

# Innovation, Technology, and Knowledge Management

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Chun Liao

# The Governance Structures of Chinese Firms

Innovation, Competitiveness, and Growth  
in a Dual Economy

 Springer

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*To LIAO Guangfu (廖光甫), LIU Xinyu (刘新玉),  
YANG Laike (杨来科), LIAO Lei (廖雷) and ZHU  
Ziye (朱子叶)*

*– Chun Liao (廖春)*

# Series Foreword

The Springer book series *Innovation, Technology, and Knowledge Management* was launched in March 2008 as a forum and intellectual, scholarly “podium” for global/local, transdisciplinary, transsectoral, public–private, and leading/“bleeding”-edge ideas, theories, and perspectives on these topics.

The book series is accompanied by the Springer *Journal of the Knowledge Economy*, which was launched in 2009 with the same editorial leadership.

The series showcases provocative views that diverge from the current “conventional wisdom,” that are properly grounded in theory and practice, and that consider the concepts of *robust competitiveness*,<sup>1</sup> *sustainable entrepreneurship*,<sup>2</sup> and *democratic capitalism*,<sup>3</sup> central to its philosophy and objectives. More specifically, the aim of this series is to highlight emerging research and practice at the dynamic intersection of these fields, where individuals, organizations, industries, regions, and nations are harnessing creativity and invention to achieve and sustain growth.

Books that are part of the series explore the impact of innovation at the “macro” (economies, markets), “meso” (industries, firms), and “micro” levels

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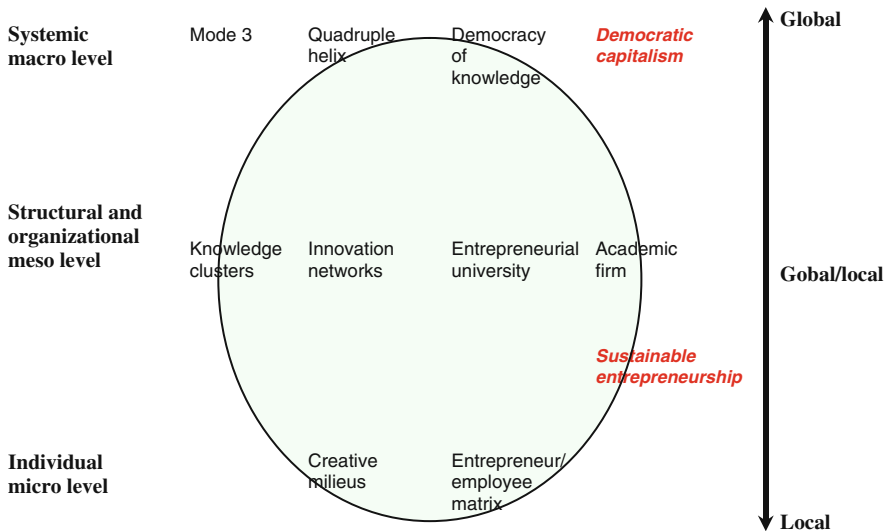
<sup>1</sup> We define *sustainable entrepreneurship* as the creation of viable, profitable, and scalable firms. Such firms engender the formation of self-replicating and mutually enhancing innovation networks and knowledge clusters (innovation ecosystems), leading toward robust competitiveness (E.G. Carayannis, *International Journal of Innovation and Regional Development* 1(3), 235–254, 2009).

<sup>2</sup> We understand *robust competitiveness* to be a state of economic being and becoming that avails systematic and defensible “unfair advantages” to the entities that are part of the economy. Such competitiveness is built on mutually complementary and reinforcing low-, medium- and high-technology and public and private sector entities (government agencies, private firms, universities, and nongovernmental organizations) (E.G. Carayannis, *International Journal of Innovation and Regional Development* 1(3), 235–254, 2009).

<sup>3</sup> The concepts of *robust competitiveness* and *sustainable entrepreneurship* are pillars of a regime that we call “*democratic capitalism*” (as opposed to “popular or casino capitalism”), in which real opportunities for education and economic prosperity are available to all, especially – but not only – younger people. These are the direct derivative of a collection of top-down policies as well as bottom-up initiatives (including strong research and development policies and funding, but going beyond these to include the development of innovation networks and knowledge clusters across regions and sectors) (E.G. Carayannis and A. Kaloudis, *Japan Economic Currents*, p. 6–10 January 2009).

(teams, individuals), drawing from such related disciplines as finance, organizational psychology, research and development, science policy, information systems, and strategy, with the underlying theme that for innovation to be useful it must involve the sharing and application of knowledge.

Some of the key anchoring concepts of the series are outlined in the figure below and the definitions that follow (all definitions are from E.G. Carayannis and D.F.J. Campbell, *International Journal of Technology Management*, 46, 3–4, 2009).



Conceptual profile of the series *Innovation, Technology, and Knowledge Management*

- The “Mode 3” Systems Approach for Knowledge Creation, Diffusion, and Use: “Mode 3” is a multilateral, multinodal, multimodal, and multilevel systems approach to the conceptualization, design, and management of real and virtual, “knowledge-stock” and “knowledge-flow,” modalities that catalyze, accelerate, and support the creation, diffusion, sharing, absorption, and use of cospecialized knowledge assets. “Mode 3” is based on a system-theoretic perspective of socio-economic, political, technological, and cultural trends and conditions that shape the coevolution of knowledge with the “knowledge-based and knowledge-driven, global/local economy and society.”
- Quadruple Helix: Quadruple helix, in this context, means to add to the triple helix of government, university, and industry a “fourth helix” that we identify as the “media-based and culture-based public.” This fourth helix associates with “media,” “creative industries,” “culture,” “values,” “life styles,” “art,” and perhaps also the notion of the “creative class.”
- Innovation Networks: Innovation networks are real and virtual infrastructures and infratechnologies that serve to nurture creativity, trigger invention, and catalyze innovation in a public and/or private domain context (for instance, government–

university–industry public–private research and technology development cooperative partnerships).

- **Knowledge Clusters:** Knowledge clusters are agglomerations of cospecialized, mutually complementary, and reinforcing knowledge assets in the form of “knowledge stocks” and “knowledge flows” that exhibit self-organizing, learning-driven, dynamically adaptive competences and trends in the context of an open systems perspective.
- **Twenty-First Century Innovation Ecosystem:** A twenty-first century innovation ecosystem is a multilevel, multimodal, multinodal, and multiagent system of systems. The constituent systems consist of innovation metanetworks (networks of innovation networks and knowledge clusters) and knowledge metaclusters (clusters of innovation networks and knowledge clusters) as building blocks and organized in a self-referential or chaotic fractal knowledge and innovation architecture (Carayannis 2001), which in turn constitute agglomerations of human, social, intellectual, and financial capital stocks and flows as well as cultural and technological artifacts and modalities, continually coevolving, cospecializing, and cooperating. These innovation networks and knowledge clusters also form, reform, and dissolve within diverse institutional, political, technological, and socioeconomic domains, including government, university, industry, and nongovernmental organizations and involving information and communication technologies, biotechnologies, advanced materials, nanotechnologies, and next-Generation energy technologies.

*Who is this book series published for?* The book series addresses a diversity of audiences in different settings:

1. *Academic communities:* Academic communities worldwide represent a core group of readers. This follows from the theoretical/conceptual interest of the book series to influence academic discourses in the fields of knowledge, also carried by the claim of a certain saturation of academia with the current concepts and the postulate of a window of opportunity for new or at least additional concepts. Thus, it represents a key challenge for the series to exercise a certain impact on discourses in academia. In principle, all academic communities that are interested in knowledge (knowledge and innovation) could be tackled by the book series. The interdisciplinary (transdisciplinary) nature of the book series underscores that the scope of the book series is not limited a priori to a specific basket of disciplines. From a radical viewpoint, one could create the hypothesis that there is no discipline where knowledge is of no importance.
2. *Decision makers – private/academic entrepreneurs and public (governmental, subgovernmental) actors:* Two different groups of decision makers are being addressed simultaneously: (1) private entrepreneurs (firms, commercial firms, academic firms) and academic entrepreneurs (universities), interested in optimizing knowledge management and in developing heterogeneously composed knowledge-based research networks; and (2) public (governmental, subgovernmental) actors that are interested in optimizing and further developing

their policies and policy strategies that target knowledge and innovation. One purpose of public *knowledge and innovation policy* is to enhance the performance and competitiveness of advanced economies.

3. *Decision makers in general*: Decision makers are systematically being supplied with crucial information, for how to optimize knowledge-referring and knowledge-enhancing decision-making. The nature of this “crucial information” is conceptual as well as empirical (case-study-based). Empirical information highlights practical examples and points toward practical solutions (perhaps remedies), conceptual information offers the advantage of further-driving and further-carrying tools of understanding. Different groups of addressed decision makers could be decision makers in private firms and multinational corporations, responsible for the knowledge portfolio of companies; knowledge and knowledge management consultants; globalization experts, focusing on the internationalization of research and development, science and technology, and innovation; experts in university/business research networks; and political scientists, economists, and business professionals.
4. *Interested global readership*: Finally, the Springer book series addresses a whole global readership, composed of members who are generally interested in knowledge and innovation. The global readership could partially coincide with the communities as described above (“academic communities,” “decision makers”), but could also refer to other constituencies and groups.

Elias G. Carayannis  
Series Editor



# Preface

Since 1949, China has adopted a heavy-industry-oriented development strategy in the attempt to support technological development and national defense and to catch up with the developed countries. Moreover, the Chinese technology policy reveals a historically rooted concern about technological autonomy. An indigenous technological capability would reduce the country's dependence on foreign technology, especially from Japan and the USA. China's industrial structure has favored capital-intensive heavy industry since then (Holz and Tian Zhu 2002, p. 88). To ensure that enterprises would follow the state's orders, and to ensure that surpluses would be used to fulfill the state's strategic goals, state ownership was adopted for the enterprises. That is, the state ownership of enterprises was established to meet the state's strategic goals. Through state ownership the state could exercise control over revenues and surpluses according to its strategic goals. Accordingly, a substantial portion of state-owned enterprises (SOEs), especially the large ones, have high capital intensity. SOEs were also assigned the best managerial staff, technicians, and workers (Lin et al. 1999, pp. 66–71).

Since the end of 1970s, the technological determinism logic has been further emphasized: According to Marxism, the forces of production (technology) are the determinants of social and economic transitions. China has also struggled to achieve a "rich country, and a strong army" (*fuguo, qiangbing*). A high-technology economy would lay the foundation for future improvements in military power. Hence, acquisition and innovation of technology, the transformation of "advanced" technology, and the development of the productive forces, embodied in the term "Four Modernizations" were further emphasized as China's strategic goal (Gabriel 2006, pp. 4–6). But the existing Central Planning System could not generate sufficient surplus to fund the acquisition, innovation, and transformation of technology. The "Four Modernizations" would require more fundamental economic reforms to establish the framework of a market economy, to liberate and expand the productive forces, to improve efficiency, and to generate more surpluses for the modernization project (Gabriel 2006, p. 36). On the one hand, in the state sector the state ownership is still significant in managing the transition, particularly in orchestrating the adoption and coordinating the innovation of advanced technologies (Gabriel 2006, p. 4), such as semiconductors, new materials, and new energy sources. This strategy of using the core competitiveness of "coordination" to absorb and improve new technology and

to build up an incremental innovation system is similar to that in other coordinated market economies, like those of Japan and Germany. On the other hand, China is pursuing another strategy to acquire a different kind of innovation system – radical innovation system. This aim is achieved via building up core competitiveness in information technologies in the private sector, which is similar to that in liberal market economies, like those of the USA and the UK. In its private sector, China has developed nongovernmental high-technology enterprises (*minying keji qiye*) in the information industries.

Shanghai, China

Chun Liao

# Acknowledgments

This book<sup>4</sup> is the result of my PhD study at the Free University of Berlin, Germany.<sup>5</sup> The opinions expressed in the project are those of the author, not those of the Free University of Berlin.

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Cordial thanks are also due to my whole family. With their love and support, I could overcome the difficulties of doing research abroad, and finally I achieved this goal in my life.

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<sup>4</sup> The author of the book – Chun Liao (廖春), was born on 4 February 1969 in the People’s Republic of China.

<sup>5</sup>The dissertation which was originally titled *The Governance Structures of Chinese Firms in the Varieties of Business Systems of Contemporary Market Economies* was submitted in May 2008 to Free University of Berlin, and was successfully defended on 11 July 2008. My PhD study was from October 2005 to July 2008, the research field of which covered corporate governance, innovation systems, and business systems.

# Contents

<b>1</b>	<b>General Theory</b>	1
1.1	Liberal Market Economies and Coordinated Market Economies	1
1.2	Market-Based Firms' Governance Structure and Coordinated Firms' Governance Structure	2
1.2.1	Firms' Governance Structures Defined by Five Dimensions	2
1.2.2	The Market-Based Governance Structure Versus the Coordinated Governance Structure	3
1.3	Case Studies on Two Basic Types of Firms' Governance Structures	10
1.3.1	The "German and Japanese Model" for the Coordinated Firms' Governance Structure	10
1.3.2	The "American and British Models" for the Market-Based Firms' Governance Structure	16
1.3.3	The "Taiwanese Model" for the Market-Based Firms' Governance Structure	23
1.4	Institutional Complementarities, Continuity, and Divergence	25
1.4.1	Institutional Complementarities	25
1.4.2	Institutional Continuity and Divergence	28
<b>2</b>	<b>Firms' Governance Structure in the Chinese State Sector</b>	33
2.1	SOE Reorganization: Keeping the Large and Letting Go of the Small ( <i>zhuada fangxiao</i> )	33
2.1.1	"Letting Go of the Small" in the Competitive Industries	35
2.1.2	"Keeping the Large" in the Strategic Industries	36
2.2	The Formation of the State Ownership Coordinated Modern Governance Structure of SOEs	39
2.2.1	The Corporatization of SOEs Results in High Levels of Surplus	39
2.2.2	The State as the Majority Owner of SOEs Has Extraordinary Power To Deploy Investable Funds for Technological Modernization	50

2.2.3	Worker Participation in Corporate Governance . . . . .	54
2.2.4	The State Ownership Coordination Based SOE Groups	56
2.2.5	The Financing Pattern of SOEs Independent of Short-Term Profitability . . . . .	63
2.2.6	Good Performance and Long-Term Innovation Strategies of SOEs . . . . .	77
2.2.7	The Corporate Governance of SOEs Resembles the German–Japanese “Insider” Model . . . . .	84
2.2.8	The Different Types of Coordination Between SOEs and the Firms in Coordinated Market Economies	88
<b>3</b>	<b>Firms’ Governance Structure in the Chinese Private Sector . . . . .</b>	<b>91</b>
3.1	The Development and the Sectoral Distribution of the Private Sector . . . . .	91
3.1.1	Development of the Private Sector . . . . .	91
3.1.2	The Sectoral Distribution of Private Sector and State Sector . . . . .	93
3.2	The Governance Structure of Chinese Private Firms . . . . .	96
3.2.1	Ownership and Control of Chinese Private Firms . . . . .	96
3.2.2	Employer–Employee Relations . . . . .	104
3.2.3	Financing Pattern, Performance Criteria, and Competitive Capability . . . . .	107
3.2.4	Personal Networks Different from the Institutionalized Coordination in Coordinated Market Economies . . . . .	116
3.2.5	The Chinese Private Sector Is Not Supportive for Coordinated Industrial Districts . . . . .	124
3.3	Privatized SOEs, Collectives, and TVEs Converge to Direct Owner-Controlled Firms . . . . .	132
3.3.1	Privatized SOEs Converge to Direct Owner-Controlled Firms . . . . .	132
3.3.2	Privatized Collectives Converge to Direct Owner-Controlled Firms . . . . .	136
<b>4</b>	<b>Foreign Direct Investment, Technology Transfer, and Dual Convergence in the Dual-Structured Chinese Market Economy . . . . .</b>	<b>145</b>
4.1	FDI and Technology Transfer Drive the Convergence Between Economies with Similar Models . . . . .	145
4.2	The Dual-Structured Chinese Market Economy Supports Its Dual Convergence Toward Both Coordinated Market Economies and Liberal Market Economies . . . . .	146
4.2.1	Massive Waves of FDI Flow to China . . . . .	146
4.2.2	The Remarkable Long-Term Economic Growth of China . . . . .	157
	<b>Conclusion . . . . .</b>	<b>159</b>

Contents	xvii
<b>References</b> . . . . .	175
<b>About the Author</b> . . . . .	197
<b>Index</b> . . . . .	199

# Introduction

This project, which is based on the comparative studies approach (the framework of comparative market economies/business systems/innovation systems), compares firms' governance structures in China with those in coordinated market economies (CMEs) and liberal market economies (LMEs), to define the core competitiveness and innovation system of the Chinese economic model evolving from its specific business systems.

The core of a business system in a market economy is the firms' governance structure. There are two basic types of market economies: LMEs and CMEs. Accordingly, there are two basic types of firms' governance structures: the market-based firms' governance structure and the coordinated firms' governance structure.

The comparison of different firms' governance structures in distinct business systems is mainly based on five dimensions: ownership and control, interfirm coordination, employer–employee relation, firms' financing pattern and performance criteria, and firms' core competitiveness and innovation system. Considering variations in the types of owner control, the first dimension is particularly important. It has quite a strong implication for the other dimensions.

The market-based firms' governance structure emphasizes the exclusivity of ownership boundaries, and limits interfirm cooperation and employer–employee interdependence. The firms' financing mainly relies on the capital-market-based financing pattern or the self-financing pattern (for small owner-managed firms). Maximization of the short-term profitability is the main performance criterion. Firms tend to develop market-oriented core competitiveness and a market-oriented radical innovation system. The coordinating mechanism of this model is based on a market mechanism.

The coordinated firms' governance structure encourages overlap of ownership boundaries and mutual cross-shareholding, and as well as interfirm collaboration and employer–employee interdependence. The firms' financing mainly relies on the credit-based financing pattern, in which banks play a control-oriented role in the corporate governance. Long-term growth and long-term technological improvements are the main performance criterion. Firms tend to develop organizational competitiveness and a coordination-based incremental innovation system. The coordinating mechanism of this model relies on non-market-mode coordination.

The market-based firms' governance structure is prevalent in the business system that is dominated by market arm's length controlled firms (the US case), and the business system that is dominated by firms that are under the owner's direct control (the British and Taiwanese cases). The market-based firms' governance structure is the general model of the firms' governance structure in liberal market economies.

The coordinated firms' governance structure is prevalent in the business system that is dominated by alliance-controlled firms (German and Japanese cases). The coordinated firms' governance structure is the general model of the firms' governance structure in coordinated market economies.

In the Chinese state sector, the firms' governance structure is similar to the coordinated firms' governance structure model in CMEs. The only difference is the type of coordination. In the Chinese state firms' governance structure, the primary coordination is "the state coordination through its controlling shareholding," while in CMEs the firms' governance relies on the institutionalized coordination. The institutional environment in China is impoverished with the institutional coordination arrangements which are pervasive in CMEs, thus, it cannot support the CME type of coordination. The coordination role in the firms' governance structure in the Chinese state sector can only be organized and played by the state on the basis of its controlling shareholding. This results in differing coordination mechanisms between the state ownership coordinated firms' governance structure in the Chinese state sector and the coordinated firms' governance structure in CMEs.

The Chinese private sector is dominated by direct owner-controlled firms, and its firms' governance structure is the market-based governance structure as in liberal market economies.

This dual market economic system in China was built up through reforms since the mid-1990s. It generates dual core competitiveness and a dual innovation system, which cannot easily be found in other market economies. The state ownership coordinated firms' governance structure plays an important role in pursuing the state strategic goal of technological modernization and generates a coordination-based innovation system and organizational core competitiveness like that in CMEs. The market-based firms' governance structure in the private sector generates market-oriented core competitiveness and a market-oriented innovation system like that in LMEs. Such a dual innovation system and dual core competitiveness have enabled the Chinese economy to compete more successfully than LMEs and CMEs, which have only one type of innovation system and core competitiveness, respectively. With such an overall competitiveness and innovation system, the Chinese economy can develop successfully in much broader industrial sectors, technological sectors, and scientific research fields than other LMEs and CMEs.

On the basis of the theory of institutional complementarities, the author will explain why in CMEs and LMEs only one model of firms' governance structure exists, and why China can have both kinds of firms' governance structure models. The theory of institutional complementarities implies that, in general, each economy has one specific model of firms' governance structure. According to the theory, only one model of firms' governance structure can exist in a market economy, because the coordinating mechanism in the model of firms' governance structure applies and



covers the whole economy, which does not have clear coordinating boundary, and cannot be split and constrained within a certain part of the economy. Thus, in CMEs such as those of Germany and Japan and in LMEs such as those of the USA and the UK, only one model of firm's governance structure exists.

But if it is possible to find a business system with such a specific coordination mechanism, which has clear coordination boundary and only covers a certain part of the economy, then it is also possible for the other part of economy to develop a different type of coordinating mechanism; thus, two models of firms' governance structure can coexist in the economy. China provides the typical case study here. Because of the controlling state shareholding, the state plays the coordination role in the governance structure of corporatized SOEs. Such a specific coordination mechanism has a clear coordination boundary. It can be constrained within the state sector, while outside the state sector private enterprises develop and rely on the type of coordinating mechanism which is built upon a market-based governance structure. Because of the clear coordination boundary between the two sectors, the institutional complementarities in each sector are intact and this prevents the interaction-driven convergence between the two sectors. Thus, the case of China does not actually contradict the theory of institutional complementarities. As a specific case, it supports and supplements the theory.

On the basis of the theory of institutional continuity and divergence, it will be analyzed how the dual structure of the Chinese economic model can support economic convergence of the Chinese economy toward different kinds of advanced market economies (CMEs and LMEs), and how foreign direct investment and technology transfer realize such a dual economic convergence.

The theory of institutional continuity and divergence does not support economic convergence between economies with different economic models, but it supports the conditional convergence between economies with similar economic models. Therefore, it also supports the dual economic convergence of the Chinese economy toward both advanced LMEs and advanced CMEs. The Chinese economic model has a dual structure, which makes it compatible with both advanced LMEs and advanced CMEs. This is the ground on which the Chinese dual economic convergence toward these two evolves. Foreign direct investment and technology transfer drive the dual convergence.

The joint strength – the dual core competitiveness, the dual innovation system, and the dual convergence, which develops from the dual-structured Chinese market economy, contributes one of the important perspectives for the analysis of China's remarkable economic growth during the last decade.

## **Author's Notes**

### ***Contribution to the Comparative Studies Approach***

The author focuses on the firms' governance structure dimension (Whitley 1999, pp. 65–77) as a distinguishable criterion to differentiate between the business

systems in the liberal market economies (LMEs) and those in the coordinated market economies (CMEs) (Hall and Soskice 2001). The concept of firms' governance structure combines the five principal spheres in Hall and Soskice's approach with Whitley's theory of the firms' governance structure. In this project, the firms' governance structure approach actually includes and reorganizes the five principal spheres from Hall and Soskice's approach according to Whitley's theory of the firms' governance system. It also entails the most important sphere – ownership and control – which is emphasized in Whitley's approach. On the basis of the approaches of Hall and Soskice and Whitley, the author adds the dimension of firms' management control of competitive capacity and of innovative capacity to the firms' governance structure, which were used as an important dimension for the comparison of the varieties of market economy or business system in both the Hall and Soskice and the Whitley approaches. The firms' governance structure dimension is indeed an inclusive and generalized approach in the comparative studies of different business systems or market economies.

The author uses the comparative studies approach (the framework of comparative market economies/business systems/innovation systems) to analyze the Chinese economic model on the basis of a comparison of the Chinese model with the models of advanced CMEs and LMEs. The author finds out that in the Chinese state sector the firms' governance structure is a state-ownership coordinated governance structure, which is similar to the coordinated firms' governance structure in CMEs; while in the Chinese private sector, the firms' governance structure is a market-based governance structure that is similar to the market-based firms' governance structure in LMEs.

Different economic models have different kinds of core competitiveness and innovation systems; therefore, a particular economic model only enhances its competitiveness in certain industrial sectors, but limits its capacity to compete in others (Hall and Soskice 2001). LMEs have market competitiveness and a market-oriented radical innovation system, but they are constrained to develop organizational competitiveness and a coordination-based incremental innovation system like CMEs. The same logic also applies for the analysis of CMEs.

Thus, the dual structure of the Chinese economic model has an important implication. The dual structure generates a dual institutional comparative advantage, dual core competitiveness, and a dual innovation system. They have enabled the Chinese economy to compete more successfully than LMEs and CMEs, which have only one type of innovation system and core competitiveness, respectively. With such an overall competitiveness and innovation system, the Chinese economy can develop successfully in much broader industrial sectors, high-technology sectors, and scientific research fields than other LMEs and CMEs.

The author contributes to the theory of institutional complementarities in the comparative studies approach in analyzing the dual structure of the Chinese economic model. The theory of institutional complementarities implies that, in general, each economy develops only one specific type of economic model based on its specific firms' governance structure. The coordinating mechanism in the firms' governance structure applies and covers the whole economy, which cannot be split and

constrained within a certain part of the economy. Thus, in CMEs such as those of Germany and Japan and in LMEs such as those of the USA and the UK, only one kind of firms' governance structure model exists. In this research, the author finds that if it is possible to find a business system with such a specific coordinating mechanism which only covers a certain part of the economy, then it is also possible for the other part of economy to develop a different type of coordinating mechanism; thus, there can be two models of firms' governance structure coexisting in the economy. This is the case for the Chinese economy. The state, with a controlling shareholding, plays a coordination role in the governance structure of corporatized state-owned enterprises (SOEs). Such a specific coordination mechanism has a clear coordination boundary and it can be constrained within the state sector, while outside the state sector private enterprises develop and rely on a different type of coordinating mechanism built upon the market-based governance structure. Thus, the case of China does not actually contradict the theory of institutional complementarities. As a specific case, it supports and supplements the theory.

In this research project the author analyzes the conditional convergence across economies. The theory of institutional continuity and divergence in the comparative studies approach does not support economic convergence between economies with different economic models. On the basis of this theory, the author analyzes the conditional institutional convergence across economies with similar economic models. The author further analyzes how the dual structure of the Chinese economy supports its dual convergence toward both advanced LMEs and advanced CMEs, and how the dual convergence has been driven by foreign direct investment and technology transfer from LMEs and CMEs to China.

This research project also addresses the important implications on several other key issues, such as: Is the Chinese dual structure sustainable? What is the future of the Chinese market economy and its economic growth? Is the Chinese model unique, or can it be replicated in other countries? What are the advantages of the Chinese dual structure and the pitfalls in the Chinese style dual structure? How strong the stability it is to avoid the economic crisis, comparing the Chinese economy with LMEs and CMEs? Does the USA have the potential to build up a dual structure superior to the Chinese style dual structure? Has the emergence of the dual-structured Chinese market economy signaled the end of the transition economy?

This is the first time the comparative studies approach has been used to analyze the core competitiveness and innovation system of the Chinese economic model, to analyze the dual structure and dual convergence of the Chinese economy toward advanced CMEs and LMEs, and to analyze the remarkable Chinese economic growth. The author finds that it is such dual core competitiveness, a dual innovation system, and dual economic convergence that drive the remarkable Chinese economic growth. It is on the one hand an important perspective of the analysis of Chinese economic growth in the framework of the comparative studies approach (the framework of comparative market economies/business systems/innovation systems), and on the other hand a breakthrough within the comparative studies approach by the dual structure analysis of the Chinese case.

## ***Comments on the Book The Future of Chinese Capitalism***

*The Future of Chinese Capitalism* is a new book written by Gordon Redding and Michael A. Witt and published by Oxford University Press in 2008. The book also compares the Chinese economy with the economies of the USA, Germany, and Japan.

The authors of *The Future of Chinese Capitalism* analyze the institutional environment in China and its impact on the Chinese business system. They analyze how this specific institutional environment which is strongly influenced by Confucianism generates the rationale for highly centralized authority to the Chinese state on behalf of the people and how it has implications for the Chinese business system – economic assets are seen as being owned by the state with the use of them serving the people (p. 86).

They describe some main characteristics of the Chinese private sector business system, such as the fragmented business system, ownership and control, financing pattern, employment relations, and personal networks. They found the market mechanism indeed plays the primary coordinating role in the Chinese private sector business system.

But the authors did not reach the following points in their research. Therefore, their views related to these points are not quite compelling.

First, the authors of *The Future of Chinese Capitalism* have not seen correctly the important role of the Chinese state sector business system. Since the mid-1990s, Chinese SOEs have been corporatized. Especially, the State-Owned Assets Supervision and Administration Commission (SASAC) has been set up to act as a shareholder of state assets to overcome the fragmentation of the state-ownership arrangement. These reform steps have important implications, as follows. They separate state ownership from state bureaucratic control, and they also separate state ownership from management of SOEs; the interest of the various state bodies within SOEs is reduced to a common denominator – equity; the shareholders have only one way – shareholding voting – to voice their interests; majority voting rules eliminate conflicting goals. Almost all of the problems in the Chinese state sector which are mentioned in *The Future of Chinese Capitalism*, such as state bureaucratic influence in SOEs, fragmentation of state ownership, and conflicting benefits of different state bodies in SOEs, were solved after these reforms had been implemented. The authors' information on the Chinese state sector development is out of date.

Second, the authors of *The Future of Chinese Capitalism* have not realized that instead of institutionalized coordination in CMEs, the Chinese state plays a similar coordination role. The Chinese institutional environment is impoverished with institutionalized coordination, but coordination by the state through its controlling shareholding can substitute the CME type of institutionalized coordination and can work well in such a Confucianism-influenced society with highly centralized authority to the state.

Third, the authors of *The Future of Chinese Capitalism* have not seen through the personal network in the Chinese private sector. The authors found the personal network to be an informal institutional support in the market-based Chinese private

sector. But they failed to find that it is actually a market-supporting informal institution which functions like a market. This special role of the Chinese personal network makes it different from the institutionalized coordination in CMEs, but makes it closer to the market-based logic of LMEs.

Fourth, the information on the privatization of Chinese collectives in *The Future of Chinese Capitalism* is out of date. The collectives have actually been privatized and now belong to the Chinese private sector. The local corporates named by the authors could be a transition form during the privatization process.

Fifth, the reason of why the authors of *The Future of Chinese Capitalism* provide a pessimistic view on the development of the Chinese economy is because they fail to see the dual strength generated from both the Chinese state and private sector business systems. Without the coordination strength in the state sector, with only one type of strength – market strength in the private sector, the Chinese economy could not catch up so quickly with global market competition. The authors mixed up the management and innovation system of the Chinese state firms with that of the private firms. They could not perceive that the former is similar to CMEs and the later is similar to LMEs. Therefore, on the basis of their comparison of the Chinese economy in general with CMEs (such as those of Germany and Japan) and LMEs (such as that of the USA), they could only reach the conclusion that the Chinese economy is different from both.