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STRATEGIC UPGRADING AND FIRM RESOURCES: A STUDY ON ZHEJIANG'S TEXTILE AND CLOTHING INDUSTRY

Anlan Chen

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Department of Financial and Management Studies
SOAS, University of London

Abstract

This thesis analyses the strategies of Zhejiang's textile and clothing firms in achieving upgrading outcomes since the early 2000s. In doing so, it critically investigates the boundary of resource base as the scope of the firm's strategic options and productive opportunities. Building on theoretical literature and empirical findings of multiple case studies, this research develops an extended framework of the Resource-Based View (RBV). Since the early 2000s, multiple changes in the competitive environment have caused strategic challenges to China's textile and clothing sector. As a result, strategic upgrading has since then become a priority of firms' strategic transitions. Drawing upon the upgrading literature, this thesis provides a systematic discussion on firms' strategies in achieving various upgrading outcomes. An in-depth study of Zhejiang's textile and clothing sector is conducted to provide a unique insight into the upgrading processes of local firms. This thesis analyses firms' upgrading strategies from a resource-based perspective with the theoretical framework of the RBV. The RBV is one of the dominant theories in strategic management. But there exist criticisms on its traditional definition of the firm's resource base boundary with the ownership boundary of firm assets. This narrow definition of the resource base leads to an overlook of the resources outside the firm's ownership boundary but can be mobilized through network connections for strategic use. Grounded in the existing literature and developed through empirical observations, an extended RBV framework is established in this research. It incorporates the impact of external and accessible resources on the firm's strategy development, and integrates the firm's business network into its growth. This extension improves the usefulness of the RBV in identifying the firm's productive opportunities and enhances the analytical power of the theory.

	Abstract	3
	Table of Contents	4
	List of Tables	8
	List of Figures	10
	Acknowledgements	11
Chapter One	Introduction	12
	1.1 Research Background	13
	1.1.1 The “Upgrading” Literature	15
	1.1.2 Resource-based Perspective of Firm Strategies	22
	1.2 Research Objectives & Research Questions	25
	1.3 Research Methodology	28
	1.3.1 Research Design	30
	1.3.2 Multiple Case Studies on Firm-level Upgrading	34
	1.3.3 Sampling Strategy	36
	1.3.4 Data Collection	41
	1.3.5 Data Analysis	45
	1.4 Research Implications	48
	1.5 Thesis Structure	49
Chapter Two	The Resource-Based View of Firm Strategy	52
	2.1 The RBV as a Dominant Perspective in Strategic Management	54
	2.1.1 The Porterian Approach of Strategy	55
	2.1.2 The Early Evolution of the RBV	57
	2.2 Branch Theories under the RBV Umbrella	61
	2.2.1 Dynamic Capabilities	62
	2.2.2 Core Competence	63
	2.3 Further Development of the RBV	66
	2.3.1 Limitations of the RBV	66
	2.3.2 Efforts in Building on the Limitations	71
	2.3.3 Extending the RBV with External Resources	74
	2.4 The Eastern Business Environment for the Extension of the RBV	78

		2.4.1 The Japanese Governance System and Management Model	80
		2.4.2 The Chinese Business Context	83
Chapter	Three	The Chinese Textile and Clothing Industry: Historical development, competitive challenges and upgrading status	87
	3.1	Historical Development of the Chinese Textile and Clothing Industry	89
		3.1.1 Reform Era Development - Stage I: 1978-1991	90
		3.1.2 Reform Era Development - Stage II: 1992-2001	92
		3.1.3 Reform Era Development - Stage III: 2001-Present	94
	3.2	Competitive Challenges in the Chinese Textile and Clothing Industry	96
		3.2.1 Competitive Challenges at the Level of National Economic Growth	96
		3.2.2 Competitive Challenges at the Level of Industrial Development	101
	3.3	Strategic Adaptations of the Textile and Clothing Sector in Zhejiang	112
	3.4	Collective Upgrading Efforts of Small Firms in Zhejiang	115
	3.5	Concluding Remarks	122
Chapter	Four	The Japanese Upgrading Experience in the 1970s and 1980s	123
	4.1	The Upgrading Context of Japanese Textile and Clothing Firms	125
		4.1.1 Competitive Challenges in the Japanese Textile and Clothing Industry towards the 1970s	126
		4.1.2 Upgrading Incentives of Japanese Textile and Clothing Firms	127
	4.2	The Upgrading Experience of Japanese Textile and Clothing Firms	129

	4.2.1 Upgrading Outcomes & Upgrading Strategies	129
	4.2.2 Critical Resources Underpinning Upgrading Strategies	140
4.3	Resource Mobilizing Mechanisms & Resource Base	145
4.4	Concluding Remarks	151
Chapter Five	Textile and Clothing Firms in Zhejiang Province: Case studies of firm upgrading strategies in China	154
5.1	Cases of Strategic Upgrading - Pioneer Firms in Zhejiang	155
	5.1.1 Wenzhou - Virtual Business Model	157
	5.1.2 Ningbo - “Hong Bang Tailors” Craftsmanship	158
	5.1.3 Hangzhou - Silk Capital & Cultural Centre	160
5.2	Semir Group	162
	5.2.1 Upgrading Outcomes & Upgrading Strategies	163
	5.2.2 Critical Resources Underpinning Upgrading Strategies	165
	5.2.3 Mobilizing Mechanisms and Resource Base	167
5.3	Wensli Group	169
	5.3.1 Upgrading Outcomes & Upgrading Strategies	170
	5.3.2 Critical Resources Underpinning Upgrading Strategies	174
	5.3.3 Mobilizing Mechanisms and Resource Base	177
5.4	Progen Group	179
	5.4.1 Upgrading Outcomes & Upgrading Strategies	180
	5.4.2 Critical Resources Underpinning Upgrading Strategies	183
	5.4.3 Mobilizing Mechanisms and Resource Base	184
5.5	Cross-case Analysis & Discussions	189
Chapter Six	Cross-national Analysis of the Japanese and Chinese Upgrading Experiences	194
6.1	Comparison of Upgrading Experiences in Japan and China	196

	6.1.1 Upgrading Outcomes & Upgrading Strategies	196
	6.1.2 Critical Resources & Mobilizing Mechanisms	200
6.2	Extending the RBV Framework	206
	6.2.1 The Extended RBV Framework	206
	6.2.2 The Boundary of Resource Base	209
6.3	Business Networks in the Japanese and Chinese Contexts	215
6.4	Concluding Remarks	223
Chapter Seven	Conclusions	224
7.1	Conclusion of Research Outcomes and Main Contributions	225
7.2	Summary of Research Findings and Theoretical Insights	228
	7.2.1 The Legacy of Economic Reforms on Strategic Transitions of Chinese Firms	228
	7.2.2 Complementing the Debate on the Post-war Japanese Management Model	231
	7.2.3 A Strategy Perspective of Firm Upgrading	232
	7.2.4 Extending the RBV Framework	235
	7.2.5 Connecting the Eastern and Western Perspectives on Management	237
7.3	Building on the Findings of this Research	238
	Bibliography	240
	Appendix	277
	Appendix 1: Sample Selection (Step 1) - Information of Selected Firms	278
	Appendix 2: Examples of Interview Questions - Wensli Group	279
	Appendix 3: Examples of Interview Questions - Progen Group	281
	Appendix 4: Examples of Interview Questions - Supplier of Semir Group	283

List of Tables

Table 1.1	Multi-level Analytical Framework	34
Table 1.2	Examples of Key Words in the Identification of Upgrading Trajectories	38
Table 1.3	Sample Selection - Patterns of Upgrading Behaviours under the Framework of Upgrading Trajectories	40
Table 1.4	Summary of Secondary Data Usage	46
Table 1.5	Summary of Interview Process - Wensli Group	47
Table 2.1	Summary of the Characteristics of a Post-war J-firm	83
Table 3.1	Contribution to National Industrial Output of Firms with Various Ownerships (%)	93
Table 3.2	Share of Domestic and Private Firms in Zhejiang's Textile and Clothing Sector (%)	95
Table 3.3	Number of Textile and Clothing Firms in Zhejiang	103
Table 3.4	Loss-generation Ratio by Firm Size (%)	109
Table 3.5	Contribution of Small Firms to New Product Ratio of Zhejiang's Textile and Clothing Industry (%)	109
Table 3.6	Summary of Competitive Challenges in China's Textile and Clothing Sector	110
Table 3.7	Textile Cluster Mapping in Zhejiang Province	116
Table 4.1	Hours of Labour Input per Unit Product (level of 1975=100)	130
Table 4.2	Summary of Upgrading Outcomes in the 1970s and 1980s: Top-10 Largest Japanese Textile Firms	131
Table 4.3	R&D Expenditures of the Top-10 Japanese Textile Firms	135
Table 4.4	Textile Sales as a Percentage of Total Sales of the Top-10 Japanese Textile Firms (%)	138
Table 4.5	Upgrading Outcomes & Upgrading Strategies of the Top-10 Japanese Textile Firms	140
Table 4.6	Critical Resources Underpinning Upgrading Strategies	144
Table 4.7	Summary of KBG membership of the Top-10 Largest Japanese Textile Firms in the 1970s	150
Table 4.8	Strategic Resources and Mobilizing Mechanisms in the Japanese Upgrading Experience (1970s and 1980s)	151
Table 5.1	General Background of Case Firms	161

Table 5.2	Upgrading Outcomes of Case Firms	162
Table 5.3	Series of Major Events - Semir Group (1996-2012)	164
Table 5.4	Continuous Data on Semir's R&D Expenses	166
Table 5.5	Continuous Data on Semir's R&D Personnel	166
Table 5.6	Series of Major Events - Wensli Group (1975-2015)	171
Table 5.7	Series of Major Events - Progen Group (1985-2011)	182
Table 5.8	Cross-case Summary of Upgrading Outcomes, Upgrading Strategies, Critical Resources and Mobilizing Mechanisms	192
Table 6.1	Summary of Strategic Resources and Mobilizing Mechanisms in the Upgrading Processes of Japanese and Chinese Firms	209

List of Figures

Figure 1.1	Distribution of Value along the Smiling Curve	18
Figure 1.2	Firm-level Analytical Framework	32
Figure 2.1	Steps of Strategy Formation from a Resource-based Perspective	58
Figure 2.2	The Traditional RBV Framework (1)	60
Figure 2.3	The Traditional RBV Framework (2)	61
Figure 2.4	The Hierarchy of Organizational Routines: Dynamic Capabilities vs. Core Competence	64
Figure 2.5	The Traditional RBV Framework (3)	65
Figure 2.6	The Traditional RBV Framework (4)	69
Figure 2.7	The Traditional RBV Framework (5)	69
Figure 2.8	Lavie's (2006) Extension of the RBV with the RV	72
Figure 2.9	Proposed Extension of the RBV Framework	77
Figure 3.1	Main Cities in Pearl River Delta	92
Figure 3.2	Main Cities in Yangtze River Delta	116
Figure 4.1	Structural Difference between a Horizontal and Vertical KBG	146
Figure 6.1	Refined Extension of the RBV Framework	208
Figure 6.2	Example of Local Business Networks of Chinese Firms	219

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Chapter One

Introduction

1.1 Research Background

The Chinese economy experienced a high-speed growth period for over three decades since the economic reforms began in 1978. The average annual GDP growth between 1979 and 2015 was 9.68%.¹ Within the modularized global production networks, China has been focusing on exporting low value added manufacturing products (Steinfeld, 2004; Yu, 2014; Li & Wang, 2015). These products are characterized as “*easy to produce, require only standardized, low-tech machinery, and are overwhelmingly reliant on a large, cheap and disciplined labour force, trained in basic manufacturing skills*” (Dallas, 2014:47). Low-cost production has been the competitive advantage of the Chinese manufacturing industry (Bloom & Williamson, 1998; Lin et al., 2003; Xue, 2008; Ge & Yang, 2011; Wang & Weaver, 2013).

Since the year 2003/2004, China’s manufacturing industry has confronted multiple competitive challenges. Important examples include new entrants from (low-cost) developing countries, increasing costs of raw materials, complexity in export restrictions, excessive low-level production capacity, concentration on low-end products, backward technological structure and lack of innovation capability etc. (Qiu, 2005; Ren, 2008; Yu & Li, 2008; Zhang, 2009; Yan, 2010; McCann, 2011). Meanwhile, concerns over labour and skill shortage in China have emerged, along with the observation that there has been a constant increase in wage levels (Cai et al., 2007; Park et al., 2010; Knight et al., 2011; Ge & Yang, 2011; Banister & Cook, 2011; Li et al., 2012; Wang & Weaver, 2013). Evidence has shown that China’s abundant supply of cheap labour is being gradually exhausted. The result of these challenges was that the Chinese manufacturing industry’s previous dependence on low-cost production activity was increasingly becoming a strategic issue. The industry was

¹ World Bank online data - GDP growth (annual %) by country, average calculated by the author.
<http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?end=2015&locations=CN&start=1961&view=chart>

losing its advantage in global competition. Internationally, other developing countries were capturing the market share for low-end manufacturing (Eng & Spickett-Jones, 2009; Yu, 2014), and domestically, Chinese firms faced destructive price competition against one another (Steinfeld, 2004).

This situation has resulted in an urgent need and desire for Chinese manufacturing firms to “upgrade” (Steinfeld, 2004; Jer, 2014; Yu, 2014; Zhang et al., 2016), namely increasing skills and knowledge in products and production processes, increasing value added, and moving away from low-cost competition towards differentiation (Gereffi, 1999). Strategic upgrading is commonly adopted by manufacturing firms in various countries. It is especially common in countries where economic growth was previously led by exports based on low-cost production but the cheap labour resource gradually exhausted. The Chinese state government has provided policy guidance in industrial restructuring with the objective of achieving strategic upgrading (the 11th and 12th Five-Year Plan of China). Accordingly, firms have been making strategic efforts in order to move up the “smiling” value curve. This marked an upgrading period of Chinese manufacturing firms since the early 2000s (Zhang et al., 2016). The subsequent decade therefore offers a meaningful opportunity to examine the upgrading strategies of Chinese manufacturing firms.

The upgrading of China’s manufacturing industry has attracted great attention of both economics and business scholars. One strand of literature has examined the mechanism for upgrading (e.g. Steinfeld, 2004; Yu, 2010; Zhang et al., 2016); a second has looked at the pattern of upgrading behaviours (e.g. Hu & Mathews, 2008; Zhao & Rui, 2012); a third focused on driving factors of upgrading attempts (e.g. Liu, 2005; Mu & Lee, 2005; Fan, 2006a). The extant studies significantly focused on one typical upgrading path of firms (e.g. Hu et al., 2005; Fan, 2006b; Mao & Dai, 2006; Wang & Mao, 2007; Eng, 2009; Mao et al., 2010; Alcacer & Oxley, 2014) - from

Original Equipment Manufacturer (OEM) to Original Design Manufacturer (ODM) and to Original Brand Manufacturer (OBM), and on the sector of electronics in China's Pearl River Delta area (e.g. Hu et al., 2005; Eng, 2009; Eng & Spickett-Jones, 2009; Peignambari et al., 2014; Yu, 2014).

This thesis offers a study on upgrading strategies of Chinese textile and clothing firms in Zhejiang province (in the Yangtze River Delta area). The textile and clothing sector is labour-intensive with low requirements on entry technology and financial capital (Orr, 1974; Demsetz, 1982; Kessler, 1999), and it plays an important role in export-led growth of national economy (Gereffi, 1999). This sector therefore serves as a typical example to show how the transition of China's manufacturing industry is being pushed by the competitive challenges since the early 2000s. Meanwhile, this sector involves a substantial amount of domestic private firms² with various sizes, and this population of Chinese firms offers an opportunity for the development of a comprehensive view of upgrading behaviours at firm level.

1.1.1 The “Upgrading” Literature

In the existing literature, the subject of industrial upgrading evolved with research on the phenomenon of economically backward countries catching up with the income level of earlier industrialized countries. Gerschenkron (1962) examined the factors that allowed economically backward countries to jumpstart growth, and his theory highlighted the role of the state (Brandt & Thun, 2010). Wade (1990) analysed the rapid economic growth in East Asia since the 1950s, with the examples of Japan, South Korea and Taiwan. Amsden's (1989) study on South Korea focused on explaining the learning mechanism of the country during the period of fast growth. These early studies concentrated on the national business system (national value chain) and explored the critical role played by the central government's intervention with the

² This research focuses on mainland domestic Chinese firms and does not include foreign invested firms or firms jointly owned by the mainland and greater China (Hong Kong, Taiwan, Macau).

path of the national economic growth. These interventions took the form of transferring resources from unproductive to productive industries (Wade, 1990), as well as disciplining and protecting businesses with efficient technology transfer (Amsden, 1989).

In his 1999 paper, Gereffi introduced the research subject of Global Commodity Chain. This concept covers a package of activities throughout the process of creating, manufacturing and delivering a product to consumers. In particular, discussions under this concept are from a worldwide perspective. The term Global Commodity Chain was later considered as an alternative terminology in describing the similar concept of Global Value Chain (GVC) (Kaplinsky, 2000), and such alternatives also include Global Production Networks and Global Supply Chain (Gereffi et al., 2001).³ Research focused on the GVC has become an important perspective on the upgrading topic (Avdasheva, 2007; Tokatli, 2013). Compared to previous studies, the GVC perspective shifted the research focus from national-level growth to global-level coordination. In the meantime, it placed the manufacturing industry at the core of the discussion. This new angle of looking at upgrading issues corresponds to the transformation of the global economy; it reflects the changes to the connection of economic activities and power distribution in a global context (Dicken, 2003). Worldwide trade flows have reshaped production from the old pattern of geographical specialisation to a new pattern of process fragmentation (Dicken, 2003). Therefore, understanding competition from a cross-national perspective serves as a meaningful addition to the previous studies on upgrading.

Discussions on upgrading from the GVC perspective emphasize the way emerging countries make progress in achieving higher value added during their integration into the worldwide production networks (Gereffi et al., 2001). In theory,

³ This research uses Global Value Chain (GVC) to represent these concepts.

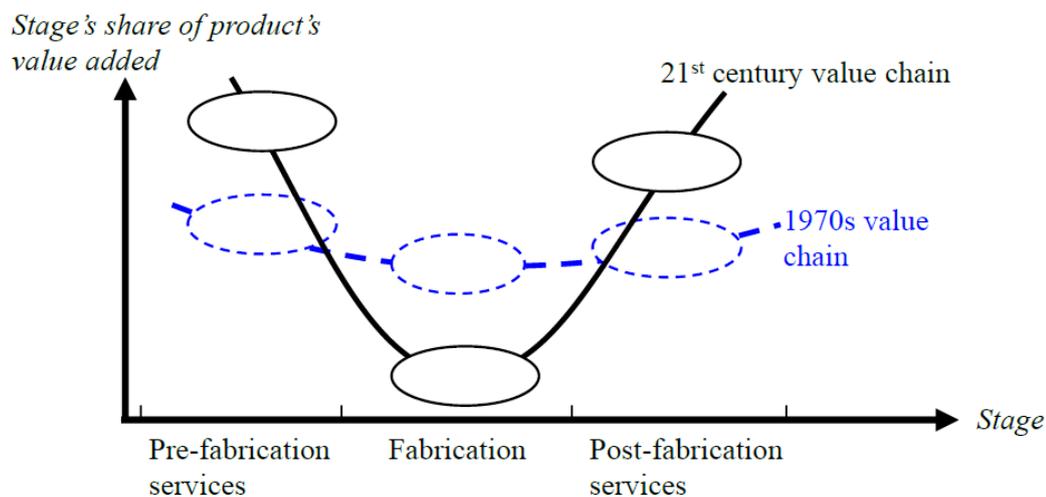
they do so by increasing knowledge and skills involved in the products they deliver, and by gradually shifting to more profitable sections along the commodity chains (Gereffi, 1999; Kaplinsky et al., 2009). This is referred to as moving upward along the value curve (Humphrey & Schmitz, 2002; Giuliani et al., 2005). The concept of the value curve - smiling curve as in Bartlett and Ghoshal (2000) - is commonly used to describe the rationale of this process. According to Baldwin (2012), the revolution in Information and Communication Technology caused the second unbundling of the global supply chain.⁴ The technological revolution in information and communication made long-distance coordination easier than ever (Arndt & Kierzkowski, 2001; Baldwin, 2012). This facilitated developing countries' participation in the global production networks. The significant wage difference between these developing countries and the developed ones granted the former labour cost advantages. Developing countries then occupied the fabrication and assembly stages of the production chain to benefit from such advantages.

Meanwhile, the second unbundling of the supply chain in worldwide trade changed the earlier, flatter value curve into a U-shaped one - the smile became bigger (Figure 1.1). This means that the reduced entry barriers of fabrication activities caused higher profit shares for firms occupying the pre- and post-fabrication activities (Gereffi & Sturgeon, 2004; Baldwin, 2013). These activities include designing, marketing, distribution and after-sales services. As a result, countries relying on fabrication activities are at the bottom level of profitability. They therefore have incentives to gradually move away from assembling and production, either to previous sections, e.g. product development and design, or to posterior ones, e.g. marketing and sales. These other sections of the value chain have become market niches due to their higher entry barriers than manufacturing (Humphrey & Schmitz, 2002; Giuliani et al.,

⁴ The first unbundling happened with the steam revolution (Baldwin, 2012).

2005), and firms in developing countries have the motivation to upgrade along the global value chain.

Figure 1.1 Distribution of Value along the Smiling Curve



Source: Baldwin, 2013:6: Figure 2

Upgrading allows suppliers to collect additional rents along the value chain, and this can be achieved through four types of trajectories (Gereffi et al., 2001; Humphrey & Schmitz, 2002; Schmitz, 2004; Giuliani et al., 2005; Schmitz, 2006; Ponte & Ewert, 2009): *Process Upgrading* mainly concerns the operation procedures of production. *Product Upgrading* involves more activities, should the new products require new designs, new production techniques or systems, new materials, new marketing channels or new services. *Functional Upgrading* means adding new activities to the firm's business portfolio or dropping existing ones from it. *Chain Upgrading* means moving the whole set of firm activities into another sector or industry. These four upgrading trajectories demonstrate a logical hierarchy of firms' upgrading outcomes - from *Process Upgrading* to *Chain Upgrading*, there is a progressive increase of difficulty.

The traditional economics research on growth and competition focused primarily on productivity (in production activity), the GVC perspective broadened this research scope through involving various activities (Kaplinsky, 2000; Giuliani et al.,

2005) and offered opportunities to understand the growth of both developed and developing economies (Wood, 2001). The extant upgrading literature includes a wide coverage of both macro-economic conditions and micro-mechanisms that facilitate the moving-up of global suppliers. At the level of national economic growth, typical research themes include trade patterns and government policy (Humphrey, 2004; Steinfeld, 2004; Ponte & Ewert, 2009; Chen & Xue, 2010). At the level of industry and firm upgrading, chain patterns and the four upgrading trajectories were commonly adopted by empirical research. Significant examples include Tokatli and Kizilgün's (2004) study on the Turkish clothing sector, Avdasheva's (2007) discussion on upgrading incentives and opportunities in the Russian furniture industry, and Navas-Alemán's (2011) comparative study of Brazilian suppliers in furniture and footwear sectors.

The existing research on upgrading has been closely related to technological learning and innovation (Morrison et al., 2008; Ponte & Ewert, 2009). These studies emphasize that since upgrading means delivering better products or achieving more efficient production processes, developing technological capabilities and competences is essential (e.g. Giuliani et al., 2005; Liu, 2005; Zhang et al., 2016). Since value chain is a global concept based on international trade, the learning and innovation of developing countries is to a large extent linked to leader countries and firms along the chain. As a result, linkage to these global "governors" is considered a pre-requisite of the upgrading of less developed countries (Gereffi et al., 2001; Humphrey, 2004; Kaplinsky et al., 2009; Ponte & Ewert, 2009). Access to knowledge and technologies through exporting and receiving foreign direct investment therefore have been argued to be the decisive upgrading factors (Morrison et al., 2008).

While buyer-seller linkage is indeed a valuable angle of analysing upgrading, there exist other factors that enable suppliers to develop learning and innovation

capabilities. For instance, Tokatli and Kizilgün (2004) provided an example of the Turkish clothing sector, showing that suppliers were able to break the control of buyers and develop brand-name manufacturing capabilities by themselves. Navas-Alemán (2011) also called for particular attention to the fact that the impact of regional/national value chain on industry- and firm-level upgrading has started to regain significance. These studies point to the challenge faced by the GVC perspective due to its exclusive focus on global linkage among suppliers and buyers.

In his 2013 paper, Tokatli called for greater scrutiny on the identification and understanding of firm upgrading behaviours. He claimed that some supplier firms entered higher value-added activities (e.g. branding, designing and marketing) simply because they had to share risks and responsibilities with buyers. The result was that in doing so, they failed to capture additional value along the production chain. Tokatli (2013) then argued that more empirical evidence is needed of the link between firms' entry into higher value-added activities and the improvement of their competitiveness and performance. This means that the reasons why firms adjust their activity portfolios and the impacts of these changes on their performances deserve detailed discussions and analyses. The processes through which firms achieve upgrading call for thorough observations and explanations.

These criticisms highlight a need for further development of studies on the upgrading subject. Firstly, more research attention should be paid to the supplier firms themselves, in order to release the constraint of an exclusive focus on buyer-supplier relationships. Researchers will have the opportunity to explore the variety of upgrading drivers through analysing the supplier firms' current and potential resources and capabilities. In the meantime, a systematic observation on the supplier firms' upgrading processes has the potential of broadening the research scope of upgrading paths (e.g. to avoid a narrow focus on the typical OEM-to-OBM path only). Finally,

the accuracy of identifying firms' upgrading results, e.g. the link between firm activities and performance as challenged in Tokatli (2013), will benefit from an analytical angle of strategic management.

Following the classic Chandlerian understanding of corporation, productive transformations are organized within firms in order to generate revenues, "*...strategy allocates resources to investments in developing human and physical capabilities that, it is hoped, will enable the firm to compete for chosen product markets*" (Lazonick, 2010:320). Strategy therefore is the key element in shaping the overall development of the firm's capabilities. It aims at maximizing the utilization of resources, and to attain revenues and other long-term objectives (Bracker, 1980). From a strategy point of view, firms achieve and sustain superior performance through competitive advantages. These advantages come from the firm's ability in either maintaining cost leadership or differentiating themselves from rivals (Porter, 1991). If the firm's entry into new activities allows it to achieve differentiation, it then provides opportunities for the firm to develop competitive advantages. As a result, the firm is expected to achieve superior performance, i.e. capturing extra value from the chain. The key to the upgrading concept is the increase of knowledge and skills in the firm's products and processes, and this is realized through improvements of the firm's capabilities and competences.

In this study, a sample of supplier firms in the textile and clothing sector is analysed through case studies. This is an effort to examine the upgrading processes of Chinese manufacturing firms in depth, with a focus on their strategies in achieving various upgrading outcomes. This thesis focuses on the textile and clothing firms in Zhejiang province, and from a strategy point of view, it analyses these firms' upgrading processes between 2003 and 2015. As the theoretical framework of this

study, the Resource-based View (RBV) is adopted in the analysis of firms' upgrading strategies.

1.1.2 Resource-based Perspective of Firm Strategies

The resource-based perspective of firm strategies - the RBV - centres on the resources and capabilities of the firm as its sources of competitive advantages (Wernerfelt, 1984; Barney, 1991; Peteraf, 1993; Eisenhardt & Martin, 2000). The theory adopts the leading assumption that resources are heterogeneously distributed among firms. It argues that the firm's competitive advantage is the result of reasonable deployment of firm-specific resources. Hence the firm's resource portfolio - its resource base - serves as the foundation of its value creation. The boundary of the resource base, as a decisive factor of the frontier of the firm's strategic options, plays a critical role in the firm's strategy formulation and implementation.

The leading assumption of the RBV is highly reflected in the Chinese business environment. China has been a typical example of an emerging economy for over three decades since the economic reforms began in 1978. It is to a large extent remaining so, with relatively low income, rapid growth and an on-going economic liberalization process (UNCTAD, 2010; Yang & Meyer, 2015; Zhu & Yoshikawa, 2016; Xie, 2017). As a result, the institutional and market environment in China has undergone rapid changes. China has been experiencing a gradual transition from state-dominant economy to the coexistence of public and private sectors. Firms' ownership and connections with the central and local governments have substantial significance for their access to resources. Meanwhile, the open-door policy since 1978 has led to geographical discrepancy in competitive conditions among different regions within the country. The regional development model then affects local firms' deployment of resources. Therefore, the legacies from the reform years have significant influence in firms' accumulation and deployment of resources, which is highlighted in their

divergent development paths. In such a competitive context, analysing firms from the resource point of view provides a comprehensive and multi-facet insight into the business dynamic of firms.

The RBV, although having demonstrated analytical power in examining firm strategies, is in need of further understanding on the boundary of the firm's resource base. In some significant studies on the theory (e.g. Barney, 1991; Amit & Schoemaker, 1993; Sirmon et al., 2007; Barney et al., 2011), the boundary of the firm's resource base was considered equivalent to the ownership boundary of its internal assets. But some other studies (e.g. Dyer & Singh, 1998; Lockett & Wild, 2014) pointed out that the firm's resource base may span over its ownership boundary to include some external resources. The firm's resource portfolio, i.e. its resource base, defines both the productive opportunity and border of its growth (Penrose, 1959). As a result, limiting the resource base to the firm's ownership boundary places a potential constraint on the firm's strategic options. This leads to a constraint on the RBV's accurate assessment of the development process of competitive advantages, and therefore limits the theory's analytical power in firm strategy. Despite some attempts to refine the RBV in the existing literature (e.g. Lavie, 2006; Bogers, 2011; Baraldi et al., 2012; Leuschner et al., 2013),⁵ this weakness of the theory remains to be fully addressed.

The firm's ownership boundary represents the efficiency dimension of its organizational boundary (Santos & Eisenhardt, 2005). As pointed out in Santos and Eisenhardt (2005), the extant understanding on organizational boundary involves multi-dimensional perspectives, and besides the efficiency dimension (which highlights the legal ownership of firm assets), there are also competence, identity and power dimensions. Along with the growth of the firm, the resource base experiences

⁵ Detailed discussions on the RBV literature are provided in *Chapter Two*.

dynamic reconfiguration, and hence the scope of resource base evolves with the firm's organizational boundary. Among the multiple dimensions of the firm's organizational boundary, the traditional RBV framework defined the scope of resource base with a strong emphasis on the efficiency dimension, while overlooking the others. The further understanding on the resource base concept therefore calls for a more thorough assessment on its association with the multiple dimensions of the firm's organizational boundary.

Santos and Eisenhardt (2005:505) pointed to the value of understanding organizational boundary in "non-traditional settings". Particularly, they specified Asian countries as a compelling research context. The academic field of management studies has been calling for special attention to the characteristics of Asian business contexts. Recent examples include Chen and Miller (2010), the special research forum of the *Academy of Management Journal* (2015, Vol. 58, No. 2) on "*West Meets East: New Concepts and Theories*", and the 2016 conference of *Journal of Management Studies* on "*Connecting Eastern and Western Perspectives on Management*". It is recognized that business systems in Eastern/Asian societies have different features from their Western peers (Chen & Miller, 2010). The extant classical theories in strategic management were developed within the context of western philosophies and practices. The Eastern/Asian features on firm development provide the potential of considering these theories from a different perspective, and thus offer opportunities to further develop and refine them.

Some of the characteristics of the business context in Asian countries are particularly useful in the assessment of the boundary of firm resources. The Chinese business environment has been argued to have a boundary blurriness feature (Boisot & Child, 1996; Peng, 1997; Meyer & Lu, 2005). This means that the firm's demarcations appear to be indefinite from other parties in the business network, e.g. the state and

local governments, financial institutions, partner firms in strategic alliances etc. Similarly, the Japanese business system (in the 1970s and 1980s) is also characterized by embedded ties among firms, the state and financial institutions (e.g. Gerlach, 1992; Dyer & Ouchi, 1993; Singleton, 1997; Lai, 2000). If the firm's strategic options are not limited to resources inside the firm's ownership boundary, the limitation from overlooking resources that cross the firm's ownership boundary should be highlighted in contexts where there are strong connections among various organizations. Therefore, Japan and China serve as reasonable "non-traditional settings" for the examination of the boundary of firm resources (Santos & Eisenhardt, 2005:505).

This thesis, while focusing on Chinese firms, includes the Japanese textile and clothing firms' upgrading experience in the 1970s and 1980s, and compares it with the Chinese firms' upgrading processes in Zhejiang. The comparison of these two countries aims to incorporate the boundary blurriness characteristic of the Eastern business system, so as to provide a useful setting for the assessment of firm resource base. Through a refined understanding on the boundary of firm resource base, this research pursues an extension of the RBV theory.

1.2 Research Objectives & Research Questions

The objectives of this research are twofold. Firstly, it aims to investigate the strategies of Zhejiang's textile and clothing firms in achieving various upgrading outcomes. Secondly, it will examine the boundary of the firm's resource base as the foundation of strategy.

To achieve these objectives, this study focuses on the resources that are outside the firm's ownership boundary, yet can be mobilized by the firm for strategic use. Through investigating the role of these resources and their mobilizing mechanism during the firm's upgrading process this study develops an extended framework of the RBV theory. Following the RBV logic, the research objectives are pursued through a

step-by-step investigation of the firm's upgrading outcomes, upgrading strategies, critical resources, mobilizing mechanisms of critical resources and the resource base boundary.

Upgrading Outcomes & Upgrading Strategies

The achievement of upgrading is reflected in the firm's ability to capture value in more profitable sections along the value chain. In strategic management, this is associated with the improvement of competitiveness and is accomplished through the development of competitive advantages. Effective upgrading strategies lead to competitive advantages, which are demonstrated through various upgrading outcomes. The existing upgrading literature has summarized four trajectories as the results of the firm's achievement of upgrading - *Process, Product, Functional and Chain Upgrading*. These four trajectories outline the types of upgrading outcomes of firms. The firm's upgrading strategies hence lead to the accomplishment of (one or several of) the four upgrading trajectories.

Each of the four upgrading trajectories, as one category of upgrading outcomes, can be the result of various upgrading behaviours. For example, *Process Upgrading* can be achieved through the replacement of labour with advanced production equipment, through the training of workers, or a combination of both. *Product Upgrading* can be the result of improvement of product quality, or a new design. Therefore, the four upgrading trajectories serve as the theoretical framework for the categorization of upgrading outcomes, and upgrading strategies that lead to these outcomes remain diverse at individual firm level.

The logic of upgrading behaviours in practice is that upgrading strategies lead to upgrading outcomes. This thesis adopts a retrospective approach in analysing firms' prior upgrading behaviours, and hence it starts with the observations of firms' upgrading outcomes. It then categorizes these outcomes with the four upgrading

trajectories and investigates firms' upgrading strategies for the achievement of such outcomes. Following this logic, the first research question is:

RQ1: Through what strategies have firms achieved the observed upgrading outcome(s)?

Critical Resources & Mobilizing Mechanisms

According to the RBV framework, the firm's resources serve as the foundation of its growth. The resource base provides the firm's productive opportunities, the firm mobilizes these resources for value creation, and strategies decide the way that resources are mobilized. Through the implementation of reasonable strategies, competitive advantages are developed through the mobilization of critical resources. Following this theoretical logic, this research proceeds to analyse the resources that played a critical role in the firm's development of upgrading strategies. The second research question identifies these critical resources, and the third research question examines their mobilizing mechanisms, i.e. in what way they were accessed and deployed by the firm:

RQ 2: What were the critical resources underpinning firms' upgrading strategies?

RQ 3: What mechanisms did firms use in mobilizing these critical resources?

The Boundary of Resource Base

The boundary of the firm's resource base indicates the scope of the critical resources underpinning its strategy development. The traditional RBV framework adopts the firm's ownership boundary of legally controlled assets to define the boundary of its resource base. This definition has been challenged by some extant studies which argue that the resource base spans over the firm's ownership boundary. The firm's mobilization of external resources (resources outside the firm's ownership boundary) during strategy development makes the boundary of resource base wider than the ownership boundary. This means that the emphasis on ownership boundary

limits the analytical scope of the traditional RBV framework in understanding the firm's strategic options. This causes overlooking of external strategic resources that provide the firm with productive opportunities. Building on this limitation of the RBV and drawing upon existing studies on the refinement of the theory, this research investigates the difference between the boundary of the firm's ownership and its resources base. The fourth research question identifies the critical resources external to the firm's ownership boundary, and the fifth research question examines the boundary of these external critical resources.

RQ 4: What were the external resources among the critical resources?

RQ 5: What was the boundary of these external critical resources?

The development of these five research questions are based on the theoretical constructs and framework of the RBV. This process is explained in detail in *Chapter Two* (where the conceptual framework of this research is introduced). This thesis involves firm-level analyses within the contexts of China and Japan, and the same research logic and research questions apply to the discussions of both countries. The next section provides detailed explanations on the research methods and approaches adopted in this thesis.

1.3 Research Methodology

This study adopts the research philosophies of subjectivism and interpretivism. It holds the belief that reality is constructed by individual participants of it, and value and perceptions have their importance in reaching knowledge (Saunders, 2009). Both the participant's and the observer's views of the situation matter, and this makes interaction of social phenomena a continual process (Saunders et al., 2008). This philosophical belief underpins this research in two aspects. Firstly, the theoretical logic of the RBV states that the firm's managerial team makes strategic decisions based on the firm's productive opportunities. Productive opportunity is an imaginary

concept, and the managerial team's interpretation of the scope of the firm's productive opportunities plays a critical role in the strategy-making process. This means that the actors involved in strategy development account for the heterogeneity of firm strategies as well as firm performance. As a result, observed firm strategies are consequences of both material resources and key actors in the firm. The actors' perceptions and actions have significant impacts on the firm's development and sustainment of competitive advantages (Penrose, 1959; Lockett & Wild, 2014).

Secondly, this research aims at investigating the boundary of the firm's resource base. The firm spans the boundary of its resource base through interactions with other parties. Such interactions involve both institutions and individuals, and both kinds of interactions are based on social actors. The perspectives of these actors and their consequent actions therefore are part of the observable reality. In the meantime, the investigation on firm resource base in this research has an exploratory nature. Instead of a test of reductionist causal relations, the objectives of this study require understandings on complex combinations of context-specific factors. This demands the researcher's interaction with the subject being observed, in order to understand their sense-making processes (Holden & Lynch, 2004; Saunders et al., 2008). The researcher's interpretations of observations also inevitably affect the sense-making of the research process.

The approach of this research is a combination of inductive observation and deductive reasoning. Based on the existing literature, the conceptual framework of this study (introduced in *Chapter Two*) proposes an extension of the traditional RBV framework. Observations are then made through multiple case studies in order to explore and refine this extension. The development of the extension of the RBV is therefore an evolving process, through inductive observations and deductive reasoning. In the extant literature of strategic management, examples of studies with similar

research approaches include Edith Penrose's seminal work *The Theory of the Growth of the Firm* (1959). The book combined inductive theory building (in the form of multiple case studies) with logical deductions (Kor & Mahoney, 2000). Compared to pure logical deduction, adding inductive observations helps with theory building and extension, and supports the attempt to deliver a study of the real world, in which the normally ignored "noises" of a mathematical model potentially have serious impacts on the research object.

In this research, case studies on firm strategies make use of both quantitative and qualitative data. Case analyses are based on qualitative evidence and quantitative evidence is used for descriptive, supplementary purpose. The case studies are based on both primary and secondary data. Primary data was collected through semi-structured interviews. Questions were designed according to the conceptual framework and targeted on critical constructs of the RBV. The collection of secondary data focused on fact evidence, e.g. interview notes and quotations available in existing studies, instead of prevailing arguments. The usage of secondary data also highlighted the variety of sources, and triangulation served as an important technique in data analysis. Details on research design, case sampling, data collection and analysis are provided in the following sections.

1.3.1 Research Design

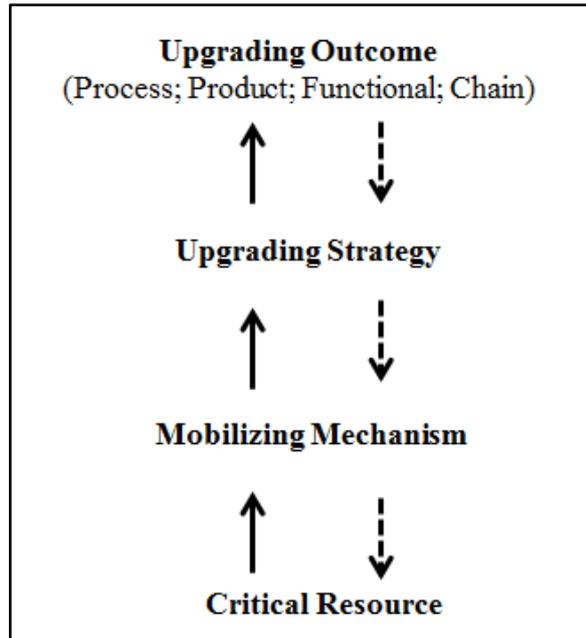
The research questions of this thesis focus on the micro level, taking the firm as the unit of analysis. They examine firms' mobilization of strategic resources in the process of achieving upgrading outcomes. As the background of the firm-level analysis, environmental changes at the macro level provide explanations on the reasons and incentives for firms to pursue strategic upgrading. Factors such as state policy, industrial structure and regional development characteristics play important roles in firms' access of various resources. Understanding this background requires

macro-level analysis of the economic growth and industry development. Therefore, the analytical framework of this thesis involves both macro- and micro-level discussions.

The macro-level analysis of national economic growth and industry development is in the form of review of existing literature. This literature includes empirical studies based on quantitative and qualitative evidence, and the review provides a summary of the competitive challenges to the textile and clothing firms in Zhejiang. This review serves as the background of firm-level case studies. It facilitates the understanding of firms' upgrading outcomes and the exploration on firms' scope of resource mobilization. After the macro-level discussions, this thesis proceeds with the micro-level study on firms and answers the research questions.

The micro-level analysis starts from upgrading outcomes attained by firms, and these outcomes are categorized through the four trajectories in the upgrading literature (*Process Upgrading, Product Upgrading, Functional Upgrading and Chain Upgrading*). Sample firms are grouped under the four categories through their attained upgrading outcomes, and then the firm's individual strategies are analysed within each category. As explained in the research questions, the studies on firms proceed with investigations on critical resources underpinning strategy development, mobilizing mechanisms of critical resources and the boundary of resource base. Figure 1.2 depicts the analytical framework of firm-level studies, where the direction of solid arrows shows the realistic order of constructs leading to one another. The direction of dashed arrows represents the investigation order of constructs in this study.

Figure 1.2: Firm-level Analytical Framework



Source: Summarised by the author.

In the firm-level analysis, this thesis involves a comparative study between Japanese and Chinese textile and clothing firms. This firm-level comparison of upgrading experiences in the two countries adds insights to the answers to the research questions and facilitates the attainment of both research objectives of this thesis:

For the objective of investigating firm strategies in achieving upgrading outcomes, Japanese textile and clothing firms went through a similar upgrading period in the 1970s and 1980s, and thus the existing literature on the Japanese upgrading experience provides meaningful reference for the analysis on Chinese firms. Similar to the situation of Chinese firms in the early 2000s, Japanese textile and clothing firms encountered multiple competitive challenges towards the late 1960s/early 1970s (Shozo, 1968; Tsuneo, 1975; Yoko, 1975; Inkster, 2001a, 2001b; Macnaughtan, 2005). At the beginning of the 1970s, the adoption of a floating exchange rate system caused Japan to lose its advantage of an undervalued currency (Hutchison, 1984), the oil

shock doubled the price of Japan's important raw materials,⁶ and significant increases in labour costs strongly affected the manufacturing industry (Kojima & Ozawa, 1984). Analyses on Japan's demographic transition (Kazushi, 1965; Minami, 1968, 1973) stated that the structure of Japan's population in the late 1960s/early 1970s had similar characteristics to that of China in the 2000s. This implies similar causes of the increase in labour costs in both countries. The Japanese manufacturing firms in the textile and clothing sector actively upgraded to move away from low-cost production and achieved a smooth transition in the 1970s and 1980s. Industrial restructure has been recorded in historical literature, and a variety of strategic adaptations were observed as firm-level upgrading behaviours (Dore, 1986; Uryu, 1990; McNamara, 1995). Therefore, adding Japan into the research scope enables this thesis to benefit from meaningful references in the literature on the upgrading of the textile and clothing sector.

Similar to China, Japan featured a boundary-blurred business environment in the 1970s and 1980s.⁷ For the examination of the boundary of firm resource base in this thesis, a study within the Japanese context adds insights into the analysis of the mobilization of external resources. The popularity of the J-firm management system in the 1970s and 1980s provides a rich and meaningful source of literature on the inter-links among various organizations. These existing studies (with a focus on the Japanese textile and clothing firms) are re-visited in this research and analysed from the angle of upgrading strategies and resource mobilization.⁸ The comparison of firm-level strategy development between the two countries offers a more comprehensive view on the resource base boundary in the RBV framework.

⁶ Japan is a large importer of oil, partly because of its substantial amount of consumption, and also because of its lack of oil production (Zhang, 2008).

⁷ *Chapter Two* provides detailed explanations on this point.

⁸ *Chapter Four* provides detailed explanations on this point.

It is important to acknowledge the differences between Japan and China, e.g. in terms of the size of national economy, the balance of economic development among domestic regions, the government's intervention in economic growth and the quantity and quality of labour supply. As a result, an exhaustive comparison between the two countries - at both macro-level and micro-level - requires focused discussions on these variances, and thus is beyond the scope of this study. The comparative analysis between Japan and China in this thesis is limited to firm-level strategies and to the specific periods of time (Japan in the 1970s and 1980s and China since the early 2000s), and the study on Japan relies on existing literature. Table 1.1 provides a summary of the overall analytical framework of this thesis.

Table 1.1: Multi-level Analytical Framework

Level of Analysis	Macro-level: National Economy & Industry	Micro-level: Firm
Objective	-To summarize competitive challenges and environmental changes as the reasons and incentives for strategic upgrading of Chinese textile and clothing firms; - To review background information on firms' access to resources for upgrading attempts	- To investigate Zhejiang's textile and clothing firms' mobilization of strategic resources in the process of achieving upgrading outcomes; - To examine the boundary of resource base as firms' foundation of productive opportunities
Method	Review of Literature	- Comparative Study: Japan vs. China - Multiple case studies: China - Textual and contextual analyses of historical literature: Japan

Source: Summarised by the author.

1.3.2 Multiple Case Studies on Firm-level Upgrading

Case study methods are generally suitable for phenomenon description and theory exploration (Eisenhardt, 1989). When there is no neat boundary between the research subject and the context, case study methods make it possible to incorporate relevant background into the research scope (Yin, 1981, 2003). This thesis analyses the process of resource mobilization in the development of firm strategies. Contextual factors such as environmental changes, critical actors in decision-making and key

procedures in strategy implementation are of great value for understanding the firm's strategic transitions. They are therefore inseparable from the research subject, and understanding them requires in-depth analysis by case.

This research adopts the method of qualitative case studies. Observations on firm strategies involve qualitatively different types of firm behaviours. They are hard to quantify and show variation in kind instead of in degree among them (King et al., 1994). The differences among observations and contextual variances lead to a high variety of causal relationships involved in this research. These causal relationships include too many variables to be tested for pre-determined hypotheses (Yin, 1981; Penrose, 1959).

In this thesis, multiple case studies were conducted to analyse the extension of the RBV framework. The method of multiple case studies is distinguished from holistic case studies through an emphasis on contextual differences among cases. A holistic case study focuses on an extreme/unique case setting, while multiple case studies highlight cross-case comparisons as well as within-case discussions (Baxter & Jack, 2008). Multiple case studies therefore pursue understandings of the similarities and differences among cases, and are useful in predicting and testing results across various settings (Yin, 2003). The method of multiple case studies enables explorations within and between cases, with the goal of replicating findings across cases. In this thesis, the analysis of Zhejiang selected case firms from three different local textile and clothing clusters. Each of these clusters has distinctive development models and these features are reflected in the upgrading paths of the case firms. These three cases thus integrated the variety of regional development into the case settings and added value to cross-case comparisons. Through these cross-case analyses, complementary views of the phenomenon under study can be detected and interlinked, and this

facilitates the achievement of comprehensive research results (Eisenhardt, 1991; Baxter & Jack, 2008).

Bahari (2010) referred to the strengths of qualitative and quantitative research as “depth” and “breadth” respectively. This emphasizes that qualitative case studies allow intensive analyses, yet target a small sample size. The small sample undoubtedly leads to limitations on the external validity of arguments and risks on the rigour of scientific data analysis (King et al., 1994). These weaknesses of qualitative research lead to the necessity of reasonable sampling strategies and data collection and analysis techniques. When appropriate external and internal validity checks are in place, validity and generalizability of findings can be increased. The following sections provide details on the sampling strategy, data collection and data analysis of this research.

1.3.3 Sampling Strategy

The upgrading of Chinese firms is an on-going process, and the existing literature lacks systematic observations and calls for in-depth exploration on individual firms. Therefore, the discussion of the Chinese upgrading experience in this thesis is in the form of intensive analysis by individual firm. This section provides details on the sampling process of case studies on Chinese textile and clothing firms in Zhejiang.

Bahari (2010) referred to qualitative studies as intensive research and quantitative studies as extensive research. Qualitative studies’ focus on small samples and in-depth analyses lead to their common adoption of *Theoretical Sampling* instead of *Statistical Sampling*. While *Statistical Sampling* pursues a significant sample size, the objective of *Theoretical Sampling* is a sample “*chosen for the likelihood that they will offer theoretical insight*” (Eisenhardt & Graebner, 2007:27). *Theoretical Sampling* hence aims at providing examples of polar types (Eisenhardt, 1989), and these examples serve as the foundation of cross-case comparisons (Baxter & Jack,

2008). The firm-level analysis in this thesis started from upgrading outcomes achieved by firms. It adopted the four upgrading trajectories to categorise firms with different upgrading outcomes into groups, and then selected representative firms from each group for in-depth case studies. The sampling of firms thus highlighted theoretical categories drawn from the upgrading trajectories, and aimed at presenting examples of each polar type. This was realized through a few steps.

The objective of the first sampling step was to identify firms with significant upgrading outcomes. This was based on the ranking of Chinese textile and clothing firms by China National Textile and Apparel Council (on behalf of which an annual report was published by China National Garment Association⁹). This first round of selection involved firms in Zhejiang which were ranked among the top 100 in both sales revenue and annual profit. The selection was then narrowed down to firms sustaining the top 100 position for five consecutive years (2010-2014). In the RBV framework, the achievement of competitive advantages is reflected in the firm's sustainable superior performance over rivals. Therefore, this study considers firms' lasting superior performance in the industry as achievements of competitive advantages. As the result of this first sampling step, six firms were selected - Youngor, Progen, Romon, Seduno, Semir and Wensli.

The second sampling step was based on a brief analysis of available information (secondary data) on the six firms' development paths since the early 2000s. This aimed at identifying the upgrading trajectories reflected in their upgrading outcomes. Each of the four upgrading trajectories was identified with key words that appeared in the firm information, and main examples of these key words are summarized in Table 1.2. The result of this sampling step is presented in Table 1.3: Among the six firms, Youngor and Progen showed evidence of achieving both

⁹ China National Garment Association is a nation-wide organization of textile and clothing firms, supervised by China National Textile and Apparel Council.

Process Upgrading and *Functional Upgrading*. Romon, Seduno and Semir demonstrated the attainment of *Product Upgrading*. Wensli appeared to have realized a combination of *Process Upgrading* and *Chain Upgrading*. This result showed examples of all four polar types of the upgrading outcomes (*Process*, *Product*, *Functional* and *Chain Upgrading*), and evidence on *Process Upgrading* and *Product Upgrading* repeated in multiple cases of firms.

Table 1.2: Examples of Key Words in the Identification of Upgrading Trajectories

Upgrading Trajectory	Key Words
<i>Process Upgrading</i>	New production machinery/equipment; Workers training on operation/process; Quicker delivery; Decreased inventory
<i>Product Upgrading</i>	Improvement in product quality; Increased quality control; Introducing new product (line); Expanding product portfolio; (R&D) Investment in product development
<i>Functional Upgrading</i>	Adding/starting/setting up new activities - design, marketing, sales, after-sales services; Switching focus from manufacturing/assembly
<i>Chain Upgrading</i>	Quitting/shutting down (existing businesses); Entering/opening/investing in new businesses/markets; Expanding business portfolio; Changing sector/industry/domain

Source: Summarized by the author.

More importantly, the six firms provided three patterns of upgrading outcomes in the Zhejiang area. Through lining up the firms according to their attained upgrading outcomes, three groups of upgrading achievements can be observed. Group one includes Youngor and Progen, with the combined upgrading outcomes of *Process Upgrading* and *Functional Upgrading*. Group two includes Romon, Seduno and Semir, which conducted *Product Upgrading*. Group three is Wensli, which conducted a combination of *Process Upgrading* and *Chain Upgrading*. This step of the sampling process indicated cross-firm similarities, and led to observable patterns of firm upgrading outcomes in the Zhejiang area. These three groups of firms pointed out the direction for the next sampling step.

Based on the three groups identified among the six firms, the third step of sampling selected one firm from each group to represent the variation of firms'

upgrading outcomes. This step of selection took into consideration the location of the firm. Literature on the textile and clothing industry in Zhejiang highlights the diversity of the development of local clusters (Wang, 2013). Each cluster is argued to have unique features in the development paths of local enterprises, and such characteristics are considered as the particular development model of the area. The first two sampling steps showed that firms in the cluster of Wenzhou, Ningbo and Hangzhou demonstrated strong competitiveness over rivals. Since each of these clusters has a unique development model,¹⁰ selecting one firm from each of them allowed the inclusion of local effects into the analyses of sampled cases, and this strengthened the comprehensiveness of the observations in this research. As the result, Semir from Wenzhou, Progen from Ningbo and Wensli from Hangzhou were selected for in-depth case study. This final selection step involved analyses of firms' strategic changes since the early 2000s, their historical development paths and the development model of their local clusters.

¹⁰ Details on the development models of Wenzhou, Ningbo and Hangzhou are provided in *Chapter Five*.

Table 1.3: Sample Selection - Patterns of Upgrading Behaviours under the Framework of Upgrading Trajectories

Firm Name	Firm Location	Main Products	Competitive Advantages	Upgrading Outcomes
Youngor	Ningbo	Textile: Cotton, Woven ,Woollen, Knitting Clothing: Men's suits	Suit-making craftsmanship with traditional "Hong Bang Tailor" skills.	- <i>Process upgrading</i> - <i>Functional upgrading</i>
Progen	Ningbo	Textile: Suit fabric Clothing: Men's suits, Office uniforms	- Suit-making craftsmanship with traditional "Hong Bang Tailor" skills; - Tailoring services - designing and producing office uniforms for business consumers.	- <i>Process upgrading</i> - <i>Functional upgrading</i>
Romon	Ningbo	Clothing: Men's suits, Casual wear	Suit-making craftsmanship with traditional "Hong Bang Tailor" skills.	<i>Product upgrading</i>
Seduno	Ningbo	Textile: Various fabrics Clothing: Casual wear	Strong brand image built up through high standards on product quality and diversity.	<i>Product upgrading</i>
Semir	Wenzhou	Clothing: Casual wear, Children's wear	Virtual business model - strong networks with suppliers and distributors. Constant improvement in product quality and product portfolio.	<i>Product upgrading</i>
Wensli	Hangzhou	Textile: Silk textile Clothing: Women's wear, Silk accessories Others: Silk artwork, Silk adornment, Cultural silk products	- Diversified into cultural and creative sector with expertise on silk materials; - Strong brand image built up through sponsoring major international events.	- <i>Process upgrading</i> - <i>Chain upgrading</i>

Source: Summarized by the author with information from official company websites, triangulated with existing case studies and archived local news

1.3.4 Data Collection

The sampling process of this thesis made use of secondary data from multiple sources. These include existing case studies on firms in Zhejiang, archived local news, company annual reports and information on the firm's official website. The combination of data from multiple sources is commonly observed in case study research (Yin, 1994; Eisenhardt & Graebner, 2007), and the key to the utilization of mixed data is the researcher's integration of it with the objective of strengthening the understanding of the case. As pointed out by Baxter and Jack (2008:554): "*Each data source is one piece of the 'puzzle', with each piece contributing to the researcher's understanding of the whole phenomenon.*" In this thesis, the variety of data sources contributes to a multi-faceted understanding of firms' upgrading paths, and facilitates a comprehensive review on firms' upgrading behaviours.

The sampling result pointed to three firms for in-depth case studies - Semir in Wenzhou, Progen in Ningbo and Wensli in Hangzhou. All of the three case studies were originally designed based on the collection of primary data. However, the author's data collection process experienced difficulties in accessing local Chinese firms. For Progen Group, a lack of publicly accessible contact details on the firm's website led to the result that despite repeated efforts (through phone calls), the author was unable to conduct an interview with the management team. For Semir Group, the author attempted to contact its main suppliers and distributors for telephone interviews. Although a publicly-listed company, the firm's annual reports did not provide a list of suppliers, and the company website did not include information on locations and contacts of branch stores. The author then searched the firm's self-media (the company newspaper available on its website) and found that two suppliers' names were mentioned in early reports. Based on this information, the author searched for the supplier companies' contacts and made phone calls to managers of both. Unfortunately,

after the author's self-introduction, both managers hung up and did not answer further calls. The author then made another attempt by texting them with an explanation of the purpose of the research, yet neither of them replied. For Semir's distributors, the author searched online and found 5 store registrations with telephone contacts. However, some of them turned out to be wrong numbers, and the others remained unanswered despite the author's repeated calls.

The author then turned to the local government for help, hoping to get in touch with firms through institutional connections. Through the personal network of a local scholar, the author contacted an officer of a local Bureau of Economy and Information Technology in Zhejiang.¹¹ Although the officer had a phone conversation with the author and introduced the general situation of the local textile and clothing sector, he did not agree to meet the author for an in-person interview. The reasons given were twofold: Firstly, the author is based in a non-Chinese institution, particularly one that he was not personally familiar with. Secondly, the bureau had cooperated with Zhejiang University for previous research projects regarding local firms. The officer advised the author to refer to these existing studies for specific information. This showed the lack of trust from the local institutions on external researchers.

The author then turned to local scholars at Zhejiang University for advice. Through personal contacts, one professor of the School of Management agreed to provide assistance. This granted the author access to existing research of local textile and clothing firms conducted by local scholars at Zhejiang University. According to the professor, for the purpose of data collection, the initial contact between scholars and the local firm was commonly pursued through personal or alumni relationships. In order to search for alumni connections between the university and the three sampled

¹¹ The officer did not grant consent for the disclosure of his identity, so neither his name nor his specific institution can be provided in this thesis.

firms in this research, the author spent two months at Zhejiang University (during the first visit to the university in September and October 2014).

The search unfortunately failed for Semir and Progen, but succeeded for Wensli. As a result, case studies on Semir and Progen had to rely on secondary data, while the author continued to pursue primary data collection. Semir became publicly listed in 2011, so continuous annual reports of the group are available for the years between 2011 and 2015. The business story of Progen was widely reported in local media, and so information on the firm's development path was available through various sources and showed a high level of consistency. Initial observations and analyses were drawn from these secondary materials. In April 2017 (the author's fourth visit to Zhejiang University), the author finally managed to build contact with the manager of one of Semir's key suppliers and the HR manager of Progen Group, and conducted telephone interviews with both. The primary data collected through these interviews is included in the case studies.¹²

The case study on Wensli is based on primary data, with secondary data adopted for triangulation purpose. The data on Wensli was collected through semi-structured interviews, and interview quotes served as evidence for case analysis. An initial visit to Wensli Group was made in June 2015 (during the author's second visit to Zhejiang University), by the author and a few scholars of Zhejiang University. This first visit established an agreement between the company and the researchers on the interview plans. Based on information collected in this first visit, interview questions were designed by the author, with a clear definition of the research objectives and focused subjects for investigation. This aimed to achieve a systematic collection of information (Eisenhardt, 1989).¹³

¹² Examples of main interview questions are provided in the Appendix of this thesis.

¹³ Ibid

In-depth interviews were then conducted with a group of senior executives of the company in July 2015. The interview session lasted for approximately five hours. On the author's behalf, a senior scholar and his PhD student in the Management School of Zhejiang University conducted the interview.¹⁴ Before the interview, the author designed the interview questions and ensured that the interviewers comprehensively understood all the questions and the corresponding objectives. The two-person interview team was fully prepared and each individual occupied a unique role. The senior scholar focused on raising questions and chasing detailed answers; the PhD student took both audio and written records of the questions and answers. Their participation provided complementary insights into the data analysis at a later stage, and added to the richness of understanding of the case. The separation of interviewers and main researcher also offered an opportunity for objective analysis. Considering the fact that the research method of case study usually has the weakness of involving an overwhelming amount of information, the process of separating observation and analysis allowed the main researcher - the author - to avoid being distracted by a large amount of details during the interview arrangement (Eisenhardt, 1989).

The audio record of the interview was taken for the full length without interruption or manual editing. It therefore provided complete first-hand data for the case study. Information was captured both as integrated notes and original narratives. These two versions of records were then cross-checked among all three members in the interview team, in order to enhance confidence in accuracy. The cross-check also aimed at avoiding omission of important information. This was a careful step taken to ensure the validity of the study.

¹⁴ The author was unfortunately unable to attend this interview session in person (July 2015). The interviewee made changes to the scheduled interview time with short notice, and the author had limited flexibility in the duration of stay out of the UK, due to restrictions on student Visa and SOAS school policies on fieldwork.

After the initial case findings were established based on interview data, the author visited Wensli Group again in January 2016 and presented the research results to the company executives (i.e. the interviewees). This final visit aimed at verifying the findings of data analysis, and achieved collection of feedback from the interviewees and supplementary information for case writing. Overall, the three visits to Wensli Group formed a process of systematic data collection, with consistent observations and analyses (Table 1.5 provides a summary of the interview process).

1.3.5 Data Analysis

The design of interview questions was underpinned by the extended RBV framework,¹⁵ and data collected through the interviews highlighted the key constructs of the theory. For example, interviewees were asked to describe the firm's problem-solving process, i.e. its development and implementation of strategies. This focused on the firm's specific actions, e.g. purchasing and installing new production equipment, training of personnel, adjustment of R&D budget, designing procedures of new products etc. The answers allowed the identification of the firm's upgrading outcomes and strategies. Interviewees were then asked to list the necessary resources in implementing these strategic actions. In their answers, various firm assets were mentioned, e.g. financial capital, expertise of technical staff, managerial competence etc. The interviewees were then chased with questions regarding the way these critical resources were accessed and deployed by the firm, and whether such access was part of the firm's operational process and routine. These questions elaborated on the mobilization of external resources and the boundary of them.

The data analysis in this thesis was designed with the objective of reducing bias, enhancing the accuracy of the understanding and improving the reliability of case findings. Evidence was kept chained with research questions (Yin, 1981), and

¹⁵ Details of the extended RBV framework are provided in *Chapter Two*.

observations were matched with theoretical concepts. Analysis of interview data emphasized the consequential relation among the firm's strategic actions, i.e. how one step was achieved and led to the next. Primary data was triangulated with secondary data from multiple sources (Table 1.4 summarizes sources of secondary data). For example, the interviewees were asked to divide the firm's strategic paths into a few stages, through identifying the main challenge of each stage and the firm's corresponding strategic adjustment in confronting the challenge. Answers to such questions were compared and combined with the memorabilia on the firm's website for consistency checks and detailed analysis.

Table 1.4: Summary of Secondary Data Usage

Source of Data	Information Collected
Existing case studies published by local scholars	Historical background of the firm Major events in the firm's development path
Archived local news and business magazines	Major events in the firm's development path
Official company website	Historical background of the firm Major events in the firm's development path Quantitative data on firm performance
Official company account on social media	Major events in the firm's development path

Source: Summarized by the author

Table 1.5: Summary of Interview Process - Wensli Group

Date	Duration (hour)	Objective	Data Collected	Job Title of Interviewee	Main Outcome
25 Jun 2015	4	<ul style="list-style-type: none"> - Introducing the research project to the firm - Setting up interview plan 	<ul style="list-style-type: none"> - Historical background of the firm - Major events in the firm's development path - Impact of major events on firm strategy 	<ul style="list-style-type: none"> - CEO - HR Director - Divisional General Manager - Assistant of CEO 	<ul style="list-style-type: none"> - Identification of the firm's main stages of strategic transition - Design of interview questions on each transition stage
21 Jul 2015	5	<ul style="list-style-type: none"> - Verifying identified stages of strategic transitions - Collecting detailed information on the process of strategy development (critical resources, mobilizing mechanism and boundary of external critical resources) 	<ul style="list-style-type: none"> - Confirmation on main stages of strategic transitions - Detailed information on strategy development (critical resources, mobilizing mechanism and boundary of external critical resources) 	<ul style="list-style-type: none"> - CEO - HR Director - Assistant of CEO 	<ul style="list-style-type: none"> - Identification of initial case findings - Identification of necessary supplementary information
14 Jan 2016	3.5	<ul style="list-style-type: none"> - Verifying case findings through feedback on results of data analysis - Collecting supplementary information for case writing 	<ul style="list-style-type: none"> - Feedback and confirmation on case findings - Supplementary details on strategic transitions and critical resources 	<ul style="list-style-type: none"> - CEO - HR Director - Assistant of CEO 	<ul style="list-style-type: none"> - Write-up of case study

Source: Summarized by the author.

1.4 Research Implications

This thesis examines the process of resource mobilization in the firm's strategy development to achieve upgrading outcomes. Within the Japanese and Chinese business contexts, it investigates the boundary of the firm's resource base. The results indicate that the scope of the firm's strategic options, i.e. the boundary of resource base, is beyond its ownership boundary and reaches out to its local business network. External resources (those outside the firm's ownership boundary) can be mobilized for the firm's strategic use via embedded network connections, and such connections are not limited to institutions or individuals, but involve both. The main implications of this research are twofold:

From a theoretical point of view, the firm's ownership of resources should not be considered as the frontier of its strategic options. The extended RBV framework established in this research indicates that the firm's resource base contains both internal, controllable resources and external, accessible resources. These two types of resources vary in accessibility and attractiveness, but both serve as the base of the firm's productive opportunities. For the RBV to further enhance its analytical power on strategy development and the growth of the firm, the understanding of resource base requires a broader view on the firm's business network, instead of a narrow focus on the efficiency dimension (legal ownership of resources) of its organizational boundary.

From an empirical point of view, local network connections serve as an important mechanism of Chinese firms' mobilization of resources. These networks have a critical impact on firms' access to resources, and provide important options for firms' strategic transitions. This reflects the feature of boundary-blurriness in the Eastern business context. It calls for special attention of managers and investors in

such environments to the potential opportunities provided by the firm's local business networks.

1.5 Thesis Structure

This thesis is composed of seven chapters, including the current introduction (*Chapter One*). *Chapter Two*, by means of a literature review, provides the theoretical foundation and conceptual framework of this research. It reviews the theory of the RBV, including the development of the theory, its main assumptions, arguments, contributions, criticisms and directions for further development. Based on the existing literature, *Chapter Two* proposes an extension of the RBV framework to integrate the strategic impact of resources outside the firm's ownership boundary. This extension of the RBV serves as the conceptual framework of the studies on Japanese and Chinese firms' upgrading strategies. It focuses on an investigation of firms' productive opportunities in their development of strategic adaptations to competitive challenges, and examines the boundary of firm resource base.

Chapter Three focuses on the environmental background of Chinese firms' strategic upgrading. Based on the extant studies on the competitive challenges encountered by China's national economic growth and the industrial development of the textile and clothing sector, it discusses the reasons and incentives for Chinese firms' strategic upgrading since the early 2000s. Particularly, it provides a focused discussion on the textile and clothing sector in Zhejiang province. Industry-level upgrading attempts during the 2000s are reviewed based on existing research, for a general understanding of the upgrading status of Chinese firms (i.e. their strategic adaptations and outcomes).

Chapter Four draws upon the historical literature to analyse the Japanese upgrading experience in the 1970s and 1980s. It provides a discussion on the strategic transitions of Japanese firms in the textile and clothing sector in the two decades.

Analyses of firms' upgrading behaviours follow the conceptual framework introduced in *Chapter Two*, to investigate the critical resources underpinning Japanese textile and clothing firms' upgrading strategies, the firms' mobilizing mechanism of these resources and the boundary of them.

Chapter Five is dedicated to case studies on textile and clothing firms in Zhejiang. Based on theoretical sampling of case selection, this multi-case study includes three firms in three local clusters of Zhejiang's textile and clothing sector. For each firm, their historical development is reviewed and their upgrading strategies are analysed. Following the conceptual framework in *Chapter Two*, the critical resources underpinning firms' upgrading strategies, their mobilizing mechanisms and the boundary of resource base are the focus of the investigation. The within- and cross-case analyses in this chapter, together with the discussion on Japanese firms in *Chapter Four*, lead to a cross-national analysis in *Chapter Six*.

Chapter Six, the cross-national analysis on the Japanese and Chinese upgrading experiences, is the last analytical chapter of this thesis. The main research outcomes and arguments of this thesis are presented in this chapter. As a summary of empirical findings, it starts with generalized analyses on the Japanese and Chinese firms' upgrading strategies. Based on these observations, the extension of the RBV framework proposed in *Chapter Two* is explored and refined. The extended RBV framework adds "*External & Accessible Resources*" into the resources base concept. This enables the RBV to incorporate impacts of external critical resources into the analysis of the opportunities and limitations of the growth of the firm.

Chapter Seven provides conclusions of this research. It summarizes the major research outcomes and their contributions to the literature. These include both empirical implications and theoretical development based on the main findings of this

study. Building on this thesis, potential directions of future research are suggested in the end.

Chapter Two

The Resource-Based View of Firm Strategy

The Resource-Based View (RBV) is one of the dominant perspectives in strategic management. It serves as an important theoretical framework for discussions on firm strategies and competitive advantages. This chapter provides a detailed review on the RBV's early evolution, branch theories, current limitations and further development. It serves as a critical assessment of the existing literature, and indicates that the traditional RBV framework's emphasis on firm ownership boundary limits its scope of analysis of the firm's strategic options. This constraint leads to the overlooking of strategic resources outside the firm's ownership boundary but contribute to strategy development (i.e. the external strategic resources of the firm). The result of this is an inadequate and limited understanding of the boundary of the firm's resource base. Despite certain attempts in the extant literature to refine the RBV, this constraint of the theory remains to be fully addressed.

The Eastern relation-based business context, with China and Japan as significant examples, features boundary-blurriness of firms. Such contexts provide useful settings for a critical analysis of the characteristics of external strategic resources and their way of influencing the competitiveness and growth of the firm. This chapter incorporates the external critical resources into the traditional RBV framework, and develops an extended analytical paradigm that aims at improving the RBV's analytical power. Section 1.1 outlines the RBV's evolution into one of the major perspectives in explaining the causal links among resources, strategies and competitive advantage. Section 2.2 discusses the branch theories developed under the RBV umbrella. Section 2.3 provides a review of the current limitations of the RBV, analyses the existing efforts in building on these limitations and points out a potential direction to further extend the theory. It then introduces the conceptual framework of this research as an extension of the traditional RBV framework. Section 2.4 discusses the opportunity offered by the Eastern business context to extend the RBV through

refining the existing understanding of resource base boundary. Specific discussions on the Japanese and Chinese business contexts are presented accordingly.

2.1 The RBV as a Dominant Perspective in Strategic Management

The research field of strategic management, with the former name of “business policy” (Schendel & Hofer, 1979), analyses firms’ superior performance compared to their rivals. Typical research questions in strategic management studies include “*why firms differ, how they behave, how they choose strategies, and how they are managed*” (Porter, 1991:95). Firms’ success in competition is measured by financial performance. Superior performance is argued to arise from sustainable competitive advantages (Barney, 1991; Peteraf, 1993; Teece et al., 1997; Powell, 2001; Armstrong & Shimizu, 2007). The source of sustainable competitive advantages is therefore the key issue in the analysis of management strategies.

Critical factors affecting firm management include both the external competition environment and the internal firm resources. Strategies aim at matching and aligning these two elements (Porter, 1991). Thus on the broadest level, the firm’s exploration of competitive advantages starts either from the outside, i.e. the industry/market it is in, or from the inside, i.e. the resources and capabilities it possess (De Wit & Meyer, 1999; Barney & Clark, 2007). In the extant literature, the outside-in approach is represented by theories developed by Michael E. Porter, and the inside-out approach is under the umbrella of the Resource-Based View (the RBV). The rest of this section firstly discusses Porter’s studies, which developed some fundamental concepts that have been commonly accepted and widely adopted in strategic management. This section then proceeds with a review of literature on the focus theory of this research - the RBV.

2.1.1 The Porterian Approach of Strategy

In the 1980s, Michael E. Porter developed the externally focused approach of firm strategies (Porter, 1980, 1985). His perspective on competitive advantages has its basic concept rooted in the structure-conduct-performance (SCP) paradigm (Bain, 1956, 1968), in industrial organization economics. This perspective emphasizes that the firm is positioned in a complex competition environment, and strategy is about finding the best fit between the firm and its business context. Porter's study of competitive forces (Porter, 1980) therefore looks at the characteristics of specific industries, and their key constraints on firms embedded in them.

Porter argues that a firm's success in competition comes from the attractiveness of the industry it is in and its position in the industry (Porter, 1985). The profitability of the firm is therefore a joint result of the "industry effect" and its "positioning effect". Industry attractiveness can be evaluated with a five-force framework including various market factors, and firm position arises from competitive advantage. The sources of competitive advantages are twofold - cost leadership and differentiation. Cost leadership refers to the firm's ability in producing the same products as its rivals do but at a lower cost. Differentiation allows the firm to charge a premium price for its products, which are recognized by consumers as distinctive from those of other firms (Porter, 1991). In strategic management, firms' superior performance compared to their rivals is deemed to come from sustainable competitive advantages. Porter's explanation on the sources of competitive advantages serves as a significant foundation for the further development of relevant studies. In order to formulate strategy, the firm must assess the competitive forces in the industry and the decisive factors behind them. Then it should identify its own strengths and weakness in competition. An action plan should then be drawn up on positioning the company in

the industry. The position of the firm influences the balance of the industry forces and exploits potential industry changes (Porter, 1996).

Porter's theory adopts the assumption that assets and capabilities are homogeneously distributed among firms within a particular industry. As a result, it is the firm's ability in influencing or controlling the external market that decides its chances of success in business competition (Hafeez et al., 2002). In terms of strategic positioning, Porter (1991) places great importance on the way the firm conducts and connects various activities inside it. According to him, both cost drivers and opportunities for differentiation exist in activity units of the firm's value system (Porter & Millar, 1985).

Porter's perspective in analysing competition issues has been commonly accepted as one of the key paradigms for both theoretical study and business analysis in practice. As a result, in the 1980s strategic management scholars mainly focused on the outside environment of the firm (Barney et al., 2011). But criticisms exist in spite of the general popularity of this perspective. For example, Grant (1991a) argued that definitions of some of the key concepts in Porter's frameworks need further clarification, a point shared by Klein (2001). Grant (1991a) also raised doubts on the empirical application of Porter's approach. He argued that the link between the industry structure and the profitability of the firm demands further justification, and business strategies should be tools for gaining returns at costs of firm resources, not for obtaining market power.

Another controversy concerns the limitation of Porter's five-force framework. It has been argued as unable to fully evaluate a dynamic, ever-changing competitive environment (e.g. Grant, 2002; Sheehan, 2005; Dulčić et al., 2012). Critics claimed that the five forces are useful references for competition in static environments only. In reality, no industry is stable enough for the framework to function well. Institutional

changes, i.e. those of government policies and market regulations, have a strong impact on firm strategies (Hoskisson et al., 2000). In a market with constant and rapid institutional changes, strategic decisions based on external context of the firm run the risk of being easily out-dated (Young et al., 2014). This makes the inside of the firm a better starting point for observing and understanding firms' strategic transitions.

2.1.2 The Early Evolution of the RBV

The Resource-Based View (RBV), the theoretical perspective that focuses on the resources and capabilities inside the firm, evolved (mainly) in the 1990s. Unlike Porter's emphasis on the external market, the RBV centres on the firm itself (Wernerfelt, 1984). It argues that critical resources and capabilities possessed by the firm serve as its essential source of competitive advantages (Wernerfelt, 1984; Barney, 1991; Peteraf, 1993; Eisenhardt & Martin, 2000). While the external environment is subject to constant changes, internal resources and capabilities offer "*a more secure base*" for strategy (Grant, 2002:140).

The 1959 work of Penrose - *The Theory of The Growth of The Firm* - is commonly acknowledged as the fundamental base of the theory of the RBV (Wernerfelt, 1984; Grant, 1991b; Mahoney & Pandian, 1992; Eisenhardt & Martin, 2000; Armstrong & Shimizu, 2007; Barney & Clark, 2007; Barney et al., 2011). Penrose (1959) stated that firms' unique historical trajectories lead to the heterogeneity of resources distributed among them. The uniqueness of firms' development paths stems from the way resources and capabilities were acquired and accumulated, and the way they were made use of (Lockett & Wild, 2014). The RBV is built on two leading assumptions - strategic resources are heterogeneously distributed across firms, and these differences can be sustained (Barney, 1991). The theory's essential argument states that sustainable competitive advantages come from the strategic resources of the firm, and superior performance is achieved through the

alignment of these resources and strategies that reasonably mobilize them (Eisenhardt & Martin, 2000; Lockett & Wild, 2014).

Following the RBV logic, the firm's reservoir of resources provides it with a set of strategic options. Strategies are decisions made by managers according to these options, and so the managerial team of the firm leads the formulation and implementation of strategies. Grant (1991b) developed a multi-step procedure to describe the way managers decide on strategies. The process starts from an evaluation of the firm's resources, to an analysis of its capabilities, to the identification of the profit-earning potential of these resources and capabilities, and to strategy formulation/selection (Figure 2.1). Since the firm's development is a dynamic process, the implementation of strategies potentially leads to an extension of the firm's reservoir of resources and capabilities. Hence, the firm constantly reconfigures this reservoir through acquiring new resources or eliminating existing ones. So the process from resource identification to strategy development repeats itself as a continuous procedure.

Figure 2.1 Steps of Strategy Formation from a Resource-based Perspective



Source: Adapted from Grant (1991b: 115, Figure 1)

Grant's (1991b) decision-making procedure involves the key constructs and basic logic of the RBV: the managerial team assesses the resources of the firm, evaluates the potential of developing competitive advantages based on these resources, and then formulates strategies. This procedure provided the foundation of a demonstration of the theoretical framework of the RBV. However, Grant's depiction needs adaptations in order to accurately reflect the causal relations among the key RBV constructs.

Penrose (2009:91) referred to the firm as "*a collection of productive resources*", and these resources form the base of the firm's "*productive opportunities*". These opportunities are the possibilities for the firm's managerial team to "*see and take advantage of*" (Penrose, 2009:97). The same resource base can lead to different business performances (Penrose, 2009), due to the moderating effect of firm strategies. The RBV considers the firm's superior performance as the consequence of competitive advantages. The firm's achievement of competitive advantages is therefore the result and outcome of effective strategies that make proper use of resources. To sum up the causal relations among the key RBV constructs: resource base acts as an independent variable while the firm's performance is the dependent variable. Management strategy serves as the moderator variable between resources and performance, and performance is reflected through competitive advantages. A logical depiction of such relations should then place strategy in between resources and competitive advantage, hence an adaptation from Grant's (1991b) initial figure (Figure 2.2).

Figure 2.2 The Traditional RBV Framework (1)

Competitive Advantage



Strategy



Capabilities



Resources

Source: Adapted from Grant, 1991b: 115, Figure 1

A major (early) step in developing the RBV theory was Barney's (1991) identification of four measurements of the firm's strategically important resources. Barney (1991) stated that strategic resources of the firm - those with high potential of generating competitive advantages - share some specific characteristics. These critical resources are valuable, rare, inimitable and sustainable (Barney, 1991). These four features were later described as valuable, rare, inimitable and non-substitutable (VRIN). Also during the RBV's early development, the concept of capabilities was closely associated with organizational routines (Nelson & Winter, 1982; Grant, 1991b), i.e. the processes of the firm's business activities which deploy the VRIN resources. These specifications of the key RBV concepts allow a further adaptation from Grant's (1991b) framework (Figure 2.3).

Figure 2.3 The Traditional RBV Framework (2)

Competitive Advantage



Strategy



Capabilities

Organizational Routines



Resources

*Valuable, Rare, Inimitable and
Non-Substitutable Assets*

Source: Adapted from Grant, 1991b: 115, Figure 1

The objective of strategy is to make reasonable use of the VRIN resources of the firm, in order to achieve sustainable superior business performance (Oliver, 1997). The assumption of the heterogeneity in resource distribution among firms therefore leads to the heterogeneity of firm strategies. Amit and Schoemaker (1993), from an economics point of view, justified the impact of strategy, managerial and organizational systems on firm performance. Peteraf (1993), also adopting an economics framework, built the link between resources, rents and performance. Grant (1996) established a spinoff of the RBV through focusing on knowledge involved in the firm and the important role of it in the firm's growth. Oliver (1997) combined the RBV with institutional theory by emphasizing the institutional effects on resource selection within the firm. During the RBV's early development, the theory was receiving increasingly comprehensive assessment and validation.

2.2 Branch Theories under the RBV Umbrella

It has been over two decades since Wernerfelt (1984) raised the concept of resource-based strategy and Barney (1991) established the theoretical framework of

the RBV. Various studies were inspired by the early works of the RBV and developed as extensions of the theory. Under the umbrella of the resource-based perspective, these branch theories continuously pushed forward the understanding on the key RBV constructs.

2.2.1 Dynamic Capabilities

Teece et al. (1997), Winter (2003) and Teece (2007) built up the theory of Dynamic Capabilities within the resource-based perspective. This theory highlighted a volatile competitive environment, where competitive advantages were argued to come from the firm's constant adaptation to changes in the business context (Teece & Pisano, 1994). Typical examples of such environments were high-technology industries. For instance, Teece et al. (1997) used product innovation in the electronics sector to demonstrate the significance of a firm's capability in adjusting its resource base during the confrontation with changing competitive environments. Dynamic capabilities hence refer to the firm's organizational routines that enable it to actively develop profitable activities through constant reconfiguration of its resource base.

Consistent with the early literature in the resource-based perspective (e.g. Nelson & Winter, 1982; Grant, 1991b), the view of Dynamic Capabilities argued that firm resources create value through activities. Activities are embedded in the firm's organizational routines and processes, i.e. its capabilities/competences (Teece et al., 1997). Capabilities and competences are integrated in the firm's ordinary routines (Teece & Pisano, 1994; Teece et al., 1997). Core competences, at a higher level of the hierarchy of firm routines, are key processes that represent the firm's essential businesses (Teece et al., 1997: 516). RBV is considered a fundamental framework of the value-creation process from resources to competitive advantages, and the Dynamic Capabilities view, in comparison, highlights the circular nature of this process. Firm

resources lead to competitive advantages, the firm's market position then leads to the reconfiguration of resources, and this loop continues.

The view of Dynamic Capabilities highlighted that the source of competitive advantages was not the resources *per se*, but the firm's ability in adjusting its assets and skills to fit the demand of the changing environment. Those dynamic capabilities are embedded in the firm's key processes and routines. Similar to the VRIN model in RBV, the key processes and routines identified by the Dynamic Capabilities view are also argued to be hard to replicate or imitate by the firm's rivals (Teece & Pisano, 1994). These firm-specific processes and routines are therefore the firm's "*distinctive competence*" (Teece & Pisano, 1994:537), and they serve as the source of competitive advantages. The logic of Dynamic Capabilities reflects the same core assumptions as those of the RBV - the heterogeneity in resource distribution among firms and the sustainability of such heterogeneity through isolation mechanisms.

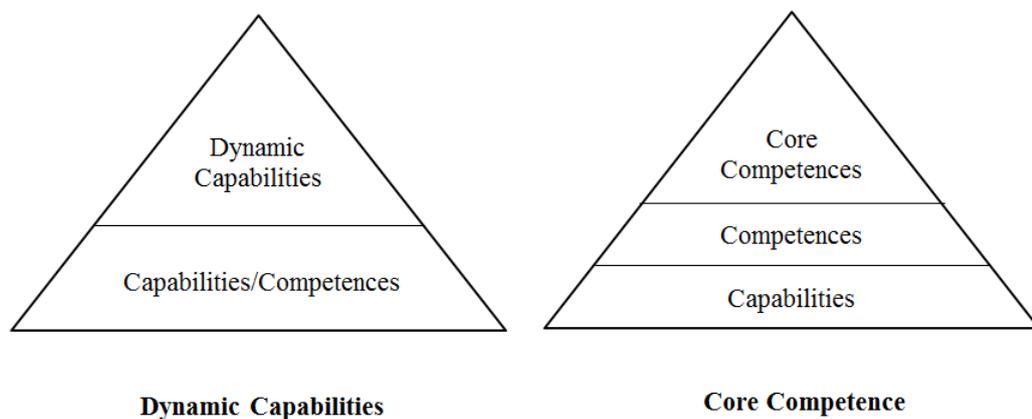
2.2.2 Core Competence

Another important branch developed from the RBV is the theory of Core Competence. This view focuses on diversified firms with multiple businesses (Prahalad & Hamel, 1990; Javidan, 1998). Sharing the basic logic of the RBV, this branch theory highlights the significance of the identification of critical competences among the firm's multiple business units (Markides & Williamson, 1994). Through focusing on core competences, the firm is argued to be able to consolidate the exploitation of its resources and deploy its essential strengths (Prahalad & Hamel, 1990). This enables the firm to produce new products, enter new markets and create additional values (Javidan, 1998).

Core competences refer to firm processes and routines that are hard to replicate or imitate by the firm's rivals. Javidan (1998) argued that the hierarchy of firm routines include three levels, where capabilities are those at the basic, functional level.

Competences are at a higher level, integrating and coordinating multiple basic processes. Core competences, at the top level of the hierarchy, represent the essential knowledge and skills of the firm across various business units. These core competences consolidate the firm-specific competences and play the key role in the value creation of firm activities. Compared to the theory of Dynamic Capabilities, the Core Competence view presented greater complexity in terms of the hierarchy of firm processes and routines. Figure 2.4 summarizes and compares the two branch theories in terms of the hierarchy of organizational routines.

**Figure 2.4: The Hierarchy of Organizational Routines:
Dynamic Capabilities vs. Core Competence**



Source: Adapted from Javidan (1998:62) Figure 1

From the RBV to its theoretical branches of Dynamic Capabilities and Core Competence, internal processes and routines have been increasingly emphasized as the building blocks for competitive advantages. The two branch theories help to deepen our understanding on the concept of firm capabilities. Key processes and routines are argued to be the essential factor that enables the firm to keep its competitiveness (Eisenhardt & Martin, 2000). Both branch theories strengthen that high-hierarchy capabilities serve as the crucial competences on which the firm relies in competition (Javidan, 1998). As summarized by Hafeez et al. (2002), the original RBV framework attributed sustainable superior performance to internal resources and strategies, and saw the firm as a concept based on various activities. The theory of Dynamic

Capabilities developed this logic through stressing the firm's processes and routines as the decisive factors for performances. The theory of Core Competence more specifically underlined the key processes (e.g. learning or managerial) in the deployment of the valuable, rare, inimitable and non-substitutable attributes inside the firm (Prahalad & Hamel, 1990; Kaplinsky & Morris, 2000; Hafeez et al., 2002).

The branch theories' focus on processes and routines is in line with some very early arguments in Penrose (1959) - resources themselves do not create value, but the efficient deployment of them does (Kor & Mahoney 2000). Despite the divergence in defining the hierarchy of firm processes and routines, both Dynamic Capabilities and Core Competence strengthened the role of these processes as the mobilizer of firm resources. These branch theories therefore established that organizational routines are the mobilizing mechanism of the firm's strategic resources. These resource mobilizers are indispensable factors for value creation and the firm's development of competitive advantages. Drawing upon these further developments of the RBV constructs, Figure 2.5 provides a further adaptation of the RBV framework to reflect the nature of firm capabilities:

Figure 2.5: The Traditional RBV Framework (3)



Source: Adapted from Grant, 1991b: 115, Figure 1

2.3 Further Development of the RBV

In the special issue of *Journal of Management* (2011) on the development of the RBV, Barney et al. (2011) pointed out that the theory has entered its maturity. This means that the future of the RBV is either revitalization or decline, depending on the upcoming research's further refinement and extension of its framework. The gradual maturation of the RBV has also revealed its limitations: Despite being widely accepted as a useful perspective on firm analysis, it has attracted doubts and criticisms in certain aspects. Recent studies have sought to further develop the RBV in order to improve its analytical power. This section focuses on the review of such studies, and proposes a direction for the extension of the theory.

2.3.1 Limitations of the RBV

Barney et al. (2011) commented on the development trend and current status of the RBV, arguing that early research on the theory focused on proving the linkage and causal effect between resources and competitive advantages, while recent studies have sought to clarify the origin of key resources and the process of the acquisition and accumulation of them. The process of strategically deploying key resources was discussed in early works that provided the foundation for the RBV, e.g. Penrose's (1959) analysis on path dependency and firm history. However, some key elements in understanding it are still absent in contemporary works.

In a review of criticisms on the RBV, Kraaijenbrink et al. (2010) pointed out eight issues with the theory. These mainly refer to its lack of managerial implications, infinite regress, limitations in applicability and attainability, ambiguity of key conceptions, and that the theory is reductionist, not complex enough to engage with other theories. These criticisms concern limitations in the theory's precision, validity, comprehensiveness and clarity. In terms of precision, it was argued that the way that VRIN resources can be and should be deployed in reality calls for more detailed

explanations. In terms of validity, the RBV works better for cases of large firms than those of small firms, and the theory is not applicable to environments where the value of resources keeps changing and therefore is hard to evaluate. The limitations in comprehensiveness were associated with the theory's weakness in explaining the existence and boundaries of the firm. Its qualification of being a theory of the firm was then questioned. In terms of clarity, the theory was criticised for the vagueness of some of its key constructs. For example, if the value of the VRIN resources is defined in the same manner as that of the additional value the firm gains through competitive advantages, the theory bears tautological issues. Also, the definitions of resources and capabilities seem ambiguous and hard to differentiate from each other. The ways that different resources contribute to the creation of competitive advantages are also lacking discussion. Drawing upon these existing doubts on the RBV, Kraaijenbrink et al. (2010) then argued that five out of the eight issues can be well addressed through a re-examination of the RBV's definitions on some key concepts.

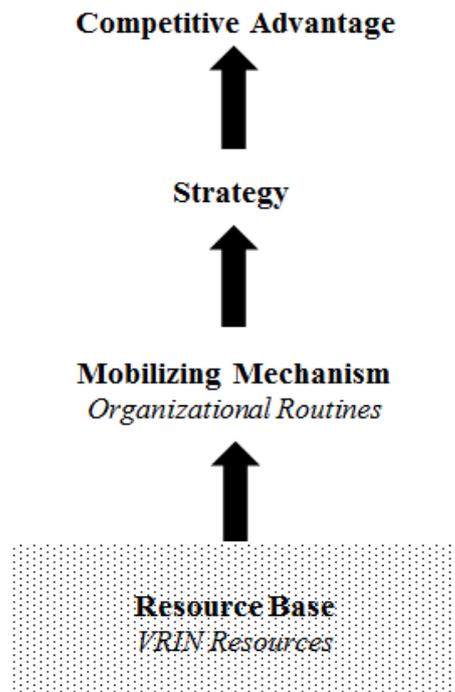
One example of a key concept yet to be clarified is the RBV's explanation of the boundary of firm resources. Firm resource base reflects the concept of productive opportunities used by Penrose, which "*...comprises all of the productive possibilities that its 'entrepreneurs' see and can take advantage of*" (Penrose, 2009:28). The firm's growth process is about the discovery and examination of productive opportunities (Rugman & Verbeke, 2002; Penrose, 2009). In this process, the firm's managers deploy its resources to create a productive opportunity set (Kor & Mahoney, 2000), and as Kor and Mahoney (2004:186) claimed: "*...in the short run, available resources place a bound on the opportunities a firm can seize.*" It is therefore of critical importance to understand the scope of this opportunity set, as "*...this opportunity will be restricted to the extent to which a firm does not see opportunities for expansion, is unwilling to act upon them, or is unable to respond to them*" (Penrose, 2009:29).

Barney (1991:101) traditionally defined resources as “*assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. **controlled** by a firm*”. This definition shows an emphasis on ownership control of firm resources. Similar definitions of resources have been adopted by other classical RBV studies, e.g. Amit and Schoemaker (1993), as well as some recent research, e.g. Sirmon et al. (2007) and Barney et al. (2011). According to these studies, resources owned and controlled by the firm serve as the basis of strategies. This means that the scope of the firm’s resource base is defined by the ownership boundary of its internal assets, i.e. the firm’s ownership boundary has been used as equivalence to the boundary of the firm’s resource base.

Figure 2.6 and 2.7 below provide an illustration of this traditional RBV framework. In Figure 2.6, the dotted area represents the reservoir of firm resources, i.e. the frontier of this area represents the boundary of the firm’s resource base.¹⁶ Productive opportunities of the firm, i.e. its strategic options, are based on perceptions of the boundary of its resource base. In Figure 2.7, the traditional RBV framework considers the firm’s ownership boundary - the frontier of its legal control on internal assets - equivalent to the boundary of its resource base. The firm’s ownership boundary focuses on its property rights over assets, and highlights the firm as a legal organization for the governance of various activities (Santos & Eisenhardt, 2005). Within the traditional RBV framework, the firm’s ownership boundary serves as the border of its resource base, which is the foundation of its development of strategies and competitive advantages.

¹⁶ The other RBV constructs, such as capabilities (mobilizing mechanism as referred to in this research) potentially also deserve a discussion on their scope and boundary, but this current research focuses on the analysis of resource base.

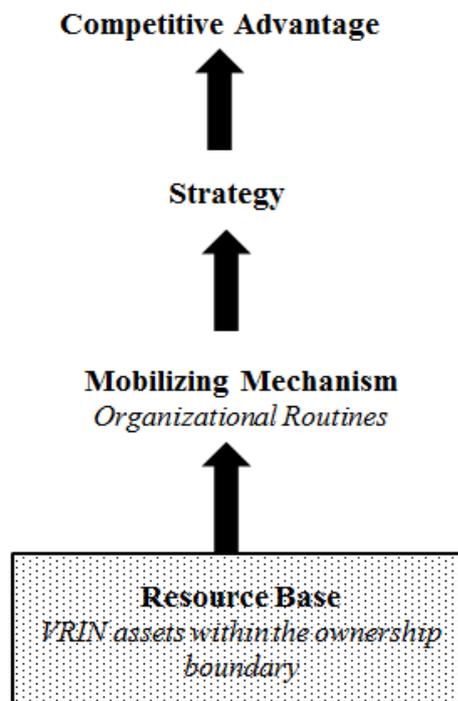
Figure 2.6 The Traditional RBV Framework (4)



Note: The dotted area represents the scope of the firm's resource base

Source: Adapted from Grant, 1991b: 115, Figure 1

Figure 2.7 The Traditional RBV Framework (5)



Note: The solid lines represent the firm's legal ownership on internal assets

Source: Adapted from Grant, 1991b: 115, Figure 1

However, some RBV scholars raised different opinions towards the scope of firm resources. For example, Lockett and Wild (2014) focused on the firm's access to

resources instead of ownership. They claimed that the firm's resource base includes not only assets owned by the firm, but also those at the managers' disposal (Lockett & Wild, 2014). Lockett and Wild's (2014) view on resource base emphasised the availability of the resources for the firm's strategic usage, instead of their ownership. In fact, Dyer and Singh (1998:660) pointed out at an earlier stage that "...a firm's critical resources may span firm boundaries..." This highlighted the potential significance of some external resources to the firm's strategy and competitive advantages, and implied that such resources should be taken into consideration by the concept of resource base.

The traditional RBV framework applied the firm's ownership boundary to the scope of its resource base. Regarding firm boundaries, existing studies involve various theoretical lenses but have been focusing on make-or-buy choices and governance efficiency (Santos & Eisenhardt, 2005). In their thorough review on extant conceptions of organizational boundaries, Santos and Eisenhardt (2005) summarized four angles of understanding the firm's demarcation from its environment. The "efficiency" angle concentrates on the firm's legal ownership of assets; the "power" angle refers to the firm's dependence and influence on other organizations; the "competence" angle, the one that Santos and Eisenhardt associated with the RBV, highlights the firm's resource portfolio; and the "identity" angle concerns the holistic mind-set of organizational members. These existing perspectives demonstrated the multiple dimensions of firm boundaries, and highlighted that the firm can be considered as having multiple boundaries.

This thesis analyses the firm's strategies for the achievement of competitive advantages. It focuses on the boundary of the firm's resource base, or "productive opportunities" as originally termed in Penrose (1959). The resource base serves as the foundation of firm strategies. It is the portfolio of resources within the boundary of

resource base, together with the managerial decisions, that lead to the firm's competitive advantages. Based on Santos and Eisenhardt's (2005) review, the original RBV framework appeared to have adopted the firm's boundary of efficiency - the legal ownership of its internal assets - to define the boundary of its resource base. This is due to a highlight of the firm's control on assets instead of the availability of resources. This is hardly an adequate reflection of Penrose's initial description of the resource base concept: "...*the maximum possible expansion for all firms taken together is determined by the availability of resources...*" (Penrose, 2009:281).

Therefore, the focus on resource ownership of the traditional RBV framework possibly makes it unnecessarily restrictive in explaining and predicting firms' development of strategy and competitive advantages. A wider scope for the firm's resource base, as illustrated in Lockett and Wild (2014), has the potential to refine the current RBV understanding on firm resources, strategies and competitive advantages.

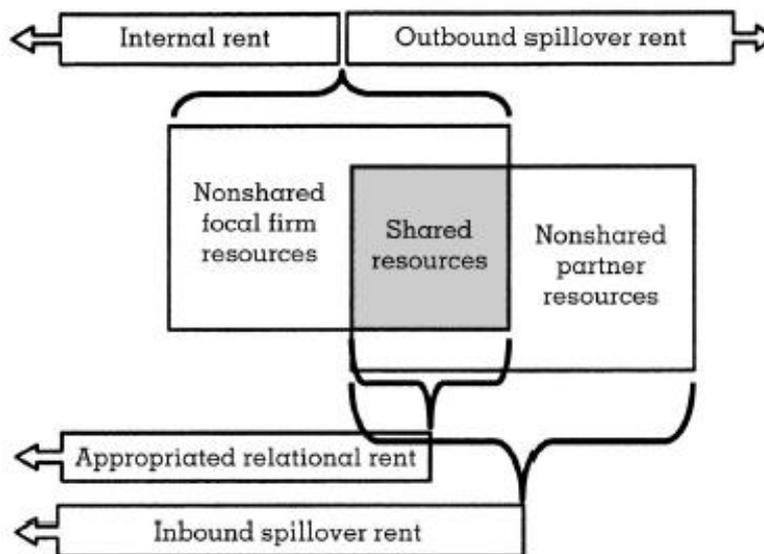
2.3.2 Efforts in Building on the Limitations

The focus on the inside of the firm distinguished the RBV from market-based theories, but its emphasis on ownership boundary led to a potential underestimation and overlooking of the external context of the firm's growth. In the existing literature, incorporating the external context of the firm into the resource-based perspective has been an important direction for further developing the theory. For instance, Oliver (1997) combined the institutional theory with the RBV in order to involve the state, society, and inter-firm relations into the framework of resources, strategies and competitive advantages. Yang et al. (2010) bridged the RBV and social network theories to identify key factors deciding firm boundaries. Makadok (2011) added external-market-based elements (e.g. rivalry restraint and information asymmetry) as newly-defined fundamental factors of firm performance, claiming that competitive advantages are not the only concern for firms' success. Scholars in strategic

management have been pursuing a more comprehensive vision of firm growth through incorporating social and competitive context of the firm into the RBV.

A more targeted attempt to adapt the RBV also exists in the literature. Lavie (2006) proposed an extension of the RBV framework through the integration of the core ideas of the Relational View (RV): “...the focus on resources that are owned or controlled by the firm undermines the essential contribution of the resources of alliance partners...” (Lavie, 2006:638). Emphasizing the role of alliance partners in shaping the firm’s competitive advantages, Lavie (2006) refined the definition of resource base. He applied two categories to the firm resources - the shared and non-shared, and claimed that both types of resources generate relational-rents for the firm (Figure 2.8).

Figure 2.8: Lavie’s (2006) Extension of the RBV with the RV



Source: Lavie, 2006:644, Figure 1

Lavie’s categorisation of resources (shared and non-shared) adopted the example of joint ventures between firms as a simplified form of resource-sharing. The implications of his framework are unclear in other forms of alliances, as they can be much more complicated than joint ventures in terms of the division of resources. But despite this limitation, his research paradigm has proved to be a significant source of

inspiration for further research.¹⁷ The traditional RBV framework has the limitation of neglecting resources crossing the firm's ownership boundary, and Lavie (2006) made a meaningful attempt to expand the theory through combining it with concepts in the RV. The value of Lavie's (2006) extension rests in its effective integration of the relational-rent¹⁸ concept into the RBV framework. Instead of a simple patchwork of two theories, Lavie's (2006) work followed the RBV philosophy and reasoning logic, and refined the very core concept of it on the firm's resource base. Therefore, Lavie's (2006) adaptation of the definition and categorization of firm resources provided a strong basis for the enhancement of the RBV's analytical power.

However, Lavie's (2006) work appears insufficient to fully refine the RBV. As his proposed framework suggested (Figure 2.8), the extension only discussed rent-generation. The process of deploying the newly categorised "shared resources" for the creation of profits remained in the black box of the firm. This means that the way these resources contribute to the firm's productive opportunities was not explained. His proposed framework does not demonstrate how these shared resources affect firm performance, i.e. through what mechanism and process they can be mobilized by the managerial team. The RBV framework offers an analytical path from the basic unit of firm resources throughout the process of the creation of competitive advantages. From this aspect, Lavie's (2006) extension of the RBV has the potential to go further.

After the 2006 paper, Lavie's challenge to the RBV has had a continuous impact on the management literature and was applied and developed by other scholars towards various directions. For example, Phelps (2010) further discussed the way in which a firm's alliance structure and composition influence its innovation capability.

¹⁷ The paper published in 2006 in the journal of *Academy of Management Review*, and had about 1,485 citations by August 2017.

¹⁸ Lavie (2006:641-642) described the "relational-rent" as jointly generated by alliance partners: "*Such relational rents derive from specific assets firms dedicate to alliance relationships and from complementarities between their resources and the resources of their partners.*"

Bogers (2011) analysed firms' exploitation of external resources through knowledge sharing in a network, and focused on inter-firm collaborations in R&D activities. Baraldi et al. (2012) raised the concept of Resource Interaction in inter-organizational connections and studied the combination of firm resources within a network. Williamson and De Meyer (2012) expanded the research scope from inter-firm networks to business ecosystems. They discussed the way a focal firm captures value through efficient communication and cooperation with various partners during the co-evolution of all parties. Leuschner et al. (2013) reasserted the significance of the combination of RBV and RV in studies of supply chain integration. They emphasised the importance of joint effort among firms in a modern supply chain (e.g. in the aspect of knowledge acquisition).

In spite of these developments on Lavie's (2006) challenge to the RBV framework, the research gap left by it has remained unfilled. Studies built on Lavie (2006) generally switched the research focus from individual firms' mobilization of resources to the integration and consolidation of network resources through co-operations among firms. Analyses from a strategy point of view on resources spanning over the firm boundary seem to have been paused since the mid-2000s. To further refine and extend the RBV framework, there lacks systematic investigations on the way the firm's resource base is affected by resources out of its ownership boundary. These resources' influences on firm strategies that shape competitive advantages call for more studies.

2.3.3 Extending the RBV with External Resources

Both the early Penrose (1959) idea and the recent Lockett and Wild's (2014) concept of firm resources emphasise their availability to firms in the process of strategy development. This means that compared to legal ownership, the firm's access to resources has greater significance to its resource base. This indicates that resources

outside the firm's ownership boundary should also be taken into consideration for productive opportunities, as long as they are at the firm's disposal for strategic use.

External resources that are accessible to the firm must be somehow connected to it, i.e. not inside, but "on" the firm boundary. In a business system, the firm is separated from its external environment through ownership boundary, i.e. its hierarchical control over the internal assets (Håkansson & Snehota, 1989). In the meantime, the firm's business exchanges with outside parties, as well as its social embeddedness, connect it with the external context. Those resources at the firm's interface with the external context therefore have strong potential in strategically influencing the firm's development path and performance.

Some existing concepts in management studies show similarities to the features of such external resources but lack accuracy in fully reflecting their characteristics. For example, Lavie (2006) adopted the logic of the RV to identify these resources, but the RV focuses on inter-firm relationships. This means that Lavie's extension of the RBV was limited to inter-firm connections and neglected the firm's connections in other forms (e.g. interactions between the firm and local governments or at individual level). Other examples include the concepts of "relational resources" and "social capital". Extant literature on relational resources mainly focused on marketing activities (e.g. Morgan & Hunt, 1999; Li & Ogunmokun, 2001; Story et al., 2009), and these studies show divergence in the definition of the concept. For example, Morgan and Hunt (1999) explained relational resources as the assets that firms obtain through relational connections; while Wong and Karia (2010) referred to the concept as the firm's ability to establish and maintain important relationships. Karia et al. (2015), again different from other definitions, stated that relational resources are the relationships that the firm is involved in; while Moore et al. (2007) and Gretzinger and Royer (2014) borrowed the concept of social capital (Nahapiet & Ghoshal, 1998) to

describe the multi-dimension characteristics of relational resources. Moreover, the existing studies on relational resources include both the connections inside the firm (among its internal units) and those outside it (Morgan & Hunt, 1999). In this aspect, the concept of social capital shares the same problem - it involves all networks associated with a unit, both inside and outside of it. So the assets it refers to include the resources within the firm's ownership boundary (e.g. human capital and organizational capital).

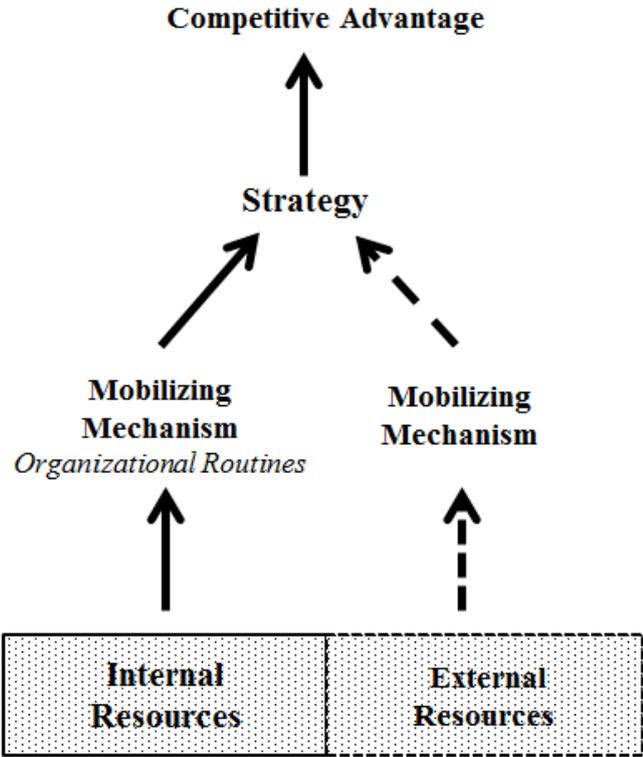
Since the existing literature fails to adequately reflect the characteristics of the strategically important external resources of the firm, there is a research gap of understanding and analysing the way these resources affect the firm's strategies. Filling this gap will contribute to a presumably thorough theoretical framework and benefit future RBV studies on firm strategies. In order to push forward the literature, this thesis investigates the boundary of the firm's resource base. Through the theoretical lens of the RBV, it focuses on the external resources with strategic importance to the firm's development and performance. Specifically, it examines the impact these resources have on the firm's strategy development, the firm's mobilizing mechanism of them and their boundary.

Drawing upon the traditional RBV framework (Figure 2.7), this thesis proposes an extension of the RBV (Figure 2.9). This extension adds "*External Resources*" into the RBV framework. In this extended framework, "*Internal Resources*" refer to assets that are legally controlled by the firm, while "*External Resources*" refer to those outside the firm's ownership boundary but underpin the firm's strategy development. Presumably, both these internal and external resources serve as part of the firm's foundation for the development of competitive advantages. Hence both types of resources are part of the firm's resource base. This extended framework considers the firm's ownership boundary as the frontier of its "*Internal Resources*" only, while the

resource base spans over the ownership boundary. It is the “*External Resources*” that push the scope of resource base beyond the ownership boundary of the firm.

In Figure 2.9, the dotted lines represent the boundary of the “*External Resources*”, which plays a critical role in determining the frontier of the resource base. Following the RBV logic, the “*External Resources*” in the extended framework also have their mobilizing mechanism that enables the firm to strategically deploy them. The rest of this research proceeds to explore this mechanism and its means of providing the firm with resource access. This proposed extension of the RBV framework serves as the conceptual framework of this thesis, under which the critical resources underpinning strategies, their mobilizing mechanisms, and the boundary of firm resource base are analysed.

Figure 2.9: Proposed Extension of the RBV Framework



Note: Dotted area represents the firm’s resource base; Solid lines represent the firm’s ownership boundary; Dotted lines represent the boundary of external resources that are at the firm’s disposal for strategic use.

Source: Adapted from Grant, 1991b: 115, Figure 1

2.4 The Eastern Business Environment for the Extension of the RBV

Section 2.3 provided a review on existing criticisms of the RBV, showing that its traditional focus on ownership boundary led to an inadequate understanding of the scope of the firm's resource base, and this limited the analytical power of the theory. The RBV thus has the potential for further extension through incorporating the strategically important external resources into the resource base concept. The Eastern business environment (specifically the Japanese and Chinese business contexts in this research) provides a useful setting for the refinement on the understanding of resource base boundary and the development of an extended RBV framework.

Boisot and Child (1996) stated that political, institutional and cultural characteristics of a country lead to particular features of its market arrangements, form of capitalism and the role of government. The national governance system serves as the context of industrial development and firm activities (McCormick, 2001). It defines the relationship between the social embeddedness and the institutional environment of organisations, the rules of the game within the economy, and the way resources are allocated and employed among various units (Williamson, 1998a). Baumol (1968) argues that it also shapes the reward structure for entrepreneurship. States, markets and other forms of institutions in a national system coordinate/control interests among various parties, in order to reach coherence in the exchange and sharing of information (Meisel, 2004). The ways power and information act in a system demonstrate the characteristics of the governance culture of it, and the system plays the role of the foundation of relationships among firms within it (through either personal or institutional links).

A dichotomy perspective in the extant studies describes the characteristics of two different national governance systems - the rule-based system and the relation-based system (Li, 1999; Li et al., 2003; Meisel, 2004). The criteria of these

categorizations are twofold. The first concerns the general cost level of transactions. Public disclosure and enforcement of contracts are the key characteristics of a rule-based system (Li, 1999). It involves high fixed costs for the set-up and implementation of law-based mechanisms. Once the package of explicit and standard processes for transactions is established, the marginal cost (for each transaction in the system) is considered low. Following this logic, a relation-based governance system is associated with the characteristics of low fixed costs but high marginal costs. The low level of fixed costs is due to the lack of public-order-building, and the high additional costs on each transaction are the price paid on evaluation and examination of new partners.

The second criterion is the way trust and power are produced in the country, i.e. mostly informal-relation-based or formal-rule-based (Meisel, 2004). The national governance system produces coherence in interests through various forms of institutions, typically through states and markets. In the cases of relation-based systems, coherence in interests is also reached through community organizations, private networks, business and civil-society associations, labour unions, big business groups (e.g. the Japanese Keiretsu) and local governments (e.g. the Chinese township and village governments). Rule-based systems, on the contrary, rely on laws as the mechanism to guarantee trust building and information sharing. Li et al. (2003) connected the two criteria, stating that the cost level of transaction is the result of the mechanism of information transfer and enforcement.

Li et al. (2003) argued that countries in the East generally relied more on relations than countries in the West. The economic dynamics of the national systems in the Eastern countries are therefore mostly relation-based. Many developing countries industrialized in the 1950s, 1960s and through the early 21st century were categorized as relation-based governance systems (Meisel, 2004). These include Japan

from the 1960s to the 1990s and China after 1978 (Li et al., 2003; Meisel, 2004). The next two sections discuss the features of the business contexts of these two countries.

2.4.1 The Japanese Governance System and Management

Model

The features of the Japanese governance system (during the years between the 1950s and the 1980s) were conceptualised by scholars with a particular term - the Japanese model (Li, 1999).¹⁹ This term focuses on the involvement of personal agreements in Japanese business activities, as well as close relations among the Japanese government, banks and firms. Between the 1950s and 1980s, a “triangle” was formed among Japanese government agencies, banks and the Keiretsu Business Groups (KBG). “Keiretsu” means either a horizontal or vertical structure of firm connections (Miyashita & Russell, 1994; Lai, 2000). The KBG involves individual firms from a variety of industries. The government monitored banks through the Ministry of Finance and the Bank of Japan. The Bank of Japan monitored firms through the main bank system in KBGs (Li, 1999). The triangular structure facilitated the government’s direct connection to firm activities. The KBGs were formed in the 1950s and served as a significant cooperative structure of Japanese firms ever since (Singleton, 1997).

Unlike the state ownership of firms in some other countries, the Japanese government used the triangular structural model for a stable protection of specific assets by guiding firm behaviours. Compared to Japan, relationships in other countries between firms and banks are much looser, as there is a less direct connection between them. Close ties between private firms and the government in Japan were also unique (Li, 1999). The connections among the government, banks, large and small firms tied

¹⁹ Different from the “J-firm model” on firm management that was explained in *Chapter One*, the “Japanese model” here describes the whole national business system.

the whole business system together, and this built up the special institutional environment of Japanese firms.

Among Eastern countries, Japan has its national business system and management characteristics well addressed by the existing literature. It has long been referred to as a typical Eastern management model compared to Western ones. A review of literature on the post-war Japanese management system and style leads to an impressive image of the special features of the Japanese management model. This includes both corporate structure and management practices.²⁰ It is particularly common in large firms in the manufacturing industry.

During the rapid-growth period of the Japanese economy (between 1955 and the early 1970s), the characteristics of the Japanese management system drew the attention of scholars all over the world. Starting from Drucker (1971), academic research on Japanese management boomed in the 1980s. Various studies analysed the general characteristics as well as specific aspects of the management structure and practices of Japanese firms (Ouchi, 1981; Ohmae, 1982; Pascale & Athos, 1982; Abegglen & Stalk, 1985; Aoki, 1986; Sheard, 1989). Aoki (1986) referred to a typical Japanese firm during the post-war period (by the collapse of the economic bubble in the early 1990s) as a J-firm. A J-firm is argued to have a distinctive corporate structure from a typical American firm during the time (the latter is noted by Aoki as A-firm). J-firms place less emphasis on shareholders, but more on employees, customers and suppliers (Buchanan & Deakin, 2009). Cross-shareholding (Lincoln et al., 1992; Berglöf & Perotti, 1994), bank-led monitoring (Aoki, 1990; Lincoln et al., 1992; Aoki & Sheard, 1993), and executive-dominated boards (Bostock & Stoney, 1997; Deakin

²⁰ Different from the situation in the US and the UK, corporate structure and management strategies are usually jointly considered in academic discussions on Japanese firms (Buchanan & Deakin, 2009). This is due to the fact that the structure and management style of Japanese firms are co-dependent, serving as the basis of the functioning of each other.

& Whittaker, 2009) are widely observed as characteristics of J-firms. In terms of management style, a J-firm provides job security (Aoki, 1986; 1990) and cross-functional training (Song & Parry, 1997; Kusunoki & Numagami, 1998; Holland et al., 2000) to its core employees, and emphasizes consensus inside the company through horizontal information coordination (Aoki, 1986, 1990). Table 2.1 provides a summary of the J-firm characteristics. Most of these characteristics show strong evidence of inter-connections and regular interactions among various organisations (e.g. firms in the same KBG, government, financial institutions etc.).

Research on Japanese management experienced its peak through the 1980s, with a complimentary tone dominating the academic opinions (Drucker, 1971; Ouchi, 1981; Ohmae, 1982; Pascale & Athos, 1982; Abegglen & Stalk, 1985; Aoki, 1986; Aoki & Rosenberg, 1989; Aoki, 1990). Abegglen and Stalk (1985: 42-43) described the Japanese firms' mode of growth as a "*Winner's competitive cycle*", which functions particularly well when there is a growing consumer market with enough demand. Between the post-war start-off of the economy and the stagnation in the early 1990s, Japan experienced a high-growth period (1955-1973) and a stable-growth period (1973-1990). These two periods are characterized (respectively) by rapid and medium growth of demand in the domestic market. Under such circumstances, ability in winning and maintaining market shares was considered critical for the firm's survival and success.

Table 2.1: Summary of the Characteristics of a Post-war J-firm

Characteristics	Source
Inter-firm (intra-group) Connection/Cooperation	Aoki, 1986; Gulati et al., 2000
Long-term Partnership with Suppliers and Clients	Aoki, 1986
Cross-holding of Firm Shares	Lincoln et al., 1992; Berglöf & Perotti, 1994
Horizontal Coordination	Aoki, 1986; 1990
Life-time Employment	Aoki, 1986; 1990
Cross-functional Training	Song & Parry, 1997; Kusunoki & Numagami, 1998; Holland et al., 2000
Bank-orientated Financing	Aoki, 1990; Lincoln et al., 1992; Aoki & Sheard, 1993

Source: Summarized by the author

2.4.2 The Chinese Business Context

Peng (1997) pointed out that within the Chinese business context, firms have a boundary-blurriness feature. Emerging and unclear property rights make the definition of resource boundaries difficult, and this can be observed through firms' network-based growth strategy. Meyer & Lu (2005:57) supported this point, and argued that this is due to the *"incomplete separation of firms from the state, incomplete integration of firms and partial listing of firm assets"*. They used "indefinite" to describe the boundaries of Chinese firms, and argued that this characteristic of Chinese firms is highly influential on their growth. It can lead to advantageous or disadvantageous positions of firms, depending on the firms' management strategies. Similarly, Boisot and Child (1996) used "network capitalism" to describe the Chinese business system, arguing that the insufficiency of legal infrastructure (e.g. unsound protection of private property rights and information asymmetry) has led to the blurriness of firms' legal status, ownership and control. This served as a distinctive characteristic of the Chinese business context from Western countries.

Literature that focuses on the Chinese context involves numerous attempts to analyse this boundary-blurriness characteristic. As examples of significant studies, Xu

and Li (2002) combined institutional theory and resource dependence theory to discuss the strategic growth of Chinese firms. Shou et al. (2013) drew upon cluster theories to analyse the role of intermediaries in the innovation performance of Chinese SMEs. Peng and Luo (2000) adopted the concept of social capital to discuss the interaction between Chinese firms and their external environments. Research conducted by Chinese scholars described social connections as a significant feature of the Chinese society. The inter-connections among local people, based on kinship, family in-law, neighbours or work mates, showed fundamental effects in the business environment, and thus played an important role in various institutions and organisations (Zhu, 2004). Boisot and Child (1996) stated that the collectivist and group-dominance tradition has long been the root of the networking culture and practice in Chinese society, and this fundamentally contrasts the western institutional constitution of property rights and transactional safeguards.

Peng et al. (2001a) argued that the decentralization process during China's economic reforms (since 1978) transferred government control from state to local level, and the changes in the institutional environment strongly affected organizations and their management. Liberalization on product and production factor prices was part of the decentralization process (Lin et al., 2003). Fiscal reforms were implemented (in 1994) to broaden the tax base of the country and stabilize central-local government fiscal relations (Naughton, 2007). A wave of bank reforms was initiated in the second half of the 1990s following the revelation of high levels of non-performing loans.²¹ Domestic Chinese firms experienced dramatic institutional and market transitions and these changes were reflected in the path-dependency of the firms' latter development. In this process, local governments maintained strong intervention in local economic

²¹ This followed an earlier round of reforms in the early 1980s which was a division between the monetary policy function of the central bank (The People's Bank of China) and the commercial banking functions of the large state-owned banks.

activities through administrative hierarchies and resource distribution: “...*the institutional environment during mainland China's reform era has created incentives for organizations to ‘blur’ their boundaries...in order to achieve necessary growth and expansion*” (Peng et al., 2001a:101). This means that despite the dramatic changes caused by the economic reforms to the national system of China, relationships and networks have remained important in the business environment.

Some might argue that networks and relationships also exist in rule-based countries, and their usage is commonly observed in business exchanges in Western countries. This is true. However, as stated by Boisot and Child (1996:623): “*It is therefore not the presence of networking that is distinctive about China's emerging economic order but, rather, the depth and nature of its social embeddedness.*” Although involving networking practices, the Western system is considered as having the characteristics of “*impersonal economic relationships, large-numbers transacting, relatively decentralized self-regulating economic units*” (Boisot & Child, 1996:602). The importance of relationships and networks in developing countries²² is usually attributed to the lack of a sound state structure (Li, 1999; Meisel, 2004). Such context makes investment in networks and relationships worthwhile for more information and less uncertainty in transactions. The dynamic process of a country's institutional evolution alters the way economic exchanges are governed (North & Weingast, 1989). Throughout the construction of legal infrastructure and maturation of the enforcement system, the balance of rules and relations changes (Coffee, 2001).

If focusing on the ownership of resources restricts the RBV's interpretation of the firm's strategic options (i.e. the scope of resource base), this constraint should be inevitably highlighted in the Eastern, relation-based business system. Blurriness of firm boundaries should strengthen the impact of external resources on the firm's

²² Li (1999) referred to these countries as “catching-up economies”.

development path. A business environment with blurred firm boundaries therefore provides a useful setting for the investigation of the boundary of resource base and the extension of the RBV framework. Both Japan (in the 1960s-1990s) and China (post-1978) are significant examples of the Eastern, relation-based business system (Li et al., 2003; Meisel, 2004). The research settings provided by the two countries facilitate the analysis of the strategic impact of external resources on the firm's growth. The comparison of observations in the two countries offers an opportunity to discover their differences in the way external resources are mobilized to influence firm strategies. This enables a more comprehensive assessment on the firm's strategic use of external resources as well as its resource base. The comparative study also brings insights from the existing literature on the Japanese management system. Historical studies on Japanese management established meaningful links between the business system and firm management practices. This offers references for the discussions on Chinese firms, and provides a strong basis for the analysis on resource base boundary.

Chapter Four and *Chapter Five* of this thesis, focusing respectively on Japanese and Chinese firms' upgrading processes, adopt the extended RBV framework (Figure 2.9) for firm-level analyses. The discussions highlight the role played by external resources in the firm's process of strategy formulation and implementation. These country-specific discussions are then followed by a cross-country comparison in *Chapter Six*.

Chapter Three

The Chinese Textile and Clothing Industry: Historical development, competitive challenges and upgrading status

This chapter discusses the changing competitive environment of the Chinese textile and clothing industry since the early 2000s. It reviews the existing literature on the competitive challenges at the level of national economy²³ and industry development. The objective of this discussion is to understand the background of firm-level strategic upgrading, i.e. the reasons and incentives for firms to make upgrading attempts. Following this discussion, this chapter proceeds with a review of existing studies on the upgrading efforts and results that have been observed in Zhejiang's textile and clothing sector (since the early 2000s). This review indicates that upgrading behaviours vary between large and small firms. Large firms are generally at advantageous competitive positions, while small firms suffer from resource constraints. Consequently, large firms have demonstrated identifiable upgrading outcomes and strategies, while small firms struggled in achieving upgrading outcomes. Small firms hence appeared to make collective upgrading efforts without clear strategies, and such collective attempts relied on public platforms on the basis of local manufacturing clusters.

The remainder of the chapter is structured as follows. Section 3.1 provides an overview of the historical development of the Chinese textile and clothing industry. Section 3.2 focuses on the competitive challenges facing the national economic growth of China (at the national level) and the industrial development of the textile and clothing sector (at the industry-level). Section 3.3 reviews existing studies on upgrading processes and outcomes in Zhejiang's textile and clothing sector. Section 3.4 provides a focused discussion on the collective upgrading efforts of small firms in Zhejiang. Section 3.5 in the end concludes this chapter.

²³ This level of analysis involves international and domestic factors that affect the economic growth of a country.

3.1 Historical Development of the Chinese Textile and Clothing Industry

Textile and clothing manufacturing has a long history in China. In the Ming dynasty (1368-1644), silk materials were the main trading commodities between China and western countries (e.g. the Roman Empire, Portugal and Spain). Traditional handicrafts served as the main technology in textile production activities (Li, 1982), and silk production was concentrated in South China, in the Yangtze River Delta (e.g. Jiangsu, Zhejiang and Shanghai). Other traditional textile centres (e.g. for cotton and latter fibre production) in North China included Qingdao and Tianjin (China Textile Industry Development Report 2009/2010,²⁴ Wu et al., 2012). In the 1910s, textile and clothing products accounted for 40% of China's exports of manufactured products. This weight maintained the high level and further increased to over 50% in the 1980s (Park, 1990).

Before the economic reforms began in 1978, the main destinations of China's textile and clothing exports were Hong Kong and other communist countries (CTIDR, 2007/2008:210). In the post-1978 years, textile exports became increasingly focused on developed countries. The biggest market for Chinese textile exports was the US in 1987, in 1995 it became Japan, and in 2006 the position was taken by the European Union (CTIDR, 2007/2008:210). China's textile and clothing industry has been highly competitive in the global market, and this sector is dominated by non-state firms - 95%

²⁴China Textile Industry Development Report is a White Print for China's textile industry. It reviews the development of the industry and provides official information and key statistics on an annual basis. This thesis cites the series of the reports between 2003 and 2013, hereafter referred to as "CTIDR".

of the total as per data in CTIDR 2009/2010. In terms of size, small firms²⁵ serve as the majority, representing 99.6% of the total number of firms. In the post-1978 reform era, the development of the textile and clothing industry went through three stages (CTIDR, 2009/10). The rest of this section provides discussions on each stage.

3.1.1 Reform Era Development - Stage I: 1978-1991

During the initial stage of the economic reforms, the State Council introduced policies to loosen restrictions on the existence and development of individual industrial and commercial proprietors: following the 3rd Plenary Session of the 11th Central Committee of the Communist Party in December 1978, support in the form of raw material supply and tax reduction was announced by the state government to encourage the development of the private economic sector (People's Daily, 1978-1981). The national system of textile supply was previously based on clothing coupons issued as rations,²⁶ and this was removed by the end of 1983 in order to introduce a market mechanism on textile supply and demand.²⁷

In 1984, the Department of Textile Industry introduced policy guidelines to promote the development of the clothing sector. It suggested that clothing manufacturing should lead the development of other textile sectors in China (CTIDR, 2004/2005). In 1986, the regulatory authorities of the textile sector and clothing sector

²⁵ While some materials in the literature adopt the concept of "Small and Medium Enterprise" (SME), this thesis uses the term "small firms" to refer to such enterprises. During the upgrading period of the Chinese textile and clothing industry (since 2001), the concepts and statistical standards of small firms and medium firms have experienced several adjustments (e.g. in 2003, 2007 and 2011). As a result, a separation between small- and medium-enterprises does not provide consistency to the analysis in this study. Meanwhile, the literature of industry-level upgrading status (reviewed in Section 3.3) shows that large firms have been leading the strategic adaptations of the industry while the other firms mainly played the role of followers. Consequently, separating small- and medium-enterprises has little contribution to the comprehensiveness of this study.

²⁶ The distribution of grain, pork, oil and cloth in China was based on a rationing system. Ration coupons and books were issued by the central government to urban and rural areas, and household consumption of these products was restricted to the amount specified on the coupons. This system was introduced to maintain stable nominal prices under inflationary pressures, and to control consumption under the circumstances of insufficient commodity supply (Huenemann, 1966; Chinn, 1980).

²⁷ People's Daily, 1st Dec, 1983.

were merged by the State Council, showing the government's objective of integrating the development of the up- and down-stream segments of the industry (CTIDR, 2004/2005). This was followed by targeted investments between 1986 and 1990 of RMB 71.2 billion in production facilities and RMB 48 billion in machinery upgrades in the sector (CTIDR, 2004/2005). In June 1988, the State Council issued the *Tentative Stipulations on Private Enterprises*²⁸ to further protect the legitimate rights and interests of private businesses (CTIDR, 2004/2005; Garnaut et al., 2012). The removal of policy restrictions and implementation of policy supports made it possible for the previously oppressed private economic sector to develop.

In the meantime, the open-door policy facilitated the entry of foreign capital. China's abundant low-cost labour resources attracted textile and clothing manufacturers from Hong Kong, Taiwan, Japan and South Korea to set up production facilities in Guangdong and Fujian (CTIDR, 2007/2008). The southern coastal area of China (the Pearl River Delta, where the main cities are illustrated in Figure 3.1), with its geographical advantage, was the first to receive foreign investments through the establishment of Special Economic Zones. As a result, this area developed an export-orientated economy, and later served as one of the modern centres of China's textile and clothing manufacturing. Cities such as Dongguan and Foshan became bases of large-scale production of clothing, footwear and accessories. In these areas, it was commonly observed that several major investors entered a city and brought in more investors at a later stage (CTIDR, 2007/2008). As a result, a customer chain gradually formed. During this stage, Chinese textile exports from the coastal manufacturing centres quickly entered the markets of Asian countries as well as Western Europe and North America (Wang, 2013).

²⁸ Private enterprises are for-profit organizations owned by individuals. The ownership ranges from sole proprietorship, partnerships, limited liability companies to shareholding cooperatives (Garnaut et al., 2012).

Figure 3.1: Main Cities in Pearl River Delta



Source: Li & Fung Research Centre, 2010:9

3.1.2 Reform Era Development - Stage II: 1992-2001

In 1992, the overall objective of building a market economic system was firmly established by the central government, and among all industries, the textile sector was early in achieving marketization. In 1995, reforms on State-Owned Enterprises (SOEs) started to follow the policy of “keeping the large and letting the small go” which was announced at the 5th Plenary Session of the 14th Central Committee of the Communist Party. The policy introduced multiple options for the ownership re-structure of SOEs, including contracting, leasing, establishing employee-held companies and privatisation. The previous dominance of state ownership gradually faded out and made way for other forms (Wu et al., 2012; Wang, 2013). As a result, the SOEs’ contribution to industrial output gradually decreased, and the importance of firms with other ownership structures increased. Table 3.1 shows that in this period the contribution of SOEs to the national industrial output decreased from 37.3% to 24.0%, while the weight of private firms’ contribution increased from 10.1% to 41.9%.

**Table 3.1: Contribution to National Industrial Output of Firms with Various
Ownerships (%)**

Year	State-owned	Collectively-owned	Private, Limited liability, Joint Stock (Domestic)	Foreign-owned (including Hong Kong, Taiwan and Macau)
1994	37.3	37.7	10.1	9.5
1995	34.0	36.6	12.9	11.7
1996	36.3	39.4	15.5	12.2
1997	31.6	38.1	17.9	12.7
1998	28.2	38.4	17.1	14.9
1999	28.2	35.4	18.2	15.9
2000	29.4	14.2	34.0	12.3
2001	24.0	10.7	41.9	12.4

Source: National Bureau of Statistics, China Statistics Yearbook (1999-2002), Table 13-1

This extensive trend towards marketization and privatisation led China's textile industry into a period of rapid growth. With private (domestic) and foreign capital, textile manufacturing clusters started to form in the Pearl River Delta, Yangtze River Delta and Bohai Bay areas. China soon became one of the leading textile and clothing manufacturers in the world. Among these manufacturing centres of textile and clothing products, the most important areas (in terms of contribution to exports) are five provinces - Zhejiang, Jiangsu, Shandong, Fujian, Guangdong, and one direct-controlled municipality - Shanghai (CTIDR, 2013/2014; Wang, 2013). The availability of continuous statistical data is limited on this development stage, but data from the period between 2003 and 2013 indicates that these six areas' combined contribution to the exports of textile and clothing products maintained a level of over 80% of the national total. Among these six areas, Zhejiang's share of export production has remained the highest, with an average of 26.5%²⁹ of the national total.

The formation of clusters in Zhejiang, Jiangsu and Guangdong facilitated product specialisation and promoted the development of related sectors. According to

²⁹ Average calculated by the author with original data from CTIDR (2003-2013)

Wang (2013), there were several key drivers behind the formation of textile and clothing clusters in China's coastal areas. Rural industrialisation, following the open-door policy, enabled small firms in the Pearl River Delta and Yangtze River Delta to benefit from their location advantages in accessing global markets. Government support encouraged the collective development of firms in these clusters (CTIDR, 2003/2004:191). Along with the gathering of textile manufacturers, supporting sectors also clustered nearby.

3.1.3 Reform Era Development - Stage III: 2001-Present

This last development stage started with China's accession to WTO in 2001, which was a key step of China's integration into the global production network. The expiry of the Multi-Fibre Arrangement (MFA) in 2005 released quantitative restrictions on China's apparel exports to the global markets (Evans & Harrigan, 2005). As a result, the transfer of textile and clothing production from overseas into China accelerated (CTIDR, 2009/10). The objective set by the government for this development stage was to increase labour productivity and efficiency in energy use. Official guidelines were issued for industrial restructure towards high-end manufacturing, and technological improvement within the industry became the focus.

This stage is considered as the upgrading period of the Chinese textile and clothing industry (Zhang et al., 2016). Starting from the early 2000s, various challenges diminished the historical competitive advantage of the Chinese manufacturing firms in the global market (detailed discussions in Section 3.2). These environmental changes continuously pushed Chinese textile and clothing firms to strategically upgrade. This thesis analyses firms' strategies in achieving upgrading outcomes, and hence the rest of this chapter centres on this upgrading period, during which challenges and corresponding adaptations were observed in the Chinese textile and clothing sector.

It was introduced in Section 3.1.2 that the development of China's textile and clothing manufacturing, especially for export purposes, has been concentrated in five provinces and one direct-controlled municipality. Among these six areas, this thesis focuses on textile and clothing firms in Zhejiang. Between 2003 and 2013, textile and clothing firms in Zhejiang represented an average of 20.4% of the national industrial total in number of enterprises, 21.8% in sales income, 19.2% in total profit, 22.8% in industrial output and 26.5% in export value.³⁰ Among the six textile centres in China, Zhejiang has maintained a significant position in the upgrading stage. Table 3.2 provides data from the Zhejiang Bureau of Statistics, and shows that domestic and private firms represent the majority of the textile and clothing sector in the area. Because of Zhejiang's significance in national textile production as well as the dominance of domestic private firms in it, this area provides rich materials for observations and analyses of strategic adaptations in China's textile and clothing sector.

Table 3.2 : Share of Domestic and Private Firms in Zhejiang's Textile and Clothing Sector (%)

Year	Share of Domestic and Private Firms
2005	75.2
2006	76.1
2007	76.5
2008	78.1
2009	72.0
2010	74.3
2011	68.6
2012	70.1
2013	71.4

Note: Percentage calculated by the author, with data on number of firms

Source: Data on number of firms from Zhejiang Statistics Yearbook (2006-2014)

Following the introduction of the three post-1978 development stages of China's textile and clothing sector, Section 3.2 and Section 3.3 focus on the upgrading

³⁰ Average percentage calculated by the author with data from China Textile Industry Development Report (2003-2013)

stage, and analyse the competitive challenges faced by the sector and the strategic adaptations that have been observed within it. Detailed discussions centre on Zhejiang province, which is the focus of this thesis.

3.2 Competitive Challenges in the Chinese Textile and Clothing Industry

The advancement of a country's national economy serves as the context of the development of its manufacturing industry. Competitive pressures at the macro-economic level inevitably impact industrial development. For an understanding of the upgrading context of China's textile and clothing firms (i.e. the reasons and incentives for firms to strategically upgrade), it is important to understand the competitive challenges emerging from obstacles in the growth of the national economy, as well as those caused by industry-specific factors.

In the existing literature, studies on the evolution of competitiveness and environmental changes of the Chinese textile and clothing industry involve various perspectives. Some analyses demonstrated the adoption of theoretical frameworks while others followed a descriptive approach. Drawing upon this extant research, Section 3.2.1 discusses the competitive challenges facing China's textile and clothing sector that emerged from the path of national economic growth. Section 3.2.2 focuses on industry-specific challenges with details of the textile and clothing sector in Zhejiang.

3.2.1 Competitive Challenges at the Level of National Economic Growth

In the extant literature, there exist various methods of assessing the international competitiveness of a country. Some are based on the global market share, profitability and growth of firms in the country (e.g. Ren, 2008), some focus on the

overall levels of factor productivity and labour cost (e.g. Chen & Tan, 2004; Lau et al., 2009), and some stress the prosperity and performance of national economic growth (Porter, 1990; Delgado et al., 2012). Despite the variety in assessment criteria, the Chinese economy proved to have achieved a significant advancement in global competitiveness during the post-1978 economic reforms.

Existing studies identified multiple driving factors of China's economic take-off since 1978. These include the central government's guidance of the economy through reform policies (Chow, 2004), the local governments' intervention following fiscal reforms (Oi, 1992), the foreign trade and FDI (Rodrik, 2006; Yao, 2006) as well as the growth of the non-state sector that stimulated competition in the public sector (McMillan & Naughton, 1992; Huang, 2008). Various schools of thought place emphasis on different factors. Among them, the perspective most notably advanced by economist Justin Yifu Lin summarized the critical reason for the economic success as a switch of development focus from capital-intensive industries to labour-intensive industries. It was argued that the fast growth of the national economy was a result of the adoption of a comparative-advantage-following strategy, which allowed China to exploit its comparative advantage in labour intensive industries (Lin et al., 2003).

Lin's perspective highlights the role of institutional instruments in pushing economic growth. Depending on the stage of economic growth, latecomer countries use various mechanisms to overcome economic backwardness (Gerschenkron, 1962). The central government of China implemented strategic interventions in the economy through resource redistribution and capital investment, creating and enforcing protection and incentives for the development of specific sectors. The Household Responsibility System (1979) linked workers' income to their performance, pushing up aggregate agricultural outputs (Lin, 1988) as well as releasing the under-employed agricultural labour (Garnaut & Song, 1999). Fiscal reform (1980) implemented tax-

sharing system between the central government and sub-national governments (Lin & Liu, 2000). The autonomy in fiscal budget and revenue incentivized local governments to support the dynamic growth of rural non-state (collective and private) industries. The open-door policy and the establishment of Special Economic Zones (in the 1980s) promoted export growth and trade liberalization. The dual-track system allowed a gradual introduction and adjustment of marketization (Lin, 2013). These reform policies shaped China's development path in the past over three decades.

Lin's perspective greatly emphasised that the protection and preferential access to capital granted by the state to particular industries should reflect the comparative advantage of the country's endowments (Lin et al., 2003; Brandt & Thun, 2010; Vandana et al., 2013). This means that government interventions accelerate the economic growth under the condition that they are consistent with the endowment structure of the country (i.e. the country's relative abundance of labour, capital and natural resources) (Thorbecke & Wan, 2012). In the case of China, industries that reflected the country's comparative advantage were those that made strategic use of the abundant labour resources.

A country's comparative advantage evolves with its level/stage of economic development. Since the early 2000s, China's abundant labour resources showed signs of exhaustion and the impact was soon detected in the industrial performance. Statistical evidence of the constant and rapid increase in labour costs is widespread, including the annual growth rate of wage levels, the wage gap between China and other Asian countries, and the comparison between the growth of wage levels and the growth of productivity (Cai et al., 2007; Park et al., 2010; Ge & Yang, 2011; Knight et al., 2011; Li et al., 2012; Das & N' Diaye, 2013; Wang & Weaver, 2013). China's wage levels have grown from significantly lower than those in Philippines and Thailand, to a level similar to them. It is believed that wage growth in China has

exceeded productivity growth since the mid-2000s.³¹ This means that labour has become effectively more expensive per unit of product (Li et al., 2012). At the same time, the Chinese economy has suffered from bouts of labour shortage, a phenomenon that was first reported in 2003 (when the position/seeker ratio was rising), and especially evident in the coastal areas (e.g. the Pearl River Delta and the Yangtze River Delta). The aforementioned observations indicated that China is gradually losing its comparative advantage in low-cost labour resources.

In the literature, explanations on this constant and rapid increase of wage levels involve various arguments. Anderson (2006), Cai (2010) and Cai (2012a) held the point that China's aging population dragged down the speed of growth of aggregate labour supply. Cai et al (2007), Park et al (2010), Cai and Wang (2008) and Cai (2010) argued that China is reaching its Lewis Turing Point.³² Islam and Yokota (2008), Minami and Ma (2010), and Knight et al (2011) argued that China's inefficient employment market caused structural barriers in stimulating and maintaining the migration flow of rural labour. Migrant workers dominate jobs with long working hours and poor working conditions (Sun, 1997; Solinger, 1999; Wang & Zuo, 1999). The hardships involved in such jobs (e.g. discrimination and non-payment of wage and pension) have stimulated protests of migrant workers in various forms (Lee, 2007). Meanwhile, there is a lack of access to the welfare system and public services in cities for migrant workers. The hukou system places strict restrictions on migrant labourers, preventing them from obtaining local citizenship, and this has led to the unequal treatment of them. In the meantime, a constant rise in agricultural income since the early 2000s (Park, 2008) attracted migrant labourers to quit urban manufacturing and return to the rural sector.

³¹ Report on the official website of Ministry of Finance of the People's Republic of China: http://gjs.mof.gov.cn/pindaoliebiao/diaochayanjiu/201304/t20130402_805477.html

³²The Lewis Turing Point signifies the exhaustion of migrant surplus labour from agriculture to manufacturing.

Losing the comparative advantage in labour resources, the Chinese economy faces strong rivalry from competitors in both developed and developing countries. The former occupies the high end of the global market with technological advantage, while the latter is catching up with lower labour costs (Ren, 2008; Yan, 2010). This gives the Chinese economy an important motivation for upgrading - to avoid being caught in the middle-income trap. A country is considered as caught in the middle-income trap when it is *“unable to compete with low income, low wage economies in manufacturing exports and unable to compete with advanced economies in high skill innovations”* (ADB, 2011:9). When firm-level labour costs increase and the country reaches middle-income level, the marginal productivity gains from labour-intensive activities may not generate enough economic growth and the economy could stagnate. It is then the time for the country to shift towards capital-intensive activities (Porter, 1990).

The trapped countries previously relied on low-cost labour and technologies adopted from overseas for productivity growth. But the rise in wage levels makes these growth forces disappear. For the economy to grow further, a new driving factor is needed. This means higher efficiency in the production process and innovation in products and services.³³ Moving up the global value chain offers an opportunity for countries to generate productivity growth and escape the middle income trap. Without doing so, the country risks losing out to competition from low-income countries and becoming stuck at a middle-income level of development (Cai, 2012b; Lin & Treichel, 2012; Tran, 2013).

The textile and clothing sector accounted for a large proportion of manufacturing exports and employment creation in the Chinese economy. This industry has a strong labour-intensive nature (Kessler, 1999), and thus the exhaustion

³³ Report on the official website of Ministry of Finance of the People’s Republic of China: http://gjs.mof.gov.cn/pindaoliebiao/diaochayanjiu/201304/t20130402_805477.html

of China's low-cost labour resources is a significant challenge to it. China's competitive advantage in textile and clothing manufacturing has been closely related to the factor condition of labour, i.e. the cost and quality of workers (Yu & Wang, 2006). The industry's post-1978 prosperity has been largely attributed to low-cost labour resources (CTIDR, 2003/2004). Over 80% of employees in textile and clothing manufacturing were migrant labour from rural areas (CTIDR, 2007/2008), and this represents the profit obtained by the industry from China's demographic dividend, i.e. the migration of excess labour resource from agriculture. From a national economy point of view, China needs to strategically adapt its development model to confront the loss of comparative advantage in abundant labour. The textile and clothing sector needs to seek effective solutions to the problems of rising labour costs and labour shortage, i.e. to strategically upgrade.

3.2.2 Competitive Challenges at the Level of Industrial Development

Since the early 2000s, the Chinese textile and clothing industry has suffered from a decline in international competitiveness. As evidence, Tan et al. (2008) reported the relocation of foreign investors from the manufacturing centres of Yangtze River Delta and Pearl River Delta. Yan (2010) called for attention to the profit margin of China's exports - despite the increase of total exports, an annual drop of 0.61% in gross profit margin of the whole industry was observed in 2004 (CTIDR, 2004/2005). McCann (2011) reported that the share of China's textile and clothing exports in markets other than the US and EU kept decreasing since 2005. As the focus of this thesis, Zhejiang's textile and clothing sector also showed signs of a decline of competitiveness. Zhejiang's contribution to the national total of profit in textile and clothing products decreased from 42.2% in 2003 to 20.2% in 2008. During this period, Zhejiang's share of national textile employment has shown an upward trend,

increasing from 15.6% of the national total to 18.0%. At a macro level, these changes suggested a decline of productivity since the early 2000s and demonstrated the need for production automation and efficiency improvement. The rest of this section reviews the existing literature on the industry-specific competitive challenges faced by the Chinese textile and clothing sector. It adopts the framework of Porter's Five Forces (Porter, 1979, 2008) to summarise these changes, and provides detailed discussions on the Zhejiang area.

Entry Barrier - Threat of Potential Entrants

In the literature, most studies do not specifically differentiate the sector of clothing from that of textile, despite the fact that the latter can be more technology- and capital-intensive than the former in certain product categories (Qiu, 2005). When integrated and considered as one sector, the textile and clothing sector is labour-intensive and has low requirements on capital investment and technology. This means that the entry barriers are generally low for this sector, and there is a significant threat of new competitors to the entrenched firms (Kessler, 1999; McCann, 2011).

In the global market, Chinese firms have been a major player in the textile and clothing industry, and thus as a whole have achieved economies of scale. But the sector involves a large number of domestic firms and is dominated by small firm size. Hence the industry suffers from over-capacity and competition over price (Steinfeld, 2004; Qiu, 2005). The constant increases in raw material and labour costs have been diminishing the cost advantage of Chinese firms, and new entrants from low-cost developing countries (e.g. Bangladesh, Vietnam, and Sri Lanka) have become a significant threat (McCann, 2011).

In the domestic market, small firms are the majority in terms of firm number. Statistics of Zhejiang (Table 3.3) provide an example of the dominance of small firms in the sector. Before 2010, the total number of textile and clothing firms in the area

had been increasing. The number reached a peak in 2010 and dropped by 46.1% in 2011. This sudden decrease of total firm number was due to a decline in the number of small firms, as in 2011 the number of large firms increased by 15.6% while that of small firms dropped by 51.9%. This indicated an industry-level consolidation of production capacity with the shut-down of small firms. According to The Development Report of SMEs in Zhejiang Province (2014), the central government directed the local governments to shut down small firms with low production capacity. In 2010, policy guidelines were drawn up by the central government to guarantee that the closing-down of small firms reached government objectives. The report also stated that in the bidding of government-led projects, thresholds on firm size were set to only allow large firms to enter the competition. After 2011, the total number of textile and clothing firms in Zhejiang has been slowly increasing again, with fewer large firms and more small firms.

From the aspect of new competitors, Chinese textile and clothing firms face the double threats of new entrants from both domestic and international markets. In the domestic market, despite the industry-level consolidation and restructure, small firms serve as new entrants and continuously join the competition.

Table 3.3: Number of Textile and Clothing Firms in Zhejiang

Year	Total Number of Firms	Number of Large Firms	Number of Small Firms	Share of Small Firms
2005	8,524	831	7,693	90.3%
2006	9,797	935	8,862	90.5%
2008	11,841	1,059	10,782	91.1%
2009	11,976	1,022	10,954	91.5%
2010	12,548	1,074	11,474	91.4%
2011	6,766	1,242	5,524	81.6%
2012	6,975	1,125	5,850	83.9%
2013	7,529	1,085	6,444	85.6%
2014	7,733	1,023	6,710	86.8%

Note: Percentage calculated by the author, with data on number of firms

Source: Data on number of firms from Zhejiang Statistics Yearbook (2006-2015)

Bargaining Power of Suppliers

China has been a major global producer (in terms of output amount) for important raw materials of textile production (e.g. cotton), but in the meantime, it has also maintained significant consumption of them (Yan, 2010; McCann, 2011). The large volume of purchases granted Chinese buyers some bargaining power over suppliers (Qiu, 2005; McCann, 2011). For the import of standard and undifferentiated materials, the switching costs of Chinese firms from one supplier to another are not high. But the purchasing expense on high-quality materials serves as a key factor impacting the costs of high-end products. Suppliers of such materials therefore have stronger bargaining power over Chinese buyers (Ren, 2008).

The manufacturing of textile and clothing products is closely related to various other sectors, e.g. textile machinery. CTIDR (2003/2004) pointed out that domestically produced textile machinery failed to reach the requirement of Chinese firms in production procedures. Problems such as low capacity (measured by daily output per machine) and single function (compared to multi-function machines this leads to a low production efficiency) caused Chinese firms' preference for imported machinery. According to CTIDR (2009/2010), the imports of textile machinery in China especially favoured products from Germany and Japan (while the main destinations of exports for domestically produced machinery were India and Bangladesh).

During the field research of this current study (in September 2014), the author had a phone conversation with a local government official in the textile sector of Zhejiang.³⁴ He elaborated on the mismatch of local supply and demand of textile machinery, and stated that locally produced textile equipment in Zhejiang was mainly for export purpose, while local enterprises tended to import machinery from overseas. Yan (2010:80-81) claimed that only 10% of the manufacturing equipment in China's

³⁴ The officer did not grant consent for the disclosure of his identity, so neither his name nor his specific institution can be provided in this thesis.

textile and clothing sector reached the advanced level of global standard, while over 60% was below the average. Such outdated equipment needs to be replaced for higher productivity and efficiency. The sector's need for advanced machinery and tools first appeared in the mid-1990s. With the central government's support in tariff exemption, incentives and preferential treatment, imports of industrial machinery increased in 1995 and 1996 (Wang & Oswald, 2005). The continuous reliance on imports of advanced equipment places cost pressure on Chinese textile and clothing firms, and the level of differentiation offered by imported products (e.g. high-quality materials and machinery) grant international suppliers strong bargaining power over Chinese manufacturers.

Bargaining Power of Buyers

The global commodity chains of various sectors in manufacturing are either producer-driven or buyer-driven (Gereffi, 1999). Producer-driven chains refer to capital- and technology-intensive sectors, in which transnational or large integrated industrial firms coordinate the multi-layer production networks. Typical examples of such sectors include automobiles, aircraft and computers. Buyer-driven chains are centred on large, branded firms, and are labour-intensive sectors, such as textile and clothing, footwear, and consumer electronics (Gereffi, 1999; Wood, 2001; Eng & Spickett-Jones, 2009). In a buyer-driven chain, the leading buyer firms have the governing power over the supply networks. In the specific case of China's textile and clothing sector, the large volume of exports granted Chinese suppliers some bargaining power against global buyers. However, Chinese firms lack real strength because of their low level of product differentiation (McCann, 2011), and this means that buyers' bargaining power is still dominant.

The expiry of the Multi-Fibre Arrangement (MFA) in 2005 released previous limitations on the amount of exports from China to international markets. This led to

an immediate increase in global demand for Chinese textile and clothing products. However, new forms of quota and non-tariff barriers on China's textile exports were then adopted by global buyers, e.g. the US, EU, Japan, Argentina etc. (World Bank 2008). It was argued that after the expiry of the MFA, the restrictions faced by Chinese textile and clothing exports became more complicated and diverse, leading to continuous challenges to the industry (Tan et al., 2008; Yan, 2010). Examples of such barriers include technical standards and green requirements, which reflect the global customers' demand for high-quality and ecologically friendly products. Despite China's WTO Accession, it is still allowed for importing countries to place special restrictions such as safeguards on China's exports (World Bank 2008).

China's textile and clothing manufacturers are challenged by the global buyers' chain-governance power, the complexity in export restrictions, as well as fluctuations in the global demand. The outbreak of the global financial crisis in 2007 led to the shrink of international demand for textile and clothing products. Data (CTIDR, 2009/2010) shows that the textile sector in China experienced a serious downturn in early 2009 (January and February): The annual growth of industrial output of enterprises above designated size was 2.6%, 13.9% lower than the previous year, and exports of textile and clothing products fell by 14.8%. The total profit of textile and clothing enterprises above designated size dropped by 11.0% and 25.7% of the firms generated losses. The situation in Zhejiang corresponded to the national trend - its share of the 2008 national textile employment and number of textile enterprises both showed declines. The Chinese textile and clothing sector's vulnerability in surviving market fluctuations is closely related to the standardization and homogeneity of products (The 2011 Report of Development Planning of Zhejiang Province,³⁵ the 12th

³⁵ Issued by Zhejiang Provincial Science and Technology Department, available at <http://www.zjkjt.gov.cn/>

Five-Year Plan of the Textile Industry of China³⁶). Wu et al. (2012) stated that although the clothing sector showed potential for differentiation, the products of the textile sector were generally highly standardised. Product standardization grants buyers bargaining power and leads to a higher price sensitivity. As a result, it is easy for buyers to switch to similar products from other suppliers.

Threats of Substitutes

Textile and clothing products are necessities for consumers, and hence there are no inter-industry substitutes. But there exist intra-industry substitutes (Qiu, 2005; McCann, 2011). The aggregate export of Chinese textile and clothing products is substantial, yet the products are concentrated on the low end of the markets and have low added value (Ren, 2008). Yu and Li (2008) compared the textile exports of China and India, and pointed out that the exported products of India served as highly competitive substitutes to Chinese products. The main customers of the two countries also had overlaps, e.g. the US market.

The threat of international substitutes is caused by the lack of differentiation and low value added of Chinese products. Yan (2010) argued that Chinese textile and clothing manufacturers were keen on expanding production capacity. Product homogeneity led to competitions over price, and this caused destructive effects on industry profitability (Porter, 2008). For product innovation, Chinese firms lacked technical talents and sufficient investments in R&D activities and personnel training. Zhang (2009:58) took the example of a 2006 survey conducted by the Chinese Academy of Social Sciences to show that among 1,597 sample firms (private enterprises in various industries), 66% reported a shortage of talent as an obstacle of technological innovation. It was reported that in 2001 the level of training expenditure

³⁶ Issued by Ministry of Industry and Information Technology of the People's Republic of China, available at <http://www.miit.gov.cn/>

in the textile and clothing sector was only 62% of the average of all industrial firms, and this rate further dropped to 56% in 2002 (Zhang, 2005).

Data shows that China's fibre consumption per capita took 20 years (from 1980 to 2000) to double from 4 to 8 kg, but only 7 years (from 2000 to 2007) to double again to reach 15 kg (CTIDR, 2009/10). The domestic market therefore demonstrated great potential in textile and clothing consumption (Yu & Wang, 2006). The increase in purchasing power of Chinese households directed their taste towards high-end products (Qiu, 2005) with a strong brand name and personalized design. Consequently, Chinese manufacturers are urged to develop product differentiation for survival in both international and domestic markets.

Rivalry among Existing Competitors

McCann (2011) argued that Chinese textile and clothing firms have significantly improved their competitiveness since 1978. This is the result of ownership reform, the adoption of a market mechanism and (more) efficient operation and regulation of the government. Nowadays, the Chinese textile and clothing industry also enjoys a high level of economies of scale and has built up a strong position in the global competition. However, since the early 2000s, Chinese firms have confronted rivals from both developed countries and developing countries, and the domestic market is also highly competitive (Wang, 2004).

In the discussion of threats of new entrants, it was observed that the total number of textile firms in Zhejiang has been increasing, and the sector has been dominated by small firms. The performance of these small firms, however, has not been prosperous. Table 3.4 presents the loss-generation ratio of textile and clothing firms in Zhejiang by firm size. This ratio is calculated as the percentage of the number of firms that make loss to the total number of firms in each category of firm scale. It shows that the smaller the firm size, the higher share of firms that make losses in the

group, and this appears to be a stable and continuous pattern for years (for which data is available). In terms of profitability, all top-100 ranked firms in Zhejiang (ranked with annual sales revenue and profit) are large firms. Moreover, Table 3.5 shows the contribution of small firms to the new product development ratio of the industry. It can be seen that small firms have been holding back the average level of product development in the industry, and this demonstrates their weakness in innovation capability. As the majority of domestic firms, small firms have not been leading the industry forward in terms of competitiveness.

Table 3.4: Loss-generation Ratio by Firm Size (%)

Registered Firm Assets	2006	2007	2009	2012	2013
RMB 5-30 Million	10.8	11.4	14.6	14.7	14.5
RMB 30-50 Million	9.0	10	11	13.1	13.7
RMB 50-100 Million	7.2	8.9	9.7	11.7	11.3
RMB 100-500 Million	6.2	8.0	6.5	8.9	8.1
RMB 500 Million-1 Billion	4.0	5.7	5.6	7.0	7.6
RMB 1-5 Billion	5.0	3.6	7.4	7.1	6.6

Note: The ratio stands for the percentage of the number of firms that make loss to the total number of firms in each category of firm scale

Source: Development Report of SMEs in Zhejiang Province (2008-2013)

Table 3.5: Contribution of Small Firms to New Product Ratio of Zhejiang's Textile and Clothing Industry (%)

2009	2010	2011	2012	2013
-5.67	-7.01	-5.82	-7.86	-7.48

Note: New product ratio stands for the contribution of annual new products to total industrial output; Contribution of small firms (percentage) calculated by the author

Source: Data from Zhejiang Bureau of Statistics, Zhejiang Statistics Yearbook (2005-2013)

The situation of Zhejiang demonstrated the struggle of the majority of domestic firms in market competition. At the same time, Chinese firms are confronted with international rivals with either highly differentiated products or low-cost

production advantage. Both cause significant competitive pressures. Table 3.6 summarizes the discussions in this section on the competitive challenges facing China's textile and clothing sector since the early 2000s.

Table 3.6: Summary of Competitive Challenges in China's Textile and Clothing Sector

Competitive challenges at the level of national economic growth	Continuously increasing labour costs
	Shortage of migrant labour
Competitive challenges at the level of industrial development	New entrants from (low-cost) developing countries
	New entrants of domestic firms
	Increasing costs of raw materials
	Reliance on machinery imports
	Buyers' governing power in the global value chain
	Complexity in export restrictions
	Product homogeneity/lack of differentiation
	Concentration on low value added products
	Over-capacity - competition over price
	Lack of technological and managerial talent
	Insufficient input in R&D and training activities
(Domestic) Dominance of un-innovative small firms	

Source: Summarized by the author.

Incentives of Government Policies for Strategic Upgrading

The development model of the Chinese economy since 1978 has featured the state government's intervention and guidance in the path of growth. However, government policy is not one of the five forces in Porter's analytical framework. Although the government was discussed as a relevant "factor" (Porter, 2008), the framework of the five forces pays most attention to market factors and has a limited role for the state. The changes and challenges in the market environment have been pushing the Chinese textile and clothing industry to upgrade. Government policies in China have also served as a driving factor for such strategic adaptations, providing incentives for firms' upgrading behaviours.

Following the appearance of various competitive challenges in the early 2000s, the industrial upgrading in the textile and clothing sector was soon put on the

government's agenda. The central government set the objectives of increasing R&D investments and promoting domestic brands in the industry (e.g. from OEM to OBM), and emphasized the necessity for firms to switch the development focus from cutting costs to increasing knowledge and skills involved in production processes and products (CTIDR 2005/2006). The CTIDR 2013/2014 reported that as a result of continuous investments in professional and specialised training, the average weight of R&D personnel in the sector has been constantly increasing. Training was organised jointly by higher education institutions and enterprises, and the results were reflected in a 38.7% increase in productivity per capita between 2010 and 2012, which was 7.8% higher than the objective set by the government (CTIDR, 2013/2014).

The support and promotion of industrial upgrading by the central government gradually expanded to further up- and down-stream segments of the sector. Usage of eco-friendly materials was encouraged for the purpose of energy saving in the production process. Marketing of original, domestic brands were facilitated by the government's official authentications. Information and communication systems were developed to support efficiency improvement of production (CTIDR, 2013/2014). The state government also made targeted investments in process and product innovation (Wang, 2013). The promotion of technology development was realized through the set-up of multiple programs in facilitating the transfer of advanced equipment, technologies and designs (Wu et al., 2012).

In the meantime, the central government led the organisation of industry associations within the textile and clothing sector. Some of these associations were run by firms, some were jointly established by firms and local research institutions, and others were under the direct supervision of the state government. These associations played important roles in the upgrading process, serving as a bridge between firms and the government for the promotion of cooperation and collaboration within the

industry. Meanwhile, public service platforms were built up by the government to assist firms' upgrading efforts (CTIDR 2007/2008, 2013/2014). The government support for industry associations and public platforms demonstrated an emphasis on collective behaviours and cooperation among firms in the upgrading process. These policy incentives encouraged firms' upgrading attempts and had significant impact on their upgrading paths.

3.3 Strategic Adaptations of the Textile and Clothing Sector in Zhejiang

Section 3.2 reviewed the competitive challenges facing the Chinese textile and clothing sector since the early 2000s. It showed that both market forces and government policies have been pushing forward the process of strategic upgrading. Along with the contextual changes, the industry has been conducting strategic adaptations. The CTIDR 2007/2008 provided an overview of upgrading activities within the industry. It was based on government survey and adopted the four upgrading trajectories summarized in the upgrading literature. The results of the overview showed evidence for the achievement of all four types of upgrading (*Process, Product, Functional and Chain Upgrading*) among Chinese textile and clothing firms. As a follow-up, the CTIDR 2013/2014 reviewed outcomes of policy guidelines on industrial upgrading and stated that large firms had demonstrated initial achievements in original brand building, although the brand awareness was limited to the domestic market. Small firms were having difficulties in learning and innovation, due to their lack of financial and human capital. This revealed a divergence of Chinese firms' upgrading experiences - firm size appeared to have affected the achievement of upgrading outcomes. It has been large firms that drove the innovation in the industry.

The CTIDR review indicated that identifiable upgrading outcomes were observed among large firms instead of small ones. Research conducted by local

scholars in Zhejiang showed similar observations. Xu et al. (2012) stated that small firms in Zhejiang hardly participate in active R&D. Based on survey data, Xu et al. (2012) argued that small firms generally did not possess enough financial and human resources to initiate technological development. From the aspect of management, managers of small firms generally had poor understanding of the role of innovation. As a result, they tended to make “task-oriented” decisions rather than “strategy-oriented” choices for the development of the firm (Xu et al., 2012:36). This lack of managerial capability limited small firms’ acquisition and mobilisation of strategic resources. It was also pointed out that the condition of equipment in small firms commonly lagged behind that of large firms (Xu et al., 2012). This indicated that small firms had difficulty in achieving the most common step of upgrading - *Process Upgrading*, which was to a great extent attributed to their lack of financial support from bank loans. “*China’s commercial banks and other financial institutions are not competent enough in project evaluation, risk management, and have shortcomings in assessment system as well, which makes them tend to be conservative in loaning*” (Xu et al., 2012:35).

Other research also revealed the tough conditions of the financing of small firms. The Development Report of SMEs in Zhejiang Province (2014) provided survey data and showed that 80% of the surveyed firms reported difficulty in obtaining bank loans. Consequently, 83.9% of these firms’ financial capital came from their own accumulated profits, and 70.6% of these firms expressed concerns on insufficiency of financing for the year. For those that managed to fulfil financing needs from private lending, 9.5% of them borrowed at a rate between 10-15% (the benchmark rate of the central bank was 6%). A further 4.3% of these firms borrowed at a rate above 15%. The report showed that 49.3% of the surveyed small firms paid extra fees for bank loans, for credit rating, insurance, auditing, consulting, account management etc. A

total of 20.3% of the surveyed firms reported special requirements raised by the bank for their loans. For example, some banks asked for early interest payment and some kept the loans as deposits. A series of research on local small firms conducted by scholars in Zhejiang also confirmed these firms' lack of ability in individually upgrading (e.g. Du et al., 2013; Liu et al., 2013).

The situation in Zhejiang demonstrated the resource constraints suffered by small firms in their growth. From the resource perspective, Penrose (2009:283) pointed out that “...*firms that are both larger and older in any economy or industry do tend to have many competitive advantages over smaller or newer firms... Their market connections tend to be more extensive, their standing in the capital market better, their internal funds larger...*” The resource limitations of small firms in initiating strategic changes were therefore not surprising. Small firms in Zhejiang showed evidence of making collective adaptations to competitive challenges instead of strategically upgrading on an individual basis. As a result, small firms as a group lack evidence for active upgrading behaviours and effective upgrading results. They therefore do not provide effective materials for an investigation on strategies that lead to upgrading outcomes.

Based on the overview of the upgrading status of Zhejiang's textile and clothing sector, the firm-level analysis in this thesis adopts a focus on large firms that have demonstrated observable upgrading outcomes on an individual basis. The Chinese textile and clothing sector has been dominated by small firms (in terms of firm number), and this means that small firms are an important part of the overall development of the industry (despite their struggling with achieving upgrading outcomes). Therefore, the rest of this chapter discusses the upgrading attempts of small firms, with the objective of understanding their collective adaptations and upgrading efforts.

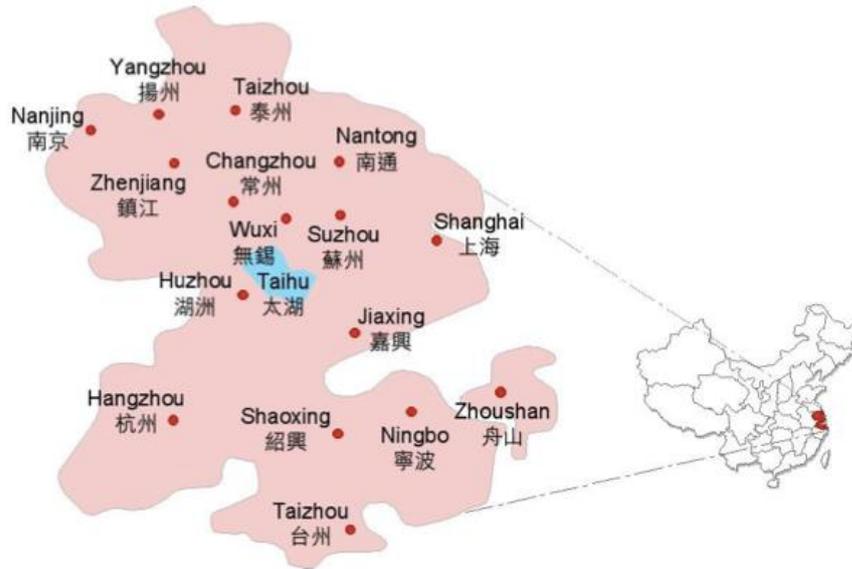
3.4 Collective Upgrading Efforts of Small Firms in Zhejiang

From a resource-based perspective, the existing studies on small firms in Zhejiang have focused on the intermediaries that firms' collective upgrading efforts relied on. These studies revealed the critical role of local intermediaries (public service platforms and inter-firm networks) in assisting small firms' development. *"...specialised intermediary organisation can play the role of resource integrators for small firms and help small firms acquire and utilise external strategic resources"*(Liu et al, 2013:50). Collective behaviours through knowledge- and technology-sharing appeared to have been the solution to strategic challenges adopted by small firms (Guo & Guo, 2013; Shou et al., 2013; Shou & Intarakumnerd, 2013; Wu & Xu, 2013). It is also observed that such collective adaptations are based on the geographical unit of clusters. Small firms were connected through public intermediaries and benefited from their services in the local clusters.

The cluster-based collectivism of small firms in Zhejiang is a result of their historical development paths. Zhejiang is located in the Yangtze River Delta area (main cities illustrated in Figure 3.2). Manufacturing firms in Zhejiang are distributed in the form of clusters in cities and towns. Each of these clusters has a distinctive product specialization and follows diverse historical development paths (Huang et al., 2011). Table 3.7 maps local clusters in terms of product type (CTIDR, 2007/2008; Wang, 2013). The provincial capital - Hangzhou - has a history of producing silk textile and women's wear in silk materials. Geographically next to it is the city of Shaoxing, the key location of textile-material manufacturing. There are two main clusters for clothing production, of which Ningbo in the north enjoys traditional craftsmanship in suit-making and Wenzhou in the south focuses on production of casual wear. The city in the middle, Yiwu, is the production centre of socks. Close to

Yiwu there is another sock production centre, Datang.³⁷ Zhili, a district in the city of Huzhou, has a strong reputation for producing children’s wear.

Figure 3.2: Main Cities in Yangtze River Delta



Source: Li & Fung Research Centre, 2010:24

Table 3.7: Textile Cluster Mapping in Zhejiang Province

Local Cluster	Main Products
Hangzhou	Silk materials and women’s wear
Shaoxing	Textile materials
Ningbo	Men’s suits
Wenzhou	Casual wear
Yiwu ³⁸	Socks
Zhili ³⁹	Children’s wear

Source: Information of key clusters and main products from CTIDR 2007/2008, table organized by the author

The cluster-based collective development of small firms is also a result of the government’s policy guidance. While lacking support for individual small firms, the government intentionally led small firms to collaborate. The SOE reform policy of “keeping the large and letting the small go” serves as an example, as well as the

³⁷ This thesis includes Datang in the discussion of Yiwu cluster.

³⁸ Including Zhuji

³⁹ Located in the city of Huzhou

preference of large firms in banks' loan treatment. Consequently, small firms seek cooperation among themselves to collectively compete with large firms. According to CTIDR 2004/2005, industry associations, together with the local government, set up various public service platforms for local small firms. The common services provided by these platforms included R&D on production technology, quality control and authentication, personnel training, information collection and sharing, and public logistics resources. The CTIDR 2007/2008 stated that the government introduced "pilot clusters" to set examples for collective development of small firms. Government grants were provided to these focused areas to support collective upgrading. The CTIDR 2013/2014 further highlighted the importance of these public services in resource sharing among small firms.

Among the six textile clusters in Zhejiang (as summarized in Table 3.7), large firms in Hangzhou, Wenzhou and Ningbo showed significant achievements and outcomes in upgrading. Case studies on individual firms in these three areas will be discussed in *Chapter Five*. This section focuses on public platforms that support small firms' collective upgrading attempts in the clusters of Shaoxing, Yiwu and Zhili. Shaoxing concentrates on the up-stream of the textile chain, producing mainly textile materials. Activities such as marketing and design are therefore not significantly involved in this area. Instead, R&D is of more importance. Yiwu is famous for its commodity trading market, a public distribution channel facilitating sales of local products (Wang, 2013). Zhili made its name with the government-built centre of children's wears, which created a strong brand name shared by all firms within the area.

Shaoxing - Collective R&D

The Zhejiang Institute of Modern Textile Industry (hereafter ZIT) is a public R&D platform in Shaoxing. ZIT was jointly founded in 2006 by Zhejiang Science and

Technology University, a local (private) science and technology company and Zhejiang University.⁴⁰ As a public platform, ZIT received government funds for purchases of equipment and development of services. It has provided local textile and clothing firms with technological support in new fabric materials, product design, weaving and dyeing, digital printing, product quality control and personnel training.⁴¹ According to the case study conducted by Guo & Guo (2013), ZIT has also been actively cooperating with textile design and research institutions in Taiwan, Seoul and Germany, and shared outcomes of these projects with firms in Shaoxing through specialised training services.

ZIT served as a public research centre, providing R&D resources for sharing among firms in the Shaoxing area. Government funding for ZIT provided a solution for small firms' difficulty in obtaining financial capital for R&D activities. The involvement of local researchers in ZIT resolved the issue of insufficient technological talents for small firms. As a result, small firms gained technological improvements in production procedures and product development, and this provided opportunities for process upgrading and product upgrading. It was reported that in the first four years after ZIT was founded, over 2,800 firms received customised services from it, over 4,000 local employees were trained by it, and 380 patents were obtained as its R&D outcomes (Wu, 2011). The case of ZIT shows that externally available R&D resources can help small firms with the difficulty of insufficient financial and human capital. The public platform, while holding the local network together, served as an important mechanism for resource sharing.

⁴⁰ Official website of ZIT: http://www.zit.zj.cn/htm/m19/c_18_343.htm

⁴¹ Ibid

Yiwu - Collective Distribution and Marketing

Textile and clothing firms in Yiwu specialise in sock production.⁴² This area drew researchers' attention with its distinctive business platform - the Yiwu Commodity Wholesale Market (Ding, 2006; Wang, 2013). The Yiwu Commodity Wholesale Market served as a major distribution channel for local sock manufactures. Through gathering suppliers and buyers, it reduced producers' costs in marketing and sales, and increased transaction opportunities. The market was founded by the local government in 1982 and grew into the biggest industrial product market in China in 1991. In 2006 it reached a transaction capacity of "400,000 commodities in 1,901 categories from 43 industries" Ding (2006:5). Datang, a small town in the city of Zhuji, served as another sock production centre in Zhejiang. Similar to Yiwu, it also had a specialised distribution market for sock products. The sock-manufacturing industry in Datang had over 10,000 firms and over 200,000 employees in 2011, involving mostly small-scale factories (Zhang et al., 2011:982).

The commodity markets in Yiwu and Datang were both established in the 1980s. Their role of collective distribution platforms was strengthened in the 2000s, as a result of the e-commerce development in Zhejiang. According to the annual report of AliResearch (2013),⁴³ the development of e-commerce in China entered its fast-growth period in 2009, and Zhejiang took a leading position with total online retail sales of RMB 202.7 billion in 2012 - an annual growth of 89.5% from 2011 (AliResearch annual report 2012). Following the prosperity of e-commerce, Datang built an e-commerce centre to provide online-transaction facilities and services to local

⁴² In this thesis, the Datang sock cluster is included in the discussion of Yiwu, because of their geographical proximity as well as the similarity in services provided by public platforms in them.

⁴³ The research institute of ALIBABA Group: <http://www.aliresearch.com/>

manufacturers.⁴⁴ Local firms were provided with quick and easy channels for online communication with customers. Meanwhile, online shops made it possible for small firms to promote their own brands with low costs. In order to explore the demand of the domestic market, the town government provided funding to e-merchants and offered training in brand promotion as well as opportunities for inter-firm communication.⁴⁵

Through the local commodity market and e-commerce centre, small firms gained easier access to market information and marketing channels, and became able to build direct contact with customers. This improved their understanding of market demand, and made it possible for brand promotion at lower costs. Consequently, it became easier for small firms to respond effectively to customer preferences. The distribution platforms in Yiwu and Datang bridged local firms to external resources and created the potential for them to achieve product upgrading and functional upgrading.

Zhili - Collective Process Optimisation

The Zhili town in the city of Huzhou is a manufacturing centre of children's wear in Zhejiang. Local production of children's wear started in the mid-1980s and in 2010 there were 12,398 firms with over 250,000 employees (Fleisher et al., 2010; Huang et al., 2011). The annual sales of Zhili products were RMB 13 billion in 2009, accounting for 30% of the national total in domestic market (Fleisher et al., 2010; Huang et al., 2011; Wu, 2011).

Zhili Children's Wear Technology Innovation Centre (hereafter ZCWTIC) is a public service platform, providing local firms with support for operation optimisation.

⁴⁴ Official website of the Datang Sock Distribution Center: <http://datang.ye.1688.com/>
Ali Research Online Case: <http://quan.aliresearch.com/blog/article/detail/id/19761.html>

⁴⁵ Ali Research Institute – Online Case Studies
<http://www.aliresearch.com/blog/article/detail/id/19761.html>

It was founded in 2005 and has been operated by a township enterprise ever since (Wu, 2011). With a connection to the township government, ZCWTIC took multiple roles in facilitating local firms' development. As an industry association, it communicates with the township authorities on behalf of local firms. Firms therefore benefited from targeted grants from the government. Between 2008 and 2010, ZCWTIC obtained government grants of RMB 10 million and distributed them among over 100 local firms (Wu, 2011). As the local chamber of commerce, ZCWTIC supervises firms in production safety and product quality. Before the establishment of ZCWTIC, firms had to send materials and products to the city of Huzhou for quality inspection, which caused high expenses in time and transportation. After ZCWTIC started to provide inspection services, quality control procedures became simpler and cheaper for local Zhili firms (Wu, 2011). Small firms generally lack brand reputation and thus have difficulty in attracting professional personnel. As an intermediary with a government background, ZCWTIC recruits and trains college graduates on behalf of local firms (Wu, 2011), which reduced small firms' expenses in HR management. The access to external resources provided by ZCWTIC has assisted the local firms' efforts in pursuing process upgrading and product upgrading.

Public platforms in the textile and clothing clusters of Zhejiang provided external resources for various types of upgrading attempts among small firms. These platforms had various focuses of their services, e.g. on technological development, personnel training, access to financial capital or optimisation of operation process. The diversity in these services and in the resources shared through them undoubtedly influences local firms' development paths, presenting them with multiple upgrading opportunities.

3.5 Concluding Remarks

The Chinese textile and clothing industry has confronted various competitive challenges since the beginning of the 2000s. The result of these environmental changes has been a decline of Chinese firms' competitiveness in the global market. Consequently, the textile and clothing sector has undertaken strategic adaptations in order to survive and succeed in competition. The extant literature showed that all of the four upgrading trajectories were observed to have been achieved by Chinese firms. It also revealed that large firms and small firms adopted different paths in their upgrading attempts and reached different levels of achievements. Large firms were at an advantageous position due to their resource abundance, and they have demonstrated distinctive upgrading outcomes as well as observable upgrading strategies. Small firms, suffering from resource constraints as well as policy limitations, lacked evidence of upgrading outcomes and strategies on an individual basis. Instead they relied on collective upgrading attempts with external resources provided by public service platforms and inter-firm networks. The review of existing studies showed that the collective upgrading efforts among small firms were based on local manufacturing clusters. The historical development of the Chinese textile and clothing industry has been closely related to cluster development, and this mode showed a continuous trend in the upgrading stage of the industry, especially for small firms.

This chapter reviewed the competitive challenges faced by China's textile and clothing industry since the early 2000s. It serves as the background of strategic upgrading at firm level. This research will now proceed with firm-level analysis on upgrading strategies. *Chapter Four* focuses on the Japanese upgrading experience in the 1970s and 1980s, and *Chapter Five* is dedicated to case studies on large Chinese firms in Zhejiang.

Chapter Four

The Japanese Upgrading Experience in the 1970s and 1980s

This chapter focuses on the Japanese experience of strategic upgrading in the textile and clothing sector in the 1970s and 1980s. This analysis is based on the existing literature that discusses the strategic transitions of Japanese textile and clothing firms in the 1970s and 1980s. The discussions in this chapter rely on textual and contextual analyses of historical academic research (King et al., 1994). It adopts the conceptual framework introduced in *Chapter Two* - the extended RBV framework. From revisiting the historical literature, this chapter reveals the inadequacy of the traditional RBV framework in explaining fully the upgrading strategies of Japanese textile and clothing firms in the 1970s and 1980s. The findings provide evidence and support to the extended RBV framework in this research, and show that a better understanding of upgrading strategies can be gained by a framework that accounts for a wider resource base. Japanese firms' achievement of upgrading outcomes relied not only on the internal resources under their legal control, but also on some external resources that they had access to. These external but accessible resources were mobilized by the firm through its embedded relationships with various parties in its business network. A typical example of such networks is the Keiretsu Business Group. These external resources demonstrated strategic importance and expanded the scope of the firm's resource base beyond its ownership boundary.

Section 4.1 introduces the macro-environment of the strategic transition of Japanese textile and clothing firms, with a focus on the competitive challenges and upgrading incentives. Detailed discussions on the Japanese upgrading experience (Section 4.2 and 4.3) start with a review of firms' upgrading outcomes and proceed to their corresponding upgrading strategies. The discussion then focuses on the critical resources in firms' upgrading process, the mobilizing mechanism of these resources and the scope of them. Section 4.4 summarizes the observations and concludes on the Japanese upgrading experience in this chapter.

4.1 The Upgrading Context of Japanese Textile and Clothing Firms

The Japanese economy experienced a period of rapid growth during the post-war years (1955-1973). The average annual GDP growth between 1960 and 1971 was 8.9%.⁴⁶ This economic take-off placed the country among the wealthiest in the world (Alexander, 2002). Multiple elements were identified as driving forces of the rapid growth. To name a few, these include the country's heavy investment in industrial sectors and infrastructure, the undervalued Japanese yen, and the market demand resulting from the Korean War in the 1950s (Inkster, 2001b). Exports of labour-intensive manufacturing products also played a key role (Drucker, 1971; Gereffi, 1999; Abe & Tanimoto, 2003). The sectors that significantly contributed to Japan's exports in the 1950s and 1960s mainly include textile and clothing, ship building, automobiles and electronics (Abegglen & Stalk, 1985; Porter, 1990).

The textile and clothing industry played an important role in the development of the Japanese economy. Before World War II, it was the main drive of Japan's industrialization (Smitka, 1998; Abe & Tanimoto, 2003). In the 1950s, the country had low levels of wages and labour skills, which were carried over from the pre-war period. Since the textile and clothing industry is labour-intensive and requires low technology (Park & Anderson, 1991), it served as a major contributor to the growth of Japan's national economy and brought in foreign currency during the post-war years (Uryu, 1990). In the 1950s, the textile and clothing sector accounted for 22% of employment and 38% of exports in Japan's manufacturing industry. These figures dropped in the 1960s but still maintained a high level of 14% (employment) and 19% (exports) (Park & Anderson, 1991:536).

⁴⁶World Bank Online Data GDP growth (annual %) by country:
<http://databank.worldbank.org/data/reports.aspx?source=2&type=metadata&series=NY.GDP.MKTP.CD>

4.1.1 Competitive Challenges in the Japanese Textile and Clothing Industry towards the 1970s

In the late 1960s, the promising post-war economic development in Japan encountered multiple obstacles. The increase in oil prices from the OPEC crisis caused soaring energy costs. The revaluation of Japanese yen after the Nixon Shock led to the weakening of overseas demand for Japanese goods (Burks, 1991; Gordon, 2003). Japan's labour supply also became tight in the late 1960s - a decrease in the amount of low-cost labour available to industries resulted in a continuous rise in wage levels (Allinson, 1975; Dore, 1986; Nakayama et al., 1999; Inkster, 2001a; Schaeede, 2008). The increase in wage levels, combined with the rise of raw material costs, created serious challenges to the Japanese economy.

Dore (1986) attributed the difficulties encountered by the Japanese economy to its reliance on low-value-added industries for growth. He argued that the country was “*hooked into*” labour-intensive industries and not making proper use of its capital and technological advantages of the time (Dore, 1986:203). This pointed to the necessity for Japanese manufacturers to conduct strategic upgrading, in order to move away from the reliance on low-cost production. The 1960s was a tough period for Japanese textile and clothing manufacturers (Uryu, 1990), when other Asian regions started to enter the global textile production business (e.g. South Korea and Taiwan). The challenges to exports of products caused the loss of a competitive position for Japanese manufacturers in the American and European markets. In the 1980s, textile products from emerging countries started to penetrate the domestic market of Japan (McNamara, 1995). In order to survive in the fierce competition, the Japanese government encouraged and supported industrial restructuring in the textile and clothing sector, and firms actively adopted upgrading strategies (McNamara, 1995).

4.1.2 Upgrading Incentives of Japanese Textile and Clothing

Firms

In the 1970s, the Japanese government strongly promoted industrial upgrading of the textile and clothing sector (Uryu, 1990). Instead of protecting domestic firms with import quotas and tariffs, the government ran targeted programs to lead the industry transitions and firm-level adjustments. The *Temporary Measures Law for the Structural Improvement of the Textile Industry (Textile Industry Law)* is an important example of such programs. The law was established in 1974 and revised three times afterwards (in 1979, 1984 and 1989). It served as the guidance for the textile and clothing industry to incorporate more knowledge into production and marketing activities. Specifically, it encouraged firms to vertically integrate various production sections. The promotion of vertical integration did not necessarily require firms to merge among themselves, but encouraged closer cooperation and coordination among manufacturers, wholesalers and retailers. This aimed at achieving effective and efficient control over the final products (Uryu, 1990). Vertical integration is an effective way to link production to market demands, because an integrated production chain facilitates rapid responses to market changes. It also helps to increase product quality and enrich product portfolio (Uryu, 1990). The ultimate objective of the policy guidelines was to increase value added in the delivered products (McNamara, 1995).

The *Textile Industry Law* also offered low-interest loans and special depreciation tax allowance to firms, in order to help them tighten inter-firm connections within the production chain (Uryu, 1990). Parallel to the call for vertical integration, capacity reduction in the industry was also promoted by the government. McNamara (1995) compared the industrial adjustment in textile and clothing industries in the US, Europe and Japan, and argued that the Japanese restructuring

focused on the modernization of production processes, and its uniqueness lies in the joint efforts of the government and firms.

Japan survived the competitive challenges in the early 1970s and maintained stable growth for the following two decades (the 1970s and 1980s). According to Nakamura (1995), the industrial adjustment from the 1970s to the early 1980s brought the ratio of job offers to applicants back below 1.0. Secondary industry became labour-saving. The increase in Japan's industrial productivity between 1970 and 1990 was the fastest in the world during the time. The whole economy recovered from a short recession and moved forward at a stable speed (Gordon, 2003). Moreover, with the strong Japanese yen, by the mid-1980s, Japanese firms expanded internationally with substantial investments abroad. The achieved increase in productivity, together with domestic technological innovation, successfully kept the Japanese economy on track for a steady growth (Inkster, 2001b). As the textile and clothing sector gradually entered its maturity phases, it inevitably experienced a decline of importance in exports and the national economic growth. But due to its active upgrading, the decline was considered a *"mild, slow and long-term process"*, showing *"persistent countervailing power"* (Abe & Tanimoto, 2003:2). As a matter of fact, Japan's exports of textile and clothing products tripled from 1970 to 1990 (McNamara, 1995). Although imports significantly increased, the industry successfully retained its export market and kept the import penetration at a low level (Dore, 1986). This was considered a result of maintaining competitiveness: *"A large part of the explanation (but not all) lies in the industry's competitiveness... Japanese producers can compete in foreign as well as in domestic markets."* (Dore, 1986:182)

4.2 The Upgrading Experience of Japanese Textile and Clothing Firms

Following the conceptual framework introduced in *Chapter Two* (the extension on the RBV framework), this section analyses firm-level upgrading in the Japanese textile and clothing sector. The discussion starts from the firm's upgrading outcomes, proceeds to their upgrading strategies, and then focuses on the critical resources in developing these strategies, the mobilizing mechanisms of the critical resources and the boundary of them.

4.2.1 Upgrading Outcomes & Upgrading Strategies

Based on the existing literature, the main achievements of Japan's effort in sustaining the textile and clothing industry in the 1970s and 1980s are twofold - substantial export market shares and a low level of import penetration. The rationale behind the transition of the industry, as pointed out by Dore (1986), was to raise value added involved in the manufacturing-related activities. This objective was realized through switching the reliance on low-cost labour to capital and technology.

The overall results of the industrial restructuring to a large extent reached its initial goal. As per data in Table 4.1, productivity showed a significant improvement. A substantial increase was also observed in the variety of products and the number of brands per product line. In the meantime, a decrease in turnaround time for products was attained (Uryu, 1990). Diversification into textile-related sectors helped to maintain the competitive position of Japanese firms. Diversification out of the textile and clothing sector, into unrelated fields, enabled firms to benefit from other profitable businesses. It was reported that non-textile sales of the nine largest spinning firms (in the early 1970s) rose from 12% of total sales in 1973 to 16% in 1979 (Singleton, 1997). The seven largest fibre-making firms achieved an even bigger growth of non-textile business during the period, from 21% of total sales to 37% (Dore, 1986).

Table 4.1: Hours of Labour Input per Unit Product (level of 1975=100)

Year	All industry average	Cotton spinning	Wool spinning	Cotton, etc. weaving
1970	125.0	117.5	134.2	130.4
1974	101.5	98.5	115.8	107.4
1975	100.0	100.0	100.0	100.0
1976	87.6	85.7	87.9	89.5
1977	87.1	86.0	83.1	82.6
1978	80.0	77.1	80.6	75.1
1979	73.3	62.1	75.4	72.9
1980	73.1	64.1	73.6	68.3
1981	74.6	65.5	70.4	69.1
1982	75.2	60.5	71.0	67.5

Source: Dore, 1986:187, Table 8.1

The Japanese textile and clothing industry was dominated by small firms (Dore, 1986). The literature shows that large firms reacted positively to the government's call for capacity reduction and took the chance to develop product specialization and diversification, while small firms were playing the role of sub-contractors of large firms. Small firms' limitation of resources (e.g. in terms of workforce and financial capital) restricted their attempts for more active adjustments (McNamara, 1995). Studies on firms' upgrading behaviours thus focused on large firms, particularly the top-10 largest textile firms in the 1970s.

These studies provided evidence of several main adjustments observed in the sector. Among these adjustments, modernization of production processes aimed at increasing productivity and reducing costs, vertical integration served as an important approach to improve product quality and enrich product portfolio, and diversification into sectors related and unrelated to textile production provided firms with alternative business opportunities. These observations indicated the achievements of three types of upgrading outcomes among the top-10 largest textile firms (in the 1970s) - *Process Upgrading*, *Product Upgrading* and *Chain Upgrading*. Table 4.2 provides a summary of these firms' main business. During the two decades of the 1970s and 1980s, all ten firms appeared to have attained the three upgrading outcomes.

**Table 4.2: Summary of Upgrading Outcomes in the 1970s and 1980s:
Top-10 Largest Japanese Textile Firms**

Firm	Traditional Main Business	Upgrading Outcome
Toray	Textile: Nylon, tetron, resins;	<i>Process Upgrading</i> <i>Product Upgrading</i> <i>Chain Upgrading</i>
	Clothing: Apparel	
Teijin	Textile: Rayon fibre, resins, , polyester fibres;	
	Clothing: Apparel	
Asahi Chemical	Textile: Textile materials;	
	Clothing: Garment (brassieres, shorts, sports innerwear)	
Kuraray	Textile: Vinyon, ester, rayon;	
	Clothing: Garment	
Mitsubishi Rayon	Textile: Vonnell, resins, rayon;	
	Other: Solvent naphtha	
Toyobo	Textile: Ester, cotton thread and fabrics, synthetic fibres;	
	Clothing: Apparel materials for dress and shirting	
Unitika	Textile: Synthetic fibres, nylon ester;	
	Clothing: Apparel (school uniform, office, uniform, stage costumes, caddie wear, bedding)	
Kanebo	Textile: Synthetic fibres, woollen cloth	
Kurabo	Textile: Cotton spinning, information systems;	
	Clothing: Apparel (uniforms, jeans, casual clothing, formal wear)	
Nisshin Spinning	Textile: Cotton spinning, brake linings;	
	Clothing: Apparel (shirts, uniforms, denim, knitwear);	

Source: Upgrading outcomes summarized by the author, based on Dore (1986), Uryu (1990), McNamara (1995), Singleton (1997), Abe and Tanimoto (2003) and Colpan (2004).

Process Upgrading

The literature shows that modernization and automation of production systems was generally conducted by Japanese textile and clothing firms in the 1970s and 1980s. This observation provided evidence for the achievement of *Process Upgrading*. The efforts made by the textile and clothing manufacturers aimed at improving production efficiency. Specifically, the objective was higher productivity and less waste during the production processes. For this purpose, Japanese firms focused on updating machinery and materials. Dore (1986) provided examples of textile firms' purchase of

high-speed spindles and looms, as well as their usage of higher-quality materials for production. In the clothing sector, an innovative production system was applied by Japanese producers. Its key feature was a high level of automation realized through computer aide, and hence it saved labour in multiple production procedures (e.g. designing, marking and cutting). It also facilitated individualized production, enhancing the flexibility of the production process (Uryu, 1990).

The results of process upgrading of Japanese textile and clothing firms were mostly reflected through cost reduction in the manufacturing activity, which was closely associated with a competitive advantage in cost leadership. It was recognized that in the 1970s, almost all segments of the textile and clothing industry conducted machinery updates in order to save labour (Uryu, 1990). Heavy investments in plants and production equipment were commonly observed in large firms (McNamara, 1995), which highlights the achievement of process upgrading among all the top-10 textile firms (as summarized in Table 4.2).

For the examples of individual firms, Dore (1986) provided a case study on the Nisshin Spinning Company.⁴⁷ He attributed the firm's maintenance of competitiveness to its technological advantage in production activity. Nisshin Spinning was stated to have relied on high-quality polyester staples and low-waste machinery to achieve high efficiency, and this retained the firm's traditional weaving business in a strong position. Additionally, Abe and Tanimoto (2003) discussed three cotton-spinning firms which stuck to the textile manufacturing business and secured their competitive positions.

⁴⁷ Founded in 1907, Nisshin Spinning was the third biggest spinning company in Japan, with a total sales of Y163bn (\$740m.) in 1979. The company was recorded as the only one in the industry that had remained profitable on a consecutive basis during the post-oil-crisis years. (Dore, 1986:164)

They argued that the three firms' (*Kondobo*, *Tsuzukibo* and *Omikenshi*⁴⁸) strong competitiveness in the cotton-spinning business was secured through their emphasis on high-quality raw cotton material and cost-cutting technology in production. These firms achieved business expansion during the tough years after the Oil Crises (Abe & Tanimoto, 2003). As a result of firms' investments in plants, materials and machineries, the Japanese textile and clothing industry increased capital-intensity in the 1970s and 1980s (McNamara, 1995). Process upgrading was observed to have been a common and fundamental solution to the upgrading needs of Japanese manufacturers.

Product Upgrading

In the 1970s and 1980s, the textile and clothing sector in Japan demonstrated a continuous shift towards high-quality and specialized products. Emphasis on the complexity and diversity of products was commonly observed in firms' upgrading behaviours. Examples of new products with higher value added include synthetic and multi-fibres, blended fabrics and yarns, higher-count cottons, clothing with fashionable designs and small-lot specialty items (McNamara, 1995). Technological innovation became a key consideration for Japanese firms during this time period, and it gradually built up the new position of Japanese manufacturing in the global market. The improvements in product quality and brand image, as well as the widening of product range led to the firm's competitive advantage in differentiation.

In order to realize product specialization and innovation, R&D played a key role in the Japanese upgrading processes. Firms' product upgrading was marked with a typical sign of heavy investment of financial capital (Keys et al. 1994). Early in 1914,

⁴⁸ **Kondobo** was established in 1914 in the city of Nagoya. At its foundation, the company had 4,000 spindles and 60 power looms, and its main business included cotton weaving and trading. (Abe & Tanimoto, 2003:12); **Tsuzukibo** used to be a weaving mill founded in 1909 in the city of Chita. Its production capacity was enlarged in the 1930s and its capital accumulated to 30 million yen by 1948. The company then entered the business of cotton spinning and had its name formally changed to Tsuzukibo (Abe & Tanimoto, 2003:14); **Omikenshi** was originally a company focused on peigne production. It was established in 1917 in the city of Hikone. In 1919 the company name was changed to Omikenshi and it started new business in silk spinning, rayon staple fibre yarn and later in cotton spinning (Abe & Tanimoto, 2003:15).

FDI from foreign MNCs brought to Japan managerial and technological knowledge and skills (Fitzgerald & Rowley, 2015). In the early post-war years (the 1950s and 1960s), Japan obtained technologies mainly through purchases from the West and research on existing foreign studies. This reliance on foreign transfer started to change towards the early 1970s. Japanese firms began to realize the priority that original technological capacities deserved. As a result, they started to catch up with the West on R&D activities (Wen & Kobayashi, 2001). Autonomous research and development received great attention and extensive investments during the 1980s. As a result, Japan was considered to have achieved technological independence in the 1980s (Abegglen & Stalk, 1985). Various studies indicated Japan's position as a global leader in R&D inputs and outputs towards the end of the 1980s (e.g. Keys et al., 1994; Aoki & Dore, 1996), measured by R&D expenditure, staff, and reception of patents. The 1980s also witnessed Japan's laboratory boom. Table 4.3 presents data of the top-10 textile firms on R&D expenditures, which demonstrates their continuous and increasing inputs for product specialization and innovation.

Firms were observed to have either upgraded their existing R&D centre, or built new labs with close connection to factories (Aoki & Dore, 1996). Dore (1986) identified two types of innovation observed in Japan's textile and clothing firms. The development on material processing and product technology was referred to as "hard innovation", and research on design and fashion trends as "soft innovation" (Dore, 1986:182). This indicates that for this period of time (the 1970s and 1980s), the focus of R&D activities in Japanese textile and clothing firms included both product development and process optimization. For large firms (where multiple operations were involved, e.g. design, production, marketing and sales), developing new product concepts into commercial outcomes required adaptation of technology within the production unit. Such adaptations involved innovation and increased the level of

efficiency and knowledge in the production processes. They therefore inevitably involved achievements of process upgrading as well as product upgrading. Based on the literature, it can be inferred that Japanese firms' product upgrading behaviours included contributions from process upgrading.

Table 4.3: R&D Expenditures of the Top-10 Japanese Textile Firms

Firm	R&D Expenditures (million yen)				R&D Expenditures/Total Sales (%)			
	1971-75	1976-80	1981-85	1986-90	1971-75	1976-80	1981-85	1986-90
Toray	7,919	9,407	14,454	21,320	2.44	2.26	2.66	3.81
Teijin	6,080	7,417	10,473	15,559	2.40	2.07	2.41	4.74
Asahi Chemical	5,706	8,821	16,385	28,483	1.54	1.88	2.48	3.59
Kuraray	2,884	3,252	4,529	7,436	2.06	1.86	2.25	3.60
Mitsubishi Rayon	3,533	3,442	5,291	9,862	3.61	1.95	2.55	4.70
Toyobo	2,006	2,147	5,830	8,765	0.81	0.90	1.77	2.88
Unitika	1,446	2,263	3,940	5,303	0.79	1.06	1.58	2.07
Kanebo	1,593	1,839	2,036	7,908	0.73	0.56	0.48	1.36
Kurabo	380	356	524	959	0.43	0.27	0.31	0.71
Nisshin Spinning	120	167	334	2,350	0.08	0.13	0.17	1.25

Source: Adapted from Colpan, 2004:7, Table 3

Functional Upgrading

Functional upgrading means changing the mix of activities within the firm through adding new activities or removing existing ones. The commonly discussed upgrading path from OEM to ODM and to OBM is a typical example of functional upgrading. Going through this path, the firm gradually adds higher value added activities (such as design, marketing and sales) into its activity set, and switches its development focus away from production and assembly. In the literature on Japanese upgrading experience during the 1970s and 1980s, there was little evidence of an achievement of functional upgrading in the textile and clothing sector. However, Gereffi's (1999) discussion on the upgrading path of East Asian Economies stated that

Japan, Korea and Taiwan all significantly benefited from an upgrading path from OEM to ODM and to OBM in the textile and apparel industry.

The absence of observation on functional upgrading in this research does not diminish the study by Gereffi (1999), instead it adds to it. Existing literature showed that in the 1970s and 1980s, large Japanese clothing firms occupied the activities of product design, planning and distribution. Production was to a great extent left to small-scale sub-contractors, or organized by wholesalers (Dore, 1986). This means that by the 1970s, large Japanese firms were already conducting a variety of activities along the production chain, while small firms remained focused on production activity. Gereffi's (1999) discussion on Japan was based on the period of the 1950s and 1960s, while this research focused on a later stage (the 1970s and 1980s). Therefore drawing upon Gereffi's (1999) argument and the observation in this thesis, there are reasons to believe that the domestic integration of the Japanese textile and clothing industry in the 1970s was a result of functional upgrading in an earlier period.

This research focuses on the upgrading of Japanese firms in the 1970s and 1980s, due to its theoretical and empirical relevance to the research questions of this study. But it is recognized that industrial upgrading is a lasting process that happens and continues for various reasons. As Gereffi (1999) stated, a country's shifting along the global production chain is caused by a combination of multiple factors. These factors are elements that affect profit distribution along the chain and international trade among countries. The Japanese experience has shown that upgrading is an unceasing process during a long period of time, and not specifically to manufacturers at the lowest end of the chain. Firms at a relatively higher position along the smile curve also conduct upgrading behaviours to further increase their profitability.

Chain Upgrading

Chain upgrading, alternatively referred to as cross-sector upgrading, is the most complicated form of upgrading paths. It involves relocating, completely or partly, the set of firm activities into another sector or industry. In the case of Japanese firms, cross-sector upgrading through diversification was commonly observed in the 1970s and 1980s. Instead of immediately quitting the traditional business in the textile and clothing sector, firms gradually increased the weight of products of other sectors or industries in their portfolios. This kind of upgrading creates parallel sets of firm activities, and firms run multiple product chains within them.

The historical literature focused mostly on large firms, which were typically associated with abundant firm resources, well-recognized company names, and long development histories. Observations on the top-10 largest textile firms showed that when firms diversified to textile-related sectors, they relied on the expertise in textile products cumulated during their historical development in the industry. This commonly allowed firms to differentiate themselves from their rivals with an image of specialized expert producers. The diversification into non-textile sectors involved the creation of businesses that were different from the firm's traditional textile production. The competitive advantage brought by such upgrading behaviours then varied, depending on each individual firm's experience and achievement. Dore (1986) stated that nearly all large textile firms in Japan conducted diversification in the 1970s and 1980s. This point was supported by Colpan (2004) with data on the ten largest Japanese textile firms (Table 4.4). The data shows a decrease in the weight of textile sales in the firm's total sales, and thus indicates an increase in the weight of non-textile products.

Table 4.4: Textile Sales as a Percentage of Total Sales of the Top-10 Japanese Textile Firms (%)

Company Name/Year	1970	1975	1980	1985	1990
Toray	92.1	77.6	74.5	63.2	55.3
Teijin	95.0	70.0	69.7	71.3	64.5
Asahi Chemical	75.0	58.8	38.2	27.6	17.2
Kuraray	82.0	71.8	73.0	69.3	45.3
Mitsubishi Rayon	86.1	80.0	60.6	45.6	48.0
Toyobo	99.0	97.0	89.2	82.2	75.7
Unitika	97.7	92.0	80.9	78.8	66.4
Kanebo	83.1	73.9	68.8	56.9	51.5
Kurabo	95.0	91.4	91.0	88.8	76.0
Nisshin Spinning	88.5	81.0	74.0	76.0	67.0

Source: Adapted from Colpan, 2004:5, Table 2

According to Table 4.4, all of the ten firms were engaged in non-textile products, and the share of these products in total sales gradually increased during the 1970s and 1980s. Some of these firms limited their diversification to textile-related sectors in the period, such as *Unitika*.⁴⁹ It developed a new focus on textile products for industry use (McNamara, 1995). Other firms turned to sectors that are indirectly-related or unrelated to textile and clothing. *Nisshinbo (Nisshin Spinning)*,⁵⁰ for example, which previously produced woven asbestos, brake linings and clutch facings, enlarged its product range to include paper, rubber, plastics and printing machinery (Dore, 1986).

It can be observed that Japanese firms' diversification in the process of achieving chain upgrading showed different directions. Some focused on textile-related sectors and some emphasized non-textile ones. Significant examples include the upgrading paths of *Toyobo* and *Kanebo*. These firms both started as cotton spinners and both ranked among the largest firms in the business (McNamara, 1995).

⁴⁹ Unitika was founded in 1889. The company was among Japan's top three largest textile producers in 1918. It merged with Nippon Rayon and adopted the name of Unitika in 1969. (Company website: <https://www.unitika.co.jp/e/company/history.html>)

⁵⁰ Nisshin Spinning was founded as Nisshin Cotton Spinning Co., Ltd. in 1907, and its initial business focus was production of cotton thread. (Company website: <https://www.nisshinbo.co.jp/english/profile/history.html>
<https://www.nisshinbo.co.jp/english/profile/portfolio.html>)

Before the 1970s, the textile operation within *Toyobo* was integrated with many downstream processes, including weaving, knitting, dyeing and clothing (Colpan, 2004). This deep engagement in textile production meant high costs for the firm to detach from its old businesses and enter new ones. As a result, *Toyobo* maintained a high level of concentration on textile production and only started diversification towards the 1980s. When it began the late diversification (compared to other large firms), it proceeded with a narrow range of new products. Colpan (2004:9) referred to the deep engagement of *Toyobo*'s textile business as a "*domain commitment*". He argued that this commitment created an exit barrier which limited *Toyobo*'s diversification options in the 1970s. Compared to *Toyobo*, *Kanebo* did not have such commitment and started its diversification much earlier, in the 1960s. *Kanebo*'s diversification significantly involved sectors outside textile and clothing.

The historical impact continued to affect the two firms' choices in their latter diversification strategies. *Toyobo*, due to its base of production expertise, focused on technological R&D for upgrading. *Kanebo* relied on its knowledge of markets instead, and developed a distinctive path. As introduced in Dore (1986), *Kanebo*'s diversification started in the 1960s, and by the mid-1980s its main businesses had covered cosmetics, pharmaceuticals, foodstuffs, housing, as well as the original textiles and clothing: "*It [Kanebo] sees a rationale in its diversification - getting close to the whole range of consumer wants with high income elasticity - 'bringing beauty into human life' as the firm's slogan has it*" (Dore, 1986:215).

The difference in diversification directions between *Toyobo* and *Kanebo* serves as an example of the path-dependency in firms' strategic choices. Historical engagement in certain businesses facilitates diversification into related sectors. Setting up new businesses requires start-up investments, and this challenges firms' choices of diversifying into new sectors (McNamara, 1995). The heterogeneity in firm strategy

comes from the heterogeneity in firm resources, and heterogeneous resources are results of the accumulation process in the firm's history of development (Penrose, 1959).

Table 4.5 provides a summary of the upgrading outcomes and corresponding strategies achieved by the top-10 Japanese textile firms. It shows that modernization of production procedures led to *Process Upgrading*, as it increased the efficiency of production processes. Quality improvement and enlargement of the product range resulted in *Product Upgrading*. Diversification moved the set of firm activities from one sector to another, to sectors related or unrelated to textile and clothing, and this led to the achievement of *Chain Upgrading*.

Table 4.5: Upgrading Outcomes & Upgrading Strategies of the Top-10 Japanese Textile Firms

Upgrading Outcome	Upgrading Strategy
Process Upgrading	Modernization and automation of production procedures
Product Upgrading	Quality improvement & Enlargement of product range
Chain Upgrading	Diversification into textile-related or non-textile sectors

Source: Summarized by the author.

4.2.2 Critical Resources Underpinning Upgrading Strategies

Section 4.2.1 discussed the upgrading outcomes and corresponding strategies of Japanese textile and clothing firms. This section focuses on the critical resources underpinning the formulation and implementation of these upgrading strategies. Following the conceptual framework introduced in *Chapter Two*, this analysis aims to link the observations of firms to the theoretical concepts of strategic resources, their mobilizing mechanisms and the firm's resource base.

Process Upgrading

Among the four upgrading trajectories, *Process Upgrading* is a relatively simple and basic move for firms to increase value added. For the achievement of process upgrading, investments in machinery and materials were necessary for the

modernization and automation of production procedures. Meanwhile, workers in the production lines also needed training in operating the new machinery and systems. Abegglen & Stalk (1985) provided an example of changes in textile firms' daily operations in the 1970s and 1980s. It showed that the old production system commonly adopted a one-person-one-machine operating mode in the factory, and this was changed to a one-person-multiple-function system with the purpose of increasing productivity per capita. This indicates that both financial and human capital served as critical resources for the firm's strategy implementation in achieving process upgrading.

Product Upgrading

Product upgrading is realized through adjustments to multiple firm activities, because changes of product quality and range called for new materials, adaptations in production systems, as well as adjustments in marketing and distribution channels. Table 4.3 provided data on R&D expenditures of the largest textile firms in Japan. It showed the Japanese manufacturers' heavy investments in both R&D facilities and personnel for the improvement of product quality and enlargement of product range. The percentage of new entrants to the Japanese labour force with higher education levels increased from below 10% in the 1960s to almost 40% in the 1980s (Abegglen & Stalk, 1985). This indicates that human resources and financial capital were both important factors for the realization of product upgrading. *Chapter Two* introduced the characteristics of the post-war Japanese management model. Some of these characteristics showed strong connections with the product upgrading in the 1970s and 1980s.

Large Japanese firms were able to conduct innovation with sufficient financial capital and research personnel. In terms of access to financial capital, these firms had their main bank as a long-term creditor, which provided constant financial support for

their development. The HR management system in large firms also served as an important basis and turned financial and personnel investments in R&D activities into value added. In large Japanese firms, rewards were homogenized, personnel transfers across various functions were facilitated, and the labour force inside the company was highly immobile (Aoki & Dore, 1996). Such arrangements facilitated teamwork in R&D activities. Sprague (1993) pointed out that R&D activities required cooperation of specialists from multiple functions inside the firm. Engineers were therefore transferred from their original positions to join cross-functional R&D teams for product development. The elimination of heterogeneity in the structure of rewards helped to avoid potential concerns of transferred employees on salary levels. Furthermore, this prevented frictions inside the cross-functional teams (Aoki & Dore, 1996). The J-firm management system therefore contributed to the large firms' achievement of product upgrading which was based on R&D activities. Barney (1991) referred to the management structure and system of firms as their organizational resources. The J-firm structure and system, as the large firms' organizational resources, hence played a key role in their product upgrading.

It is important to note that although large firms were able to initiate active product upgrading, the implementation of their upgrading strategies significantly relied on small firms. Product upgrading requires the implementation of new design and technology involved in complicated product concepts. It was therefore necessary and essential for large firms to guide their small-firm suppliers through the process of changes. Dore (1986) stated that technical advice was provided by large firms to their small-firm partners and such technological assistance was offered on a regular basis and in a continuous manner. Small firms lacked sufficient resources on an individual basis for R&D inputs. Besides benefiting from large firms' technological support, they worked together as networks and joined R&D projects organized by the central

government and local laboratories. Dore (1986:182) referred to these networks of small firms as “co-operatives”, through which small firms set up “study groups” for collective learning.

Without sufficient financial and human capital, small firms could hardly achieve innovation individually. Large firms appeared not able to succeed in product upgrading without the cooperation of small firms either. Therefore, the contractual and collaborative connections among large and small Japanese firms were essential to the realization of product upgrading. Such connections were also part of the key characteristics of the Japanese management system. The J-firm model depicts not only individual firm structures but also connections among firms. The J-firm management system involves both the internal structure of large manufacturing firms and the networks among firms and other parties (e.g. the main bank). As these connections concerned multiple units within a business network (often in the form of Keiretsu Business Group), they served as part of the organizational resources of the J-firm system.⁵¹

Chain Upgrading

McNamara (1995) pointed out that the diversification of Japanese firms differed from that of European and American firms. While European and American firms commonly entered other industries through purchasing stocks of existing firms, Japanese firms set up their own product lines instead. Building new product lines required new teams of employees, new sets of subcontractors and substantial financial support (McNamara, 1995). As a result, small Japanese firms were rarely observed to have conducted chain upgrading (Dore, 1986), as they were unable to afford such input of resources. The chain upgrading of large firms again demonstrated significant impact from the special features of the Japanese mode of management. One such key

⁵¹ Discussions with greater details on the network connections between large and small Japanese firms are included in section 4.3 Resource Mobilizing Mechanisms & Resource Base.

characteristic was cross-shareholding - firms keep stable and close connections among them through holding one another's shares. This prevented takeovers from outsiders and provided an explanation for the fact that purchasing new business was not the Japanese choice of diversification.

Three of the four upgrading trajectories were observed to have been achieved by Japanese textile and clothing firms in the 1970s and 1980s - *Process*, *Product* and *Chain Upgrading*. Japanese firms' process upgrading relied on heavy investments in machinery. Financial and human resources were the key to this upgrading path. Product upgrading relied on R&D within large firms. This also involved significant inputs of the firm's financial and human resources. Meanwhile, it depended on the coordination among large firms and their small-firm subcontractors. The Japanese management system played a key role in unlocking and consolidating the capacity of individual firms' inputs, which highlighted the significance of the organizational resources of the J-firm system. Chain upgrading relied on similar resources to those of product upgrading. It was implemented through building up new product lines and teams. The firm's specific direction of diversification was to a great extent shaped by its development history. This includes the firm's resource base in technology, knowledge and skills. Table 4.6 summarizes the critical resources for the realization of Japanese firms' upgrading strategies in attaining various upgrading outcomes in the 1970s and 1980s.

Table 4.6: Critical Resources Underpinning Upgrading Strategies

Upgrading Outcome	Upgrading Strategy	Critical Resources
<i>Process Upgrading</i>	Modernization and automation of production procedures	Financial resource, Human resource
<i>Product Upgrading</i>	Quality improvement & Enlargement of product range	Financial resource, Human resource, Organizational resource of the J-firm system
<i>Chain Upgrading</i>	Diversification into textile-related or non-textile sectors	Financial resource, Human resource, Organizational resource of the J-firm system

Source: Summarized by the author, extended from Table 4.5

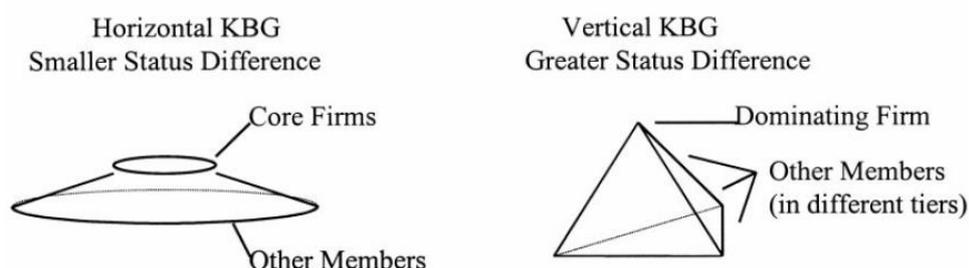
4.3 Resource Mobilizing Mechanisms & Resource Base

The implementation of large Japanese textile and clothing firms' upgrading strategies made important use of their internal assets, e.g. financial, human and organizational resources. Meanwhile in product and chain upgrading, large firms also relied on their small-firm partners to build up new product lines, and hence the realization of large firms' upgrading outcomes required significant involvement of external resources mobilized through inter-firm connections. Small firms did not have easy access to financial and human resources, and hence their upgrading behaviours depended on external resources. These external resources either belonged to the large firms they worked for as subcontractors, or their partner small firms. These observations point to the significance of resources out of the firm's ownership boundary in the firm's strategic behaviours, despite the size of the firm. These external resources appeared to have been accessed through connections among firms.

Large firms' stable access to financial capital came from their close relationship with the Japanese financial institutions. Because of the support of banks, large firms managed to maintain a high debt ratio to realize their pursuit of aggressive growth in market shares (Kester, 1986). A common and important example of such banks is the lead bank (main bank) within a Keiretsu Business Group. A Japanese firm's main bank played multiple roles in its development, including Lender - supplying funds for the firm to grow; Shareholder - through cross share-holding among big firms; Credit Monitor - monitoring firm performance and evaluating risks; Venture Capitalist - supporting heavy investment in advanced technologies; and Company Doctor - cleaning mess and rescuing firms in financial troubles (Miyashita & Russell, 1994). These roles embedded the main bank into the firm's daily operations and strategic development, holding the two parties together.

In *Chapter Two*, Section 2.4.1 introduced the J-firm system, within which the business network in the form of KBG is a typical subject. Horizontal KBGs have a main bank, a trading company (*Sogo Shosha*), and a leading manufacturing firm at the core. These three main parties share equal importance within the group. Vertical KBGs, differently, are built up as a supplier and distributor network with a large manufacturing firm as the head (Lai, 2000). It is this large firm that leads multiple layers of smaller manufacturers surrounding it (Miyashita & Russell, 1994; Lai 2000). The leading firm in a vertical KBG can be (and usually is) part of a horizontal KBG as well (Li, 1999; Lai, 2000), and there can be hundreds and thousands of small firms at lower tiers of a horizontal or vertical KBG (Miyashita & Russell, 1994). Figure 4.1 depicts the two types of KBGs. Among all the Japanese KBGs there were six leading horizontal ones. During the two decades of the 1970s and 1980s, five of them had substantial business in textile and clothing manufacturing (Singleton, 1997). Lai (2000:423) summarized the essence of the KBG form of firm connections as “*a sophisticated, multifaceted management device*”, and claimed that it is different from other forms of firm connections (e.g. trusts, cartels, or conglomerates) and is most adequately described as “*groups of firms with an intricate web of inter-firm relations*”.

Figure 4.1: Structural Difference between a Horizontal and Vertical KBG



Source: Lai, 2000:430, Figure 1

Based on several existing studies, Table 4.7 provides a summary of the affiliation of the ten largest Japanese textile and clothing firms with their related KBGs. All of these firms were members of horizontal KBGs. Among them *Toray*,

Asahi Chemical and *Kanebo* also led their own vertical KBGs (Lai, 2000). Table 4.7 presents the firm's main business, the KBG it belonged to, and the corresponding main bank that supported its development. The discussion in this thesis on large firms' upgrading strategies and critical resources indicates the significance of the firm's relationship with its main bank and subcontractors in the KBG. Its relationship with the main bank served as the stable source of financial capital for upgrading. Its relationship with the subcontractors had a direct impact on the implementation of its upgrading strategies.

For small firms, the role of KBG is more important. Observations on small firms' upgrading experience in this thesis highlight their resource restraints due to the firm size. These firms hence made collective efforts in R&D projects with the government and local research institutes. But in most of the cases they played the role of coordinator and assisted upgrading practices initiated by large firms. The firm resources of these small-scale manufacturers offered limited options for their upgrading attempts. Uryu (1990:11) described small firms' position as "*vulnerable*" within the industry, and argued that this was due to their weak financial power and lack of innovation capacity. In general, small firms are at a disadvantageous position when competing with large firms. Compared to large Japanese firms, small firms could only expect much less financial support. Dore (1986) mentioned government funding for the R&D projects of small textile firms. Yet this was not granted to any individual firm, but solely to their "*co-operatives*". For example, the Japanese government supported networks of small-scale weavers for their collective innovation on materials, production process and market research (Dore, 1986). Active technological advancement of a small firm therefore was achievable only through its network with other firms.

Small firms dominated the Japanese textile and clothing sector (in terms of number of firm). As the majority of the sector, these firms had limited ability in initiating upgrading strategies, but followed large firms' upgrading path through the KBG ties. While coordinating large firms' upgrading actions, small firms shared the outcomes of large firms' upgrading inputs. Such embedded connections among large and small firms in the KBG were described in Lai (2000) as four types of ties: commercial, legal, financial and operational tie. Commercial exchanges among firms served as the channel for information flow, technology dissemination and strategic planning; Cross share-holding among firms sustained the legal connections; Loans among firms or between firms and the main bank in the KBG built up financial connections; Operational ties in the form of the management system within the KBG linked all member firms together in efficiency and productivity. These embedded connections therefore explain the way external resources were mobilized by Japanese firms in the process of achieving various upgrading outcomes. They were therefore the mobilizing mechanism of external critical resources underpinning Japanese firms' upgrading strategies in the 1970s and 1980s.

Singleton (1997:139) referred to the close ties among large and small firms in Japan as a "striking" phenomenon because of their distinctive stability. The Keiretsu form of firm connections has long been argued as an important source of competitive advantage for firms within it (e.g. Gerlach, 1992; Dyer & Ouchi, 1993; Dyer, 1996). Branstetter (2000) used empirical data to test the top-down technology transfer within vertical KBGs and showed the high level of knowledge spillover through the inter-firm ties. Peng et al. (2001b) also argued that the Keiretsu form significantly contributed to the overall cost-reduction for both large manufacturers and their suppliers within the group. The discussion in this chapter shows that the embedded connections among Japanese firms served as an essential mechanism for the

acquisition and mobilization of resources during their formulation and implementation of upgrading strategies. The Keiretsu is a typical form of these relationships, while the co-operation among small firms serves as another example.

Table 4.7: Summary of KBG membership of the Top-10 Largest Japanese Textile Firms in the 1970s

Firm	Main Business	(Main) Keiretsu Group	Main Bank
Toray	Textile: Nylon, tetron, resins; Clothing: Apparel; Other: Polymer chemical and biochemical products	Mitsui	Mitsui Bank
Teijin	Textile: Rayon fibre, resins, , polyester fibres; Clothing: Apparel; Other: Plastic processing, chemical and pharmaceutical products	Sanwa	Sanwa Bank
Asahi Chemical	Textile: Textile materials; Clothing: Garment (brassieres, shorts, sports innerwear); Other: Chemical products, rubber, building materials	DKB	Dai-ichi Kangyo Bank
Kuraray	Textile: Vinylon, ester, rayon; Clothing: Garment; Other: Chemical products	DKB & Sanwa	Dai-ichi Kangyo Bank & Sanwa Bank
Mitsubishi Rayon	Textile: Vonnell, resins, rayon; Other: Solvent naphtha	Mitsubishi	Mitsubishi Bank
Toyobo	Textile: Ester, cotton thread and fabrics, synthetic fibres; Clothing: Apparel materials for dress and shirting	DKB & Sanwa	Dai-ichi Kangyo Bank & Sanwa Bank
Unitika	Textile: Synthetic fibres, nylon ester; Clothing: Apparel (school uniform, office, uniform, stage costumes, caddie wear, bedding)	Sanwa	Sanwa Bank
Kanebo	Textile: Synthetic fibres, woollen cloth; Other: Cosmetics, resins, foods, housing	DKB & Sanwa	Dai-ichi Kangyo Bank & Sanwa Bank
Kurabo	Textile: Cotton spinning, information systems; Clothing: Apparel (uniforms, jeans, casual clothing, formal wear); Other: Electronic equipment, bio-medicals, food processing, real-estate leasing	Sanwa	Sanwa Bank
Nisshin Spinning	Textile: Cotton spinning, brake linings; Clothing: Apparel (shirts, uniforms, denim, knitwear); Other: Household and fine paper, colour imaging, bio-medicals	Fuyo	Fuji Bank

Source: Information on KBG was summarized from Lincoln and Shimotani (2009, 12: Table 2), and partly cross-checked with Singleton (1997) and Lai, (2000); Information of main business was summarized and cross-checked with Colpan (2004), Suzuki (1980) and company websites; Information on main bank is from Lincoln and Shimotani (2009).

Table 4.8 provides a summary of the results of analysis of the Japanese upgrading experience in the 1970s and 1980s. It shows that some of the critical resources (that played a key role in the firm’s upgrading strategies) were not owned by the firm, but mobilized through the firm’s embedded connections with its partners in the KBG network. This supports the extension of the RBV framework proposed in this research, i.e. some external resources that can be accessed by the firm contribute to its strategy development and provide it with strategic options. These external resources hence serve as part of the firm’s resource base. The scope of the resource base expands over the firm’s ownership boundary of its internal assets. In Japan’s example, firms appeared able to mobilize resources within their business network, especially in the Keiretsu form. The KBG therefore serves as an important reference for the scope of the resource base of member firms in it.

Table 4.8: Strategic Resources and Mobilizing Mechanisms in the Japanese Upgrading Experience (1970s and 1980s)

Critical Resource	Mobilizing Mechanism	Resource Ownership
Human resource, Financial resource, Organisational resource of large textile firms	Large textile firms’ organizational processes and routines	Large textile firms
Organizational resource of the J-firm system	Embedded connections among large and small firms, and between large firms and main banks	Other member parties of the KBG, or the KBG system

Source: Summarized by the author.

4.4 Concluding Remarks

The discussion in this chapter focused on the Japanese textile and clothing firms’ upgrading experience in the 1970s and 1980s. It revealed the firm-level upgrading outcomes, and the strategies that Japanese manufacturers adopted for these achievements. Specifically, it analysed the critical resources which served as the basis of the upgrading strategies, with a focus on the mobilizing mechanism and boundary of such resources.

The upgrading literature states that firms normally start with process upgrading, and then proceed to product, functional and chain upgrading. But observations of Japanese firms showed that process and product upgrading was continuous after Japanese firms' achievement of functional upgrading. Meanwhile, studies on R&D activities implied that product upgrading in Japanese firms was accompanied by process upgrading. This means that instead of being categorized into one upgrading trajectory, the firm's upgrading behaviours might include multiple upgrading trajectories.

In the RBV perspective, the path-dependency in resource accumulation and strategy formulation was observed in the Japanese upgrading experience. Firm resources, such as financial and human resources, as well as organizational resources in the form of the J-firm management model, effectively supported the formation and implementation of firm strategies. However, the traditional RBV framework only provided part of the explanation of the Japanese upgrading experience. Some resources that were not covered in the firm's asset ownership proved to have had a critical impact on firms' upgrading strategies. This empirical finding provides evidence for the argument that focusing on resources within the firm's ownership boundary limits the vision of potential strategic options. The boundary of Japanese textile and clothing firms' resource base therefore cannot be adequately defined or understood with the ownership boundary of the firm. This provides support for the extension of the RBV framework in this research.

Some of the key resources that the firms relied on to attain upgrading outcomes did not fall into their ownership boundary, but were mobilized through embedded relational connections within the KBG. These resources were outside the firm's ownership boundary but inside the Keiretsu business network that the firm was part of. This leads to the understanding that external resources of strategic importance expand

the firm's resource base, over the firm's own ownership boundary and reaching out to its embedded business networks. Such findings apply to both large and small Japanese firms, despite the fact that large firms benefited from the abundance of their internal resources while small firms were more dependent on the external but accessible resources.

Following this discussion on Japanese textile and clothing firms in the 1970s and 1980s, the next chapter (*Chapter Five*) analyses the cases of large Chinese firms in their upgrading process. It adopts the same conceptual framework, as used in this chapter on the Japanese experience, to analyse Chinese firms' upgrading strategies and the evolution of their resource base in the upgrading process.

Chapter Five

Textile and Clothing Firms in Zhejiang Province: Case studies of firm upgrading strategies in China

Chapter Three of this thesis provided an overview of the upgrading in the textile and clothing sector of Zhejiang, and led to the observation that small firms have been making collective upgrading efforts. These firms suffer from resource constraints which limit the upgrading outcomes they are able to achieve individually, and so they lack the capacity to develop upgrading strategies on an individual basis. Drawing upon this observation, the analysis of upgrading strategies of individual firms in this thesis focuses on large firms. This chapter concentrates on firm-level analysis of large textile and clothing firms in Zhejiang. It provides in-depth case studies of three individual firms to analyse their upgrading strategies. These analyses pay special attention to the role of external critical resources in strategy development, the mobilizing mechanism of these resources and their boundary.

In this chapter, Section 5.1 provides an introduction to local firms' typical development paths in the city of Wenzhou, Ningbo and Hangzhou. The characteristics of firms' growth paths in these cities are reflected in the strategic transitions of the selected case firms. Section 5.2, 5.3 and 5.4 are dedicated to detailed within-case analyses of Semir, Wensli and Progen Group. These analyses follow the same conceptual framework as that of the discussions on Japanese firms in *Chapter Four* (i.e. the extended RBV framework introduced in *Chapter Two*). They start with the identification of firms' upgrading outcomes and strategies, and proceed with discussions of the critical resources in the upgrading processes, and then investigate the mobilizing mechanisms of critical resources and the boundary of them. Section 5.5 provides a cross-case analysis among the three firms and discusses the implications of the observations to the extended RBV framework.

5.1 Cases of Strategic Upgrading - Pioneer Firms in Zhejiang

In *Chapter Three*, the roadmap of Zhejiang's textile and clothing clusters (Table 3.7) identified six key areas where manufacturing firms concentrated

geographically. Among these areas, the collective upgrading efforts of small firms in Shaoxing, Yiwu and Zhili were discussed in *Chapter Three*. Large firms in Ningbo, Wenzhou and Hangzhou demonstrated strong and consistent competitiveness in the ranking of domestic brands of textile and clothing products (based on customer awareness and annual sales). Their province-wide leading positions are also indicated by the ranking of annual profits by the China National Garment Association.

Chapter One introduced the sampling strategy of the multiple case studies in this thesis. The initial sample selection identified six firms as potential targets for case studies. Four of these six firms are based in the city of Ningbo, one in Wenzhou, and one in Hangzhou.⁵² From a methodological point of view (as explained in *Chapter One*), the further selection of the three case firms is based on their representativeness of theoretical polar types of upgrading outcomes. Moreover, the development paths of these three case firms reflect the local characteristics of the clusters where they are located. As a result, the in-depth case studies demonstrate the development characteristics of the case firms' local areas. Therefore, the analyses of the case firms not only present three individual instances, but also provide insights into the upgrading experience of large firms in the cities of Wenzhou, Ningbo and Hangzhou.

The rest of this section discusses the distinctive development paths of textile and clothing firms in Wenzhou, Ningbo and Hangzhou. These three areas have drawn the attention of some existing management studies, which argued that each of these cities has a unique development model for local firms (Wang, 2013). Among them, firms in Wenzhou have been observed to commonly adopt a virtual business model, textile manufacturers in Ningbo generally benefit from the local "Hong Bang Tailors" craftsmanship, and firms in Hangzhou focus on silk-related products and culture.

⁵² Details on the result of the first round of firm selection are provided in Appendix 1.

5.1.1 Wenzhou - Virtual Business Model

The city of Wenzhou pioneered the development of China's private economic sector. The term "Wenzhou Model" was raised in Jiefang Daily, a state-owned newspaper, on the 12th May 1985. It was reported that 330,000 local people in the city of Wenzhou were running family business in industrial manufacturing. The products were mainly non-agricultural, fast-moving consumer goods. These products required low initial investments in technology and skills, and were mainly labour-intensive. The Wenzhou model therefore referred to the concentrated development of small-scale private enterprises in the area (Wei et al., 2007).

The Wenzhou model was closely associated with the geographical location and economic history of the city. Before the economic reforms began in 1978, Wenzhou was highly undeveloped, lacking land and other natural resources for economic development (Parris, 1993). Insufficient basic infrastructure such as public transportation also limited the local economic growth. As a result, local residents in the city set up small-scale family business and focused on markets outside the area. Benefiting from the economic reforms and state policies that promoted the private economy, private businesses in Wenzhou further grew (Liu, 1992). In 1982, the number of registered private enterprises in Wenzhou surpassed 100,000, which was one tenth of the national total back then.⁵³ From 1980 to 1985, the non-farm employment in the area rose from 22% of the rural total to 38%, and the output value of non-agriculture production increased from 31.7% to 67% of the rural total (Liu, 1992:698-699).

The historical focus on private, family-based business in Wenzhou has been maintained during the reform era and is still evident nowadays. Existing literature on the textile and clothing firms in Wenzhou focused on the "Virtual Business Model"

⁵³ Kaifeng Daily, April 30, 2014 <http://news.kf.cn/2014/0430/91894.shtml>

which was observed to have been commonly adopted by local firms. Significant examples include two local brands of clothing products which are highly competitive in the domestic market - Meters/bonwe⁵⁴ and Semir.⁵⁵ Both firms started from small-scale, family/kinship-based businesses in Wenzhou, and the lack of initial capital caused them to rely on sub-contractors for production activity instead of conducting manufacturing themselves. For sales activity, they depended on franchised distributors. Meters/bonwe and Semir were commonly regarded as the representative cases of textile and clothing firms in Wenzhou.⁵⁶ However, Meters/bonwe moved its headquarters to Shanghai in 2005⁵⁷ and was not based in Zhejiang anymore. The company also started to experience difficulty in sustaining its business in 2012.⁵⁸ Semir then became an outstanding example of textile and clothing firms in Wenzhou.

5.1.2 Ningbo - “Hong Bang Tailors” Craftsmanship

The city of Ningbo has a long history of clothing production. In the Ming dynasty, local tailors travelled to northern China for business and gained a nationwide reputation for excellence in craftsmanship.⁵⁹ In 1843, the city of Shanghai was opened by the Qing government as a treaty port with western countries. This brought to the domestic market Western clothing fashion as well as demand for western-style suits. The geographical proximity of Ningbo to Shanghai provided the local tailors with learning opportunities for suit-making. The first suit store set up by Ningbo tailors in

⁵⁴ Sina Finance: <http://finance.sina.com.cn/leadership/case/20060125/15542306522.shtml>

⁵⁵ Local News: <http://www.meihua.info/a/54783>

⁵⁶ Sohu News: http://www.sohu.com/a/211116798_99958546

Sina News: <http://cj.sina.com.cn/articles/view/1750935105/685d2641019001xsy>

Local News: <http://www.iheima.com/news/2014/0907/145515.shtml>

<http://people.pedaily.cn/u/18908/20170821418830.shtml>

⁵⁷ Shanghai Municipal Commission of Commerce: <http://www.scofcom.gov.cn/swdt/218997.htm>

⁵⁸ Due to decreasing sales, Meters/bonwe started to close shops in Shanghai in 2012:

<http://finance.china.com.cn/industry/special/mbgkc/20120412/651903.shtml>

⁵⁹ Local news: <http://www.55df.com/c/14665.shtml>

the city of Shanghai opened in 1896.⁶⁰ In the following 50 years, 710 more suit stores were opened in Shanghai, among which 60% were owned by Ningbo tailors.⁶¹

Local residents in Ningbo referred to westerners as “red-hair people” when the latter first appeared in the area with their exotic appearance. As a result, Ningbo tailors who made suits for the “red-hair people” were nick-named “Hong Bang Tailors”,⁶² where “Hong (红)” in Chinese means “Red” and “Bang (帮)” means “Group”. This indicates the distinguishable social network of these tailors who worked with a unified style and culture in the clothing business (Wang, 2013).⁶³ The “Hong Bang Tailors” were known for their professional techniques and services. They made the first western-style suit in China and produced the first handbook of suit-making techniques.⁶⁴ They were also the designers of the Chinese tunic suit which later became the standard uniform of Chinese government officials.⁶⁵ To transfer the skills possessed by the group and extend the social network, the Hong Bang Tailors opened clothing schools and passed on their knowledge, skills and experience in suit-making through apprenticeships. Successors of the earliest group of “Hong Bang Tailors” produced suits for several generations of Chinese government officials.⁶⁶

The “Hong Bang Tailors” served as a reliable brand and a guarantee for the quality and service of suit products. Their skills have been inherited, but the majority of the group left mainland China during the civil war, some for Japan and some for Taiwan.⁶⁷ Their expertise thus became rare and valuable in mainland China. In the post-1978 reform era, the clothing manufacturers in Ningbo continued to specialise in

⁶⁰ Ibid

⁶¹ Ibid

⁶² Ibid

⁶³ Local news: <http://www.yhsjzz.com/index.php?m=content&c=index&a=show&catid=104&id=119>

⁶⁴ Local news: <http://www.55df.com/c/14665.shtml>

⁶⁵ Ibid

⁶⁶ Ibid

⁶⁷ Ibid

men's suits and shirts. Their succession of the "Hong Bang Tailors" craftsmanship granted them the advantage of expertise in suit making.

The main products of textile and clothing manufacturers in Ningbo are men's suits and shirts. Well-known local brands include Progen, Youngor, Romon and Shanshan (Chen, 2001). Among these firms, Progen demonstrated the earliest effort in applying "Hong Bang Tailors" craftsmanship to mass-production (in 1986). Romon Group also inherited the "Hong Bang Tailors" craftsmanship, but the firm was founded at a later stage in 1992, and Youngor Group wasn't involved in suit-making business until 1994. Progen was also the first local firm in Ningbo to offer B2B tailoring services (in the late 1990s). Youngor established a sub-brand for tailoring service (MAYOR) much later (in 2009). The development path of Progen therefore serves as a pioneer case for textile and clothing firms in Ningbo.

5.1.3 Hangzhou - Silk Capital & Cultural Centre

Hangzhou has a reputation of China's "Silk Capital" with its long history of craftsmanship in silk production. Archaeological discoveries in the Liangzhu Ruins⁶⁸ included locally made silk products, indicating that the area has a history of silk-making for over 3000 years. In classical Chinese literature, poetries from the Tang dynasty appraised the quality of Hangzhou-made silks. There are also remains of Qing-dynasty silk villages around today's Hangzhou city (Fang, 2014). Textile and clothing firms in this area specialize in silk materials, producing high-quality silk textiles as well as women's wear. Hangzhou is also one of the ancient cultural centres in East China. Literati from all over the country gathered around in the city, building up the rich culture and humanistic atmosphere in the area (Zhuang, 2002).

As a typical silk manufacturer in Hangzhou, Wensli specialised in silk-textile and clothing production. Since 2008 it has established a new, strong position in the

⁶⁸ Ruins of Ancient China in the city of Hangzhou, dated back to three centuries ago.

market of cultural and creative products based on silk materials. The firm's development path combined the textile expertise of the local manufacturing with the unique culture of the city, and hence reflects the characteristics of the local area. Wensli also demonstrated strong competitiveness among rivals in the domestic market. From 1995 to 2010, the number of textile and clothing firms in Hangzhou dropped from over 3,000 to about 30. Firms bankrupted during this period include some nationwide well-known brands, such as Du Jin Sheng which was founded in 1922 and previously exported the largest amount of silk products among all Chinese textile and clothing firms (Fang, 2014). Wensli sustained itself through the transforms and demonstrated strong strategic capabilities in a dynamic context of competition.

Table 5.1 provides a summary of the general background of the three case firms - Semir, Progen and Wensli. Table 5.2 provides an overview on the upgrading outcomes of the three firms. Both Progen and Wensli had a Township and Village Enterprise (TVE) background. The TVEs are firms collectively founded and operated by the rural townships and villages (Sun, 2002; Perotti et al., 2014). These firms were considered as public enterprises under the supervision of local governments. Both Progen and Wensli were then privatized (Progen in 1994 and Wensli in 2003) and are no longer directly connected to the local government. Semir has been a private firm ever since its foundation.

Table 5.1: General Background of Case Firms

Firm	Semir	Progen	Wensli
Location	Wenzhou	Ningbo	Hangzhou
Year of Foundation	1996	1984	1975
Ownership Background	Private	TVE	TVE
Current Ownership	Listed (since 2011)	Private (since 1994)	Private (since 2003)

Source: Summarized by the author with information on company websites

Table 5.2: Upgrading Outcomes of Case Firms

Firm	Location	Main Products	Upgrading Outcomes
Progen	Ningbo	Textile: Suit fabric Clothing: Men's suits, Office uniforms	<i>Process upgrading</i> <i>Functional upgrading</i>
Semir	Wenzhou	Clothing: Casual wear, Children's wear	<i>Product upgrading</i>
Wensli	Hangzhou	Textile: Silk textile Clothing: Women's wear, Silk accessories Others: Silk artwork, Silk adornment, Cultural silk products	<i>Process upgrading</i> <i>Chain upgrading</i>

Source: Summarized by the author with information on company websites, triangulated with existing case studies and archived local news

5.2 Semir Group⁶⁹

In 1996, Semir was founded as a small-scale private enterprise in the city of Wenzhou. Qiu Guanghe (hereafter Qiu), the founder and thereafter general manager of Semir, was born in 1951 in the local area. Qiu noticed the boom of the clothing sector from the prosperity of local firms' OEM business. The success of some Hong Kong based low-end brands (e.g. Giordano and Baleno) inspired him to benefit from the low-cost manufacturing supply in Wenzhou.⁷⁰ He therefore pursued setting up a mainland Chinese brand of casual wear products. As a result, Semir was founded by Qiu, his son, and several friends. In 2011, Semir listed on the Shenzhen Stock Exchange. The registered capital was RMB 60,000, and the founder and his family held 20% of the total equity.⁷¹

Semir's target market segment was young Chinese customers aged between 16 and 25.⁷² It then developed into a low-end domestic brand with both design and price matching the demand of this customer group. The early development of Semir showed typical characteristics of the local Wenzhou area - privately founded, family based, in

⁶⁹ Company official website: <http://www.semirbiz.com/>

⁷⁰ Local news: <http://www.iheima.com/news/2014/0907/145515.shtml>

⁷¹ The remaining 80% of the total equity is publically held (Source: Listing Prospectus of Semir).

⁷² Local news: <http://finance.sina.com.cn/stock/s/20130721/181116193611.shtml>

the sector of labour-intensive consumer goods, and focused on the low end of the market. Also as a common characteristic of textile and clothing firms in Wenzhou, a “Virtual Business Model” features Semir’s operation. Since its foundation, the firm relied on sub-contracted suppliers for production and franchise stores for distribution. The firm itself focused on the design of products and management of production and distribution networks.⁷³

The “Virtual Business Model” of Semir is commonly observed in textile and clothing firms in Wenzhou, and it has drawn the attention of some existing literature (Chen, 2014; Li et al., 2014; Zhang & Wang, 2014). As introduced in Section 5.1.1, the Wenzhou area lacks resources for business development, including physical, financial and human resources. The “Virtual Business Model” relied on external suppliers for manufacturing activity and franchised retailers for product distribution. It therefore leads to a lower requirement on initial resources in starting up a manufacturing business. It was favoured by local enterprises in Wenzhou, where many local brands adopted the same model, such as Meters/bonwe (founded in Wenzhou and moved to Shanghai) and Bailide, as well as some local shoe producers (Song & Fan, 2012; Kaifeng Daily, April 30, 2014). By adopting this start-up model, Semir ran its business on the basis of co-dependency with its suppliers and distributors. This is reflected in the concept of "profit-sharing with suppliers and retailers" raised by Qiu in 1997.⁷⁴

5.2.1 Upgrading Outcomes & Upgrading Strategies

In the early 2000s, Semir started to make targeted efforts on product quality enhancement and development of new products. It set up a new sub-brand “Balabala” in 2002, to extend the product range to children’s wear. The Semir brand has maintained its focus on low-income young customers, while the new brand of

⁷³ Local news: <http://www.meihua.info/a/54783>

⁷⁴ Company official website: <http://www.semirbiz.com/>

children's wear aimed at the mid-income parent groups in China. In the same year, the firm cooperated with JUNGHEINRICH - a German company providing professional logistics solutions - in order to improve the efficiency of production and distribution networks (Zhao, 2010). In the following years, it set up three logistics centres in Shanghai, Wenzhou and Tianjin. Continuous efforts were made to consolidate and integrate supplier and distributor networks. In 2014, Semir realized a higher concentration of key suppliers, reducing the total number of suppliers to half the level of 2013.⁷⁵ Table 5.3 summarizes a series of major events of Semir since its foundation:

Table 5.3: Series of Major Events - Semir Group (1996-2012)

Date	Events
<i>Dec 1996</i>	Semir was founded as a private, small-scale firm in Wenzhou
<i>Mar 1997</i>	The 1st franchise store opened – the firm officially entered the clothing market
<i>Mar 1997</i>	CEO Qiu raised "profit-sharing with suppliers and retailers" as the key principle of Semir's operation. This slogan thereafter remained as an essential management policy of the group
<i>Jul 2000</i>	The Semir Shanghai branch was set up. It partnered with the French company of PROMOSTYL in the analysis and collection of information on market demand
<i>2002</i>	A sub-brand of children's wear was created - Balabala
<i>2005</i>	Semir set up partnership with a professional logistics firm - JUNGHEINRICH from Germany - for the development of a new logistics system
<i>May 2007</i>	The Semir Shanghai production and logistics centre was founded
<i>Mar 2008</i>	The Semir Wenzhou production and logistics centre was founded
<i>Mar 2011</i>	Semir went public at Shenzhen Stock Exchange
<i>Apr 2012</i>	Agreement on building a new production and logistics centre in North China was reached between Semir and the local government of Tianjin

Source: summarised by the author with information from official company website:

<http://www.semirbiz.com/aboutus/milestones.html>

After going public in 2011, Semir started to disclose operation information in annual reports. Continuous data from 2008 to 2015 shows that Semir has remained profitable for the period and achieved an average operating margin of 18.9%.⁷⁶ Along

⁷⁵ Local media interviews with the management team - publicly disclosed on official company website.

⁷⁶ Operating margin calculated by the author (operating profit/operating income) with data from Semir Group Annual Report (2011-2015).

with constant investments in logistics centres and other projects, the profit/asset ratio showed declines in certain years, but maintained an average of 26.2%.⁷⁷

Meanwhile, the annual reports provided explanations of the firm's strategic focus and highlighted its objective of continuous improvement in product quality. Targeted efforts were made through increasing the speed and accuracy of responses to changes in market demand. The 2015 annual report described this as a switch of strategic focus from distribution channel to products. This is consistent with the competitive pressures from the concentration on low-end and homogeneous products outlined in *Chapter Three*, and points to strategic adaptations induced by competitive challenges in the sector. Among the four upgrading trajectories, Semir demonstrated evidence of achieving product upgrading through the strategy of constant improving product quality and enlarging product portfolio. The strategic moves were combined with increasing R&D expenses on product design and development. Semir's efforts in supply chain management after 2000 focused on building new logistics centres and consolidating supplier and distributor networks. This aimed at increasing the level of quality control as well as providing product portfolios that promptly and accurately reflect market demand (Zhao, 2010).

5.2.2 Critical Resources Underpinning Upgrading Strategies

Semir's upgrading strategies for product improvement were realized through changes in both R&D and production activities. Since Semir is not directly occupied with production activity, the inputs of its assets during the upgrading process mainly included R&D expenses and technological staff. The firm's annual reports disclosed its R&D inputs in recent years (Table 5.4 & 5.5):

⁷⁷ Calculated by the author (operating profit/total assets) with data from Semir Group Annual Report (2011-2015).

Table 5.4: Continuous Data on Semir’s R&D Expenses

R&D Expenses	2011	2012	2013	2014	2015
Annual R&D Expenses (RMB 10 thousand)	4,797	5,433	6,603	10,331	13,458
Annual growth in R&D Expenses (%)	4.08	13.27	21.53	56.47	30.26

Note: Annual growth in R&D Expenses calculated by the author

Source: Data on Annual R&D Expenses from Semir Group Annual Report (2011-2015)

Table 5.5: Continuous Data on Semir’s R&D Personnel

R&D Staff	2011	2012	2013	2014	2015
R&D Staff Number	226	317	449	447	510
As a Percentage of Total Employees (%)	13.12	14.11	21.40	22.03	21.67

Note: Percentage calculated by the author

Source: Data on R&D Staff Number and Total Employees from Semir Group Annual Report (2011-2015)

The data in Table 5.4 and 5.5 shows that between 2011 and 2015, Semir’s R&D expenses have kept increasing, with an average annual growth of 25.1%.⁷⁸ The R&D expenses almost tripled from 2011 to 2015, and the number of R&D staff more than doubled. This increasing emphasis on R&D activities reflected through financial input is in line with the firm’s upgrading needs in product development.

The processes of designing, producing and delivering new products include multiple firm activities, among which both production and sales are important elements. Since Semir itself did not conduct these activities, its suppliers and distributors played an important role in the implementation and realization of its upgrading strategies. Semir’s quality control on products placed high requirements on suppliers. Sales and services in franchise stores had a direct impact on customer experience of the products, and distributors also provided key information on market demand and consumer feedback to Semir. This information served as the basis of Semir’s design and marketing activities. Consequently, without a long-term and stable

⁷⁸ Calculated by the author with data from Semir Group Annual Report (2011-2015).

cooperation with the strategic partners (producers and distributors), it would have been difficult for Semir to implement its upgrading strategies and achieve the product upgrading outcome.⁷⁹ These partners' resources in production and distribution therefore were necessary in Semir's upgrading path.

5.2.3 Mobilizing Mechanisms and Resource Base

Semir relied on its internal financial and human resources for R&D in product development as well as supply chain consolidation. But a major part of Semir's upgrading process was realized through its suppliers' and distributors' capacities in production and sales. The strategic partnership in Semir's supply chain and distribution networks had essential influence on the realization of its product upgrading. Yang et al. (2012) stated that in pursuit of stable relationships with partners, Semir offered high-volume orders to selected suppliers, and made efforts in balancing the amount of orders between off- and busy seasons. Li et al. (2014) also pointed out that to protect retailers' profit, Semir offered to take back leftover products in store at the end of each selling season.

In order to obtain more details regarding Semir's mobilization of its partners' resources, the author of this thesis contacted one of Semir's key suppliers for a telephone interview.⁸⁰ This supplier has cooperated with Semir for 10 years, and this placed Semir among its key customers. The supplier's annual output is 5 million clothing items, with a total value of RMB 0.3 billion. Among these products, 50% goes to Semir. The interviewee - general manager of the supplier factory - regarded Semir as not only an important customer but also a strategic partner. When being asked the difference between Semir and the other customers, he stated that the cooperation with other firms is based on contracts signed on an annual basis. But with

⁷⁹ Local news: <http://www.meihua.info/a/54783>

⁸⁰ Interview conducted on 21 Apr 2017 in Hangzhou. Examples of main questions are provided in Appendix 4.

Semir the factory draws up long-term growth plans and follows the latter's lead in improving production skills and capabilities.

According to the manager, Semir leads and assists the supplier's development in three aspects - training, assessment and resource-sharing. Semir organizes communications among groups of suppliers for them to share experiences in the manufacturing process and advice one another on the cooperation with Semir. The communication takes forms of factory tours and forum meetings among suppliers, and third-party training companies are also involved for instructions to the suppliers.⁸¹ This aims at helping suppliers to develop a better understanding of Semir's quality and efficiency requirements of products. The manager emphasized that such training and sharing services are exclusively provided by Semir. The other buyer firms normally send their quality requirements without offering instructions or help to suppliers. For such buyer firms, the suppliers would only make sure to meet their minimum requirements and lack incentives for further improvement. In the aspect of quality control, Semir runs systematic assessment programs four times a year (before the beginning of each season). Such evaluations of suppliers cover the key processes in pre-production preparation and on-site management, and involve product and service quality indicators such as pass rate and on-time delivery rate. Suppliers' performances in these assessments are directly linked to the amount of orders they receive from Semir.

Semir's "Virtual Business Model" is related to the concept of "Virtual Organization" in academic studies, which was raised at the beginning of the 1990s (Nagel & Dove, 1991). This operation form had long been observed in western countries by then, and features the organisation of business activities within a temporary network of multiple firms. The adoption of virtual operation was mostly

⁸¹ The costs of third-party training courses are paid by suppliers. Semir acts as the intermediary organizer of such events.

due to the lack of resources in member firms. This led to a cooperative relationship among them within an identifiable network. Specifically, the “Virtual Business Model” of textile firms in Wenzhou includes virtual production and virtual sales. This means that manufacturing and distribution activities of the focal firm were constantly conducted by its external partners. These production and distribution collaborations served as the foundation of the focal firm’s development (Song & Fan, 2012).

This network structure has fundamental differences from transaction-based inter-firm cooperation. As summarized by Morgan and Hunt (1994:21), transaction-based cooperation has “*distinct beginning, short duration, and sharp ending by performance*”, whereas relational exchange is “*longer in duration, reflecting an on-going process*”. The stable and long-term relationship among Semir and its partners acted as the mobilizing mechanism of the latter’s resources. These resources are outside Semir’s ownership boundary but played a key role in its upgrading process, and they expanded the boundary of Semir’s strategic resources to the firm’s supply chain and distribution networks.

5.3 Wensli Group⁸²

Wensli was founded in 1975 in Hangzhou, as a township factory collectively owned by the local government. The first manager was a civil servant in the local government and appointed as the leader of the factory. The firm started privatizing in 2000, completed the process and became a limited liability company in 2003. It did not go public, and the management has remained in the family of the first manager. The current chairman and CEO of Wensli are the first manager’s daughter and son-in-law. Interview data shows that the decision-making process in Wensli mainly includes members of the senior management team. This implies that the local government did not maintain direct involvement in the firm’s operations after its privatization. Wensli

⁸² Company official website: <http://global.wensli.com/>

Group has been in a leading position in China's silk industry.⁸³ According to the official company website, the group had over 2,000 employees and annual sales of RMB 16 billion in 2016.

5.3.1 Upgrading Outcomes & Upgrading Strategies

Textile and clothing firms in Hangzhou mostly produce silk textiles and women's wear. These were also Wensli's main products before the firm's strategic transition in the early 2000s. Silk products previously enjoyed strong advantages in the competition with chemical fabric products, as the texture of the latter was relatively hard and rough. However, technological innovations on porous fibre in 2003 improved the softness of chemical fabrics, making them a cheap but qualified substitute for silk. This caused serious shocks to the market of silk products. As a result, silk-textile producers encountered difficulty in maintaining profitability after 2003, including Wensli:

"Many silk producers in Hangzhou went bankrupt between 2003 and 2006. We were also suffering from massive loss. We had 60 stores across the country, and they all had excess inventory." (CEO, 21 Jul, 2015)

Around the year of 2005, another issue challenged traditional silk producers in Hangzhou - recruitment of factory workers became difficult and wage level rapidly increased:

"In 2005/2006, I found that factory workers started to cost more than fresh college graduates... Production activity became rather expensive. As a result, I tried to think of a way to make use of the skilled labour [college graduates] instead of the unskilled ones [migrant labour from rural areas]. " (CEO, 21 Jul, 2015)

⁸³ Ibid

Since the early 2000s, Wensli diversified into cultural and creative industry with products based on silk materials. The company uses silk material to produce creative products with traditional Chinese cultural elements, e.g. silk painting decorations and silk books. Since the year of 2008, Wensli has made great efforts to promote cultural elements in its products. This was realized through sponsoring a series of major international events. The strategy of diversification into cultural and creative sector with expertise in silk materials led to Wensli's achievement of chain upgrading. Table 5.6 presents the main events in Wensli's development.⁸⁴

Table 5.6: Series of Major Events - Wensli Group (1975-2015)

Date	Events
1975	Wensli was founded as a TVE in the city of Hangzhou
1985	The excellent performance of Wensli gained broad attention from local government and press
1991	Wensli was named nationwide "Excellent TVE"
1992	Wensli reached the national criterion for "Mid-size Enterprise"
1995	Wensli reached the national criterion for "Large-size Enterprise"
1997	Wensli obtained ISO9002 quality management system certification
2000	Wensli started privatization
2003	Wensli was fully privatized and became a limited liability company Wensli started to reduce production capacity and create new business unit
2007	Wensli obtained sponsorship license for the 2008 Beijing Olympic Games
2009	Wensli obtained sponsorship license for the Shanghai World Expo 2010
2010	Wensli sponsored the 16th Asian Games in Guangzhou
2015	Wensli obtained sponsorship license for the G20 Summit 2016 in Hangzhou

Source: Summarized by the author with information from official company website (<http://www.wensli.com/?q=taxonomy/term/7/2015>) combined with interview data.

Wensli started to adopt a diversification strategy in 2003. The firm gradually turned its business focus from traditional silk textiles and clothing to cultural and creative products. The first step was reducing the production capacity of traditional products, and diversifying into the silk-material gift sector. Because of the challenge brought by new chemical fabrics, the early 2000s was a period when many silk manufacturing firms in Zhejiang chose to outsource production to smaller firms.

⁸⁴ The company is continuing with its diversification. In 2015 it acquired a French textile enterprise, aiming at creating a new product line of luxury fashion products.

Wensli also subcontracted production activity to small suppliers in the nearby areas, and started to focus on design of gift packages and promotion of gift sales. For the new business, the CEO Li Jianhua (hereafter Li) set up a new firm with a registered capital of RMB 500,000. This new firm took orders from customers and purchased finished products from subcontractors. The purchased products were mainly silk scarves and pajamas. Wensli then designed the product packages and sold them as gifts.

The strategy of diversifying into silk-material gifts was Li's first attempt to differentiate Wensli from its competitors in the sector. But during the first few years in the new sector, Li did not figure out a clear path for Wensli to stand out in the local cluster:

"I do not see strategy as something that a firm can set up and stick to. You figure it out gradually, and it keeps changing." (CEO, 21 Jul, 2015)

During Wensli's early transition in the gift sector, Li noticed the potential of cultural concepts in promoting sales - gifts became more meaningful and valuable to consumers when there were cultural stories behind them. Consequently, Wensli began to pay attention to cultural elements that can be linked to silk products. The company encouraged employees to research Chinese historic stories related to silk materials. For example, speech contests were organized as a training process for employees to present products with a cultural background. Gradually, cultural elements became the potential basis of Wensli's product innovation. This led to the second step of Wensli's strategic transition - further diversification into cultural and creative industry. This time the firm focused on innovative concepts and designs with silk-material products. Wensli set its strategic focus as creating silk-material products to represent China's traditional culture. Such products were mainly scarves, and later the product range expanded to silk books, silk painting decorations, and other types of silk artworks.

“It was with gift sales that we gradually realized the benefit of including cultural elements in our products. Then we tried to explore the Chinese culture behind silk materials, and in this process we accumulated and developed our understanding of running a silk brand with cultural elements... I don’t think any other firm had the same vision [of the value of cultural elements in silk products] as we did... This distinguished us from the competitors.” (CEO, 21 Jul, 2015)

The adoption of the “cultural and creative product” concept was a major turning point of the company’s strategic transition, and it was achieved through a vital event in 2008 - the Beijing Olympic Games. In order to put the new strategic direction on track, managers of Wensli worked on the establishment of a strong brand image closely associated with Chinese silk culture. However, this required substantial investment in advertisement and the company could not afford it. The 2008 Beijing Olympics Games then provided an opportunity:

“Sponsoring international events are brilliant marketing opportunities. Through these events, we sell products, promote our brand and build networks with media. Photos on our website with government officials wearing our products drew massive attention to our brand... I believe that this is the most cost-effective marketing approach.” (CEO, 21 Jul 2015)

The experience of sponsoring the Beijing Olympic Games gained Wensli opportunities to participate in other events (e.g. 2010 Guangzhou Asian Games, 2010 Shanghai Expo, 2016 G20 Hangzhou Summit etc.). Wensli then quickly built up its new position in the silk market. It became a symbol of the Chinese culture and thus a popular choice for cultural and creative gifts. The brand image of Wensli was then differentiated from those of other silk producers.

During Wensli's transitions, its production processes required constant upgrading for both the traditional business and the newly established product lines. Adopting advanced technology in production activity therefore served as an important basis for the firm's growth. Wensli updated its production machinery early in the 1990s. From the 2000s it started to diversify out of traditional manufacturing of silk clothing. The diversification strategy upgraded Wensli from a traditional manufacturer in OEM business to a distinctive brand name with OBM business. During this process, the firm reduced production capacity through removal of most production facilities, but it kept the most sophisticated production procedures.

“For high-end products (produced in small-lots), we consider it important to produce them ourselves rather than relying on sub-contracted suppliers. (In 2012) We invested over RMB 300 million in a new factory at Xiasha district of Hangzhou. It is mainly used for high-tech production processes. We only keep small-scale production activity with advanced technology and skills (e.g. high-quality digital printing).” (CEO, 21 Jul, 2015).

Wensli kept increasing the technological level of the production procedures. These efforts in process upgrading also provided key support for the diversified business unit on cultural products:

“This new factory in Xiasha is equipped with the most advanced technology in silk-material processing. It thus supports our continuous creation of new product and business lines.” (CEO, 21 Jul, 2015)

The constant improvement in production processes led Wensli to the achievement of process upgrading, along with chain upgrading.

5.3.2 Critical Resources Underpinning Upgrading Strategies

Wensli started the new business of silk gifts in 2003. To realize this first step of diversification the firm needed to remove its historical burden of the old business

model - assets for production activities. As a previous TVE, Wensli had a large amount of real estate assets and a number of plants for production activities, but limited cash to support its new business in gift sales. The management thus wanted to dispose of the lands and buildings for cash.

“We needed to invest in the new business of silk-gifts, but the firm was not making profit and was living on bank loans... I wanted to sell out our production plants, but it was hard.” (CEO, 14 Jan 2016)

In order to implement the new strategy, Wensli negotiated with the local government to join the ongoing urban renewal project. As a result, the firm’s lands and buildings were involved and the municipal government acquired them with financial compensation.

“With the government’s support, we adjusted our asset structure and invested in the new business... We recruited college graduates to be salesmen, and were able to develop the new firm for gift sales.” (CEO, 14 Jan 2016)

The local government helped liquidate Wensli’s non-strategic assets, which provided the firm with financial resources for the implementation of the new strategy. The CEO stated that without Wensli’s relational connection with the local government, it would have been very hard to initiate the strategic change.

“I took over the management of Wensli in 2003. Before that, the founder general manager Shen Aiqin had built close connections with the local government. These relationships played a critical role in facilitating our changes.” (CEO, 21 Jul 2015)

Wensli was founded as a township collective factory producing silk materials. The first manager Shen Aiqin (hereafter “Shen”) was previously a local civil servant. During Shen’s stewardship of Wensli, she took up the positions of vice chairman of

the association of China's township enterprises, vice president of the China Silk Association and China National Apparel Association, and executive director of the China Textile Industry Association.⁸⁵ Most importantly, she gained the position of the Zhejiang deputy of the National People's Congress for two years in a row.⁸⁶ Through attending government meetings and making speeches on various policy-making conferences, she promoted Wensli as a made-in-Zhejiang brand and built strong networks with local and state-level government officials. Therefore in 2003, through Shen's network, Wensli managed to join the urban renewal project and realize its strategic transition.

"We have relied on financial resources, human resources and social networks to make changes to our firm. The social networks especially helped to form our strategy. We paid attention to keep the important contacts... Shen and I both deem that it means much to the development of Wensli." (CEO, 21 Jul, 2015)

Wensli's connection with local government proved essential again in the second diversification of the firm. There was a fierce competition among firms for the sponsorship license of the Beijing Olympic Games. Wensli became one of the candidates in 2006, and proposed product design catalogues with silk materials. Instead of waiting to be selected, Wensli made use of its social network to pursue a winning chance. When Shen attended a government conference, she showed Wensli's catalogue to state government officials, and explained Wensli's objective of promoting Chinese culture through silk products. The state government officials then recommended Wensli's design to the organizing committee of the Olympic Games in

⁸⁵ http://www.worldsilk.com.cn/content/2014-08/13/content_5400938.htm

⁸⁶ The interview data does not include detailed information concerning how Shen won the position of the Zhejiang deputy of the National People's Congress. But based on informal talks with the firm managers and local Zhejiang scholars, it can be inferred that her success in gaining this position benefited from the TVE status of Wensli back then.

Beijing. Soon after, Beijing sent out a consulting team to Wensli for discussion of potential silk products for the games. As a result, Wensli won the opportunity to provide uniforms, medal ribbons and souvenir products with silk materials for the games.

Wensli's Olympic products significantly featured Chinese culture with creative design of silk materials. They therefore successfully attracted attention for the Wensli brand. Wide media exposure greatly promoted the brand name, and the company's concept of cultural product was firmly established among consumers. During its strategic transitions, Wensli reached out to government authorities to acquire financial resources and access market information and marketing opportunities. The firm's accumulation of network connections during its early TVE stage has had a decisive impact on its upgrading path.

5.3.3 Mobilizing Mechanisms and Resource Base

Wensli's evolution of firm strategies showed the important role played by the firm's connection with the local government. In the early 2000s, Wensli mainly relied on bank loans for financing. The TVE identity provided the firm with easy access to local commercial bank loans, as the local government acted as its guarantor.

"In 2000, Wensli had a total bank loan of about RMB 100 million... I then decided to increase it for investments in strategic changes... Between 2005 and 2008, our investment in new projects was not yet profitable and so the firm was almost completely living on bank loans... "(CEO, 21 Jul, 2015.)

For the initial upgrading in 2003, Wensli's connection with the government enabled the firm to adjust its resource base - replacing physical resources with financial capital. This greatly facilitated the firm's strategic changes. Although the formulation of the strategy was the managers' decision, its implementation relied on government support. In 2008, Wensli diversified into the cultural and creative sector through sponsoring the

Beijing Olympic Games. The event served as a critical marketing channel for Wensli's brand image, and it was a result of the firm's connection with the local government. The support of the local government again played a decisive role in pushing Wensli on its new strategic path.

Local governments play a critical role in organising economic activities in the township and village areas, especially when there lacks market mechanisms to balance the power (Perotti et al., 2014). Under such circumstances, attachment to the local government leads to easier access to resources, e.g. bank loans. For TVEs, the governments were directly involved in the firm's management (Sun, 2002), and as these firms mainly employ local people, their profitability is closely related to the prosperity of the area. The major wave of TVE restructure in the mid-1990s resulted in most TVEs turning into private firms. But the privatization was a gradual process. In Wensli's case, it took three years for the firm to fully privatize (2000-2003). Wensli's transition in 2003 showed that towards the end of its privatization process, there still remained close connections between the firm and the local government. Although the government's direct control through legal ownership was fading out, the survival of Wensli was still closely related to the growth of local economy. This made the Wensli case a typical example of the boundary blurriness in the Chinese business context. Wensli's TVE background provided the founder manager opportunities for network-building with the local government. When Shen was leading the firm, this network was an institution-based tie. After the privatization of Wensli and Shen's retirement, the connection became a personal tie between Shen and some government officials. This connection was then inherited by the second generation of Wensli's management team and continued to serve the firm's growth.

Through Wensli's upgrading experience, it is observed that the resources mobilized in its realization of upgrading strategies involved the local suppliers and

local government. Its former TVE status also implies that it has received support from the local banks and local media throughout its transition process. This means that the boundary of its strategic resources was much wider than the firm's ownership control of assets and was expanded to its local business network.

5.4 Progen Group⁸⁷

Progen was founded in 1984, in the village of Jiangliu near the city of Ningbo. It was set up as a collectively owned village workshop attached to the local government (a TVE). Twenty Jiangliu villagers invested RMB 1,000 and purchased several sewing machines to set up the factory. At the early stage its main products included gloves, aprons and oven-sleeves.⁸⁸ In 1994, Progen was formally privatized and became a joint-stock company. The company is not publicly listed and few details on its ownership structure have been disclosed. There has not been direct evidence showing that the firm was sold by the government to its founders, but the management has remained in the family of the founder manager (one of the twenty initial investors).⁸⁹

Based in the city of Ningbo, Progen Group demonstrated in its historical development the typical characteristics of the local textile and clothing firms. These firms are considered as possessing highly professional suit-making skills, and such skills came from traditional craftsmanship inherited from the "Hong Bang Tailors" in the area (detailed information on "Hong Bang Tailors" was provided in Section 5.1.2).

At the foundation of Progen in 1984, this small TVE did not have industry-specific expertise, and hence it struggled to gain profit (Han, 2011; Wang, 2013). In

⁸⁷ Company website: <http://www.progengroup.com/en/index.php/about/intro/1/2>

⁸⁸ Local news: <http://www.zjol.com.cn/05zjmj/system/2005/10/20/006340349.shtml>

⁸⁹ By 2008, Progen had over 4,500 employees and an annual sales income of over RMB 1.6 billion (Company website: <http://www.progengroup.com/en/index.php/about/intro/1/2>). No updated data on annual income or number of employees available on the company website, but local news showed that the firm has remained a large-scale enterprise, an item which is also used by the company for self-reference.

1985, the founder manager Shi Liying (hereafter Shi) noticed a news report about one of the well-known “Hong Bang Tailors” in Shanghai, Lu Chengfa (hereafter Lu). From the news Shi realized that Lu was born in Jiangliu village, where Progen was based (Wang, 2013). Shi then attempted to build up a connection with Lu and persuade him to introduce suit-making techniques and expertise into Progen. In their meetings in Shanghai, Shi emphasized the TVE identity of Progen back then, and expressed her hope to create employment for Jiangliu village (the hometown of Lu) through the growth of Progen.⁹⁰ It was recorded that after three visits, she succeeded in persuading Lu,⁹¹ who then shared his self-designed sewing templates of suit-making with Progen.

Despite Lu’s provision of technological instructions to Progen, he remained as an external consultant of the factory. Lu continued to help Progen with the training of over 300 workers in various production procedures⁹² and this turned the village-based workshop into a proper factory with standardized suit-producing processes. After cooperating with Progen for two years, Lu joined Progen in 1987 as the technical director of the group, and remained an employee of the firm until he passed away in 1995.⁹³

5.4.1 Upgrading Outcomes & Upgrading Strategies

Since Lu joined Progen, the firm has been at the forefront of the sector in terms of suit-making techniques and skills. After its privatization in 1994, the management team attempted to identify a new strategic direction for differentiating the firm from its rivals. The idea of expanding the product portfolio with business suits was then initiated.⁹⁴ The new product line aimed at catching more of the B2B market share for

⁹⁰ Local news: <http://www.zjol.com.cn/05zjmj/system/2005/10/20/006340349.shtml>

⁹¹ Local news: <http://www.55dianping.com/98.html>

⁹² Local news: <http://www.globrand.com/2006/55319.shtml>

⁹³ Local news: <http://www.55dianping.com/98.html>

⁹⁴ Ibid

suit production. This change ended up serving as the basis of Progen's later strategic upgrading.

Towards the late 1990s, Progen developed new product lines of business suits - office uniforms, and expanded its market range to focus on business customers. As a further development of this new business, Progen switched its strategic focus from mass production to tailoring services. This expanded its firm activities to original designing and personalized services, and the strategy of adding tailoring services - designing office uniforms for business consumers - enabled Progen to realize functional upgrading.

Among the textile and clothing manufacturers in Ningbo, Progen was the first to add personalized design and service into its business model. The managers held the belief that the craftsmanship of "Hong Bang Tailors" had the potential to create more value for Progen through tailoring services (Feng, 2008). Traditional "Hong Bang Tailors" provided package services to customers, from collecting personalized demands, to design and cutting, to sewing and delivery of products, and to after-sales modification and redesigning. Suit products from mass-production hence buried this prestigious expertise that Progen possessed. As business suits (office uniforms) required brand new designs and cutting, they provided an ideal opportunity for Progen to apply tailoring services.

In 2005, the city of Ningbo gained its reputation of "The Capital of China's National Brand" (Song, 2006). Local enterprises have created many competitive brands in the domestic market. By the end of 2007, a total of 159 brands registered in Ningbo gained the authentication of "China's Famous Brand" (Pang, 2010). What distinguished Progen from other textile firms in Ningbo was its tailoring business in designing and producing office uniforms for business consumers. According to an interview with the group's current technical director and chief designer, this strategy

was realized through “a combination of traditional ‘Hong Bang Tailors’ craftsmanship and modernized production processes.” (Han, 2011:62). Progen constantly updated its production system with the objective of production automation. In its current system, consumer and product information is recorded and transferred among various production segments through computer networks. The automation and modernization of the production system marked Progen’s achievement of process upgrading along with functional upgrading. Table 5.7 provides information on the major events in Progen’s development path.

Table 5.7: Series of Major Events - Progen Group (1985-2011)

Date	Events
1984	Progen was founded as a TVE in Ningbo
1987	Hang Bang master Lu Chengfa joined Progen as technical director
1990	Progen suit was awarded “high-quality product” by the Ministry of Agriculture
1992	Progen initially put forward the concept of business suit in the industry
1994	Progen carried out ownership reform and formally began privatization
1997	Progen obtained ISO9002 quality management system certification
2001	Progen was ranked among the National Top 500 private enterprises
2005	Progen won Gold Award in the China International Business Suite Design Competition
2008	Progen was involved in the drafting of national standards of “Inspection Rules of Business Suit”
2011	Progen was named “China’s top ten well-known brands of business suit”

Source: Summarized by the author with information from official company website:

<http://www.progen.com/en/index.php/about/intro/1/2>

By switching the strategic focus from mass production (OEM) to personalized design and service (ODM and OBM), Progen pioneered the market segment of business suits in China. It quickly accumulated significant market shares since the strategic transition (Yin, 2005) and currently serves as the largest business suit production base in China.⁹⁵ Its main customers include large private companies as well

⁹⁵ Ibid. Maintaining its substantive presence in textile and clothing manufacturing, Progen recently set up branch firms in other business areas. Yet it hasn’t implied a switch of main business into other sectors.

as government institutions, e.g. The National Ministry of Public Security of China, State Administration of Customs of China, and The National High Court of China.⁹⁶

5.4.2 Critical Resources Underpinning Upgrading Strategies

Progen achieved both process upgrading and functional upgrading. Process upgrading was realized through constant investments of financial resources in operation machineries and procedures. Similar to the Japanese experience in process upgrading, Progen made heavy investments in increasing the technology involved in production operations. The CEO of Progen talked about the importance of production efficiency in his interview with a local magazine (Song, 2006), referring to advanced technology in production activity as the guarantee of product quality. As per information in the interview, Progen invested USD 3.2 million in 2006 in imported machineries from France and Italy, for the purpose of building a new suit-production line. The official company website also disclosed that Progen invested RMB 150 million in 2007 to build a new production centre, and the new plants were equipped with advanced machinery and specially designed warehouses.⁹⁷

The functional upgrading, through adding tailoring services to the company's activity set, relied on the firm's human resources, including their professional knowledge and skills in suit-making. Progen inherited the traditional craftsmanship from the old generation of "Hong Bang Tailors", and this served as the foundation of the firm's early capability in producing high-quality suits.⁹⁸ It was noted that the techniques of "Hong Bang Tailors" in suit-making included over 130 procedures, in 6 steps - measuring, cutting, style-testing, style-fixing, sewing, and product assessment. These procedures guaranteed high quality during the production processes, and were

⁹⁶ Company website: <http://progen.cn.chinaningbo.com/>

⁹⁷ Company website: <http://www.progengroup.com/index.php/industry/base/14/15/22>

⁹⁸ Local news: <http://www.zjol.com.cn/05zjmj/system/2005/10/20/006340349.shtml>
<http://www.55dianping.com/98.html>

particularly valuable in making personalized suits.⁹⁹ Therefore, the skills and techniques introduced to Progen by Lu provided essential grounds for the firm's development of tailored products and services in the later upgrading process. Progen's current technical director and chief designer is one of Lu's successors (Han, 2011). The second generation of the management team¹⁰⁰ also emphasized the importance of the early steps of building up the firm's professional skills and procedures in a recent interview:

“The expertise that Progen inherited from Lu was the prerequisite and a fundamental reason for the company's success today. We combined modernized production process with the traditional craftsmanship and value. And this put Progen in a competitive position in the market of business suits.” (Han, 2011:62).

5.4.3 Mobilizing Mechanisms and Resource Base

Secondary materials on Progen's development path highlighted the importance of the “Hong Bang Tailors” craftsmanship in shaping the firm's strategic transitions. In order to obtain details regarding this key point in understanding Progen's upgrading, the author of this thesis contacted one of the HR managers based at Progen's headquarters for a telephone interview. The interviewee stated that the firm's current middle management team is a young generation, and so did not witness Lu's early staff training process. However, nowadays there still remain Lu's successors (the apprentices of those who received Lu's training) in the firm. The number of such staff members is about 10% of the group total. These staff members mainly occupy key technical and quality control positions. They passed on Lu's early instructions through combining the techniques with the company's standardized operational routines.

⁹⁹ Local news: <http://www.55df.com/c/14665.shtml>

¹⁰⁰ Shi's sons took over the management of the firm in 2001.

The HR manager stated that Progen's inheritance of the "Hong Bang Tailors" craftsmanship relied on the firm's HR management processes, which highly emphasize the professional skills in suit-making. At the recruitment stage, candidates are evaluated on their professional education and work experience. Both aspects require an industry-specific background, i.e. the expertise in the clothing sector. The recruitment processes also highlight operational capabilities of the candidates. For example, the second and third rounds of interviews usually take place on the factory site, where candidates are given instructions in operating production equipment. The candidate will then be evaluated through their learning and practicing skills in following the instructions and conducting a quick task in the production routine. After admission, new staff members go through a two-stage training process. They firstly receive a 4-7-day intensive training, in the form of group lectures, to learn about Progen's history, values, main businesses and company structure. Then they follow a senior member of their department for position-specific trainings. This stage covers practical operations on the factory floor, with one-to-one individual instructions, and lasts for 2 to 4 weeks. The HR manager emphasized that it is always guaranteed that each new worker has a senior staff member on standby to help them whenever they need. This senior member will then evaluate the new worker's operation skills at the end of the probation period (3-6 months) and hand in a report. This assessment adopts high standards on the accuracy and efficiency of the trainees' operations, and serves as the basis for further training.

After all the effort in recruiting and training the technical staff, it is important for Progen to retain those with valuable skills. The HR manager indicated that the salary level of Progen is competitive compared to the general average of the sector. But as the sector itself is labour-intensive, Progen cannot afford a much higher level of salary while maintaining its competitiveness in operating costs. So what encouraged

the employees to stay is more than salary incentives. For junior employees, constant and personalized training opportunities are provided. This offers young workers professional knowledge and skills for their future development in the industry. For senior employees, especially those in technical positions, promotions and attractive packages of remunerations are available. Moreover, Progen has built up an internal culture that highly values technical abilities. An atmosphere of respecting professional expertise contributed to the loyalty of senior staff members. These HR management processes, with a target of maintaining key employees, then led to a low turnover of technical staff.

Progen's upgrading experience showed that the firm's expertise inherited from the "Hong Bang Tailors" craftsmanship played a fundamental role in its functional upgrading. Such professional knowledge has been maintained in the firm through training and other HR management processes. However, the essential skills were not obtained or developed during the upgrading period, but at an earlier stage. This makes Progen a special example among the three case firms. Semir invested financial and human capital in R&D activities to build up a new capability in product innovation; Wensli invested financial capital to recruit new teams for sales, marketing and design. Progen, differently, focused on its existing know-how in suit-making and adjusted the firm activity that made use of it from manufacturing standardized products to the design, manufacturing and service of tailored products. While Semir's and Wensli's upgrading strategies emphasized the acquisition of new resources, Progen's strategy highlighted the exploitation of existing resources. This indicates that the critical resources underpinning Progen's functional upgrading are those historical resources, and the upgrading strategy realized the hidden value of these resources, i.e. their potential of creating competitive advantage of the firm.

From the RBV perspective, Progen's upgrading process provides a specific example of the link between the imperfect imitability of strategic resources and the firm's unique historical conditions: *"If a firm obtains valuable and rare resources because of its unique path through history, it will be able to exploit those resources in implementing value-creating strategies that cannot be duplicated by other firms, for firms without that particular path through history cannot obtain the resources necessary to implement the strategy"* (Barney, 1991: 108). Therefore from a resource-based point of view, an investigation on the critical resources of Progen's upgrading strategies should analyse the historical path through which the firm's suit-making expertise was obtained and accumulated, i.e. its acquisition and mobilization of strategic historical resources in an early stage.

A strong basis built up through the "Hang Bang Tailors" tradition shaped Progen's technical expertise in suit-making, and the strategic transition during the upgrading period reasonably exploited these resources through rationalizing the deployment of them. As the person who introduced the "Hong Bang Tailors" craftsmanship into Progen, Lu had a significant impact on the firm's development path, and he served as the critical human resource to the firm in its early stage. The training and instructions provided by Lu also had long-lasting effects on Progen's HR management policies and routines. For example, the one-to-one instruction and evaluation procedures demonstrated similar characteristics to the common apprenticeship in Lu's days - where the apprentice maintained a strong connection with the master, following him for all activities and even living in his house.¹⁰¹

Lu started the cooperation with Progen as the latter's external consultant in 1985. His impact on Progen's development started to build up before he became part of the firm. As introduced earlier in this section, Lu's "Hong Bang Tailors"

¹⁰¹ Information provided by the HR manager of Progen during the phone interview.

craftsmanship was a rare and valuable skill in mainland China back then. In 1985, he was a prestigious textile technician working for a suit company in Shanghai,¹⁰² while Progen was a loss-generating small-scale village factory. Hence there was no transactional link between the two but a gap in social status. This provides a potential explanation for the reason why Lu remained an outsider of Progen during the first two years when he shared his expertise with the firm. Reports and case studies on Progen's history (e.g. Song, 2006; Pang, 2010; Wang, 2013) attributed the initial cooperation between Shi and Lu to their common origin of the Jiangliu village. It was reported that Lu was keen to help the local community with the development of the collective enterprise. Lu as the critical human resource of Progen was therefore accessed through the firm's TVE identity, which served as a motivation for Lu to join the firm and contribute to local development.

The motivation for Lu to share his skills with Progen is presumably easy to understand from a social identity point of view (Zhu & Yoshikawa, 2016). As commonly recorded in existing studies on Progen's case, in her early meetings with Lu, Shi highlighted Progen's TVE status and her identity as a Jiangliu villager, to express her motivation of contributing to the welfare of other Jiangliu villagers. This aimed at emphasizing Lu's self-definition as belonging to the same social group. The fact that Lu agreed to help and later joined the company showed the significant value he placed on the village identity. He then led the construction of the production system and training of personnel within the firm.

Progen's upgrading experience indicated the importance of internal routines in mobilizing and sustaining critical resources for strategy development. It also shows that historically accumulated resources can be exploited for strategic transitions, and external parties can shape the acquisition and accumulation of such resources. The

¹⁰² Lu was a technician of Shanghai BAROMON Suit Company, a suit-producing firm founded in 1928 with a well-known brand established in China since the 1930s.

early cooperation between Lu and Shi (before Lu joined Progen) demonstrated that the boundary of resources that can be mobilized by the firm is not limited to its ownership of internal assets but can be expanded through (social) network connections. These connections could be based on individual relationships, or a mixture of personal and institutional ties.

5.5 Cross-case Analysis & Discussions

Based on the analyses in Section 5.2, 5.3 and 5.4, Table 5.8 provides a summary of the case firms' upgrading outcomes, upgrading strategies, critical resources and mobilizing mechanisms. All three firms have achieved original design of products and operation of own brands. So the competitive advantages they developed through upgrading are closely associated with a strong brand image and high product quality, which both fall into the category of differentiation. The brand awareness of these firms is currently limited to the domestic Chinese market, except that Wensli has been present in the global market with its exposure in international events.¹⁰³

Among the three firms, Semir relied on product development and supply chain consolidation to achieve product upgrading. Progen added original design and tailoring services to its firm activities and achieved functional upgrading and process upgrading. Wensli focused on business diversification into textile-related sectors and achieved chain upgrading. It also realized process upgrading in the production activities maintained for high-end products. It is worth noticing that both Semir and Wensli involved external suppliers for their manufacturing activities (only partly for Wensli), but Semir showed a greater reliance on suppliers. Wensli kept the manufacturing of high-end products to itself, while Semir has been fully dependent on suppliers' capacity in production activities. This means that external suppliers are of

¹⁰³ In 2015, Wensli started cooperation with luxury brands in Europe through overseas acquisition.

greater strategic importance to Semir than to Wensli. As a result, although Semir provided constant assistance for suppliers to improve skills and knowledge in production processes, the firm itself was not considered as having achieved process upgrading.

The upgrading literature stated that process upgrading tends to be the first step of firms' upgrading attempts, but the observations in this research showed an exception. In Semir's upgrading path, process upgrading did not happen, yet product upgrading was achieved. The explanation of this is Semir's "Virtual Business Model". The firm entered the textile and clothing industry with a focus on design and marketing activities. Its separation of production, sales and other firm activities made it a special case.

In this study, internal assets, e.g. human and financial resources, played an important role in the upgrading strategies of all case firms. For these resources controlled by the firm, operational routines served as the mobilizing mechanism. Besides these internal assets, all case firms appeared to have made strategic use of external resources for the achievement of upgrading outcomes. Semir relied on inter-firm networks with strategic partners for production and sales. Progen's functional upgrading benefited from its historical resources, as an important part of which the "Hong Bang Master" Lu remained as an external consultant during the firm's early development. Wensli's diversification into a new sector was greatly facilitated by the opportunity of sponsoring the 2008 Beijing Olympic Games. The event served as a critical marketing channel in the firm's chain upgrading, but it was not part of the controlled assets within the firm's legal boundary. As a result, it is commonly observed among the case firms that some of the strategic resources during the upgrading processes were not internal assets of the firms. They fell out of the firm's ownership boundary but could be mobilized for strategic use.

It is also commonly observed among the case firms that their access to the strategic external resources were through embedded relationships. In the case of Semir, the close and stable partnership with suppliers and distributors allowed the firm to rely on external capacities for production and sales. In the case of Progen, Lu agreed to share his skills and expertise with the firm because of the latter's TVE status and close connections with the local community. Similarly, the implementation of Wensli's diversification strategy relied on government support, which was obtained through network connections related to its TVE background.

The textile and clothing industry in China is dominated by private firms. Some of these firms are privatized TVEs. Compared to private firms, TVEs were in an advantageous position, benefiting from connections with the local government. But the boom of private firms gradually eroded the high profitability of TVEs, pushing the latter to increase efficiency through ownership restructure (Sun, 2002). The protection that TVEs enjoyed from local governments also gradually lost effect along the improvement of legitimacy of private ownership in the 1990s (Qian, 2002). Consequently, the privatization wave in the mid-1990s led to the disappearance of this special form of firm ownership in China. In the clothing sector, TVEs' share of the economy (measured by number of firms) dropped from 26% in 2000 to almost zero in 2011 (Zhang et al., 2016). The case studies on Progen and Wensli showed that TVE background has had a significant impact on the firms' development after privatization. Their attachment to the government appeared to transform from an institutional relationship to a personal one, and by this means the government-enterprise connection was transferred between two generations of managers.

Table 5.8: Cross-case Summary of Upgrading Outcomes, Upgrading Strategies, Critical Resources and Mobilizing Mechanisms

Firm	Upgrading Outcomes	Upgrading Strategies	Critical Resources	Mobilizing Mechanisms
Progen	<i>Process upgrading Functional upgrading</i>	Modern production system combined with traditional "Hong Bang Tailors" craftsmanship through tailoring services on office uniforms	Financial resources, Human resources, Organizational resources	Firm operational routines, Local network connection based on social identity
Semir	<i>Product upgrading</i>	Virtual business model - improvement in product quality and product development through R&D and supply chain consolidation	Financial resources, Human resources, Production capacity of suppliers and sales capacity of distributors	Firm operational routines, Strategic partnership in supply chain and distribution networks
Wensli	<i>Process upgrading Chain upgrading</i>	Diversification into cultural and creative sector with expertise on silk materials	Financial resources, Human resources, Marketing channel	Firm operational routines, Network connection with local government

Source: Summarized by the author.

The upgrading experience of large firms in Zhejiang provided evidence of the importance of internal resources in the formation and implementation of firm strategies. It also showed support to the extended RBV framework proposed in this research, where some of the strategically significant resources are outside the firm's ownership boundary. The case studies indicated that networks played an important role in firms' upgrading processes. Through these network connections, firms mobilized external resources to shape and implement upgrading strategies. These external but accessible resources had an important impact on the firms' achievements of upgrading outcomes. The relationships involved in these connections were not based on market contracts but on embedded ties among multiple entities, i.e. firms, government and individuals. Such connections include supply chain, distribution, political and social networks. These various networks were concentrated on the local area where the firm's historical development has been based.

Chapter Six

Cross-national Analysis of the Japanese and Chinese Upgrading Experiences

In this thesis, *Chapter Four* discussed the upgrading strategies of Japanese textile and clothing firms in the 1970s and 1980s. *Chapter Five* analysed Chinese firms' strategic upgrading since the early 2000s. This chapter summarizes and compares the observations of firm upgrading in the two countries for a cross-national analysis. This thesis adopts the four upgrading trajectories summarized in the existing literature to categorize firms' upgrading outcomes. The observations on the Japanese and Chinese experiences showed that these trajectories serve as a useful framework for the understanding of the variety of upgrading paths. The empirical evidence illustrates firm-level strategies for the four upgrading trajectories. Moreover, observations on the Japanese and Chinese firms' upgrading processes provide support to the extended RBV framework proposed in *Chapter Two*. This framework distinguishes between internal, controllable resources and external, accessible resources, and highlights strategic resources that can be mobilized through the firm's business networks. The external and accessible resources have had a significant impact on the firm's upgrading strategies. With such resources integrated into the analytical framework, the resource base concept in the extended RBV framework has the potential to broaden the theory's analytical scope.

Section 6.1 compares the upgrading experiences of Japanese and Chinese firms in the textile and clothing sector. The discussion follows the conceptual framework introduced in *Chapter Two* and includes firms' upgrading outcomes, strategies, critical resources and mobilizing mechanisms of the critical resources. Based on this cross-national summary and comparison, Section 6.2 refines the extension of the RBV framework (proposed in *Chapter Two*) and clarifies the key concepts within it. Particularly, it highlights the resource base concept in the extended framework and discusses its boundary. Section 6.3 discusses the characteristics of networks within the Japanese and Chinese contexts, in order to further analyse network connections as the

mobilizing mechanism of external strategic resources. In the end, Section 6.4 concludes this chapter.

6.1 Comparison of Upgrading Experiences in Japan and China

In this study, the discussion of the Japanese upgrading experience focused on the 1970s and 1980s. The observations showed that during this period of time, process, product and chain upgrading were the main outcomes that Japanese textile and clothing firms achieved. In China, the period under study was between the early 2000s and the present. Case studies showed that all of the four upgrading outcomes have been achieved by textile and clothing firms in Zhejiang.

6.1.1 Upgrading Outcomes & Upgrading Strategies

In both the Japanese and Chinese experiences, process upgrading was achieved through production automation and machinery updates. This type of upgrading helped firms to eliminate waste during the production process and increase productivity. It also served as the basis for improvement of product quality and increase in product diversity at a later stage (e.g. Nisshin Spinning Company in Japan and Progen Group in China). Product upgrading in Japan and China also adopted similar strategies. Firms in both countries emphasized higher complexity and diversity of products. Multiple firm activities were involved in new product development, such as technology development and human resource management (e.g. the ten largest Japanese textile firms and Semir Group in China).

There are differences between the Japanese and Chinese firms' product upgrading processes. In Japan, large firms worked closely with smaller firms (within the KBGs) to realise new product design and higher requirements on product features. Through this collaboration, small firms accessed large firms' upgrading resources and shared their upgrading outcomes. Small firms were thus "pulled up" the value chain through large firms' technological lead. In the Chinese example of Semir Group, the

“Virtual Business Model” means that Semir was as dependent on its suppliers as were large Japanese firms. But Semir constantly consolidated its supplier network by reducing the number of suppliers and only keeping small firms with higher levels of production quality. Large Japanese firms possessed knowledge and skills on production activity, and thus they were able to support the small-firm partners by sharing technologies. Semir had not conducted production activities itself since its foundation (due to the lack of initial capital), and consequently it did not appear to have similar capabilities as large Japanese firms did.

In the Japanese upgrading experience, there was little evidence in the literature showing firms’ efforts in functional upgrading during the 1970s and 1980s. In the Chinese experience, the achievement of functional upgrading was observed in Zhejiang. The case of Progen Group showed that functional upgrading was realized through adding new units (e.g. design, marketing or services) into firm activities. The discussion in *Chapter Four* indicated that large Japanese firms were already conducting a variety of activities besides assembly and production at the beginning of the 1970s (e.g. design and marketing were commonly observed in the Japanese textile and clothing sector). This explains why newly-added firm activities were not easily identified in the period of the 1970s and 1980s. In China, firms’ common starting point of OEM meant that they had a strong potential for adjustments of firm activities. Moving from assembly to design and marketing therefore served as a regular path for firm upgrading in China. The observation in functional upgrading reflects the two countries’ different technological levels in their manufacturing industry. Japanese firms in the early 1970s appeared to have already developed wide-ranging technological capacity. In this aspect, Chinese textile and clothing firms in the early 2000s generally showed a disadvantageous position.

Both Japanese and Chinese firms demonstrated evidence for the achievement of chain upgrading. Some firms diversified into textile-related sectors (e.g. Wensli Group in China), others into unrelated ones (e.g. Kanebo in Japan). Observations of chain upgrading in this thesis provided strong evidence for path dependence on the firm's historical development. The direction and procedure for business diversification in both Japan and China showed high relevance to the firm's previous accumulation of resources and capabilities.

In the upgrading literature, Kaplinsky and Morris (2000) claimed that firms' upgrading behaviours usually start from *Process Upgrading* and proceeds to *Product Upgrading*, then to *Functional Upgrading* and finally end with *Chain Upgrading*. This is because of the increasing complexity associated with the achievement of each upgrading step. In order to realize upgrading outcomes of the four trajectories, changes need to be made to various activities involved in the firm's daily business. The order from *Process Upgrading* to *Chain Upgrading* makes logical sense, as more firm activities need to be involved in each further step of upgrading attempts. Nevertheless, observations in this thesis on Japanese and Chinese firms showed that various types of upgrading can be a continuous process. In the Japanese experience for example, process and product upgrading continued after the firm's achievement of functional upgrading. It is therefore possible that firms conduct multiple types of upgrading behaviours simultaneously. The combination of upgrading trajectories is also observed in the Chinese cases. Progen achieved functional upgrading with on-going process upgrading, and Wensli conducted chain upgrading and process upgrading at the same time. Since upgrading highlights the increase of knowledge and skills involved in firm activities, the achievement of a certain degree of upgrading presumably facilitates the firm's access to appropriate resources for the conduction of other types of upgrading. This reflects the dynamic reconfiguration process of the firm's resource base.

In addition, it is inadequate to consider process upgrading as the basis for the other three types of upgrading. As shown in the Semir case, it is possible for firms to achieve product upgrading without being involved in process upgrading. This means that process upgrading is not necessarily the starting point of firms' upgrading attempts. In Semir's case, it was the firm's (virtual) business model which led to this situation. It is worth noticing that Semir's reliance on external partners for production activity was due to its resource constraints at the foundation period, and thus the strategic choice of business model resulted from concerns about resource access.

One important common feature of the Japanese and Chinese upgrading experiences is that the diversity in upgrading strategies is mainly observed among large firms. Compared to small firms, large firms enjoy greater access to various resources for the development of competitive advantages. While large firms adopted distinctive strategies in upgrading, small firms' options for strategic adaptations were much more limited. Within the Japanese KBGs, small firms served as long-term suppliers of large firms. These small firms were able to access large firms' upgrading resources and share their upgrading results (e.g. R&D for new products). Small Chinese firms in Zhejiang made collective upgrading efforts through cooperation with public service platforms. As part of the local cluster, they reached out to external resources provided by these platforms in order to gain upgrading opportunities. The observations on both Japan and China therefore indicated that the disadvantages of small firms in resource access restricted the scope of their upgrading efforts.

Few examples of successfully upgraded small firms were observed in this study. This raises concerns on the resource constraints that are limiting the upgrading potential of small firms as a group. The situation also leads to doubts regarding the

effectiveness of government support for small firms' upgrading attempts.¹⁰⁴ In the Japanese upgrading experience, although R&D funding was provided to small firms, this support targeted groups of firms instead of individual ones. In the case of China, local governments encouraged collective upgrading attempts of small firms at cluster level, yet government surveys showed that this was insufficient in pushing individual firms to improve technological and innovation capabilities (relevant analyses in *Chapter Three*). Investments in R&D activities are necessary for small firms to increase value added in products and processes. Besides access to some public resources, government policy should remove existing constraints on resource distribution based on firm size. As an example (discussed in *Chapter Three*), increasing the availability of bank loans will facilitate the strategic adaptations and growth of small firms. This shows that banks and other forms of finance have the potential of forming part of small firms' resource base, and as a result expanding the scope of these firms' strategic options.

6.1.2 Critical Resources & Mobilizing Mechanisms

In the Japanese and Chinese upgrading experiences, process upgrading mainly involved changes to the firm's production activity, and such adjustments were supported by HR management (e.g. training of workers). Critical resources for process upgrading hence included the firm's financial and human capital. Japanese firms' process upgrading also benefited from the availability of textile equipment, technologies and technicians in domestic firms (McNamara, 1995). Abe and Tanimoto (2003:17) referred to this as a "*historical heritage*" of Japan's pre-war economy. Quite differently, Chinese firms appeared to have relied on imported machinery. The

¹⁰⁴ A methodological caveat to this generalization exists. The highly limited availability of information on individual small firms possibly has restricted observations on their upgrading behaviours. Moreover, small firms, if upgraded successfully, should normally have grown into large ones. This also affects retrospective analysis on upgrading behaviours of small firms.

cases of Progen Group and Wensli Group showed that process upgrading was achieved through heavy investments in purchasing equipment from Europe and Japan. The Japanese textile and clothing industry (in the 1970s and 1980s) therefore demonstrated a higher degree of upstream and downstream integration in its national value chain than that of China.

In the procedures of product upgrading, large firms in both Japan and China invested financial and human resources in R&D activities to enhance product quality. These large firms then significantly relied on small firms as their suppliers for the implementation of new product development and delivery. The Keiretsu networks in Japan kept large and small firms closely connected. This promoted the joint upgrading efforts of firms with different sizes. Large Chinese firms, although relying on the partnership with subcontractors, tended to concentrate on their own upgrading progress. Besides the example of Semir (discussed in Section 6.1.1), Wensli showed a similar characteristic. The firm removed the majority of its production facilities when it started diversification and relied on the supplier network for product manufacturing. But for high-tech manufacturing capacity, the firm maintained the production activity with its own factory for product testing and small-lot production. This shows that Wensli kept the critical R&D resources and capabilities to itself instead of guiding subcontractors to meet its increasing requirements on production.

Large firms in Japan provided continuous supports to small firms and kept the latter highly involved in the process of product upgrading, while large Chinese firms concentrated on their own activities. This demonstrated that the cross-shareholding inside the Japanese Keiretsu created a closer tie among firms than that in the Chinese inter-firm networks. The different connections among firms in the two countries led to their variety in the extent to which external resources could be accessed and mobilized, especially for small firms. Through sharing upgrading resources and results of large

firms, small firms in Japanese KBGs also benefited from an indirect connection with the main bank (as the latter provided direct support to large firms in the KBG). This shows a wide scope of network impact on firms within the KBGs. In the Chinese case of upgrading experience, there was no evidence showing that local banks formed part of small firms' resource base.

In terms of functional upgrading, large Japanese firms in the 1970s and 1980s conducted various activities (e.g. design and marketing) while small firms mainly occupied production procedures. This shows that the Japanese KBGs govern a fragmented production chain inside them, where large firms dominated the long-term cooperation with their multi-layer sub-contractors. The leading positions of these large firms caused limitations to small firms' activity choice - small firms had little potential in adding new units to their activity sets. As a result, the J-firm management system had a self-reinforcing effect on the stability of its structure. Chinese firms appeared to be more flexible in this aspect. Small firms in Zhejiang benefited from the cluster-based development model, in which public resources were available and shared among firms. This led to the potential for small firms to add marketing and sales to their activity sets. The collective upgrading efforts of small firms facilitated learning and innovation, and the advancement of information and communication technology enabled firms to reach out to resources that were previously unavailable. As a result, small firms in China enjoyed opportunities for business model innovation in their upgrading attempts.

Chapter Four discussed some Japanese firms' "domain commitment" in the textile and clothing sector. It was argued in existing studies that an early presence and specialisation in one specific sector created historical barriers of diversification into other sectors. The observations in this thesis showed that technology, skills and knowledge possessed by Japanese firms were crucial factors that facilitated their chain

upgrading into textile-related sectors. This was also shown in the Chinese case of Wensli Group, which benefited from its business experience in silk material and clothing products for gradual diversification. In Progen's functional upgrading processes, the firm's historically accumulated expertise in suit-making played a more significant role in facilitating its strategic transition. The firm did not diversify into other sectors but specialized in the clothing product of business uniforms. Its experience demonstrated the positive effects of "domain commitment" as a resource-accumulation process in the firm's historical path which contributes to the growth of the firm. Upgrading through a diversification into non-textile sectors requires substantial investments as start-up costs, as shown in the Japanese case of *Kanebo* (McNamara, 1995). Consequently, firms' diversification generally started with textile-related business, and gradually expanded to non-textile ones.

Small Chinese firms relied on external resources for upgrading attempts, and local public service platforms acted as intermediaries to extend firms' scope of innovation resources. These specialised intermediaries have acted as resource mobilizers for small firms (Liu et al., 2013). The cooperation among small firms within the local clusters was in the form of knowledge networks. Within these networks the transfer of knowledge and other firm resources altered the overall distribution of resources and profitability among local firms (Du et al., 2013). Shou et al. (2013) pointed out that the cooperation among small firms in the cluster was either resource-based or information-based. Both types of cooperation improved innovation performance of small firms through promoting their learning.

In terms of the mobilizing mechanism of critical resources, the Japanese experience showed that networks among large and small firms played a critical role in the upgrading process. Large firms relied on the main bank and multi-layer suppliers, and small firms depended on large firms' R&D resources. Dore (1986) described the

feature of the Keiretsu connection among Japanese firms as less of market-based coordination but more of enduring partnership. Singleton (1997) emphasized the trust involved in the inter-firm relationships. Kester (1992) claimed that despite the difference between horizontal and vertical KBGs, this Japanese form of business networks demonstrated common reliance on implicit contracts based on trust. As an example, supply contracts within KBGs were in the form of basic agreements instead of detailed legal documents, under which the two parties “... *endeavour in good faith to maintain an atmosphere of mutual trust in their business dealings*” (Kester, 1992:28). Li (1999) also stated that the inter-firm connections within the vertical KBGs, as well as the bank-firm ties in horizontal KBGs, were relation-based instead of legal-based. The cross-shareholding among firms served as institutional arrangements to strengthen these relations. Lai (2000) claimed that more than just commercial linkage, between Japanese firms there was also emotional commitment involved in the long-term relationship.

In the cases of large Chinese textile and clothing firms, Semir’s process of resource mobilization showed similar characteristics to that of Japanese firms. It relied on external suppliers and franchised dealers for the activities of production and sales. Its product upgrading was realized through joint efforts with these partners. Semir therefore has been highly dependent on the external resources and capabilities of its partners. Such an in-depth cooperation among various sections of the production chain results in “*internal coordination and external balance of the entire supply chain.*” (Li *et al.*, 2014:824). In Semir’s “Virtual Business Model”, the firm, its suppliers and distributors shared common strategic goals, and this led to long-term collaboration. Compared to transactions based on market contracts, the exchanges between Semir and its partners showed a strong characteristic of relational-governance. The transaction process, although based on formal contracts, involved a high level of

flexibility, solidarity, information exchange and risk sharing (Poppo & Zenger, 2002). As discussed in *Chapter Five*, Semir emphasized profit-sharing with suppliers and retailers as a major operation policy. It offered adjustments in procurement and sales in order to balance and share risks with partners, and it organized regular meetings with key partners for communication and feedback.¹⁰⁵ Market-based transactions are based on short-term relationships with “*a clear-cut, complete and monetized agreement*” (Ring & Van de Ven, 1992:485). The exchanges between Semir and its partners therefore showed clear distinctions from purely market-based transactions. In inter-firm exchanges, relational governance complements formal contracts, as the trust built through embedded social relationships substitute the “*complex, explicit contracts or vertical integration*” (Poppo & Zenger, 2002:707). Existing literature on this type of collaborative network emphasizes blurred and overlapping firm boundaries (e.g. Dyer, 2000; Belkadi & Bernard, 2015). Firms within such partnership structures are argued to have inter-linked development paths.

In the case of Progen Group, the firm’s previous TVE identity facilitated the founder manager’s approach to the “Hong Bang Master” Lu, and helped to build up a connection between the two. This relationship provided Progen with early access to its critical human resource. Through continuous cooperation, this external resource was integrated into Progen’s internal resources at a later stage. Similarly in the Wensli case, when the firm started diversification, an important marketing channel - the Beijing Olympic Games - facilitated its entrance into the new sector. This opportunity arose through the firm’s relational connection with the local government. Because of the firm’s early identity of a TVE, the manager Shen built up networks with the local government. After the firm privatized and Shen retired, this early relationship between the firm and the government became a personal connection between Shen and some

¹⁰⁵ Official company website: <http://www.semirbiz.com/newsdetail/21.html>

government officials. Such a relational tie continued to play a key role in the firm's growth and provided it with access to critical resources for the realization of upgrading strategies.

The analyses of Japanese and Chinese upgrading experiences in this study showed the significance of path dependence in the firm's resource accumulation process and the strategic impact of internal resources and organizational routines. Meanwhile in both the Japanese and Chinese experiences, some resources demonstrated great impacts on the firm's achievement of upgrading outcomes. But they were not owned by the firm, in the sense that they were located outside the firm's ownership boundaries. These external critical resources provide important reference for the extension of the RBV framework.

6.2 Extending the RBV Framework

Some of the observations in this thesis demonstrated the usefulness of the RBV in explaining firms' development of sustainable competitive advantages. Nevertheless, some observations revealed the traditional RBV framework's weakness in comprehensively analysing firms' strategic options in the upgrading process. The traditional RBV conception adopts ownership boundary as the frontier of the firm's resource base. As a result, the external resources with strategic importance fell out of the theory's analytical scope of the productive opportunities of the firm. This indicates an obvious limitation to the analytical power of the RBV.

6.2.1 The Extended RBV Framework

The Japanese and Chinese upgrading experiences both demonstrated that resources that can be mobilized by the firm underpinned the upgrading strategies of these firms. Among these resources, some were not internal assets of the firm but were accessible through institutional or personal relational/network ties. These resources also had a critical impact on firms' upgrading paths and outcomes. Therefore, strategic

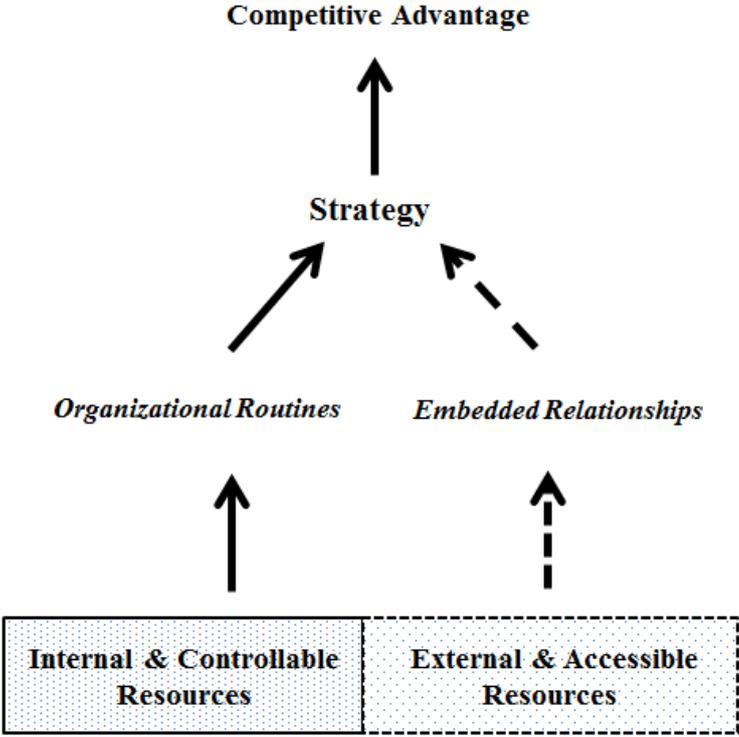
resources do not have to be owned by the firm, and it is possible for part of these resources to remain out of the firm's direct control yet still play a decisive role in its strategy development. Such external resources thus also serve as the basis of firm strategies and sources of competitive advantages. Consequently, it is inadequate to consider the firm's ownership boundary as equivalent to the frontier of its resource base. The case findings in this study indicate the effectiveness of the extended RBV framework proposed in *Chapter Two*, demonstrating its usefulness in incorporating into the resource base those strategic resources outside the firm's ownership boundary. Meanwhile, the observations enable further exploration of the external strategic resources in the extended RBV framework and allow its refinement.

Based on the existing literature, *Chapter Two* raised the proposition that the firm's resource base should include critical external resources, while the characteristics and mobilizing mechanism of these external resources remained to be discussed. The results of the case studies led to a further clarification of the composition of the resource base. Based on these findings, the extended RBV framework proposed in this research can be refined through the categorization of two types of firm resources: *Internal & Controllable Resources* and *External & Accessible Resources*.

In this categorization, resources are considered as internal when they fall inside the firm's ownership boundary. These internal resources are controllable by the firm, as the firm is able to mobilize them for value creation through organizational processes and routines. *External & Accessible Resources* refer to those outside the firm's ownership boundary, which, as the case studies showed, can be mobilized through the firm's business networks. These resources, although not controlled by the firm via organizational processes and routines, are within the firm's reach through business and social connections. It is possible for the firm to access and mobilize these

resources through embedded relationships. These relationships may be based on institutional connections or personal ties, or a hybrid form involving both. In the extended RBV framework, both these types of resources serve as the base of the firm’s strategic options, i.e. they are both part of the firm’s resource base. Although they offer different levels of accessibility, they both contribute to the creation of sustainable competitive advantages. Figure 6.1 demonstrates this refinement of the extended RBV framework, presenting the new categorization of the firm’s strategic resources and their respective mobilizing mechanisms.

Figure 6.1: Refined Extension of the RBV Framework



Note: Dotted area represents the firm’s resource base; Solid lines represent the firm’s ownership boundary; Dash lines represent the boundary of external resources that are at the firm’s disposal for strategic use.

Source: Adapted from Grant (1991b: 115, Figure 1)

Applying the extended RBV framework to the observations on Japanese and Chinese upgrading experiences, Table 6.1 presents a summary of firms’ strategic resources and their mobilizing mechanisms. The new resource categories in the

extended framework (*Internal & Controllable Resources* and *External & Accessible Resources*) involve all critical resources underpinning the firms' upgrading strategies. Whether these resources are internal or external of the firm's ownership boundary is no longer a constraint of analysis. Both the Japanese KBG networks and Chinese firms' networks (based on supply chain partnership, government ties and inter-personal connections) are integrated into the analysis of firm strategies. This shows that the extended RBV framework provides a more comprehensive and thorough explanation of the upgrading strategies of Japanese and Chinese firms.

Table 6.1: Summary of Strategic Resources and Mobilizing Mechanisms in the Upgrading Processes of Japanese and Chinese Firms

	Japanese firms in the 1970/80s	Chinese firms since the early 2000s
<i>Internal & Controllable Resources</i>	Human resources, Financial resources, Organisational resources	Human resources, Financial resources, Organisational resources
<i>Organizational Routines</i>	Operational processes of the firm	Operational processes of the firm
<i>External & Accessible Resources</i>	Human resources, Financial resources	Human Resources, Financial Resources, Marketing Channel
<i>Embedded Relationships</i>	Keiretsu network connections between large firms and main banks, and among large and small firms	Strategic partnership between firms in supply chain and distribution network, government-firm tie and inter-personal tie

Source: Summarized by the author.

6.2.2 The Boundary of Resource Base

The traditional RBV framework defines the frontier of resource base with the firm's ownership boundary. Based on Santos and Eisenhardt's (2005) analysis, this reflects an exclusive focus on the efficiency dimension of organizational boundary, while the other dimensions (competence, identity and power) are neglected. Under the extended RBV framework, the boundary of the firm's resource base spans over its ownership boundary. This section discusses the relationships between resource base boundary and the multiple dimensions of the firm's organizational boundary. It

pursues a more thorough understanding on the resource base and a more comprehensive interpretation of the scope of the firm's productive opportunities.

The efficiency dimension of organizational boundary highlights the minimization of governance costs and focuses on the firm's legal governance mechanism and ownership of assets (Santos & Eisenhardt, 2005). From this efficiency point of view, the boundary of the firm's resource base is wider than its ownership boundary, and the gap between the two is caused by the firm's *External & Accessible Resources*. The firm's ownership boundary is usually explained from a transaction cost perspective, which is effective in explaining vertical integration in supply chain management. However, the transaction cost theory lacks comprehensiveness in analysing the strategic motivations for network building (Eisenhardt & Schoonhoven, 1996). Networks have the potential of providing firms with strategic benefits. This thesis shows that network building allows the firm to access and mobilize external resources. These resources play a crucial role in expanding the firm's strategic options. The external resources accessible through networks hence indicate the gap between the firm's efficiency frontier and resource base boundary, and these resources can be deployed or combined with the deployment of internal resources to create extra productive opportunities for the firm.

In the observations of firm upgrading experience in this study, the Japanese KBGs particularly highlighted the variety of ownership and its impact on firms' access to external resources. From the aspect of legal control, the cross-shareholding of the J-firm management structure led to firms' partial control on resources within the KBG network. This indicates that while internal resources inside the firm's ownership boundary are fully controlled by the firm through operational routines, external resources are partly controlled and accessible through the firm's embedded connections. The Chinese upgrading experience showed that such connections

possibly involve but are not limited to ownership ties. Strategic benefits from external resources can be obtained via partial access to external parties instead of full control.

Among the four dimensions of organizational boundary, the competence dimension focuses on firm resources and capabilities. It is therefore the most relevant dimension to the boundary of resource base. The competence perspective emphasizes the firm's deployment and dynamic configuration of resource pool. In the literature of J-firm management, Numagami et al. (2010) argued that the connections among firms and between large firms and the main banks hindered firms' ability to opportunely respond to strategic challenges. Because the complex networks were hard to break down, and this added to the difficulty of initiating major changes and served as the "organizational deadweight" of the J-firm management system. The observations in this thesis demonstrated that small firms in the KBGs benefited from resource sharing with large firms. For large firms, the J-firm characteristics, e.g. the main bank system and HR incentive mechanism, provided essential support to their strategic changes in various upgrading behaviours (details in *Chapter Four*). This indicates that from a competence point of view, the network connections facilitate the firm's dynamic configuration of resource base. During the process of resource configuration, the firm enjoys the potential of developing new competences which add to its productive opportunities.

Meanwhile, results of this study indicated that the firm's competence boundary cannot provide an adequate understanding on its resource base frontier. The extension of the RBV framework in this research includes two types of resources in the resource base, and the firm adopts different mechanisms to mobilize them. As discussed in *Chapter Two*, the concept of capabilities/competences focuses on the firm's organizational process/routine, which is the mobilizing mechanism of *Internal & Controllable Resources*. *External & Accessible Resources* are mobilized through

embedded relationships, and hence are left out of the analytical scope of the competence perspective of boundary. Process/routine is internal to the firm, and serves as the basis of the firm's dynamic capabilities. Relationship/network involves parties other than the firm itself. It thus requires cooperation and collaboration to function as resource mobilizer. Relationship/network can follow various patterns, and is less repetitious (in terms of stability) than process and routine. Instead of dynamic capabilities, it serves as the basis of the firm's ad hoc problem-solving capability (Winter, 2003). The ad hoc problem solving also initiates the firm's strategic changes, but it cannot be adequately explained through the capability/competence perspective. A typical example of such capabilities resides in the manager's entrepreneurial actions - those that are undoubtedly crucial to the firm's strategic changes, but "*...neither stem from routines (or algorithms) nor need give rise to new routines*" (Teece, 2012:1395).

The identity perspective of organizational boundaries discusses the universal definition of the firm by its members, and analyses the coherence between its boundary and activities (Santos & Eisenhardt, 2005). In this thesis, the Japanese KBGs demonstrated a clear identity-based frontier of firms within the group. Firms in a vertical KBG function as a holistic supply chain, while those in a horizontal KBG cover a wider range of businesses as a group. The closed nature of the Keiretsu membership excluded external parties (Chang & Passing, 1998; Anderson, 2004) and strengthened the identity boundary of the group. On one hand, the KBG identity granted member firms a stable and long-term cooperative relationship with each other; on the other hand, the closed nature of the group excludes some cooperative potentials with firms outside the KBG. This means that the KBG connection has both positive and negative impacts on its member firms' productive opportunities. But the overall effect is hard to specify given that the negative impact can only be estimated based on potential cooperation with other parties.

The emphasis on a universal identity inside the firm was not as obvious in the Chinese cases of this research, but the boundary of resource base of Chinese firms did demonstrate impact from their social identity. Such impact comes from the firm's connections with external parties and the access to external resources through these connections. In the case of Progen Group, the common identity of Jiangliu villager led to Lu and Shi's initial connection, and Progen's TVE identity further built up the foundation for Progen's acquisition of critical strategic resources. Such examples have the potential of complementing our understanding on the identity dimension of organizational boundary - while the internal employees' perception of firm identity plays an important role in organizational boundary, the social identity of the firm perceived by external parties might cause important changes to the resource base boundary. Those factors that shape the firm's internally-perceived identity, as summarized in Santos and Eisenhardt (2005), appear to also affect the firm's externally-recognized social identity, e.g. its foundation status, its leaders' beliefs, its institutional conditions and the evolution of its external context.

The power dimension of organizational boundaries focuses on the relationships between the firm and its strategic partners (Santos & Eisenhardt, 2005). The extended RBV framework in this study identified the firm's embedded relationships as the mobilizing mechanism of external strategic resources, and hence the power dimension is highly relevant to the resource base boundary. In the Chinese case of Wensli Group, the firm reduced its production capacity in 2003 and relied on external suppliers, but it re-invested in manufacturing activities for high-end products after setting up a luxury brand. The choice of keeping the most sophisticated manufacturing unit inside the firm activity set demonstrated Wensli's concerns of dependence and influence on external parties. This shows that while the scope of non-strategic resources is usually closely

associated with efficiency and cost, the firm's pool of strategic resources involves power considerations.

In this aspect, the Japanese firms in this research demonstrated a greater level of dependence and dominance among large and small firms. Within the vertical KBG, resources remained under control of large firms, and the strong and stable network structure led to the co-dependency of all members. The clear and stable power distribution among large and small firms in KBGs appeared to have locked small firms in the production activity, causing difficulty to their further upgrading attempts. This shows that for the more powerful firms (large firms in the Japanese case), the relational connections offer them chances to affect the weak firms' network positions and expand their own productive opportunities. But for less dominant firms (in terms of power and position) in the network, the connections might lead to limitations on some of their potential productive opportunities (if such opportunities challenge the dominant firms' positions). In this aspect, since the Japanese national value chain of the textile and clothing sector (in the 1970s and 1980s) showed a higher degree of integration than that of China, large Japanese firms within the KBGs appeared to have greater capacity and power than large Chinese firms in terms of influencing small firms in the sector.

When the firm expands power boundary, ownership is not the only means of placing influence on external forces. While the legal boundary remains unchanged, it is possible for the firm to expand its power boundary via social embeddedness, e.g. through taking important positions in cohesive networks (Santos & Eisenhardt, 2005). This appeared to be an important means of expanding the firm's resource base as well. As an example, the first manager of Wensli took up leader positions in various local industry associations and became a representative of the National People's Congress of China. These positions enabled the firm to have influence in local business

networks, and these networks proved to have had a direct impact on the firm's strategic options. Similarly, Progen Group was also actively involved in industry association events, dominating the network of local firms.

Santos and Eisenhard (2005) argued that a comprehensive understanding of the firm's organizational boundary requires synthesized investigations of the four dimensions of efficiency, competence, identity and power. The understanding of resource base boundary is a similar case. The discussions in this section showed that although the boundary of the firm's resource base is closely related to its organizational boundary, the former cannot be adequately defined or understood through any single dimension of the latter. The dynamic configuration of the resource base is affected by the firm's connections and interactions with external parties in its business network.

6.3 Business Networks in the Japanese and Chinese Contexts

Under the extended RBV framework, *External & Accessible Resources* expand the firm's resource base over its ownership boundary. This leads to a further development of understandings on the intrinsic RBV assumptions. The RBV highlights heterogeneous distribution of resources among firms, and this heterogeneity comes from the firm's historical development path (Penrose, 1959). The extended RBV framework in this thesis indicates that this historical path also involves the evolution of the firm's embedded relationships with external parties in its business context. These connections affect the firm's mobilization of external resources, and these external resources have a critical impact on the firm's strategic options and consequently affect the firm's strategic directions.

The other essential assumption of the RBV concerns the sustainability of resource heterogeneity and highlights the firm's isolation of strategic resources from imitation and substitution. The extension of the RBV in this thesis indicates that for

Internal & Controllable Resources, such isolation is realized through the firm's ownership boundary. For *External & Accessible Resources*, the sustainability depends on the ties/connections between the firm and the external party (individual or institution). The traditional RBV has focused on internal resources within the ownership boundary and neglected the network connections and their strategic impact. As a result, understanding the firm's network connections provides a potential clarification of its strategic options, i.e. productive opportunities. Network ties originate and evolve within the national context of the firm. *Chapter Four* discussed the Japanese Keiretsu network (including both vertical and horizontal KBGs), and this section seeks to analyse the business network of Chinese firms.

China's process of modernization during the reform years has created a distinctive "network capitalism" (Boisot & Child, 1996). The result of this is a special mode of economic organization which is different from that of Western, developed countries. Through evaluating the characteristics of information diffusion in China, Boisot and Child (1996:600) labelled the Chinese transactional environment with "*limited extent of codification of information*" and "*communal property rights*". Along with the domestic economic development, this characteristic appeared to remain the feature of the Chinese business context. Hoskisson et al. (2000) argued that China's insufficient legal infrastructure leads to insubstantial basis of corporate governance. The country is still a long way from having fully specified property rights, which "*convey exclusivity, transferability, and quality of title*" (Hoskisson et al., 2000:252). Peng et al. (2005) further strengthened this as a common feature of emerging economies, stating that such environments suffer from high level of information asymmetry. In such environments, transactions with unknown parties are associated with a large extent of opportunism, and network-based exchanges benefit

from the embedded social capital. As a result, market-based arrangements tend to lead to higher transaction costs than relation-based exchanges.

The empirical evidence in this thesis showed that for Chinese firms, the bridging and sharing of resources through network connections not only continued in inter-firm alliances, but also significantly involved the local government. Moreover, the upgrading cases in Zhejiang demonstrated the involvement of personal relationships in the mobilization of critical resources. This means that Chinese firms' access to external resources relied on both institutional relationships and personal connections. The case of Semir Group demonstrated the network connections in the supply chain and distribution chain, and involved mainly inter-firm ties. Progen Group and Wensli Group, because of their TVE background, serve as examples of more complex networks of local firms.

TVE is a unique form of firm ownership in China. In the 1980s, the economic sector of TVE achieved significant growth (Qian, 2002; Kung & Lin, 2007). It was reported that in 1995, TVEs' contribution to the domestic GDP was approximately 30% of the total (Perotti et al., 2014). There were multiple reasons for the sector's rapid growth during this period. The central government's suppression on the private sector was not yet released at the beginning of the economic reforms. As a result of the pre-reform planned economy, the domestic demand for consumer goods could not be satisfied by SOE products. This left the TVEs with significant market opportunities (Zhang, 1999; Kung & Lin, 2007). China's abundant low-cost labourers mostly resided in rural areas, and this provided the local TVEs with easy access to labour resources (Perotti et al., 2014). The development of TVEs created employment for the rural areas without demanding substantial state investments, so the central government encouraged their growth (Perotti et al., 2014). Compared to SOEs, TVEs did not enjoy the same (high) level of access to bank loans and technology provided by the state

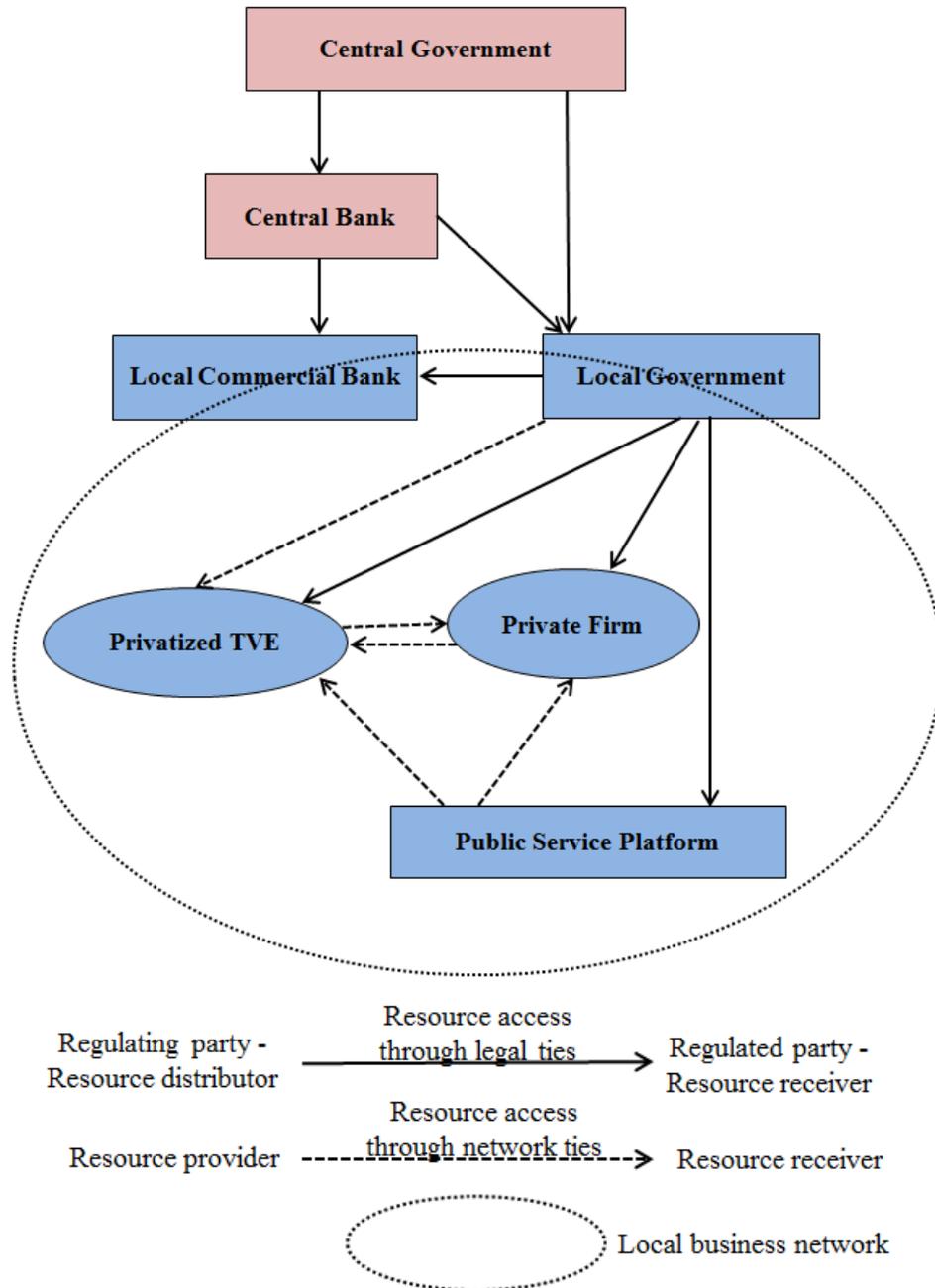
government (Perotti et al., 2014). However, TVEs' burden of employee welfare was much lighter than that of SOEs. It was argued that 40% of the profitability variance between TVEs and SOEs was due to the social welfare burden of the latter (Perotti et al., 2014). Compared to SOEs, TVEs were market-oriented due to a higher level of autonomy in operations and management (Cheng et al., 2006). For example, TVEs did not practice life-time employment which dominated SOEs, and compensation in TVEs was related to the firm's performance, which led to high efficiency (Ding & Warner, 2001).

Qian (2002) argued that China's lack of legal protection on private property rights was an important reason behind the high efficiency of TVEs. The attachment with local governments provided them a more secure control over firm assets than that of private firms. The local government's share of profit of the TVE also gave government officials incentives to facilitate the firm's access to various resources. In terms of financial support, the local government served as the TVE's guarantor for bank loans and facilitated the financing process. The advantages of TVEs led to their rise during the 1980s and their rapid accumulation of capital and technologies. It was discussed in *Chapter Five* that most TVE firms privatized after the 1990s. But despite the de-connection in ownership between the firm and the local government, the case studies in Zhejiang showed that privatized TVEs still benefited from their previous ownership status. The embedded connection with the local government remained as a legacy.

Based on case findings in this thesis, Figure 6.2 sums up the network connections of privatized TVEs and provides an example of a local business network of such Chinese firms. For the purpose of simplicity, the firm's network connections are referred to as its "business network". While this network includes some market-

based exchanges (such as transactions with formal contracts), for the purpose of this thesis the focus is on strategic resources accessed through embedded relational-ties.

Figure 6.2: Example of Local Business Networks of Chinese Firms



Source: By the author

In Figure 6.2, the solid circles represent the ownership boundary of the firm, and the dotted circle represents its business network. The local government plays an important role in organizing economic activities in the local area. To TVEs it had direct managerial inputs (Perotti et al., 2014), and some of the effects remained after

the firm's privatization. Therefore, the local government is partly inside the firms' business network. Meanwhile, the local government is part of the national government system, and it carries out other political functions. This part of it is outside the business network of firms. Similarly, the local state-owned commercial bank is partly inside the network and partly outside. The local government connects the local state-owned commercial bank with firms (mostly TVEs), through its support on firms' financing activities.¹⁰⁶ Meanwhile, the local commercial bank is part of the national monetary system, as well as an independent business entity. Therefore, its operations reach out of the circle of local firms. The solid lines in Figure 6.2 represent legal ties among various actors in the business network. These include government distributions of resources and regulations on economic activities. The dotted lines represent network/relational ties, through which the firm can access resources outside its ownership boundary but inside its business network.¹⁰⁷

Figure 6.2 shows that Chinese firms access external resources through various relationships. These relationships are embedded in the local business and social networks, in the form of personal or institutional ties, and include various parties. Under the extended RBV framework in this thesis, *Internal & Controllable Resources* fall inside the firm's ownership scope, i.e. inside the solid circles in Figure 6.2. *External & Accessible Resources* are outside the firm's ownership boundary, but inside the firm's business network, i.e. out of the solid circles but inside the dotted one in Figure 6.2.¹⁰⁸

¹⁰⁶ The local government serves as firms' guarantor of bank loans and executors of repayment (Perotti et al., 2014).

¹⁰⁷ It is acknowledged that the local business network depicted in Figure 6.2 is a simplified version of the reality. It is possible that local Chinese firms' network includes various other parties, such as informal finance institutions. Figure 6.2 is summarized based on the cases studied in this thesis, and therefore focuses on the observations in this research.

¹⁰⁸ External and inaccessible resources (considered irrelevant to the firm's strategy development in this thesis) are outside the dotted circle in Figure 6.2.

Both the Japanese and Chinese business contexts have the feature of boundary blurriness, but firms' network connections show different characteristics in the two countries. The post-war J-firm management system provided a structured, universal and stable form of network connections among firms, and this served as the foundation of regular mobilization of resources within the KBG. Chinese firms do not share such a unified network, and therefore showed greater complexity in terms of the types of network linkages and relationships. The TVE cases in this research exemplified the ties among firms, between the firm and local government, and the transfer between institution-based and individual-based connections. All such networks can serve as the mobilizing mechanism of external resources for the firm's strategic use. The case of private firms showed the strategic significance of the supply chain network and distribution network, which involve mainly inter-firm connections.

The Japanese Keiretsu network structure, although different from individual firm's internal process and routine, highlights the concept of a closed and exclusive group of firms. Especially with the cross shareholding, this form of firm network showed strong sustainability in isolating network-based strategic resources from imitation and substitution. Network connections in China involve a hybrid form of both institution-based and individual-based ties, and therefore have greater uncertainties in stability. This leaves more space for contingency factors to affect the firm's strategic options.

Kor and Mahoney (2004:186) stated that "*...in the short run, available resources place a bound on the opportunities a firm can seize.*" The traditional RBV framework emphasizes the firm's resource ownership as this "bound" of productive opportunities. The findings in this thesis showed that this is not necessarily the case. Instead of the firm's resource ownership frontier, the "bound" appeared to be closely associated with the boundary of the firm's business network. The Japanese KBG

network structure provided important reference for the boundary of resource base of its member firms. But in China, the multi-form and unstable ties (compared to the Japanese KBG connections) mean that it is harder to specifically locate the frontier of the local business network.

Both the resource base and organizational boundary of the firm were perceived and imagined concepts, and the traditional RBV framework appeared to have moved the conception towards a legal definition. The strict focus upon firms' ownership and control in the RBV literature presumably emerged along with characteristics of Anglo-Saxon capitalism, which emphasizes property right as an isolation mechanism regarding the inside and outside of an organization. It is worth stepping back to the early conception where the resource base and productive opportunity was perceived instead of legally defined, and considering a broader network around the firm as the foundation of its strategy development.

The process of discovering the firm's productive opportunities requires dynamic learning, and this involves the business environment (Rugman & Verbeke, 2002). Since the extended RBV framework incorporates the firm's business network into the analytical framework, the dynamic changes of the network are also incorporated. For example, under the extended RBV framework, if the firm's network expands, previously inaccessible resources to the firm might become accessible. As another example, in the case of a transition from a relation-based system to a rule-based system, i.e. the number of actors or the capacity of networks decreases, some previously accessible resources might become inaccessible. In such cases, although the firm's boundary of resource ownership remains the same, its actual "bound" of productive opportunities changes. This research highlights the context of a relation-based business system, but the extended RBV framework also applies to research on the process where a country's legal infrastructure builds up and approaches that of a

rule-based context. The changes of firms' strategic options during this dynamic process have a direct impact on the limits of growth of the firm, and can be analysed through the external and accessible resources of the firm. While the traditional RBV framework has difficulty capturing these changes, the extension in this thesis provides an effective refinement.

6.4 Concluding Remarks

This chapter summarized and compared the Japanese and Chinese firms' upgrading experiences, discussed their implications to the upgrading literature, and further developed the extension of the RBV framework proposed in this research. The extension of the RBV framework added the category of "*External & Accessible Resources*" into the concept of the firm's resource base. This incorporates the key impacts of external critical resources into the firm's strategy and growth.

Existing literature includes some discussion on the weakness of the traditional RBV framework, caused by its narrow focus on the ownership of resources. The Japanese and Chinese business environments have the feature of blurred firm boundaries. As a result, the isolation mechanism of resource ownership in these countries is not as strong as that in Western countries. In such environments, business networks play an important role in enlarging the range of firm resources. The blurred boundary within the Eastern business system might have highlighted the limitation of the narrow focus of the traditional RBV framework. But in the Western context the strategic impact of external resources accessible through network connections is also important. This makes the extended RBV framework and the investigation it raised on resource base also valuable in the Western business environment.

Chapter Seven

Conclusions

This thesis investigates the strategies of Zhejiang's textile and clothing firms in achieving upgrading outcomes since the early 2000s. Through analysing firm strategies from a resource-based perspective, it examines the boundary of the firm's resource base as the scope of its strategic options and productive opportunities. This research develops the literature on the upgrading subject and the contemporary development of Chinese firms. Meanwhile, it extends the existing understanding of the post-war Japanese management system and the theoretical framework of the RBV. This chapter focuses on the findings, conclusions and contributions of this thesis. Section 7.1 concludes the research outcomes and their main contributions. Section 7.2 provides a summary of the research findings and the insights they add to the corresponding literature. Section 7.3 suggests potential directions for future studies building on the research in this thesis.

7.1 Conclusion of Research Outcomes and Main Contributions

In this study, the research questions are addressed through structured analyses of the firm's upgrading outcomes, upgrading strategies, critical resources, mobilizing mechanisms and resource base boundary. The research findings add to both the empirical and theoretical literature of management studies. This section concludes the research outcomes and their contributions to the literature.

In this thesis, the analyses of firms' upgrading experiences in Zhejiang led to the finding that all four types of upgrading trajectories (summed up in the existing upgrading literature) have been observed among Chinese textile and clothing firms. Process upgrading was achieved through production automation and machinery updates, product upgrading was realized with higher quality, complexity and diversity of products, functional upgrading was achieved through tailoring services added to the firm activities, and chain upgrading was realized via diversification into textile-related (cultural and creative) sector. The development processes of these upgrading strategies

demonstrated significant effects of resource bridging and resource sharing among various units within the firm's local business network. These findings contribute to the upgrading literature by revealing the value of a strategy perspective of the upgrading subject. They indicate that besides learning from global leader firms (the common focus of the existing literature), upgrading can also be pushed through collaboration within the supplier firm's local and national value chain.

In this research, the variety in firms' upgrading strategies has been observed among large firms. Small firms lacked capability in independent upgrading and made collective upgrading attempts on a cluster basis. This finding adds to the literature on the legacy of economic reforms in Chinese firms' contemporary development. The synergy and rivalry benefits of cluster-based development in China have been identified in various studies (e.g. Zhang et al., 2004; Fleisher et al., 2010; Huang et al., 2011; Zhang et al., 2011). But there are doubts regarding whether this development automatically leads to innovation, or rather to the formation of supply-chain cities (Fan et al., 2014). This research showed that although the government has been promoting cluster-based innovation, the policy support has significant space for further improvement, especially for small firms.

The analyses of firms' upgrading strategies in this research also lead to a development of the existing TVE literature (e.g. Garnaut & Song, 1999; Zhang, 1999; Ding & Warner, 2001; Qian, 2002; Sun, 2002; Kung & Lin, 2007; Li, 2010; Perotti et al., 2014). The TVE was a special form of firm ownership created in China's reform processes. It disappeared along with the privatization wave started in the mid-1990s. The observations on privatized TVE firms in this thesis revealed that the TVE background has continuous impact on the firm's resource mobilization and strategy development. Hence it is still an important factor in explaining Chinese firms' survival and growth. This finding further highlights the significance of the firm's ownership

(history) from a resource-based perspective. It indicates that the firm's ownership (history) has strong impacts on its network connections with external parties, and these connections play a key role in shaping its strategic path.

Based on a critical assessment of the existing literature, this research proposed an extended framework of the RBV theory. Under this framework, answers to the research questions were developed, with focuses on the mobilization of the firm's critical resources and the boundary of its resource base. These analyses led to the finding that the firm made strategic use of some resources outside its ownership boundary. These external resources were mobilized through the firm's local business network, via its embedded relationships with other firms, institutions or individuals. The extension of the RBV framework in this research integrates the strategic impact of external and accessible resources into the firm's resource base and explains the firm's mobilizing mechanism of them. It complements the existing RBV literature on the strategic significance of external resources and develops the understanding on the boundary of the firm's resource base. This research therefore pushes forward the development of the RBV theory by enhancing its analytical power in understanding the firm's productive opportunities.

In the process of answering the research questions, this thesis revisited the literature on the post-war J-firm management model. The characteristics of the organizational structure and management procedures of Japanese manufacturing firms were re-examined from an angle of strategic transitions in the upgrading processes. The findings indicate that the characteristics of the J-firm management model played an important role in the strategic upgrading of Japanese textile and clothing firms in the 1970s and 1980s. Their effects were realized through influences on the firm's resource distribution and mobilization. These findings provide empirical evidence for the theoretical debate on the J-firm model's impact on firm growth. They demonstrate

both positive and negative effects of the J-firm model on firms' strategic transitions. More importantly, they add to the debate by indicating that the impact of the J-firm model on resource mobilization depends on the position and power of the firm in the network.

In management studies, scholars have been calling for a connection between the Eastern and Western perspectives. Specifically, building up Eastern-based management theories has been an important objective for academic communications (Barkema et al., 2015). The analyses of Japanese and Chinese firms' strategic transitions in this thesis provide empirical evidence for the boundary-blurriness feature of the business contexts in the two countries. They add to the understanding of the relation-based Eastern business environment and its impact on firm growth. The extended RBV framework, established in this research within the Japanese and Chinese business contexts, serves as a meaningful platform for the connection of the Eastern and Western management perspectives.

7.2 Summary of Research Findings and Theoretical Insights

This section provides detailed explanations on the main research findings of this thesis. It summarizes the observations and analyses in this research and the insights they add to the existing literature. These include the legacy of economic reforms on strategic transitions of Chinese firms, the impact of the post-war Japanese management model on firms' growth, the strategy perspective of upgrading studies, the extension of the RBV framework and the connection between the Eastern and Western management perspectives.

7.2.1 The Legacy of Economic Reforms on Strategic Transitions of Chinese Firms

In this research, the analysis of firms' upgrading experiences in Zhejiang is integrated in the context of the economic growth of China and the industry

development of the textile and clothing sector. The Chinese firms' strategic adaptations to multiple competitive challenges since the early 2000s showed significant influences from the domestic environment. The findings from the industry-based discussions revealed concerns over policy impacts on strategic transitions at different levels of the textile and clothing sector, specifically at the levels of clusters and firms.

The findings indicate that due to resource constraints, small firms struggled to achieve observable upgrading outcomes on an individual basis and failed to demonstrate distinctive upgrading strategies. This thesis conducted a review on small firms' upgrading attempts, which led to the finding that these firms made collective actions in the adaptation to competitive challenges. These upgrading attempts significantly involved resource-sharing through cluster-based public platforms, and this provides evidence for the positive effects of the government's cluster-based policy supports to firms in Zhejiang. However, the example of textile equipment showed that the integration of up- and down-stream segments among textile and clothing clusters has not been satisfactory. This adds to the cost pressure of firms that have to rely on machinery imports. Meanwhile, the existing cluster-based policy supports appeared to have failed in stimulating and facilitating small firms' individual upgrading initiatives. This significantly limited the effects of policy supports in driving innovation among small firms. A more effective support would be removing the current constraints on small firms in bank loans and other types of financing options. The introduction of local financial institutions into small firms' business networks (in terms of building strategic connections between the two) has great potential of broadening these firms' scope of productive opportunities and facilitating their upgrading attempts.

In the cases of large firms, both within-case study and cross-case analysis showed that firms benefited from their embedded relationships with external parties in

mobilizing some critical resources for strategy development. In two of the three cases, these embedded connections were closely associated with the firms' former TVE identity. One of the particular outcomes of China's 1978 economic reforms is the emergence of a more diverse range of non-state ownership forms. The TVE is in between state-owned and private firms. The privatization wave of TVEs (started in the mid-1990s) led to the gradual disappearance of this ownership type. As a result, studies with a focus on TVEs gradually diminished as well. However, the findings in this thesis showed that the privatized TVEs to a large extent maintained their attachment to the local governments. Instead of a formal, institution-based tie, the connection with the local government turned into a personal relationship between the managers and local authorities. These findings revealed the legacy of the previous TVE identity of the firm - it sustained the firm's advantages in resource access and granted them with important development opportunities. For researchers, this implies that the nature of a firm's ownership, both past and present, needs to be taken into consideration for the analysis of the firm's contemporary strategic transitions.

Embedded ties with the government influence the firm's resource mobilization for strategy development, and thus influence its scope of productive opportunities. This analytical angle of resource mobilization serves as a meaningful platform for further discussion on the link between the firm's ownership (history) and its strategic options. China's current private sector includes privatized TVEs, firms that are originally set up as private enterprises, as well as privatized SOEs. Similar to privatized TVEs, privatized SOEs also had embedded connections with governments and other public institutions. Although now enjoying management independency, these firms have remaining attachments with the central and local governments, and such connections differ as per their individual privatization process. The perspective of resource mobilization based on network connections in this research provides a

specific angle of analysing these firms' strategic options/transitions. It serves as a means of integrating the reform legacy into firm-level strategy analysis.

7.2.2 Complementing the Debate on the Post-war Japanese Management Model

This study draws on a firm-level comparison between Japan's upgrading experience in the 1970s/1980s and that of China since the early 2000s. The management structure and practices of Japanese firms in the post-war years have drawn substantial attention of management scholars. In the fast- and stable-growth periods of the Japanese economy (between 1955 and the early 1990s), the J-firm management system received mainly positive appraisals among scholars (e.g. Ouchi, 1981; Pascale & Athos, 1982; Abegglen & Stalk, 1985; Aoki, 1986). But the popularity of the model gradually diminished after Japan's economic bubbles collapsed in the early 1990s. Some research held the view that the J-firm management structure and style did not serve as a driving factor of Japan's economic growth (e.g. Miwa, 1996). Other studies argued that characteristics of the J-firm management system had negative effects on the competitiveness of Japanese firms (e.g. Porter et al., 2000; Numagami et al., 2010). As a result, long-term effects of the J-firm model on firm growth and economic transition remain subject to considerable debate.

The findings in this research showed that business networks among Japanese firms, typically in the form of the Keiretsu Business Group, played a key role in their upgrading experiences in the 1970s and 1980s. The cross-shareholding within these networks served as a solid tie among various units, and allowed resource bridging among them. Large firms were in an advantageous position in terms of firm resources, and therefore they led the industrial upgrading through R&D investments. For small firms within the KBGs, the network provided them access to large firms' R&D

resources and outcomes. This had a pulling effect, allowing them to upgrade following large firms' lead.

These observations provided evidence for the J-firm model's value in enabling inter-firm cooperation and collaboration within business networks. They indicated that the J-firm system facilitated the strategic transitions of textile and clothing firms in the 1970s and 1980s. However, findings of this research also highlighted the disadvantageous competitive position of small firms within the Keiretsu networks. Large firms occupied the high end of the national value chain by conducting high value added activities. This led to the result that small firms were left with little space for active upgrading and consequently locked in the production activity. Small firms' limitation in the development of technology and innovation capabilities undoubtedly dragged down the speed of industry growth. This exemplified the "organizational deadweight" discussed in Numagami et al. (2010) - a major weakness of the J-firm model.

Research findings of this thesis provided empirical evidence for both positive and negative impacts of the J-firm model on firms' growth. These findings further develop the debate in the literature by indicating the link between such impacts and the firm's position and power in the network. Specifically, large firms enjoy access to external resources and benefit from the network connections. Small firms, although benefiting from access to certain resources of partner large firms, suffer from a lock-in effect. This is the result of large firms' governance of the value chain inside the network. Therefore, the impact of the J-firm model on firms' resource mobilization depends on the position and power of the firm in the network.

7.2.3 A Strategy Perspective of Firm Upgrading

Early literature on the upgrading subject emphasized domestic institutional and policy impacts on the growth of national economy and industrial adaptations (e.g.

Gerschenkron, 1962; Amsden, 1989; Wade, 1990). The GVC perspective switched the focus of upgrading issues to global chain governance, i.e. the worldwide linkage among firms. This led to a significant emphasis on supplier firms' learning from global leader firms in the later literature of upgrading studies. The focus on this specific upgrading mechanism lacked attention to the local impact on firms' upgrading processes (Humphrey & Schmitz, 2000) and overlooked the diversity of firm-level upgrading options (Navas-Alemán, 2011).

In contributing to this literature, this thesis offers an analysis of supplier firms' upgrading paths from a strategy point of view. The research findings on both Japanese and Chinese firms demonstrated the critical impact of the historical development path of the firm and its local network. Case studies of large firms showed direct evidence for the mobilization of external resources through embedded network connections, and these external resources provided firms with important strategic options. For small firms, collective adaptations serve as a substitutive solution to competitive challenges. Through these collective efforts resources can be shared within business associations and other types of networks among small firms. Alternatively, some small firms enjoy the opportunity to be "pulled up" the value chain by large firms in the business network (e.g. small firm in the Japanese KBGs). These findings showed that network collaboration for the mobilization of critical external resources played a key role in driving firm upgrading. This factor calls for the attention of upgrading studies. It serves as a meaningful research focus besides supplier firms' linkage with global leader firms.

This thesis does not neglect the effects of global linkage on firms' upgrading process. But its findings highlighted that against the background of globalization, the impact of the national value chain on supplier firms' upgrading behaviours deserves as much emphasis. In the Chinese cases, the local government played an important role

in encouraging and facilitating resource sharing among small firms. This is realized through setting up industry- or sector-based associations and building public service platforms. The industry associations and public platforms served as crucial channels for small firms to access external resources and gain upgrading opportunities. For large firms, the local government provided direct support to their mobilization of external resources and acted as part of their business network. This showed the important contribution of the local government in promoting firms' upgrading attempts and widening their strategic options for the upgrading path.

The textile and clothing sector in Zhejiang has featured active entrepreneurship, and firms' upgrading behaviours in this area have demonstrated strong national and local influences. The research findings based on this area complements the existing studies on Chinese firms' upgrading behaviours, most of which have concentrated on the Pearl River Delta area (e.g. Hu et al., 2005; Eng, 2009; Eng & Spickett-Jones, 2009; Peignambari et al., 2014; Yu, 2014). Located in East coastal China, manufacturing firms in Zhejiang have their local characteristics in historical development and upgrading paths. This indicates a potential divergence in upgrading paths among various manufacturing centres in China (e.g. the Yangtze River Delta and the Pearl River Delta). This research provides a foundation for further investigations on the contribution of local business networks to supplier firms' upgrading options in other areas of China, e.g. Shanghai or the Pearl River Delta.

Compared to studies with an exclusive focus on the governance impact of global leader firms, analyses of supplier firms from the angle of upgrading strategy provide a more systematic and comprehensive view. This perspective reflects the nature of firms' upgrading behaviours - the pursuit of growth through increasing the value added in products and processes. Fundamentally, the upgrading behaviour at firm level is about identifying opportunities and constraints of the firm's growth.

7.2.4 Extending the RBV Framework

In this thesis, the strategic upgrading of firms is studied from a resource-based perspective, through the theoretical lens of the RBV. Drawing upon existing doubts in the literature on the traditional RBV concept (e.g. Eisenhardt & Schoonhoven, 1996; Silverman, 1999; Lavie, 2006), this thesis proposed an extension of the RBV framework. This extension aims to refine the RBV's focus on internal resources (defined by the ownership of resources). It argues that this narrow focus has limited the research scope of the RBV on firm strategies and restricted the analytical power of the theory. Under the extended RBV framework, the examination of critical strategic resources led to the finding that both Japanese and Chinese firms have made use of some external resources during their upgrading transitions. These external critical resources were mobilized through the firm's relational/network connections with other parties. These resources were not owned or controlled by the firm and therefore span over the firm's ownership boundary, yet they have played a key role in the formation and implementation of the firm's upgrading strategies.

The research findings indicated that the traditional RBV concept of resource base, due to its focus on resource ownership (e.g. Barney, 1991; Amit & Schoemaker, 1993; Sirmon et al, 2007; Barney et al., 2011), fails to adequately capture the critical effects of external resources that can be mobilized for the firm's growth. The findings provided support to the extended RBV framework developed in this research, and enabled further clarifications and refinements of the key concepts in it. In this extended RBV framework, the firm's resource base contains two types of resources: *Internal & Controllable Resources*, and *External & Accessible Resources*. This new categorization of firm resources extends the scope of the resource base concept. It incorporates resources that can be mobilized through the firm's network ties into the

foundation of the firm's strategic options. This broadens the vision on the "bound" of the firm's productive opportunities (Kor & Mahoney, 2004:186).

The extended RBV framework established in this research is different from the existing refinements of the RBV (e.g. Eisenhardt & Schoonhoven, 1996; Lavie, 2006). It highlights that the external resources that are critical to the firm's strategy development can be based on a variety of connections, instead of inter-firm ties only. For example, some of these embedded relationships are between the firm and the local government, and some are based on individual connections. Moreover, compared to previous adaptations of the RBV in the existing literature, the extended RBV framework in this thesis provides a more comprehensive understanding of the means through which external resources can be mobilized by the firm. This clarifies the way that these external resources create extra productive opportunities for the firm. This incorporation of the business environment into firm resource base provides an opportunity to capture the dynamic changes in the business system.

Meanwhile, recognizing the role of the firm's network connections as a resource mobilizing mechanism provides a platform for further discussions on the hierarchy of firm capabilities. Winter (2003) and Teece (2012) called for researchers' attention to the non-routine capabilities of the firm (e.g. ad hoc problem solving and managerial contingency). They argued that the existing resource-based perspective fails to address the strategic significance of resource deployment that is NOT through organizational routines and processes. This thesis introduced *External & Accessible Resources* into the RBV framework, and these resources are not deployed through the firm's organizational processes. Their mobilizing mechanism of network connections thus provides a structured explanation to some of the non-routine capabilities that contribute to the firm's strategic transitions.

7.2.5 Connecting the Eastern and Western Perspectives on Management

Both Western and Eastern scholars have recognized the special features of Eastern societies compared to Western countries in terms of business philosophy and practices. Specifically, a relation-based governance system has been identified as distinctive from a rule-based one, and the Japanese and Chinese business contexts were argued to be typical examples of the former (Li et al., 2003; Meisel, 2004). The findings of this research add to the understanding of the impact of such contexts on firms' strategy development.

In the Japanese case, the effects of blurred boundaries are mostly observed among institutions under the KBG structure, mainly including small manufacturing firms, large manufacturing firms and their main banks. Boundaries between different KBGs are however clear and strict.¹⁰⁹ In the Chinese case, the boundary blurriness is mainly observed between firms and local governments, but it is not limited to institutions - the firm's network showed strong impact from the network of its managerial personnel. Compared to the inter-firm boundary under the Japanese Keiretsu structure, the boundary between firms in China appears to be clearer.

The existing management perspectives are mostly developed in the context of Western societies, and these theories are argued to have weaknesses in fully understanding Eastern-based management issues (Boisot & Child, 1996). The RBV is one of the dominant management theories evolved in the Western business context. This thesis adopted the RBV in the analyses of Japanese and Chinese firms' upgrading experiences. The research method of case study allowed a large amount of relevant background information to be taken into consideration. As a result, the analysis incorporated the characteristics of the relation-based business context in these two

¹⁰⁹As introduced in *Chapter Four*, it is possible (and common) for a firm (mainly large manufacturing firms) to be part of a horizontal KBG and a vertical KBG at the same time, but within the category of horizontal/vertical KBG, an overlap of memberships (in multiple KBGs) is rarely observed.

countries. The research findings in this thesis led to an adaptation of the traditional RBV framework. This refinement of the RBV therefore serves as one step forward in the connection of the Western and Eastern management perspectives.

7.3 Building on the Findings of this Research

Focused on the textile and clothing sector in Zhejiang, this thesis provided step-by-step answers to the research questions under the extended RBV framework. It offers unique insights into firms' upgrading processes and meaningful clarification of the resource base concept. The research method of multi-case study guided by cluster-based regional development characteristics also applies to other manufacturing centres in China. Combining such research on various areas has the potential to provide a comprehensive understanding of the upgrading transitions of Chinese manufacturing firms. As a follow-up of this thesis, the author is in the process of designing more case studies of Chinese manufacturing firms in Zhejiang as well as other areas (e.g. Shanghai and main cities in the Pearl River Delta).

In this research, the review on the industry development in Zhejiang's textile and clothing sector showed that small firms failed to achieve upgrading outcomes on an individual basis and lacked upgrading strategies. As the main party of the industry (in terms of firm number), small firms' development calls for further investigations. In particular, studies on their potential to become competitive large firms in the industry are meaningful. For a development from the findings of this research, the author is attempting to build contact with small local firms in Zhejiang and conduct focused studies on them, potentially with the support of quantitative evidence (e.g. survey data).

This research revealed that the firm's local business network serves as an important indicator for the scope of its strategic options. Building on this finding, a further specification of the firm's business network frontier can be achieved through

the incorporation of a greater variety of firms. This includes the firm's industry background (e.g. other sectors than textile and clothing), ownership history (e.g. privatized SOEs in China) and geographical location (e.g. the Pearl River Delta in China).

The contrast between Japan and China in this research demonstrated the differences between the two countries in terms of firms' networks and their impacts on firms' growth opportunities. This reflects the variation in the two countries' historical development of governance system and business environment. The extension of the RBV framework in this research developed a systematic structure for the integration of such impacts into firm analysis. This framework serves as a structured analytical tool, providing a theoretical ground for further evaluations of the firm's strategic options and productive opportunities. It has the potential to be applied to the business contexts of other Eastern or Western countries.

To both researchers and managers, the dynamic changes of competitive challenges confronted by firms require a wider scope of analysis of the firm's productive opportunities. This calls for the understanding of the firm's business environment, in terms of organizational boundaries, the nature of network connections and the impact of such embedded relations on the firm's resource mobilization. Strategic decisions are therefore not limited to the level of firm resources and capabilities, but require a broader view of the firm's business network.

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Appendix

Appendix 1: Sample Selection (Step 1)
- Information of Selected Firms¹¹⁰

	Youngor	Romon	Progen	Seduno	Semir	Wensli
<i>City of Foundation</i>	Ningbo	Ningbo	Ningbo	Ningbo	Wenzhou	Hangzhou
<i>Year of Foundation</i>	1979	1984	1984	1994	1996	1975
<i>2010 Total Sales Revenue Ranking</i>	#1	#18	#47	#28	#10	#26
<i>2010 Total Profit Ranking</i>	#1	#18	#67	#32	#4	#63
<i>2011 Total Sales Revenue Ranking</i>	#1	#19	#53	#30	#11	#26
<i>2011 Total Profit Ranking</i>	#1	#21	#72	#30	#6	#61
<i>2012 Total Sales Revenue Ranking</i>	#1	#14	#57	#31	#12	#20
<i>2012 Total Profit Ranking</i>	#2	#20	#82	#35	#7	#62
<i>2013 Total Sales Revenue Ranking</i>	#1	#15	#53	#28	#13	#22
<i>2013 Total Profit Ranking</i>	#3	#20	#77	#34	#9	#42
<i>2014 Total Sales Revenue Ranking</i>	#1	#22	#54	#24	#13	#21
<i>2014 Total Profit Ranking</i>	#2	#22	#63	#28	#6	#35

¹¹⁰ Zhejiang LE SUEUR VIDIE Garment-making Co., LTD is also one of the top ranked textile and clothing firms. However, the firm does not have an official website, and available online information does not show consistency and failed the triangulation check in this thesis. This firm was therefore removed from the list of selected firms for case study.

Appendix 2: Examples of Interview Questions¹¹¹

- Wensli Group¹¹²

1. For the period between 1975 (the firm's foundation) and 2015, has Wensli experienced major strategic transitions, i.e. changes of strategic focus? What were they?
2. Based on these changes of strategic focus, can you divide the development path of Wensli (between 1975 and 2015) into several stages? Please provide the starting and ending year of each stage.
3. What were the main challenges to Wensli's development in each of these stages? Please provide details (examples) as the signs of these challenges. What were the impacts of these challenges to Wensli's operation and growth?
4. What strategic adaptations did Wensli make to confront the challenges in each stage? Please provide details (examples) of the results of these adaptations. What were the impacts of these adaptations to Wensli's operation and growth?
5. For the strategic adaptations in each stage, please describe the main changes happened to Wensli's business operation, e.g. in terms of firm activities (production, financing, procurement, marketing, design, sales and services), main business units, managerial structure and processes, HR management procedures etc.
6. Were these changes planned? What were the steps taken to decide on them? Who made the decisions?
7. What steps were taken to realize these changes? Who participated in each step? What did they contribute to the realization of these changes?
8. Has Wensli met difficulties in the steps of realizing the changes? What were they?
9. How were these difficulties resolved? Did Wensli rely on any institution or individual's help in resolving these difficulties?

¹¹¹ The appendixes in this thesis provide examples of main interview questions - questions that were designed before the interviews. During the interview, the interviewer chased the interviewees with further questions for detailed information based on their answers. These additional questions are not included in these appendixes.

¹¹² As introduced in Table 1.5, the interviewees of Wensli Group are the top managerial team of the firm, and most of them hold a degree in management (e.g. the HR director holds an MBA and the CEO holds an EMBA). These interviewees therefore have general knowledge and understanding of academic terms in management studies.

10. In each of these steps and the problem-solving processes, what firm resources were acquired, invested and made use of by Wensli?
11. Were these resources necessary for the realization of the changes? Why or why not?
12. In what way were these resources acquired, invested or made use of by Wensli? Were they part of the assets that Wensli owned?
13. Those resources that were not Wensli's assets but necessary for the changes - who owned/controlled them? What steps were taken for Wensli to make use of these resources?
14. What were the relationships between Wensli and the owners/controllers of these resources? How were these relationships built?
15. How long have these relationships been maintained? How did Wensli maintain them?
16. Could Wensli have made use of the resources without these relationships, e.g. accessing similar resources through other channels? Why or why not?
17. Have there been changes in the nature of these relationships? What were these changes? How and when did they happen?
18. Did Wensli's adjustments of key personnel (e.g. members of the managerial team) cause changes to these relationships? How were these relationships maintained through these changes?
19. What were the firms that Wensli considered as important rivals in each stage of the strategic transitions? Did they go through similar transitions as Wensli did?
20. Regarding these rival firms and their transitions - did they (attempt to) imitate the strategic changes that Wensli made? What do you think, in terms of resources and capabilities, enabled/hindered their (attempts of) imitation?
21. Were these rival firms able to build and maintain similar relationships as Wensli did, and make use of resources through these relationships? Why or why not?

Appendix 3: Examples of Interview Questions

- Progen Group

1. What are the steps taken in the recruitment processes of Progen?
2. What are the threshold requirements on job applicants? Are there requirements regarding professional knowledge and work experience in the textile and clothing sector? What are they?
3. What is the general background of newly recruited employees, particularly in technical and design-related positions?
4. What are the steps taken in the training processes of newly-recruited employees? Please list the specific procedures and provide examples. How long does each of these training steps last?
5. For workers in production activities, what are the steps taken to train them in using (new) advanced machines? How are these training results evaluated?
6. In Progen's development of tailoring services of business suits, what were the impacts from the "Hong Bang Tailors" legacy? Please provide details and examples.
7. Nowadays, are there still successors of Lu remaining in Progen? How many are they, in percentage of the total number of employees?
8. What positions are these successors occupying? Do they play any role in the training of other employees? What are these roles?
9. What is the turnover level of employees in Progen, compared to the general level of the sector?
10. For employees at essential technical and design-related positions, how does Progen retain them? How many years, on average, have they remained employees of Progen?

11. What are the wage levels of employees in production, design, service and managerial positions? Compared to other firms in the sector, how competitive are these levels of Progen?
12. Are there other incentives for employees besides the salary? How are these incentives decided and distributed - please introduce the payment system of Progen?
13. These incentives provided by Progen, are they also commonly available in other firms of the sector?
14. What do you think is the most effective means of retaining essential employees adopted by Progen? Why do you think it is effective - please provide examples?

Appendix 4: Examples of Interview Questions

- Supplier of Semir Group

1. Please introduce some details about your firm - name, location, year of foundation, number of current employees, types of products, annual outputs and revenues.
2. How long has your firm been cooperating with the current buyer customers, the longest, the shortest, and the average? How long has your firm been cooperation with Semir Group?
3. Among your current buyer customers, what is the percentage of long-term partners like Semir (in terms of number of firms)? What is the percentage of your annual outputs that are produced for Semir?
4. What is your understanding of/how would you describe the cooperative relationship between your firm and Semir? Why - please provide details and examples?
5. What do you think has maintained the long-term cooperation between your firm and Semir? What makes you willing to keep working with Semir?
6. Compared to other buyer customers you are currently working with, is Semir special in any aspect? What makes it special - please provide details and examples?
7. Has Semir been sharing profit with your firm during the cooperation? Through what specific actions was the profit-sharing realized?
8. Has Semir helped your firm to develop new skills and capabilities? What are the steps taken for such helps - please provide examples regarding the type, procedure, frequency and content of assistance provided by Semir?
9. What is your observation in terms of the quality requirements of Semir? Has Semir been increasing its standards of quality control - please provide examples?
10. What efforts has your firm made to meet these requirements? Has Semir provided any assistance to facilitate your efforts? What is the assistance – please provide details and examples?