the major assumptions underlying large capital investments would show that a minimum level of “due diligence” was completed prior to implementation. This would represent a step towards a closer “approximation” of the private sector model so well described by Wei (2002). Ultimately, it should also translate into long-term performance improvement through the elimination of the many undisclosed inefficiencies that still plague these organizations.

## Note

1. Off-takes arrangements were subsequently secured; however, the timing of their signatures reveals their marginal relevance at the time the investment decision was made.

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## **Part II**

# **International Trade and Investment**

# 5

## An Assessment of the Effects of Institutional Change on Chinese Outward Direct Investment Activity

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### Introduction

Since the instigation of the “open-door” policies (*gaige kaifang*, 改革开放) in 1978, China has experienced three decades of considerable economic and institutional reform. These reforms have been directed towards changing the domestic industrial structure and increasing the degree of integration of China’s economy and its businesses into the global economy. At the same time, China has evolved from a position of marginal relevance in terms of its outward foreign direct investment (OFDI) levels to becoming an important source country, especially among developing countries. To illustrate, the Chinese Ministry of Commerce reports that domestic firms invested US \$21 billion abroad in 2006, raising China’s OFDI stock to US \$ 90 billion (MOFCOM, 2007).

Given this backdrop, it is important for scholars who study historical trends in Chinese OFDI to understand the relationship between institutional change and outward investing firm behavior. This chapter represents a step in this direction. In particular, we assess the development of China’s OFDI over 30 years through the lens of institutional theory.

Increasingly in the field of international business scholarship, institutional theory has been applied to explain patterns and behavior of internationalizing firms. Institutions are important to international business, because they determine “the rules of the game” and shape the environment in which business takes place, as well as the transaction costs that firms incur as they extend their activities abroad (Peng, 2003;

North, 1990). However, much of the work on the application of institutional theory to international business tends to focus on *inbound* foreign business, especially in the case of China. This type of analytical approach has been rarely used to explain OFDI from China (e.g., Child & Rodrigues, 2005; Hong & Sun, 2006). In this chapter, we adopt an alternative standpoint to extant studies on Chinese OFDI by examining why, how, and to what extent institutions impact on outbound business activities of Chinese firms. China represents an ideal lens through which to examine the relationship between institutions and OFDI because its economy was a closed, planned system until 1978, then evolved into a “two economic systems, one country” arrangement during the 1980s until the mid-1990s, and then became much more market-oriented from the mid-1990s onwards (Naughton, 1995). In this process, the economic policy regime of China moved from direct intervention by the state in business decisions and the “command” of business outcomes to one in which the state influences and directs the market using more arm’s-length rules and a wide set of specialized administrative bodies (Bach, Newman, & Weber, 2006). Consequently, the institutional environment in which Chinese OFDI takes place has evolved considerably over the past 30 years, the key developments of which can be charted across three distinct period of policy direction. Though the institutional environment changed only incrementally for most of this time, we can see today a fundamental shift in the institutional setting compared with the late 1970s (Peng, 2003). In particular, since the instigation of the “Go Global” policy in 1999 (described in detail below) a plethora of regulatory changes and measures to support OFDI have been implemented at both national and subnational levels. As we explain, these developments have contributed greatly to the internationalization of Chinese firms since 2000.

The contributions of this chapter are threefold. First, it contributes to general understanding about the applications of institutional theory to international business and Chinese studies by explicitly relating institutional change in China to outbound FDI. Second, by synthesizing extant understanding of the key government actors working “behind the scenes” and their roles and activities in relation to OFDI, and by charting the decentralization and localization of relevant regulatory measures, the study provides a comprehensive analysis of institutional transition concerning a key aspect of China’s political economy. Third, the study provides a framework for policymakers and practitioners to understand the factors that have shaped the character, scope and strategic intent of Chinese OFDI activities in the past, presently, and into the future.

This chapter is organized as follows. The next section introduces our analytical framework which builds upon on work by North (1990), Peng (2003), Oliver (1997), and Buckley and Casson (1976) on institutions in general and international business applications in particular. This is followed by a description of the principal government actors that determine the institutional environment within which China's OFDI occurs. In the section on Government support and involvement, we describe the evolution and changes in OFDI regulations over the past 30 years and the range of responsibilities of the major government actors. These developments are discussed in the section on discussion in the context of the analytical framework we presented earlier. The sixth section summarizes and concludes this chapter and suggests areas where further research is required.

### **Analytical framework**

Changes to China's institutional environment concerning OFDI are analyzed using an institutional theory perspective. According to North (1990) institutions define the formal and informal rules that constrain or drive economic interactions and growth within an economy and between economies. Institutional theory offers considerable explanatory power in international business research because the external institutional environment in which a firm operates, together with its internal resources and capabilities, shape to a considerable degree its competitiveness (Oliver, 1997). This is especially the case in transition economy contexts where institutional change is often a defining characteristic. Institutions impinge on firms through the creation of market imperfections and through regulatory and social pressure. These two dimensions are discussed in more detail below starting with a static view and, thereafter, through the introduction of a dynamic dimension, which, we argue, is essential for an analysis of China given the extent of market reforms since the 1980s.

Theory asserts that firms create competitive advantages for their domestic market by internalizing and exploiting market imperfections which help them to create unique and difficult to replicate resources (Oliver, 1997; Hymer, 1960; Kindleberger, 1969). Likewise, to invest internationally, firms must be capable of internalizing and exploiting market imperfections across borders (Buckley & Casson, 1976). This includes the ability to take advantage of market imperfections in the host market and the ability, through the exploitation of domestic imperfections, to create and sustain international competitiveness. The

latter requires that domestically acquired competitiveness is internationally transferable within the company without friction. Such market imperfections can be created through government actions and intervention (North, 1990; Brewer, 1993). Examples include the support that governments can give to selected firms in the form of special access to human and financial resources and directives that influence investment decisions. Differences in the transaction costs associated with accessing such government activities can create an artificial heterogeneity among companies within industries (Oliver, 1997) and between different governance models of companies, which is incongruent with the internal resources of the firms in question. With regard to outward investment this means that some domestic firms may benefit from (intentional or unintentional) government induced market imperfections that support their internationalization strategy.

Pressure to comply with regulatory and social expectations, on the other hand, can undermine the competitiveness of a firm. Social expectation refers to a "doing as usual" strategy that is socially and politically acceptable (Oliver, 1997). Suboptimal business and other social relationships are nurtured and maintained by both parties because of the social equity invested in them in the past and the danger of sunk costs. Organizations that are "trapped" in such a situation may neglect alternative relationships and business practices because of uncertainty about how they may develop and lose established linkages. Acceptable firm behavior is evident in investment decisions undertaken by a firm that reflects the expectations that political structures and society have of the firm concerning, for example, its size, status, or business scope. But such investments do not necessarily have to correspond with a long-term sustainable business development plan. Regulatory pressure can lead to greater homogeneity among firms of a particular industry by imposing the same standards and requirements across all firms (e.g., through corporatization and public listing; Oliver, 1997). This can undermine the search for uniqueness as a way to achieve and sustain competitiveness. In such circumstances, the internationalization of firms may be at least partly driven by the perceived need to comply with regulatory, political, and social expectations rather than be underpinned by a coherent and realistic business rationale. Government incentives may "sweeten" compliance.

These static perspectives provide an important background for the development of a dynamic perspective to understanding the interplay between institutions and businesses. In times of institutional transition (which can be defined as "fundamental and comprehensive changes

introduced to the formal and informal rules of the game that affect organizations as players”: see Peng, 2003, p. 275), existing market imperfections will be substituted by new ones and the configuration of regulatory and social pressure will change. As we have seen, China, for example, has moved from a planned and autarkic economy towards an open, internationally integrated, and more market-based economy since the 1980s. As part of this process, its institutional environment has also evolved, shifting from a relation-based governance system towards a more rules-based one (Li, Park, & Li, 2004; Peng, 2003). In a relation-based governance system well established connections with influential parties (i.e., government officials) can often help to secure preferential treatment in general and, in particular, access to scarce resources (Li, et al., 2004). Often, firms will tend to be locked in to such relationships as they bring benefits to all parties involved. Breaking up such a network would therefore create immense sunk costs for the firm and, to a lesser extent, to government officials. For outsiders, such a relationship represents an entry barrier because they do not receive equal treatment and cannot rely on publicly available information (Li, et al., 2004). A rules-based governance system is characterized by objective and transparent decision-mechanisms and procedures.

Though institutional change happens, it does not have to occur homogeneously. Krug and Hendrischke (2008) argue, for example, that China is today characterized by three different types of economic regime that are emerging at a local level which can be described as “arms length,” “developmental state,” and “pre-corporatist.” These regimes have devolved during the process of institutional transition because of different institutional innovations and incremental change that has taken place at different rates across regions of China depending on the location-bound mediation and negotiation of local businesses and local government officials. These (sub-national) regimes support businesses differently, attract different types of businesses, and can cause agglomerations of business activity (Krug & Hendrischke, 2008). Therefore, such subnational variation is likely to affect outward investment uniquely.

As a consequence of these dynamic and heterogeneous changes, the external dimension of the competitiveness of a firm changes. Taking the existence and variations of market imperfections and external pressure over time in a company’s home market as the backdrop for our analysis, we assess the evolution of the institutional environment that has shaped Chinese OFDI until today. In doing so, we address the call by Child and Rodrigues (2005) that institutional aspects need

to be incorporated more thoroughly into analyses of Chinese OFDI. Moreover, we advance the work of Buckley, Clegg, Cross, Liu, Voss, and Zheng (2007) and Deng (2004), among others, by providing a more comprehensive analysis than hitherto of why and how the wider institutional realm has affected Chinese OFDI over time.

### **Political and administrative actors**

There are a number of key political and administrative actors in China that impinge upon OFDI by setting the laws and regulations confronting outward investing firms and by being actors in the investment approval process. The main actors are the State Council, the State Administration for Foreign Exchange (SAFE), the Ministry of Commerce (MOFCOM), the People's Bank of China (PBC), the National Development and Reform Commission (NDRC), and the State Asset Supervision and Administration Commission (SASAC). The State Council drafts and develops law and regulations as well as coordinates national economic development. It also manages foreign affairs and concludes bilateral treaties. It decides upon major economic policies and liberalization measures, although policy initiatives may come directly from subordinate organs such as SAFE or MOFCOM (Zhao, 2006). SAFE was established in 1979 under the Bank of China and is responsible for administering the usage and flow of foreign exchange.<sup>1</sup> SAFE consolidated activities and responsibilities that were formerly distributed across several ministries in relation to the supervision of China's foreign exchange control (Lin & Schramm, 2004). Although the authority over SAFE moved in 1982 from the Bank of China to the newly created central bank, the People's Bank of China, SAFE remained relatively independent until a subsequent government restructuring in 1998 (Lin & Schramm, 2003; Shi & Gelb, 1998). The restructuring led to SAFE strengthening its OFDI-related mandate in the following ways: (i) the reporting of the balance of payments (BOP) data to the State Council and the International Monetary Fund, (ii) recommending foreign exchange policies to the PBC, (iii) overseeing the transfer of foreign exchange out of, and into, China under the capital account of the BOP, and (iv) managing China's foreign exchange reserves (Zhang, 2004).

MOFCOM was established in its current form and function in 2003.<sup>2</sup> Its major responsibilities with regard to Chinese OFDI relate to: (i) the supervision of Chinese OFDI by drafting and implementing policies and regulations and considering nonfinancial OFDI projects for approval; (ii) bilateral and multilateral negotiations on investment and

trade treaties and representing China at the World Trade Organization and other international economic organizations; (iii) ensuring the alignment of China's economic and trade laws with international treaties and agreements; and (iv) coordinating China's foreign aid policy and relevant funding and loan schemes (Munro & Yan, 2003). These functions provide MOFCOM with direct and indirect opportunities to guide and influence the scope and direction of Chinese OFDI. Indeed, MOFCOM issued the first regulation on Chinese OFDI as early as 1984 (Zhang, 2003).

The PBC was established as China's central bank in 1983 and is currently directly supervised by the State Council (Zhang, 2004). The PBC is responsible for the overall financial policies and rules and dealings with international financial organizations such as the World Bank. It also supervises and manages China's foreign exchange reserves (Chang, 1989). With respect to the latter, the PBC imposed significant changes to China's foreign exchange regime in 1994, providing it with tighter foreign exchange control (Barale & Jones, 1994). The combined powers over domestic monetary and financial policies and foreign exchange control give the PBC the ability to arbitrage one function against another. Careful management of China's foreign exchange reserves used in international investment projects by Chinese companies has helped the PBC to fulfill a number of domestic monetary objectives, including a stable and low inflation rate (because domestic enterprises could be encouraged to spend Yuan to reduce pressure on the monetary supply side: Pettis, 2005). Prior to 1992, the PBC regulated the financial service sector and hence the foreign investments of financial institutions. From 1992 onwards, the securities, insurance and banking services were spun off into separate regulatory authorities such as the China Banking Regulatory Commission, which today approves OFDI projects by Chinese banks (Pearson, 2005).

The National Development and Reform Commission (NDRC), sometimes referred to by its old name, the State Development and Reform Commission, emerged from the institutional structure of the State Planning Commission in 2003 (Munro & Yan, 2003). The NDRC is the main government body that designs, regulates and coordinates the economic development and industrial policy of China. As part of this function, it regulates government investments in domestic industries (Pearson, 2005). One key function of the NRDC is to develop "strategies, goals and policies to balance and optimise [...] China's overseas investments" (Munro & Tan, 2003, p. 4). As part of this role, the NDRC has issued guidelines concerning the access of domestic firms to soft

loans to finance their internationalization (Schwartz, 2005). In a similar vein, the NDRC, in cooperation with MOFCOM, has published a host country catalog that lists the countries for which the Chinese government subsidizes FDI projects (Zweig & Bi, 2005). The NDRC is also involved in the approval process of Chinese OFDI. Large-scale Chinese OFDI projects in industry sectors such as natural resources and other projects involving larger amounts of foreign exchange require prior investment approval from the NDRC. The threshold has changed over the years and depends on the industry concerned (see Table 5.1). The involvement derives from NDRC's responsibility for maintaining equilibrium in balance of payments.

A relatively new governmental authority is the State Asset Supervision and Administration Commission (SASAC). SASAC was established by the State Council in 2003 to represent the Chinese government in non-financial state-owned enterprises (SOEs). As the Chinese government is the ultimate owner and investor in SOEs, it has wide-reaching responsibilities and powers (Naughton, 2006; Pearson, 2005). Prior to SASAC's establishment, its functions were divided between the State Economic Trade Commission and several ministries and other government authorities that controlled and supervised "their" companies independently of each other (Munro & Yan, 2003; Pearson, 2005). In this respect, it is the objective of SASAC as an investor to ensure that the SOEs under its supervision remain competitive and increase their profitability and the value of the assets under their control (Pearson, 2005). However, it remains questionable if such an institution can fulfill this type of objective since its supervision is split: the national SASAC directly controls nearly 170 national SOEs while subnational SASACs act at a provincial level (Clarke, 2003; Naughton, 2006). Both types of SASAC offices exercise their power through the appointment of senior managers to SOEs and through involvement in "major decision-making" of firms under their supervision. A considerable number of senior management positions are actually appointed directly by the Chinese Communist Party (Naughton, 2007). This structure and the strong influence of the Party do not necessarily lead to the appointment of the most suitable, but rather the most rewarded, managerial candidates, and this has a number of implications for the company's domestic and international operations. OFDI projects by SOEs under the supervision of SASAC are unlikely to be decided without its explicit approval. The decision to invest overseas, either through a greenfield investment or an acquisition, can be regarded as a "major decision" that impacts on the company's profitability and the value of the involved assets. Any OFDI

project by an SOE therefore touches upon the key objectives of SASAC. Examples of Chinese multinational enterprises (MNEs) under the direct control of SASAC (each of which rank among the Top 100 developing country MNEs) include, China National Offshore Oil Corporation (CNOOC), China National Petroleum Corporation (CNPC), Sinochem Corporation, China State Construction Engineering Corporation, China Minmetals Corp, China Cereals, Oils and Foods Company (COFCO), and TCL (through SASACs' holdings in Huizhou Municipal Investment Holdings) (UNCTAD, 2006). SASAC also controls smaller SOEs such as China Aviation Oil, which has operations in Singapore, and the international trading company, Sinosteel.

The basic model of involvement of government agencies in the formal approval process is depicted in Figure 5.1. Each outbound investment project has to pass a thorough approval process in which several institutions are involved. The key political actors in the two stage process are the State Council, MOFCOM, SAFE, and the NDRC. Although the process has been modified several times over the past 30 years, the basic procedure remains unchanged to date. A firm applies, first, to SAFE to use foreign exchange earnings abroad and, second, to MOFCOM or the NDRC for the approval of the project business case (Yin, Stender, & Song, 2003; Horsley, 1990). The first step is necessary because SAFE is responsible for the administration of sourcing, conversion, remittance

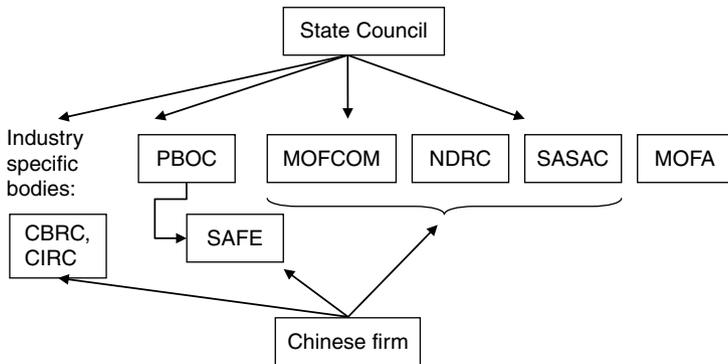


Figure 5.1 Institutional actors in China's OFDI framework

Arrows from the firm indicate organizations it has to correspond with for OFDI approval. Arrows from the State Council to institutional actors indicate the hierarchical structure. CBRC: China Banking Regulatory Commission CIRC: China Insurance Regulatory Commission MOFA: Ministry of Foreign Affairs

and monitoring of the repatriation of foreign exchange and investment profits (Yin, et al., 2003).

The division of responsibility between state actors is not always clear, however, and has changed numerous times during the institutional reforms process. Overlapping duties, conflicting interests (between and within bureaucracies), and the multiple government authorities that an outward investor has to approach illustrates the potential of the institutional framework to hamper the development of Chinese OFDI as uncertainty and lack of transparency increase transaction costs. Good relationships with the relevant government bodies may help to ease this tension. However, it is easy to envisage that smaller SOEs and privately owned companies without well established relations (*guanxi* 关系) with the administrations in particular may become discouraged by such an institutional environment. The descriptions of the administrative actors also reflect the numerous restructurings of the Chinese government system to accommodate the transition towards a market-oriented economy (Pearson, 2005).

Having introduced the major government actors, we now turn to the institutional transition under which Chinese OFDI has taken place. This is notable for the evolution of a rules-based regulatory framework. In our discussion, we show how each of the political actors that comprise the institutional environment for OFDI, and the regulations they have enacted, have helped to influence the spatial distribution, amount, and number of OFDI projects undertaken by Chinese MNEs since 1979.

Chinese OFDI is described as having developed in five distinctive phases. The classification follows adjustments to China's political and regulatory environment towards OFDI. We examine three main phases, and five subperiods, as follows (paraphrasing the famous "crossing the river by feeling each stone" metaphor of Deng Xiaoping's reform policy): (1) 1979–1991—"Tasting the water" (which is divided into two subperiods: 1979–1985, and 1986–1991), (2) 1992–2001—"Finding the stepping stones" (and subperiods: 1992–1998, and 1999–2001) and (3) 2002 onwards—"A bridge is built" (see Table 5.1 for a summary).

### **1979–1991—"Tasting the water"**

This phase comprises two subperiods. The first subperiod (1979–1985) encompasses the beginning of the open-door policy, the first international steps by Chinese investors, and the first attempt by the authorities to establish formal rules for OFDI. The second subperiod (1986–1991) encompasses the first attempts by the Chinese government to encourage OFDI administratively and refine the institutional environment.

Table 5.1 Key developments in the evolution of China's OFDI regime

	<b>Main regulatory measures</b>	<b>Impact on OFDI</b>	<b>Political direction</b>	
Pre-1978	Closed economy and restricted international business involvement as part of the economic planning system	Virtually no OFDI	Prohibition	
Phase 1 "Testing the water"	Subperiod 1	First official regulations issued by MOFCOM	Hardly any changes; OFDI by selected companies	Implementation of first national regulations; developmental state; relation-based
	Subperiod 2	Clarification and extension of regulations by MOFCOM and SAFE	Hardly any changes	Cautious liberalization steps
Phase 2 "Finding the stepping stones"	Subperiod 3	Shifting of investment approval from the State Council to MOFCOM and NDRC	OFDI takes off and subsequently contracts	Decentralization and tightening of regulation
	Subperiod 4	Instigation of the "Go Global" policy	No immediate impact of either investment flows or numbers of projects	Liberalization and increasing transparency
Phase 3 "A bridge is built"	Subperiod 5	Clarifications on investment credits, preferred host countries and local responsibilities; Subnational regulations	Sharp increase in OFDI; OFDI by state-owned and private enterprises	Decentralization and liberalization; manifestation of a rules-based administration of OFDI

*Subperiod 1: The open-door policy and early internationalization (1979–1985)*

From the outset of the “open-door” policy, the Chinese government endeavored to create an institutional environment to attract foreign MNEs to China *and* encourage Chinese companies to invest internationally (Zhang, 2003). The State Council authorized selected state-owned trading companies under the auspices of MOFCOM and subnational economic and technology cooperation enterprises to establish foreign affiliates (Ye, 1992; Tan, 1999). Such projects had to fall into one of the following four categories: (i) securing access to domestically scarce natural resources, (ii) accessing and transferring technology to China, (iii) enhancing export possibilities for Chinese companies, and (iv) augmenting managerial skills through “on-the-job” training (Guo, 1984). Particular support was given to the establishment of a foreign joint venture to enable the Chinese partner to transfer technology and managerial knowledge back to China and to attenuate business risk.

The objective of allowing a certain amount of controlled Chinese OFDI was to ensure that it became an integral part of the Chinese economy and contributed to social welfare. The extent to which OFDI benefited the Chinese economy or signalled a departure from socialistic ideology was heavily debated among politicians and policymakers during the 1980s, and this reflected the classic tension between the potential (diversionary) impact of OFDI on domestic investments and economic development (Zhang, 2003; Buckley, Clegg, Cross, & Voss, 2008). This conflict of interest is also reflected in the corporate reforms of the 1980s, which were constrained by the emphasis laid on state ownership and state control of industrial production as well as the reluctance by bureaucrats to diminish their power and interests in the companies they supervised (Chow, 1993). The nature of the economic system and international inexperience did not yet favor a liberal approach to OFDI.

Chinese macroeconomic policy, since the 1970s has focused on the accumulation of foreign exchange earnings. Only regulated OFDI could achieve this objective and avoid what was deemed “unnecessary” outflows of hard currency. Companies that had been granted an export license had the right to retain a share of foreign exchange earnings under the auspices of the exchange retention scheme. Under the retention scheme, exporting firms were allowed to hold a certain amount of foreign exchange earnings while the remainder had to be returned to the Chinese government. The retention scheme favored firms in the coastal provinces and certain industrial sectors, especially

light industry, over others, and these firms could consequently accumulate considerable amounts of foreign currency entitlements. The retention scheme only permitted a firm to use the amount of foreign exchange earned, with the prior approval from SAFE. The firm itself therefore did not own foreign exchange as such (Lardy, 1992; Guo & Han, 2004; Lin & Schramm, 2003; Shan, 1989). An application for an outward investment project which included the usage of hard currency was therefore not possible for every Chinese firm. The number of potential Chinese international investors was “artificially” limited to a small “club” of (successful) international trading firms which “earned-to-use” foreign exchange. To circumvent this policy, trading companies established foreign affiliates without government approval to (illegally) keep hard currency earnings outside of the Chinese administrative system but within their international network of affiliates, and to draw on these earnings when appropriate (Shan, 1989). Indeed, legitimate foreign exchange transactions could be undertaken only in accordance with the national foreign exchange plan. The plan involved MOFCOM and the Ministry of Finance, SAFE, the Bank of China, the State Planning Commission and the State Council (IMF, various years). Once a foreign exchange usage application had been approved by SAFE, an investment project application had to be made to MOFCOM or to the NDRC. Projects of an investment value of less than US \$10 million could be approved by MOFCOM. All other investment projects had to receive NDRC endorsement (Zhang, 2003). The application involved the submission of the following documentation: a feasibility study, a certificate over the usage of foreign exchange from SAFE, a statement from the Chinese embassy in the target country, an investment recovery plan and documentation on the legal environment of the target country. All profits generated abroad had to be remitted to China (IMF, 1992).

These restrictive measures partly explain the slow growth of Chinese OFDI in the early 1980s despite an overvalued Chinese Yuan which is normally found to encourage OFDI as foreign assets become cheaper (Cushman, 1985; Froot & Stein, 1991). Lack of participation in the global economy, an inward-looking development strategy and tight foreign exchange control meant that Chinese firms were not encouraged to establish foreign affiliates during this period despite political rhetoric to the contrary. Another factor was the unclear regulatory situation. Only in 1984 was the first regulation on OFDI issued, while the principal regulatory framework on the control and approval of OFDI was published in 1985.

Despite the unfavorable institutional environment, more than 100 foreign affiliates were established by Chinese firms between 1979 and 1983. These operations were mainly located in industrialized countries (Guo, 1984). International joint ventures were, for example, established in the service sector such as in banking and technical consultancy, and in trade-related activities. Early investments abroad were conducted by companies such as China International Trust and Investment Company (CITIC), one of today's major Chinese MNEs. CITIC was established by the State Council in 1979 with the explicit goal of investing and diversifying internationally. Sinotrans, the logistics company, established an affiliate in the USA in 1980 and China National Metals and Minerals Import and Export Corporation, the specialized trading company, opened offices in Hong Kong and the United Kingdom (Zhang, 2003). By the end of 1985, Chinese companies had invested around US \$900 million abroad, signifying a strong growth on the US \$44 million of FDI stock owned by Chinese MNEs just three years earlier (UNCTAD, 2007). This subperiod also witnessed the first three international acquisitions by Chinese firms (Thomson, 2008).

#### *Subperiod 2: Government OFDI encouragement (1986–1991)*

With the issuance of new regulations by MOFCOM in 1985, restrictive policies on OFDI eased and the approval process was opened to SOEs other than trading companies (Zhang, 2003). However, companies still had to undergo a formal administrative approval process, which included the evaluation of sufficient financial and managerial capacity of the investing firm and evaluation of the foreign joint venture partner (Wong & Chan, 2003; Tseng & Mak, 1996). SAFE and MOFCOM refined their regulations on OFDI and issued in 1989 the first regulation on the usage of foreign exchange earnings. New regulations increased the transparency of documentations needed for the OFDI approval process. In 1991, the NDRC issued circulars to strengthen the administration of outward investment projects and on the drafting and approval of project proposals and feasibility studies. A questionnaire survey conducted at the time by Lu Tong (cited by Cheng & Zhou, 2007) indicates that the NDRC policy served as an important inhibitor of outbound investment by Chinese firms.

Nonetheless, Chinese OFDI grew somewhat during the late 1980s, and this was supported by a change in the official Chinese development strategy, which shifted from an import-substitution orientation to export-led growth orientation. Further assistance was provided by the Chinese government for “in kind” OFDI projects. Such projects

involve the export of physical equipment, know-how, and raw materials, for example, instead of foreign currency earnings. “In kind” projects therefore did not need the approval of SAFE but only of MOFCOM or the NDRC. De facto, overseas projects considered to be of national strategic importance enjoyed special foreign exchange-related privileges. Qualifying Chinese firms were able to readily purchase foreign exchange and receive loans denominated in foreign currency from domestic financial institutions during periods of tight foreign exchange control (Cross, Buckley, Clegg, Voss, Zheng, Rhodes, & Liu, 2007).

### **1992–2001—“Finding the stepping stones”**

The second phase in the evolution of China’s institutional environment for OFDI covers the period when China moved towards greater liberalization and marketization (1992–1998) and the major institutional push towards OFDI which was formalized with the instigation of the “Go Global” policy (1999–2001).

#### *Subperiod 3: Deng Xiaoping’s southern journey (1992–1998)*

In early 1992, Deng Xiaoping, de facto leader of China from the late 1970s to the early 1990s, traveled to Southern China in an effort to express his support to economic reforms and market opening (Naughton, 1993). This landmark journey strengthened the liberal politicians in the China Communist Party (CCP) and bureaucrats in government agencies, and marked a departure from the restrictive and constraining policies that characterized the aftermath of the Tiananmen Square incident in 1989. As a consequence of this newly gained liberalization momentum, Chinese OFDI officially became part of China’s national economic development plan and was publicly endorsed by the then chairman of the CCP, and later president of China, Jiang Zemin (Zhang, 2003). Encouraged by these measures, local and provincial government authorities increasingly engaged in overseas business and allowed companies under their supervision to establish affiliates abroad. Government officials were also driven by the conviction that internationalization would help Chinese firms to increase their competitiveness and to circumvent trade discrimination by host countries (Tan, 1999). This came to a halt, however, when MOFCOM became suspicious of defalcation of state assets through the establishment of questionable international ventures (that effectively gave rise to illegal privatization) and in the wake of the Asian financial crisis in 1997 (Ding, 2000). In reaction to this crisis, MOFCOM tightened the approval procedure and enforced better screening and monitoring of each outward investment project.

This policy was supported by SAFE and its local offices ceased approving foreign exchange for OFDI projects in 1998 (Wong & Chan, 2003; Lin & Schramm, 2003, 2004). The precise effect on Chinese OFDI of the approval ban, however, is not clear. For example, official MOFCOM data published in the *Almanac of China's Foreign Economic Relations and Trade* record a number of formal approvals for the years 1997 to 2000. This discrepancy may indicate divergent de jure and de facto realities in China at this time.

At the beginning of this subperiod, (in 1992) the thresholds that define which government organization was responsible for approving Chinese OFDI were adjusted. MOFCOM and NDRC became responsible for investments of up to US \$30 million while the State Council had to approve any OFDI project above this value (Zhan, 1995). Likewise, in 1995, the investment value threshold for the approval of foreign exchange in an outbound investment project was adjusted upwards. Formerly, applications for an investment project under US \$1 million were dealt with by SAFE's regional offices and only projects above US \$1 million by the national SAFE. Following a SAFE Circular in 1995, the decentralization of foreign exchange usage began. SAFE branches in 14 selected provinces and municipality were given the right to approve investments projects of up to US \$3 million in value.

Further reform measures were concerned with Chinese currency and foreign exchange earnings. The foreign exchange retention scheme and swap markets were abolished in January 1994 and a buyer-seller market was introduced instead (Guo & Han, 2004; IMF, 1994). With the liberalization of 1994, the Chinese government moved from an "earn-to-use" to a "buy-to-use" foreign exchange policy regime and opened the "club" to outsiders. Foreign exchange entitlements could be bought from SAFE to finance OFDI projects regardless of whether or not the applicant firm had previously generated foreign exchange earnings through trade. This was a crucial development for Chinese OFDI, since the investment approval process had always begun with an investigation by the relevant authorities of the foreign currency involved. It is likely that this liberalization step enabled more Chinese companies to finance their international investments by converting domestically earned Yuan into foreign currency.

#### *Subperiod 4: Pre-WTO accession adjustments and the "Go Global" policy (1999–2001)*

The period towards the end of the second phase of the evolution of China's institutional framework for OFDI was characterized by

contradictory policies toward outward investments. On the one hand, the Chinese government tried to consolidate excessive and poorly managed OFDI projects by strengthening both the outward investment approval process and capital controls. On the other, firms in the light industry sector (textiles, machinery, and electrical equipment) in particular were encouraged to internationalize (Wong & Chan, 2003; Wu & Chen, 2001). In 1999, MOFCOM sought to encourage Chinese firms to establish assembly plants overseas to support the export activities of Chinese firms. The same objective was followed when MOFCOM selected 33 experimental SOEs in the main export sectors to receive priority state assistance to invest abroad—of which 13 firms were in consumer electronics (Wu & Sia, 2002). Additionally and, arguably, most importantly, the Chinese government instigated the “Go Global” (*zou chu qu* 走出去) policy in 1999.<sup>3</sup> The policy provided a strong, public endorsement for outbound investment to be promoted and it was subsequently adopted by various governmental and administrative actors. The policy was officially supported by the then Chinese President Jiang Zemin and Chinese Premier Zhu Rongji and became formal policy by its incorporation in the 10th Five Year Plan (FYP) in 2001 (Zhu, 2001; Child & Rodrigues, 2005). The “Go Global” policy was issued to encourage and support (financially and administratively) Chinese firms to internationalize, with the aim of strengthening their competitive advantage and, recursively, the economic restructuring and development of China. This policy was also a reflection of the perception held in China that the country had by now become sufficiently developed to take its place in the global economy, as symbolized by the international economic strength and scope of its multinational enterprises (Zhao, 2007). Some 512 companies were identified to be of key importance to China’s international business aspirations and have consequently received preferential attention and support (Wu & Sia, 2002).

### **2002–present—“A bridge is built”**

The third and last phase of our analysis covers the period when reform measures were introduced after China joined the World Trade Organization (WTO) and the “trickling-down” of further institutional measures to support OFDI.

#### *Subperiod 5: Accession to WTO and “Go Global” implementation (2002 and onwards)*

Since China’s accession to the WTO in 2001 and the announcement of the “Go Global” policy, the business environment for Chinese enterprises

has changed dramatically. WTO accession necessitated that China gradually opened once protected domestic markets to comply with the accession protocols and WTO's "most favored nation" rule (Qin, 2007). With the adoption of these commitments, Chinese enterprises across many sectors have since faced increasingly stiff competition from foreign invested enterprises, as well as from foreign importers. Growing competition in domestic markets is likely to force many Chinese companies, especially private-owned enterprises which lack domestic political protection, to consider new markets abroad, and this is likely to provide fresh impetus to Chinese OFDI flows (von Keller & Zhou, 2003; Taylor, 2002).

Against this backdrop, the Chinese government has undertaken several initiatives to facilitate Chinese OFDI. First, the investment approval process has been further decentralized to fall under the scope of sub-national government authorities, while investment in a small number (currently seven) selected countries only require approval at a national level. Second, the government has simplified and abolished the feasibility study as part of the application documentation, but instead stresses market forces and the managerial capabilities of the investing enterprise. Third, control of international capital movement has been eased (FT, 2004). Finally, internationalizing enterprises are no longer required to deposit a security at SAFE and are allowed to raise money on international finance markets to help fund their OFDI activity (Wong & Chan, 2003).

A further liberalization step involved significant changes to the foreign exchange approval process in 2002 and 2003. Some 26 approval requirements were repealed by SAFE at this time. This was followed by the abolition of a foreign exchange risk assessment and the foreign exchange deposit and exchange rate risk analysis (Zhao, 2006; Yin, et al., 2003; EIU Viewswire, 2004). SAFE also allowed Chinese firms to use foreign exchange of up to 15% of the total investment sum to cover setup cost prior to its final decision (Deschandol & Luckock, 2005). The foreign exchange cap available to domestic enterprises for outbound investment was abolished by SAFE in 2006 (Stender, et al., 2006). A number of other decentralization measures were also implemented. Six coastal provinces were selected in October 2002 on a trial basis, where foreign exchange usage for OFDI by domestic firms could be approved by the local SAFE branch. After a successful trial period and successive geographical extension, this policy came into force nationwide in 2005 (Zhao, 2006). It gives local SAFE branches more autonomy and should shorten the approval process. A similar measure was undertaken

by MOFCOM. The national MOFCOM office is now only involved in approving investments by companies under the supervision of the central government (for example, those under the supervision of SASAC) and investments by any company in seven selected target countries (including Iraq, Japan, and the United States). Investments in other destinations are evaluated by provincial MOFCOM offices (MOFCOM, 2004). Resource-seeking FDI exceeding an investment value of US \$30 million and nonresource seeking FDI exceeding US \$10 million have to receive approval from the NDRC, while resource-seeking investments above US \$200 million and nonresource seeking investment above US \$50 million have to be approved by the State Council (Norton Rose, 2005; Deschandol & Luckock, 2005; Yu, et al., 2005). Regardless of the size of investment, the State Council and the NDRC are also responsible for any investment in Taiwan and countries that have no official diplomatic relationship with China (Yu, et al., 2005).

In a statement on existing regulations concerning the OFDI approval process, MOFCOM (2005) stated that Chinese firms are guided via the approval process to invest in a feasible project in an economically and politically stable host country that has concluded a bilateral treaty with China on investment and taxation. The investment should also carry benefits for the firm and for China's economy by: (i) promoting China's exports of goods and services, (ii) enhancing the firms' technological capacity and R&D activities, (iii) enabling the firm to create and establish an international brand (MOFCOM, 2005).

This macromanagement of Chinese OFDI is likely to be facilitated by the so-called "Outbound Catalog" issued jointly for the first time by MOFCOM and NDRC in 2004. This catalog lists the governments' preferred host countries and industries and tries to direct Chinese firms to invest in them by offering preferential access to finance and tax concessions and other incentives (Deschandol & Luckock, 2005). The catalog has been updated twice since its introduction.

The number of government authorities involved in the approval process and OFDI strategy has increased. The key authorities remain the national SAFE, MOFCOM, NDRC offices and, to a lesser degree, the State Council. SASAC and the Ministries of Finance and Foreign Affairs, together with the CIRC and CBRC are increasingly more involved. These organizations are complemented by their respective subnational offices which started to promulgate local regulations from 2002 onwards. It has been indicated that the formal approval process is likely to evolve further over time into a pure registration and monitoring process, easing overseas investment further. The liberalization from a system of

microcontrol to macrocontrol mechanisms have de jure significantly eased the internationalization of Chinese firms via OFDI.

### **Government support and involvement**

Presently, the involvement of the Chinese government in OFDI does not remain on a macroinstitutional level, however. The provision of an “acquisition fund” and cheap loans influence the investment decision of Chinese MNEs and constitutes an invaluable source of competitive advantage (Antkiewicz & Whalley, 2006; Child & Rodrigues, 2005).<sup>4</sup> Micromanagement is evident in the annual appraisals by MOFCOM and SAFE to assess the performance of overseas affiliates (MOFCOM, 2004; *People's Daily*, 2002). Whether, future approvals of outbound investment and expatriation of staff are granted or not is based on the outcome of this evaluation. Such types of “parental” involvement by the Chinese authorities in the decision-making of state-run *and* non-state-run enterprises is said to be common practice (Ring, et al., 2005; Child & Tse, 2001).

The “Go Global” policy has also impacted on China’s foreign policy. Numerous high-profile state visits by China’s leaders to developing countries since 2000, especially to the African continent, and the establishment of the *Forum for China-Africa Cooperation* to smoothen the way for Chinese companies to enter potential host countries are evidence of this development (Liu, 2001; Fernando, 2007). During state visits, China has signed a number of wide-ranging economic cooperation agreements and, foreign aid schemes, such as an agreement on exploration rights for CNOOC in Kenya. The Africa link is further politically supported through a newly established investment fund worth up to US \$5 billion designed to encourage Chinese businesses to invest in Africa (Zafar, 2007; *China Daily*, 2007). Another example is China’s participation in the *Technical Cooperation among Developing Countries* and *Economic Cooperation among Developing Countries* programs of the United Nations Development Programme. One of China’s explicit objectives in this cooperation is to foster the “Go Global” agenda and, in particular, to support and encourage privately owned Chinese enterprises to invest in Africa (Zhao, 2007). To this end, China has established the China African Business Chamber for private businesses and seeks to conclude double taxation treaties and bilateral investments treaties with a number of African nations (TCDC Update, 2005, 2006). Moreover, China’s official development aid is generally allocated to infrastructure projects which are often conditional on the receiving country awarding a

Chinese company with a construction contract, as has been evident in the cases of Cambodia, Ethiopia, Laos and Sierra Leone, for example (Pheng & Jiang, 2003; Zhan, 1995; Frost, 2005; FT, 2005, 2006a, 2006b). China's official development aid strategy supplies Chinese companies with international contracts, and this helps them to establish an overseas market and set up affiliates with government-backing under low risk conditions.

## **Discussion**

Taking as a basis our analytical framework on institutional change and its effects on transactions costs and market imperfections, and by relating this to our review of the development of Chinese OFDI from an institutional perspective, some interesting findings are revealed.

First, it is clear that the institutional environment within which outward investment from China occurs has undergone significant change over the last 30 years. From a position of outright prohibition of international direct investments that generally prevailed in the 1970s, rules were slowly introduced in the 1980s to provide the foundation for an objective, transparent and independent administration of OFDI activity by the Chinese authorities. However, to date such an administration has yet to be achieved. Despite liberalization and decentralization measures and political assurances, the institutional environment for OFDI remains in transition and is yet to become a fully open, transparent, and independent guiding environment without constraints on Chinese companies. For example, the division of investment approval responsibilities between the NDRC and MOFCOM is often perceived as unclear for potential Chinese investors and local government agencies, and the process as such continues to be perceived by firms as time-consuming, resource intensive, and not designed to encourage overseas investment (CAITEC & WDA, 2005; Long, 2002). Thus, relational access to governmental bodies that can grant necessary approvals remains an important asset to companies. Nonetheless, this indicates some recent advancement towards a new rules-based governance system of OFDI vis-à-vis the 1980s and 1990s when less detailed rules were in place and when private enterprises internationalized despite a *de jure* prohibition. Examples include the concerted rush by local governments and their companies to internationalize in the early 1990s and the internationalization of the Chinese white goods manufacturer Haier in the mid-1990s. As a consequence, the OFDI regime has been characterized by market imperfections that arise from the need of firms to be well

aligned with government officials and the status and economic rank of the company. Having the status of a state-owned enterprise was thus positively associated with preferential treatment (e.g., the selection of 33 experimental SOEs in 1999 and the identification of “promising” 512 firms later). These deficiencies were removed in two stages with the opening of the “outward investor club” in 1994 and relaxation of the prohibition on OFDI by private enterprises in 2003. However, this limitation has simply been replaced by other constraints, such as restricted access to resources (e.g., capital, human capital, and infrastructure).

Second, it has become evident that decentralization of the OFDI approval and supervision regime has affected firms from different provinces differently, and this is for two reasons. The trial-and-error implementation of new institutional arrangements which is typical in China has given some provinces a “head start” in building organizations and establishing policies that support the internationalization of indigenous firms. At the same time, overall economic and institutional change has progressed at an uneven rate across China, and this has led to the development of different economic regimes at a local level (Krug & Hendriscke, 2008). Variations in local institutional environments are therefore likely to engender divergent strategies towards OFDI among local firms: these range from innovative and entrepreneurial approaches by local authorities that support the internationalization of local firms, to more inward-looking approaches within which local investments are perceived as superior and of higher benefit. To illustrate the divergency of policy at a local level in China, Shanghai established an initiative to support the internationalization of private enterprises in 2002—a year before national law was changed to allow private firms to invest abroad legally for the first time.

Third, we can see that the “Go Global” policy has achieved somewhat conflicting results. On the one hand, the policy has promoted the development of a transparent and rules-based governance system for OFDI and it therefore marks the clearest move towards an arm’s length institutional regime. At the same time, the policy calls for a considerable number of Chinese firms to grow their international business activities sufficiently to enter the rankings of the world’s largest MNEs and to signal the economic power of China. This puts companies, and especially state-owned ones, and the relevant supervising authorities under considerable social and political pressure to comply. This has led to a number of provincial governments (e.g., Jiangsu) to issue their own intentions to see provincial firms in the global rankings of leading MNEs. Political and social expectations may also explain to some extent

the bidding war for MG Rover (despite its arguably outdated technology and weak reputation) by Nanjing Automobile against its then domestic rival Shanghai Automobile and the acquisition of Thomson (with outdated brands) by TCL.

It is debatable how long the above measures to support the internationalization of Chinese can be sustained. China's WTO commitments prohibit the government's involvement in the commercial decisions of SOEs (Qin, 2007). The increasing international spread of Chinese companies to resource-rich locations, and the attempted and successful purchases of companies based in the industrialized countries may subsequently lead to a thorough reexamination of the exact wording and consequences of China's "non involvement commitment" by industrialized country governments. A further disentanglement of government and (state-owned) business and reliance on transparent ruled-based governance seems likely—with unclear consequences for the competitiveness of Chinese firms.

## **Conclusions**

The current OFDI regime China's is the result of a process of continuous institutional development since the "open door" policies of the late 1970s. Since then, the institutional framework has evolved from one that prohibited outward investment to one that includes a wide range of administrative bodies involved in the administration, approval, and support of Chinese companies seeking cross-border investments. The establishment of new and more specialized administrative bodies was accompanied by a decentralization of functions and responsibilities to local (i.e., provincial) agencies. Liberalization of the OFDI regime is most evident in the investment threshold above which bodies other than the State Council are allowed to grant an outward investment approval (which has steadily risen since the 1980s) and the issuance of regulations on the subnational level. The cautious and stepwise advancement of the institutional framework for OFDI towards a more liberalized, objective and transparent regulatory system mirrors to a large extent the overall reform process underway in China, which has allowed relevant administrative bodies to "test the waters" for institutional change and to slowly "build the bridge" along which Chinese companies march today. The identified elements of a "developmental state" in the OFDI regime to plan and control OFDI for the "greater good" and the fulfillment of certain policy objectives are also typical of economic policy formulation in China (Krug & Hendrischke, 2008; Scott, 2002). As the

whole economic system becomes more market-oriented, so too will the treatment of OFDI, because the rules and regulations will need to conform with the general institutional environment. The pace of change depends largely on the inertia of the institutional players involved and the importance of OFDI to the overall institutional transition. Once China joined the WTO, the required openness of the domestic market to more competition and the compliance with the national treatment rule necessitated the strengthening of indigenous enterprises. One way of achieving this was to allow them to internationalize to acquire new capabilities and support existing ones. However, government involvement in OFDI, the regulatory focus on SOEs, and the ability of SOEs to exploit market imperfections in domestic markets have combined to see the emergence of a fairly homogeneous group of Chinese MNEs. Despite a few private firms, China's OFDI stock is dominated by SOEs. Recent changes to the institutional environment (e.g., relaxation on private OFDI) should support the evolution of a more heterogeneous group of Chinese MNEs as private enterprises increasingly invest abroad. This is likely to lead in future to a more differentiated picture of the competitive advantage of Chinese MNEs as more recently investing firms are likely to require stronger firm-specific advantages than their state-owned peers.

An analysis of the evolution of China's OFDI institutions yields several theoretical implications and avenues for future research. First, the evolution that we chart emphasizes the parallel development of the institutional fabric of China, reforms in the corporate sector and economic progress towards a level "sufficient" for the country to compete internationally. Years of crafting and negotiating the establishment of domestic institutions and the distribution of responsibilities meant that institutions are now rather facilitators of, rather than impediments to, outward investment. This points to the fact that Chinese firms internationalize when domestic institutions are sufficiently well developed and the institutional environment allows them to exploit their competitive advantages across borders and not when a firm perceives itself to be ready. However, further research on this point is required.

Second, host country companies today compete with Chinese firms which enjoy significant backing from domestic institutions. Such support may provide Chinese firms with advantages when they seek to compete with internationally established players and, especially, when they enter other developing country markets such as those in Africa and Latin America. If Chinese firms are able to successfully exploit their home country specific, government-related, advantages, this may

bolster considerably their international competitiveness in foreign markets. As a consequence, these firms may be constrained in developing the appropriate internal capabilities and resources to compete without the government resources. Two future research questions thus emerge which require case-based research: Does the international competitiveness of Chinese firms derive mainly from the institutional support they receive? If so, how competitive will Chinese firms be once this support ceases? Our preliminary analysis suggests that differences in the OFDI regime across China and firm-specific differences (e.g., corporate governance type and ownership form) may lead to incongruent conclusions.

Third, companies from developing countries do not generally receive the same level of the institutional support from their home governments as is the case in China. It will therefore be interesting to compare the institutional environments of developing countries and the effect of this on indigenous MNEs. It is possible that institutional support is needed for developing country MNEs to emerge and compete internationally before they are able to rely on internal resources.

## Notes

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1. It should be noted that SAFE evolved from the State Administration of Exchange Control (SAEC) in 1994 which itself replaced in 1982 the State General Administration for Exchange Control (SGAEC). For simplification purposes, this study uses the term SAFE throughout, while acknowledging that responsibilities and scope have varied between the three organizations over time (Lin & Schramm, 2003; Shan, 1989; IMF, 1983; Bumgarner & Prime, 2000).
2. MOFCOM evolved from the Ministry of Foreign Trade and Economic Cooperation (MOFTEC) and in 2003 became responsible for domestic trade, foreign economic coordination and the coordination of international trade of industrial products, raw material and semifinished as well as products activities of the State Economic Trade Commission and the State Development and Planning Commission. MOFTEC was the successor organization to the Ministry of Foreign Economic Relations and Trade (MOFERT) following a reorganization in 1993. For simplification, we use the term MOFCOM throughout while acknowledging that the specific responsibilities and scope

- of function have varied between the three organizations over time (Munro & Yan, 2003).
3. The starting year of the “Go Global” policy is ambiguous. Cai (2006) states that Premier Jiang Zemin announced the policy in 1998 while Child and Rodrigues (2005) refer to the year as being 1999. Sauvart (2005) and Zhang (2005) take 2000 as the starting point. A fourth group of researchers refers to the year 2001 in connection with the FYP (e.g., CAITEC and WDA, 2005). The most recent date is proposed by Kaartemo (2007) who refers to 2003. The discrepancies probably derive from (i) access to original sources in Chinese and (ii) reference to either the first mentioning or the public implementation of the policy.
  4. Xiao and Sun (2005), for example, report that CNOOC received for its failed takeover bid to Unocal a preferential US \$7 billion loan from the Chinese government. US \$2.5 billion of the loan was interest free and the remainder was repayable over 30 years at an interest rate of 3.5%.

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# 6

## FDI and China's Global Trade Competitiveness: Evidence from Measuring Sino-EU15 Intra-Industry Trade

*William X. Wei*

### **Introduction**

Dynamism in bilateral trade, a chronic growth of the EU15 trade deficit, changes in intra-industry trade (IIT) and the rising important role of EU15 firms' foreign direct investment (FDI) activities in China are the foremost features of Sino-EU15 economic and trade relations.<sup>1</sup> The direct effect of EU15 FDI in promoting China's position in global competitiveness in international trade is evident. In this chapter, we analyze this issue through measuring Sino-EU15 IIT associated with EU15 FDI in China.

In the section on The role of FDI in China's global trade performance, we highlight the significant role of FDI in building China's competitiveness in global trade.

In the section on Sino-EU15 trade associated with EU15 firms' FDI activities in China, we will provide a brief overview of the growth of EU15–China bilateral trade and EU15 FDI to China. Apart from dynamic bilateral trade developments and a chronic EU15 trade deficit as the salient features of Sino-EU15 trade relations, the other characteristics of EU15–China trade are the domination of manufacturing trade and the changing pattern of Chinese exports and of IIT. These features, together with the EU15 trade deficit, are closely associated with the EU15 firms' FDI activities in China. We discuss these features in detail in the section on Sino-EU15 trade associated with EU15 firms' FDI activities in China.

Although the EU15 trade deficit is largely shaped by foreign invested enterprises (FIEs) located in China, the issue of trade specialization patterns and complementarity between the two regions is also highly related to the EU15 firms' FDI activities in China. Due to a lack of statistics enabling a precise analysis of intra-firm trade (IFT) at a disaggregate level, an evaluation of IIT by product category becomes valuable because IFT is an important component of IIT. In the section on Measuring Sino-Eu15 intra-industry-trade: The method, we provide the methodology in measuring IIT between EU15 and China. The conclusion highlights the results.

### The role of FDI in China's global trade performance

From 1979 to 1991, FDI yearly inflows in China were flat (under US \$2 billion) and the cumulative realized FDI reached only US \$16 billion in 1991. Realized FDI inflows first exceeded US \$11 billion in 1992 and US \$33 billion in 1994 and ranged from US \$40 to 45 billion from 1996 through 2000, reaching US \$47 billion in 2001. Ever since China's accession to the World Trade Organization (WTO) in December 2001, FDI inflows have increased and realized values amounting to US \$52.7, 53.5, 60.6 and 60.3 billion in 2002, 2003, 2004, and 2005 correspondingly (Figure 6.1).<sup>2</sup> This growth phenomenon is expected to continue.

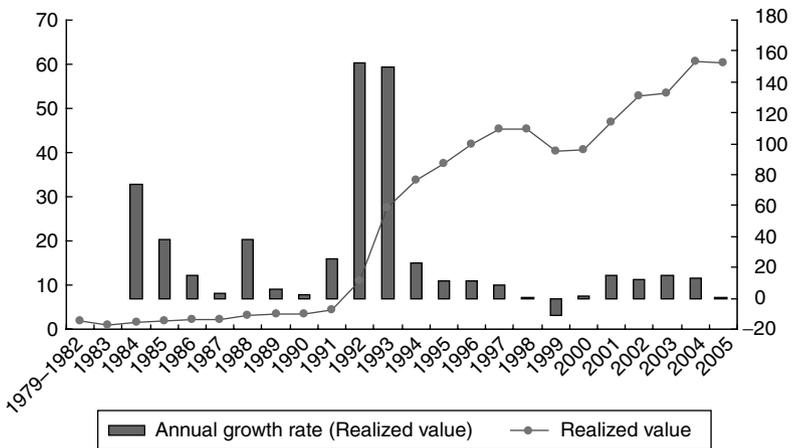


Figure 6.1 Realized FDI inflows to China (US \$ billions) and annual growth rate

Source: MOFCOM, P.R.C

As a result, the dramatic FDI inflows from the 1990s to the present have made China the world third largest FDI recipient (in terms of realized FDI stock) after the United States and the United Kingdom.<sup>3</sup>

By May 2006, China had approved a total of 568,601 FDI projects (MOFCOM, 2006) and nearly 400 of the biggest 500 multinationals had set up companies in China, albeit a large number of these FIEs being in the manufacturing industry. At present, FIEs in China are responsible for a large fraction of imports to and exports from China.

Since the 1980s, China's international trade has grown dramatically from 38.14 billion US \$ in 1980 to 620.785 billion US \$ in 2002 with an average annual growth rate of 17.5% (Figure 6.2).

China's high share of exports in GDP, at 31% in 2003, made China the fourth largest exporter and the third largest importer of merchandise products worldwide (Table 6.1). Furthermore, the proportion of China's total trade conducted by FIEs has grown dramatically, making up almost half of the total imports and exports since 1986 (Table 6.2). Besides the main factors such as trade liberalization as a result of market economic reforms and open door policies, and the notable export expansion conducted by the fast growing township and village enterprises (TVEs), the increasing FIEs imports and exports associated with the inflow of FDI has become a driving force in China's international trade growth ever since the mid-1980s. In 2002, total trade, imports, and exports of FIEs in China accounted for 53.19%, 54.29%, and 52.20% of the respective national level, up from 4.04%, 5.60%, and 1.88% in 1986 (Table 6.2).

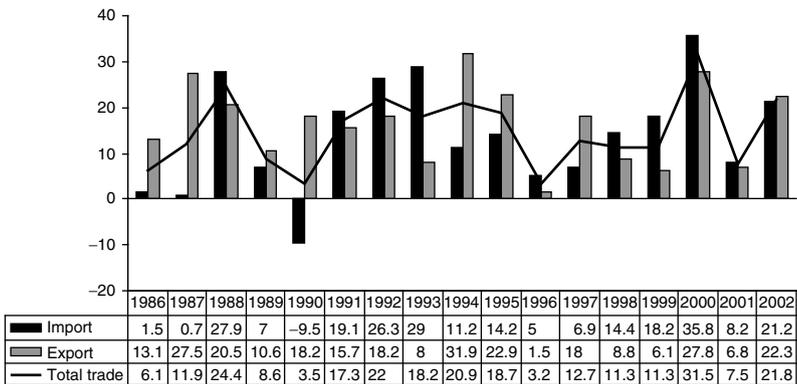


Figure 6.2 Growth ratio of China's international trade (1986-2002)

Source: China Statistical Yearbook (various years) and own calculation

Table 6.1 Position of China in world merchandise trade, 2003

Rank	Export		Import		Total trade	
	US \$ billion	%	US \$ billion	%	US \$ billion	%
1	Germany	10	U.S.	16.8	U.S.	13.3
2	U.S.	9.7	Germany	7.7	Germany	8.8
3	Japan	6.3	China	5.3	Japan	5.6
4	China	5.9	France	5	China	5.5
5	France	5.1	U.K.	5	France	5.1
6	U.K.	4.1	Japan	4.9	U.K.	4.5
7	Netherlands	3.9	Italy	3.7	Italy	3.8
8	Italy	3.9	Netherlands	3.4	Netherlands	3.6
9	Canada	3.6	Canada	3.2	Canada	3.4
			1,305.6		2,029.6	
			601.7		1,350.1	
			412.8		854.9	
			388.4		851.2	
			388.3		773.1	
			383		692.2	
			289		579.2	
			261.1		554.5	
			245.6		517.7	

Source: WTO, own calculation

Table 6.2 Import and export Value of FIEs (1986–2002, Million US \$)

Year	Import and export value			Export value			Import value		
	National total	FIE	%	National total	FIE	%	National total	FIE	%
1986	73,846	2,985	4.04	30,942	582	1.88	42,904	2,403	5.6
1987	82,653	4,584	5.55	39,437	1,210	3.07	43,216	3,374	7.81
1988	102,784	8,343	8.12	47,516	2,461	5.18	55,268	5,882	10.64
1989	111,678	13,710	12.28	52,538	4,914	9.35	59,140	8,796	14.87
1990	115,436	20,115	17.43	62,091	7,813	12.58	53,345	12,302	23.06
1991	135,701	28,955	21.34	71,910	12,047	16.75	63,791	16,908	26.51
1992	165,525	43,747	26.43	84,940	17,360	20.44	80,585	26,387	32.74
1993	195,703	67,070	34.27	91,744	25,237	27.51	103,959	41,833	40.24
1994	236,621	87,647	37.04	121,006	34,713	28.69	115,615	52,934	45.78
1995	280,848	109,819	39.1	148,770	46,876	31.51	132,078	62,943	47.66
1996	289,904	137,110	47.29	151,066	61,506	40.71	138,838	75,604	54.45
1997	325,060	152,620	46.95	182,700	74,900	41	142,360	77,720	54.59
1998	323,923	157,679	48.68	183,757	80,962	44.06	140,166	76,717	54.73
1999	360,649	174,512	48.39	194,931	88,628	45.47	165,718	85,884	51.83
2000	474,309	236,714	49.91	249,212	119,441	47.93	225,097	117,273	52.1
2001	509,768	259,098	50.83	266,155	133,235	50.06	243,613	125,863	51.67
2002	620,785	330,223	53.19	325,569	169,937	52.2	295,216	160,286	54.29

Source: China Statistical Yearbook (various years)

In 2004, these FIEs produced 57.07% of all Chinese exports, representing 57.81% of Chinese imports as well as 57.43% of total trade, contributing significantly to China's competitiveness in global trade.

Since the mid-1990s, the structure of China's exports has advanced from the traditional resource-intensive, low-tech and labor-intensive products such as textiles, clothing, and leather to some medium-tech and more capital-intensive products such as mobile phones, computers, and electronic and communication equipment. This phenomenon is directly linked with FDI activities in the Chinese market.

According to the China Foreign Investment Report for 2003, the capacity of China's industry in electronic and communication equipment jumped to become the third biggest globally with total export revenue of US \$92.5 billion in 2002, accounting for 28% of the country's total export revenue. Accumulated FDI in the industry mainly concentrates in manufacturing of electronics, electronic parts and components, communication equipment, consumer electronics, and PCs. To the present, China is the leading producer of computer external and spare parts and components due to the establishment of a full-fledged industrial pattern in hardware production facilities located in the Pearl River Delta and the Yangtze River Delta. In 2002, the export to FIEs in the computer industry amounted to US \$8.83 billion, which accounts for 35% of China's total computer exports. In some high-tech industries, FIEs helped China's performance to be spectacular in both domestic and global markets. In the telecommunication industry, mobile phones have become the sixth largest export product, accounting for 3.1% of total exports by FIEs in 2002. In the same year, the production of FIEs accounted for 77.45% of national output and 98.98% of Chinese mobile phone exports. In the software industry, the export value increased from US \$400 million in 2000 to US \$1.5 billion in 2002, with an annual growth rate of 93.6%, in spite of a declining growth rate at the world level.

### **Sino-EU15 trade associated with EU15 firms' FDI activities in China**

As we discussed in the section on The role of FDI in China's global trade performance, the direct effect of FDI in promoting China's position and upgrading the country's competitiveness in global trade is evident. In this section, we will analyze further this issue through the development of Sino-EU15 trade and EU15 FDI to China. Starting from an analysis of EU15 FDI to China and a brief overview of Sino-EU15 bilateral relations,

we will highlight the importance of the amount of Sino-EU15 trade associated with the FDI activities of EU15 firms in China.

**Analysis of EU15 FDI to China**

By October 2004, more than 19,193 enterprises had been established by EU15 investors in China and EU15 FDI cumulative contractual and realized value stood at US \$73.46 billion and US \$41.74 billion respectively. With regard to the weight of the EU15, cumulative realized FDI accounted for 7.5% of total realized FDI to China, and ranked fourth in cumulative terms up until the end of 2004. Among the Triad, the EU15 lag in the Chinese market, with respect to other investors, started to narrow only from the mid-1990s.<sup>4</sup> Apparently, a catching-up process of EU15 firms in China started in the mid-1990s, and this expanded from 1997 to 1998. As shown by chronological EU15 data at national level, realized EU15 FDI in China increased dramatically in 1997 and has remained constant from 1997 to 2002. However, the EU15 has been positioned as the largest investor in China for three consecutive years from 1998 to 2000 in realized value terms (excluding Hong Kong, which represented the lion’s share of FDI inflow both based on yearly and total cumulative realized value terms) (Figure 6.3).

From 1979 to 1985, EU15 FDI accounted for 10% of the total Chinese inward FDI in terms of realized value. This relatively strong FDI position in the early 1980s was related to a number of leading European multinational enterprises (MNEs) setting up large-scale manufacturing subsidiaries through joint venture (JV) agreements, such as Pharmacia

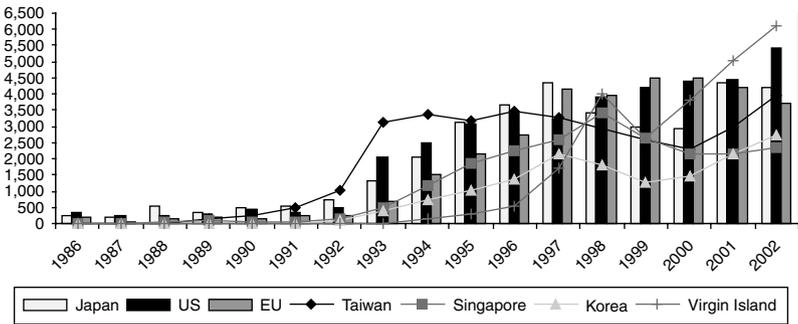


Figure 6.3 EU FDI inflows in China compared with other major investors (except HongKong). Realized values, million US \$

Source: Almanac of China’s Foreign Economic Relations and Trade, Ministry of Commerce of PRC, <http://www.mofcom.gov.cn/waimaotongji.shtml>

(US \$6 million in 1982), Alcatel-Bell (US \$39.5 million in 1983), and Pilkington (US \$29.9 million in 1983), and several EU15 chemical companies, notably BP and Elf participating in large joint exploration projects. Compared with other FDI sources, particularly Asian FIEs, EU15 FDI slowed down in the mid-1980s and worsened due to the confidence crisis after the Tiananmen Square events in 1989. As a result, the proportion of contractual EU15 FDI to the total decreased from 8.3% between 1986 and 1988 to 2.7% between 1989 and 1992 (Van den Bulcke, Zhang, & Esteves, 2003). The decline of FDI from Western investors, however, stopped in 1992 thanks to the continued engagement of the Chinese government in economic reforms and to the further relaxation of investment regulations. The years 1993, 1994, and 1997 have seen EU15 realized FDI inflows climb from US \$671 million, to 1,538 million and 4,171 million respectively; this corresponds to year-on-year growth rates of 176.13%, 129.21%, and 52.39% respectively. In contractual EU15 FDI value terms, the year-on-year growth rates jumped to 91.72% and 116.21% in 1993 and 2000 respectively (Figure 6.4).

The triple-digit growth of realized FDI in 1993, 1994, and contractual FDI values in 2000, together with a decline of Japanese FDI to China due to the Asian financial crisis in 1997, has made the EU15, for the first time, the largest nonoverseas Chinese investor both in realized and contractual value terms, although this lasted for a period of only three years (i.e., realized EU15 FDI from 1998 to 2000) and one year (i.e., contractual EU15 FDI in 2000) respectively (Figure 6.3). Nevertheless, and as in the case of other investors, a great gap between realized and contractual EU15 FDI values is easily identifiable through the 1993–1997 and 1999–2001 periods (Figure 6.4). This phenomenon can be explained as follows: on the one hand, the extreme caution of EU15

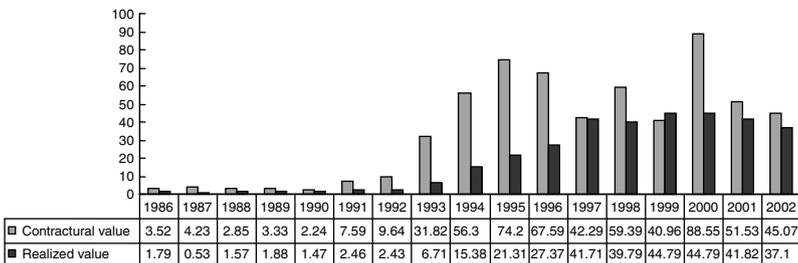


Figure 6.4 EU15 FDI to China 1986–2002 (100 million US \$)

Source: Almanac of China's Foreign Economic Relations and Trade, Ministry of Commerce of PRC, <http://www.mofcom.gov.cn/waimaotongji.shtml>

multinational corporations (MNCs) vis-à-vis the Chinese market could be the fundamental *raison d'être* for the quiet period before and right after Deng Xiaoping visited the southern coastal economically opened areas and special economic zones (SEZs) in 1992, a famous tour which led to deeper, faster, and wider economic liberalization. It is only after the beginning of the EU15–China Human Rights Dialogue in 1996 and the Chinese government's commitment to a market-oriented economy (i.e., since 1997–1998) that stable and substantial EU15 FDI inflows have materialized.<sup>5</sup> On the other hand, the dramatic jump and fall of contractual EU15 FDI in the 1999–2001 period reflected the growing enchantment and disenchantment of EU15 MNCs regarding Chinese WTO accession. In 2000, with the reaching of US–China and EU15–China WTO accession agreements, both contractual FDI from the United States and the EU15 to China increased considerably. However, as the process dragged on, FDI pledges from both sources have not been realized. Following China's WTO membership in 2001, a boost of FDI inflows from the Triad is thus expected, at least in the medium term.

Although EU15 FDI by sectors are similar to those of overall FDI in China,<sup>6</sup> there are still several unique differences. In comparison with other FDI sources, EU15 FDI is characterized by a relatively high-realized value per project, by a higher degree of technology content, and by being both domestic market and exportation oriented. These characteristics are closely associated with the sectoral pattern of EU15 FDI in China.

These features will now be examined in detail. In the first place, in conformity with a large share of total FDI congesting in the manufacturing sector, a lion's share of EU15 subsidiaries also belongs to manufacturing companies in the Chinese market. According to the MOFTEC<sup>7</sup> database of EU15 FIEs in China during the period 1979–1996, 86% of EU15 subsidiaries in the Chinese market were manufacturing companies, while trading and service companies accounted for 11% only. This contrasts with later periods of EU15 FDI, when a boost of the tertiary sector represented 55% of the total outward EU15 FDI stock in the mid-1990s (Eurostat, 2001, 2003). However, in the service sector, EU15 businesses manage to have a comfortable presence in certain financial services such as banking and insurance. By the end of 2003, there were 56 European-funded banks in China. European banks have opened 59 representative offices (out of 209 foreign representative offices in total) in the Chinese market. With 55 branches established out of a total 156 foreign branches, European banks have the largest share (35%). Among them, 21 European branches have been approved to conduct RMB business,

although the market share of the foreign funded banks remained small in 2002 (1.6%) and 2003 (1.56%). Up to mid-2003, European insurers, reinsurers, and intermediaries have respectively obtained 15 life, 3 non-life and 3 reinsurance branch licenses and 1 broking license in China (EUCCC, 2004).

Although the service sector is more open to foreign investors nowadays, Table 6.3 shows that the manufacturing sector still accounted for 74.57% of EU15 FDI inflows in China in the first year after China joined the WTO.<sup>8</sup> This phenomenon shows that, when compared with other locations such as the Central and Eastern European Countries (CEECs), China is still largely seen by EU15 firms as a manufacturing base rather than as a suitable location for service activity.

In the second place, compared with other FDI source countries, particularly the Asian (newly industrialized economies (NIEs), EU15 manufacturing firms are largely concentrated in capital and technological intensive industries such as petrochemicals, chemicals, motor vehicles, electrical and machinery, telecommunication, aerospace, pharmaceutical, and cosmetic industries. Specifically, EU15 investment is highly concentrated in the petrochemical, chemicals, and motor vehicle industries. Several leading European petroleum (such as Shell and Elf) and motor vehicles companies (such as Volkswagen) entered China shortly after the very beginning of FDI liberalization. Furthermore, large EU15 investments in the Chinese chemical industry followed up, which was linked to significant operations of European petroleum firms that had acquired a substantial presence in China since the early 1980s.

Table 6.3 EU15 FDI in China: Broad sectoral breakdown (2002, US \$ million)

Sector	No. of projects	% to total	Contractual value	% to total	Realized value	% to total
Farming, forestry, stock raising and fishery	28	1.88	54	1.2	22	0.6
Manufacturing and mining	1,038	69.85	276.6	61.37	276.6	74.57
Trade in service	460	30.96	185.3	41.54	101.4	27.37

Source: China Foreign Investment Report 2003, Ministry of Commerce, Beijing, P.R. China

China's GDP has quadrupled since 1980 and it is expected to further quadruple by 2020. This implies that China will consume 16% of the world's primary energy, almost half of the entire Asian-Pacific area, and that it will represent about 10% of world bulk petrochemicals demand by 2010. Although major energy state-owned enterprises (SOEs) are aggressively looking for and acquiring overseas energy reserves and assets, foreign companies are playing a decisive role in China's petrochemical oil and gas sectors to meet its vast energy demand. According to the European Chamber of Commerce in China, more than 20 of the largest EU15 companies such as BP, BASF, and Bayer, in the petrochemical, chemical, oil and gas sectors are actively involved in oil and gas exploration and production, oil products retail and downstream development, gas infrastructure, and liquefied natural gas (LNG) import into the Chinese market. At the end of 2003, EU15 firms in the above sector alone accounted for contractual and planned investments of over Euro 15 billion.

Since Volkswagen established its first JV in Shanghai in 1985, EU15 MNCs have established a prominent role in the Chinese motor vehicles industry. It is estimated that at the end of the year 2002, European manufacturers represented about 60% of FDI in the industry for passenger cars in China, with a production capacity generating about 66% of the total of cars produced in China (EUCCC, 2004). Along with European leading motor vehicles manufacturers such as Volkswagen, Fiat, Renault, and Mercedes-Benz, a number of large producers of automotive components have also moved into China, such as Lucas and Robert Bosch.

In the electrical and machinery industry, EU15 MNCs such as ABB and Siemens have established a leading position in the Chinese market. Through opening a representative office in Beijing in 1982, Siemens reentered China and currently holds more than 50 JVs throughout the country.<sup>9</sup> According to the European Chamber of Commerce in China, the EU15 IT and Telecom industry represents approximately Euro 50 billion cumulatively in FDI, with a total turnover in 2003 of Euro 15 billion, directly employing more than 20,000 Chinese, and indirectly 70,000.

A number of EU15 MNCs such as Nokia and Ericsson in telecommunication, Airbus in aerospace, Novo Nordisk in the pharmaceutical industry, and Avon in the cosmetics industry have been successful in penetrating the Chinese market. According to the European Chamber of Commerce in China, EU15 investment amounts to about Euro 700 million in the pharmaceutical industry alone. Of the 30 European

pharmaceutical companies with operations in China, more than 20 have established manufacturing facilities, producing not only for the Chinese market, but also exporting in the region, in some cases, globally. In mobile telecommunication, China is Nokia's second largest market in the world. Nokia's investment in China reached US \$1.7 billion in 2001. It has established over 20 offices, eight JVs and two R&D centers, with over 5,000 employees in China<sup>10</sup>. Ericsson also doubled its investment in China and reached US \$5.1 billion by the end of 2005. It has ten JVs, four solely funded companies and employing more than 4,500 workers.<sup>11</sup> In the cosmetics industry, EU15 MNCs such as Avon, L'Oréal, and Wella have established manufacturing facilities in China with a total investment of Euro 1.3 billion. The cosmetics industry is also a driving force for other manufacturing industries such as fine chemicals and packaging and for services such as distribution and advertising.

Another prominent feature of EU15 FDI is its relatively large size per project, which is directly related to its sectoral pattern. By the end of 2002, the EU15 had set up 14,084 FDI projects with a realized investment of US \$33.922 billion, in contrast to 210,876 FDI projects with a realized investment of US \$204.875 billion from Hong Kong. Among the top five FDI contributors to China (Hong Kong, the US, Japan, the EU15, and Taiwan), EU15 FDI positioned itself as having the lowest percentage in terms of project numbers (less than 5%; Figure 6.5), but it ranked number one when assessed on the basis of the realized value per project (US \$2.40 million), which is more than twice the national average (US \$1.05 million per project), 2.5 times the average for Hong Kong FDI and four times the Taiwanese average (Figure 6.6). The size

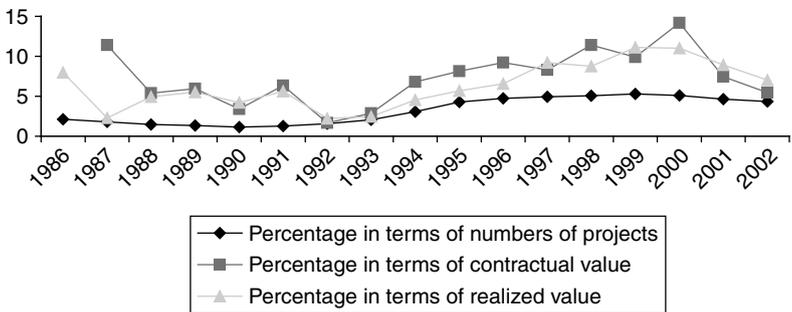


Figure 6.5 EU FDI to China (percentage to national total)

Source: Almanac of China's Foreign Economic Relations and Trade, Ministry of Commerce of PRC, <http://www.mofcom.gov.cn/waimaotongji.shtml>

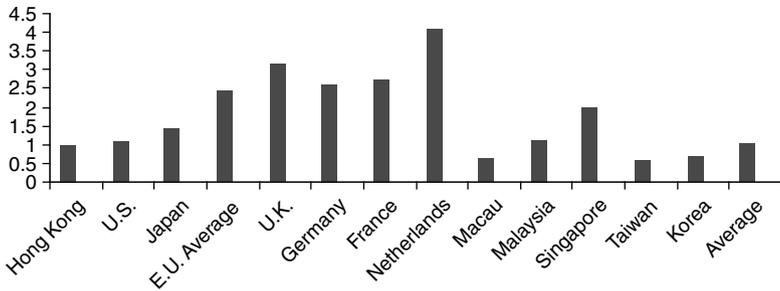


Figure 6.6 Realized FDI value per project until the end of 2002 (US \$ million)

Source: Author's calculation based on data from Almanac of China's Foreign Economic Relations and Trade, Ministry of Commerce of PRC, <http://www.mofcom.gov.cn/waimaotongji.shtml>

of investment per project from the Netherlands is US \$4.07 million, followed by that of the United Kingdom (US \$3.13 million), France (US \$2.72 million), and Germany (US \$2.61 million). This is much larger by comparison with other FDI sources, such as the United States (US \$1.07 million) and Japan (US \$1.44 million) (Figure 6.6).

The main reason behind the larger size of EU15 investment per project is that such projects mainly focus on the capital and technology-intensive manufacturing industries such as motor vehicles, chemicals, communication equipment, pharmaceutical, and aerospace, as stated above. For example, a questionnaire survey from the Investment Research Unit in the Academy of Macroeconomic Research attached to the National Development and Reform Commission of the People's Republic of China (P.R.C.) in 1998, disclosed that a small percentage of EU15 FDI projects in motor vehicles (8% of total projects) and medicine, medical devices (4%), represented 27% and 21% of the realized FDI values in the above industries respectively (Wang, 2000). Another example is represented by the case of the energy sector, and in particular of the nuclear sector, in which key technologies and equipment have originated from the EU15. Because the energy sector is capital intensive, the average size of EU15 investment projects is bigger than FDI projects in other industrial sectors. Van den Bulcke, et al. (2003), argue that the resource commitment by European parent companies to their manufacturing plants in China is much higher than Asian NIEs, as they are highly present in the large-scale and high-tech manufacturing production. Based on statistical analysis of the 8,077 FIEs approved by MOFTEC during 1979–1996, Van den Bulcke, et al. (2003) found that almost half (48.5%) of the EU15

companies contributed on average at least US \$5 million in the equity capital of their subsidiaries in China. This proportion reached only 33% for North America, 39% for Japan, and 29% for Asian NIEs. These also correspond to, for example, two largest EU15 investments before 1997: Volkswagen with US \$316.4 million in 1990 and Novo Nordisk with US \$243 million in 1994. Furthermore, most of China's imports of machinery, electrical machinery, and vehicles has come from the EU15, and more than a third of China's imports from the EU15 concern machinery and equipment goods. This phenomenon can be directly linked to FDI activities, and it is testimony to the fact that EU15 FDI in China is characterized by relatively capital-intensive projects (OECD, 2000).

Third, "owing to a more liberal attitude towards technology transfer, than say the one perceptible in the USA, the EU15 is the largest source of technology for China" (Andréosso-O'Callaghan, Nicolas, & Wei, 2005, p. 3).<sup>12</sup> For example, Andréosso-O'Callaghan and Qian (1999) found that US firms are more cautious than their EU15 counterparts when they transfer technology to China, and a large proportion of technology transfer originating from the EU15 is in high-tech industry such as telecommunication. In addition, the key technology and the equipment of the first three nuclear plants built up in China have originated from the EU15. The major players include Framtome, Alsthom Co. (France), and General Electric Co. (Britain) (Andréosso-O'Callaghan and Qian, 1999). Another excellent example is the development of the motor vehicles industry in China. This industry has upgraded significantly through technology transfer agreements with the establishment of Sino-foreign JVs. Technology transfer of passenger cars, commercial vehicles, and buses production has been made by renowned EU15 motor vehicles manufacturers such as DaimlerChrysler, Fiat, Volkswagen, and Volvo. As a result, the Chinese motor vehicles industry today has a relatively complete product portfolio and it is fairly vertically integrated. A recent example is the fast development of the telecommunication industry in China. EU15 IT & Telecom companies are the main couriers of technology transfer in the telecommunication industry and will boost China's high-tech development in the sector with R&D investment estimated to reach Euro 2.5 billion by 2007. In other R&D-based industries such as the pharmaceutical industry, EU15 MNCs are committed to bring innovative medicines to China and to develop China's own pharmaceutical industry. The important role played by EU15 firms in transferring technology to China has also been stressed in other empirical research. In a thorough study of 20 EU15 firms investment in China by Bennett, et al. (2001), and in a detailed study of EU15 technology

transfer in the automotive industry by Zhang & Taylor (2001), transfers of low and intermediate technologies to Chinese indigenous companies are found in the context of learning by doing. By focusing on the case of Shanghai Volkswagen Automotive Company and Shanghai Bell Telephone Equipment Manufacturing Co. Ltd, Li and Yeung (1999) found inter-firm technology transfer and knowledge spillovers in both cases.

Finally, EU15 FDI was found to be both local market-oriented as well as export-oriented. Relying on the statistical analysis of the MOFTEC database of EU15 enterprises during 1979–1996, Van den Bulcke, et al. (2003) found that EU15 investment is less concentrated in the industries that are resource and labor intensive as compared to FDI from Japan and in particular from Asian NIEs. Van den Bulcke, et al. (2003) argue that China is less attractive than the CEECs for EU15 MNCs who wish to out-source and who are cost-oriented. Even if the latter motivation applies, it is often combined with market-oriented investment. In this sense, cost-oriented or resource-seeking FDI in China is mostly related to the attraction of the Chinese market itself during the period 1979–1996. This is also demonstrated by the fact that larger EU15 investors often accept local equity participation mostly by SOEs or government institutions because of their need for local partners to guarantee market access when EU15 firms first establishing themselves in the Chinese market. Furthermore, the specific location pattern of favoring the eastern provinces and cities, which are highly ranked at the top in terms of size and growth, is also strongly related to EU15 MNCs' market-seeking options. In this sense, EU15 FDI tends to be more market-oriented than export-oriented, and thus more committed to the Chinese domestic market than to foreign markets through exports during the period 1979–1996. This is in contrast to Asian FDI, in particular to Japanese FDI which was found to be trade-oriented in the Chinese market in the mid-1990s by Cassidy and Andreosso-O'Callaghan (2005). However, recent trends show that the amount of the EU15 trade deficit vis-à-vis China can actually be imputed to EU15 FIEs, particularly in the telecommunication industry, albeit the same firms are also strongly oriented towards the Chinese market and a fair amount of their finished products find an outlet in the domestic market. Furthermore, most EU15 MNCs may consider their investment as part of their long-term strategies not only in penetrating the Chinese local market, but in creating and sustaining competitiveness in the Asian emerging market through exporting as well. Therefore, there is a trend that China is more and more seen by EU15 firms as an export platform to serve their global production network and it is argued that EU15 FDI was essentially market-seeking,

but it is less so now (Wei, forthcoming). In this sense, EU15 firms' FDI activities have been shaping and building China's trade performance through IFT as well as IIT, particularly from 1995.

### **Overview of Sino-EU15 trade**

The dramatic expansion of EU15–China bilateral trade is the most important feature of EU15–China economic relations. In 2002, China overtook Japan to become the EU15's second largest trading partner (after the United States), with a trading volume climbing over Euro 115 billion and 135 billion in 2002 and 2003 respectively. This contrasts with total Sino-EC-9 bilateral trade, which stood at ECU 2.4 billion in 1978. Since 1980, EU15–China bilateral trade has increased spectacularly and has reached around Euro 175 billion in 2004, making the EU25 the largest trading partner of China due to its fifth enlargement during that year. The share of China in extra-EU15 imports was 7.4% in 2001, up from 2.6% in 1990, and its share in extra-EU15 exports was 3% in 2001, up from 1.5% in 1990. In 2004, EU25 merchandise trade with China accounted for 12.33% of EU25 total imports and 4.99% of EU25 total exports respectively (Eurostat, 2004).

Another prominent feature is the growing EU15 trade deficit with China. From 1979 to 1991, sales from the EU15 to China increased only marginally, while Chinese exports to the EU15 jumped to account for twice the level of its imports from the EU15 in 1991. Over the period 1996–2002, imports from China by the EU15 maintained a higher annual growth rate (14.5%) than that of exports from the EU15 to China (8.9%). As a result, the EU15 trade deficit with China increased nearly fivefold from Euro 11.65 billion to 55.09 billion between 1995 and 2003, in contrast to a rather stable trade deficit at around Euro 10 billion between 1992 and 1995 (Figure 6.7). In 2004, the merchandise trade deficit of the EU25 with China amounted to Euro 78.7 billion (Figure 6.8), with every member country of the EU25 having a deficit with China except Finland. Germany, the United Kingdom, the Netherlands, France, and Italy are the main trading partners of China, accounting together for more than 70% of the bilateral trade within the EU25. Owing to their economic size, the new EU member states account for 6%, with Poland and Hungary each representing 2% (Eurostat, 2004).

Apart from dynamic bilateral trade developments and a chronic EU15 trade deficit as the salient features of Sino-EU15 trade relations, the other characteristics of EU15–China trade are the domination of manufacturing trade and the changing pattern of Chinese exports and of IIT. These features, together with the EU15 trade deficit, are closely associated with the EU15 firms' FDI activities in China.

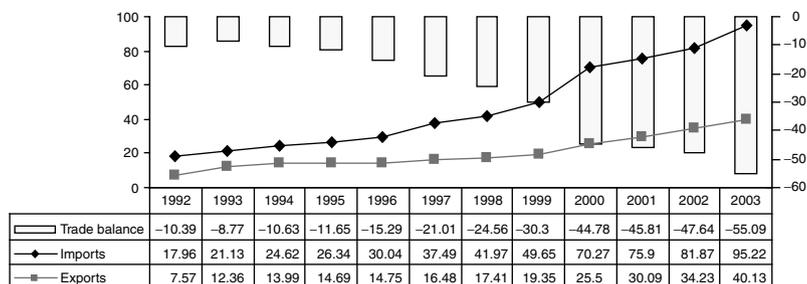


Figure 6.7 EU15 merchandise trade with China 1992–2003 (billion ECU/EUR)

Source: Eurostat, Statistical Regime 4, Luxembourg

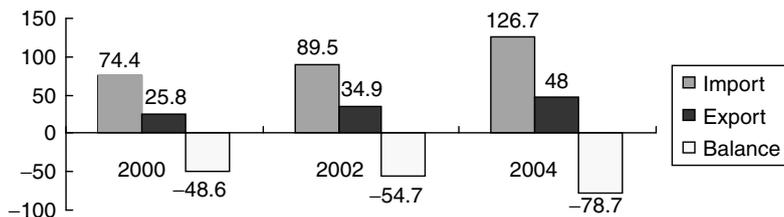


Figure 6.8 EU25 merchandise trade with China (EU15 billion)

Source: EU15rostat Trade Statistics, Luxembourg, 2005

Table 6.4 EU15 trade with China: Trade in services and in goods to total trade (1999–2002) US \$ billion

	1999	2000	2001	2002
Total Trade in Service	5.978	6.422	7.269	9.277
Total Trade in Goods	75.020	83.851	92.630	106.700
Total trade	80.999	90.273	99.899	115.977
% of Trade in service to total trade	7.38%	7.11%	7.28%	8.00%
% of Trade in Goods to total trade	92.62%	92.89%	92.72%	92.00%

Source: OECD Statistics on International Trade in Service, Volume II 1999–2002, OECD, International Trade by Commodity Statistics, volumes 1993–2004, OECD

As Table 6.4 shows, manufacturing products account for more than 92% of total EU15–China trade, while trade in services only occupied 8% over the 1999–2002 period. With regard to trade in manufacturing products, more detailed data disclosed that the trade deficit of the EU15 with China worsened between 1996 and 2002 in nearly all product groups except chemicals (Table 6.5).

Table 6.5 EU15 trade with China by broad product group (Euro million)

Product groups	Export			Import			Trade balances		
	Share of total export (%)	Export annual growth 1996-2002	Share of total import (%)	Import annual growth 1996-2002	2002	1992	2002	1996	Changes 1996-2002
Total manufactured products	37,016	8.9	47,389	14.5	-10,373	1992	-12,366		
Of which:									
Food products, beverages and tobacco	546	1.48	1,097	2.31	-551	-277	-274		
Textiles and textile products	696	1.88	6,810	14.37	-6,114	-3,455	-2,658		
Leather and leather products	452	1.22	2,537	5.35	-2,085	-1,201	-884		
Wood and wood products	251	0.68	587	1.24	-336	-405	69		
Pulp, paper and paper products, publishing and printing	1,101	2.97	248	0.52	853	223	630		
Coke, refined petroleum products and nuclear fuel	59	0.16	338	0.71	-249	-256	-24		
Chemicals, chemical products and man-made fibres	4,867	13.15	29,555	6.24	19,125	-2,975	22,095		
Rubber and plastic products	513	1.39	1,517	3.20	-1,005	-460	-545		
Other non-metallic mineral products	358	0.97	755	1.59	-397	-155	-242		
Basic metals and fabricated metal products	2,938	7.94	30,195	6.37	26,817	-81	345		
Machinery and equipment	11,450	30.93	41,437	9.24	21,707	7,542	-471		
Office machinery and computers	942	2.54	6,556	13.83	-5,614	-1,313	-4,301		
Electrical machinery and apparatus	2,961	8.00	28,226	5.96	135	382	-246		
Radio, television and communication equipment and apparatus	3,088	8.34	59,888	12.64	-29,000	289	-3,190		
Medical, precision and optical instruments, watches and clocks	2,236	6.04	12,933	2.73	943	34	909		
Transport equipment	4,308	11.64	19,388	4.09	23,695	2,092	277		

Source: UN Trade Statistics, own calculation

As discussed in the section on The role of FDI in China's global trade performance, China's export structure changed dramatically from the mid-1990s. A growing competitiveness was not restricted to labor-intensive traditional Chinese products such as textiles, clothing, and leather, but it also applied to some medium-tech and more capital-intensive products such as electronic components and IT-consumer goods.

As a result, on the one hand, machinery, transport equipment, and high-tech products such as office machinery and communication equipment still account for a high proportion of the EU15's exports to China; on the other hand, in almost the same product group, the trade balance of the EU15 with China either changed slightly (machinery and transport equipment), or worsened significantly (office machinery and computers). In communication equipment, the trade balance even shifted from a surplus to a deficit over the 1996–2002 period (Table 6.5). Obviously, the large importation of capital goods such as machinery and equipment from the EU15 to China is intended to establish or at upgrade local Chinese enterprises or JVs' production facilities. However, a large share of Chinese exports can be explained by IFT, according to which EU15 enterprises are sourcing inputs, particularly light industrial products, from their Chinese affiliates.

As Tables 6.6 and 6.7 show, a considerable share of EU15 trade with China is indeed associated with FIEs located in China. Since 1998, the share of FIEs' exports to the EU15 in total Chinese exports to the EU15 has continuously risen, while the share of FIEs' imports from the EU15 to total Chinese imports from the EU15 declined quite dramatically since 1995. The widening EU15 trade deficit with China is therefore largely associated with this phenomenon. As a result, in 2003, FIEs' exports to the EU15 stood at US \$39.514 billion, and accounted for 54.76% of total Chinese exports to the EU15, which is noticeably larger

*Table 6.6* Total exports by FIEs from China to the EU15 1991–2003 (US \$ million)

FIE exports to the EU15	Total FIE exports	FIE export to EU15 in % of total FIE exports	Total Chinese exports to EU15	FIE exports to EU15 in % of total Chinese export to EU15
152,985	110,5179	13.8	361,165	42.3

*Source:* Ministry of Commerce, Chinese Customs Statistics

Table 6.7 Total imports by FIEs from China to the EU15 1991–2003 (US \$ million)

FIE imports to the EU15	Total FIE imports	FIE imports to EU15 in % of total FIE imports	Total Chinese imports to EU15	FIE imports to EU15 in % of total Chinese export to EU15
160,659	11,52,252	13.9	313,918	51.2

Source: Ministry of Commerce, Chinese Customs Statistics

than FIEs' imports from the EU15 (US \$26.041 billion and accounting for 49.08% to total Chinese imports from the EU15).

### Measuring Sino-EU15 intra-industry-trade: The method

Although the EU15 trade deficit is largely shaped by FIEs located in China, the issue of trade specialization patterns and complementarity between the two regions is also highly related to the firms' FDI activities in China. Due to the lack of statistics enabling a precise analysis of IFT at a disaggregate level, an evaluation of IIT by product category becomes valuable because IFT is an important component of IIT.

According to Andreosso-O'Callaghan & Wei (2005), the relative trade specialization of an economy, particularly if its trade structure is complementary to that of its trade partners, can be determined by the importance of IIT. In order to give a first-step appraisal of intra-industry merchandise trade between the EU15 and China, standard Grubel and Lloyd (GL) indices are computed for the year 1990 and 2003 as a comparison.

These are calculated as follows:

$$GL_i = \left[ 1 - \frac{|X_i - M_i|}{(X_i + M_i)} \right] \cdot 100,$$

where  $X_i$  and  $M_i$  denote exports and imports in product  $i$  respectively.

Since GL indices have been criticized as being static, a dynamic analysis of IIT can be employed in order to show the contribution of IIT and net trade (NT) change in the growth of total trade (TT) between the EU15 and China (Menon, 1996; Andréosso-O'Callaghan and Bassino, 2001).

Starting with  $TT_i$  being total trade (i.e.,  $X + M$ ) in commodity  $i$  observed at a given period of time, and  $NT_i$  being net trade in product  $i$  (i.e., the

difference, in absolute value, between exports and imports), we can write

$$TT_i = IIT_i + NT_i^{13} \quad (\text{Eq.1})$$

The *GL* index above can also be written as follows:

$$GL = (TT_i - NT_i)/TT_i \quad (\text{Eq.2})$$

and therefore, given equation (1), we can write:

$$GL = IIT_i/TT_i \quad (\text{Eq.3})$$

The growth in total trade of a given commodity *i* ( $tt_i$ ) over a period of time is denoted as

$$tt_i = \Delta(X_i + M_i)/(X_i + M_i) \quad (\text{Eq.4})$$

Owing to equation (1), the percentage growth in total trade of commodity *i* ( $tt_i$ ) over a given period of time can be decomposed in the following way:

$$tt_i = Cnt_i + Ciit_i \quad (\text{Eq.5})$$

where  $Cnt_i$  represents the contribution to the growth in TT of the growth in NT, with  $nt_i$  representing the percentage change over the period in the net trade of commodity *i*.<sup>14</sup>

## Conclusion

Using the methodology in the section on Measuring Sino-Eu15 intra-industry-trade: The method, we measured the Sino-EU15 IIT. The changes of TT, IIT, and NT by product category are shown at the two-digit level of this analysis in Table 6.8.<sup>15</sup>

The results disclosed that IIT between the EU15 and China in total merchandise trade differed slightly between 1990 and 2003 (Table 6.8). However, in certain product groups, the index rose dramatically.

In addition, the high increase of IIT in these product groups explained the fact that a significant part of the growth in Sino-EU15 trade is due to IIT. These include both product groups in low-tech categories as well as high-tech categories. In low-tech industries such as leather, beverage, and tobacco, IIT contributed significantly to the growth of TT. Also worthy of note is the large increase in IIT in raw materials, which gives an

Table 6.8 Grubel and Lloyd indices and contribution of IITand NT growth to the growth in total trade between the EU and China (1993–2003)

	GL1990	GL2003	Cnt	Ciit	tt
Total trade	65.45	59.49	694.40	-116.90	577.51
Of which:					
Food and live animals	54.44	48.44	114.08	-24.92	89.16
Beverage and tobacco	14.66	72.73	189.04	615.35	804.39
Crude material, inedible, except fuels	35.14	90.25	-60.65	222.31	161.65
Mineral fuels, lubricants and related materials	12.72	28.07	306.39	86.70	393.09
Animal and vegetable oils, fats and waxes	51.80	53.48	-78.33	0.78	-77.55
Chemicals and related products	88.07	97.97	-13.44	420.91	407.47
Leather, leather manufactures and dressed furskins	11.33	95.36	-70.11	541.42	471.31
Paper and paper manufactures	79.03	76.75	683.00	-76.81	6.06
Textile yarn and related products	10.80	28.20	124.72	54.46	179.18
Machinery and equipment	65.16	77.92	597.36	402.98	1000.35
Office machines and ADP machines	56.04	7.90	25039.61	-13139.68	11899.92
Telecommunication and sound recording apparatus	38.64	29.10	896.84	-134.13	7.63
Road vehicles	54.93	33.53	1744.93	-594.06	1150.87
Miscellaneous manufactured articles	8.22	13.46	419.12	31.47	450.59
Professional and scientific instruments	52.04	73.48	1412.91	1223.36	2636.27

Source: Authors' calculations based on OECD data from International Trade By Commodity Statistics, volumes 1993–2004

indication of the significant role of resource-seeking EU15 FDI in China. In the high-tech categories, about half of the increase in EU15–China trade in machinery and equipment as well as in professional and scientific instruments industries in which IIT/TT (i.e., GL) has increased over the period, is actually explained by IIT.<sup>16</sup> Consequently, “increasing IIT ratios in these ‘high-tech’ industries between structurally dissimilar economies defies the post-Ricardian logic enshrined in Helpman’s hypothesis according to which increasing IIT indicates higher products differentiations, and is more likely between structural similar countries. As first espoused by Wakasugi (1997), the fact that FDI allows structurally dissimilar countries to trade increasingly in the same types of industries is explained by FDI, and possibly by Intra-Firm Trade” (Andreosso-O’Callaghan and Weiet al, 2005, p. 5). In this sense, increasing IIT between the EU15 and China has largely been shaped by EU15 firms’ FDI in China and therefore the issue of IIT, IFT, and FDI cannot be disassociated.

## Notes

1. The EU15 includes Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom. Since the EU enlarged to 25 member states in 2004, data obtained from Eurostat on Sino-EU15 trade and investments is relevant up to 2003.
2. In 2002, China surpassed the United States and temporarily positioned itself as the number one FDI recipient.
3. By May 2006, China attracted FDI at US \$645.39 billion in terms of cumulative realized value (i.e., the amount of capital eventually invested), while Chinese outward FDI stock was estimated at US \$37 billion by the end of 2003 (Source: MOFCOM, 2004; UN/UNCTAD, 2004).
4. Note that EU15 companies invested a total of US \$2.5 billion in the 1979–1993 period (US \$7.3 billion pledged) in some 3,000 projects, which represents less than half of the investment of either US or Japanese companies in the same period (CEC, 1995).
5. In January 1996, an EU15–China dialog on human rights was initiated. Since then, the dialog has been held twice a year, although there has been an interruption in early 1997 (European Commission, <[http://EU15ropa.EU15.int/comm/external\\_relations/china/intro/](http://EU15ropa.EU15.int/comm/external_relations/china/intro/)>).
6. In terms of the amounts actually used (realized value), FDI in the manufacturing sector has taken a substantial share of realized FDI inflows (around 70% in 2002), and it has maintained a constantly high percentage in the last two decades in China. Within the manufacturing sector, approximately half contractual FDI have been directed towards the labor-intensive industries. Technology-intensive and capital-intensive sectors share the rest almost equally, with the proportion of the former being 26.9% and the latter 22.7% (OECD, 2000).

7. MOFTEC refers to the Ministry of Foreign Trade and Economic Co-operation of P.R.C, the predecessor of MOC (Ministry of Commerce) of P.R.C.
8. Detailed yearly and cumulative data on the sectoral breakdown of EU15 FDI in China are not available from the Ministry of Commerce, China. The following account will briefly document cumulative EU15 FDI in some industries, which are available from EU15CCC (EU15 Chamber of Commerce in China).
9. Before the liberalization of FDI in 1978, China had already opened its coastal cities to foreign investors in the 1890s under the "Treaty of Shimonoseki" as a result of its defeat in the Chia-Wu war against Japan (1894). Between 1885 and 1936, about 210 foreign affiliates and JVs were established by West European companies with a total investment of US \$1,200 million (Shen, 1994). Among them, the United Kingdom invested US \$990 million with 155 enterprises, followed by Germany (22 enterprises with US \$103 million), Belgium (5 enterprises with US \$82 million), France (18 enterprises with US \$12 million) and Italy (5 enterprises with US \$6 million). Large European companies such as Siemens, Philips, Fiat, Agfa, AEG, Unilever, Wagons-Lits, and P&O had then established a manufacturing or service presence in China (Van den Bulcke, Zhang, & Esteves, 2003).
10. <http://www.nokia.com.cn>
11. <http://www.ericsson.com.cn>
12. In 1994, the EU15 represented 43.8% of China's total import of technology, a share that was well ahead of that of Japan (at 25.5%) and of the United States (18.3%) (Andréosso-O'Callaghan & Qian, 1999).
13. Since  $TT = (X + M)$ ,  $NT = /X - M/$ , given  $GL = 1 - NT/TT = (TT - NT)/TT = IIT/TT$ , therefore  $TT = IIT + NT$  (also see Andréosso-O'Callaghan & Bassino, 2001).
14.  $Cnt_i$  and  $Ciit_i$  can also be written as  $Cnt_i = (1 - GL_i)nt_i$  and  $Ciit_i = (1 - GL_i)iit_i$ . For an insight into a pioneering study using this method, see Menon (1996).
15. Our sample covers 99 manufacturing products (defined at the two-digit level under NACE) that we regrouped into 15 different categories. These industries are most exemplary in EU15–China trade associated with the sectoral breakdown of EU15 FDI in China (For details on sectoral breakdown, see the section on Sino-EU15 trade associated with EU15 firms' FDI activities in China).
16. Declining levels of IIT in paper and paper manufactures, office machines and ADP machines as well as road vehicles may imply a low scale of vertical integration in these industries between EU15 FIEs in China and their parent companies.

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# 7

## Chasing the Dragon: The Emerging EU–China Relationship and Its Impact on Business

*Louise Curran*

### Introduction

The rapid evolution of the European Union's economic relationship with China has taken many European governments by surprise. The EU has struggled to develop a coherent policy in the face of the challenges posed by the integration of a China that emerged from virtually nowhere in the early 1990s to become the EU's largest trading partner. At the same time, China's increasing willingness to use its economic weight to political ends challenges the EU's established interests and poses questions about the future global balance of power. As is often the case, EU diplomacy has lagged behind business in developing a response to this emerging reality.

This chapter seeks to explore the emerging EU policy on China through three key examples related to trade and development policy—textiles, shoes, and Africa. The manner in which the EU has sought to respond to the challenges in these areas highlights the frequent incoherence in the EU's approach. It is argued here that this incoherence is rooted in a profound ambivalence both within and between member states on how best to approach the challenge of China. The key point which the chapter seeks to highlight is that this ambivalence needs to be addressed if a coherent and effective EU approach is to be developed. Finally, the chapter draws some conclusions on the impact of the complexities of the EU–China relationship on the business environment faced by Chinese industry.

This chapter explores the development of the EU–China relationship through the lens of the emerging trade and development policy of the

EU. This policy is both the result of expediency—responding to political pressures from producers of labor-intensive goods—and of more strategic long-term orientations. The result is a sometimes contradictory and often ambiguous EU stance. The EU has been forced by political pressure to negotiate voluntary export restraints (in effect quotas) and impose antidumping duties on Chinese goods. However, at the same time it seeks to develop a harmonious trading and political relationship with the country, which is rapidly becoming its most important trading partner. The contrast between the political rhetoric of partnership and the reality of what often amounts to protectionism is striking, but perhaps inevitable in the circumstances.

Since China joined the World Trade Organization (WTO) in 2001 the emerging reality for the EU has increasingly been one of rising imports from China, especially in several key consumer sectors. The EU has been caught between protectionist pressures from the affected EU industries, pursuit of its own economic interests in an important and growing market, and the fundamentally liberal instincts of at least some of its members, whose support for open trade and for the development of the poorer members of the trading community are at odds with a protectionist stance.

What is clear to all actors in the EU is that China can no longer be ignored. What is far more difficult for them to agree on is the best manner to interact with this behemoth. Although the search for a common line on China reflects long-standing tensions between more protectionist countries and the more liberal members, there is a complicating factor in the relationship with China. Concerns about the human rights situation in China and about the model of development which it espouses are generalized in the EU. Sometimes they conceal protectionist tendencies, but often they are genuine. In any case, the fact that the Chinese regime is of a very different nature from the democracies of the EU further complicates the development of a consistent approach even in those liberal member states that would usually be considered “friends of free trade.” The controversy surrounding policy on China in the EU is a reflection of the difficulty which member states encounter in developing a clear policy in relation to this very successful developing country which espouses a very different model of economic and political development from that generally endorsed by the industrialized countries.

The lack of a consistent and coherent policy is increasingly untenable. A policy on China which is reactive rather than constructive is not an option. All key actors seem to be aware of this, and the EU is committed

to negotiating a new agreement with the Chinese, but the construction and implementation of such a policy is proving more complicated than rhetoric would suggest.

### **Textiles, shoes, and Africa—key sources of emerging tensions for the EU**

This chapter seeks to explore the EU's relationship with China by considering, in particular, three key areas of trade and development policy where recent controversies have emerged. The first two are related to trade defense—the cases of textiles and shoes. The third—Africa—relates more to problems with the Chinese development model, on the one hand, and with its growing diplomatic muscle, on the other. These three themes were chosen because they provide clear examples of the most pressing conflicts of interest facing the EU.

In many ways they also provide illustrative examples of the conflict between the “China Threat” and “China Challenge” schools of thought developed elsewhere in this book by Francis Schortgen. Those member states that feel most economically vulnerable to the rise of China see it as a threat which must be urgently addressed, while others with rather different economies and interests are more sanguine about the challenges posed. In the EU's case the result of this clash of approaches and rhetoric has generally been a series of economically suboptimal, but politically acceptable, compromises.

The cases of textiles and shoes relate to the complexity of integrating a low-cost source with virtually unlimited production capacity into the world trading system. The EU still retains some production facilities in these two sectors, particularly in peripheral regions, thus the emergence of China poses competitive threats to certain EU states. Their protectionist interests often clash with more liberal tendencies of other EU members which have long ceded labor-intensive production to the south.

The case of Africa raises different issues more related to the changing nature of global hegemony and the emergence of a more multipolar world where “developing” nations like China are beginning to play a role previously reserved for the developed world. China's growing economic muscle and financial strength have made it an important actor in several regions, particularly those which produce the raw materials needed to fuel its economic boom. European nations often have difficulty developing a coherent approach to this development, particularly in regions that had been previously “their” zones of influence.

The emerging role of China in these regions is often seen as threatening established linkages and interests. It also opens up the old debate on the best route to development which many developed countries had considered successfully closed.

### **Textiles**

Before China joined the WTO, worries about the impact of the liberalization of its trade, together with the opening of the previously heavily restricted textile market, were widespread (e.g., Avisse & Fouquin, 2001). These fears motivated the negotiation of a textiles-specific safeguard clause in the Chinese accession agreement to WTO allowing the imposition of limits on Chinese textiles and clothing imports up to 2008, if they are seen to be “threatening to impede the orderly development of trade in these products” (WTO, 2001). This was additional to a wider safeguard clause, which covers all goods up to 2012.

In the event, these fears seem to have been justified by the large increases in Chinese textiles exports that followed the liberalization of the sector in 2005. The impact of that liberalization has been looked at in detail elsewhere (Curran, 2008a, 2008b). As a result of rapidly increasing Chinese exports, pressure grew for further protection of developed country markets and new restrictions were negotiated with the Chinese in certain categories of textiles in both the EU and US markets. These restrictions remained in place in the EU until the beginning of 2008, in the United States until the end of 2008.

The pressure on the European Commission to act when Chinese exports began to increase was intense (Mandelson, 2005); however, several important northern member states, including the United Kingdom, Sweden, the Netherlands, and Germany strongly opposed the rolling back of the liberalization process, which was the culmination of ten years of slow liberalization following the agreement to liberalize the sector signed in 1995. The resulting political dispute was dubbed the “bra wars” by the British tabloid press, although bras were not the main product affected and the main disagreements seem to have been within the Union itself, rather than between the EU and China (Parker, 2005; White & Gow, 2005).

In fact, the Chinese agreed to new quotas and a final rejigging of these quotas in September rather gracefully. The Chinese trade minister was quoted as seeing the final deal as a “win-win situation” and considered that rather than a lapse into protectionism, it was a “transitional” step towards freer trade (White & Gow, 2005). The political rows in Brussels on the other hand, were intense and often bitter, revealing

significant differences between the member states. Countries that still produced clothing, mainly in the south and east of Europe, pushed for new restrictions. Countries where the main economic interest in clothing was from retailers who wanted open access to cheap sources, strongly opposed any new measures (Parker, 2005).

Even rather liberal newspapers like the *Guardian* presented the quotas as a legitimate response to “a deluge of cheap Chinese imports” (Elliot, 2005). In fact, although Chinese exports were indeed increasing significantly, especially in the newly liberalized sectors, the volume of total EU clothing imports (from all sources) was increasing at rates consistent with historic trends (8% annually), while total imports in the textiles (fabrics and yarn) subsector were actually falling. In other words, the main impact of the liberalization was to restructure EU clothing imports, rather than to increase them. Predictably, the main impact of the reimposition of quotas in the middle of 2005 was an increase in exports of other key suppliers, especially neighboring Hong Kong, but also India and Vietnam (Curran, 2008a).

In spite of the squeals of the domestic industry and the political theater played out in Brussels, the extent to which the quotas actually provided any additional protection to EU manufacturers was almost certainly limited. However, there may have been more to the row than textiles. There was a feeling amongst many member states that textiles was “the thin end of the wedge” and that a stand on the issue was necessary to signal EU concern on China. As Peter Mandelson, the EU Trade Commissioner at the time, was quoted as saying, in defense of his efforts to resist protectionism: “Yesterday textiles, today footwear, tomorrow what? Where will it go and when will it end? We are at the beginning of the China story, not the end” (Parker, 2005). Certainly political commentators also saw the “bra wars” as a signal that the EU was facing up to the difficulties entailed in integrating China into the world economy (Elliot, 2005). However, the ad hoc and chaotic manner in which the case was handled did not bode well for the future.

## Shoes

As Mandelson foresaw in his quote above, the next big story to hit EU–Chinese relations was shoes. Even before the ink was dry on the agreement with the Chinese on textiles a new row was brewing in Brussels over low-cost shoe imports from China (and Vietnam). This row exposed the same fault lines as those seen in the textiles dispute, with the variation that this time the supporters of China’s trade were producers as well as retailers (Minder, 2006). Difficulties emerged over

the proposal of the European Commission to impose antidumping duties (ADDs) on Chinese and Vietnamese shoes of 16.5% and 10% respectively.

The Commission proposal was based on a standard investigation, further to complaints from certain EU producers;<sup>1</sup> however, the duties proposed were well below the dumping margins—the calculated difference between price on the domestic market and price for the EU market—found in the investigation, for a variety of technical reasons (CEC, 2007a). Thus, the overwhelming impression given from the investigation was that the proposal was, from the start, an attempt at a compromise. Even so, the member states differed fundamentally in their attitude to the proposed duties. Initially a majority of member states opposed them (Parker, 2006). The case was further complicated by the fact that China does not yet have market economy status (MES) in the WTO. This makes it in some ways easier to impose antidumping duties on its companies.<sup>2</sup> Only one Chinese company was afforded market economy treatment in the investigation in the shoe sector and even they had ADDs imposed on their goods, but at a lower rate.

Provisional ADDs were imposed in April 2006, but due to the sensitivity of the case and in a departure from normal practice, they were slowly phased in (CEC, 2007a). After fierce lobbying, member states finally agreed on a compromise proposal which imposed definitive duties at 16.5% for China and 10% for Vietnam for two years, compared with the usual five. An Italian official was quoted as saying that two years would allow its shoemakers to adjust to face full international competition (Bounds, 2006). This quote indicates a fundamental misinterpretation of the role of ADDs—to rebalance *unfair* competition. Clearly, the Italian government interpreted the case more as an effort to avoid open competition for as long as possible. In this context it is understandable that more liberal states like the United Kingdom and Sweden were opposed to the duties.

However, several states opposed the duties not only for ideological reasons but also for reasons of political economy. Many northern states either had important retail sectors that relied on imports to maintain margins, or important manufacturers who relied on sourcing their low-quality ranges in China to supplement profits. As Wei points out elsewhere in this book, much of China's trade with the EU is actually linked to EU investment in China. For such investors, the duties were disastrous. The reaction of the UK company Clarks, who called the duties "*illogical and ill-founded*," was rather typical of large integrated shoe companies in northern Europe (Callan, Wilson, & Guthrie, 2006).

Strangely, the fact that Chinese footwear had been subject to quota limitations in the EU up to 2005 was rarely mentioned in the debate on the ADDs. The Commission refers it in passing in its report on anti-dumping activities in 2006, indicating that this factor had been taken into account in the investigation (CEC, 2007a). However, the fact that the usual response of markets to the abolition of quota is a large increase in trade and a reduction in prices was hardly remarked upon by any of the actors. In the clothing sector, the liberalization of quota restrictions had led, not only to increases in trade, but also to substantial falls in prices (Curran, 2006). It is quite logical that the same would happen in the footwear sector and quite possible, therefore, that the low prices were a result of adjustment to the removal of market distortions, rather than dumping. This point could have been more effectively exploited by those opposed to duties.

The extent and complexity of the row over Chinese shoes was indicative of the difficulty the EU was experiencing in developing a coherent response to the might of Chinese manufacturing. On the one hand governments recognized the important positive effects for consumers that cheap imports were bringing, but, on the other, when their own industries were threatened they had great difficulty resisting pressure for protection. The contradiction for Europe was summarized well by the head of the Federation of European Sporting Goods industries, “Europe cannot declare lofty goals about becoming a modern and dynamic economy and at the same time shield inefficient manufacturers from global competition” (quoted by Bounds, 2006).

The row also exposed how difficult it was proving for the EU’s anti-dumping apparatus to deal with the emerging economic reality—primarily, but not only, defined by China. In effect antidumping investigations look only at the key question of whether goods are being sold at below their price on their domestic market. The fact that this might actually be good for EU consumers and indeed for certain EU companies is not extensively taken into account by the investigations. The Swedish Board of Trade subsequently undertook a study of the impact of antidumping on the EU shoe industry.<sup>3</sup> They found that 50–80% of the value added of shoes imported from China was European, related in particular to substantial marketing and design inputs (Isakson, 2007). The study criticized the fact that this value added was not being taken into account in antidumping investigations, resulting in incoherent consequences: “shoes that are mostly made in Europe are seen as foreign and run the risk of being subject to anti-dumping. When that happens it means that the EU imposes anti-dumping against itself”

(Isakson, 2007, p. 2). The key difficulty is the definition of “made-in.” The study criticizes the way in which this notion is entirely related to the physical manufacturing process, rather than the whole production and distribution chain.

Partly as a result of the intense debate over Chinese shoes, the European Commission announced a review of its trade defense instruments including antidumping in 2006 (CEC, 2006a). The review document referred to the shoe case as highlighting the need to take account of the interests of both EU producers who outsource production and EU consumers when undertaking antidumping investigations (CEC, 2006, p. 6). Former EU Commissioner Mandelson openly posed the question of whether antidumping duties are always a good thing for Europe, as, even when justified by the facts they may interfere in the establishment of “rational production strategies” (Bounds, 2007). This is precisely the point made in the Swedish study.

In effect, in a global world where EU companies source their goods from a variety of suppliers, the notion of “Europeanness” is increasingly blurred, with different member states viewing the concept in different ways. Many companies based in the EU source a majority of their goods from China, as their low cost supplements the overall competitiveness of the companies’ offer. They may do so through investment or through simple import, but their China sourcing is an integral part of their global strategy for competitiveness. Less globalized EU companies clearly struggle to compete in this context.

Whether a company and its government sees China as a threat or an opportunity depends quite naturally on where they operate in this continuum. Rows about antidumping continually pit these different camps against each other. After shoes there was a similar row about energy-saving light bulbs and most recently candles (Bounds, 2008). The former case pitted the German government, usually liberal on trade issues, against the other member states, as the only major EU manufacturer is a German company—Osram (Liang, 2007). Member states, it seems, have great difficulty agreeing on whether trade from China is “fair” and, even if it isn’t, whether something should be done about it.

## **Africa**

Europe’s ambivalence to China is perhaps most evident in its policy on Africa, or rather on China’s policy in Africa. For decades Africa has been the preserve of European countries and companies. The current trade and political agreement with Africa, the Cotonou Agreement, is the latest in a long line of agreements aimed at supporting African development

through aid, cooperation and market access (CEC, 2000a).<sup>4</sup> However, in spite of many years of such support, Africa remained marginalized in world trade and investment (Curran, et al., 2008).

The emergence of China as an economic actor in Africa has taken Europeans by surprise and reactions have been rather muted. Ostensibly Europe's lack of enthusiasm for Chinese expansionism in Africa is motivated by the fact that its presence is mainly related to economic interests (*The Economist*, 2006a). Europeans like to see their own involvement in Africa as more benevolent, although, as indicated above, years of European support for development has not significantly changed the negative trajectory of most countries. Louis Michel, the EU Commissioner for development, has accepted that the EU is not really in a good position to moralize about involvement in the continent (Michel, 2007). However the China–Africa Summit in Beijing in 2006 provided an indication of the importance of the growing relationship, and motivated observers, including the EU, to reconsider its importance (Shanglin, 2006).

Concerns on Chinese involvement in Africa are both economic and political. On the one hand there are fears that booming Chinese demand for commodities from Africa is fueling price rises and further encouraging African dependence on a few key commodities to the detriment of the rest of the economy (*The Economist*, 2006a). In the short term it is clear that Africans benefited from these high prices. Growth rates in resource rich African countries were close to 10% in 2007. As these countries are home to a third of the continent's population, these growth rates have significant impacts on poverty reduction. Indeed, these levels should be sufficient to attain the Millennium Development Goals—hitherto seen as beyond the reach of most of Africa (World Bank, 2008).

In the long term, however, commodity dependence tends to be bad for development and the high prices paid for commodities such as oil can fuel the “Dutch disease”—an overvalued exchange rate which undermines the competitiveness of noncommodity industries (Campos & Vines, 2008). In addition, the global economic slowdown is already having negative impacts on these commodity prices, a development that will certainly reduce growth rates in the near future.

More fundamental concerns arise at the political level, however. These are multiple. First, there are concerns that the Chinese represent a more interventionist, centralized model of development for Africa—what has been termed the “Beijing Consensus” in direct reference to the hitherto standard “Washington Consensus” of the World Bank and the IMF

(*The Economist*, 2006b). As Rodrik has pointed out, measured against the standard policy mix for development “China’s policies resemble more those of a country that messed up big time than those of a country that became a formidable competitive threat in world markets to rich and poor countries alike” (Rodrik, 2006). Although the standard Washington Consensus does not seem to have served Africa particularly well, the fear that the Chinese alternative model could encourage African governments to intervene more heavily in the economy, after years of arm-twisting to do the reverse, horrifies economic liberals (*The Economist*, 2006b).

Another key concern is that Chinese involvement in Africa is “value-free”—in the sense that Chinese support and aid is not dependent on respect for certain international norms such as human rights or good governance. Given the extent of problems of governance in Africa, Western donors have consistently sought to link aid to “good” policies—so called “conditionality.” The fact that China both invests and provides aid without any conditions attached (except economic viability in the former) provides African governments with an alternative source of funding without any pressure to change “bad” policies (*The Economist*, 2006). For example, in Angola, the willingness of the Chinese government to provide aid without conditions enabled the country to cease efforts to conclude an agreement with the IMF (Campos & Vines, 2008).

Concerns are most evident in relation to Sudan, where Chinese companies moved in to develop the oil fields after Western companies withdrew due to civil war and concerns about genocide in Darfur (*The Economist*, 2006c). China has become the biggest investor in the country, largely motivated by its growing need for energy, but it has been accused of ignoring human rights abuses and colluding with the regime, including resisting efforts in the UN Security Council to properly address Darfur (*The Economist*, 2006a; Lisbonne de Vergeron, 2007).

The World Wildlife Fund (WWF), a prominent environmental NGO, has made the legitimate point that China’s involvement in more controversial regions such as Sudan in its search for resources is an inevitable result of the fact that Western interests control the more accessible and less controversial sources (Pamlin & Baijin, 2007). Furthermore, recently the Chinese have adopted a more conciliatory attitude and have become active in addressing the problems of Sudan at political level (Guijin, 2008). This could be a sign that their approach to Africa is becoming more sophisticated. Indeed, a policy of “non-interference,” which has always been a by-word of Chinese diplomacy, becomes untenable in circumstances where political chaos impacts on all elements of

the economy and society. The Chinese seem to have accepted that non-interference cannot equal indifference in such contexts (Lisbonne de Vergeron, 2007). Nevertheless, Europeans remain skeptical.

Overall, the European rhetoric on China's involvement in Africa has been a mixture of guarded acknowledgement of the potential positive development impacts together with a good deal of more critical commentary based on concerns related to governance, economic dependence on commodities, support for unsavory regimes, and the fact that interests are overwhelmingly economic rather than developmental or humanitarian. It is notable that this kind of critical coverage does not tend to follow the involvement of Western powers in the continent, which is generally welcomed. The debate has been far more active in the press and NGOs than at political level, but the controversy has inevitably spilled over into the political arena, although diplomatic sensitivities mean that criticism tends to be less overt.

In reflection of this, the EU's official response to China's involvement in Africa has been rather limited. There have not yet been any official documents on the issue, in spite of extensive discussion in the press. However, the latest EU paper on China, in referring to the need to coordinate international aid efforts, talked almost exclusively about Africa (CEC, 2006b). At the same time, the most recent EU paper on Africa refers to the growing economic role of China in the region as a motivating factor in reinvigorating the EU–Africa relationship (CEC, 2007b). The European Parliament has raised the issue of China's role in Africa (EP, 2008) and expressed concern about the potential negative effects of Chinese involvement in terms of governance and human rights. It called for a coherent EU policy on the issue. The European Commission is due to respond to this report in a formal paper in the near future.

A European Commission conference in Brussels in June 2007 sought to explore the question of the roles of the EU and China in Africa and start a process of cooperation with the Chinese (CEC, 2007c). At the conference, Louis Michel was positive about the potential benefits of Chinese involvement in Africa and its positive contribution to growth. Yet he also highlighted the difference in the Chinese and EU frameworks for development support. While acknowledging that China could not be expected to conform to "rules" which it had not been involved in developing, he called for a dialog with the Chinese to clarify a common approach (Michel, 2007).

Establishing such a common approach will not be straightforward. The EU has its own "European Consensus" on development which, although seeking to differentiate the EU approach from that of

Washington, has many common features and emphasizes several issues which are likely to be problematic to Beijing. For example the clause on “Common values” states: “EU partnership and dialogue with third countries will promote common values of: respect for human rights, fundamental freedoms, peace, democracy, good governance, gender equality, the rule of law, solidarity and justice” (CEC, 2006c). Several of these values are not easily reconciled with Chinese approaches to governance, and such fundamental differences in priorities seem unlikely to be easily harmonized into a common approach.

At the Brussels conference, the Chinese ambassador to the EU underlined that China represented no threat to European interests in African, but did acknowledge that “China and Europe’s levels of economic development and societal institutions are not alike; it is natural that there should be different views and experiences regarding the Africa question between the two of them” (Chengyuan, 2007). He also acknowledged that mismanagement of the EU–China relationship in Africa could lead to new frictions, and he called for enhanced dialog to avoid this.

Such dialog is common in the EU–China relationship. Indeed, most EU commissioners and departments have been very enthusiastic about talking with the Chinese. There are more than 40 existing areas of dialog and cooperation (Chengyuan, 2007) while the recent EU–China High Level Mechanism meeting in Beijing brought the biggest common Commission Delegation of any meeting in its 50-year history (Mandelson, 2008). However, there are concerns that deeper bilateral discussion is being side-tracked by these large and intense meetings where little progress on substance can be expected and where the fundamental differences in approach are not adequately addressed (*The Economist*, 2007a). The next section of this chapter will look at the structure of EU–China relations and how the rhetoric sometimes sits rather uneasily with the tensions that this section has shown exist on several key issues of trade and development.

### **The EU–China relationship—what kind of engagement and for what ends?**

The importance of the EU–China relationship for the European side is evidenced by the many policy papers that have emerged since the late 1990s. A 1995 Commission document marked the beginning of the EU’s realization that the China question was a key issue (CEC, 1995). The policy paper had a two pronged approach—first, engagement with China at a political level on such key issues as human rights and, second,

addressing the rise of China as an economic power. This basic two-pronged approach has not changed substantially over the many policy papers since (CEC, 1998, 2000b, 2001, 2003) and has even been reinforced by the most recent EU policy papers where the political and economic aspects of the relationship were dealt with in separate documents (CEC, 2006b, 2006d). However, the EU's 1995 document was written when China was not yet a member of the WTO and the trade deficit with the EU was in the 8–10 billion ECU<sup>5</sup> range and fairly stable. The most recent papers were written in a context of a rapidly growing deficit of over €100 billion. Clearly, the extent and urgency of the issue are seen differently today than in 1995.

The most notable difference between the EU's 1995 document and that from 2006 is the terms in which political engagement is discussed and particularly the high profile which contentious political issues had in the latter document. The issue of "human rights" represented more than half of the chapter on political engagement in 1995, Tibet was mentioned specifically, and the rhetoric was quite critical: "reports of human rights violations by authorities at every level continue, with severe restrictions on the right of citizens to freedom of association, expression, and religion, as well as to due legal process and fair trial" (CEC, 1995, p. 5). The follow-up paper in 1998 which set the framework for policy over the following few years was also directly critical (CEC, 1998). In the most recent paper, the subject of human rights was not referred to as a key point, but rather as part of "Supporting China's transition towards a more open and plural society." In this context concerns about human rights "in all regions of China" were expressed in more muted terms. The Commission did acknowledge, however, that their concerns were increasingly not being met in the Human Rights dialog set up, at the suggestion of the Chinese, even before the 1995 policy paper.

One could see this change as a natural progression, as understanding and mutual interest increased between the two actors. This is the view of many EU politicians and bureaucrats, who consider engagement and soft persuasion as the means to change the situation for the better (as evidenced in the 2006 policy paper). It is said that the Chinese in turn appreciate the EU's low profile on the human rights issue (Lisbonne de Vergeron, 2007). However, one could also view this change as an indication of the way in which overriding economic interests are increasingly preventing the EU from outwardly criticizing elements of the Chinese model with which it is not in agreement. In any case, what is clear is that as the relationship has developed the EU has focused more on

dialog and increased cooperation and understanding and less on efforts to directly influence or change the Chinese model.

Although the 2006 document includes the rather lofty objective “to leverage the potential of a dynamic relationship with China based on our values” (CEC, 2006b, p.2), it is not at all clear how the EU intends to reconcile the extensive differences in values between the Chinese and EU socioeconomic structures. Outside observers are more straightforward in their assessment of the difficulty. Men has characterized the period from 2003 to 2004, just after the announcement of an EU–China “Strategic Partnership” as the “honeymoon period” where consensus seemed possible, one which is now being followed by an “adjustment period” as both sides realize the complexity of building such a partnership between two actors with differing values and economic interests (Men, 2008). As the Center for European Reform, a London based think-tank has pointed out, “the EU will still struggle to build a strategic partnership with what is essentially an autocratic one-party state while at the same time upholding its own values and principles” (Barysch, 2005, p. 3). This fundamental contradiction is at the heart of the EU’s difficulties in establishing a clear, consistent, and coherent China policy.

Much of the criticism of the impact of China on the EU market and on Africa highlighted above reflects a mistrust of the economic model on which the Chinese export miracle has been based. In the 1995 Communication the Commission was very critical of the extent of state involvement in the Chinese economy, particularly the restrictions on trade, unfair treatment of foreign companies, and technical barriers to trade (CEC, 1995). Although WTO membership has undoubtedly reduced the extent of some of these problems, EU businessmen still complain about unfair treatment (*The Economist*, 2007a). The latest Commission policy document on trade lists a series of unfair practices and restrictions on trade, which, although less flagrant than those listed in 1995, still add up to considerable interference in the capacity of non-Chinese companies to do business (CEC, 2006d).

Furthermore, concerns about low-cost goods coming from China are motivated not only by economic protectionism but also by fears about the sustainability of the latter’s production system and its impacts on the development of other poor countries (e.g., Kaplinsky & Morris, 2006; ICFTU, 2006a; EP, 2005). The lack of an effective environmental protection system and the fact that the Chinese have not ratified half of the core conventions of the International Labor Organization (ILO) contribute to concerns about sustainability (CEC, 2006d; ICFTU, 2006b; EP, 2005). Many European governments and NGOs are concerned

that untrammelled growth in China will be at the expense of its environment and workers. The European Parliament has expressed this rather clearly declaring itself “deeply concerned at the lack of workers’ rights in China, the very low level of wages and the increasing number of industrial accidents due to inadequate health and safety rules” (EP, 2005). These concerns undoubtedly impact on economic decision-making and contribute to a more receptive environment for calls for restrictions on Chinese trade.

In spite of widespread concerns about the impact of Chinese growth on other developing countries, in reality it is very varied and depends on the production structure of the country in question. Depending on whether countries are primarily suppliers or customers to China they will be impacted by its growth differently. Positive impacts on raw materials exporters are counter-balanced by negative impacts on manufactured goods exporters and even the former need to be seen in the context of potential negative impacts on the wider economy—through “Dutch disease” effects (see, e.g., Ianchovichina, Ivanic, & Martin, 2008). The potential for China to “crowd out” other developing countries because of its sheer size and production potential rests a real concern. Although China itself has made huge strides in growth and consequent poverty reduction, many other developing countries have been singularly unsuccessful.

### **Building an EU–China policy—getting the foundations right**

A key element in explaining the lack of coherence between the different elements of the EU’s China policy is probably the framework on which it is based. In spite of the plethora of papers emanating from Brussels since 1995 and the launch of a “Strategic Partnership” in 2003, the legal basis of EU–China relations has not changed since 1985, when the current bilateral trade and cooperation agreement was negotiated (Barysch, 2005; Men, 2008). This means that a relationship which has changed vastly over two decades is still operating on the basis of a framework built over 20 years ago for what was a relatively minor EU partner.

Clearly, an upgrading of this framework would provide an opportunity to address some of the inconsistencies and the incoherence which have bedeviled the relationship on the individual issues discussed above. There is agreement in principle to move forward and the negotiations on a new “Partnership and Cooperation Agreement” started in early 2007 (Men, 2008). However, the process of negotiating any new agreement is likely to be long and tedious. On the one hand the EU and China have different conceptions of what the agreement should cover

and there are likely to be major disagreements on the EU's "standard" clauses which it seeks to incorporate in all its agreements, especially those on human rights, intellectual property rights and "common values" (Barysch, 2005).

On the other hand, as we have seen above, the EU member states are not always consistent in their approach to China and the negotiations could further open up the fault lines already exposed by the discussions on textiles and shoes. Ideally, the negotiations would provide an opportunity to address the legitimate concerns of some member states on sustainable development and human rights issues, while at the same time seeking to provide increased access to the Chinese market for those primarily interested in economic relations. However, balancing these conflicting needs, together with the less clearly articulated need to temper China's expansion on the EU market, will not be a simple task. The difficulties that the EU member states have experienced in establishing agreement in the cases of shoes, textiles, and Africa do not bode well for a quick and easy negotiating process.

### **The implications for China and for Chinese companies**

China has not been a passive bystander in the development of the EU–China relationship. It has taken the initiative in many of the dialogs now in place, including, as indicated earlier, that on human rights. It appears that, having originally considered the EU as a block as rather irrelevant, the Chinese started to take its role seriously during the negotiations for WTO accession. It is clear that, in a context where the Commission speaks for the Union as one, the EU has much more influence than in other areas of international affairs. As Barysch (2005) has pointed out "China was somewhat taken aback when demands from Brussels threatened to delay its WTO entry" (p. 27). In addition, many of the subsequent "grains of sand" in the wheels of harmonious Chinese relations with the EU's member states emanate from the trading relationship. This realization has forced a rethink and is likely to be at least one of the reasons why the Chinese chose the EU as the subject of its first policy paper on an international partner (Chinese government, 2003).

This paper starts with the observation that "There is no fundamental conflict of interest between China and the EU... However, given their differences in historical background, cultural heritage, political system and economic development level, it is natural that the two sides have different views or even disagree on some issues." On a political level,

the paper gives high priority to encouraging both EU support for the one-China policy and the objective of promoting "the EU's understanding of Tibet," as well as ending with a call for the abolition of the long-standing and contentious arms embargo.<sup>6</sup>

In the area of economic relations the paper proposes to "give attention" to updating the current Trade and Economic Co-operation Agreement "at an appropriate time." This could hardly be interpreted as great enthusiasm. The paper rather puts a high priority on objectives such as to "properly address irrational restrictions and technical barriers" as well as to "reduce and abolish antidumping and other discriminatory policies and practices against China."

Clearly, the Chinese side sees both the EU's high technical standards and the use of its antidumping policies as discriminatory. However, such concerns about antidumping, including the highly ambitious objective to abolish it, have not prevented the Chinese from increasingly using the mechanism themselves, including against the EU (Wu, 2008). At the same time, technical barriers to trade are seen on the European side as a major barrier to EU exports in China (Barysch, 2005). These two issues are therefore likely to loom large in the negotiations on a future agreement. They are also at the heart of many Chinese companies' concerns.

The Chinese policy paper also includes calls for further cooperation on such key issues as environment and energy, as well as less contentious topics such as IT and cultural exchanges. All in all it is a comprehensive, although brief, document which reflects the multipronged approach of the Chinese in their discussions with the EU.

The implications of these political developments for globalizing Chinese companies are various. It is vital that they understand the context in which the EU operates in order to avoid the protectionist pitfalls into which their compatriots have often fallen. Although a recent paper by Chatham House notes a high level of understanding of the EU policy apparatus in China, it is likely that this is more concentrated in the administration than in business (Lisbonne de Vergeron, 2007). For business, a proper understanding of the key aspects of EU policy is vital.

On the issue of technical barriers to trade and safety more generally, the EU is strongly attached to the precautionary principle, by which, in case of scientific doubt, technical standards are set at the higher level in order to avoid possible negative impacts on consumers or the environment (CEC, 2000c). The fact that EU standards sometimes vary from those set at international level inevitably has implications for trade, especially from developing countries (see Otsuki, Wilson, & Sewadah, 2001); however, the best medium-term strategy for exporters is to seek

to conform to EU standards rather than trying to change them. Indeed, the Chinese government proposes in its policy paper to develop stronger links in order to avoid difficulties due to safety and environmental protection issues. In addition, the Commission is committed to ensuring that any EU standards are nondiscriminatory in practice (CEC, 2000c). If such discrimination can be proved, efforts would need to be made to correct it.

On the issue of product safety, there has been a lot of concern in recent years, both in the EU and elsewhere, about the safety of products coming from China, encouraged by a series of product recalls in products as diverse as toys, toothpaste, and dog food (*The Economist*, 2007b). The fact that China is the key source of counterfeit goods in the EU further stokes concern, especially in sectors like toys, where they are not only illegal but also potentially dangerous (CEC, 2008). Close attention to safety standards should clearly be a priority for exporters, but pressure on margins often forces manufacturers to cut corners (*The Economist*, 2007b).

In relation to the threat of antidumping, this has potential negative impacts on all developing country exports (Neufeld, 2001), but Chinese companies are at a further disadvantage due to the fact that the EU has not yet accorded MES to China. Antidumping duties are thus more likely to be imposed and China has been a major target of antidumping actions in recent years. About a third of the EU's antidumping measures in force at the end of 2006 were against China (CEC, 2007a). In general antidumping actions are initiated against goods sold on the EU market at a lower price than on the home market. Thus proper attention to differential pricing could help to avoid difficulties. Furthermore, Chinese companies in joint ventures with EU partners are less likely to be targeted by antidumping actions as China's "transition economy" status enables certain companies to be classified as having MES. So far, however, most requests for such treatment have been turned down (CEC, 2004) and in the shoe case above only one Chinese company was treated as having such status (CEC, 2007a).

In terms of the role of Chinese companies in the wider world, the extent of the debate on the Chinese presence in Africa has highlighted the sensitivities of the EU press and politicians to the activity of Chinese businessmen and government abroad—particularly in their "neighborhood." There are efforts underway to increase dialog between the EU and China, in particular in relation to Africa, and the European Commission seems likely to propose a more formal dialog, but sensitivities will certainly persist and companies need to be aware of them.

The recent Chatham House analysis of Chinese attitudes to Europe referred to above indicated that the Chinese are not overly concerned about trade tensions, which they see as primarily linked to the failure to award MES (Lisbonne de Vergeron, 2007). As this situation is for a maximum period of 15 years according to China's accession agreement to WTO, this would imply that in the medium-term tensions will reduce. However, even the brief review above of policy in three areas highlights that concerns on China are a reality in Europe and that they are mounting, rather than reducing. The European Commission is unlikely to be able to neutralize the protectionist tendencies of EU companies and governments, even when MES is eventually obtained. It is vital, therefore, that China and its companies follow developments in Brussels closely in order to react quickly to any developing trade tensions.

Finally, it has been reported that there is a perception in China that the EU is an ineffectual world power, handicapped by internal rivalries (Lisbonne de Vergeron, 2007). The brief analysis above tends to confirm this perception. Establishing a clear EU line, even on issues that should be technical such as antidumping, has proven far from straightforward. However, the EU has the opportunity to develop a clear China policy, in the context of the ongoing negotiations for a new agreement with the Chinese. Especially in the trade area, the EU is a real world power representing almost 500 million consumers. If the member states do manage to overcome their different national interests and establish a common approach to China, this would much strengthen the EU's hand.

## **Conclusion**

This chapter has sought to clarify the complex nature of the EU's relationship with China through the lens of its trade and development relations. It explores the way in which the EU has developed policy in relation to China on three key areas of contention—textiles, shoes, and Africa—and highlights the lessons of these experiences. In brief the EU has had great difficulty articulating a clear and unambiguous policy in relation to the emergence of China as an important economic actor. This is a direct result of the differences in the political economy of the relationship with China between different member states, as well as differences in approach on key potential issues of conflict—such as human rights and the arms embargo. The major difficulties which the EU experienced in establishing a common line on the competitive threat from low-cost textiles and shoes does not bode well for the definition of a clear strategy in the context of the negotiation of a new cooperation

agreement with the Chinese. Unless the EU member states can effectively iron out their differences they will be seriously disadvantaged in any negotiation.

This lack of coherence in Europe is not necessarily to the advantage of the Chinese. Although they have been accused of playing the different member states off against each other, overall there seems to be a clear will in China to see a strong and united EU policy, both towards themselves and towards the wider world, in part to balance the power of the United States (Barysch, 2005; Lisbonne de Vergeron, 2007). In reflection of the famous quote from US Secretary of State Kissinger in the 1970s, the Chinese also have a sense of frustration at not having a single European phone number to call. Clearly, in the area of trade relations they do. It is a Community competence with a single Commissioner. However, even in this area, as we have seen, member states' views often differ markedly, so outcomes are difficult to predict.

The situation on wider political issues is even more complex, with a clear lack of consistency between member states. These inconsistencies reflect long-standing differences in political and economic ties with China which mean that even the three key EU powers—France, Germany, and the United Kingdom—have important variations in their China policy (Barysch, 2005). As the review by Barysch (2005) highlights, until recently France was seen as the country most actively engaging with the Chinese. However, the statement by French President Sarkozy that he might not attend the Olympic opening ceremony (he did finally attend), together with the chaos that ensued when the Olympic flame went through Paris, soured relations and fanned a growing Chinese movement to boycott French products (Magnier, 2008). The recent EU–Asia summit, where Sarkozy agreed common approaches to the financial crisis with the Chinese, will undoubtedly revive relations, but the bad feeling generated by the Olympic incident is unlikely to dissipate overnight.

For business, the lack of clarity in the EU's position on China poses real challenges. Protectionist sentiment clearly remains strong in several EU member states and the capacity of certain governments to pressurize their partners through cross linkages between ostensibly unrelated policies is legendary.<sup>7</sup> This makes it difficult to predict outcomes, as they do not always depend on the merits of the case. The best policy for Chinese companies is to develop a clear understanding of the EU's key policies most likely to affect them—especially standards and antidumping measures—and develop policies to avoid potential

difficulties. In parallel, it is to be hoped that political progress on a framework for relations will help to establish a clearer and more consistent operating environment. However, business cannot wait for this framework, especially as the negotiations risk being protracted and difficult.

Finally, the title of this chapter was chosen deliberately and to some extent in opposition to a recent paper on the relationship entitled "Embracing the Dragon" (Barysch, 2005). There is a real sense in which the EU has been chasing after developments in China in a reactive manner rather than as part of a coherent and well thought-out strategy. This is a dangerous approach in a context where the economic potential of the partner country is enormous. The EU cannot afford to develop policy in an ad hoc manner. Such policy-making always risks resulting in a series of suboptimal compromises depending on how member states perceive their best interest at the time. The transformation of the German government from supporter of free trade to advocate of antidumping in the light bulb case is a clear example of how economic interests create inconsistencies in policy. The EU needs to avoid such inconsistencies and ensure that the relationship with China is based, as soon as possible, on a clear framework. Only then can the EU begin to embrace the dragon on their own terms rather than chasing it.

## Notes

1. The European Commission imposes antidumping duties following an in-depth investigation which seeks to establish whether the goods in question are being sold at below their price in the home country, that is, dumped. In theory this tool is a means of insuring fair trade practice. Unfortunately, it has often been used for protectionist ends.
2. See Barysch (2005) for a discussion on MES. In fact certain Chinese companies, primarily those joint owned with EU companies, may be accepted as having MES. The discussion on MES is highly political and a bone of contention on both sides.
3. This study is unusual in focusing on the impacts on the EU industry, rather than EU consumers. The Swedes have consistently argued that antidumping is bad for consumers.
4. For further discussion on the economic elements of the Cotonou Agreement and its objectives see Curran et al. (2008).
5. ECUs: European currency units were the common unit of account used in the EU before the introduction of the euro. Their value is roughly equivalent.
6. See Barysch (2005) for an extensive discussion on the arms embargo.
7. It was reported that the United Kingdom had offered support to Italy for the anti-dumping duties on shoes if they in turn supported the United Kingdom on the issue of longer working hours (Bounds, 2006).

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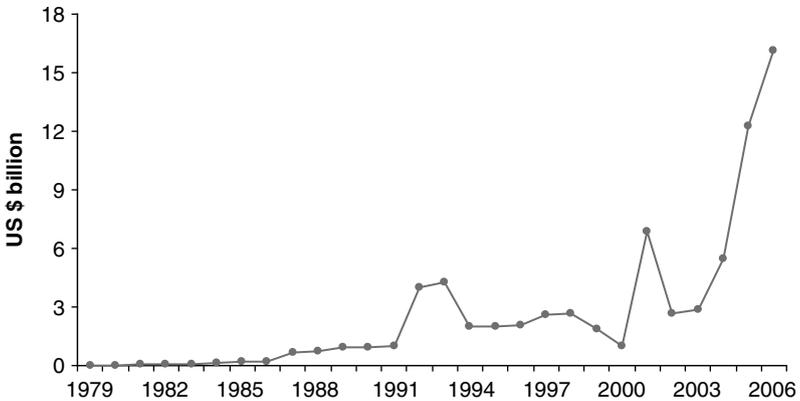
## China's New Approach to ODI in Africa: A Model for a Government Seeking Natural Resources

*Amir Shoham and Mosi Rosenboim*

### Introduction

The emergence of the Chinese economy, which has grown rapidly since the late 1970s, has increased the country's demand for natural resources. China's demand surplus for raw materials has made it increasingly dependent on the global supply of raw materials and energy (Cheng & Zihui, 2007). Throughout this period, policymakers in China's central government understood the importance of being open to the global economy, first as receivers of inward foreign direct investment (FDI) and, more recently, also as a provider of outward direct investment (ODI). China is well known for its central planning and control in economic issues (Scott, 2002), especially of ODI. Although formal regulation of ODI has been eased since 2002 (Sauvant, 2005), China's central government still maintains significant formal and informal control over the goals and amount of Chinese ODI (Buckley, et al., 2007). Cheng & Ma (2007) argue that the bulk of China's FDI comes from the country's state-owned enterprises (SOEs), in particular the large multinational companies that are administered by the Central Government's ministries and agencies. The central government SOEs' share of FDI flows in 2003–2005 were 73.5%, 82.3%, and 83.2%, respectively. Their shares of FDI stocks by the end of 2004 and 2005 were 85.5% and 83.7% respectively.

China started to open its economy to FDI in the late 1970s and used the inflow of FDI as one of the most important stimulants for growth. Since the 1990s, China has received more FDI than any other developing country. Its outward FDI has grown rapidly during the past three decades from less than US \$100 million in the 1980s to US \$12 billion in



Graph 8.1 China's outward foreign direct investment (1979–2006)

Sources: Ministry of Commerce and China Statistics Bureau (from Morck, et al. [2008])

2005 (UNTCTAD, 2007) and US \$16 billion in 2006 (Morck, Yeung, & Zhao, 2008). During this period, China's central government changed its policy toward outward FDI; it now includes a series of incentives to promote investment abroad such as tax incentives, credit and loans, foreign exchange allowances, and a favorable import and export regime. Since the main share of China's outward FDI comes from firms that have a close relationship with the government and even private overseas investment requires government approval, it is not hard to establish the importance of the Chinese government in outward FDI (Cheng & Ma, 2007).

Graph 8.1, shows the rapid recent growth of Chinese ODI.

Since 2000, Chinese authorities have used the slogan "Go Global!" to encourage local enterprises to invest abroad (Hong & Sun, 2004). Taylor (2007) points out, "The strategy chosen is basically to acquire foreign energy resources via long-term contracts as well as purchasing overseas assets in the energy industry."

Although Chinese ODI is still very small, relative to global flows, its growth rate is among the fastest, when compared to other source countries (Woo & Zhang, 2005). The reasons that the Chinese government encourages outward FDI are:

1. Resource exploration.
2. Projects that can promote the exports of domestic technologies, products, equipment, and labor.
3. Overseas research and development centers.

4. Merge and acquisitions (M&As) that can enhance the international competitiveness of Chinese enterprises and accelerate their entry into foreign markets.
5. From a macroeconomic perspective, encouraging international growth through ODI is considered consistent with China's trade surplus and with the positive gap between savings and investments that characterizes the national accounts (Wong & Chan, 2003).

Clearly, because China is itself a low-cost production base, cost minimization was not a major motivation of Chinese FDI overseas (Cheng & Ma, 2007).

Krkoska and Korniyenko (2008), who examined China's investment in Russia, suggest that the determinants for these investments are proximity of the investment location, market size, and the ability to access Russia's natural resources. Cheng and Zihui (2007) note that China's effort to invest in oil companies around the world gives the impression that resource-seeking is key determinant for Chinese ODI.

Buckley, et al. (2007), investigated the determinants of Chinese outward FDI from 1984 to 2001. They divided their sample into two different time periods, before and after 1992. They found that host country's natural resource endowments played an important role in outward Chinese FDI decisions. They argue that during the period under study, Chinese firms have moved away from undertaking mainly market-seeking strategies in nearby foreign markets towards the securing of raw materials in riskier markets. These findings reinforce the view that the securing of natural resources has become an imperative in more recent years, in line with Chinese domestic growth. As this introduction explains, China is becoming a major player, not only in incoming FDI but also in outgoing FDI.

This chapter is organized as follows: the following section will provide a brief survey on the current economic relationship between China and Africa. This is followed by an explanation of our model regarding the lifecycle of Chinese ODI to Africa and a test of the political risk impacts on Chinese ODI to Africa.

## **Theoretical background**

### **China–Africa trade and ODI relations**

This chapter focuses on China's ODI to Africa because of the unique patterns that we will discuss below. In recent years, Chinese trade with Africa has grown rapidly. In 1999, the value of China's trade with Africa

was US \$2 billion; by 2004 it had grown to US \$29.6 billion and in 2005 it reached US \$39.7 billion. According to the China–Africa Business Council, China is now Africa's third most important trading partner, behind the United States and France but ahead of the United Kingdom (Taylor, 2007), and the 2007 United Nations report, for example, points out that China is one of the major providers of capital for developing countries in Africa (UNCTAD, 2007).

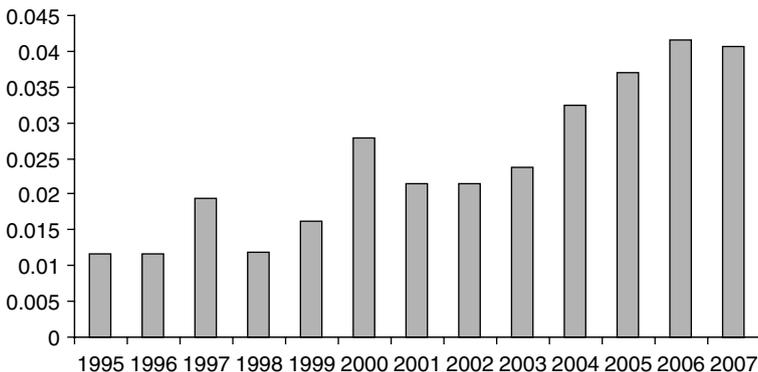
Graph 8.2 displays the Africa's growing share in China's imports.

Africa is also emerging as an important destination for new Chinese FDI and has recently become an important FDI location for Chinese enterprises (UNCTAD, 2007). In 1997–2001, Africa became the second largest regional destination of Chinese FDI outflows, receiving 24.1% of the total, exceeded only by Asia (Cheng & Ma, 2007).

There are several motives for Chinese FDI in Africa, including access to markets and circumventing import quotas imposed on Chinese products. However, FDI grew substantially only when securing access to natural resources became a major, explicit motive for outward FDI from China to Africa. This can be seen in Graph 8.3, which shows an impressive increase in FDI to Africa, starting in 2004.

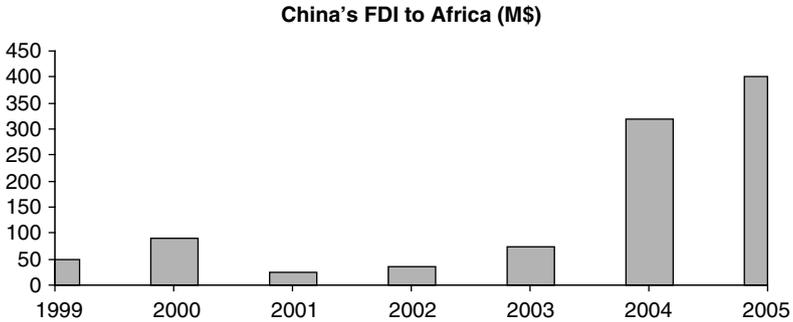
Morck, et al. (2008) shows that in 2006, the 67 new outbound FDI projects planned for southern and eastern Asia and Africa account for over 53% of the 125 total reported. In contrast, only about a third were directed to developed countries.

China is now the second largest source of FDI in Africa, surpassed only by South Africa. For the host economy, China offers possibilities for



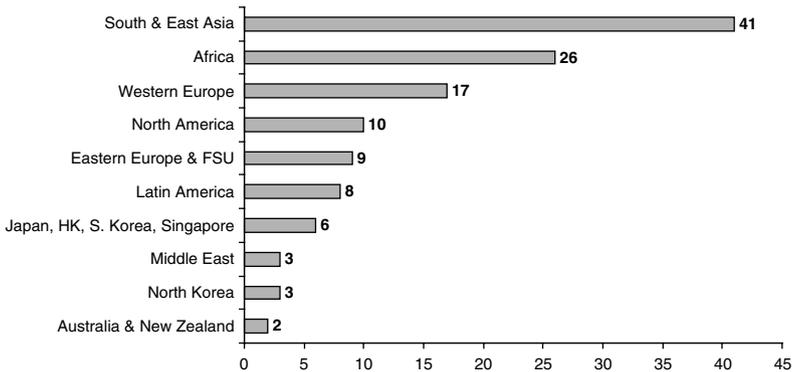
Graph 8.2 Imports from Africa/total imports

Source: MOFCOM



Graph 8.3 China's ODI to Africa

Source: MOFCOM



Graph 8.4 Number of planned FDI project by destination (2006)

Source: FIAS/MIGA Firm Survey, World Bank (from Morck, et al. [2008])

growth and brings financial, technological and skill resources (Bellabona & Spigarelli, 2007). As of 2006, China's biggest suppliers in Africa were Angola, the Republic of Congo, Equatorial Guinea, and Sudan. It has also bought supplies from Chad, Nigeria, Algeria, and Gabon.

SOEs are offered a large amount of capital for FDI and are instructed by the China International Trust and Investment Corporation to search for investments in resource industries (Zhang, 2003). The Chinese government can use outward FDI to control the sale of resources by African countries and ensure that meeting China's needs for resources will be the African companies' first consideration. ODI in natural resources is encouraged because of growing needs in China.

In addition, if Chinese companies use FDI to control firms in Africa, then they may prefer Chinese products and this will enlarge the markets available to Chinese products. Even African spokespeople acknowledge that China is investing in Africa for its resources. Mohamed El Masry (MOFCOM, 2006) head of the African Union of Chambers of Commerce, Industry, Agriculture, and Professions (UACCIAP) said, "Africa's cooperation with China is aimed at increasing bilateral trade and attracting Chinese investment and technology transfer to fully tap the continent's human and *natural resources* for better economic growth."

The research regarding China's general ODI (Buckley, et al., 2007) and ODI to Africa in particular is just beginning. Chinese FDI increasingly targets natural resources that support the needs of China's economic growth. China requires secure access to natural resources. For example, oil accounts for approximately two-thirds of all African exports to China (Shinn, 2008; Hanson, 2008). The African continent is rich in natural resources, particularly petroleum (for example, Africa is home to 9% of the world's known oil reserves and there are probably significant undiscovered oil fields) and high-value minerals. In recent years, most of the large investments and FDI from China in Africa are related to natural resources or have a goal of maintaining good relations with countries that have reserves of natural resources. To summarize this section, China's main economic interest in Africa is the continent's natural resources, in general, and natural gas, in particular.

### **New approach to ODI motivation: A model for a government seeking natural resources**

To better understand this unique and homogeneous economic relationship, we suggest an alternative theory for FDI outflows that is based on the national level and not only on firms maximizing profits. Chinese FDI to Africa has two unique characteristics: First it is government funded, controlled, and navigated. Second, the main and almost only, motivation for China's outward FDI (ODI) in Africa is securing the future supply of natural resources for the growing Chinese economy.

Our FDI model is biased on a stage-by-stage lifecycle similar to the one previous research suggested on the firm level. The increasing number of multinational corporations (MNCs) are due to the fact that products have lifecycle (Hirsch, 1965; Vernon, 1966). All products go through a lifecycle that starts with introduction, proceeds to growth, followed by maturity, then decline. The product can be at a different stage in its lifecycle in different countries. Thus products that have reached stages

of maturity or decline stage in their home country may be at the earlier stages abroad.

Stopford and Wells (1972) analyze the different modes of entry used by companies when they commence marketing to foreign markets. The first initiative is indirect exports. If this initial effort is successful, the company undertakes riskier and potentially more profitable actions, such as direct exports, licensing, joint ventures, and direct investment. Johanson and Wiedersheim-Paul (1975) outline a four-stage process by which firms become MNCs. In the first stage, they export on an irregular basis; in the second stage, via agents; in the third stage, they open sales subsidiaries and in the last stage they establish production subsidiaries.

From the previous literature regarding international trade and investment, we learn that an FDI model has its roots in trade and the FDI process goes through several stages before it arrives at the steady-state stage. The last stage of a lifecycle of international trade is FDI.

This chapter proposes a new model that explains ODI that is motivated by a central government seeking natural resources. Our model has four stages that evolve over time, as depicted in Figure 8.1.

The four stages in the lifecycle portrayed by our model.

*Stage A*

At this point the country is taking its first steps towards opening to the world, even while the local economy is very weak and small. If the country has natural resources, the outcome will be a supply surplus in the local market, which leads to exporting the surplus. The lifecycle of

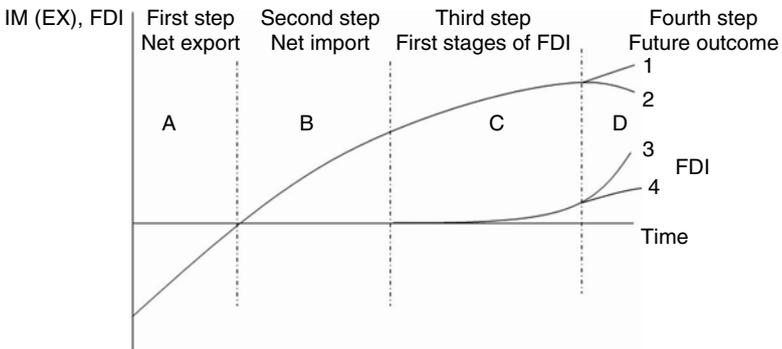


Figure 8.1 Model of ODI by a government seeking natural resources

Source: FIAS/MIGA Firm Survey, World Bank (from Morck, et al. [2008])

oil in China can be used to demonstrate our model. In 1973, China's output of petroleum products was large enough to export one million tons of crude oil to Japan. Exports increased to 6.6 million tons in 1974 and reached 13.5 million tons in 1978. In 1985, exports of crude oil amounted to approximately 20 million tons, roughly 16% of total production. China's demand for oil soared when its economy began growing rapidly, and since 1993 China has imported rather than exported oil (King, 2005).

### Stage B

Growing demand in the local market converts the largest oil exporter in Asia, China, into a net importer of oil. In the 1990s, China has become the second largest oil-consuming nation in the world, surpassed only by the United States <[http://en.wikipedia.org/wiki/Oil\\_in\\_China-cite\\_note-3](http://en.wikipedia.org/wiki/Oil_in_China-cite_note-3)> (US Department of State, 2008). Most of China's oil imports come from southeast Asian countries and the Middle East, but its fast-growing economy imports oil from all over the globe. Today, China's domestic oil production supplies only two-thirds of the country's oil needs, while one-third must be imported. As of 2008, China is obtaining one-third of its imported oil from Africa.

### Stage C

Imports increase and the Chinese government wants to secure its supply sources. At this stage, FDI from China to Africa starts. The FDI is used on two levels: On the national level, China helps governments in Africa with FDI, loans and donations. The second level of FDI is the firm level, which is characterized by creating new joint ventures with African natural resource companies. Today, China is in the first years of this stage (see Table 8.1).

Table 8.1 Count model dependent variable ODI to Africa

Variable	Coefficient**
C	10.811**
GDPPC	0.159**
Political risk	0.050**
Oil reserves	0.024**

\*\* P-value < 0.01 Adjusted R-squared = 0.13 P-Value Regression < 0.01

### *Stage D*

In our attempt to model the next step in China's ODI to Africa, we envision a few possible outcomes, as shown in Figure 8.1. The last stage of this lifecycle depends on China's future needs for natural resources and, more specifically, on the long-term growth rates that China maintains compared to the rest of the world. Possible outcomes include:

1. Outcomes D1 and D3 in Figure 8.1 represent a case with high needs for natural resources in the future. The outcome is high, rapidly increasing ODI, simultaneous to increasing imports from non-ODI and ODI companies and countries.
2. Outcomes D2 and D4 (see Figure 8.1): In case of a decreasing need for natural resources, China will lower its ODI to Africa and their first priority for imports will be for those from African firms that have a joint venture with a Chinese company or are fully owned by a Chinese company.
3. If there is a moderate increase in the need for natural resources any combination of the four outcomes that are presented in Figure 8.1 stage D could evolve.
4. Factors determining the outcome of the model. (Stage D)

As explained above, China's future path for ODI to Africa (as depicted in Figure 8.1, stage D) is the outcome of several factors that influence the demand for national resources. We argue that three main factors will determine the outcome of the model. The first factor is China's economic growth rate (see the literature referred to in Chapters 1 and 2). The future long-term growth rate will determine the actual amount of natural resources that China will need to secure with investment. We argue that China's growth is not the sole factor; a second, important, factor is the international growth rate. China competes with the rest of the world for natural resources and when the international growth rate is also high, there is surplus demand and tough competition. In this event, the motivation for investing in Africa, with its natural resources, will increase. As can be seen in Graph 8.3, China began its high level of ODI to Africa in 2004, even though it had been a net importer of oil since 1993. This is because there was an international surplus of supply in 1990s but there is now surplus demand for oil (as demonstrated by the rise in oil prices from 1995 to 2008). The first two factors are straight forward; the third factor is more complicated and so we added a short empirical test to support it.

The third factor is the environment in the host country. We use political risk as a proxy for the local, host environment. Empirical studies have found that host country instability is a major factor in FDI location decisions (Frank, 1980; Root, 1968; Basi, 1963; Aharoni, 1966; Buckley, Newbould, & Thurwell, 1988). Executives report political risk to be the most important variable influencing their FDI decisions, after the initial reason that motivated them to go global. According to a global survey, MNC executives appear to be sanguine about macroeconomics and political risks. However, these executives also foresee a marked heightening of political risks that could undermine the success of their overseas investment strategies (EIU, 2007). This survey also reveals that political risks have moved closer to the top of corporate agendas. Morck, et al. (2008) argue,

It is worth pointing out that the risks of outward FDI are not going unnoticed in China. The rationale and efficiency of companies going abroad have been frequently discussed in Chinese newspapers, academic journals, and some high-profile economic forums. Many scholars, practitioners and policy makers have called for caution and patience, emphasizing that FDI would be a long learning process for Chinese companies. Managers also try not to repeat the experience of their Japanese counterparts in the 1980s, and frequently seek the help of external advisors with their due diligence investigations.

However, Buckley, et al. (2007) found a positive correlation between political risk and China's ODI. Cheung and Qian (2008) also found that for developed countries political risk is linked to China's ODI.

We argue that political risk has a negative effect also on China's ODI to Africa. Since this argument contradicts part of the literature we conducted an empirical test that focuses on ODI Chinese to Africa and political risk effect. The test is described in the following section.

## **Method**

As stated in the previous section, we claim that one of the factors that will have in impact on the amount of ODI from China to Africa will be the political risk at the host country. Buckley, et al. (2007) and Cheung and Qian (2008) make the opposite claim. We hypothesize that their findings resulted in a positive correlation between political risk and FDI because they did not control for natural resources in the imperial test.

The Chinese are no different from other investors; they want to maximize yield and reduce risk, including political risk.

Our hypothesis is based on Vanek's (1963) explanation of the Leontief Paradox. The paradox evolved when Leontief empirically tested the Heckscher–Ohlin Trade Theory, which explains the existence and pattern of international trade based on a comparative cost advantage between countries producing different goods. Heckscher (1919) and Ohlin (1933) stated that this advantage exists because of the relative resource endowments of the countries trading. However, Leontief (1953) discovered that despite the United States being endowed with an abundance of capital, its exports were labor intensive and imports capital intensive. Vanek argued that Leontief may have oversimplified the production functions and failed to recognize the endowments of natural resources.

The majority of surplus in natural resources in general and oil in particular are located in high political risk areas like the Middle East, Russia, and Africa. China needs those resources for its high growth rates, so it will take on high political risk in its natural resources ODI that it will not accept for market-seeking ODI. We tested our hypothesis on a sample China's ODI to Africa started in the last few years as displayed in the section on theoretical background.

The variables in the empirical test are:

1. Dependent variable: ODI = Chinese FDI to Africa in 2005 in millions of American Dollars by country source UNCTAD (2006).
2. Independent variables:
  - (a) **GDPPC**—source CIA World Fact Book. Shows GDP on a purchasing power parity basis divided by population, as of July 1, 2005 for the African countries in the sample. We used GDPPC as a control for other ODI reasons, like market seeking.
  - (b) **Political risk**—Source PRSGROUP. The International Country Risk Guide includes a Political Risk Index, which consists of 12 components for measuring various dimensions of the political and business environment facing firms operating in a country. We used data from the December 2005 report. The political risk in a given country was scored on a scale of 0 and 100, 0 representing very high political risk and 100 representing no political risk in a country.
  - (c) **Oil reserves**—source CIA World Fact Book. Displays the stock of proven reserves of crude oil in barrels (bbl). Proven reserves are those quantities of petroleum which, by analysis of geological

and engineering data, can be estimated with a high degree of confidence to be commercially recoverable from a given date forward, from known reservoirs and under current economic conditions.

## Results and discussion

We conducted a Kolmogorov–Smirnov goodness-of-fit test on the dependent variable. The results showed that the dependent variable has a Poisson distribution and, therefore, we used a count model regression. The count model is employed when the dependent variable takes integer values that represent the number of events that occur. Our sample included 32 countries in Africa that had a political risk evaluation and ODI data. Table 8.1 displays the regression results.

As can be seen in Table 8.1, our hypothesis is supported. Political risk reduces ODI to Africa when the country's oil reserves are a controlled variable in the test. Having empirically tested the effect of political risk, we can now display the three factors that impact ODI in a figure. Figure 8.2 displays the three factors in three-dimensional format.

According to our argument, which is supported by the partial empirical test, the three factors that will impact the outcome of the model (see the section on methods) are China's growth, global growth, and political risk. Figure 8.2 displays the three factors and their expected impact for example the three-dimensional rectangle in Figure 8.2 (marked "W")

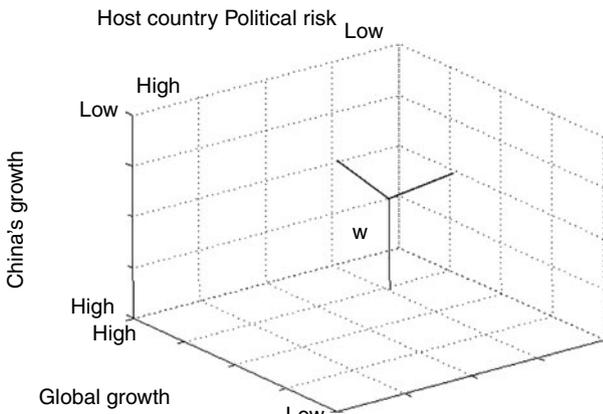


Figure 8.2 The three main factors shaping future ODI

represents the situation in which both China and the rest of the world have high growth rates and one country has a lower political risk, in comparison to other African countries. In this case, we expect that outcomes D1 and D3 of the model will develop. This means high Chinese ODI and high import of natural resources from the host country to China.

## Conclusions

The growth in China's economy during the last three decades increased its demand for natural resources. Since 2000, China has become a net importer of almost all natural resources. The next step taken by Chinese policymakers was to start securing natural resources in host countries by using ODI. Chinese imports from Africa have grown rapidly because of Africa's natural resources, hence China's oil imports from Angola and Sudan. Since 2005, China has backed up its growing imports by increasing ODI to Africa (see Graph 8.3).

Our theoretical model helps to predict the next stage in China–Africa trade and ODI relations. The relations depend on two main factors: world economic growth and China's growth rates. We argue that if the world economy grows rapidly, intense competition for natural resources will develop between developed and developing countries. In this situation, Chinese policymakers will encourage greater ODI to African countries to secure the constant flow of those resources to China. The growth rate of the Chinese economy will also be a major factor in importing from and investing in Africa. As much as the economy grows, the import of natural resources from secure (past FDI) and from nonsecure companies and countries will increase. At the same time, ODI will grow to secure the long-term flow of natural resources to China. The specific countries in Africa that will receive the new ODI depends on both their natural resources and on degree of political risk. Another important finding in this chapter is that empirical results should lead to a better understanding of the real impact of political risk on ODI to developing countries with large quantities of natural resources.

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## **Part III**

### **Industry Cases**

# 9

## Natural Resources: Government Support for Chinese Companies' Global Hunt

*May Hongmei Gao*

### Introduction

In the past, the notion of investing abroad was a distant dream for Chinese companies. Today, this strategy has become an essential part of many Chinese enterprises' development plans. More than 23% of Chinese companies go abroad to exploit or search for natural resources, including energy and raw materials (Fudan University, 2008).

Though China has a considerable amount of natural resources, its per capita quantity is very limited. Such resources are usually located in areas that are hard to reach. On the one hand, many Chinese companies need significant amounts of high quality raw materials to support a quickly urbanizing country, China being the world's manufacturing center. On the other hand, to import from foreign countries is restricted by the exporting countries' laws and regulations as well as global market supply and demand. Therefore, to go out and invest at the source becomes a logical choice (Huhehaote Commercial Bureau website, 2008). Consequently, to obtain natural resources is the major motivation behind the "Going Global" strategy of large Chinese state-owned enterprises (SOE).

Chinese overseas direct investment (ODI) has shown steady growth in recent years. A major drive for such growth is Chinese companies' appetite for natural resources, especially energy and raw materials. One key element in this is the Chinese government's strong support in international relations, policy, and financial loans.

The purpose of this chapter is threefold. First, it investigates the history and drive of Chinese companies' global hunt for natural resources.

Second, it indicates the location of Chinese ODI for natural resources. Third, the research translates Chinese government policies from Chinese into English and synthesizes several major governmental support strategies for Chinese companies' ODI for natural resources.

Textual analysis is the method adopted for the purpose of this research. I examine patterns of symbolic meaning (Neuman, 2003) within the written online text in both English and Chinese on Chinese companies' global expansion for energy (oil, natural gas, coal, etc.) and raw materials (iron, copper, nickel, and other metals and precious stones). About 80% of the materials were in Chinese language from various reputable online and journal publications. I utilized various search engines such as Google, yahoo, sohu as well as some reputable and related Chinese and English news sites such as chinadaily.com, peopledaily.com, sina.com.cn, gdfair.com, bbc.com, and cnn.com. In addition, I also visited the websites of the China Banking Regulatory Commission (<<http://www.cbrc.gov.cn>>), the People's Bank of China (<<http://www.pbc.gov.cn>>), China Insurance Regulatory Commission (<<http://www.circ.gov.cn>>), China Securities Regulatory Commission (<<http://www.csrc.gov.cn>>), and China African Information Center (<<http://www.feizhou.gov.cn>>). Keyword searches on both English and Chinese websites, generated a total of over 2,000 pages gave up-to-date information on the development of Chinese companies global ambitions and operations.

## **Historical evolution**

China's fast growing economy, high foreign currently reserve, and especially its double-digit annual GDP growth have prepared many companies from this vast country for a global search for energy and raw materials. Chinese companies' hunt for natural resources has two main causes. First, with its growing GDP and its relative low labor cost, China has become the de facto center for world manufacturing industries, where natural resources are much needed. Second, the country has become the ground zero for changes brought forth from major urbanization, industrialization, and informationization processes resulting from the growing economy. For example, with construction cranes named as "the bird of China," one can imagine how much iron is needed for the skyscrapers being built in hundreds of Chinese cities. Many Chinese companies, especially large and medium SOEs, have gone to Africa, Latin America, Eastern Europe, North America, and the rest of Asia for oil, natural gas, metal, precious stones, cotton, and other raw materials. China has become a global giant with an insatiable appetite for natural

resources. As raw materials and energy sources grow more scarce, the competition for security of supply only become more acute (Hutton, 2008).

The Chinese government's advocacy of the country's public and private enterprises pursuing overseas investment stretch back to the opening of the Chinese economy in the late 1970s. However, government industrial policy directed at growing Chinese ODI was given more formalized support in the wake of the 1997–1998 Asian financial crisis and the country's entry into the World Trade Organization (WTO) in 2001. Under the label "Going Global," or, literally translated, "Stepping out," the policy was given weight in 2001 by the then Premier Zhu Rongji in connection with the government's 10th five-year plan and was reinforced as recently as March 2006 in a key policy speech delivered by Premier Wen Jiabao to the annual plenum of the Chinese People's Political Consultative Conference, in which the Premier noted that the government will "institute a policy support and service system and improve the mechanisms for coordinating overseas investment and risk management."

A quintessential impetus for Chinese companies' global expansion was China's WTO entry in November 2001. WTO members formally approved an agreement on the terms of accession for the People's Republic of China (China) on November 10, 2001 at the WTO Ministerial Conference in Doha, Qatar. One day later, China signed the agreement and deposited its instrument of ratification with the Director General of the WTO. China became the 143rd member of the WTO on December 11, 2001. This ended the 15-year negotiation period, which began in July 1986 when China applied for admission to the WTO's predecessor, the General Agreement on Tariffs and Trade (GATT) (Office of the United States Trade Representative, 2001).

On the one hand, the accession of China into the WTO further reduced restrictions for global multinational corporations (MNCs)' investing and marketing in China and granted all WTO member countries favorite nation status of trading and investing in China. As a result, in recent years China has experienced a 36% increase in Fortune 500 representation (Fortune website, 2006). Anxiety about the "foreign wolves coming to China" worries many Chinese companies, particularly the possibility of price and market competition from global enterprises coming to China. For example, China's entry into the WTO dramatically cut import barriers previously imposed on American agricultural products. This agreement locked in and expanded America's access to a market of over one billion people with an economy maintaining double-digit

growth in the past 20 years. U.S. total exports to China have grown from negligible levels to about US \$14 billion a year. Agricultural exports in fiscal year 2000 were nearly US \$1.7 billion (Fykseen, 2008).

On the other hand, WTO entry has made it possible for Chinese companies to enjoy favorite nation status in expanding to global markets. In fact, it is absolutely normal for Chinese corporations to go global now, because since the opening up of the country in 1978 this has been one way of capital flow. Foreign companies have invested in China; now it is the time for Chinese companies to invest overseas, especially when they have accumulated a certain amount capital through domestic business operations. Following accession to the WTO, Chinese companies are now enjoying the same kind of favorite nation conditions in trade as other nations.

Therefore, to survive and sustain themselves, Chinese companies have been encouraged by the government to step out of China and “surf” globally. “Going Global” became a national policy in the 10th Five-year plan for 2001–2005, whereby the government provided support for 50 Chinese companies to be listed within Fortune 500 before 2010 (*People's Daily Online*, 2002). Such global policy reflects a shift of strategy for the Chinese companies from being “defensive” to “offensive.” Research shows that such an “offensive” strategy enables Chinese companies to gain advanced technology, global brands, and managerial know-how as well as experienced human resources (Gao, 2008).

In addition, labor costs are rising in China and in some areas it is becoming less competitive to have things produced in China. Experts estimate that labor costs in China will continue to rise by 30% to 50% in the next three to five years (*Sina.com.cn*). Accordingly, Nike has moved some of its production line out of China to Vietnam, where labor costs are lower (*gdfair.com.cn*).

Over a third of Chinese companies are going global to satisfy their thirst for energy and raw materials. As the world's manufacturing center, the world's most populous nation, and a country with massive urban expansion, China needs a gigantic supply of energy and raw materials, including gas, oil, coal, copper, iron, zinc, forestry, etc. Chinese energy and mining companies, mostly of them government-owned, create 55.12% of current Chinese ODI explosion, totaling US \$994 million (Zhang, 2004). Chinese companies have taken stakes in oil-production facilities in Algeria and Canada, natural gas reserves in Iran and Saudi Arabia, and mining projects in Australia, Brazil, Papua New Guinea, and Zambia (Accenture, 2006). Sinopec and CNOOC are examples of this model. In 2005, the country's zinc and copper producer China

Minmetals negotiated a US \$5.5 billion dollar takeover of Noranda, Canada's top mining company (*People's Daily* website, 2006).

China is now the second biggest consumer of oil after the United States, having overtaken Japan in 2003. Its consumption grew by 15%, while its output only rose 2% in 2004. Reporting for BBC News, Mary Hennock compared China's production and consumption increase as scaled on the graph below (Hennock, 2005). With an increasing gap in net imports, China's reliance on other countries to satisfy its widening demand is what one would call a "marriage of convenience" where both countries have to tread carefully just to keep the union alive. China also needs to practice an intricate form of diplomacy in a new partnership that seeks to sustain favorable relations with its trading partners. Failure to do so will result in dire consequences, especially for China's growing appetite for oil security.

#### *Location of the global hunt*

Africa is a major strategic area of Chinese ODI for energy and raw materials. Amir Shoham's chapter in this book details China's ODI to Africa. According to some estimates, only 8% has been explored (Africa-Invest Website, 2007). For oil and gas reserves, Nigeria and Libya are among the two leading producers in the world. Furthermore, Africa is home to timber, diamonds, and bauxite deposits (Rena, 2007). Africa supplied 28.7% of China's total crude oil in 2004. Oil deals have been signed in the Democratic Republic of Congo (DRC), Angola, Nigeria, Sudan, and Equatorial Guinea. China's state owned companies such as China Aero-Technology Import (CATIC) pledged a US \$400 million investment in Zimbabwe's mining industry in 2005 (Valley, 2008). Harry Broadman, economic adviser for the Africa region at the World Bank, said, "Fundamental differences in the resource, labor and capital endowments of Africa and Asia make them complementary business partners," a trend that he projects "will be likely sustained" (Broadman, 2008). Africa's growing middle class provides the purchasing power for Chinese products. Further, Africa lacks processing and mining industries that could make use of its enormous natural resource endowment. Broadman (2008) further notes that Chinese ODI in Africa was US \$1.3 billion at the end of 2005 with 50% of it going to the oil- or mineral-rich countries of Nigeria, Sudan, and Zambia. Sub-Saharan Africa's exports to China increased at the rate of 48% between 2000 and 2005. Some 85% of the continent's exports to China came from the five oil exporting countries of Angola, Sudan, Nigeria, Equatorial Guinea, and the DRC.

China imports precious stones, metals, alloys, and chemicals from South Africa, while the hunt for other raw materials has paid dividends, with China's investments in apparel manufacturing industries in Kenya, food processing in Tanzania, textiles in Ghana, fishing in Senegal, while in Uganda and Ethiopia, China's foreign direct investment (FDI) has been in the growing fresh-cut-flower sector. China also has a huge investment in the copper and cobalt belt of Zambia, a growing presence in South Africa's iron and platinum mining sectors, and in Cameroon, Congo-Brazzaville, and Gabon, all for timber. A deal was signed between the Kenyan and Chinese governments to prospect for oil in Kenya's coastal waters even though there is no formal estimate of possible oil reserves (Onyango & Odhiambo, 2007). In addition, SOE Jinchuan Group Limited acquired a 20% stake in Tiomin Kenya, a subsidiary of Tiomin Resources of Canada to mine titanium on the Kenyan Coast. China is also waiting for a deal to go through in which it will tap in to Kenya's cement industry. In 2007, a Chinese company and a Kenyan firm announced a joint venture to establish the first solar panel in the region that is due for completion this summer. Sinopec, primarily a Chinese oil refining company, has also been active in acquiring exploration rights in Mauritania and Angola.

Oil dependency has also made China a particularly active player in the Middle East. By 2004, China had accrued a total of about 45% of its oil imports to China from the Middle East. Iran alone accounts for 11% of China's oil imports. In the same year, the SOE Sinopec signed an oil and natural gas agreement with Tehran that could be worth as much as US \$100 billion. The deal gives rights to Sinopec to exploit Yadavaran field in southwest Iran, with reserves reported at about 15 billion barrels (Zweig & Jianhai, 2005). According to Lu Chang Jin, Beijing's economic and commercial counselor in Tehran, of Iran's US \$4 billion worth of exports to China in 2004, US \$3 billion were crude oil, gas, and oil products. With US companies barred from Iran by sanctions, Iran's reserves of 133 billion barrels of oil and 27,500 billion cubic meters of natural gas offer a tempting prize to China. Chinese companies carrying out exploration and development in Iran have also been promised incentives such as tax exemptions. Outside the energy sector, China is acquiring saffron, which the Chinese use for medicine (and the Iranians for cooking). South Pars field, which is shared between Iran and Qatar, is a major source of liquidated natural gas: China won a deal to buy 10 million tons of the gas over a 25-year period (Smyth, 2005). Saudi Arabia is also a major importer of oil to China. To a lesser extent, China also acquires oil from Oman and Yemen.

Third, Asia and Australia still are a focus of Chinese ODI for energy and raw materials. Two decades ago, China was East Asia's largest oil exporter but now it is the second-largest oil importer. In 2004 alone, China accounted for 31% of global growth in oil demand. After September 11, 2001, China rekindled its mineral interest, especially for oil exploration in Central Asia. Currently, China has access to coal in the Philippines. Sinopec also has oil exploration rights in Kazakhstan and Azerbaijan. China has further expressed interest in the oil reserves of Indonesia, Turkmenistan, Uzbekistan, and Vietnam.

China's demand for natural resources has found a new partner in Australia. In 2004, Australia reported a 41% increase in iron ore and a 72% increase in coal exports to China. Since 2006, an approximately US \$1 billion worth of liquefied natural gas will be exported to China from Australia every year for 25 years (Zweig & Jianhai, 2005).

Meanwhile, the Americas are important areas of Chinese investment as well. Energy demand has spurred China to seek access to Canada's massive tar sands in Alberta. The Chinese and Canadian governments have entered into agreements that allow China's involvement in exploring Canada's natural gas, its vast oil sand deposits, and its uranium sector (Asia Pacific Foundation of Canada, 2005). In Latin America, China is accessing agricultural goods such as soybeans as well as key mineral resources. In 2004, a US \$30 billion deal of new Chinese investments in Latin America was announced by Chinese President Hu Jintao during a four-country trip (*New York Times*, 2004). Currently, China has invested heavily in gold mining industries in Bolivia and oil in Ecuador. In Brazil, there is an active agreement for US \$20 billion new investments in oil and gas exploration. There is also an exclusive oil supply agreement with Venezuela signed by Vice President Zeng Qinhong in 2004. In the same year, a total of about 40% of China's FDI went to Latin America (Colburn, 2008). China's main interest in Cuba is its nickel resources. In Chile, China replaced the United States as the leading purchaser of copper. In Argentina, China invested US \$20 billion mainly for energy exploration. In exchange for sizable trade and aid packages, island countries Grenada and Dominica, have opted to partner with China rather than Taiwan. In 2004, sales made to China by Brazil, Argentina, Peru, and Chile of copper, iron ore and soybeans helped boost Latin America's exports by 45% to US \$21.7 billion (Lapper, 2005).

Finally, Russia is a key recipient of Chinese ODI for energy. Having been ignored by China due to decades of suspicion, Russia has now warmed up to China's investment at an alarming rate in what Brooke (2004) termed as "Russia Catching the China fever." China now looks

north to the Russian Far East for oil, gas, timber, and electricity. China's rapid population increase has caused grain shortages and the country has exploited the Russian borderland for its food supply. As Brooke (2004) noted, 140 million people inhabiting three northern Chinese provinces can provide the labor to work the land and resources of Russian Far East, which has only seven million inhabitants. Chinese and Russian joint ventures in trade, timber, and wood processing currently exceed the combined figure for such ventures supplied by the United States, Japan, and South Korea. Since 2006, the Russian Yukos oil company agreed to sell China 300,000 barrels of oil a day, which tripled the level of China's oil imports from Russia in 2003 (Brooke, 2004).

### **Chinese government supporting policies**

Since the late 1970s, the Chinese government has supported the country's public and private companies in their global expansion. Since 2000, the Chinese government has been encouraging Chinese companies to position themselves overseas and to acquire foreign assets that will make their companies multinational corporations (Barboza, 2005). Such government support aims to create harmonious international relations, positive policies supporting ODI, and favorite financial status provided for ODI.

#### *The new three-pillar structure of the Chinese economy*

In the 1980s, the Chinese government recognized that China needed to develop multinational business, such as that of China International Trust and Investment Company and China Five Metals Company. After the 1990s, the Chinese government pointed out in the 15th Chinese Communist Party (CCP) congress report that "While international export needs to encouraged and expanded, we need to organize and support a group of strong and advantageous state owned enterprises to go out." In 1999, at the National Economic Conference, Chinese President Jiang Zemin mentioned three trends in global economic development. No. 1 is the increasing impact of MNCs, No. 2 is the rapid development of science and technology, and No. 3 is the global restructuring of industries (*People's Daily*, 2006). In 2000, "going out" was emphasized as a new strategy. In 2001, "The 10th Five-year Plan Memorandum" initiated the three-pillar plan: international trade, FDI (inviting in), and ODI (going out).

In 2007, the 17th CCP congress further stated: "To support companies' global operation in R&D, production, sales, to further cultivate

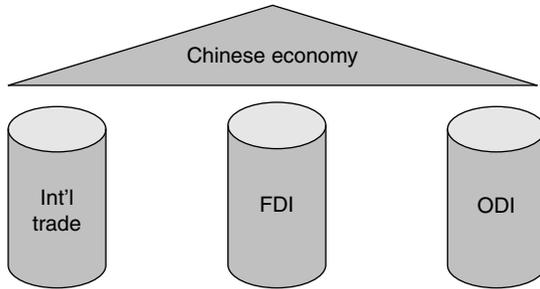


Figure 9.1 3-pillar structure of the Chinese economy since 2001

Chinese MNCs and global brand names”(Wang, et al., 2007). According to the Division of Overseas Economic Cooperation of the Ministry of Commerce in Beijing, until the end of 2004, there were 8,300 nonfinance corporations set up by Chinese corporations abroad. For investment overseas in 2004, most of the cash flows went to the mining industry. As for investment area distribution, the money flowed to Latin America (US \$889 million, 49.3%), Asia (US \$515 million, 28.57%) (Wang, 2004).

President Hu Jintao stated in his 17th CCP Congress Report that China needs to expand the breath and depth of its open door policy and to elevate the level of the open economy. He stressed that China needed to stick to the basic policy of being open, and at the same time to combine “coming in” with “going out.” He said China needed to diversify the areas, improve the structure, and enhance the quality of being open, and thus complement domestic and overseas functions, and create a win-win and efficient open system. In the long term, China needs to cultivate its advantage of becoming competitive for global competition and cooperation in the new global economy. Hu pointed out that Chinese companies need to participate in global natural resource exploration and cooperation (Chinese Academy of Social Sciences Net, 2007).

Long Yongtu, the former Chinese counterpart of Greenspan, said that the Chinese government should adopt three strategies to support Chinese companies going global. Long was a member of the China WTO Negotiation Team for ten years. The three major areas of support include China’s striving for harmonious international relations, positive policies supporting ODI, and favorite financial status provided for ODI.

*Striving for harmonious international relations*

First, the Chinese government tries to cultivate a positive international political environment, which is a basic precondition for Chinese companies going global. The quintessential factor in this international environment is to promote the “peaceful rise of China.” People all over the world have different ideas about the rise of China and many view the prosperity of the country as a threat. The Chinese government is striving to reassure the rest of the world that the rise of China is not a threat, but, rather, a contribution to human prosperity.

For example, in the 1997–1998 Asian finance crisis, China did not devalue its currency amid severe pressure. This shows that China is a responsible “big country” in global terms. Another example is that, through accession to the WTO after 15 years of negotiation, the Chinese government demonstrated to the rest of the world two critical promises: First, that China will observe and follow international regulations. Second, that China will gradually open its markets. A third example is that from 2002 China has signed new comprehensive economic agreements with The Association of Southeast Asian (ASEAN) countries, promising China’s neighbors that they will benefit from China’s prosperity.

*Positive policies supporting ODI*

The Chinese government is trying to foster a fair structure for companies going global. The essence of such a structure is to maintain and improve the socialist market economy. Long (2006) said that without a real market economy, without fair legal systems to ensure balanced competition, there will be no positive environment for the companies going abroad. The following specific examples demonstrate Chinese government policy in this respect.

From 1980s–1990s, the Chinese government imported the principles of citizen benefits, which apply to all kinds of enterprises, including SOEs, foreign companies, private companies, etc. All these companies enjoy the same benefits in registering to enter the market, applying for bank loans, and utilizing the land. No matter what kind of ownership type a company has, it enjoys a fair share of opportunity.

Since 2001, the Chinese government employed more transparency in its operation after China’s accession to the WTO. The Central Chinese government encourages various ministries to hire a Chief Information Officer and to publicize all laws and regulations online (Global Times, 2005).

The Chinese government is also trying to reduce companies’ social service costs by breaking monopolies. In the past, when the telecommunication

industry was completely monopolized, the cost of communications for Chinese companies was the highest in the world. Since the deregulation of telecommunication companies in 2005, these communication costs are much lower. Other costs, too, such as transportation and electricity, are also gradually lowering because of the dismantling of monopolies in these industries. This is another very important aspect of the Chinese government's support for Chinese companies going global.

China's accession to the WTO in 2001 made the Chinese government realize two sides of the Chinese economic coin: One side is domestic development for employment and social and economic stability; the other is international development for increasing trade and creating an open market. From 1991 to 1993 China held free trade zone negotiation with ASEAN countries, which were followed by similar talks with Japan and South Korea. Since free trade zones encompass more open trade policies, zero tax and tariffs, and more open investment policies, they signal a new phase of Chinese government support for Chinese companies going global (Long, 2006).

Meanwhile, the modernization of China has reached a new stage. The 17th CCP congress set new goals for the next stage of Chinese modernization, which reflects a five-wheel drive vehicle: industrialization, informationization, urbanization, marketization, and globalization (Wang, et al., 2007). It is estimated that by 2010, Chinese gross domestic production (GDP) will reach or exceed 26,000 billion yuan RMB (doubles that for 2000). By 2020, GDP per capita in China will reach or exceed US \$3,000, which will indicate that China has entered the club of upper- or middle upper-level income countries. The output of Chinese information industries now ranks as No. 3 in the world. China's urbanization rate in 1978 was 17.9%, in 2000 36.2%, and in 2006 43.9%, as compared to the world urbanization average of 48.8%, and developed country average of 77.6% in 2005 (Wang, et al., 2007). At the end of 2006, Chinese ODI totalled US \$ 90.63 billion in over 172 countries and regions (Wang, et al., 2007).

#### *Favorite financial status provided for ODI*

Chinese companies going global have been supported not only by WTO entry and Chinese government support but also by Chinese banks, mostly government-owned. The strong Chinese economy, high savings rate, and abundant foreign reserves have motivated Chinese banks to encourage ODI of Chinese companies. Since 1994, savings totals exceed loans totals in Chinese banks. In 2001, savings in banks exceeded loans by 3,200 billions RMB (*People's Daily Online*, 2002). The current GDP of

China stands as the fourth of the world, and its world trade values lists as No. 3. The foreign revenue reserve of China exceeds US \$ 6 trillion dollars (Sina.com.cn website, 2006a). So much foreign reserve needs to be invested somewhere, and ODI is an obvious choice for the Chinese government who owns most of the banks in China. Chinese banks thus form a conglomeration, supporting Chinese companies' global outreach and expansion. For example, Jingdongfang Group received US \$740 million from a nine-bank group to purchase the Korean Hynix IT company. The banks are also appreciating Chinese currency (from 8.3 in 2005 to 6.7 in 2008) to connect the Chinese RMB further with foreign currencies (XE, 2008). Critiquing on the 2008 Wall Street Financial Crisis, German Finance Minister Peer Steinbrück said that the United States might lose its dominant status, and that the world needs to prepare itself for four major currencies in the future: the U.S. dollar, the Euro, the Japanese Yen, and the Chinese RMB (Xinhua News Agency, 2008).

The State Development and Reform Commission and the Export-Import Bank of China jointly issued a circular on November 2 on establishing special loans to facilitate investment overseas. The Ex-Im Bank will earmark part of its annual export credit scheme for such special loans. By granting preferential policies, the circular said, companies will undertake mergers and acquisitions more easily in a bid to sharpen their international competitive edge and explore international markets (*People's Daily*, 2005). Below are examples of specific policies.

#### *Stabilizing Chinese currency*

Yi, Gang, the Assistant Governor of the People's Bank of China, was interviewed by China Government Net in early 2007, stating that the Chinese currency, RMB, is a very hopeful, high credit currency that in the future will become a hard currency, acting as another support for Chinese companies going global (CNBC Website, 2007). In fact, some Chinese currency ATM Plus cards became valid in Korea, Thailand, and Singapore, starting January 10, 2005. There is no service charge when a Chinese ATM Plus card is used in these areas, unless cash is withdrawn (People's Bank of China website, 2005).

#### *Low interest loans*

Various levels of Chinese government selectively support proposals that take advantage of foreign preferential loans for Chinese enterprises undertaking overseas business activities (People's Bank of China, 2005). Different provinces in China employ different governmental policies to support their companies investing abroad. For example, in 2006, for

southern China's Fujian province, the government established "Special Funding for Overseas Economic and Technological Cooperation." This included financial support prior to and during different global projects, as well as long-term low-interest loans, and 50% support in contingency fees (*Haixiadushi Daily*, 2006). For East China's Jiangsu province, the government encourages Chinese initial ODI in energy of not lower than US \$200,000, including in oil, gas, minerals, forestry, agriculture, fishing, and other areas of natural resource. If an enterprise meets this and other standards, then the government will give an additional 2% supplemental support, with an upper limit of US \$1 million (<<http://www.jssh.org.cn>>). Foreign currency loans given out by Chinese banks are on the rise. According to a report published on May 14, 2008 by the People's Bank of China (PBC), Chinese companies' global operations stimulate such growth. By the end of March 2008, the ending loans of foreign currency by Chinese banks was US \$268.8 billion, which represented a net increase of US \$46.2 billion compared with the same period in 2007. The PBC report shows that US \$35.7 billion were used to support Chinese companies going global, which weighs 73.2% for all loans in the first quarter of 2008 (China Import and Export Bank, 2008). Some of the preconditions of applying for low interest loans are:

- In the past three years, the company has been profitable, with import and export permission, and is in an preferred area by the country.
- The company has a complete financial management system.
- The ratio between trading but nonfinance asset and total asset is not lower than 15%, the ratio between nontrading and nonfinance asset and total asset being not lower than 30%.
- The sum of international commerce loans and overseas trust credit are not more than 50% of its asset in foreign currency.
- The sum of foreign currency loans and foreign currency insurededo not exceed the previous year's foreign currency profit (Law Library website <http://www.law-lib.com>).

#### *More convenient foreign currency exchange*

It became national policy in 2002 at the 16th CCP congress that "going out (going global or ODI)" and "inviting in (FDI)" are two complementary strategies of opening up China. Following the going global strategy, the State Foreign Currency Management Commission deepened its reform in foreign currency in 16 provinces and than expanded to the whole country.

### *Establishing offshore banks*

In 1989, with the approval of China People's Bank and the State Foreign Currency Administrative Bureau, China Commerce Bank spearheaded its offshore banking: China Import and Export Bank. Then, in June 2002, Shenzhen Development Bank, the Bank of Communications, and Shanghai Pudong Bank started to develop their offshore banking business. Currently these are the four Chinese banks with offshore capacity. Offshore banks are considered one of the best choices for Chinese companies' global expansion. Compared with banks inside China, these offshore banks have certain advantages: (1). The offshore accounts enjoy more privacy. (2). The funds enjoy easier global transfer. (3). Deposits in offshore banks have tax free opportunities. (4). When the business operation is overseas, the banking can be done in China and saves costs.

### *Three stages of Chinese ODI policy*

#### *Stage one: Global operation exploratory stage (1979–1983)*

During the first stage, China's ODI was very limited. Because of the shortage of foreign currency, before 1982, every ODI needed to be approved by the State Council. Since 1982, the State Council transfer this power to the then Ministry of Foreign Trade to approve at case by case basis.

#### *Stage two: Global operation and management strengthening stage (1984–2000)*

With the accumulation of overseas investment experience, certain laws and regulations were drafted in China, forming a basic policy framework. Two important regulations were formed: First, in May 1984, a regulation was issued entitled "A notice on the power and principles approval on establishing overseas nontrading investment enterprises." Then, in July 1985, another document was issued, entitled "Implementation Regulations on the approval and management of establishing overseas non-trading investment enterprises."

#### *Stage three: Global expansion rapid growth stage (from 2001 to the present)*

"Inviting in (FDI)" and "Going out (ODI)" become complementary strategies in China's national economic development plan. In this stage, divisions and departments in both central and local governments adopted various strategies to support companies' globalization processes. The

State Council initiated relevant regulations and policies for Chinese companies' ODI investments. Such regulations and policies covered areas such as the simplification of approval procedures, provision of financial support, expansion of international trade power area, financial and tax management, foreign currency management, approval for Chinese citizens going abroad, and overseas business insurance (Wang, et al., 2007).

While the focus of the "Going Global" strategy on encouraging Chinese companies to embrace "the two markets" (i.e., domestic and foreign) represents a continuation of the policies pursued previously by the Chinese government, the implementation of ODI-friendly industrial policies, such as the relaxation of foreign currency controls, marks a further turning point in the development of Chinese ODI. As such, the "Going Global" strategy in the post-WTO era functions as a complement to the Chinese government's successful advocacy of foreign direct investment flows into China as a key pillar of support for the country's economic development.

### **Concerns over such expansion**

In 2006, President Hu Jintao issued "China's Africa Policy" through which China announced a US \$5 billion provision in adjustable loans and credits and a further US \$5 billion which went towards the cancellation of debt it was owed by 33 African countries. The Western world termed it a strategy to woo African leaders to accept Chinese investment in their respective countries. Beijing's Africa policy has increased the perception by the rest of the world that it is an extension of the China's foreign policy, which has caused a conflict of interests with Western countries in some African states. While exploring China's global hunt for energy, Zweig & Jianhai (2005) have offered an odd argument for this view, that "Beijing's resource-based foreign policy has little room for morality." Because the desired natural resources are mostly found in war-stricken countries, China has gone into business with states that other governments strongly disapprove of. With China getting about 5% of its oil from Sudan, such concerns become justified, due to human rights abuse in Darfur. The global energy search has also prompted China to strengthen its relations with Chad, Angola, and Myanmar, all countries that the United States claims have widespread human rights abuse. China has also become a close ally of Iran, which, again according to the United States, betokens that its nuclear weapon interest is a

threat to humanity. China's further strengthening of ties to acquire oil imports with Venezuelan President Hugo Chavez, whom the United States deems as being capricious, is a further indication of its desire to do business despite US outcry.

The quote below emphasizes China's hands-off policy of meddling in a country's internal politics: Beijing has brushed off accusations that it is helping to prop up Khartoum. "Business is business. We try to separate politics from business," said the then deputy foreign minister, Zhou Wenzhong, in the summer of 2004. "I think the internal situation in Sudan is an internal affair, and we are not in a position to impose upon them." In September 2004, China successfully watered down a UN resolution condemning Khartoum, undermining US efforts to threaten sanctions against Sudan's oil industry (Zweig & Jianhai, 2005).

Such a scenario is no different in Zimbabwe, where China is the major FDI investor and where the Western world has imposed major sanctions due to President Mugabe's reportedly corrupt rule and severe human rights abuses. The fact that China does not concern itself in the internal politics of unstable countries could be one reason why the governments of those countries warmly embrace China's ODI. Whereas the Western world offers conditional trade and aid, China's offerings are usually unconditional, since China just concerns itself with the business of making money and satisfying its quest for acquiring natural resources for its expanding industries.

From a critical perspective, Lee (2005) contends that China, in its quest for oil security, has to be wary of its relations with other countries since it relies heavily on them for this very commodity. Simply put, the Chinese government cannot spite the hand that feeds it. The bitter border war that China fought against Russia 35 years ago is a thing of the past as China has now increasingly focused its attention on the Russian energy resources in offshore areas. Another area of concern in South-East Asia is the Strait of Malacca through which about 80% of China's imported oil passes. Hence China has to foster "amicable neighborly relations" with such countries as Malaysia, Singapore, Thailand, Japan, and Indonesia. The figures below emphasize the point that China's oil consumption is expanding, and thus its imports increasing drastically each year.

Of particular interest, Corporate Social Responsibility (CSR) is a "voluntary approach that a business enterprise takes to meet or exceed stakeholder expectations by integrating social, ethical, and environmental concerns together with the usual means of revenue, profit, and legal obligation" (bnet.com). For many corporations around the world, CSR

is an extremely important aspect of their innovation. Respecting and improving the environment and local communities, as well as upholding proper ethical standards, is a must if a company wishes to invest in foreign markets. According to *The Economist*, China has become the new frontier for CSR. "A few Chinese companies have started to issue CSR reports. In Shanghai in October 2007, 13 foreign and domestic companies launched the Chinese Federation for Corporate Social Responsibility. These are baby steps, but the Chinese are quick learners" (*The Economist*, 2008). However, Chinese companies have a long way to go to match up to international standards. The 2008 baby milk formula that was widely contaminated with industrial melamine (CNN, 2008) is only one of the scandals that haunt Chinese companies' global reputation.

## Conclusions

We must realize that compared with many multinational corporations, Chinese companies' global investment is relatively small at US \$1 million per company, compared with the US \$6 million per company of developed countries, and also lower than the US \$4.5 million per company of other developing countries (Huhehaote Commercial Bureau, 2008). Currently, Chinese ODI is minimal and immature, but moving up with increasing speed (Harding, 2006). Potential ODI recipient countries must compose a strong relationship with China, allowing American presence and stability in Asia (Marti, 2001). In order for Chinese companies to succeed by "Going Global," it is important for them to achieve natural and strategic resources, by mergers and acquisitions. As the domestic market in China continues to grow, these outward companies play a key role in shaping up the Chinese economy while bring in new knowledge, capital, products, and personnel to China (Accenture, 2006). Our research shows that Chinese companies are going global for new energy and raw material sources. The Western media and Western governments resent this, seeing Chinese companies as being controlled by the government. There is a misconception that Chinese companies are going to change the global business landscape overnight. Some Westerners fear that Chinese companies are taking over the world in market share, but in reality, the Chinese ODI value is only a fraction of the world's total. Additionally, the World Bank recently reported that one-third of Chinese enterprises had lost money on their foreign investments and that 65% of their joint ventures had failed. China's top 500 companies are greatly inferior

to their world's counterparts in terms of scale, productivity, profit-making capacity, managing capacity, and competitiveness (Accenture, 2006).

China aspires higher than to be the world's low-cost manufacturer. Through global mergers and acquisitions, China is repositioning itself as a major player in a multi-polarity world. Various Chinese public and private enterprises are going global for energy and raw materials by investing at their resources in Africa, Latin America, Australia, Russia and South-East Asia. The Chinese government is supporting these companies from the perspectives of cultivating harmonious international relations, providing a more transparent and fair policy, and granting favorite financial status from the state-owned banks. Such Chinese ODI is only in its initial stage, and this trend shows no signs of slowing down. Estimates show that the Chinese economy will be the world's largest economy by 2050. The world needs to be prepared for a new multilateral framework of superpowers, one that includes China, India, Brazil, Russia (the BRIC countries), Indonesia, the United States, Japan, and the European Union.

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# 10

## Telecommunications: Primacy of Power and Regulatory Battles for Promoting National Standards

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### **Introduction**

Telecommunications markets worldwide have changed radically since 1990s thanks to rapid globalization and advances in technology. Standards are the foundation of the new global technology economy. The growth and success of the global information and communication technology (ICT) industry is based on the development and use of standards and the subsequent “royalty fees” derived from the intellectual properties attached to these standards. Leadership in telecommunications equipment and services has for years come from the United States and Europe. However, the most rapid telecom/data network build-outs are now occurring in East Asia, including China, Japan, and South Korea.

As a new player in the global economy, with insignificant global market share and technology capacity, China has had difficulty achieving technological breakthrough and breaking the established production network by only following the developed countries’ lead and being the assembling center without controlling any key technology associated with technical standards. In order to develop a robust domestic high-technology industry, the Chinese government is promoting indigenous innovation and globally competitive national standards. In an effort to foster a sustainable economy based on home-grown technologies, China has stated in its standards strategy that it plans to develop some mandatory domestic technical standards based on Chinese technology and intellectual property, rather than adopt all existing industry and international technical standards and having to pay license fees for non-Chinese technology (Congressional Hearing, 2005).

This chapter analyzes China's motivation/capabilities in standard-setting, the relative importance of the domestic market in China's standards strategy, and the role of multilateral corporations in determining the success of particular standard-setting activities. The research questions are: With the help of a predatory governmental telecommunication policy and the promise of a lucrative domestic market, will China upgrade from today's production base (made in China) to tomorrow's gravity for innovation (made by China)? What is the domestic mobilization process of China's telecommunication industrial policy and standards strategy? What is the impact on global competition? A main finding is that, although Beijing promotes the development of Chinese standards in upgrading China's less favorable position in the global production chain, economic globalization and the international regime (the World Trade Organization [WTO] Trade-Related Aspects of Intellectual Property Rights [TRIPS] and Technical Barriers to Trade [TBT] in particular) have effectively constrained the parameters and effectiveness of Beijing's standards strategy.

In other words, the Chinese government accepted neo-techno-nationalism instead of techno-nationalism to embrace global competition and open participation to foreign competitors. "Techno-nationalism" is a term to describe Japan and Korea through the 1980s. Techno-nationalist policies in these countries were designed to create independent domestic capabilities in core or critical technologies, supported by establishment of domestic institutions that encouraged the diffusion of these technological capabilities across sectors, and assisted producers and users of these technologies (Samuels, 1994). However, China began to integrate into the global economy in 1980s and 1990s when the world was moving towards economic globalization. As the biggest beneficiary of globalization, China is now a committed member of international economic institutions and an advocate of globalization. There are at least three reasons to think that dynamics for change in china's technology policy reflect distinctive Chinese advantages and concerns. First, China is bigger and more diverse than other developing countries, so it has the option of maintaining labor-intensive advantage and at the same time pursuing technology acquisition. Second, China is still in the process of reforming its economy and integrating into the global system. Since it joined the WTO in 2001, China has worked hard to transform its domestic standardization regime and make it more compatible with its WTO commitments. China's technology acquisition and domestic standard strategy, before it is full-blown, has been constrained by international regulations.

Third, China is facing a real “security dilemma.” Chinese leaders act on the understanding that China is rising and will assume great power status at the regional and global level. In the meantime, China is not a political ally of any dominant power in the region or the world, including Japan, the United States, and Europe due to the fundamental value clashes (democracy, human rights, etc.) If China has no access to certain core technologies and standards which are monopolized by foreign companies, China’s national security could be at risk, particularly in the areas of E-government, information security, key technologies of high performance computers, etc. (*People’s Daily*, 2007).

The rest of this chapter is organized into five further sections. The section on Standards and the motivations behind China’s national standards strategy provides a brief summary of the motivations behind China’s standards initiative and their specific policy goals and timelines. The section on Evolution of wireless telecommunication technology and the emergence of 3G technologies discusses the evolution of wireless telephony technology and the emergence of the three dominant third generation (3G) standards. The section on Government support analyzes the implications of strong government support to the TD-SCDMA (TD) standard on the prospective development and commercialization of this particular standard and on global competition. The section on Prospect of China’s TD standard: Will it succeed in global competition predicts whether TD standard will succeed in global competition. The section on Implications concludes the chapter by focusing on the policy implication of this TD case study.

### **Standards and the motivations behind China’s national standards strategy**

States have always played a role in structuring and regulating markets, and “the existence of the state is essential for economic growth” (North, 1981, p. 20). Today, in the technology sector, standards can determine the fate of an individual firm, the industry as well as the market competitiveness of a country. What is a standard? A standard is a technical specification for a product, process, or service (Mattli & Buthe, 2003). Standards are used to ensure uniformity and interoperability. It is estimated that 80% of the total value of global trade is affected by standards and related technical regulations and testing procedures (Suttmeier & Yao, 2004; Tan, 2006; Mattli & Buthe, 2003). Standards play a critical role in domestic and international markets. If a standard achieves broad acceptance in a market, it may lead to the abandonment of technologies

supported by alternative standards and the domination of a market by a specific technology.

Given the growing importance of standards in the global economy as well as China's rapid integration into the global market, Chinese standards development have acquired considerable policy importance. What are the driving forces of this policy initiative? First, technology transfer and learning/absorption supported by developmental states are more and more difficult in today's knowledge economy (or what some others are calling the "new economy"). From the 1960s to the 1980s Japan and other newly industrialized East Asian countries adopted the "imitation to innovation" approach to catching up with the industrialized countries. For the last two decades China has followed the East Asian developmental model, particularly that of Japan and South Korea. What characterizes this model is the proactive role played by a strong state and export-driven economic policy based on a strategy of technology imitation. Government agencies in these two countries made extensive efforts to identify critical technologies, bargained hard over the terms on which these technologies would be transferred to domestic firms, and created conditions to protect and nurture new industries using these technologies once they were established (Samuels, 1994). China has adopted all these measures. However, dominant firms in today's global competition are increasingly the firms that establish standards. The most obvious examples are Microsoft and Intel, the so-called "Wintelism" (Borras & Zysman, 1997). Standards are not the same as critical technologies—companies do not transfer standards, they only charge royalties. In other words, the Asian development model was able to work because technology could be easily imitated or transferred from leading markets to emerging markets through trade and investments. The same, however, is not true of standards.

Second, trade barriers and protected market are more difficult to maintain under economic globalization and the commitments China made in order to join the WTO. Traditional mercantilist policies fostering domestic capabilities and protecting infant industries are measures that restrict or discourage direct foreign investment and impose tariff and nontariff barriers to trade. However, these policy initiatives are no longer feasible in today's environment of economic interdependence. Long before China's WTO accession in 2001, China had liberalized its trade regime and welcomed foreign investment. Partly to facilitate its WTO accession negotiation, China significantly lowered its tariff levels and removed nontariff barriers. For example, Branstetter and Lardy argue that in a narrow growth accounting sense, it is simply not true

that net exports have been a consistently important driver of China's economic growth in the 1990s. Growth in imports has broadly kept pace with growth in exports. (Branstetter & Lardy, 2006). During the 1990s, China was the largest recipient of FDI among developing countries. China has taken in a total of US \$650 billion in FDI since 1978, ten times the total stock of FDI that Japan accumulated between 1945 and 2000, and far more than any other emerging market economy (Gilboy, 2004, p. 33). The trend of trade liberalization and FDI openness has strengthened even more since 2001, when China formally joined the WTO. Upon accession China was required to make major tariff reductions and by 2007 to reduce average import-weighted average tariffs to 6.8%. Almost all China's nontariff trade barriers have been eliminated. Nearly all imports and export quotas and licenses were removed by 2005 (China's WTO Accession Protocol, 2001). Specific to China's commitments on telecom market access:

China commits to open its telecom sector, both to the scope of services and to direct investment in telecom business. Tariffs on all IT products will be reduced to zero by 2005. China will phase out all geographic restrictions for paging and value-added services in two years, mobile/cellular in five years and domestic wireless services in six years. China's key telecom services corridors in Beijing, Shanghai, Guangzhou, which account for approximately 75% of all domestic traffic, will open immediately on accession in all telecom services. China will allow 49% foreign investment in all services and will also 50% foreign ownership for value-added paging services in two years; for mobile services, 49% in five years and for international and domestic services, 49% in six years (China's WTO Accession Protocol, 2001).

A third, though related point, is that as China agreed to sign the TRIPS and TBT agreements on entering the WTO, these two particular agreements also have directly constrained Beijing's policy options. With the worldwide reduction or elimination of trade tariffs, thanks to the multilateral negotiations sponsored by GATT and now the WTO, countries have begun to use more and more nontariff barriers (NTR). Countries began to use technical requirements as a way to close their markets to imports. This concern was addressed in the WTO TBT agreement, which lays out the principle that countries should adopt international standards whenever possible or practicable. Specifically, it states that "where technical regulations are required and relevant international

standards exist or their completion is imminent, Members shall use them ... as a basis for their technical regulations" (GATT TBT Agreement, article 2.4). TBT is further reinforced by another WTO multilateral agreement—TRIPS. Trade-related property rights for the first time are legally protected in the WTO framework and Intellectual Property Rights (IPR) are used as a strategic asset in standards development. Many developing countries have raised two correlated concerns within the context of today's knowledge economy. First, WTO members are obliged to protect IPR associated with foreign international standards. Second, national standards that are not harmonized with international standards will be treated as discriminatory standards (nontariff barriers) and have to be eliminated. Upon its WTO accession, China had to take actions on two divergent policy directions—harmonizing most of its national standards with international standards and at the same time, it hoped to internationalize a few cutting-edge home-grown standards. The Chinese government plans to compile 10,000 new standards to meet the standard vacuum in certain fields next year. Meanwhile, some 11,000 outdated national standards will be revised, according to the Standardization Administration chief Liu Pingjun. (Zhou, 2007)

Fourth, China, over the years, believes that it has been a victim of the "patents trap." China's participation in the global economy is largely constrained by the international production networks established by others. These networks employ technical standards and technological architectures set by the American, European, and Japanese multinational corporations (MNCs), which are able to capture value from their control over standards and intellectual properties. Thus, while China's absolute gains have been significant, it remains more than a little dissatisfied with the relative gains it has realized in comparison to international technology leaders (Suttmeier & Yao, 2004, p. 4). Since the early 1990s China has often seen itself as being in a "patent trap" that forces it to pay substantial royalties to others out of the sales of its manufactures. One example is the patent dispute with Phillips, Sony, and Pioneer in 2002, when Chinese-made DVD players (90% of the world's DVD players are now made in China) were impounded at European ports because the manufacturers allegedly had not paid for part of the patents used. In the following negotiations the patent holders demanded US \$20 per machine on equipment with a unit sales price of only US \$90 and the profit margin of the whole industry chain was less than 5% of their sales price. Although this "standard war" was later settled, it reinforced China's perception that without independent intellectual property rights Chinese industry is too vulnerable to global competition.

Fifth, while China has gained considerably from the global economy due to its position as the “world’s factory,” it strongly feels that it has also paid a painful price over the past three decades, primarily in terms of resource exhaustion and environmental degradation. The scarcity of natural resources, especially energy, raw materials, and water, to support such a huge population and rapid economic growth is increasingly a serious challenge to China. The country is the second largest importer of oil in the world, only after the United States. China today makes 35% of the world’s steel, half of the world’s cement and flat glass, and about one third of world’s aluminium. It overtook Japan in 2006 as the second largest producer of cars and trucks after the United States. Consequently, since 2007 it has become the largest greenhouse gas emitter. Hundreds of thousands die every year because of pollution-related diseases. Half of its rivers and lakes are polluted and nearly 500 million people lack access to safe drinking water (Kahn & Yardley, 2007). Facing both domestic challenges and external pressure, Chinese leaders have switched its policy priorities from “sustained development” to “sustainable development” and from pursuing “GDP growth” to “green GDP growth.” Needless to say, innovation and indigenous standards will play a large part in achieving this new policy goal.

Sixth, after 30 years’ remarkable economic growth (on average 10% annual GDP growth), China has visibly increased its technological capacity. The new interest in standards grows out of China’s unique position in the international economy. The total output of Chinese manufacturing has ranked fourth in the world and has earned China a new image as the “world’s factory.” However, the Chinese government rejects this title by arguing that without innovation and key technologies, China stays at the lower end of the production chain and at most is “an assembling unit within the world factory” (Chinese News Net, 2005). Indeed, China’s technological capabilities have increased hand in hand with its production capacity. However, in important respects, it has yet to emerge as a significant force for innovation globally and thus continues to be in a subordinate position vis-à-vis global industry leaders. In recent years China has devised some technical standards warranting international attention but which it has largely failed to commercialize. Besides the well publicized *WLAN Authentication and Privacy Infrastructure* (WAPI), China is also developing several other important standards in areas as diverse as the new Internet Protocol IPV6, and a new digital audio standard AVS, EVD—the successor of the DVD as well as its own microprocessor, the “Dragon Chip.” However, Beijing’s own assessment reveals that its industries’ technological level

and ability in self-dependent innovation are still low (*People's Daily*, 2005).

Seventh, this leads to an interpretation of its approach to standards that focuses on market power in the face of relative technological weakness. China can use the promise of its emerging market as an asset and leverage this in developing distinctive standards with an expectation that its standards policies will be taken seriously by international business organizations and foreign competitors in ways that the policies of other emerging markets would not be (Rosen, 2003; Naughton & Segal, 2002). The Chinese government has been able to demand and entice technology transfer on a large scale from eager investors vying for the opportunity to market and manufacture their goods in the country (Linden, 2004). Clearly, influencing the international business community to adopt Chinese standards is more difficult than extracting technology from foreign companies seeking entry into the Chinese market, hence strong government policy is essential. The telecom market is lucrative, with extensive technology spillover to other high tech sectors and to the national economy in general. China's mobile-communications infrastructure capital spending is expected to rise from \$4.2 billion in 2006 to \$5.4 billion in 2010 (Curley, 2006). Analysis International says in a recent report that China's first round of investment on 3G equipments will reach RMB 10 billion to 20 billion (US \$1.25–US \$2.5 billion). Every link of this industry chain will benefit from this market, including main equipments manufacturers, fiber and cable manufacturers, terminal manufacturers, system integrators, and other vendors of auxiliary lines such as electricity power, instruments, etc. In 2001, China overtook the United States to become the world's largest mobile communication market in terms of number of subscribers. According to the Ministry of Information Industry, the number of mobile phone users in China reached 649.7 million by the end of January 2009, according to Ministry of Industry and Information Technology (MIIT) (*China Daily*, 2009). The proposed restructuring and 3G licensing are expected to create a huge thirst for capital among Chinese telecom operators who are actively expanding and upgrading their existing networks in order to gain a favorable position in the country's upcoming 3G environment. China Unicom, for example, announced in August 2008 that it would invest 100 billion yuan from 2009 to 2010 in 3G-related networks and services. China Telecom also said it will invest 80 billion yuan to expand and upgrade its CDMA network (Wang, 2008).

China's interest in indigenous technology and its efforts to foster innovation are rooted in long-held aspirations for technology independence and

advancement, the necessity of catching up and resuming its “rightful” position in the world. At the core of these developments is the new initiative to develop a Chinese Standard Strategy. The strategy’s goals include efforts to develop, by 2020, independent technical standards through effective measures. Specifically, during the National Standardization Work Conference (NSWC) held on December 27, 2007, China set its long-term goals of standardization, including commitments that by 2020 Chinese standards will reach the level of developed countries, 90% of the standards will be adopted from international standards, around 200 Chinese national standards will become international standards; and China will participate in the revision of about 2,000 important international standards (NSWC Working Report, 2007). The core task of China’s technical standards strategy is to improve the adaptability and competitiveness of China’s national technical standards. The ultimate policy goal is to take China from the position of a net importer of foreign developed standards to an exporter of Chinese standards to the international market. China’s new approach to standardization includes such goals as creating an environment conducive to innovation, the large-scale adoption of international standards, the creation of a system that ensures that standards are responsive to the market, and the promotion of home-grown standards (Zhao & Graham, 2006).

The developed countries have been advocating the development and use of market-led, voluntary standards. However, it is almost infeasible for the companies in emerging markets to own a key international standard through the channel of market-led competition. First, emerging markets do not enjoy the overall industrial capacity and technology primacy. Second, emerging markets do not have the market size and “quality” of “users of technology.” Standards have to be accepted by “front” users on a trial basis and then be accepted by the majority manufacturers. Third, the development and use of international standards has never been purely market driven. Since the late 1980s, the industries and governments in developed countries have established an intimate “partnership.” Governments have exerted great influence to promote the new ICT standards sponsored by their MNCs through the process of standard-setting, commercialization, and global competition. Government interest and involvement plays a critical role in today’s global ICT industry.

MNCs in developed countries increasingly complain about the use by their trading partners of technical standards and other standard-related requirements as barriers to trade. This increases the costs of exporting to the country in question because the companies trying to export must

change their product line to meet the special standards requirements of the country in question. Under tremendous pressure from industry, Western governments are actively involved in a “standards war” with the developing countries, particularly China. One well-publicized case is the issue of the Wireless Local Area Network (WLAN) Authentication and Privacy Infrastructure (WAPI) standard. In May 2003, the Chinese government issued compulsory WAPI security standards that were set to become effective on June 1, 2004. The Chinese government said the standard was needed for national security reasons. Moreover, China provided the technology underlying this mandatory technical standard to only 24 domestic producers of wireless equipment, and designated these companies as the obligatory production partners for any foreign manufacturers willing to license the mandated technology and seeking to market their products in China. This policy left Western technology companies two options: either collaborate with a select number of their Chinese competitors to coproduce products for the Chinese market and potentially have to share valuable intellectual property with Chinese competitors, or abandon the profitable Chinese market and its opportunities altogether. U.S. industry raised a loud and strong voice on this issue. Major IT companies such as Intel worked hard to make sure this issue was on the agenda of both the US Administration and Congress. On March 2, 2004, in a joint letter signed by U.S. Secretary of State Colin Powell, U.S. Commerce Secretary Don Evans, and USTR Robert Zoellick to Zeng Peiyan, Vice Premier of the People’s Republic of China, the Bush administration urged the Beijing to drop WAPI. After considerable dialog, culminating in the April 2004 meeting of the US-China Joint Commission on Commerce and Trade, the Chinese government agreed to indefinitely suspend implementation of this mandatory standard and participate in international standard bodies (USTR, 2004). By standing firm against WAPI, the U.S. government has ensured that the fast growing wireless market in China remains open to U.S. products.

### **Evolution of wireless telecommunication technology and the emergence of 3G technologies**

Over decades of development, the mobile telecommunications industry has undergone tremendous technology innovation from first generation (1G) analog to second generation (2G) digital, to today’s third generation of advanced digital technology. After the advances of pure voice services of 1G technology, both 2G and 2.5G are now able to provide a

number of more advanced services including short message and single image. But with a data transmission rate ranging from 144kb/s to 384 kb/s, the current technology cannot keep up with growing demand, especially recent efforts to integrate mobile telecommunications with the Internet. This can only be made possible with broadband capacity and the speed of 3G technology.

During the 2G era China's mobile market has been dominated by foreign companies. For example, Nokia, Motorola, and Ericsson have been the winners in China's handset market and the same has been for the high-end telecom equipment market, including switcher, fiber networks, cellular base stations, etc. More than 90% of China's 2G products is dominated by foreign suppliers (Li, Xie, & Zhu, 2005, p. 38). Being both the biggest cellular phone market and the biggest handset production center in the world has not brought much benefit to China's profit margin. As a latecomer to 2G cellular services, China does not own important patents associated with the 2G standards. Consequently, Chinese handset makers have had to sign license agreements with U.S., EU, Japanese, and South Korea telecom companies and pay various royalties fees. Since the 1990s, China has spent billions of dollars purchase equipment. One study shows that during the 1G era China paid foreign patent holders a total of US \$30 billion (RMB 250 billion) and during the 2G era China paid about US \$60 billion (RMB 500 billion) (Shu, 2008).

Since China lagged behind in previous telecom standard activities, it presently lacks intellectual property in core technologies, resulting in a loss in the current market. Today Beijing is hoping to exploit the "latecomer's advantage" and leapfrog to the frontline of the 3G era with its own TD standard. TD-SCDMA stands for Time Division—Synchronous Code Division Multiple Access. TD-SCDMA is a third generation mobile telephony standard developed by China Academy of Telecommunications Technology (CATT) in collaboration with the Chinese company Datang Telecom Technology Co. and Germany telecom giant Siemens. It was proposed to ITU in 1998 and was approved by ITU as one of the three candidate standards for 3G mobile communications in May 2000. The other two international standards are the WCDMA proposed by the EU and the CDMA 2000 favored by the United States. The TD standard was further accepted by 3GPP in March 2001. Technically, TD-SCDMA implements a hybrid of time-division (the TD part) and frequency-division (the CDMA part) multiple access in an effort to achieve the benefits of dynamically allocated time slots

for downlink and uplink in order to support varying traffic asymmetry. TD-SCDMA enables Internet connection speeds of up to 2 Mbit/s, or 35 times faster than ordinary 56k modem and telephone line links. It also allows more efficient use of existing infrastructure. It makes use of TDD synchronous CDMA technology and offers several operational advantages over alternatives including flexible spectrum allocation, low cost implementation, and easier migration from GSM systems (Chen et al. 2002; Carey, 2008).

### **Government support**

Telecommunication has always been and will continue to be a strategic sector that is of great importance to national security and the economy, particularly in today's "network economy." It has become the scene for one of the "battles for dominance" between MNCs and various national governments. Europe and the United States took divergent approaches to managing their 2G national standards. Unlike the market-driven standard setting in the United States, the EU has relied on mandated standards set by the European telecommunications Standards Institute (ETSI). The government-dominated European approach has had direct and positive impacts on prices, penetration rates, market expansion, deployment, and coverage of GSM standard. To a great extent it has led to the domination of GSM standard in the global telecom market vis-à-vis the CDMA standard which failed to expand in overseas markets and does not even dominate in the U.S. market. Nokia emerged as a global telecom giant along with GSM became the dominant 2G standard.

Beijing is motivated to replicate this successful model by promoting its own home-grown standard TD-SCDMA. The Chinese leadership has made no secret of its belief in the importance of the telecommunications sector to China's economic aspirations. In September 2005, Chinese president Hu Jintao made it explicit that "our home-grown standard is critical for the future development of China's mobile telecommunication" (Wang & Liu, 2006). The TD standard has received full blessings from the Beijing government. First and foremost, the government has provided generous financial support to develop and commercialize the standard. Until now, the National Development and Reform Commission (NDRC), the Ministry of Science and Technology and the Ministry of Information have deployed about 1.4 billion yuan (about US \$200 million) into this project. At the "3G in China Global Summit" in 2006, high-level officials from the Ministry of Information Technology

revealed that the NDRC and the two ministries had promised to invest 200 million yuan (US \$30 million) for the next step of network testing, including equipment purchase and network optimizing services (Tan, 2006). Government ministries and agencies, notably the Ministry of Science and Technology, the State Commission of Development and Reform, and the Ministry of Information Industry, have been directly involved in the whole process of research, development, and commercialization. Government provides secretariats to manage domestic standards development processes, publish standards, and support national representation at international standards meetings. On October 30, 2002, the TD-SCDMA Industry Alliance was established in Beijing, aimed at cultivating and accelerating the TD industrialization. It has been fully endorsed by the State Development Planning Committee (SDPC), Ministry of Information Industry (MII) and Ministry of Science and Technology (MOST). At the end of January 2006, TD-SCDMA was formally identified as China's 3G national standard. In March 2006, the final network test was launched.

Second, the Ministry of Information Industry allocated two blocks of spectrum, totaling 155-MHz of bandwidth in which 35 MHz is the core spectrum allocated by ITU, to TD-SCDMA technology. In the same allocation the two dominant global standards, WCDMA and CDMA 2000 1x were each granted a 60-MHz block (Clendenin, 2002). The decision, made in October 2002, was a significant milestone in the development of the TD-SCDMA standard. Backers of the technology interpreted this favorable allocation as a signal that the government is serious about its pursuit of national standards strategy.

Third, the TD standard was developed about ten years later than the other two dominant 3G standards, WCDMA and CDMA 2000, so the maturation and commercialization of the TD standard still needs time. With the hope that China's latecomer technology can compete with the two Western-developed ones in terms of network speed, greater voice capacity, and a range of interactive data features, the government consciously delayed the decision to issue 3G licenses for operations. Though the government has never admitted that the 3G licenses were held in order to allow more time for the readiness of TD technology, it is not a secret, according to several MII officials the author interviewed in Beijing. According to them, such a delay would give TD-SCDMA the breathing room it needs to overcome certain technical hurdles and extend its coverage.

Fourth, the Chinese government has carefully chosen the strongest operator—China Mobile—to adopt the TD standard. Unlike the

3G auction practices in the EU, 3G licenses in China are granted to state-owned operators through an administrative tender procedure (Yu, 2005). Since 2001 there have been many speculations about the Chinese government's 3G licensing plan. But regulators in China tend to take very cautious steps because the policy consequences are both strategically and economically very serious. It will put a huge amount of investment at risk, as well as the development trajectory of China's ICT industry. In May 2007, MII approved the use of global wireless standards WCDMA and CDMA 2000, in addition to China's home-grown 3G standard, TD-SCDMA. The Chinese government has made assurances on many occasions, including at the U.S.–China Strategic Economic Dialogue, that the decision to provide 3G services should be a commercial one and the regulator should be agnostic regarding technology choice. However, the recent restructuring plan of China's state-owned operators unveiled in May 2008 revealed the government's obvious support of its home-grown TD standard. In this industry overhaul, China Telecom bought China Unicom's CDMA network and China Unicom merged with China Netcom. China Mobile took control of China Tietong Telecommunications Corp. The restructuring allowed China Telecom, China Unicom, and China Mobile to each provide both fixed-line and wireless services. China Mobile has more than 400 million mobile phone users, more than triple that of China Unicom (*China Daily Online*, 2008). The circular, jointly issued and signed by the Ministry of Industry and Information, the National Development and Reform Commission, and the Ministry of Finance, promised to issue 3G licenses after restructuring. If we read this circular carefully, the term "indigenous innovation" was mentioned ten times. Needless to say, this refers to the TD standard.

To date Beijing has not explicitly announced its decision about which network operator will receive which 3G licenses, but the recent restructuring has drawn a clear picture of China's 3G licensing strategy. China Mobile, ranked as the largest mobile operator in the world and currently servicing 75% of mobile subscribers in China, has been chosen to adopt the TD standard for its 3G network. As Xi Guohua hinted during the China National Telecommunication Working Meeting in December 2005, China's national standard will go to the most capable network provider (Wang & Liu, 2006). Recently, the president of China Mobile, Wang Jianzhou, stated that "TD standard is the one that China owns important intellectual properties, so it is our responsibility to adopt and develop TD standard" (Xiong, 2008). Since the reshuffle, China Mobile has built and operated a TD 3G commercial trial in ten cities including

Beijing, Shanghai, and Guangzhou. The company will establish the network in 28 more cities during the second phase of expansion. According to the MII, about 300,000 users have signed up to the TD 3G network. In the meantime, China Telecom and China Unicom, which are most likely to adopt CDMA 2000 and WCDMA, still do not have government approval to build their networks or provide trial services, despite having conducted trial runs. Many market analysts believe that this is another preferential treatment granted to TD standard by giving it a head start over the other two standards.

### **Prospect of China's TD standard: Will it succeed in global competition?**

Compared with many other Chinese standards, TD-SCDMA seems to be promising. Many factors contribute to its comparative advantages. First, different from the failed WAPI case, the stakeholders in this 3G standard competition are more diversified. Unlike the WAPI standard, which was developed independently by the PRC Broadband Wireless IP Standard Group with little communication with other standards organizations and no foreign participation, TD standard was initially codeveloped by China's Datang company and German telecom giant Siemens. It uses the basis of U.S. company Qualcomm's proprietary CDMA technology. After it was formally adopted by Chinese government as the national standard, many leading foreign chip makers, handset designers and telecom infrastructure equipment makers have been actively involved in the research and design of the relevant products that are compatible with the TD standard. For example, Sony Ericsson recently formed a strategic alliance with China's ZTE to collaborate on TD-SCDMA solutions for China. Siemens AG and Huawei Technologies Inc. formed a joint venture to develop TD-SCDMA products. The world's leading vendors, including Nokia, Motorola, Ericsson, Siemens, and Alcatel, have entered the market to provide infrastructure network equipment and handsets compatible with the TD standard. Clearly, the attractiveness of the Chinese telecom market has provided effective leverage over foreign MNCs which gradually, though reluctantly, accept the reality that they need to adopt TD in order to fully grasp the potential of China's lucrative domestic market. As foreign telecom equipment manufacturers lack experience in developing the TD standard, international giants such as Nokia, Ericsson, Siemens, and Alcatel are seeking cooperation with domestic TD equipment manufacturers for a share of the alluring Chinese market. Siemens is the first overseas telecom giant entering this

field. The aggregate value of its investment in TD has surpassed 200 million euros. It holds a joint venture with Huawei by holding 51% of the stock. Alcatel has contributed 250 million yuan to work in cooperation with Datang. Since 1998 Siemens and CATT/Datang have worked together in the standardization and development of TD. Fujitsu, together with South China University of Technology, will develop a TD network in China. UT Starcom entered a partnership agreement in November 2002 with Datang for the development of TD core network infrastructure equipment. In January 2003, Philips Semiconductor, Datang, and Samsung established T3G in Beijing, with the goal of developing TD chipsets and handset platforms. Texas Instruments, Datang, Nokia, PTIC, and LG Electronics established COMMIT Inc. in February 2002 to develop open multimedia information products based on the TD standard. RTX Telecom, a Danish wireless solution developer, has been developing TD terminal platforms since 2000 in close coordination with Siemens.

This broad participation of foreign MNCs covering all important production chains of wireless telephony from base, telecom equipments, and handset makers to chip producers and services providers is crucial to the future success of the TD standard. According to Scott Kennedy, the main reason behind China's overwhelming record of failure in standards development to date is that several of the industry coalitions supporting unique Chinese standards have been narrow and weak relative to the coalitions formed by their foreign competitors (Kennedy, 2006). The TD coalition may be still weak compared with the industry coalitions of the other two competing 3G standards, but it is so far the strongest in China's standard development.

Second, unlike WAPI, which was just a national standard, TD has long been accepted by ITU as one of the three 3G international standards. By adopting one of the international standards, China to a large degree is immunized from possible criticism that TD standard serves as another nontariff trade barrier to prevent foreign competition in its domestic market. As long as China is not giving up the other two international standards, its support for the TD standard is tolerated by the leading markets. In addition, so far China is the only country that will formally adopt the TD standard, but over 104 countries have allocated their TDD spectrum (Phoenix TV Online, 2006a). This at least provides some possibilities that Chinese manufacturers can export their TD equipment and products in the future.

However, the TD standard also leads to some serious concerns. The biggest difficulty facing the TD standard is that it is likely that only China will deploy this standard. Because there is no market for

TD-SCDMA handsets or equipment anywhere else in the world, the costs of developing phones for consumers and infrastructure for operators are higher. WCDMA and CDMA 2000 have the advantage of large-scale international production. Thus foreign equipment providers and cell phone manufacturers are cautious about investing in this home-grown Chinese standard. Chinese operators also worry about their own future development, apart from the maturity of the technology itself. According to Lu Tingjie, Dean of the Economic Management School of Beijing University of Posts and Telecommunications, Chinese operators will have to shoulder the risks in future market scale, international cooperation, and international roaming service once they have adopted the TD standard (Tan, 2006). In the future, China might be able to penetrate into a few emerging markets in Africa and Latin America with the help of government policy support, such as aid, export credit, preferential loans, etc. China is more likely to follow the EU GSM expansion model by penetrating into developing markets which may not have standard of their own or a choice of preference. In November 2006, Romania conducted its first field test using the TD-SCDMA standard. But the limited adoption will definitely constrain further R&D investment on the standard's application, compared with the two dominant standards.

Another concern from the point of view of the Chinese network operator is real market demand. As a developing country, how many Chinese mobile phone subscribers will really have need for the complicated data processing and Internet access services? Due to large population of low-end subscribers (low-mobile services including "little-smart service" and personal handy-phone service) and the decreasing price of both GSM terminals and service prices, it will be difficult for TD-SCDMA to attract basic voice service subscribers with a much higher 3G subscription price. More importantly, strong competition from WCDMA and CDMA 2000, with their well-established subscriber bases, could curtail adoption.

The third concern is the continuous dilemma of how to balance the proper roles for government in terms of supporting standards-setting and commercialization and the market responsiveness of enterprises. Edward Steinfeld argues that more interventionist approaches to industrial policy are fiercely contested by those who prefer that the market play a more central role (Steinfeld, 2004). So far the state has been the leading actor pushing for the success of the TD standard. The interest, intention, and diverse sources of initiatives of other actors involved have been undervalued by the Chinese government, including operators,

vendors, domestic manufacturers, etc. For instance, China Mobile, with its GSM infrastructure, could have opted for an easy 3G upgrade by choosing WCDMA technology. In 2006 China Mobile Chief Executive Officer Wang Xiaochu reportedly stated that his company was unlikely to pick TD as a standalone technology for 3G (Morse, 2006). Later, the Ministry of Information Industry also rejected a plan by China Mobile to adopt both WCDMA and TD standards. Obviously China Mobile has accepted its mission to develop the TD standard with great reservation. Recently, China Mobile chose to use “nationalism” as a marketing tool for their TD cell phone. They have repeatedly used such rhetoric as “the development of TD with my support” (TD Fazhan, youwo zhichi) on their TV advertisements. Another example is Huawei, China’s leading telecom equipment manufacturer. It has successfully expanded to overseas markets by selling products based on the two dominant standards. Throughout its manufacturing, IPR has already been established internationally by owning dozens of important patents associated with those two standards. New government-supported initiatives for distinctive Chinese standards may not be welcomed by such globalized firms who have reaped the benefits of technoglobalism. By contrast, other Chinese manufacturers who have heavily focused on the domestic market will benefit considerably from China’s distinctive home-grown standards.

The Chinese government has made it a priority to ensure that the home-grown TD standard flourishes. Administrative intervention, policy support and financial aid have proved effective for cultivating this relatively new and immature standard against today’s largely stable standard. The follow-up question is that after the issuance of 3G licenses, to what degree will government support facilitate the development of the TD standard without impeding healthy market competition? With pressure from the United States and EU, China is less likely to give up any of the two dominant standards endorsed by them. Therefore, the country practically has to adopt all three standards for the Chinese market. Would it be too costly for Chinese network carriers to invest in three independent networks?

## **Implications**

Through careful examination of the ongoing domestic mobilization process within China that has evolved around the new 3G standard, particularly the interplay between domestic network providers, manufacturers, government ministers, and major foreign competitors, this

case study illustrates that China's status as the biggest manufacturing base of telecom equipment, socialist bureaucratic politics, government regulatory preferences, and the advantage of its vast domestic market and export weight are together elevating China's "technology capacity" and eventually gaining China more leverage to compete within the global market through the application and development of a home-grown set of standards and technologies.

It is still too early to predict if China's efforts in the 3G game will be a market success or failure. Though it is a strategy any emerging country with China's relative technology capability and market size should try to adopt, it has left two noteworthy policy implications. First, there is only a subtle line between legitimate government industrial policy to enhance the competitiveness of Chinese infant industry and policies that unfairly promote national standards as trade barriers for foreign market access. Second, it is a high-risk and often too-costly undertaking. In the first five years of deployment of the 3G network, it is estimated that the total investment will reach as high as US \$75 billion as China is about to adopt all three different standards and build three networks accordingly (Phoenix TV Online, 2006b). In other words, many other emerging markets may find the standard competition game too costly and therefore undesirable.

Apart from competitive technology, the TD case adds the influence of government policy and market size to China's new wave of standards initiative. China's aspirations for its standards initiative are ambitious. Leveraging its large market size, China has gone further than other developing countries by promoting home-grown standards for products that compete in China with products controlled by major MNCs. China's standard-setting policy is politicized and has taken an upside-down approach. China's standards strategy is still a work in progress. Many adjustments have been made during the course of experimentation, particularly the lessons learned from previous failures. Ultimately, with China's mind and might, this strategy is worth trying. In the meantime, China must be pragmatic to avoid imposing unnecessary costs on its economy.

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# 11

## Automotives and Electronics: What Explains Export Success in Chinese Firms?

*Ganeshan Wignaraja and Rosechin Olfindo*

### **Introduction**

Following economic liberalization in 1978, the giant Chinese economy has become the fastest growing exporter in the developing world. In 2006, China's total merchandise trade amounted to 65% of its gross domestic product (GDP) and over 13% of world exports. Today, China is considered the world's third largest trading economy (WTO, 2008; Adams, Gangnes, & Shachmurove, 2006). Initially, China was internationally competitive in labor-intensive exports such as toys and garments. Since 2001, there is evidence of notable industrial upgrading, export diversification, and sophistication of exports comparable to that of Organization for Economic Cooperation and Development (OECD) countries (Schott, 2006). R&D-intensive industries such as electronics and automotive products, have emerged as leading Chinese exports.

Several macro and industry-level factors have been put forward to explain China's export success, including low costs of labor and materials, falling trade barriers, improvements in trade logistics and infrastructure, and inflows of foreign investors.<sup>1</sup> Policies have been undertaken to promote domestic capabilities such as technology transfer in the electronics industry and high local content requirements for the automotive industry (Rodrik, 2006; Zhang, 2009). At the micro-level, however, only a handful of studies have analyzed export performance in China (e.g., Zhao & Li, 1997; Tong, 2001; Zhao & Zuo, 2002; Guan & Ma, 2003). Drawing on recent developments in the literature of applied international trade on innovation and learning,

this chapter investigates the underlying factors affecting the export success of Chinese firms.

A long tradition exists of empirical testing of trade theory using industry-level data with varied results (Leamer & Levinson, 1995; Bernhofen & Brown, 2005). Over the last decade, attention has focused on the export activity of individual firms. An important question is whether firms' efficiency is considerably enhanced by the experience of competing in overseas markets (Bleaney & Wakelin, 2002; Greenaway & Kneller, 2007). It has generally emerged that the characteristics of firms that export are significantly different from firms that do not. Specifically, exporting firms are larger, have higher foreign equity and are more innovative than nonexporters. These findings from studies on developed and developing countries have been rationalized in terms of the neo-Heckscher–Ohlin model, the neotechnology theories, and the literature on technological capabilities.

The aim of the chapter is to replicate these tests on the links between exporting and key characteristics (including firm size, foreign ownership, and innovation) for a sample of electronics and automotive firms in China. Econometrically, variations across firms in terms of ownership, export orientation, and technological capabilities have made the China dataset an interesting case for firm-level research. The sample covers 858 firms (506 electronics firms and 352 automotive firms) from a large survey conducted by the World Bank in 2003. Statistically significant differences in firm characteristics were found to exist between exporters and nonexporters in the two sectors. Further empirical analysis using a Tobit model was conducted to determine the factors that affect export performance of firms in the two industries.

Previous studies of firm-level export performance in China have dealt with the manufacturing sector as a whole rather than key industries. Accordingly, this chapter adds to the literature by providing insights on firm-level behavior in the two R&D-intensive industries (electronics and automotive). Another feature of the research was the testing of two proxies for technology—R&D expenditures as a percentage of sales and a technology index. The evidence indicates significant differences in ownership, skills, firm size, and technological capabilities between exporters and nonexporters in the two industries.

The chapter is structured as follows: the section on Studies on firm's export performance provides a brief review of the literature, empirical results are presented and evaluated in the section on empirical analysis, and the section on Conclusion concludes.

## **Studies on firm's export performance**

The export behavior of enterprises in developing countries has attracted increasing academic interest in recent years. As background to the empirical study of Chinese firms, key aspects of the theoretical and empirical literature are surveyed below.

The analysis of export performance of firms in developing countries—which has roots in the neo-Heckscher–Ohlin model and the neotechnology theories of Posner and Vernon<sup>2</sup>—is a relatively recent development in the applied international trade literature. This literature suggests that the theoretical determinants of comparative advantage, which are traditionally recognized as industry-level factors, can also operate at the firm level. Conditions of imperfect markets with widespread oligopoly as well as differences in technologies, learning, and tastes underlie the notion of firm-specific advantages. It follows that almost all the theories of comparative advantage can be firm-specific, determining not only which countries will enjoy a comparative advantage in international markets but also which firms can exploit that comparative advantage better than others.

A related body of research on technological capabilities has focused on the nature of technological change in developing countries and the effects of such change on comparative advantage (e.g., Lall, 1992; Bell & Pavitt, 1993). This draws on the evolutionary theory of technical change pioneered by Nelson and Winter (1982) and Kim and Nelson (2000). A central tenet of this literature is that the process of mastering imported technologies is costly and the differences in which mastery is achieved is a source of comparative advantage between countries. Accordingly, building technological capabilities to use imported technologies efficiently requires investments by firms in search, engineering, experimentation, and even research and development.

Incorporating the notion of firm-specific advantages somewhat modifies the predictions of the theories of international trade as follows: (1) there are country-specific and industry-specific advantages which apply to all firms equally; and (2) within this, some advantages will be firm-specific since certain managerial, organizational, marketing, and other skills will be peculiar to each firm as will production methods, technologies, and experience-based know-how.

The available empirical studies have generally confirmed the importance of the theoretical determinants of comparative advantage at the firm level in developing countries. Econometric techniques were employed, relating export achievements to particular enterprise

characteristics (e.g., capital intensity, skill intensity, advertising, firm size, foreign ownership, R&D, and technological capabilities) in different industries. Several proxies have been used in these studies to represent technology including the R&D to sales ratio and a technology index (composed of technical functions performed by firms). Different econometric methods (using OLS, Probit, Logit, Tobit, and Heckman selection models) have also been employed in these studies. Selected econometric studies are summarized in Table 11.1 and are discussed below.

A handful of empirical studies exist on China. The relationship between the R&D to sales ratio and exports in the context of China was

*Table 11.1* Selected microeconomic studies on export performance

Studies	Country	Sample	Estimation	Results <sup>a</sup>
Zhao & Li (1997)	China	1,562 manufacturing firms; 1992 survey data	Logit and simultaneous equations	R&D expenditures (+), profitability (-), and firm size (+)
Tong (2001)	China	500 firms; 1993 survey data	Logit and Tobit	Foreign ownership (+) and human capital (+)
Zhao & Zou (2002)	China	1,049 manufacturing firms; 1992/1994 survey data	Logit and multiple regression	Industry concentration (-), location, size (+), capital intensity (-), and technological innovation (-)
Guan & Ma (2003)	China	213 industrial firms; 1996–1998 survey data	Multiple regression	Innovative capability (+) and firm size (+)
Du & Girma (2007)	China	28,000 private enterprises; 1999–2002	Tobit	Product innovation (+), training (+), firm size (+), productivity growth (+), age (-), bank loans (+), self-raised finance (+)

Continued

Table 11.1 Continued

Studies	Country	Sample	Estimation	Results <sup>a</sup>
Wignaraja (2008a)	China and Sri Lanka	353 clothing firms in China; 205 clothing firms in Sri Lanka	Probit	Foreign ownership (+), technological capability (+), buyer relationship (+), capital intensity (-) skill-adjusted wage rate (-)
Ito & Pucik (1993)	Japan	271 manufacturing firms; 1983 corporate data	OLS	R&D expenditures (+), firm size (+), and R&D intensity of industry (+)
van Dijk (2002)	Indonesia	20,161 industrial plants; 1995 survey data	Tobit and Papke and Woolridge technique	Firm size (U-shaped), foreign ownership (+), age (-), and human capital (+ for SD &—for SI), R&D (+ for SD & SI) <sup>b</sup>
Rasiah (2003)	Malaysia and Thailand	71 electronic firms; survey data	OLS	Foreign ownership (+), wage (+), age (+), process technology (+), and R&D (+)
Lall (1986)	India	100 engineering and 45 chemical firms; 1978–1980 data	OLS	Export incentives (+), product differentiation (+), and internal technological effort (+) <sup>c</sup>
Kumar & Siddharthan (1994)	India	640 corporations; 1988–1990 survey data	Tobit	Firm's technological activity (+ for LT & MT), firm size (U-shaped), advertising (+), and capital intensity (- for LT & MT, + for HT) <sup>b</sup>

Continued

Table 11.1 Continued

Studies	Country	Sample	Estimation	Results <sup>a</sup>
Bhavani & Tendulkar (2001)	India	310 industrial units; 1987–1988 survey data	Probit and Tobit	Scale (+), technical efficiency (+), wage share (–), share of sales expense (+), and form of business organization
Bhaduri & Ray (2004)	India	124 pharmaceutical and electronics firms; 1994–1995 data	Tobit	Firm size (+), R&D (+), foreign ownership (+), raw material import (+), and technological capability (+)
Wignaraja (2002)	Mauritius	40 garment firms; survey data	OLS	Foreign ownership (+) and technology index (+)
Wignaraja (2008b)	Sri Lanka	205 clothing firms; 2004 survey data	Tobit	Technological capability (+), foreign ownership (+), firm size (+), human capital (+), and location
Correa, Dayoub, & Francisco (2007)	Ecuador	441 manufacturing firms; 2003 survey data	Heckman selection	Technology (+), firm size (+), and foreign ownership (+)

<sup>a</sup> Reports significant factors that affect export performance only. (+) and (–) signs indicate positive and negative relationship with the dependent variable.

<sup>b</sup> SD=scale dominated firms; SI=scale intensive firms; LT = low–technology; MT = medium–technology; HT=high technology.

<sup>c</sup> Shows significant results for both engineering and chemical firms.

first examined by Zhao and Li (1997) using a large sample of manufacturing firms. They found a positive and significant relationship between R&D and export propensity and the level of export intensity. Other firm-specific variables such as firm size and capital intensity showed

similar effect on export performance. Using a sample of 213 Chinese industrial firms, Guan and Ma (2003) found that export performance is positively related to the improvement of innovation capability. An interesting feature of the research was the use of a simple index (composed of various technical functions performed by firms during the innovation process) to represent innovation capability at firm level. They also find that larger firms demonstrate stronger export competitiveness while the interaction and harmonizing of various innovation assets are the primary factors in the improvement of international competitiveness of firms in China. Moreover, using a large panel dataset, Du and Girma (2007) also found that product innovation and access to finance have a positive effect on exporting, particularly for capital-intensive firms in China.

Other studies of Chinese firms have indicated the influence of foreign ownership, human capital, firm size, and geographical location. Zhao and Zou (2002) found that firm size and geographical location have a positive effect on manufacturing firms in China. Nonetheless, Zhao and Zou did not find a positive R&D-export intensity relationship.<sup>3</sup> Meanwhile, Tong (2001) shows that foreign ownership and education level of a firm's employees contribute to international technology diffusion and hence exports. More recently, Wignaraja (2008a) tested the relationship between technological capabilities and learning from buyers controlling for firm-specific factors (e.g., capital intensity and age) in a sample of 353 clothing firms in China. The results underlie the link between technological and marketing factors in firm-level exporting.

Empirical studies on China's neighbors in East Asia report similar findings on determinants of firm-level export performance. For instance, Ito and Pucik (1993) found that export sales of Japanese firms are positively associated with firm size and R&D intensity of the firm and the industry. Controlling for firm size and using export ratio as measure of export performance, the absolute amount of R&D (rather than R&D intensity) becomes significant. A strong positive influence of foreign ownership on export performance is found by van Dijk (2002) using a large sample of Indonesian firms. Firm size, age, skilled labor, and R&D also showed positive influence on exports. Rasiah (2003) examined the hypothesis that foreign firms in Malaysia and Thailand are endowed with higher export and technological capabilities than local electronic firms. The positive sign and significance of a foreign ownership dummy, R&D expenditure, and skills confirmed the hypothesis.

The links between technology, ownership, and exporting have been highlighted in the growing literature on other developing countries. In an early study of Indian engineering and chemicals firms, Lall (1986) found evidence for technological determinants (R&D, licensing, and product differentiation through advertising) of enterprise exporting. Lall's findings on technological determinants for Indian firms are supported by Kumar and Siddharthan (1994) and Bhaduri and Ray (2004). Bhavani and Tendulkar (2001) study suggests that the form of business organization determines textile garments and apparel exports.

Using a technology index, Wignaraja (2008b) highlighted that technological capability also plays a role in export success for clothing firms in Sri Lanka. Other determinants include human capital (higher skills but lower cost), foreign ownership, firm size, and location. Technological capability is also found to be important in determining export performance for garment firms in Mauritius. Wignaraja (2002) found that the technology index has a positive and strong relationship with exports shares. Among other firm characteristics, only foreign ownership shows significance.

Similarly, technology is found to be an important driver of exports for Ecuadorian firms. Using a sample of manufacturing firms in Ecuador, Correa, Dayoub, and Francisco (2007) found that firms that have in-house R&D, quality certification, Internet access, and/or import inputs present higher export intensity. The study also confirmed earlier findings on the positive relationship between export performance and firm size and foreign ownership.

Building on the theoretical and empirical literature, the next section undertakes an empirical investigation of the relationship between exporting and other key firm characteristics (including ownership and technology).

## **Empirical analysis**

### **Data and variables**

The analysis in this study uses data from Investment Climate Survey conducted by the World Bank in 2003. The survey gathered both qualitative and quantitative information and covered a wide range of topics including products and services, sales and finance, labor, ownership, technological acquisition, among others (World Bank, 2008). Electronics and automotive firms account for around 40% of all firms and 55% of all exporters in the survey. In this study, the sample covers

506 electronics and 352 automotive firms. There are 109 and 59 foreign firms in the electronics and automotive industries, respectively. Both industries also have more large firms (313 in electronics industry and 241 in automotive industry) than small firms.<sup>4</sup> Appendix Tables 11.A1 and 11.A2 show the sample profile and descriptive statistics.

Firms in the sample differ in export behavior as measured by the share of exports to total sales. There are 145 and 66 exporters in the electronics and automotive industries, respectively.<sup>5</sup> The sample exhibits some of the stylized facts reported by the literature on exporting firms discussed in the section on Studies on firm's export performance. In particular, exporters are generally foreign-owned, larger, and have higher levels of technological activity than nonexporters. Table 11.2 shows the mean values of selected firm characteristics of exporters and nonexporters for electronics and automotive firms in the sample along with the t-values.

Exporters have higher capacity utilization rates than nonexporters. On average, exporters in electronics and automotive industries operate at about 81% and 77% of capacity, respectively. These figures are significantly higher than the capacity utilization rates of nonexporters in the two industries, which operate at 67% and 70% of capacity, respectively.

In both industries, there is a significant difference in foreign ownership between exporters and nonexporters. Exporters in the electronics have an average share of foreign equity of 35%; in the automotive industry the figure is 19%. These are significantly higher than the nonexporters (6% in electronics and 7% in automotives). Exporters are also larger in terms of the number of workers employed. On average, exporters in electronics and automotive industries have 897 and 1,892 permanent employees, respectively, while nonexporters have 244 and 485 permanent employees, respectively. The average education level of technical personnel of exporters is also higher than nonexporters.

Exporters and nonexporters also differ in levels of technological activity. A simple technology index (discussed further below) indicates the various technology functions needed to operate imported technology efficiently. According to this measure, exporters reported higher technology scores (0.60 in electronics and 0.58 in automotive industries) compared with nonexporters. Furthermore, exporters also have higher capital intensity and are generally younger compared to nonexporters, particularly in automotive industry. However, there is no significant difference in R&D expenditure between exporting and nonexporting firms in these industries.

Table 11.2 t-Tests of differences of means of exporting and nonexporting firms

Firm Characteristics	Electronics			Automotives		
	Exporter	Nonexporter	t-values <sup>a</sup>	Exporter	Nonexporter	t-values <sup>a</sup>
Capacity utilization rate (%)	81.10	66.94	5.84***	77.05	69.91	2.12**
Net value of fixed assets per employee (CNY '000)	150.81	246.44	-0.33	164.92	96.82	2.31**
Average education level of technical personnel <sup>b</sup>	5.45	5.29	2.04**	5.38	5.17	1.90*
No. of years since the firm was established	10.73	14.59	-3.04***	12.66	17.04	-2.11**
Share of R&D expenditure to total sales (%)	1.94	2.12	-0.36	1.37	1.31	0.11
Firm's technology index (between 0 and 1) <sup>b</sup>	0.60	0.34	11.02***	0.58	0.35	7.63***
Share of foreign equity (%)	34.57	5.61	10.96***	19.04	7.13	3.89***
Firm's number of employees	897	244	8.27***	1,892	485	6.74***

<sup>a</sup> Mean (exporting)—mean (nonexporting); \*\*\* differences are significant at 1%, \*\* at 5%; and \* at 1%.

<sup>b</sup> See Appendix Table 11.A4 for scoring.

Source: Computed from World Bank's Investment Climate Survey, World Bank (2008)

### Specification and hypothesis

Drawing on the studies in the section on Studies on firm's export performance and taking into account the availability of data from the enterprise survey, the following econometric model is specified for estimating the factors affecting firm-level export performance in the sample of Chinese electronics and automotive firms:

$$Y = \beta X + \varepsilon, \quad (1)$$

where  $Y$  is the vector denoting export performance of firms,  $X$  is the matrix of explanatory variables,  $\beta$  is the matrix of coefficients, and  $\varepsilon$  is the matrix of error terms. We use the firm's share of exports to total sales as measure of export performance (EXSH). The explanatory variables in  $X$  in equation (1) are described below.

#### *Capital intensity*

Within a given activity, a higher capital intensity of operations is likely to give the firm a competitive advantage. Thus, the sign on this variable is expected to be positively associated with export performance. Drawing on earlier studies (Zhao & Li, 1997; Zhao & Zou, 2002; Wilmore, 1992; Wignaraja, 2008b), capital intensity in this chapter is represented by the value of fixed assets per employee (FAEMP).

#### *Human capital*

Within a given activity, a higher level of human capital in the form of educated management personnel (EDUC) and the share of skilled and technical employees in employment (SKTE) is expected to have positive relationship with export performance (Kumar & Siddhartan, 1994; Wignaraja, 2008b). Higher levels of human capital are associated with more rapid technological learning and development of effective business strategies, which are likely to provide a competitive edge at firm level.

#### *Foreign ownership*

Access to the marketing connections and know-how of their parent companies as well as accumulated experience of production and exporting make foreign affiliates better placed to tap international markets than local firms (Wilmore, 1992). Measured by the share of foreign equity, foreign ownership (FOR) is expected to have a positive influence on export performance.

*Technological capability*

We expect technological capability (TECH) to have a positive and significant relationship with export performance for both industries. As the section on Studies on firm's export performance indicates, this is because the process of learning involves conscious investments in creating skills and information to use imported technologies efficiently. We use two alternative measures of technological capability—the firm's share of expenditure on R&D to total sales (R&D) and a firm-level technology index (TI).<sup>6</sup> Although electronics and automotive industries differ in technological structure in production, the TI constructed here captures the firm's competence across a series of technical functions that gives a firm a competitive advantage.

*Firm size*

Larger firms are expected to have better export performance than smaller firms. Hence, a positive relationship is expected between export performance and firm size. Economies of scale in production and export marketing, higher capacity for taking risks, better opportunities to raise financing, and sufficient managerial, financial, R&D, and marketing resources have been pointed out as causes for a positive impact of size on export performance (Kumar & Siddharthan, 1994; Rasiah, 2003; Correa, Dayoub, & Francisco, 2007). Firm size (SIZE) is measured by the number of permanent employees.

*Age of firm*

The age of firm (AGE) has an ambiguous relationship with export performance depending on whether better export performance can be acquired through learning by doing or through the firm's ability to tap superior technology and market access more efficiently, particularly those that began operations recently. Age is measured by the number of years of operation since establishment.

**Model and estimation results**

We estimated the following empirical model of EXSH:

$$\begin{aligned} \text{EXSH}_{ij} = & \beta_0 + \beta_1 \text{FAEMP}_{ij} + \beta_2 \text{EDUC}_{ij} + \beta_3 \text{SKTE}_{ij} + \beta_4 \text{FOR}_{ij} \\ & + \beta_5 \text{TECH}_{ij} + \beta_6 \text{SIZE}_{ij} + \beta_7 \text{AGE}_{ij} + \varepsilon_i, \end{aligned} \quad (2)$$

where the variables in the equation are the same variables discussed previously for firm  $i$  in industry  $j$ , the  $\beta$ 's are the estimated coefficients, and  $\varepsilon$  is the error term.

The dependent variable EXSH in equation (2) is left-censored due to existence of nonexporting firms in the sample. Hence, we estimated the equation using a Tobit model. The empirical model was estimated twice for each industry to account for the two alternative measures of TECH. The results of our estimated export functions for the electronics and automotive industries are reported in Table 11.3. Estimated equations (1) and (6) uses R&D as a measure of TECH, equations (4) and (7) uses TI, and equations (5) and (8) are reduced form equations with variables whose coefficients are significantly different from zero.

R&D as a measure of TECH shows no significance in explaining export performance in both industries, as shown in equations (3) and (6) in Table 11.3. Estimating the same empirical model using TI as a measure

*Table 11.3* Tobit estimates of firm-level export performance in China

Independent variables	Electronics			Automotives		
	(3)	(4)	(5)	(6)	(7)	(8)
FAEMP	-0.0000 (-0.58)	-0.0000 (-0.35)		-0.0001 (-1.20)	-0.0001 (-1.39)	
EDUC	0.0333 (0.53)	0.0928 (1.36)	0.1432 (2.87)***	-0.0937 (-2.26)**	-0.0755 (-1.85)*	
SKTE	0.0073 (0.55)	0.0058 (0.46)		0.0415 (3.56)***	0.0319 (2.94)***	0.0298 (2.75)***
FOR	0.9355 (6.24)***	0.7225 (4.81)***	0.7771 (7.36)***	0.3706 (3.05)***	0.3942 (3.38)***	0.4224 (3.96)***
R&D	-0.1557 (-0.30)			-0.4606 (-0.46)		
TI		1.1703 (5.00)***	1.1594 (6.52)***		0.3135 (2.22)**	0.3885 (2.70)***
SIZE	0.0002 (5.00)***	0.0000 (1.94)*	0.0000 (2.59)***	0.0000 (3.71)***	0.0000 (2.63)***	0.0000 (2.18)**
AGE	-0.0067 (-1.92)*	-0.0050 (-1.37)		-0.0038 (-1.75)*	-0.0010 (-0.52)	
Constant	-0.6464 (-3.05)***	-1.2296 (-4.45)***	-1.4366 (-6.78)***	-0.0618 (-0.45)	-0.2552 (-1.59)	-0.5691 (-5.87)***
LR $\chi^2$	78.89***	91.99***	149.22***	53.10***	56.43***	51.18***
Pseudo R <sup>2</sup>	0.21	0.32	0.32	0.24	0.32	0.29
n	341	257	363	282	231	232

Dependent variable: EXSH

Figures in parentheses are t-values. \*\*\* Significant at 1% level; \*\* at 5%; \* at 10%.

See Appendix Table 11.A4 for definition of variables.

of TECH shows a positive and highly significant result for the two industries. Continuing with TI as a measure of TECH, the empirical model was reestimated to keep the variables that show significance in the general model. The results are shown in equations (5) and (8) in Table 11.3 for both industries.<sup>7</sup>

TI plays an important role in explaining firm-level export performance in the two industries for a given firm size, age, ownership structure, and human and capital intensities. This confirms the hypothesis that conscious investments in skills and information to use imported technologies efficiently contributes to export performance. The magnitude of the effect of TI is higher in electronics than in automotive industry.

FOR is positive and highly significant at 1% level in both industries (although the magnitude of impact is less compared with TI, holding all other firm characteristics constant). This result indicates that foreign firms are more successful exporters than domestic firms in the two industries. Access to marketing connections and know-how of parent companies, accumulated learning experience of producing for export, and access to information about foreign markets, consumers, and technology, give a firm an export advantage.

SKTE is significant (1% level) in the automotive industry while EDUC is also significant (1% level) in the electronics industry. Accordingly, there is some evidence that human capital has positive influence on exporting in PRC. Further work is needed using alternative measures of human capital to better understand skill requirements at firm level.

Larger firm size (SIZE) affects export performance for both industries. This suggests that economies of scale in production are important for electronics as well as automotive firms in increasing their exports shares.

Finally, capital intensity (FAEMP) and age of firm (AGE) do not appear to be significant determinants of export performance among electronics and automotive firms.

## **Conclusion**

This chapter reports on research on the export behavior of electronics and automotive firms in China. In a refinement to existing firm-level studies of the PRC, technology-based approaches to trade were tested and a large sample of firms in two important R&D intensive industries was used for the econometric analysis. Furthermore, empirical testing of export functions considered R&D expenditures and a technology index as proxies for technology along with other firm characteristics.

The econometric results show that foreign ownership and building technological capabilities are the most important influences on firm-level export performance in both R&D intensive industries. The results also suggest that investing in human capital at firm level contributes to exporting in both industries. Furthermore, firm size is statistically significant in electronics but not in automotives. Accordingly, the results confirm those for studies of other developing countries that technology-based approaches to trade (based on a combination of the neo-Heckscher–Ohlin Model, the neotechnology theories and the literature on technological capabilities) also offer a plausible explanation for firm-level export performance in China.

The research offers insights for the design of structural adjustment policies in industrial latecomers. The experience of China indicates that economic liberalization is a necessary but not sufficient condition for export success. The research suggests that economic liberalization works best in liberalizing developing economies when it is combined with investments in supply-side factors relating to technological development. Foremost among these supply-side factors are attracting foreign investment, investing in industrial skills, creating technological capabilities, and developing cost-competitive infrastructures. Policy coordination and continuous monitoring of the results of economic strategy are also critical to export success on global and regional markets.

## Notes

1. For further discussion on why and how Chinese firms reach global markets and China's growing trade relations with its East and South Asian neighbors, see Alon and McIntyre (2007) and Zhang (2009), respectively.
2. One of the first neotechnology theories was the technology gap theory of trade put forward by Posner (1961) which indicated that countries with a highly innovative capacity will have a comparative advantage in products that have not been imitated elsewhere. A later variant—the product cycle theory of Vernon (1966)—argued that the location of production is related to the stage of development which a product has reached.
3. Cross-sectional analysis of 191 subsectors undertaken by Liu and Shu (2003) focused on the industry factors that affect export performance. Using the level of exports of a sector as dependent variable, they confirmed earlier findings on the positive effect of abundant labor supply in China on export performance. The level of FDI and firm size also showed significance.
4. A firm is classified as foreign if the share of foreign equity is greater than zero and as large firm if the number of permanent employees is greater than 100.
5. A firm is classified as exporter if the share of exports to total sales is greater than zero.

6. R&D expenditure has been used frequently in the literature as indicator of firm-level technology/innovation (see for instance, Lall, 1986; Ito & Pucik, 1993; Kumar & Siddhartan, 1994; van Dijk, 2002; Rasiah, 2003; Liu & Shu, 2003; and Bhaduri & Ray, 2004). To capture the more complex nature of technology in firms, others have used an index to represent this variable (see for instance, Guan & Ma, 2003; Bhavani & Tendulkar, 2001). In this chapter, we use the technology index similar to the methodology employed by Wignaraja, 1998, 2002, 2008a, and 2008b. See Appendix Table A4 for the technology scoring scale used in the estimation. A more complex technology index involving nine scores have been tried and produced the same results in terms of direction of coefficients and their levels of significance.
7. Since heteroskedasticity is prevalent in cross-section data particularly firm-level, equations 3 to 8 were estimated using interval regression, which allows the use of robust option to obtain the corrected standard errors. The estimated coefficients using this method were the same as the estimated coefficients using Tobit presented in Table 3. Hence, the Tobit estimates were retained for analysis. Appendix Tables A3(a) and A3(b) shows the correlation matrices for electronics and automotive samples. No large correlations were noted between any of the independent variables.

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## Appendix Tables

Table 11.A1 Sample profile

	All		Electronics		Automotives		
	No.	% Dist. (column) <sup>a</sup>	% Dist. (row) <sup>b</sup>	No.	% Dist.	No.	% Dist.
No. of firms	858	100	100	506	58.97	352	41.03
<i>By export orientation<sup>c</sup></i>							
Exporter	211	24.59	100	145	68.72	66	31.28
Nonexporter	647	75.41	100	361	55.80	286	44.20
<i>By ownership structure<sup>d</sup></i>							
Foreign	168	19.58	100	109	64.88	59	35.12
Domestic	690	80.42	100	397	57.54	293	42.46
<i>By firm size<sup>e</sup></i>							
Large	554	64.57	100	313	56.50	241	43.50
Small	304	35.43	100	193	63.49	111	36.51
<i>By technological intensity<sup>f</sup></i>							
High	429	50	100	260	60.61	169	39.39
Low	429	50	100	246	57.34	183	42.66

<sup>a</sup> % distribution across categories.

<sup>b</sup> % distribution across electronics and automotive industries.

<sup>c</sup> A firm is an exporter if share of exports to total sales is greater than zero during the sample period; nonexporter otherwise.

<sup>d</sup> A firm is foreign if the share of foreign equity is greater than zero; domestic firm otherwise.

<sup>e</sup> A firm is large if the number of permanent employees is 100 or larger; small firm otherwise.

<sup>f</sup> A firm is high-technology if TI is 0.50 or higher; low-technology otherwise.

*Table 11.A2* Descriptive statistics

<b>Firm characteristics</b>	<b>Electronics</b>		<b>Automotives</b>	
	<b>Mean</b>	<b>Std. dev</b>	<b>Mean</b>	<b>Std. dev</b>
Capacity utilization rate (%)	71.11	24.88	71.28	24.66
Net value of fixed assets per employee (1,000 Yuan)	218.70	2,877.93	109.74	216.79
Share of skilled and technical employees in employment (%)	40.96	23.62	31.63	19.65
No. of years since the firm was established	13.49	13.00	16.22	15.25
Share of R&D expenditure to total sales (%)	2.47	10.17	1.32	3.86
Firm's technology index (between 0 and 1)	0.41	0.24	0.40	0.22
Share of foreign equity (%)	13.91	29.85	9.36	22.85
Firm's number of employees	431	854	749	1,621

Table 11.A3(a) Correlation matrix of variables for electronics sample

Variables	EXSH	FAEMP	SKTE	EDUC	AGE	R&D	TI	FOR	SIZE
EXSH	1.0000								
FAEMP	-0.0202	1.0000							
SKTE	0.0574	-0.0159	1.0000						
EDUC	-0.1120	-0.0058	-0.0503	1.0000					
AGE	-0.1555	-0.0089	-0.1391	0.3176	1.0000				
R&D	-0.0750	-0.0272	-0.0360	-0.2536	-0.0774	1.0000			
TI	0.3104	-0.1013	0.0971	-0.1941	-0.0711	0.1541	1.0000		
FOR	0.3502	0.2314	0.1060	-0.2653	-0.2503	0.0188	0.1630	1.0000	
SIZE	0.0944	-0.0246	-0.0336	-0.1192	0.1105	0.0118	0.4202	-0.0390	1.0000

Table 11.A3(b) Correlation matrix of variables for the automotives sample

Variables	EXSH	FAEMP	SKTE	EDUC	AGE	R&D	TI	FOR	SIZE
EXSH	1.0000								
FAEMP	-0.0332	1.0000							
SKTE	0.3325	-0.0573	1.0000						
EDUC	-0.1244	-0.1945	0.1068	1.0000					
AGE	-0.1075	-0.1342	-0.1050	0.0963	1.0000				
R&D	-0.0405	-0.0335	-0.0504	-0.1156	-0.0153	1.0000			
TI	0.0897	0.0920	0.1727	-0.2537	-0.0880	0.0160	1.0000		
FOR	0.3311	0.3743	0.0732	-0.2840	-0.2772	-0.0181	0.1765	1.0000	
SIZE	-0.0336	0.1277	0.0141	-0.0337	0.0776	0.0240	0.3430	0.0272	1.0000

*Table 11.A4* Definition of variables

<b>Variables</b>	<b>Definition</b>
EXSH	Share of exports to total sales (%)
FAEMP	Net value of fixed assets per employee (1,000 yuan)
SKTE	Share of employees with skills and engineering and technical qualifications divided by total permanent employment (%)
EDUC	Average education level of managerial personnel measured by the following scoring: No education Primary school education Secondary education High-school education Undergraduate education in China Undergraduate education abroad Postgraduate education in China Postgraduate education abroad
AGE	Number of years since the firm was established
R&D	Share of R&D expenditure to total sales (%)
TI	Proxy for firm's technological capabilities (between 0 and 1) with the following scoring: Search for new technology via participation in international trade fairs Introduction of new management and organizational techniques Upgraded quality management systems via ISO or any internationally recognized certification Minor adaptation of products to client specifications Development and export of new products
FOR	Share of foreign equity (includes individuals, institutional investors, firms and banks) (%)
SIZE	Number of permanent employees

# 12

## Final Reflections

*Ilan Alon, Julian Chang, Marc Fetscherin,  
Christoph Lattemann, and John R. McIntyre*

As mentioned in our Introduction, we are in the midst of an ongoing shift of power from West to East. Since the late 1990s, China's global economic and political integration and the internationalization of Chinese companies have been multipronged, attracting the attention of politicians, economists, business people, and academics. Two inter-related questions are under discussion: "What are the rules for China's economic and political development?" and "Will China rule the global economic and political system in the future?" This book has provided a unique contribution as it focused on emerging, timely, and important topics concerning the internal political transformation of China, which may lead to a change in the global political and economical arena. The book has presented both background information and theoretical explanations for the still open questions of the internationalizations of Chinese firms. It is one of the first books of its kind to reflect on the relationship between the Chinese domestic political and institutional environment and the internationalization of Chinese firms to developing and developed countries.

This book and the research program ([www.chinagoesglobal.org](http://www.chinagoesglobal.org)) have at their core the root question of how are Chinese companies, and China, going about implementing the mandate of going global. Building from a discussion of the underlying assumptions that inform the Chinese approach to foreign investment, and how they might be changing, this volume also addresses the significant geopolitical dynamics of China's foreign investment. Drawing together a diverse international group of political economists, international business specialists, as well as specialists in various financial, trade, and institutional sectors, the book extends the literature on China's globalization through the lens of the changing rules and resource capabilities in China.

Part I looked at the key political economy and governance issues. As Tarun Khanna noted in the Foreword, the state remains a strong player in the shaping of, and in the contextual background for, China's firms going global. Thus, an understanding of the Chinese political economy context is crucial for any examination of China's internationalization. Francis Schortgen, Gloria Ge, and Daniel Ding established the limits, interpretations, and impact of that context on Chinese firms and showed what they are able to do overseas. Peter James Williamson and Eden Yin examined the pushback effects to describe how Chinese companies change in response to opportunities, or lack thereof, in international markets. Olivier Roche, looking at the case of petrochemical companies, reviewed the case for an evolution of Chinese firms based on the contextual and governance limitations discussed previously.

Part II looked at the international trade and investment regime as it has developed since 1978, with a focus on China's activities in two regions: the EU and Africa. Hinrich Voss, Peter Buckley, and Adam Cross provided a historical overview of the past three decades of foreign investment in China as institutional reform created an evolution of the investment regime in China. The effects of policy and regulatory change substantially created the institutions and incentives that Chinese companies needed to expand overseas. The next three chapters, by William Wei, Louise Curran, and Amir Shoham and Mosi Rosenboim, showed how trade relations between China and the EU and Africa have bloomed over the past two decades. The nature of the resource-intensive investment in Africa will require adjustments in government policies to address the competitive strategic dimension of this investment. Increased government awareness and management of the various aspects of these trade relationships is required.

Finally, Part III provided detailed cases that illustrate the evolution of Chinese changing political economy and governance as well as organizational rules and the path towards a leading role in world trade and investment. May Hongmei Gao looked at how Chinese firms seeking natural resources are aided by their government. Wei Liang analyzed the conditions surrounding successful telecommunications, while Rosechin Oflindo and Ganesham Wignaraja investigated automotive and electronics firms in China. The authors described how the Chinese government retains a strong role in supporting corporate investment. The curious Chinese case of outward investment is an amalgamation of ideological traditions, historic entrepreneurial inclinations, and cultural habits with new technologies and international standards. How Chinese companies are learning to take advantage of the recent international

political economy background, and what other lessons need to be integrated, are described in this section.

The collection of chapters presented here, then, provides a crucial foundation for an understanding of the dynamic process of country- and firm-level adaptation. The complicated interplay hinted above remains a work in progress. Further research areas that would provide fruitful analysis include intercountry comparisons, and an examination of the bureaucratic and institutional politics involving the government entities that affect private entrepreneurial international activities. At the micro-level, consumer behavior and corporate social responsibility issues that may impel firm responses such as product safety, environmental and labor issues should be addressed. Future research should also investigate the similarities and differences between firm-related investments and sovereign wealth funds, exchange rates, foreign currencies, and the importance and roles of China in the global financial markets. Another promising research stream might examine the similarities and differences between corporate governance and ownership between state-owned and privately-owned enterprises. Tarun Khanna also mentioned the Foreword the changing relationship between civil society and the state and its development. Political, civic, and religious freedoms in China may impact sustainability, and should be further researched. As this research field moves ahead, the management of civil society–state relations in China will become a key factor in the analysis of how, why, where, and when Chinese companies go global.

In 2008, the Great Recession hit the United States and its trading allies. China's economic growth rate, which some argued was decoupled from the American economy, has in fact slowed too. How China will cope with the global slowdown and affect the future structure of global trade and investment remains to be seen.

As this edited book highlighted new insights into the globalization of China's enterprises, we hope that it will encourage further research in this area. In the future, Harvard University, Rollins College, Potsdam University, and Georgia Tech will continue to sponsor academic conferences that delve into the political, economic, and social underpinnings surrounding the theme *China Goes Global*.

# Index

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