DOCTOR OF BUSINESS ADMINISTRATION

Porter's Strategy and the Influence of *Guanxi* and Government Policies in Small and Medium-sized Pharmaceutical Companies in China

Document Five

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Bo Xu

N0185374

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Copyright Statement

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ABSTRACT

This thesis is set against the context of China's economic transition period and in particular the policy environment of national Medical Reform for 2009. The national policy acknowledged the growing aging population that has boosted market demand and growth. Indeed, from 2009 to 2014, a series of policies were promulgated by both central and provincial governments. Here, these are shown to influence strategy formulation and implementation within small and medium-sized pharmaceutical companies (SMPCs).

Given this business environment, the research reported here finds that the "pure form" of Porter's strategy theories do not work completely for China's pharmaceutical industry. In particular, two non-market factors of government policies and *guanxi* are deemed critical and yet absent within one of his models. Here, Porter's Five Forces model is extended to include the two forces of *guanxi* and government policies. The subsequent "seven forces" model arises from examining SMPCs' strategy application in two comparative case studies, and in light of changing government policies.

The two case studies were identified as being typical and representative of the industry. One is a chemical medicine producer and the other is a Traditional Chinese Medicine producer. The two case studies share the characteristics of being private medium-sized companies and having prescription drug manufacturing capability. A critical realist approach was adopted with a semi-structured interview technique to collect primary data from nine interviewees, four of whom provided a second follow up interview to explore *guanxi* giving a total of 13 interviews.

The two main conclusions drawn from the analysis of the rich interview accounts

are: *guanxi* is a force in terms of Porter's theoretical scheme. It offers competitive advantage to facilitate achieving organizational strategy goals and is embedded in the business practices of SMPCs and seemingly runs through the whole process of their strategy formulation and implementation. The second conclusion is that national and provincial government policy influences market entry, market coverage rates, product pricing, costs and profitability. Notably, *guanxi* was conceptualised as one underlying causal mechanism influencing government policy formulation at provincial level. The contribution of this thesis is to show that *guanxi* and government policy do interact in complex ways to influence SMPCs' strategy; these forces also connect and influence the other Porter's Five Forces.

The theoretical implications are that the "pure form" of Porter's strategy theories do not work completely in this context but do help as a "scheme" for practitioners in the industry. Given the Chinese context, *guanxi* and government policy interact and have an influence on Porter's Five Forces model, hence, they add two key forces to Porter's theoretical model. Turning to the practical implications, the thesis' findings will/can assist strategy makers' understanding of the interaction of *guanxi* and government policy associated with the process of strategy formulation and implementation and thus may facilitate the achievement of strategy goals.

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CHAPTER ONE: INTRODUCTION

The author has been interested in the application of Porter's strategy to China's pharmaceutical industry since starting her Masters degree in 2004. Subsequently, she combined Porter's focus strategy and differentiation strategy to formulate her own company strategy and develop her business. From her DBA research, the practicability of Porter's strategy has been further developed given the emergent importance of government policy changes and *guanxi*. This research has been undertaken in two small and medium-sized pharmaceutical companies (SMPCs) and shows the ongoing management from a stable to dynamic environmental context.

This introductory chapter briefly explains the author's previous research, which represents a research context for this thesis. This is followed by a description of the outcomes of this thesis through summarizing the chapters that follow.

1.1 Previous Research

The author embarked on her research into Generic Strategy and Five Forces Strategy (Porter, 1980, 1985) in Document One. Next, within the context of the pharmaceutical industry in China, Document Two reviewed the existing literature and two significant factors emerged: an apparent neglect of *guanxi* and government policies. This literature review led to a conceptual framework showing the factors of policy, *guanxi*, product, entrepreneurship and e-commerce that small and medium-sized pharmaceutical companies (SMPCs) should take into account when formulating and implementing strategy. The research findings of Document Three – from semi-structured interviews conducted with an elite cross-section of the Chinese pharmaceutical industry – supported the view that these factors were significant. The author's own company was used as one case study to explore the feasibility of the application of Porter's generic strategy.

Thirty-six interviewees were selected from different categories of pharmaceutical companies including medicine producers, agents, distributors and drugs logistic companies with the purpose of determining what factors should be taken into account and what barriers exist when SMPCs apply Porter's model. At that stage, the senior managers who were interviewed for Document Three still considered strategy as very important but had different understandings from each other. Furthermore, and of interest, the interviewees emphasized that companies should have competence in possessing, acquiring and monitoring *guanxi*-based resources. The interviewees also gave important clues to market-orientation including existing competition and current policies – both national and provincial. E-commerce was also considered in Document Three, but as e-commerce is restricted by governmental policy, most SMPCs did not consider e-commerce in formulating and applying their strategies. Therefore, e-commerce was not continued in Document Four. One overall finding was that Porter's strategy theories were applicable to the SMPCs, yet other key aspects were missing.

Research for the development of Document Four showed that there was an extensive competitive environment in existence. Based on the findings of Document Three, the research for Document Four adopted a structured questionnaire using six hypotheses which were presented to measure the reliability and practicability of the application of Porter's theories. The goal of Document Four was to identify the critical influencing factors for strategy formulation and implementation. 220 completed questionnaires were received and 190 valid questionnaires were confirmed. One key finding was that Porter's generic strategy seemed no longer applicable because of policy changes and a complex environment. The critical policies included medical reform, drug licensing certification (e.g. good manufacturing practice (GMP)), medical insurance schemes and drug pricing, and drug regulatory systems. These central policies strongly influenced SMPCs' strategy formulation and implementation in the Chinese pharmaceutical industry. For products with competitive elements, it

emerged that policies resulting from central government could influence product development. Furthermore, *guanxi* with relevant government agencies was established as still being an important resource in both strategy formulation and implementation.

Given the findings of qualitative research in Document Three and quantitative research in Document Four, an understanding of Porter's strategy has become more complex during the period of three years. Given the influence of government policies, one question was how and why, but also, its absence within Porter's framework was noted. *Guanxi*, which arose in Documents Three and Four, was also emerging as an essential resource that needed to be taken into account. The literature supports this when considering any business in China (Pablos, 2005； Gibb, 2006； Ying, 2007; Zhao, 2009; Cao, Liu and Porter, 2010; Yen, Barnes and Wang, 2011; Gao, Knight and Ballantyne, 2012; Arribas, 2013; Cao, Baker and Schniederjans, 2014). Based on a literature review, but also the author's practical experience, *guanxi* is shown to exist in all primary activities and supports achievement in China. Yet this factor too is not captured as a force in any of Porter's original theories. As the research reported here shows, *guanxi*, as a competitive advantage, has been influential in SMPCs' development. So the overall guiding/emergent questions were, can *guanxi* as a force influence policy-making in the Chinese pharmaceutical industry? What is the relationship between policy and *guanxi*? These issues are explored in this thesis.

1.2 Research Context

China's economy stands in a transition period (Yuan, 2014). During "the transition from an industrial to post-industrial economy" (Zhang, 2015, p. 59), China's pharmaceutical industry is also developing rapidly. The industry is a massive and growing area (BMI, 2014) (See Appendix 1). China is seeing big changes in healthcare policies in relation to provincial policy making, medicine

producers' certification and production, medicine logistics, and medication use in hospitals. The background to the issuing of these policies is China's Medical Reform, which is formulated by the Chinese central government. China's Medical Reform (See Appendix 2) imposes public health, and sustaining it, as a national long-term goal. The most relevant national policy to this research is Medical Reform for 2009 (See Appendix 3). It aims to boost the market demand and capacity of the pharmaceutical market. This provides numerous opportunities for SMPCs.

However, "resource misallocation" is also a problem which weakens China's economic growth (Zhang, 2015). The pharmaceutical industry also faces this same problem. Public hospitals mainly undertake medical education, medical diagnosis and treatment for the public. They account for 54% of the total number of hospitals, have 49% of registered doctors (Statistical Yearbook of China Health and Family Planning, 2014), and share 90% of the medical market (Jiang, Lv and Zhao, 2014) in China. Without doubt, public hospitals (See Appendix 4) own the main medical resources and dominate the market share of the pharmaceutical industry. Not surprisingly, therefore, a common strategy for medicine producers is to develop business with public hospitals.

More specifically, small and medium enterprises (SMEs) provide major economic contributions for a country (Sharma, 2011): In China, SMEs are much more numerous than the stated-owned enterprises, and therefore, research into SMPCs is arguably important given the potential greater policy influence of SMPCs. Indeed, analysing SMPCs' strategy formulation and implementation given the changing national and provincial policies has become an important area to research. This thesis begins that effect and aims to offer insights into the role and influence of policy and *guanxi* as forces within SMEs' efforts to apply, especially medicine producers in this sector.

1.3 Definitions of SMPCs

Initial references to the definition of the SMEs and their characteristics, developments and obstacles were undertaken in Documents Two and Three. In this thesis, the earlier review of SMEs classification has followed the European Commission Standard, which was converted from Euro to Renminbi (for further explanation see Appendix 5). SMPCs are defined as being located in Mainland China. While it is impossible to summarize all types of Chinese pharmaceutical enterprises strategy developments in this thesis, given the author's context and knowledge, chemical and Traditional Chinese Medicines (TCMs) producers are one classification and were accessible for the collection of data. The research subjects, then, are drawn from the chemical drugs and the TCM sectors. Previously, in Documents Three and Four, the research subjects included pharmaceutical producers, agents, distributors and logistic companies. Based on this previous research work, the drugs tender bidding process was identified as the main issue in the drug business operations. Whatever drugs producers, distributors or logistic companies do, they have to follow, coordinate with, and implement producers' strategy or market operations. Hence, pharmaceutical producers are central to the whole pharmaceutical industry and the corresponding value chain. Pharmaceutical producers stay at the head of the industrial chain. This is especially the case for all drugs tendering and bidding. Pharmaceutical producers are, then, the bidding subjects and the decision-makers for drug pricing. Given this, pharmaceutical producers were chosen as the context of research focus for this thesis.

1.4 Research Period: from 2009 to 2014

The central government launched the Medical Reform policies for improving and upgrading the pharmaceutical industry. Subsequently, a series of health laws, policies, government opinions, directives, and regulations were promulgated by the Chinese central government from 2009 to the present. The State requires the

industry to be up-to-date, with professional standards of the pharmaceutical industry and medical services aiming to implement policies such as the new Good Manufacturing Practice (GMP) (See Appendix 6) and Good Supply Practice (GSP) policies. The requirements of the Medical Reform for 2009 are reflected in the various policies and regulations (for more details see Appendix 3) and some of these directly influence product structure, the business model and the company strategy of pharmaceutical enterprises, indeed, even the survival of SMPCs (for example, the policy of Drug Centralized Procurement Bidding (DCPB)- see Appendix 7). At the same time, the DCPB policy showed that price was going to be reduced year by year. Clearly, this situation directly influences SMPCs' operations.

1.5 Research Questions and Aims

The two research questions were established as:

(a) How do *guanxi* and government policies influence SMPCs' strategy formulation and implementation?

(b) To what degree does Porter's Five Forces theory influence SMPCs' strategy in the Chinese pharmaceutical industry?

Furthermore, given the literature review and documents Three and Four research, an interest in exploring the role of *guanxi* was retained too. Although there are many negative aspects of *guanxi* as the literature indicates, in this thesis, the author focuses on *guanxi*'s critical role to influence other forces under the context of government policies, such as New GMP, medical insurance scheme, and drugs tender bidding. Given the research context, the author sought specifically to examine (1) the relationship between government policy, *guanxi* and the Five Forces; (2) exploring the effects of government policy and *guanxi* on strategy practice in particular in China's pharmaceutical industry, here, in two SMPCs.

1.6 Case Study

The author chose two case studies from SMPCs: both were known to the author . They are a chemical producer, named Company A, located in Shengzheng, Guangdong, with the second being a Traditional Chinese Medicine (TCM) producer, named Company B, located in Guizhou province. The two case study companies share the characteristics of being private, medium-sized producers and have prescription drug systems including at least one product listed in the two most important Government insurance schemes. The interviewees were senior managers and decision-makers within the companies.

A critical realist approach was adopted which informed the data collection and analysis. Thirteen semi-structured interviews were conducted to collect primary data from the nine interviewees working in five departments. The data collection included two phases of interview. Seven questions were adopted for the first phase and six questions were adopted for the follow-up interviews in order to collect further data. Both phases of face-to-face interviews followed the same steps. The four interviewees chosen for follow-up interviews had also been chosen for the first interview phase. After completing data collection, data management included transcribing the records into Chinese, making notes and generating themes in Chinese first and then accurately translating it all into English. Given the Chinese context, the main findings are:

(1) *Guanxi* offers a competitive advantage which facilitates achieving strategic goals. It was conceptualized as one underlying influencing force in government policy formulation at provincial level, and a critical force which is not the determining factor but plays a tactical role in strategy formulation. *Guanxi* is shown to have the dominant functions of “catalyst, lubricant, and multiplier” in strategy implementation.

(2) National and provincial policy are intense forces that directly influence

SMPCs' entry barriers, market coverage rates, product pricing, costs and profitability.

(3) *Guanxi* and government policy interact and this uniquely influences strategy. Notably, the findings suggest that the "pure form" of Porter's strategy theories does not work completely but helps initially to begin to understand the industry. *Guanxi* and government policy, then, are seen as two forces in terms of Porter's theoretical themes and they need to be added to Porter's Five Forces model in this national/cultural context. A modified model, with "seven forces" is suggested as offering a more insightful guide for SMPCs to cope with complex policy, economic and social environments.

The contribution of this thesis is that *guanxi* and government policy do interact in complex ways to influence SMPCs' strategy; these forces also connect and influence Porter's other Five Forces. It is suggested that the "seven forces" model assists strategy makers understand the interaction of *guanxi* and government policy associated with the process of strategy formulation and implementation and develops strategies in the pharmaceutical sector which can be applied within the current dynamic environment.

1.7 The Structure of the Thesis

The thesis is arranged as follows. In the next chapter, the literature review focuses on the three elements of strategy, *guanxi* and policy. In particular, Porter's generic strategy and Five Forces theory are reviewed and updated. The definition and implications of *guanxi* and its functions are explored too. At the same time, the operations of *guanxi* are investigated at the two levels of the individual and the organization and the links between the two are reviewed. Then, the interrelationship between *guanxi*, government policy, and strategy would be explored. *Guanxi* as underlying causal mechanism is explained too. Based on the literature, the conceptual framework is generated and this guided the data

analysis. In Chapter Three, the research design, methodological approach, data collection, and data management are outlined. In Chapter Four, the analyses and a discussion of the key theme findings are explored critically. Finally, the conclusions are drawn and include highlighting both the theoretical contributions to Porter's strategy theories as well as contributions to the author's practice too. Future studies are also presented, alongside a consideration of limitations which, together, close the thesis.

CHAPTER TWO: LITERATURE REVIEW

The focuses of this thesis are strategy, policy and *guanxi.* Strategy definitions were explored in previous research and are presented as selective summaries here. The review of the implications of *guanxi* is updated based on previous research. *Guanxi* operations at the two levels of individual and organizational level are extended too. The role of government, the medical administration system, the structure of the government medical regulatory system and their impact on business will be outlined next, as some pharmaceutical industry policies are perplexing and contradictory (BMI, 2014). The interrelationship between *guanxi* and government policy and strategy are also extended too. Finally, the conceptual framework is outlined.

2.1 Understanding of Strategy

In this section, the term "strategy" and strategy formulation and implementation will be explored and updated from literature.

2.1.1 Review of the Implications of Strategy

The term "strategy" is widely applied in military and economic fields (. In China, it has been in use since the Spring and Autumn Period (BC 722-481). But what exactly is strategy? Regarding the different definitions of strategy and scholars' understanding of the term, it cannot be defined in a few brief sentences or paragraphs (Mintzberg, 1994, Dandira, 2012). Strategy has long been used implicitly (Mintzberg, 1987), and developed since the 1960s (Feurer and Chaharbaghi, 1997). Some scholars consider that strategy is a plan or planning. Mintzberg (1987), for example, defines strategy as plan, ploy, pattern, position, and perspective and explores their interrelationship. Mintzberg's definition provides valuable directions for companies on how to achieve competitive

advantage in the five dimensions. In contrast, Kay (1993) argues that strategy is no longer planning or visioning. More recently, Mintzberg, Ahlstrand and Lampel (2005) elucidate that strategy is also needed to focus efforts instead on promoting coordination of activities.

Davies (2000, p. 25) explores strategy's nature and purpose and considers that it could be viewed as one element of a troika of policy-strategy-resources. He explains that "In government, policy is the product of a legislature that delineates the goals, objectives and priorities of the state. In business, the term 'policy' is used to define a company's principal goals and objectives and to prescribe the company's operational domain." Based on the interdependence of the three elements, the purpose of formulating and implementing strategy is to make corporate policy succeed in the competitive environment. Without resources, strategy cannot be achieved. He highlights that strategy-making must be implementable and flexible. Davies (2000) combines government policy, corporate strategy and resources together to facilitate strategy formulation and implementation. The author considers that *guanxi* can be regarded as a resource in China; a unique resource that can be seen as a competitive advantage. Johnson and Scholes (2004, p. 9) define strategy as relevant to the long-term development and unique resources so as to adjust resource allocation to achieve competitive advantages. Porter (1980, 1985) considers that strategy is to achieve competitive advantages in the industry. Porter (2008, p. 53) improves on this further that "strategy is the creation of a unique and valuable position, involving a different set of activities". Bach and Allen (2010, p. 41) state that "sustained competitive advantage arises from tackling social, political and environmental issues as part of a corporate strategy – not just pursuing business as usual". It is obvious that strategy is related to resources. And resources are derived mainly from social and political environments. In China, there are many channels and approaches to obtain resources from society.

Another view of strategy is in terms of goal and mission. Chandler (1962) states that strategy is the determination of the basic long-term goals and objectives. Johnson and Scholes (2002, p. 15) offer a similar point of view: “Strategy is the direction and scope of an organization over the long-term which achieves advantage for the organization through its configuration environment, to meet the needs of market and to fulfill stakeholder expectations.” Furthermore, Johnson and Scholes (2003) define strategy as mission, strategic intent, goal and objective. Thompson and Strickland (2003) highlight and combine the strategy mission, formulation and implementation as three questions of “What is our business?”, “What will it be?” and “What to do now?”. Phillips (2011) also considers that strategy includes operations and results. Smith (2006) classifies strategies into business strategy, functional strategy and product strategy. Although the author argues that Smith’s classification has a few limitations, she agrees with his view of the significance of product strategy in business strategy. It has been suggested that strategy can guide businesses in getting on with their primary activities (Harland, Lamming and Cousins, 1999), gaining competitive strengths (Porter, 1985), and achieving “strategy value” (Bowman, 2007).

Sometimes the issue of strategy is complicated for practitioners in SMEs. They may misunderstand and encounter pitfalls in the practical activities. The author considers that those pitfalls have practical implications for companies. Based on her practical experience, practitioners in SMEs have no complete theoretical system; normally, they rely on their empiricism to add theory piecemeal to practical activities. Some projects succeed while others fail. Under the open policy, a lot of SMPCs have been developing for many years. During the 1990s, SMEs established themselves in a market that was advantageous for success. They depended on one or a series of products, or on one policy in one province, for example, drugs tender bidding regulation. Thus, another view of strategy that has emerged is connected with practical insight. Dandira (2012) highlights strategy as a practice perspective issue that would help executives achieve

practical insights. At the same time, practitioners are involved in a knowledge vacuum, which has been cited (Dandira, 2012) as a main error at strategy implementation stage.

Many definitions and explanations of strategy have been proposed by scholars such as: mission, goals, plans (Mintzberg, 1987); objectives, operations and results (Phillips, 2011); resource (Davies, 2000; Phillips, 2011; Johnson and Scholes, 2004, p. 9); and long-term goals or objectives (Chandler, 1962). Phillips (2011) considers that strategy has pluralism. External forces such as political, economic, and social forces influence "the viability of alternative strategies for achieving objectives" (Phillips, 2011，p. 926). Therefore, consideration of context is significant for understanding strategy. Given the various definitions and perspectives on the term of “strategy’, the author considers that it is important to articulate the position of strategy adopted for this thesis. In the context of China’s economic transition period and in particular the policy environment of National Medical Reform for 2009, strategy is unique resource and long-term objectives. Strategy work, then, aims to achieve competitive advantages and being different is one core element (Porter, 2008, p. 43). This definition is adopted in this thesis and echoes the author’s own 20 years of experience in China’s pharmaceutical industry.

2.1.2 Strategy Formulation and Implementation

A number of scholars have demonstrated theoretically and have written on the importance of strategy formulation and implementation over the past three decades. Chaharbaghi and Feurer (1994) state that strategy formulation and implementation encompass issues such as competitive environments, values, goals, capabilities, structures and processes brought together with action. It is a complex process.

McCarthy (2003) demonstrates that strategy making should be a “bottom-up” process and not just a “top-down” process. Micheli, Mura and Agliati (2011) argue that the “how to” of balancing between top-down control and bottom-up empowerment can be critical for strategy implementation. At the same time, they also suggest that researchers need to adjust objectives and processes and update their knowledge continuously so as to face the challenges presented by the highly dynamic environment. In relation to this viewpoint, Feurer, Chaharbaghi and Wargin (1995) also argue that dynamic strategy formulation and implementation are carried out simultaneously while the strategy formulation and implementation are underway. So it is the process of strategy management. Ramaseshan, Ishak and Kingshott (2013, p. 1224-1225) explain that “market competition negatively influence strategy” and strategy formulation and implementation should be “simultaneously applied”.

Mair (1999) states that employees can play an important role in strategy formulation and have the power to influence some decisions. The employees see the venture from another perspective and are often able to provide information or points of view from a different perspective; they often have contacts and can report on implementation factors that can help with the strategic mission. Not working with employees in this manner will risk important factors in the process of strategy formulation.

Okumus (2001, 2003) illustrates the key implementation variables as environment, strategy formulation, organizational structure, leadership, organizational culture, operational planning, resource allocation, people, communication control and feedback, outcome and external partner companies in his writings. Thus, strategy implementation is crucial to ensure a firm’s success (Love, Priem and Lumpkin, 2002; Micheli, Mura and Agliati, 2011).

Sterling (2003) states the misalignment of strategy implementation as the real

reason for strategy failure, thus suggesting a checklist for successful implementation as: an assessment of organizational design and capabilities; consideration of potential competitor reactions; involvement of managers; attention to communication; action planning and budgeting; and establishment of a monitoring system. Kazmi (2008) points out that strategy implementation is a sophisticated process and that during the processes of strategy implementation, many researchers and managers are misaligned, unable to view the objective in the same way and to meet the primary goals. Accompanied by economic changes and significant changes in our society's development, the external conditions impacting SMPCs' strategy development are unpredictable, making the strategy implementation extremely difficult. As a result, the strategic understanding and framework of SMPCs are difficult to effectively or efficiently define, develop or implement.

The author considers that strategy formulation and implementation are dynamic processes. Organizations need to combine their resources such as *guanxi* with the practical environment such as government policy to develop strategy. At the same time, during the strategy formulation process, the executors need to consider and avoid a series of potential obstacles such as unrealistic mission statements and overestimations of organization capacity.

2.2 Porter's Strategy Theories Reviewed

Porter (1980, 1985) describes the Five Forces model to understand industry structure and existing competitors. Five forces determine industrial profitability. Therefore, by understanding all changing competitive forces and their underlying causes, firms can seek competitive advantages, for example, by using generic strategy.

The theory of value chain is arguably also relevant to this thesis and the

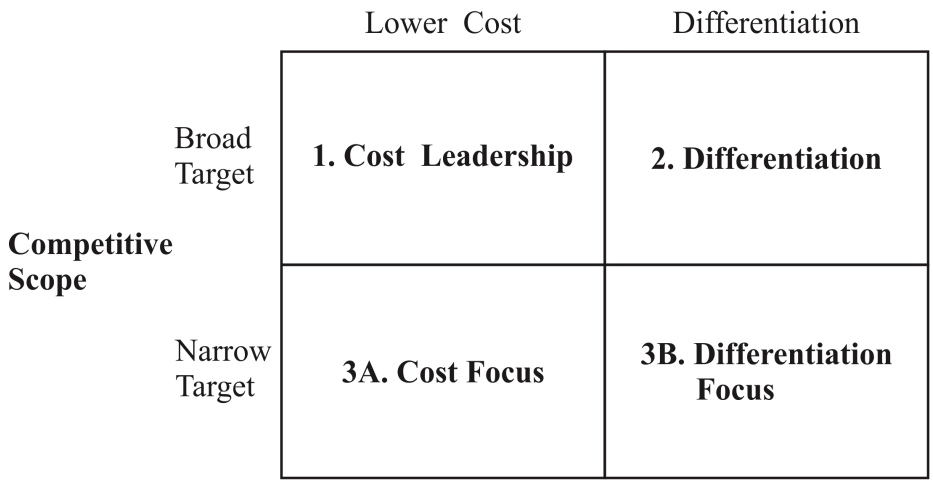
interviewees did touch on it. However, given the objective need to maintain focus, this thesis considers just the two theories of generic strategy and Five Forces, which will be explored and updated in this chapter. In this thesis, the Five Forces theory is more important because two research themes of government policy and *guanxi* influence the five forces and determine SMPCs' entry, cost, market coverage, and profitability.

2.2.1 Generic Strategy

Porter (1985, p. 11) states that strategy is about achieving competitive advantages. He proposes that a firm's primary profitability is its position in the industry, the foundation for maintaining the two basic types of strategy advantages of "cost advantage and differentiation". Moreover, the two types of advantages deriving from industry structure and the five forces determine whether a firm possesses capability to compete against rivals. Therefore, generic strategy (see Figure 2.1) is also relevant to this thesis.

Although generic strategy has been researched in Documents Two, Three, and Four from both literature and practice, for this thesis, the updated literature of generic strategy is also important. The value of updating generic strategy is to see what factors such as political factor influence the application of generic strategy from literature.

Figure 2.1 Three Generic Strategy



Source: Porter, 2004, p. 12

Porter's generic strategy application has received various comments from different researchers. Generic strategy theory is testified to and verified both academically and practically (Pertusa-Ortega, Monina-Azorin and Claver-Cortes, 2009). But Salavou (2013, p. 302) argues that "it lacks consistency" and "was neglected in the first 20 years in the EU".

Porter's original conceptual study is traceable from empirical evidence in North America (Jacome, Lisboa and Yasin, 2002). Brown and Pirani (2007, p. 25) state that "cost leadership and differentiation are not mutually exclusive strategies". Allen *et al*. (2008) compare the application of Porter's generic strategies in Japan and in America. In particular, cost-leadership has been applied in Japanese firms extensively. It was rooted in the Total Quality Management based (TQM) tactics so as to reduce cost and waste. Further important support came from the Japanese government's economic strategy. Allen *et al.* (2008, p. 39) also state that "To achieve a low-cost advantage, an organization must have a low-cost leadership mindset, low-cost manufacturing with rapid distribution and replenishment, and a

workforce committed to the low-cost strategy". On the contrary, the differentiation strategy was much less utilized in Japanese companies. Frequently resorting to Porter's generic strategy application, American companies were willing to utilize focus-differentiation, focus-cost, cost leadership and product differentiation.

Magretta (2012) considers practitioners may misunderstand the theme of generic strategy. Therefore, Magretta (2012, p. 114) explains that "Focus refers to the breadth or narrowness of the customers and needs a company serves. Differentiation allows a company to command a premium price. Cost leadership allows it to compete by offering a low relative price." Based on empirical evidence, Banker, Mashrueala and Tripathy (2014, p. 891) argue that "differentiation is a source" that can enhance a firm's competitive advantages as well as make the firm's profits more volatile. Meanwhile, "pursuing a differentiation strategy enables firms to sustain performance more than pursuing a cost leadership strategy."

Hunt (2007) considers that Porter's theory was well defined and based on the understanding that a company's strategy should correspond to the opportunities and threats in the company's external environment. Thus, external environment factors, for example, social, economic, and political factors, affect firms' strategy. Parnell (2014, p. 56) also argues that cost leadership and differentiation shift in a political environment are negatively associated with performance. Cost leadership, differentiation and focus could be seen as component parts of a firm's value proposition. Yoo, Lemake and Choi (2006, p. 354) argue that it is necessary to use "a different way to think about the implementation of the Porter's cost-leadership and differentiation strategies. But Porter's theories are more generic and not easy to implement."

As the competitive environment is changing with uncertain business conditions

and dynamic political stress, companies have to adjust and modify their strategies. Regarding this point, Parnell (2006) argues that Porter's generic strategy has generalizability. The relationship between generality and practicability needs to be worked out by practitioners in SMEs. Changing the external environment brings big changes of business model structure and application. When the environment changes, firms need to redesign and re-plan their former strategy and utilize the strategic tools of business models, value networks and resource management to conduct "deliberate strategy explicitly" (Ghezzi, 2013, p. 1351).

According to the updated literature, generic strategy application is influenced by external environment too, such as political factors. The success of the generic strategy application depends on steady national conditions and business environment changes. In China's context, the author considers that Porter's model still has some major limitations. It does not take into consideration the new dynamics of markets, for example, non-market factors of political power. At the same time, the Chinese element of *guanxi* plays an important role and functions during business process. This had been commented on in Documents Three and Four. The author is more interested in research on the links between Five Forces application with the government policy and *guanx*i influence.

Given the author's previous research and experience, operating business needs to consider two important elements of government policy and *guanxi* under China's context, especially in the pharmaceutical industry. Based on Porter's works on strategy, strategy formulation is more related to consideration of industry structures and looks at each competitive force's strengths and weaknesses. Those competitive forces drive company's cost and profitability. Therefore, the Five Force model is more relevant and significant to this thesis.

In the next sections, first, the Five Forces application and its critical arguments will be explored based on the previous research. Then the author focuses on

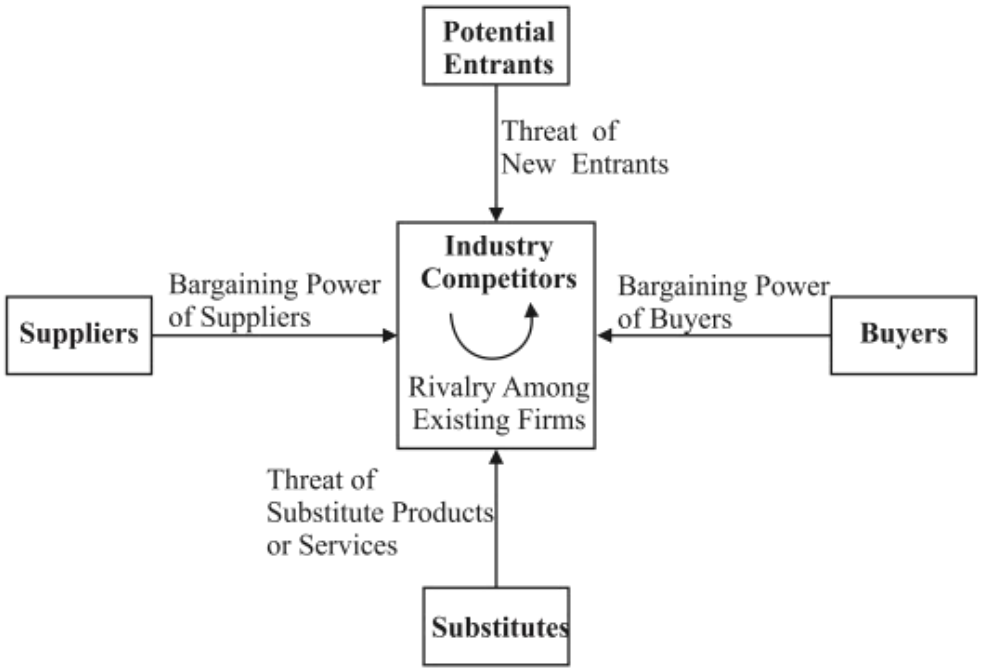
exploring the influences of government policy and *guanxi* on the Five Forces applications from literature. Further, a modified Five Forces model and its application are researched. Specifically, the applications of a modified Five Forces model in China have been included and updated in this thesis.

2.2.2 Five Forces Model

Porter (2004) expounds that the state of competition and the best use of generic strategy depend on five basic competitive forces, namely, entry of competitors, threat of substitutes, rivalry among the existing players, and bargaining power of suppliers and buyers (see Figure 2.2). Porter (2004) advances the concept that industry factors determine the profitability of organizations. It is suggested that through understanding the Five Forces model, companies should be able to choose an appropriate strategy to compete successfully in their market (Thurlby, 1998).

Porter has emphasized five competitive forces that impact every industry and every market. These forces define the intensity of competition and the attractiveness and profitability of an industry (Porter, 2004). The purpose of a company's strategy must be suitable for these competitive forces so that the position of the company can be improved. Porter's model supports the analysis of the driving forces in a market and can be used by management to decide how to manage particular characteristics of their industry on the basis of data taken from the Five Forces theory.

Figure 2.2 Porter's Five Forces



Source: Porter, 2004, p. 5

It was suggested that by a thorough understanding of the Five Forces model, companies should be able to choose an appropriate strategy to compete successfully in their market (Thurlby, 1998). Strategy formulation starts to analyse industrial competition (Lee, Kim and Park, 2012, p. 1784). Industrial competition is the main force in the Five Forces model. In Porter's model, the five forces exert influences on the competitiveness of a firm. They jointly determine the competitive intensity and attractiveness of a market in an industry (Ramaswamy and Renforth, 1996). In the traditional economic model, in order to operate a firm's competitive advantage to overcome its rivals, a firm can choose competitive activities such as lowering cost to gain price advantage, improving products or services for differentiation, creatively changing channels of distribution to keep customers or brand loyalty, and high concentration of market share to ward off rivals. For instance, for SME makers in the Turkish brick industry, cost differentiation is the main competitive advantage which is utilized

widely to fight existing rivals (Oral and Mistikoglu, 2007).

In a free market, if there are viable alternative products and services to suit the same needs, firms face the threat of substitutes. Faced with this threat, firms use cost advantages, specialized products or other core competency to protect themselves against new competitors. A producing industry requires raw materials – labour, components, and other supplies. This requirement leads to buyer-supplier relationships between the industry and the firms that provide raw materials used to create products. Suppliers, if powerful, can exert an influence on the producing industry, for example, by selling raw materials at a high price to capture some of the industry's profits. Supplier power is driven by the number of suppliers of each key input, the uniqueness of their product or service, or their strength to control rivals. The fewer suppliers you choose, the more you need suppliers' help, and the more powerful your suppliers are.

Dobbs (2014, p. 32) suggests that the Five Forces model taken as an industry analysis template can be utilized to obtain sophisticated and deeper insights. In reality, the Five Forces theory is useful to guide practitioners to think about and confront industry structure and supply chains, to understand strengths and the threat of competitive forces and then find their own inner or outer core competency. Dobbs (2014, p. 33-34) provides a list of academic evidence to show that people lack understanding of the depth, structured analysis and strategic insights of Porter's Five Forces model. He suggests a practitioner should gain perception of "how a firm can compete more effectively within its industry" and "many contingency factors to consider".

Sheehan (2005) argues that Porter's generic strategy and Five Forces models do not work in knowledge-intensive firms, for example, pharmaceutical companies. They should utilize those classic old tools in new ways so as to achieve profitability. McGowan and Mahon (2007) argue that Porter's analysis was based

on the confines of the product-market-technology troika, and firms need to consider the effect of non-market issues in political and social factors. Those impacts are undeniably powerful. “Political and social actions can and often do have profound economic and financial impacts on an industry and on individual firms” (McGowan and Mahon, 2007, p. 192). The author agrees that political dynamics, the force of non-market issues, are beyond firms’ control, for example, DCBP policy. Policy issues are dynamic for every industry and firm. The policy of New Good Manufacturing Practice (new GMP) of 2010 must be implemented before 2016 in China. New GMP policy is the industry entry barrier for SMPCs. If small companies do not have a unique product, they have to give up their business to be acquired by and merged with big companies.

Ryall (2013) commends the contribution of the Five Forces model, which has transformed the strategy field, as well as arguing that Porter makes the complexity that five forces can be seen as one force. Because “each player in an industry (whether a firm, a customer, or a supplier) experiences a single force of competition for itself” (Ryall, 2013, p. 83). That force is value-based: industry intensity is between value created or value appropriated by each player. The author thinks Ryall’s one force view is not suitable in China’s pharmaceutical industry. In China’s context, there are different categories of companies existing and competing in the industry. Every company fights for its own existing value or future value created. Moreover, each force may be influenced by government policy and *guanxi* and this is what the research is exploring.

Porter’s Five Forces model has been applied in different government policies and economic environments. Due to different contexts and personal experiences, the Five Forces model meets critical arguments. Anyway, regarding the author’s study, the value of the Five Forces model provides a vital system to categorize competitive forces which influence a firm’s profitability (Grant, 2008). Further, researchers also employ the Five Forces model as a tool which has added

important factors as a modified model based on their different industries and research fields. For this thesis, the author agrees that government policy and *guanxi* are seen as forces in terms of Porter's strategy theoretical schemes that need to be added to the modified model. Therefore, the next sections introduce influences and applications of two important forces combined with the Five Forces model.

2.2.3 Government Policy and the Five Forces Model

In this section, the author has sought several modified Five Forces patterns from literature. Those modified patterns cover both the public and private sectors. Most of the modified patterns are about the private sector including strategy formulation, strategic choice, and strategy implementation. In the public sector, Vining (2011) added the two forces of political institutions and influence and economic external forces to the Five Forces model as a modification framework to guide public agency management. Grundy (2006, p. 223) argues that Porter's Five Forces are the theory of the textbook and have less appeal to actual practitioners. As "Porter's five competitive forces are highly interdependent" (Grundy, 2006, p. 217), he suggests the Five Forces should be "Competitive Pressures/Five competitive Forces" and explores each of the Five Force interdependencies. He also combines the Five Forces with PEST (political, economic, social and technological factors), growth drivers and competitive position as an "onion" model format. It helps a practising manager to think about the competitive environment from multiple angles.

Dulcic, Gnjidic and Alfirevic (2012) believe that the time dynamics issue (past, present and future/anticipated) should be considered in the Five Forces model, which can help practitioners understand today's dynamic industry's structure and interaction between company and industry. Because the broadband market in Korea is constantly and dynamically changing, it is emphasized that policy needs

to be presented in the Five Forces model. And government should play an important role to consider the policies which "prevent interference among different markets"(Lee, Kim and Na, 2007, p. 1590). Lee, Kim and Park (2012, p. 1794) suggest that to the modified model would be added relevant sub-forces such as government regulations as a "sixth force", to operationalize the Five Forces model to deal with competitive dynamics. Given China's context, Wu and Yang (2014) use Porter's Five Forces model to analyse the shale gas industry. They point out that policy is a strong force to limit new entrants and to control marketization in the industry. At the same time, policy is the principal influencing factor in the industry structure.

Government, as a state machine, has proven to be useful on many occasions. "In heavily regulated sectors" (Sutherland, 2014, p. 2), such as the pharmaceutical industry, healthcare, food etc, concerning people's health and safety, there are a set of regulations to control and administer. Thus, Sutherland (2014, p. 13) also suggests that a "full set of market and non-market opportunities and actions" need to be taken into account when firms develop their strategy. Those views that "government influences industry profitability" and can be a "sixth force" are proposed by researchers (Magretta, 2012; Lee, Kim and Park, 2012, p. 54; Grigore, 2014, p. 33; Mathooko and Ogutu, 2015, p. 350). Further, the term "sixth force" is considered an important element that would be added based on Porter's Five Forces model (Lee, Kim and Park, 2012, p. 1794), although they do not elaborate and explore this term widely. At the same time, the author also agrees with those views above that the Five Forces should be combined with political factors. Grigore (2014, p. 33) just says the "sixth force is government" and does not explain government's role and function.

Different researchers suggest the terms of "government" or "government policy", which can be seen as a "sixth force" influencing the Five Forces model. Porter (2008) responds that government policies are more understandable to impact on

industry or firms' profitability rather than government. Porter (2008, p. 264) also mentions that "government policies inflict costs on firms without conferring any compensation", thus it can be seen that government policy is a strong force. But Porter does not explore this element in his strategy works. This reflects his neutral stance.

In answer to critical comments on the Five Forces model from researchers, Porter (2008) emphasizes that making sense of the competitive forces and their underlying causes leads practitioners to anticipate competition. However, Porter does not explore two issues of what are the underlying causes and how those underlying causes influence the five competitive forces. The underlying causes may be specific government policies or other causes. As this thesis will show, one cultural cause or factor that can be seen is *guanxi* in China's environment. Although Porter (2008) proposes government policies which can affect the Five Forces, he does not elaborate and explore this important element in his model. However, Porter (1980, 1985, 2008) does provide a principle framework for understanding, analysing, and anticipating in practice. The author agrees that the Five Force model helps practitioners understand the attactiveness of industry (Ortega, Jalón and Menéndez, 2014) so as to formulate strategic scenarios. Specially, in China's unique context, Qin (2010) indicates that policy is the influential force during China's transitional reform period. Yuan (2014, p. 23) also supports the view that China's transition economy is very relationship-oriented. Regarding the researched literature, the author proposes that government policy and *guanxi* need to be added to Porter's Five Forces model in the context of China. The modified "seven forces" can provide a more sophisticated and comprehensive understanding of China's pharmaceutical industry.

Overall, government policy is seen as a "sixth force" in the literature, so the new value of this thesis is that *guanxi* is seen as a competitive force to be added in

Porter's Five Force model. This view will be explored in the next section.

2.3 *Guanxi*

Guanxi has rich cultural connotations and permeates all aspects of Chinese life including politics, the economy and business activities. *Guanxi* has been defined and researched in different ways in the literature by Westerners for decades. As this review will show, the definitions of *guanxi* have many implications and understandings.

Guanxi implies an intricate and ambiguous web of inter-personal, intra-organization, inter-organization, and government regulatory agencies. Because there are no clear boundaries to clarify its expression it is researched and updated constantly by Western and Chinese experts. Looking at a number of critical comments about *guanxi,* Chinese scholar Zhuang (2012, p. 28) argues that "some references are confused about *guanxi*'s cognition and application".

The adaptability of *guanxi* has extensive and different historical contexts in China (Barbalet, 2015). *Guanxi* is still an important factor in the Chinese business environment during the transition period (Tan, Yang and Veliyath, 2009). As a practitioner, in this thesis the author's interest is in the applicability of *guanxi* as it influences SMPCs' strategy formulation and implementation in the Chinese context. In this section, the implications, definitions, functions, and operations at individual and organizational level of *guanxi* will be extended. The interactions of *guanxi* and the five forces will be explored too.

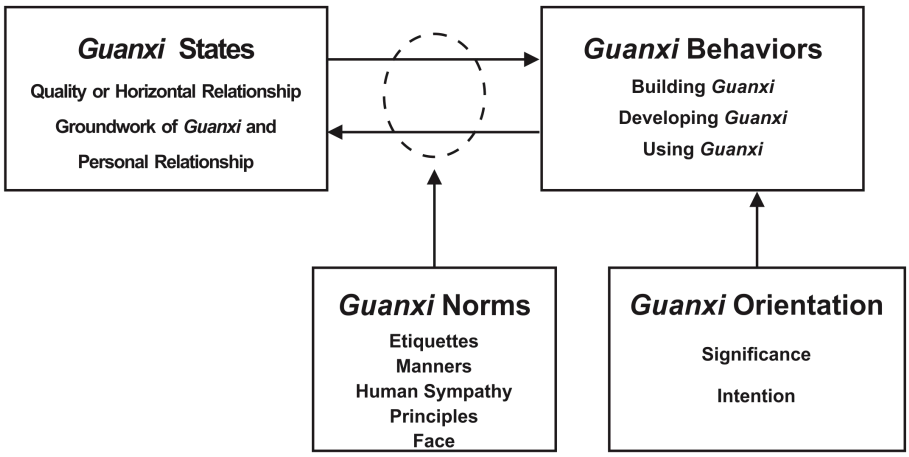
2.3.1 Review of the Implications of *Guanxi*

Research into the implications of *guanxi* is started with individual research in Chinese society. Many references have shown that *guanxi* is germane to Chinese culture, with a long history from Confucianism to the modern day (Anderson, 2008). *Guanxi* is also a Chinese cultural influence (Tong and Mitra, 2009), a way of life (Gong, He and Hsu, 2013), and the main way to work (Chen, Wang and Hsu, 2013). In the research of Markus and Kitayama (see Han and Altman, 2010, p. 39), "in the Confucian society, people are interdependent rather than independent". This means individuals connect with each other to share favours and benefits. Thus *guanxi* is one aspect of Confucian moral standards that can be developed as an open-ended and potentially long-term relationship (Han and Altman, 2010, p. 41). Among all the different attempts to explain *guanxi*, the following literature has distinguished the sense of worth, classifications, hierarchy and strata. Chang (2011, p. 318) considers *guanxi* is "a purposive network behaviour" and its behavioural forms include accessing, bridging and embedding forms. Accessing *guanxi* is to "acquire something desirable". Bridging *guanxi* is to connect two or more groups benefiting each group. "Embedding *guanxi*" emphasizes future mutual benefits and has strategic significance and objective.

According to Sathe (1985) and Schein (1984), culture has three strata: manifest culture, expressed values, and basic assumptions. *Guanxi* also has different strata of culture and various connotations, such as human relations, psychological connection，cognition, and emotion. Further, Zhuang (2012, p. 18, 27) identifies that *guanxi* has several notions of *guanxi* states, *guanxi* behaviour, *guanxi* norms and *guanxi* orientation (see Figure 2.3). *Guanxi* norms and orientations that determine Chinese people's behaviour have rich cultural connotations. *Guanxi* starts with two or more personal relationships. So *guanxi* reflects an individual's relationships as being close or distant. And family bonds, emotions and trust test

and reflect *guanxi*'s intimacy. *Guanxi* norms mean principles of social action and behaviours. For instance, etiquette, manners, human sympathy and "face" belong in this category. Human sympathy adheres to social norms and rules of behaviour. Human sympathy (Barnes, Yen and Zhou, 2011), reciprocity (Hwang, 1987) and empathy (Ingram and Zou, 2008) are involved in the *guanxi* environment. The potential rules are based on the mutual benefits (Jia and Lamming, 2013) and trustworthiness (Efferin and Hopper, 2007) at personal and individual level.

Figure 2.3 Analytical framework of *Guanxi*



Source: Translated by the author, cited in Zhuang, 2012, p. 22

Huang (2009) also explores face and etiquette as "Confucian Relationism". *Guanxi* behaviours are a series of actions and efforts that an individual builds, develops, maintains and uses (Zhuang, 2012, p. 22). Shou *et al.* (2011, p. 503) define "*guanxi* behaviour as a relational effort in building and maintaining good *guanxi* relationships specifically requires saving face (*wei hu mianzi*) and affect investment (*ganqing tou zi*)". *Renqing* (sympathy) and face belong to Chinese cultural values (Qian, Razzaque and Keng, 2007), and both have an interrelationship with *guanxi.* Jia and Rutherford (2010, p. 256) argue that building *guanxi* is "essentially personal and informal" and addressed by the

interaction of face and *renqing* too. Zhai (2011, p. 153) considers that *renqing* and *guanxi* are two notions which are derived from face (*mianzi*). *Guanxi* orientations are in relation to the fundamental perceptions and beliefs of *guanxi. Guanxi* orientation also includes two aspects of *guanxi*'s significance and objective. Zhuang (2012) also classifies *guanxi* into four models of inherent *guanxi*, embedded *guanxi*, emerging *guanxi* and developed *guanxi*. Developed *guanxi* is seen to build a relationship with someone who can bring current or future interests.

The author considers that Zhuang (2012) provides a model for the interrelationship and clues between *guanxi* and Chinese culture. It covers wide categories and links many norms, definitions and terms of *guanxi* together. Zhai (2007) states a theoretical framework about Chinese *guanxi:* personality expresses *guanxi* and *guanxi* reflects personality. He considers that *guanxi* research should be used to compare the association with logic between Chinese and Western cultures. Long-term and involuntary *guanxi*, such as with family members, classmates and superior–subordinate *guanxi*, is core for the Chinese. Zhou (2011, p. 30) argues that *guanxi* should be formed based on special norms rather than on interpersonal relationships. Zhou (2011, p. 32) also compares the differences between the *guanxi* of the Chinese cultural environment and the relationship marketing of Western culture. In Chinese culture, *guanxi* facilitates mutual benefit and trust through rules of human obligations. So *guanxi* works from the basis of a unique social culture and its institutional system.

In the end, *guanxi* reflects Chinese culture and business elements. From a wide perspective, *guanxi* culture is about Chinese lifestyle including knowledge, art, ethics, law and custom. From a narrow perspective, *guanxi* is a unique Chinese symbol (Zhuang, 2012, p. 19). In this social and cultural context, *guanxi* is embedded in Chinese social activities, social behaviours (e.g. authority, ethic and benefits), and personal principles. As researched in the author's previous

Documents Three and Four, *guanxi* is adapted by individuals in business activities. It is therefore necessary to look first at definitions of *guanxi.*

2.3.2 Definitions of *Guanxi*

The author has compiled views of *guanxi* that are relevant to this research in Table 2.1. The value of this table is to list and show different views of *guanxi* from literature so as to generate a definition of *guanxi* which is used in this thesis. Views of *guanxi* from references include both positive and negative, which in direct relation to the thesis will be investigated from the two case studies. This enables a comparison of the different *guanxi* definitions and functions and to make sense of the implications of *guanxi* from practice in the following case studies.

Fei (2008) does not define *guanxi* in his research. The “spider web” (Fei, 2008, p. 28) and “ripple” (Fei, 2008, p. 30) are used to define *guanxi’*s basic implications. These are very abstract and have abundant connotations and denotations. Therefore, it is too abstract to use words to express its connotations. The implications of *guanxi* are very complex too (Fan, 2002).

Table 2. 1 Views of *Guanxi* from Literature

Reference
Positive sides: ● Addresses personal relationship (Fei, 2008; Han and Altman, 2010) ● A pillar of Chinese culture (Anderson, 2008; Tong and Mitra, 2009) ● Enables competitive advantage (Li and Zhang, 2007; Li, Poppo and Zhou, 2008; Chen and Chen, 2004; Pablos, 2005; Chong, Fu and Shang, 2013) ● Important for face and etiquette (Qian, Razzaque and Keng, 2007; Huang, 2009; Shou *et al.*, 2011) ● Enables social capital (Song and Werbel, 2007; Zhai, 2007) ● Social activities (Liu, Bao and Liu, 2013). ● Enables social networks (Whilpert and Scharpf, 1990; Szeto *et al*., 2006; Pablos, 2005) ● *Guanxi* as a model of states-behaviours-norms-orientation (see Figure 2.4) (Zhuang, 2012) ● Improves business performances (Cao, Baker and Schniederjans, 2014) ● Benefits of building good relationships with government (Gao and Tian, 2006)
Negative aspects: ● Gift economy (Chen, 2011), articles of luxury (Chen and Kim, 2013) ● Favours and commission (Yang, Meng and Lau, 2015) ● Bribery and corruption (Wei and Xi, 2001; Luo, 2008; Besha, 2010; Zhao, 2014) ● Unfair, weak, unethical and inefficient enforcement mechanism (Berger and Herstein, 2014) ● Illegal (Zhang, 2007)

Source: Compiled by the author based on literature

Based on the existing literature, *guanxi* is a personal connection (Fei, 2008), or a new of personal connections (Chang, 2011), or connections between organisations (Yen, Wang and Kao, 2015). *Guanxi* starts with connecting personal relationships (Han and Altman, 2010) through social activities (Liu, Bao and Liu, 2013) and social networks (Whilpert and Scharpf, 1990; Pablos, 2005; Szeto et al., 2006) to share favours (Yang, Meng and Lau, 2015) and benefits (Xu and Li, 2013). Therefore, *guanxi* is that individuals connect with each other to share favours and mutual benefits (Cao, Baker and Schniederjans, 2014). A working definition of *guanxi* used for this thesis is that *guanxi* is a connection between organisations and individual persons who have resources to be employed in strategic development of organisations.

The functions of *guanxi* mentioned in Table 2.1 will be explored in the next section.

2.3.3 The Functions of *Guanxi*

In starting this section, there are two questions that arise. How can *guanxi* be built, developed, and used? What are the functions of *guanxi* in relation to strategy formulation and implementation? Following questions arising from the literature, the next subsections will explore *guanxi* operations at individual and organizational level.

Why are the Chinese involved in *guanxi* practice? Both Western and Chinese researchers perceive *guanxi* as useful social capital (Song and Werbel, 2007; Zhai, 2007). At the same time, "*guanxi* acts as the roles of both the catalyst and the buffer" (Wong, 2007, p. 258) during business activities. Therefore, *guanxi* improves business performances (Cao, Baker and Schniederjans, 2014) as well as facilitating business success. In talking about *guanxi* functions, it reflects other

simple questions of how to build, develop, and use *guanxi* and what approaches *guanxi* be utilized. The issues are explored in Appendix 8.

Although Fan (2002) considers that *guanxi* is not a competitive advantage but a tactical tool that facilities strategy development, for many others in China's business environment in both domestic companies and foreign invested enterprises (Yuan *et al*., 2014), *guanxi* can be considered as competitive advantage (Chen and Chen, 2004; Pablos, 2005; Li and Zhang, 2007; Li, Poppo and Zhou, 2008; Chong, Fu and Shang, 2013) to facilitate strategy development. During strategy formulation and implementation, in all cases *guanxi* remains an important force (Liu and Porter, 2010), and a critical factor (Park and Luo, 2001).

From the existing literature, it is apparent that much has been written on the function of *guanxi*, especially on competitive advantage, but there seems to be little in relation to the pharmaceutical industry in China. The characteristics of China's pharmaceutical industry such as "overcapacity of cheap and low-cost pharmaceuticals and highly fragmented market" (BMI, 2014, p. 9) show pharmaceutical existing competition is extremely intense. Those features of the industry offer developing opportunity to those who possess *guanxi*. This feature builds the foundation for and marks the importance of this research. Given this research context, the author considers *guanxi* is a competitive advantage to facilitate the achievement of organizational strategy goals. But there is less literature that links the functions of *guanxi* with strategy formulation and implementation. Therefore, this will be sought from the two case studies.

2.3.4 *Guanxi* Operations

As shown in section 2.3.1, the implications of *guanxi* are very complicated. Consequently, the types of *guanxi* are similarly complex. There are many types of *guanxi* in literature (See Appendix 9). The types of *guanxi* (See Appendix 9,

Table A9.1) are mainly categorized under politics, economy and culture. It is obvious there are no criteria to categorize *guanxi* types. In summary, those types are more various. However, given the objective need to maintain focus, *guanxi* types are not considered in this thesis.

Chinese business operations rely on individual or organizational networks (Feng and Wang, 2013). As shown in Figure A8.1 (See Appendix 8), whatever the political or commercial intentions, building and developing *guanxi* starts with individual emotional connections as well as identifying the process of quality *guanxi* is the process of building trustworthiness *guanxi*.

Chang (2011, p. 317) considers that *guanxi* behaviours have a "significant overlap" at individual and organizational levels. Especially, organizational performances are represented by individuals who work in them. The author highlights more the individual than the organizational level. Individuals use personal *guanxi* to work for and serve their organizations. At the same time, the individual builds overlapping *guanxi*, both personally and on behalf of the organization with the government official who is also at the individual level. G*uanxi* at organizational level in this thesis is more relevant to firms' strategy formulation and implementation. Strategy formulation and implementation are clusters of dynamic and complex process, activities, and decisions. Those clusters of activities in the organizations are more complex than what individuals do (Chang, 2011).

Guanxi at Individual Level

The Chinese sociologist Fei (2008, p. 28-31) presents the "pattern of differentiation" (Pinyin: Chaxu geju, 差序格局) theory, which explores *guanxi*'s networks in Chinese society. He explains that China's social structure and patterns are totally different from those in the West. The Chinese *guanxi* network

is like a web. Each individual is at the centre of a personal web to impact on everyone else. The centre is oneself and the web is flexibility. Value orientation is based on egoism. Given this, individual "social relationships are like ripples" (Lu, 2012, p. 468).

This web indicates *guanxi* has cultural legitimacy in China's history. Differentiated social status determines individual values. When different individuals handle different personal matters or events, their individuality is manifested in different intentions, behaviours, actions and manners. Under the general standards, rules and regulations, the individual will follow *guanxi*-based principles to make decisions.

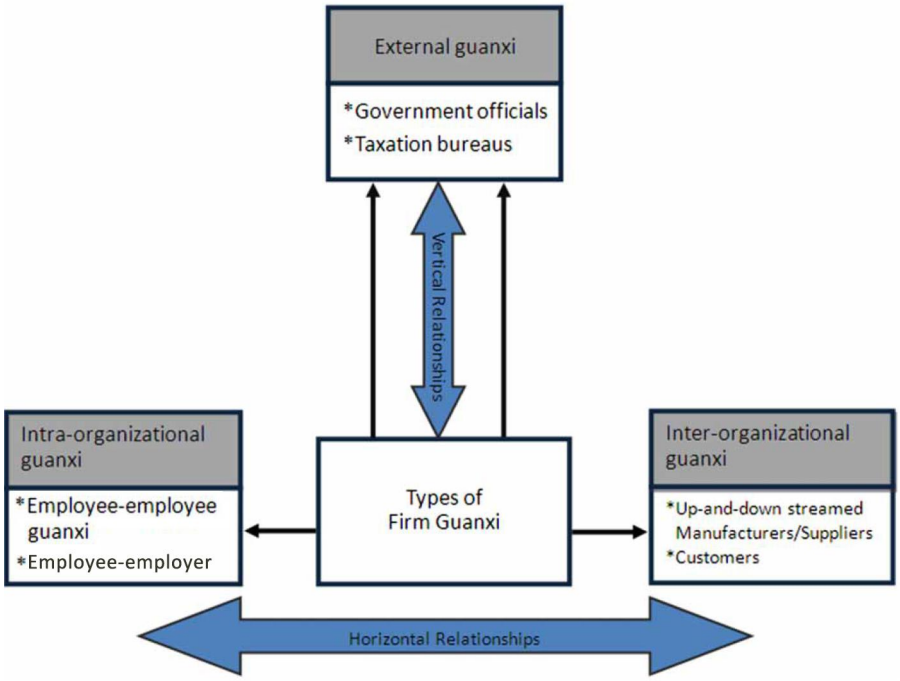
According to Fei's (2008) pattern of differentiation theory, *guanxi* starts between and among individuals. Every individual is rooted in the self and looks from the internal to the external. So what exactly can *guanxi* do for an individual? *Guanxi* can contribute "tangible (e.g. securing employment) and intangible benefits (e.g. increasing social capital)" (Xu and Li, 2013, p. 834) in study, work and business. Lu (2012) links the research between *guanxi* and equity and equality rules and argues that *guanxi* can be an intangible asset to make differentiation rules for individual and organization when doing business. So in this thesis, whether employees, or senior managers, every individual is building and connecting *guanxi* with what they want or what they need. Every position requires *guanxi* that carries out different functions.

Normally, through the approaches mentioned above, an individual builds *guanxi* "which is base for generating goodwill" (Ingram and Zou, 2008, p. 178) with business partners or government officials to facilitate their performance. So, is *guanxi* also important inside the organization? The next section will explore organizational *guanxi* and whether it is based on individual *guanxi* to exert effects on internal and external organizations.

Guanxi at Organizational Level

An organization comprises many individuals who work in different positions and carry out different functions. Every individual utilizes personal *guanxi* for personal affairs, business matters, and government affairs. Yen, Wang and Kao (2015, p. 10) suggested three types of company *guanxi* including external, inter-organizational, and intra-organizational (See Figure 2.4).

Figure 2.4 Types of Organizational *Guanxi*



Source: Modified by the author based on Yen, Wang and Kao, 2015, p. 10

In Yen, Wang and Kao's model (2015), external *guanxi* is in relation to links with government. This will be explored in the next section. In this section, the author focuses on intra-organizational and inter-organizational *guanxi*.

The intra-organizational *guanxi* includes two aspects. Normally, basic

relationships are based on the employee–employee, employee–employer (individual to individual) (Yen, Wang and Kao, 2015). Now, there is an important relationship in the intra-organizational *guanxi* named supervisor–subordinate *guanxi*. Supervisor–subordinate *guanxi* is exchanging mutual benefits based on personal trust which improves "building group/team or family identities" (Han, Peng and Zhu, 2012, p. 321). And good supervisor–subordinate *guanxi* can boost job satisfaction in the workshop (Zhai, Lindorff and Cooper, 2013). Working together and more positive job satisfaction link members who are closely allied in opinion and feelings voluntarily and become a "small circle" (Luo and Cheng, 2015), in-group members and work team (Han, Peng and Zhu, 2012). Even more, the members of the small circle, or senior managers, form intangible networks in the intra-organizations. These *guanxi* networks "promotes a strategy of relying on these networks and alliances to encourage firm growth" (Cai and Yang, 2014, p. 5), especially in SMEs.

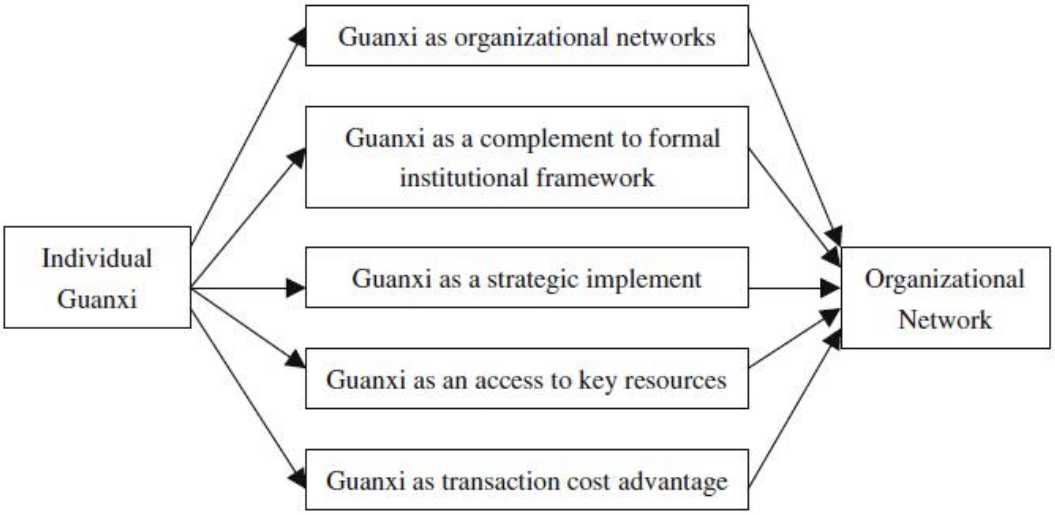
As well as the small circle manifesting itself intra-organizationally, it also exists in inter-organization and in inter-organization and government. The author considers it is important to define it here. The interviewees had mentioned the existence of the small circle in relation to *guanxi* and so the author uses its form to describe the manifestation of *guanxi*. This term will be utilized to analyse it in the following discussion in this chapter. Therefore, the term "small circle" means an independent individual voluntarily, constituted group of members who have a common hobby, family background, or interest. Small circles can be established in intra-organization, inter-organization or inter-organization and government. Further, "small circle" is seen as an interest group.

Zhu *et al*. (2013, p. 248) state that managers agree that "one's knowledge, skills and performance are more important than *guanxi*", but employees consider "internal promotion is based on *guanxi*". For individuals, *guanxi* can help careers (Li and Wright, 2000; Song and Werbel, 2007). For China's SMEs, most are

family enterprises and key managers have kinship. They operate *guanxi* that is confined to internal favourites.

In the context of commercial cooperation, individuals in the different organizations also exercise *guanxi* to improve business performance and build mutual benefits (Cao, Baker and Schniederjans, 2014); for instance, the relationships between managers of suppliers and buyers. Inter-organizational *guanxi* is also built on personal *guanxi*. The link between *guanxi* at individual level and organizational level "acts as a bridge" (Zhang and Zhang, 2006, p. 376). As shown in Figure 2.5 (Zhang and Zhang, 2006, p. 348), whether at intra-organization or inter-organization level, the individual acts at micro-level linking organizations which act at macro-level. In particular, *guanxi* at individual level acts as an access to key resources and facilitates strategic implementation for organizations. Therefore, the inter-organizational business transactions are positively or negatively influenced by personal *guanxi* (Cai and Yang, 2014). Following this principle, building good relationships between organizations is cultivated by individuals or senior managers in the short or long term. And senior managers often play double roles in the social and commercial environments on behalf of the benefits to themselves or their organization. *Guanxi* between individuals and organizations has duality (Wellman, Chen and Dong, 2002). However, the principles of personal-based *guanxi* and organizational relationships are less clear. *Guanxi* in organizational performance is "controversial" (Zhang and Zhang, 2006, p. 389).

Figure 2.5 The Framework of the Micro–Macro Link



Source: Zhang and Zhang, 2006, p. 384

In any case, Zhang (2007) confirms that *guanxi*'s operation implicates legal and illegal ways. A number of scholars criticize intensively *guanxi*'s negative effects in the Chinese context. Ren (2014) comments that China's current political system is imperfect and cannot be in place fully. Indeed, *guanxi*-led ideology facilitates unfair, weak, unethical and inefficient enforcement mechanisms (Berger and Herstein, 2014, p. 781), illegal behaviours of bribery and corruption (Luo, 2008; Zhao, 2014) and enigma (Berger and Herstein, 2014). Wei and Xi (2001) identify super-*guanxi* that "involves corruption, bribery, privilege, interference and others".

2.3.5 *Guanxi* and Five Forces Model

Porter (1985) explains that competitive forces influence industry structure and position. In regard to the Chinese pharmaceutical industry, the prescription drugs distribution structure is more complicated (for more information see Appendix 10,

Figure A10.1). This structure determines each party's strength and profitability. For this thesis, *guanxi* will be explored in relation to its influence on each of the five competitive forces from literature.

The relationship between suppliers and buyers is a basic transaction. *Guanxi*-based business offers cost advantages to reduce uncertainties (Standifird and Marshall, 2000). Therefore, buyers evolve in establishing *guanxi* gradually with suppliers in order to obtain higher discounts (Liu, Luo and Liu, 2009) and lowest price (Xie, Peng and Zhao, 2013). Once *guanxi* is established, *guanxi*-related trust provides "powerful in effectively governing buyer-supplier partnerships and even more so in nourishing long-term relationship performance" (Liu, Luo and Liu, 2009, p. 306-307). This strategic relationship helps both cope when "unforeseeable events arise" (Liu, Luo and Liu, 2009, p. 298). As an operating company in China, supplier resource management is influenced by *guanxi*. Then building strategic *guanxi* with a supplier can enhance long-term partner relationship and heighten "competitiveness as a whole" (Yang and Jiang, 2008, p. 4). It is worth mentioning that supplier selection strategy is based on relationship-focus, which here can be understood as *guanxi*, where "managers select supplier through social relations including ties and referrals from partner firms, friends, or relatives" and can save costs of seeking new partners (Xie, Peng and Zhao, 2013, p. 1222). Hence, Cheng, Yip and Yeung (2012, p. 3) highlight collaborating key suppliers through *guanxi* networks can "reduce risk" and positively relate to "supplier performance".

The existing literature above shows that buyers in other industries, such as the illumination industry (Liu, Luo and Liu, 2009), are involved in building relationships with suppliers. These suppliers have bargaining power when they have technology or core products. In the pharmaceutical market, do the buyers, including medicine distributors/agents and public hospitals, need to build strategic *guanxi* with suppliers (medicine producers)? This will be revealed in the

discussion section.

The force of new entries to the market is obviously related to the limitations of the licensing requirements of government policy (Porter, 1980, p. 13). Changes to government policy affect lower entry barriers (Kranenburg and Pfann, 2002, p. 233) and new entrants' survival and profitability as well as increasing competition (Silva, Kosmopoulou and Lamarche, 2008). Although *guanxi* is a competitive advantage adopted in the business context, few researchers have studied *guanxi* as an important force influencing two forces of new entrants and product substitution. To address this gap in the literature, this thesis will reveal *guanxi* as a force to influence directly or indirectly new entrants and substitutions from the empirical evidence.

The former director of the State Food and Drug Administration (SFDA, previous name of CFDA), Zheng Xiaoyu, was executed in 2007 for accepting bribes from pharmaceutical companies to approve new drugs, some of which did not go through regular procedures. Because of the bribe taking and dereliction of duty of Zheng Xiaoyu (BBC, 2007), an oversupply of products including chemicals and TCMs was approved for market. During this period, *guanxi* directly influenced policy making to reduce entry barriers and increase competition. These historical events caused the pharmaceutical market's characteristics. Yu (2011) points out that China's pharmaceutical market is oversupplied, with limited market opportunity for development and low technological content. SMPCs are competing based on products with low technological content and low price. It is obvious that there is fierce rivalry in China's pharmaceutical market (BMI, 2014). Based on the author's research in Documents Three and Four, *guanxi* is an important competitive advantage over rivals. Downstream customers (Porter, 2008), for example, public hospitals in the pharmaceutical industry, determine the bargaining power. Moreover, a strong buyers' market determines that products are often replaced by substitutes (Porter, 2008).

Since the Zheng Xiaoyu affair, incumbents of central government have been responsible for pharmaceutical industry administration including production certification, product registration and regulatory policies. Then the question arises: Does *guanxi* influence policy making which indirectly affect rivals' entry and substitutions? This will be revealed in the two case studies.

2.4 Government Policy

According to updated literature, government policy is a force that directly influences industry structure and competitiveness (Dulcic, Gnjidic and Alfirevic, 2012; Wu and Yang, 2014). In this thesis, the main element under consideration is government policy. However, the role of government and its administrative system are also relevant to this research. In particular, the medical administrative system reflects the process of medical policy making. The next section looks at the role of government and the functions of the medical administrative system in China. And the critical policy, DCBP is be explored in the literature.

2.4.1 The Role of Government

So what is the role of government for an industry? Porter (2008, p. 261) explains that "Government inevitably plays a variety of roles in an economy. … Government's basic role in an economy is to achieve macroeconomic and political stability". The government plays the role of policy maker (Hadiyati, 2015). The role of government means that through significant functional interventions it seeks to affect the entire economy (Wint, 1998). Regarding the drug market, literature suggests that the government could play multiple roles to act as a system designer, medical insurance provider, drug purchaser or subsidizer and market regulator. Zhao (2012) states that any government intervention in the economy has its own natural boundary. And government intervention policies are always blind justice. So the government's interventionist

policy making will be based on cooperation rules that cause a high cost to be paid by social groups.

In the public healthcare sector, government plays a significant role. For example, the Indian government issued the National List of Essential Medicines for 2012 and the Drug Price Control Order in 2013 to reduce and control drug prices (Adige, 2014). Thus, policies to control drugs prices are a strategy frequently used by governments. Based on the research by Barros (2010, p. 3-4), all European countries "regulate prices of pharmaceutical products" and "governments strongly intervene in healthcare to cost containment". Unlike China's medical insurance system, in many European countries governments are the main third-party payers. And pharmaceutical product prices are controlled in European countries.

In the next section, China's medical system and its structure will be explained in relation to the making of medical policies.

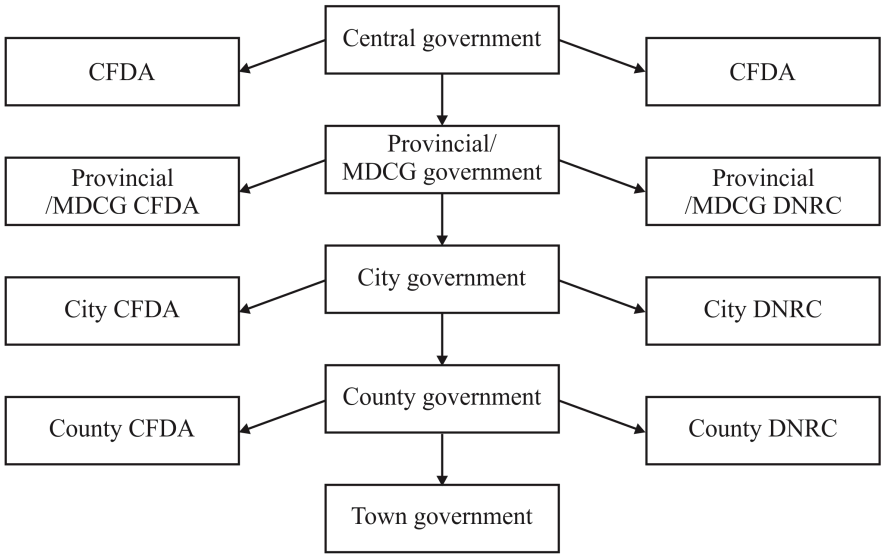
2.4.2 The Chinese Medical Administration System

When discussing policy issues in China, principally the Chinese central political system needs to be taken into account. The political system is one-party, the Chinese Communist Party, and a hierarchical management system from central, provincial, municipal, county, to town government. All the following agencies relate to the pharmaceutical industry.

Giving the priority of the research, it is important and essential to present the policies which were issued by both central government and provincial government following the regulatory structure (See Figure 2.6; for more information see Appendix 11). If an important policy is issued by central government, every provincial government also issues a local policy which will be

supplemental to the national policy in order to develop the local pharmaceutical economy and healthcare. For example, the main policy of the National Basic Medical Insurance List (NBMIL) had been also issued by every provincial government. In other words, on the one hand, local SMPCs have more opportunities to get their product into the local insurance list. Every provincial insurance list is different including the products and the cost. On the other hand, SMPCs will have to address different provincial government bodies and distinct policies.

Figure 2.6 The Structure of the Government Medical Regulatory System in China



(CFDA: China Food and Drug Administration; DNRC: The National Development Reform Commission; MDCG: Municipality Directly under the Central Government)

In the research of Kuang (see Wang and Ap, 2013 p. 224) it is stated that government plays a dominant role in policy making and implementation in China. China's Medical Reform for 2009 is government-oriented. Wen and Fang (2014, p. 39-41) state that the role of government is misguided. They suggest that the

functional orientation of government should be to plan and supervise. Planning is not just about formulating macro medical care policy; it is government investment and overall arrangement as well. Supervision of quality and safety, and medical cost management are needed.

According to Xing (2006), under the governance mechanism, pharmaceutical industry policies are lacking in systematization and legal restraint. And multi-regulatory supervision causes a defect in the management system. The regulatory system has been uncertain and confused (Deng and Kaitin, 2004) for companies; some principles are even contradictory. Some limitations and enforcement of policies are beyond the control of any type of pharmaceutical company (Chan and Daim, 2011).

China Pharmaceutical & Healthcare Report (BMI, 2014, p. 11) is strongly critical saying that "China's political system is inherently unstable" and "provincial governments often fail to enforce central government directives". The author disagrees with BMI's first point but agrees with the second point. During 30 years of reform and development, the rapid growth of GDP maintains an annual mean at 10%. China is the second largest economy in the world (Yi, 2014). Economic development is based on overall political stability.

Shen and Li (2012) argue that government intervenes in the market directly. The methods will seriously affect the development of the national drug market and fair competition in the pharmaceutical industry. The pharmaceutical industry policies are the sum of the various national and provincial policies that government is involved with and intervenes in to achieve and develop certain economic and social objectives (Xing, 2006; Xi, Zhu and Zhu, 2012).

Based on the literature, it is interesting to note that China's medical administration system has been critically debated by these researchers: the roles

of government are critical, dominant and misguided (Wen and Fang, 2014); therefore, it seems that some policies are uncertain and confused (Deng and Kaitin, 2004) and lacking in systematization (Xing, 2006) such as the policy of the Drug Centralized Procurement Bidding. However, the author does not want to argue about the government's system. She is more interested in how those policies influence SMPCs' strategy and how SMPCs cope with them in the policy environment. Thus, the next section will discuss how researched policies influence the industry.

2.4.3 The Influence of Policies on the Chinese Pharmaceutical Industry

In this thesis, four major policies – New Goods Manufacture Practice for 2010 (See Appendix 6), Drug Centralized Bidding & Procurement (DCBP) (See Appendix 7), National Basic Medical Insurance List and Sub List for Provinces (See Appendix 12), National Essential Drugs List (NEDL) (See Appendix 13, abbreviated medical insurance schemes) – are very important to SMPCs. The NEDL and NBMIL are main important parts of the Medical Reform for 2009. The two lists have differentiation in drugs amount, structure, and forms (Wang and Li, 2013; Yang and Yang, 2013). The two lists also have other important differences (See Appendix 14). This outcome has been shown in Document Four. Information on the New GMP and the two medical insurance schemes is rarely found in the literature. But the policy of the DCBP policy has been researched critically. Thus, this section explores literature mainly about DCBP policy. In addition, it is worth mentioning that the policy of drugs pricing is equally important and directly influences SMPCs' business operations. The drug pricing system was a complicated system which set the maximum retail price for drugs. It was arguably detrimental to the pharmaceutical industry. Therefore, this policy was cancelled by the central government in 2014. The author has researched and updated its implications while writing this thesis. However, since drugs pricing policy does not influence pharmaceutical industry anymore, it is out of the

research scope.

The Drug Centralized Procurement Bidding

He and Li (2011) studied the literature of drug bidding published from 1999 to 2010 and state that the Drug Centralized Procurement Bidding (abbreviated here as tender bidding) system is indispensable for Chinese medical and healthcare reform and a significant system that must be implemented. Based on research findings published in China, groups including medical organizations, colleges and universities and scientific research institutions pay close attention to Drug Centralized Procurement Bidding, whereas the main participants of pharmaceutical companies including manufacturers, distributors and drug logistic companies have rarely published articles about this issue. The author considers that pharmaceutical manufacture is an important and indispensable actor for drug tender bidding with plenty of interests and opinions. But pharmaceutical manufactures lack discoursing power and influencing power in the tender bidding system. They focus on taking part in different provincial bidding and lack of time for or experience in academic research.

There are several parties, including government, making pharmaceutical industry policies, interconnecting tendering centres, formulating regulations and establishing platforms, hospitals as buyers, pharmaceutical companies as sellers and social medical insurance departments as payers. These complex systems lack coordination and consistency. The literature (Geng, 2010; He and Li, 2011) reveals that the tender bidding policy and system poses many problems including:

- Disunity of tender subjects
- Lack of standardization
- Regional protectionism

• Burden of pharmaceutical enterprise
• Most hospitals are not bound by purchasing contracts
• Delay in payment to pharmaceutical companies
• Intermediary agencies' indiscriminate collection of fees

For the 14 years of the tender bidding experience, the DCBP policy has been unable to reduce the medical cost and price. And the principle of policy is to cut price, which violates the objective laws of the development of social economy (Tao, 2012). Wang (2011) also points out that the objective of the policy is to reduce drug bidding prices, abolish commercial bribery during purchasing activities and ease patients' medical expenses. It has been given political appeal. Drugs price cutting influences producers' competition and profitability (BMI, 2014). Based on the author's practical experiences, the low-price-oriented strategy of rivals shakes up producers' national price system stability. The behaviours result in new competitive configuration that new entrants fight against with substitute products instead of the existing market. Based on the regulation of DCBP, medical organizations are required to pay drugs payment to medicine logistics companies within 30 days. Effectively, the average payment term is about 163 days (Xue, 2015). And the main influencing factor is that many medical organizations have failed to bear the responsibility of fulfilling contracts to pay medicine producers and logistic companies. On the one hand, this phenomenon indicates public hospitals in the role of buyers have bargaining power to negotiate with suppliers in the pharmaceutical industry. On the other hand, government policy implementation indirectly increases firms' financial costs and risks.

According to Li and Reimers (2012), the drug procurement practice driven by the government model has illustrated the failure of implementing third-party electronic platforms. "When prices cannot perform their coordinating role" (Stiglitz, 1996, p. 160), "the government may have to assume a more active role

in performing this function" (Yu, 2000, p. 994). Therefore, government can assume the role of coordination to tackle uncertainty. The fundamental purpose of controlling drug prices is to control drug cost. Thus, Chinese drug pricing policies have failed in the intention of controlling ever-increasing drug expenditures. At the same time, the policy process is not the process of reducing drug expenditures and commissions on sales. Rather, it is the process of involving drug distribution by related government departments.

Yet a unified tender bidding policy has still not been achieved (Geng, 2010; He and Li, 2011). Tender purchasing price is the most critical factor that influences drug market entry, drug competitiveness, drug secondary price and medicare payment price-setting. But although it is criticized and imperfect, it is still an important reference for drug pricing. According to the literature (Geng, 2010; He and Li, 2011; BMI, 2014), the DCBP policy is changing fast and creating uncertainty. Furthermore, the DCBP has also been influencing SMPCs' business activities and financial costs (Xue, 2015) since this policy increases operation costs "without conferring" (Porter, 2008, p. 264). It is shown from the literature that government policy is a force which directly influence firms' operations, costs and profitability. Hence, the author will explore and reveal this view from case studies in chapter four.

After reviewing understanding of strategy, application of Porter's Five Forces model, and the implications, definitions, and functions of *guanxi.* The next section mainly explores the relationship between *guanxi* and government policy. Moreover, the underlying causal mechanisms of *guanxi* will be revealed from the literature too.

2.5 *Guanxi* and Government Policy

In order to clarify the interrelationship between *guanxi* and government, it is essential to be aware of China's political system structure (see Section 2.4.2), the structure of Chinese government medical regulatory system (see Figure 2.6), and China's medical reform background (see Appendix 2 and 3). .

Guanxi not only exerts its influence in interpersonal relationships and business connections, but it also generates intangible (Ying, 2007) and subtle and intricate force as relational power. Based on Gao and Tian's (2006) research, *guanxi* is connected with political system, policy formulation and implementation, economic context and business. Networks from a powerful, complex and extensive system can support the smooth operation of a business (Gibb, 2006). In this scheme, "*Guanxi* is endemic and uniquely influences the character of China's legal system and offers an alternative dispute resolution mechanism" (Berrell and Wrathall, 2007, p. 66). So *guanxi* has a social level in the Chinese political system.

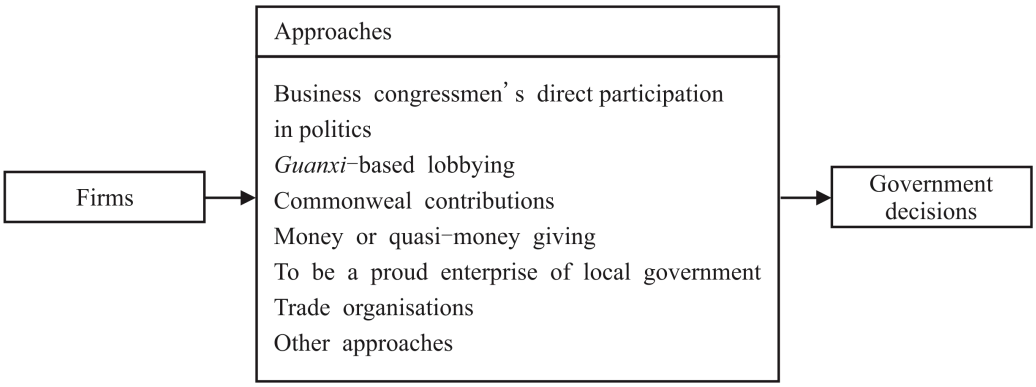
Berger and Herstein (2014, p. 779) reveal the interrelationship between government and *guanxi* issues. "China is government-led and tightly controlled" (Berger and Herstein 2014, p. 781), where *guanxi* can solve uncertainty so as to reduce transaction-cost, gain valuable future government policy trends and then create efficiency (Wang and Ap 2013, p. 231). On behalf of organizations, individuals are involved in building good *guanxi* with government so as to facilitate company and project implementation fast and well. "*Guanxi* becomes a source of power to a leader and also influences the leader's attitudes and behaviour in ways different..." (Chong, Fu and Shang, 2013, p. 55-56). In this way, an individual could utilize *guanxi* connections to government to collect and share inside information (Yang and Lau, 2015), consult on detailed schemes and then influence policy making or bypass and overcome administrative hurdles. At

organizational level, however, the process and approaches of building *guanxi* with government are more complicated and expensive but they provide higher returns and profits (Yuan *et al*., 2014, p. 23). Naturally, the author considers that establishing good *guanxi* with any decision-maker who works in any political system is part of the business thinking pattern for Chinese companies.

Interest organizations and influences on policy, *guanxi* plays vital functions and it is important to look at which approaches can be used by individuals to influence policy making. Gao and Tian (2006, p. 77) show that registered firms in China can adopt several approaches (see Figure 2.7) such as *guanxi*-based lobbying and commonweal contributions to influence policy making. Normally, *guanxi*-based lobbying is utilized by individuals. An example of intangible influence over policy making can be found in contributions to so-called commonweal projects. Chinese domestic companies or subsidiaries of multinational enterprises in China: These may contribute to welfare projects such as the Hope Project which helps children who cannot afford to go to school because of poverty, and in order to make contact with the government officials involved. Or in the face of natural disasters, companies may contribute to charity relief funds in answer to government appeals. These approaches help to build a good public image so as to obtain government's favour and trust (Gao and Tian, 2006, p. 79).

Kennedy (2005, p. 3) states that “firms influence the policy process indirectly via their trade associations and other intermediaries”, for example, lobbying activities in steel and software industries in China. Given Chinese pharmaceutical context, very few studies research government policies and *guanxi* influence SMPCs’ strategy. This thesis addresses the gap for literature.

Figure 2.7 Approaches Used by Firms to Influence Government Decisions



Source: Gao and Tian, 2006, p. 77

Chen, Chen and Huang (2013, p. 177) argue that g*uanxi* is opaque and unofficial and has an impact on selection decisions. Fan, Woodbine and Scully (2012) also describe *guanxi* as two-dimensional – both positive and negative. *Guanxi* has also been identifies as a double-edged sword (Warren, Dunfee and Li, 2004) to apply in non-Chinese cultural contexts (Fan, Woodbine and Scully, 2014). According to published articles (Wei and Xi, 2001; Luo, 2008; Besha, 2010; Zhao, 2014), its connotations have many critical implications. When people mention *guanxi* regarding issues of business and politics, *guanxi* implicates many ideas and qualities that reflect negative aspects of manipulating powers, bribery, corruption and illegal utilization.

Since everyone in China knows the benefits of building relationships with government officials, individuals on behalf of organizations are at different stages of building, developing and maintaining *guanxi* with government. For facilitating *guanxi* with government within a short time, there exist illegal approaches manipulated by some organizations. Undoubtedly, some phenomena exist from national government regulatory agency (i.e. The National Development Reform Commission (NDRC) to local hospitals. Three officials in

the prices department of NDRC, Liu Zhengqiu, Zhou Wangjun and Li Caihua, were arrested for bribes in September 2014 (Wangyi, 2014). The prices department is the most powerful department in NDRC. Officials in this department have the power to decide a drug's price. At the provincial level, every pharmaceutical company wants to build good connections with them to obtain information of policy trends and support for making drugs prices higher.

2.6 *Guanxi* as an Underlying Causal Mechanism

In order to reveal the underlying causal mechanisms of *guanxi*, it is important to show the historical Chinese social context, social behaviours, and social interactions (Zhai, 2011). Culture is one factor which is implicated by underlying determinants of behaviours (Li and Cai, 2012). Several thousands of years of agricultural civilization is the China's traditional characteristic. Therefore, kinship and geography are the base of Chinese interpersonal relationships. Chinese interpersonal relations are mainly about acquaintance circles such as relatives, friends, and classmates. A personal principle for Chinese is to avoid disagreement or conflict, or to find reconciling ways (Zhai, 2011, p. 141). Confucianism is the main ideology. The Chinese thinking pattern has been associative, analogous, and continuous (Zhai, 2011, p. 145). This social context of psychological and behavioural models for Chinese determines the prevalence of *guanxi.*

As noted earlier, Zhuang (2012) identifies dimensions individual roles, status, positions, and stratum. Status determines personal resources and behavioural intentions. Consequently, the individual gains self-benefits through private ways to bypass current systems, regulations, and structures to achieve aims (Zhai, 2011, p. 153). And the aims are the end result and methods are the ways in which the aims are achieved. This mechanism fits mutual benefits of decision makers and beneficiary.

Historically, concentration of power is characteristic of China's political system. "Confucian authority chains and *guanxi* should be viewed as two complementary and interactive principles" (Hong and Engestorom, 2004, p. 553). At the same time, *guanxi* and authority constrain each other too (Zhai, 2011). Based on status, the individual possessing more power influences or constrains another, as in the example of Zheng Xiaoyu, executed in 2007 for bribe taking and dereliction of duty (BBC, 2007) as discussed earlier. These events reflect that influence at individual level formulates directly national policies. Those influences are profound for Chinese pharmaceutical industry.

The point of underlying causal mechanism of *guanxi* is significant for this thesis. After that, the relationship between *guanxi* and strategy will also be explained. Finally, based on all literature research, the conceptual framework will be outlined to guide this research.

2.7 *Guanxi* and Strategy

Some have proposed *guanxi* as a business strategy, and its development and maintenance, can "achieve favorable market position and competitive advantages" (Chen, Ellinger and Tian, 2011, p. 551). In the study by Harris *et al*. (see Leitner 2014, p. 355), SMEs strategy formulation is shown to be based on personal relationships or personal networks (Huang, 2009). In China, this personal relationship refers to *guanxi*. Leitner (2014, p. 370) suggests that the strategy maker in SMEs "should be cautious" during deliberate strategy formulation. Owners in SMEs constantly hunt for information, identify opportunities and make decisions quickly (Huang, 2009, p. 98). Huang (2009) also suggests that SMEs' strategic decision-making should take into account political activities or behaviours.

Furthermore, *guanxi* "can be seen as an organizational strategy" (Gao, Knight and Ballantyne, 2012, p. 464-465). "With *guanxi* most things are possible" (Liu and Porter, 2010, p. 331). When people have to face seemingly interminable obstacles, *guanxi* is like a shortcut that is highly active and effective. Without *guanxi*, "it seems at times to be an interminable obstacle" (Liu and Porter, 2010, p. 331). Although people know the risks of utilizing *guanxi*, people still want to utilize *guanxi* to make decisions. According to previous literature, *guanxi*, as competitive advantage, can facilitate organizational strategy goals.

2.8 *Guanxi*-givers and *Guanxi*-receivers

There are many parties including hierarchical government systems, medicine producers, distributors, logistics companies, and public hospitals in the pharmaceutical industry chain in China. In order to describe those complicated interrelationships and connections in the industry, the author creates two new terms about *guanxi* in this thesis, namely *guanxi*-giver and *guanxi*-receiver, so as

to describe, analyse and argue about some sensitive and debatable issues. The new terms have similar concepts to *guanxi* builder and *guanxi* maintainer (Zhao, 2014).

A *guanxi*-giver refers to a person or an organization that has ability or power to offer physical or human resources, either tangible or intangible, which can meet the demands of the one who receives them. In the Chinese pharmaceutical industry, a *guanxi*-giver refers to an official in government, a policy maker, a director in a hospital department and a medical doctor who has prescription powers. A *guanxi*-receiver, however, refers to a person or an organization that desires to build trust and close relationships with a *guanxi*-giver to reach aims and goals. In the pharmaceutical industry, a *guanxi*-receiver refers to any drug producer, medicine company, drug agency, medicine logistic company, drug store, chain drug store or intermediary who is engaged in the drug business, selling, promotion or after-sales services. The person from this type of company may be an owner, a CEO, a general manager, a sales manager or a representative. Not every *guanxi*-giver and *guanxi*-receiver can directly connect with and benefit each other. Thus, an intermediary, who has influencing power, resource or connection with both groups, can support them in connecting and benefiting each other. This intermediary is a person or an organization.

"*Guanxi* is a dynamic process involving many parties" (Fan, 2002, p. 550). Personal *guanxi* resource is always limited for individuals. Normally, if the g*uanxi*-receiver wants to start a relationship with the *guanxi*-giver, they need an intermediary to match their requirements and needs or to help both the *guanxi*-giver and *guanxi*-receiver to exchange favours. Therefore, intermediators play a bridge to link and transfer information or deals. Intermediators can be individuals or any types of organizations. *Guanxi* between *guanxi*-receiver and *guanxi*-giver is dynamic too. Even when both have been initiated, built and used (Chen and Chen, 2004), the "*guanxi* quality is reevaluated and adjusted during

this dynamic process" (Zhao and Timothy, 2014, p. 492).

In the pharmaceutical industry, because a lot of policies and regulations can influence industry development, the relevant participants of drug producers and operators will arguably utilize all the *guanxi* they have to improve regulation changes or to get their drug onto the insurance lists. *Guanxi* is regarded as collaboration between a *guanxi*-giver and a *guanxi*-receiver among different parties.

2.9 Conceptual Framework

In the context of this thesis, the existing literature shows that *guanxi* is deemed to play a critical role and force that influences government policy at provincial level, business partners and performances, to create competitive advantages and in some cases then avert fair competition so as to prevent new entrants entering the competition and be a threat by introducing substitute products. Under the current changing environment, SMPCs have to run their businesses according to government medical policies and provincial regulations to survive and create margins.

Although Porter (2008) proposed that government policies and underlying causes can affect the Five Forces model, he did not elaborate and explore them in his model. Porter (1980, 1985, 2008) proposed that strategy formulation is more related to consideration of industry structure and looked at each competitive force's strengths and weaknesses. Those competitive forces are then deemed to drive company's cost and profitability. Without doubt, Porter (1980, 1985, 2008) provided a principle framework for understanding, analysing, and anticipating in practice. In other words, the Five Force model can be seen to help practitioners understand the attractiveness of industry (Ortega, Jalón and Menéndez, 2014) so as to formulate strategic scenarios. Yet, in the author's previous research, she

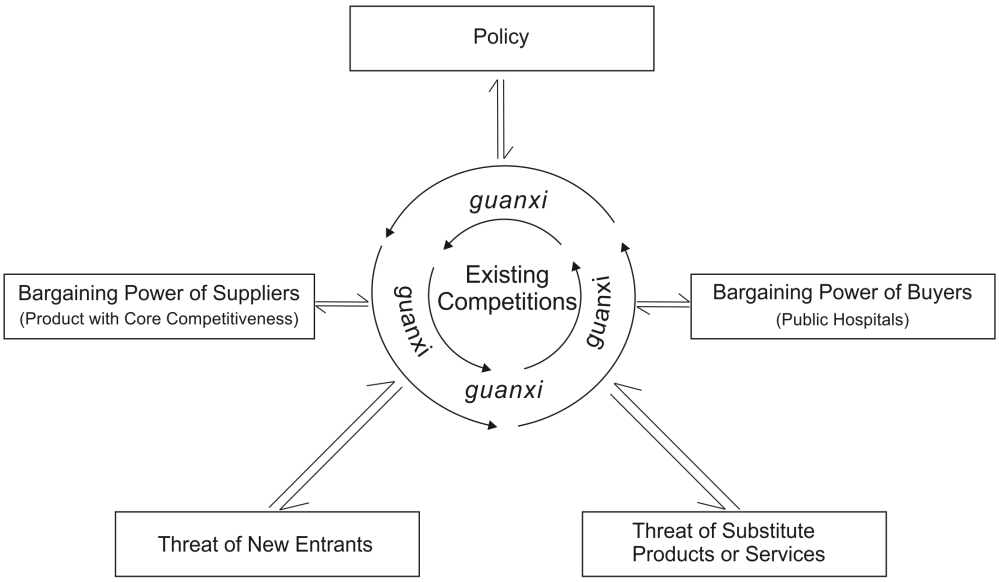
emphasized that Porter's generic strategy and Five Force theories did not work in their "pure form" in the Chinese pharmaceutical industry because the influencing factors of policy and *guanxi* were not taken into account in Porter's strategy model. Specifically, in China's unique context, as Qin (2010) indicates, political force exerted influencing forces during China's transitional reform period. Yuan (2014, p. 23) also supports the view that China's transition economy is very relationship-oriented. Given this context, individuals are motivated by employing and selecting relevant *guanxi* to connect with the officials of government.

Drawing on the three aspects of *guanxi* literature (functions, operations and causal mechanisms), together with China's policy environment and Porter's Five Forces theory, a conceptual framework is proposed to guide this thesis (see Figure 2.8). The conceptual framework is a modified "seven forces" model in which government policy and *guanxi* are added to Porter's Five Forces model in the context of Chinese pharmaceutical industry. According to Porter (2008, p. 9), "underlying drivers of each competitive force" determine the strength and weakness of five competitive forces that "shape strategy" (Porter, 2008, p. 3). Existing literature – and the research reported here - shows *guanxi* is deemed to play a critical role and force that influences government policy (Gao and Tian, 2006) and the other five forces (Liu, Luo and Liu, 2009; Yang and Jiang, 2008; Kranenburg and Pfann, 2002). In other words, individuals are motivated by employing *guanxi* to connect government officials and business partners (Chen and Wu, 2011). At the same time, *guanxi* is seen to offer cost advantages (Standifird and Marshall, 2000) and improve business performance (Cao, Baker and Schniederjans, 2014). It is also shown in the literature that government policy is a force that directly influences a firm's financial costs and risks (Xue, 2015), as well as, operation and profitability (BMI, 2014).

In light of this literature review, and importantly, given the research conducted and reported here government policy and *guanxi* need to be studied and see

whether these *guanxi* and government would be valuable to add to Porter's Five Forces model generating a modified "seven forces" model in the context of China. The "seven forces" modified model begins to provide a guide to understand the complex policy and business environment as practitioners formulate and implement organizational strategy goals.

Figure 2.8 Conceptual Framework



Source: modified by the author, based on Porter, 2004

This is the conceptual framework. The next chapter will discuss issues of methodology and methods.

CHAPTER THREE: METHODOLOGY AND METHODS

In this chapter, the critical realist approach is outlined and the choice of this philosophical approach advanced. The research design, case study and interviewee selection, data management and analyses are discussed, together with data reliability and validity issues.

3.1 Philosophical Approaches

Three paradigms of positivism, constructivism and realism, each with the elements of ontology and epistemology (Guba and Lincoln, 1994; Perry, Riege and Brown, 1999; Healy and Perry, 2000; Riege, 2003), are considered. "Ontological is the 'reality' that researchers investigate, epistemology is the relationship between that reality and the researcher, and methodology is the technique used by the researcher to investigate that reality" (Healy and Perry, 2000, p. 119).

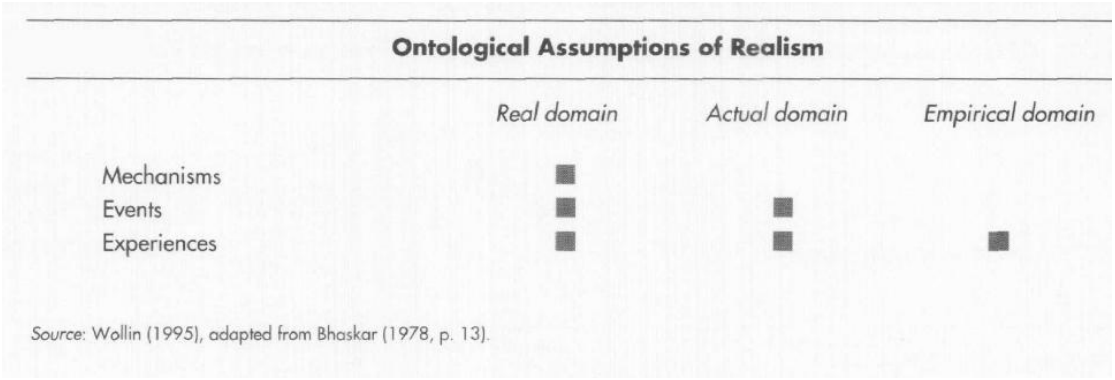
Ontology concerns the natural reality (Healy and Perry, 2000) and investigates the nature of objects (Winn and Williams, 2012). Thus, "ontological assumptions shape the way in which you see and study your research objects" (Saunders, Lewis and Thornhill, 2016, p. 127). This is the first step. In terms of business, those objects include individuals, teams or organizations. In order to distinguish an appropriate philosophical approach to be utilized in this thesis, ontologically, a belief of objectivism is "the view that external world exists independently of our sense and experience, ideation, and volition, and that it can be known" (Bunge, 1993, cited in Weber, 1997, p. 174). Thus, objectivism embraces realism. Objectivists are concerned with the existence of social entities in an external reality and, therefore, believe that social actors are experiencing a true social reality. In contrast, constructivists construct their knowledge from the experiences, behaviours and interpretation of reality which interacts with their

social values (Fisher *et al*., 2007; Saunders, Lewis and Thornhill, 2015). “From a constructivist’s perspective, truth is a construction which refers to a particular belief system held in a particular context” (Perry, Riege and Brown, 1999, p. 18). Thus, constructivist researchers are often interested in different topics and accounts that people offer which suggest different social realities.

Epistemology is another important philosophical element. Epistemology deals with human knowledge and the beliefs that people come to know, and the principles that are confirmed by propositions. Different types of knowledge such as textual data, descriptions and stories, can be reasonably considered (Saunder, Lewis and Thornhill, 2015). The methods adopted are not only influenced by their philosophical elements but also in choice the researchers make. According to this principle, at one end, positivists are inclined to utilize quantitative research methods (e.g. questionnaires) to advocate the position of the natural scientist in the social reality. However, the positivist approach is deemed inappropriate when research involves social science phenomena (Perry, Riege and Brown, 1999). “Realism believes that there is a ‘real’ world to discover even though it is only imperfectly apprehensible” (Healy and Perry, 2000, p. 120). Therefore, realism recognizes the role of subjectivity in developing knowledge based on the practice. The critical realist aims to understand the relationship of an objective environment and the internal/external individual through observation or experience. From the critical realist perspective alongside what is directly observed or experienced, there are also hidden mechanisms which might have cause what is observed or experienced. Critical realism delves deeper and considers that the real world has three domains: events, experiences and mechanisms (Bhaskar, 1978) (see Table 3.1). Realist researchers may utilize qualitative methods to explore and discover differences between reality, experiences and individual views (Riege, 2003; Fisher *et al*., 2007), while case studies are utilized to research those “process-oriented” (Perry, Reige and Brown, 1999) and “causal’ tendencies (Bhaskar, 1978). It is the latter stance that is

adopted in this thesis.

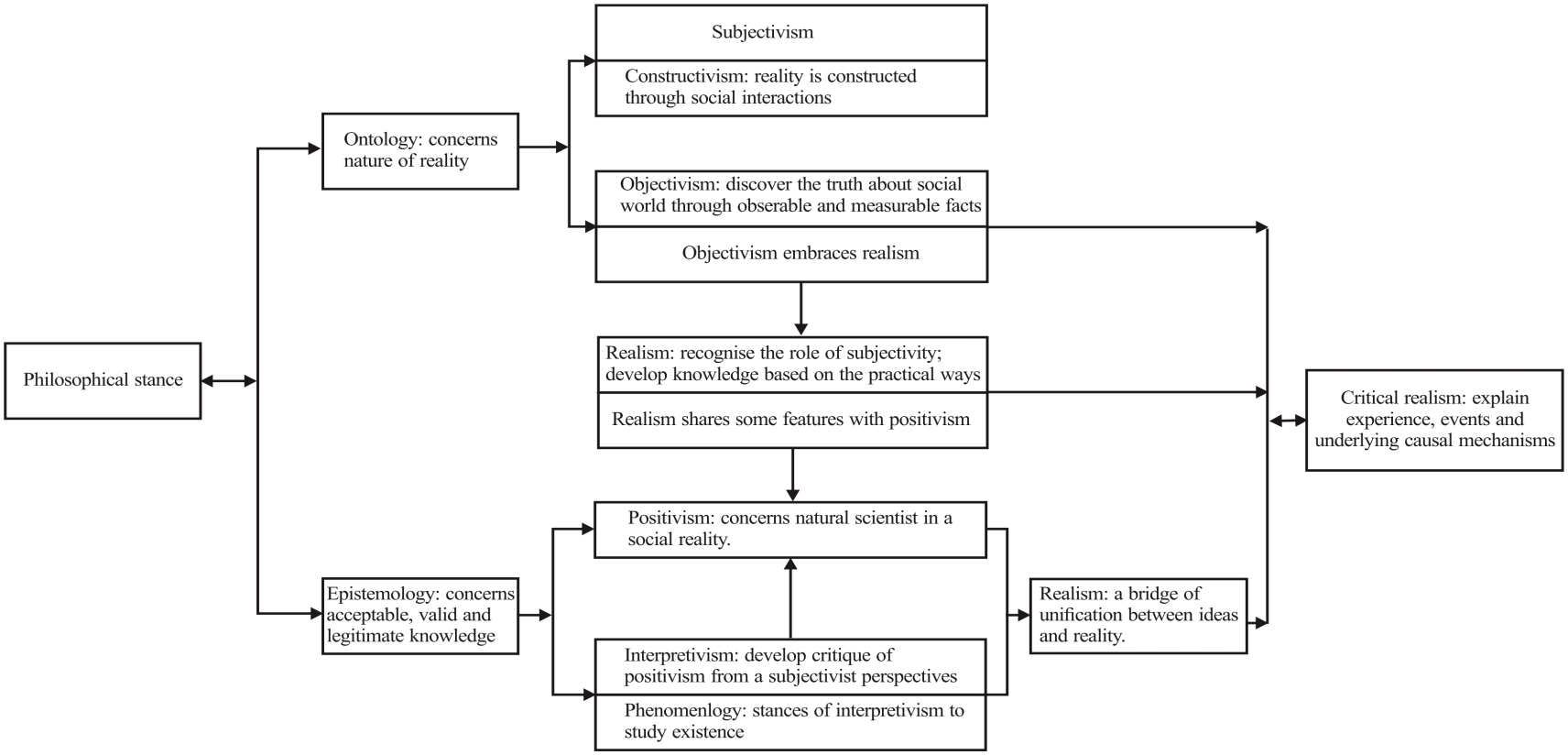
Table 3.1 Ontological Assumptions of Realism



Source: Perry, Riege and Brown, 1999, p. 19

Figure 3.1 shows the series of considerations around selecting a philosophical approach undertaken by the author. The next section justifies the selection of critical realism as a philosophical approach to be utilized in this thesis.

Figure 3.1 Consideration of Philosophical Approach



Compiled by the author, based on Bryman and Bell, 2003; Saunders, Lewis and Thornhill, 2015

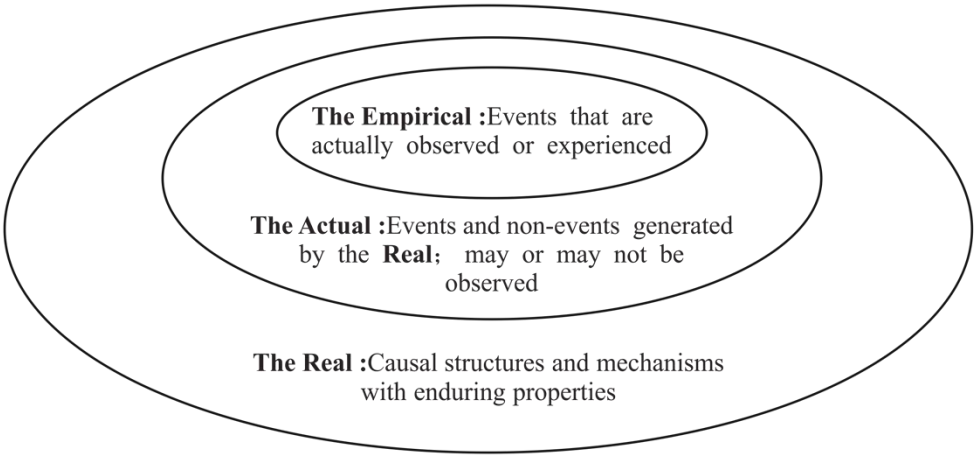
3.2 Research Approach: Critical Realism

Realism is deemed to be a middle ground that provides "an element of unification by offering a philosophical 'bridge' between the positivist and the phenomenologist view" (Stiles, 2003, p. 265), or between ideas and reality (Synmon, 1994). Realism takes two major forms: empirical realism and critical realism (Bryman and Bell, 2007). Easton (2010, p. 118) suggests that "critical realism however provides not only a basis for justification but also guidelines as to how case research might be done and how theory can be fashioned." Critical realism is rooted in a positivist philosophical stance and aims to see reality and explain experiences, events and mechanisms (Collier, 1994, p. 42-45, cited in Fisher *et al*., 2007). There is an interest in the underlying mechanisms but also deeper reality is in dynamic, complex and multi-disciplinary contexts. Importantly, the mechanisms cannot be directly observed and can only be logically inferred from real events (Fisher, *et al*., 2007, p. 285). Therefore, what people experience is taken from external and independent sensations. Knowledge of reality is generated from the interaction of structures, procedures and process. Critical realists are inclined to recognize multi-level case studies to interpret observable events.

Ontologically, critical realism has a stratified reality (see Figure 3.2). The three ontological assumptions can be seen as "three worlds" (McGee, 1985, p. 61). They are the empirical, the actual, and the real world. Understanding the world includes two steps that are "sensations and events we experience" and "reasoning backwards" (Saunders, Lewis and Thornhill, 2015, p. 139). Here, reasoning backwards is known as retroduction. Tsang (2014, p. 175) summarizes usefully that "retroduction [is] used to create theories regarding the structures and mechanisms that generate the observable events, emphasizing explanation over prediction". For critical realists, the empirical events that people see are only part

of reality. The actual event that may not be observed is underlying the reality. Rather, "the deeper reality is the underlying dynamics or mechanisms that are driving changes in society in general and in organizations in particular" (Fisher *et al*., 2007, p. 285). Therefore, critical realists take "the form of in-depth historical analysis of social and organizational structures, and how they have changed over time" (Saunders, Lewis and Hornhill, 2015, p. 140).

Figure 3.2 Critical Realist Stratified Ontology



Source: Saunders, Lewis and Thornhill, 2015, p. 139; developed from Bhaskar, 1978

Epistemologically, those underlying causes and mechanisms can be explained, observed, and inferred from organizational daily events. The three elements of experiences, events and mechanisms provide clear guidance for the author using this philosophical approach. Hence, in this thesis, the "real" practitioners of two "real" case companies are deemed to be influenced by changing policies. In the actual world, *guanxi* is a competitive advantage that influences their daily activities in which they have participated. Events can be observed from the practitioners' experiences or exposed by the public. In other words, the

researcher can observe these events but cannot observe the influence of *guanxi.* Given the events of Zhegn Xiaoyu, *guanxi* did influence policy making, but the researcher cannot observe how *guanxi* influenced policy making. The author's task is to discover, recognize, depict and analyse the causal structures and mechanisms with presented evidence. This mechanism is inferred from the interview data and set against the existing literature with particular attention paid to outcomes.

From the critical realist perspective, one key causal mechanism is the unique phenomenon of *guanxi* arguably underlying the complexity of real society. "Causal social mechanisms, usually unseen, by virtue of which one event causes another" (Gross, 2009, p. 361) and offer "a bridge between the philosophical and the empirical" (Mason, Easton and Lenney, 2013, p. 354). Mechanisms can be any real entities, for example, human, non-human (e.g. *guanxi*), or an institution (e.g. government). Critical realists postulate their theoretical entities and then identify evidence for the "real" world. Danermark (2002, p. 5) argued that the real world which critical realists study is a "structured, differentiated, stratified and changing" world. Thus, "what is real is not exhausted by what is experienced or readily apprehensible" (Banta, 2012, p. 389). For example, *guanxi* implies an underlying complex phenomenon that influences policy making and implementation, which in turn impacts on strategy formulation and implementation. Ontologically, *guanxi* reflects a deeply structured social reality even though those experiences or events cannot be observed by social actors. Thus, the interaction between *guanxi* and policy making is the relationship of "ontologically objective and socially consequential existence" (Porpora, 1993, p. 222).

Critical realism, then, construes the world not only from accumulated empirical information but also aims to acknowledge the "unobserved entities, structures, and causal mechanisms which are existing and acting independently of

scientists' knowledge of them"(Lewis, 1996, p. 487). In China's pharmaceutical context, the process, applications and adjustments of SMPCs' strategy formulation and implementation are the observable appearances of underlying causal mechanisms that *guanxi* embeds and in turn influences the crystallization of five forces. The semi-structured interview has been recognized by interviewees and discussed with regard to practical and real events and has generated empirical information about practitioners' strategy management and their handling mechanism under the same political policies. Those actions "carry with the intentions of and the meaning of consequences" (Miles and Huberman, 1994, p. 10). In this light, critical realism is identified as a particular philosophical approach to explain practitioners' empirical experience, where events may or may not be observed, and *guanxi* is conceptualised as an underlying causal mechanisms to influence policy formulation as well as the other Five Forces. Table 3.2 further presents a summary justification for choosing critical realism as a philosophical approach utilized in this thesis.

Table 3.2 Justification for Choosing Critical Realist Approach

	Critical Realism
Discipline	Social science: (1) Political issues: government policies. (2) Culture: *guanxi*. (3) Business/management/marketing: organization strategy.
Ontology	(1) Pre-existence of social structure: government political system. (2) Stratified reality: real, actual and empirical domains of practitioners' empirical and actual activities and experiences. (3) Observable events. (4) Social actors (practitioners) intentions: reasons as real causes. (5) Consisting of structures, mechanisms and events: constant policies changing, loops of SMPCs strategy formulation, implementation and adjustments.

(Continued)

Epistemology	(1) Knowledge: the beliefs of *guanxi*; the perspectives of policy; the formulation of strategy. (2) Inference of building theories based on the causal mechanisms. (3) Subject-matter: internal necessity (SMPCs' strategy formulation, implementation); external relations: building good *guanxi* with government. (4) Practice: *guanxi* provides competitive advantages to SMPCs' strategy formulation and performance. Critiques of *guanxi*.
Methodology	(1) Historical process analysis: evolution of China Medical Reform for 2009; evolution of two case companies strategy; changing government main policies. (2) Underlying complexity: causal mechanism of *guanxi*. (3) Theoretical research: Porter's strategy application in China. (4) Empirical research: SMPCs' strategy formulation and implementation.

After outlining Table 3.3, critical realism is adopted as the exact methodological approach to be utilized in this thesis.

3.3 Research Design

Against the philosophical approach, the methods of data collection are outlined next.

Case study research provides “in depth” inquiry (Yin, 2014, p. 24). Following the research themes of *guanxi*, government policy and strategy, “deals with operational links needing to be traced over time”. The case studies were utilized to collect more detailed information (Yin, 2014, p. 10) to understand the interrelationship of influencing factors when a policy changes. According to Urquhart (1999), the case study can involve single or multiple angles from which to analyse a subject and to conduct an analysis at numerous levels to build theory and develop a conceptual framework. Case studies discover differences between reality, experiences and individual views (Riege, 2003; Yin, 2014). This was matched with critical realism to make inferences related to causal relations among variables (Yin, 2014, p. 28).

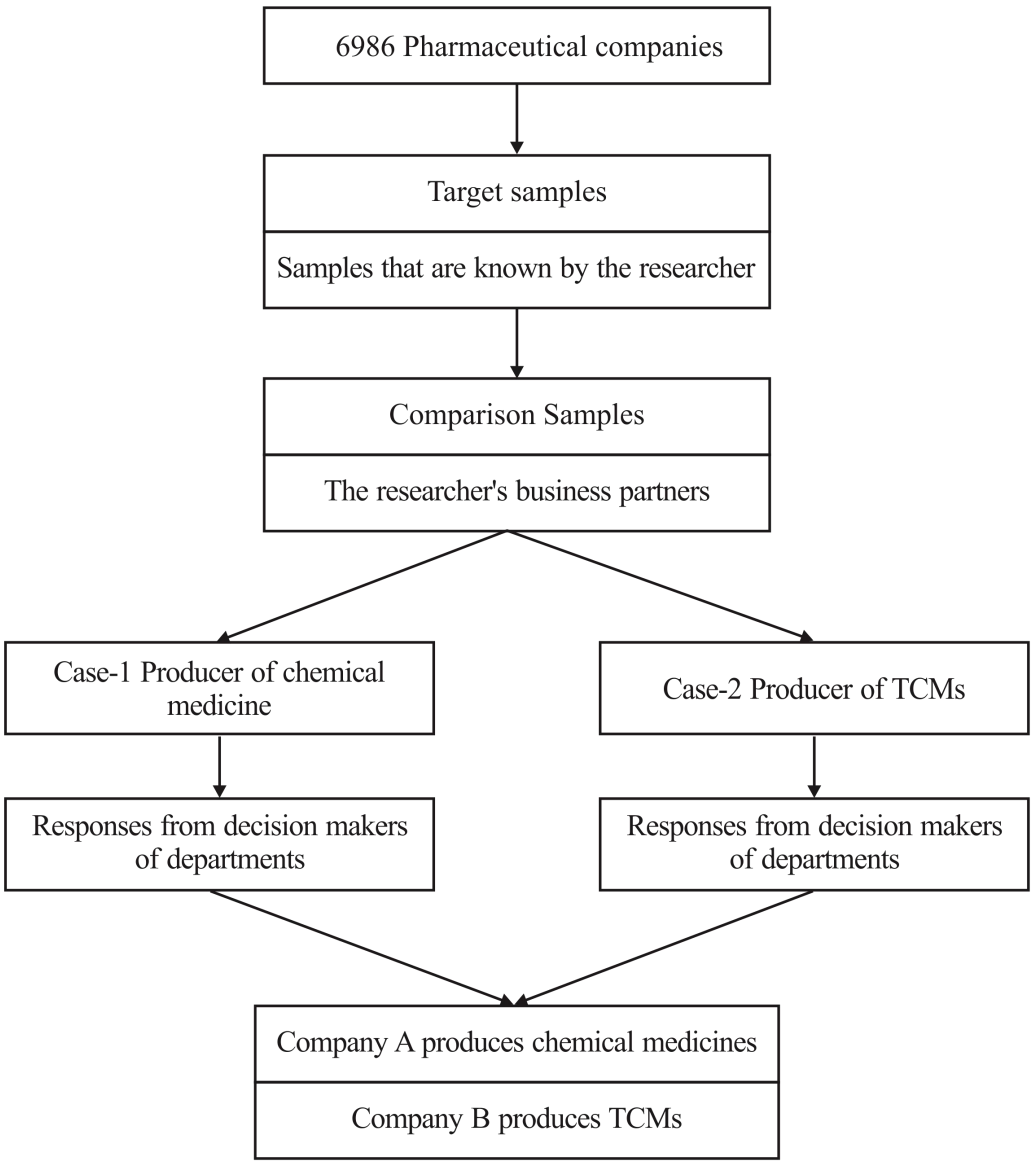
3.3.1 Research Approach: Two Comparative Case Studies

One case study, featuring a chemical medicine producer, was deemed too limited to identify distinction. Therefore, comparative case studies were employed to “elucidate the causal social processes underlying events” (O’Brien and Ackroyd, 2011, p. 39). Traditional Chinese Medicine (TCM) is a unique feature of Chinese medical science and theory and TCM is largely used in the public medical organizations in China. Hence, another case study of a TCM producer was chosen. These two different types of medicine producers have many differences including their product lines, product quality system, production standard, marketing mode, the reimbursed rate in the NBMIL and NEDL, and the regulations of DCBP. Therefore, comparative case studies can compare the differences and outcomes of formulating strategy based on different products. Using the case studies of two different types of producers enabled the author to

compare and contrast findings under the same influencing forces of policy during the same period. The goal was to distinguish differences in the strategy formulation between the chemical drug manufacturer and the TCM manufacturer.

Based on the author's experience and contacts, identifying two companies began. In light of the need to consider also practical aspects such as the convenience, accessibility, cost and time issues, ultimately, the author made the decision to filter the study cases from SMPCs that were known to her or had collaborated with her (see Figure 3.3). The author studied for her TCM degree for five years in Guizhou and has worked and lived in Guangdong for 16 years and has a good reputation and rich experience in cooperating with suppliers in Guangdong and in Guizhou provinces for many years. Thus, it was easier to connect and access the data from these companies.

Figure 3.3 Case Studies Selection Process



The two case studies were selected based on the criteria described in Table 3.3. The criteria was formulated based on two considerations. In this thesis the research subjects are medicine producers. Based on the author's experience, competition among medicine producers arose from the need to be listed in the NBMIL and NEDL. Products listed in the two medical insurance lists decide market coverage rates. If the products of the case study companies were not listed on the insurance schemes, practitioners had no experience of selling those

products. And interviewees might not provide in-depth understanding about policy influences relating to those products. Accessibility to interviewees who work in different departments and positions is very important. Interviewees working in different departments and positions have different empirical information and understanding about the influences of policy too. Following these criteria, one typical prescription drug producer of chemical medicine called "Company A" and one TCM producer called "Company B" were selected for this thesis (for more detailed information see Appendix 15). The two case studies have the same characteristics in terms of being private medium-sized manufacturing companies and have prescription drugs systems including at least one product listed in the two important insurance schemes NBMIL and NEDL (See Appendices 12 and 13). The interviewees in the companies were senior managers and decision-makers of departments.

Table 3.3 The Criteria of the Case Studies Selection

Items	Matched conditions	Selected case studies
Company nature	Manufacturing companies registered in Mainland China	Private companies
Enterprise category	SMEs	Medium-sized companies
Product category	One case for producer of chemical medicines, one case for producer of TCMs	1.Company A is producer of chemical medicines. Company B is producer of TCMs. 2. 5 senior managers of Company A and 4 senior managers of Company B responded and confirmed to attend the face to face interview.
Product characteristics	1.Product system includes prescribed drugs. 2.At least one product is listed in the NBMIL. 3.At least on product is listed in the NEDL	
Interviewees characteristics	1. Four administrative hierarchies: CEO---Sales director---Sales manager---R&D manager or factory director. 2. Every representative interviewee needs to be the decision maker of the department.	

(NBMIL: National Basic Medical Insurance List; NEDL: National Essential Drugs List； SMEs: Small and Medium-sized Enterprises; TCM: Traditional

Chinese Medicine)

Company A is involved in producing chemical medicines and has three professional teams to improve business. One team focuses on the prescription drugs market. The prescription drugs are mainly anti-cancer drugs and cardiovascular medicines. The other two teams focus on the over-the-counter (OTC) market, for instance, cold medication. The author's own company is Company A's distributor for anti-cancer medicines in Guangdong Province. The author has over seven years' collaboration experience with Company A and implements Company A's strategy in the local market. She has built good connections with the decision-makers of the different departments of the company.

Company B is located in Guizhou Province. It is also a private medium-sized enterprise in the industry. Company B is involved in producing Traditional Chinese Medicines (TCMs). Because the author graduated from Guiyang Traditional Medicine School, she knows many local owners of TCMs producers in Guizhou Province. Company B is a famous medicine producer in Guizhou. She has no previous experience of cooperating with Company B in any medicine business but has brought opportunities to collaborate with Company B in the medical device field from companies in European countries.

When access to the two representative cases were confirmed, the interviewees of the two case studies were selected and the ethical approval sought. The process of selecting the interviewees is discussed in the next section.

3.3.2 Interviewees Selection

The organizational structure of the two SMPCs consists of five decision-making departments: CEO or general managers, sales and after-sale service, marketing, R&D and production, and financial. Companies A and B, both well-known in China, are medium-sized pharmaceutical companies. The senior managers of the departments are the departmental decision-makers. Having considered the sensitivity of financial information, the author decided not to interview managers of the financial departments. The interviewees selected were responsible for making decisions in their department for business operation purposes. Their opinions and decisions directly influence their companies' strategy formulation and implementation and hence were the focal source of data.

The following criteria applied to all interviewees:

1) Professional education background in medical treatment, medicine and business management.
2) Decision makers of department: over ten years' work experience as a pharmaceutical producer.
3) Leader of a department/company.
4) Experience in the tendering and bidding policy process from 2009 to 2013.
5) The decision makers of the company: over 25 years' work experience; deep and broad understanding of China's pharmaceutical industry; have witnessed the changes and evolution of China's opening-up and reform and China's New National Health Reform. The CEO of Company B is the owner of the company.

Nine interviewees, the leaders in four departments, were selected from the two companies (see Appendix 16 for more about the interviewees). When the selection of interviewees was confirmed, the next step was data collection.

3.4 Data Collection

A semi-structured interview is recommended to gain a detailed picture of a respondent's beliefs and perceptions of a particular topic (Smith, 1995, p. 9). It lets participants show their understanding of policies, decision-making and implementation through following a list of questions. This method gives the researcher and respondents much more flexibility than the structured interview and more focus and direction than the unstructured interview (Sekaran, 2003).

Semi-structured interview was adopted to collect primary data from the interviewees' points of view directly and to obtain detailed answers. The data collection process included two steps to collect satisfactory data. Before the interviews, questions for semi-structured interview were formulated. Seven questions were formulated (see Appendix 17), with questions focused on how national and provincial policies influence SMPCs' strategies and why? The first stage of data collection was completed between July and August 2014. During a detailed review of transcriptions, what emerged was that all practitioners mentioned *guanxi.* Subsequently, the author went back to conduct both a literature search and a follow-up review about *guanxi*. Six questions were formulated for the follow-up interviews (see Appendix 17). Follow-up interviews were set up for March 2015. The research & development (R&D) manager of Company A and the factory director of Company B are in charge of production in their companies. During a review of transcriptions, both were seen to have less experience to explain *guanxi* operations. Therefore, they were not chosen to be interviewed in the follow-up interview. Furthermore, the sales director and sales manager of Company A had an important conference to attend in Beijing in May and needed to stay in Beijing. The author did not go to Beijing to interview them. The sales manager of Company B, had asked for leave of one month to take care of his father in another city. Therefore, four interviewees, the CEO and marketing director of Company A and the CEO and sales director of Company B, were

interviewed a second time. Those key decision-makers were interviewed to the follow-up interview.

Before any interviews were held, the author complied with ethical regulations and received the Ethical Approval Checklist Form and a consent form was developed. Owing to the author's relationships with these business partners, it was easy to contact them and arrange face-to-face interviews. The author obtained consent from every interviewee and she informed all interviewees in advance that the face-to-face interviews would be recorded.

The face-to-face interview process followed the following steps:

Step 1. In order to obtain consent, contacting and phoning the interviewees to present the purpose, intention, goal, methods and the length of time needed.
Step 2. Obtaining the approval and confirming the location and time for the interview.
Step 3. Meeting at the agreed time and location; introducing the research topic, presenting the letter for the semi-structured interview (See Appendix 18) and obtained their approval for being recorded; asking the questions, and taking notes, observing.

Finally, there were nine interviewees involved, four of whom conducted a second follow-up interview to explore *guanxi* further, giving a total of 13 interviews completed successfully (see Table 3.4). To travel from Guangzhou to Shengzheng takes under two hours by car. To travel from Guangzhou to Guizhou takes four and a half hours by train and one and a half hours by air. Most of the interviewees of the two case studies chose an interview location in working time at their offices or in a meeting room. The average length of time was about 55 minutes. All interviewees of Company A spoke Mandarin. The interviewees of Company B chose the local Guizhou dialect, which was probably more

comfortable for them and easier to express their understanding and insights.

Table 3.4 Background Information on the Interviews

Case Studies		First Interview				Follow up Interview			
Company A& B		Location	Language	Length of time/minutes	Transportation (from Guangzhou to location)	Location	Language	Length of time/minutes	Transportation (from Guangzhou to location)
A	CEO	Office	Mandarin	48	by car (2 hours)	Office	Mandarin	47	by car
	Marketing director	Meeting room	Mandarin	58		The author's office	Mandarin	60	
	Sales director	Office	Mandarin	55					
	Sales manager	Meeting room	Mandarin	80					
	R&D manager	Meeting room	Mandarin	45					
B	CEO	Office	Guizhou dialect	47	by train (4. 5 hours)	Office	Guizhou dialect	49	by air (1.5 hours)
	Sales director	Meeting room	Mandarin	62		Office	Guizhou dialect	65	
	Sales manager	Office	Mandarin	58					
	Factory director	Office	Guizhou dialect	40					

Just one female member of staff of Company A interrupted to ask questions of her sales director and the sales manager of Company B took several short telephone calls. Other interviewees set their phones to the silent mode. With all the interviewees, the interviewing process was effective and efficient. The CEO of company A, who had a PhD degree, talked a lot more than others based on the author's questions.

3.5 Data Management and Analyses

Face-to-face methods are best suited to the exploratory stages of research when the researcher is trying to get an impression of concepts or situational factors (Sekaran, 2003). Through the face-to-face interview method, the interviewees' attitudes, feelings, tones and body language can be observed directly (Hill and Wright, 2001). Face-to-face interviews allow the researcher to investigate the respondents' views, opinions and beliefs more effectively, as the respondents are

given much more freedom in the survey interview (Bryman and Bell, 2007). Face-to-face interviews can collect deep-level details and approaches about *guanxi* utilization and can allow observation of the interviewee's attitudes, body language, and rational understanding in relation to *guanxi*'s functions in someone's life and work.

After collecting the data, the author followed six stages to carefully manage it. The first stage was to listen to the recordings three times. The second stage was to generate ideas after listening to the records. At this initial stage, it was found that central and provincial government policy was a main influence on them. But it was also interesting that practitioners mentioned *guanxi* in relation to the emerging main theme of policy. That appeared to be a critical factor too.

The third stage was to transcribe the recordings into Chinese and analyse them in Chinese; especially as the three interviewees of Company B spoke in the Guizhou dialect. The author comes from Guizhou and works in Guangdong, so she can speak in the Guizhou dialect, Cantonese, Mandarin and English. During two interviews, the two languages of Mandarin and the Guizhou dialect were utilized by interviewees. The interviewees of Company A are from different provinces, work in Shenzhen, and can speak both Mandarin and the local dialect. Shenzhen is a pilot city of the policy of reform and is open. Thus, Shenzhen is a city of immigrants. People working in Shenzhen speak mainly Mandarin. So all interviewees of Company A spoke Mandarin to the author. And all interviewees of Company B are from Guizhou province and can speak both languages of Guizhou dialect and Mandarin. The sales director and manager concentrate on business customers who come from different provinces in China. They accordingly speak fluent Mandarin and the Guizhou dialect.

The author made use of whichever language was easier for the interviewees. The CEO of Company B also speaks both Mandarin and the Guizhou dialect fluently.

Interestingly, when the author was with him, when the CEO was facing customers, he spoke Mandarin. He spoke in the Guizhou dialect to the author and when the author interviewed him, he utilized the Guizhou dialect. He was used to using the Guizhou language to communicate with internal staff and Guizhou friends. However, the factory director is a technician. He has been working for Company B for over 10 years, but was not good at speaking Mandarin. It was notable that the Guizhou dialect made him more comfortable to complete the interview. Overall, the author was flexible, aiming to put them at ease to get the fullest answers possible. The sales director of Company B also directly utilized the Guizhou dialect to speak to the author at the second interview. This is the local culture. Where Guizhou people know that the speaker is from Guizhou, they usually use the local language to talk and communicate with each other.

The author was born in Guizhou and studied for 16 years from primary school to university. She can fully understand and speak fluently the Guizhou dialect with all interviewees of Company B so as to complete the two interviews and then transcribe them into Chinese. Transcriptions in the Chinese version made the author comfortable to understand and to generate themes. After obtaining the Chinese version of the transcriptions, the following analyses began.

The fourth stage was to print all transcriptions, read them, and mark key words or expression. After the three stages of managing the data and with themes emerging at the fourth stage, the author went back to look at the literature. The analyses continued and check were based on the transcriptions and subsequently compared to the research literature. The fifth stage was to generate categories in the notebook, group similar ideas, and eventually to locate key quotes to illustrate key themes. Then, organizing the analysis was based on key quotations and the key themes. At the final sixth stage, the author translated the Chinese version of the transcription and themes into English. This stage was important. The author made sure that the transcription and themes were translated carefully

and accurately. Although the author knows the Chinese words, old sayings and idioms were not easy to translate into English and care had to be taken.

The process of data management and analyses aimed to ensure a systematic and consistent approach at all stages noted above. The transcriptions in Chinese first enabled the author to become comfortable in understanding the practitioner's views and to generate emerging themes. The author repeatedly listened to the records of interviews. Marking up key words/expressions and locating key quotes helped the author to begin to categorize similar ideas. As part of this process, typical quotations were noted and eventually utilized to illustrate the themes in this thesis. The final stage was to translate transcriptions into English since terminology management is clearly significant for this thesis. The next section will focus on defining key terms.

3.6 Terminology Management and Analyses

One phenomenon in this thesis is the terminology (e.g. government, medical administrative system, policy-making) where there are different ways to refer to things in Chinese. Therefore, it was essential to define those terms which were frequently mentioned by interviewees and discussed by the author. For the DBA thesis, the author has selected key terms to be defined and ensured that they were used consistently throughout this thesis.

The notion of government relates to politics, government departments, government agencies, authorities, and power in the Chinese context. Based on the structure of the government administration system in China (See Figure 2.6), government means central, provincial/municipal directly under the central government, city, county and town government. Normally, it is the surrounding talk/context that gives it the unique or specific meaning. Pharmaceutical policies refer to all medical and pharmaceutical policies relevant to laws and regulations

of drug production, sales and services which are promulgated by the Chinese central and provincial government. However, significant pharmaceutical policies are mainly issued by central and provincial government. It was approval that the term of “government” was used mainly to express both central and provincial government.

Similarly, policies need to be defined, especially those mentioned in this thesis. Policies are mainly issued by both central government and provincial government following the governmental body structure. When an important pharmaceutical policy is issued by central government, every provincial government also issues a local policy which will be supplemental to the national policy in order to suit the local situation and develop the local pharmaceutical economy and healthcare (BMI, 2014). For example, when the main policies of the National Basic Medical Insurance List (NBMIL) (See Appendix 12) and the National Essential Drug List (NEDL)(See Appendix 13) were issued by central government, subsequently, both of them would be issued by every provincial government named “provincial name” NBMIL and NEDL (e.g. Guangdong NBMIL, Shanghai NBMIL, Beijing NBMIL etc.). This regulation is the same as NEDL. Thus, the provincial insurance list is based on the same national policy with new and different medicines added. Consequently, every provincial insurance list is different including products and costs. The result is that, on the one hand, local SMPCs have more opportunities to get their products onto the local insurance list but, on the other hand, SMPCs will face different provincial government bodies and distinct policies. Therefore, policy making by government is mainly pointed towards provincial policies formulation.

3.7 Data Reliability and Validity

Although the realism approach is increasingly used in marketing research there are still challenges in thesis of its reliability and validity for researchers. From the realist perspective, "realism emphasises the building of a theory rather than the statistical testing of the generality of a theory to a population" (Healy and Perry, 2000, p. 124). In particular, based on value awareness, perceptions from multiple angles from different positions in an organization, could be "a window to reality through which a picture of reality can be triangulated with other perceptions" (Healy and Perry, 2000, p. 125). Healy and Perry (2000, p. 122) summarized six comprehensive criteria that could be utilized to judge reliability and validity in the realism paradigm (for more details see Appendix 19). And Riege (2003, p. 78-79) highlighted, "four design tests of construct validity, internal and external validity and reliability can improve the quality of case study design" (See Appendix 20).

From the criteria and paradigms of Healy and Perry (2000) and Riege (2003), the author used the six facets to demonstrate this thesis's quality and its reliability and validity.

First and foremost, Table 3.2 presents the justifications for choosing critical realism based on case-oriented research. The key elements of *guanxi*, government policies and SMPCs' strategy are related to complex social phenomena. Thus, ontological appropriateness relates to the selection of "how" and "why" issues. For example, the first research question is how national and provincial policies influence SMPCs' strategy formulation. Second, methodological trustworthiness – the author represents practitioners' quotations and supporting public government reports to both summarize data and illustrate this vital notions; she depicted the principles for the selection of the two comparative cases and also selection process and the detailed interviewing

procedures.

Second, the case study method focuses on theory construction based on the interviewees' real-life experience. Thus, realist researchers have an intimate relationship with the organization. Hence, the researchers need to prevent inclusion of personal subjective judgements during data collection so as to enhance the construction validity (Riege, 2003). Regarding internal validity, the author has utilized cross-case patterns to discover the similarities and differences between the two cases. Both cases are medium-sized companies and the interviewees are decision makers within the same departments. They are located in different local markets, facing different local governments, and have different products and distribution systems. Finally, the research results showed that the two companies have the same principles of strategy formulation. These results were generalized to form a broader theory that was matched against a previous conceptual framework.

Third, reliability in case studies is related to whether other researchers can replicate the findings. In this research, the author used consistent interviewing techniques and procedures with the same interviewees for the two interviews. Also, the author has carefully used precise data management such as in recording data and transcription in both Chinese and English versions. This data assists assurances on the accuracy of the findings across comparable data sources. These techniques are deemed to increase the validity of construction (Riege, 2003, p. 78-79).

Fourth, the selection of the business partners maintained the case reality of the research. On the one hand, the connection between the author and companies A and B gave the author accessibility. This close relationship between the researcher and the interviewees helped the research achieve validity and reliability. Since the face-to-face interviews were to focus on the practical

situation for analysis of the facts and consequences in light of policy change, the practitioners' quotations recounted and represented reflected the empirical and the historical events being generated and exchanged in the analyses. The interviewees described their companies' internal and external actions and thinking frameworks, as well as the basis for decision-making. On the other hand, although the business partner connection could bring accessibility, it could also lead to a bias where the respondents did not express in-depth views on sensitive issues such as *guanxi*. Interviewees of Company A have known the author over a period of five years and in order to overcome bias, the author employed different techniques to ask the questions following their viewpoints and to let the interviewees quote examples in answering the questions. And interviewees were encouraged to expend their views following the author's questions and other questions enabled the author to cross check for consistency.

Fifth, the author constructed a relaxed and comfortable environment in which to undertake the interviews. For instance, she gave the interviewees a cup of coffee and introduced her recent circumstances and research before starting the interviewing. Before the interview, the researcher prepared and also shared with the interviewees a lot of detailed information including a government industrial report and an international pharmaceutical report in China (BMI, 2014). During the interviewing, the author established a trusting relationship through validating and exemplifying both the interviewer's and interviewee's experiences as the foundation for asking critical questions that challenged assumptions about sensitive issues. This rapport enabled ideas that might have been difficult to articulate were raised and discussed in depth.

Sixth, the languages of Mandarin and the Guizhou dialect were both adopted in the interviews. The author could clearly state and ask the questions, clarify doubts and ensure that the interviewees understood the issue without confusion caused by language (Sekaran, 2003). When talking about sensitive questions,

industrial reports and news, other company's examples were used to explore their understanding. And when the author held different views from the interviewees, she respected their responses and did not comment on their answers. After data collection, transcription and noting themes, the next chapter will analyse and discuss how *guanxi* and government policy are interacted to influence Porter's Five Forces in the pharmaceutical industry.

CHAPTER FOUR: ANALYSES AND DISCUSSION

The analysis suggests that *guanxi* plays a critical role in connecting the other six forces outlined in the conceptual framework (see Figure 2.8). This chapter begins by presenting the analysis and discusses *guanxi* which, the author suggests, is key in combining policy and SMPCs' strategy. First, a summary discussion of *guanxi's* properties is outlined, along with its implications, functions and operations. The consideration of the functions of *guanxi* in strategy formulation and implementation as articulated by practitioners. *Guanxi* operation leads on to analysing *guanxi* at individual and organizational level, as articulated by the practitioners in this study. Following this, the next section examines the interrelationship between *guanxi* and government policy and also the underlying causal mechanisms. Porter's Five Forces theory will be looked at in relation to these two forces of *guanxi* and government policy as the analysis is presented. The final section outlines the analyses and discussion of SMPCs' self-organization development. Throughout the presentation of the analysis, the discussion will also inherently refer to, and make connections to, the relevant literature.

4.1. Complications of *Guanxi* in Practice

The analysis begins with a reminder summary of the definitions of *guanxi*. Given the space considerations, the findings are summarized in Table 4.1 and it remains interesting that none of the interviewees could define *guanxi* clearly. This reflects the literature review (See Table 2.1) in terms of the complications of *guanxi* where there are no uniform definitions and no criteria to generalize about *guanxi* from literature and practice. Indeed, the meanings of *guanxi* and the forthcoming analysis – summarised in Table 4.1 – supports this too.

Because of their different positions in organizations, and their levels of education and working experience, the practitioners had different views (See Table 4.1) and yet all interviewees emphasized *guanxi* as a resource. Four interviewees mentioned *guanxi* was a competitive advantage which facilitated strategy goals. Five interviewees specifically considered *guanxi* to be something unique to Chinese culture. Except for providing broad understandings of *guanxi*, two CEOs and the sales director of Company B described *guanxi* as a "small circle" and it was described as a "lubricant" (CEO of A), "catalyst" and " multiplier" (CEO of B) and "information collector" (sales director of Company B). This points to both its complexity and elusiveness.

When talking about the causal mechanism of *guanxi* with respect to government affairs, two CEOs used historical institutional examples of when *guanxi* influenced government policies, and the effects on the pharmaceutical market; others used public events, commercial rivals' cases or the press to describe it. The author had to carefully analyse and interpret what they were pointing towards. Indeed, only when practitioners were talking about issues or events, could they define *guanxi* based on that situation.

Table 4.1 Views of *Guanxi* in the Two Case Studies

Interviewees	Company A	Company B
CEO	● In relation to social legal system and spirit of commitment. ● Narrow sense as a negative word and negative side. ● Like lubricant to achieve the goal, reduce cost and improve the effectiveness during strategy implementation. ● "Small circle" culture.	● Difficult for foreigners to understand our *guanxi*. ● In relation to civic culture (e.g. "what *guanxi* have I?", "can it be faster?", "can I take a short cut?" ● *Guanxi* and government policy are like twins which need to be considered comprehensively. ● Making you more confident ● Like a catalyst, multiply to facilitate and help achieve your strategy goal.
Marketing director	● Including external and internal *guanxi*. External *guanxi* means the relationship with government, internal *guanxi* means the network inside the enterprise. ● Traditional code of conduct (Face, sympathy etc.).	Sales director is also in charge of marketing department. Thus, the understandings are the same as below.
Sales director	● In relation to Chinese Confucian culture. ● Using *guanxi* to develop fast. ● Core competitiveness.	● To establish an interactive relationship with government. ● Like information collector or a bridge to link with government.

(Continued)

		● Competitive advantage and then avert fair competition. ● A series of tactics ● Narrow sense as asymmetrical competition
Sales manager	● SMPCs needs to build good *guanxi* with government, distributors and doctors, which can: ● Be helpful to formulate business strategy. ● Be competitive advantage. ● Improve business performance.	● A powerful tool to improve our goal. ● Facilitating SMPCs' products to be listed in the medical insurance scheme.
R&D manager/ Factory Director	● To guide us in how to work and what to do. ● More useful to sales people.	● *Guanxi* is resource. ● Helping you succeed fast. ● *S*upporting commercial deals.

The complications of *guanxi* are also manifest from its dual nature. Regarding the properties of *guanxi*, g*uanxi* has been described as two-dimensional – both positive and negative (Fan, Woodbine and Scully, 2012) and a double-edged sword (Warren, Dunfee and Li, 2004). Except for a number of positive advantages and benefits to individuals and organizations, it was also evident that interviewees felt that *guanxi*'s negative side was linked mainly to government (Wei and Xi, 2001; Zhang, 2007; Luo, 2008; Zhao, 2014; Berger and Herstein, 2014). The negative sides were in relation to interest groups. And three

interviewees – two CEOs and the sales director of Company B – used the term "narrow sense" to link *guanxi*'s negative sides. As one typical illustration here, the CEO of Company A said:

> *Guanxi* in the narrow sense means any type of irregular *guanxi*. It could influence decision making … If policy formulation and implementation are not genuinely open and transparent, *guanxi* works … As long as governmental behaviour lacks standardization, it is consequent that interests of small groups influence policy making.

The account from the sales director of Company B also conveys a narrow and negative sense of *guanxi*, for example, here as asymmetrical information competition which averts fair competition. The next section begins to further explore *guanxi* operations but from the individual level and the organizational level.

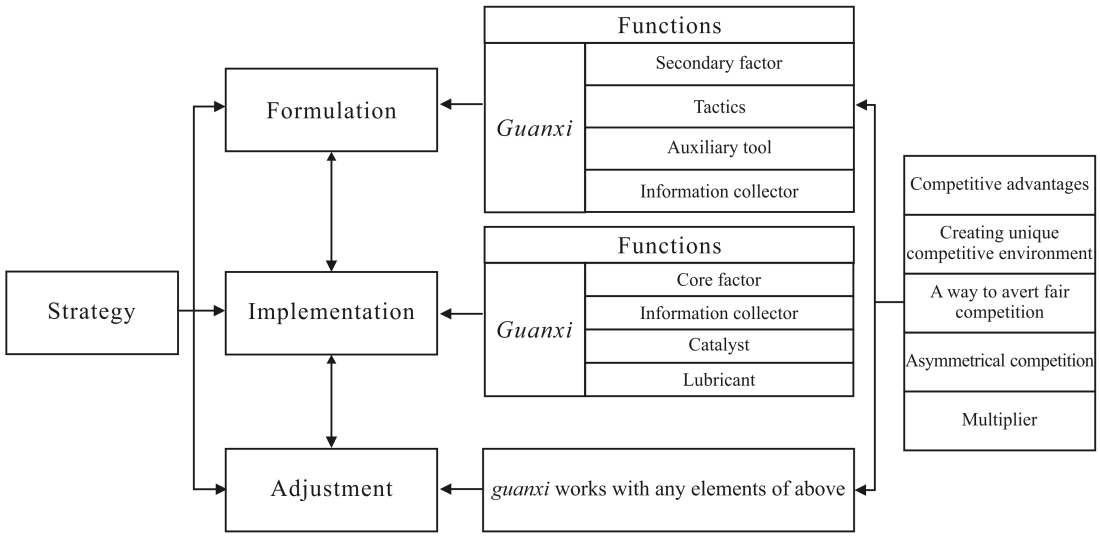
4.2 The Functions of *Guanxi*

Using *guanxi* to improve business is an open secret existing in China's pharmaceutical industry. People working in the sector do not need to talk about this issue. Indeed, the interviewees were not interested in talking about detailed approaches which are utilized when they improve business activities. This is because there are no standard patterns to refer to either. The process and orientation of using *guanxi* is based on the significance and the objective of the task or interaction (Zhuang, 2012; and see Figure 2.3).

From the literature it was apparent that different approaches (See Appendix 8) could be used to build *guanxi*, and to develop and use it during strategy formulation and implementation (See Appendix 8, Figure A8.1). The interviewees provided several patterns for developing and using *guanxi* at the individual level and the organizational level (See Appendix 21, Figure A21.1 and Figure A21.2).

Undoubtedly, *guanxi* was found to be like an information collector or bridge to support all stages of SMPCs' strategy formulation, implementation and adjustment. As literature also showed, "*Guanxi* acts the roles of both the catalyst and the buffer" (Wong, 2007, p. 258); In this context, *guanxi* acted as an internal and external factor to facilitate business integrated success and interviewees' understanding and the terms used to describe *guanxi*'s functions are summarized in Figure 4. 1.

Figure 4.1 The Functions of *Guanxi* in Strategy Formulation and Implementation



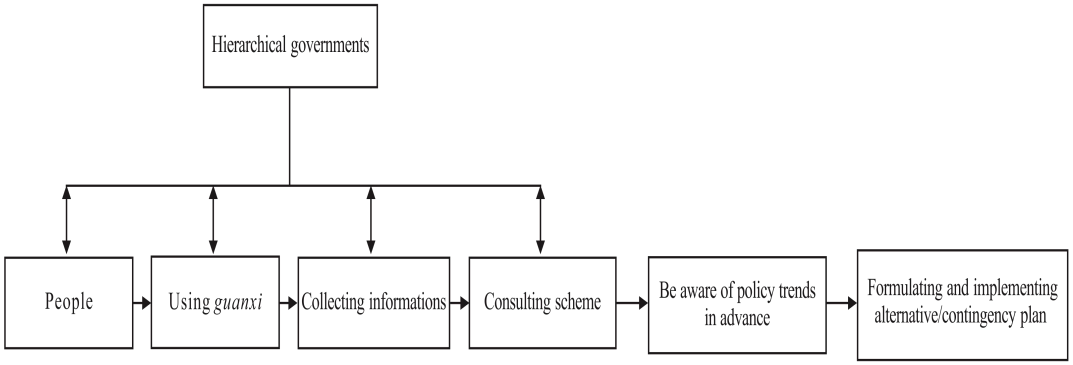
Notably, eight of the interviewees mentioned that *guanxi* acted as an information collector (only the factory director of Company B did not). The decision makers, including the two CEOs and two sales directors, conveyed a deeper understanding of *guanxi's* functions during their efforts at strategy formulation and implementation. The analysis found that they utilized *guanxi* to collect important information about government policy so that their company strategy could conform with policy trends and thus, align their strategic direction too.

Guanxi, then, enables information collection to help decision makers formulate strategy. The sales director of Company B offers one typical illustration when he said:

> Sometimes, the competition is information competition. So I think *guanxi* is like the information collector. This function goes through strategy formulation and implementation. For example, regarding NBMIL and NEDL, we need to know those information. How long will the state adjust the policies? What are the basic requirements? In what time the national policy will be implemented? What time provincial supplementary drug lists will be formulated? If I knew that information early, I shall prepare early.

The detailed analysis of the accounts of all the senior managers, including the sales director of Company B and the marketing director of Company A, highlighted that they all have the same broad principles, patterns and process to build *guanxi* with government and to achieve their goal (See Figure 4.2).

Figure 4.2 The Functions of *Guanxi* with Government



Crucially and conceptually, building *guanxi* at organizational level with government is based on individual-level operations. This will be explored in the next section. Given the structure of the government administration system in China (See Figure 2.6), SMPCs need to build different *guanxi* with central,

provincial and local governments. It was stated as impossible for them to obtain all the information and detailed policies in time given the available resources. Yet the interviewees tried to collect useful information or details to support their decision making by building relationships and hence, building *guanxi*, and then, to work out if alternative plans were needed to remain competitive.

Although *guanxi* is not the determining factor in strategy formulation, it was important in seeking out and obtaining local government policy support to facilitate SMPCs' formulation, and to do so fast. The government imposes various policies at central and regional level to facilitate and support SMEs' development (Hadiyati, 2015). Undoubtedly, obtaining local policy support was important for SMPCs, and both of the two case companies worked hard to build good relationships with local government. One way to do so was to attend more professional governmental conferences and decision-making forums – to network.

An analysis and discussion of the different functions of *guanxi* in strategy formulation and implementation is essential to compare them together so as to build on the next section's analyses and discussion.

*4.*3 *Guanxi* Operations

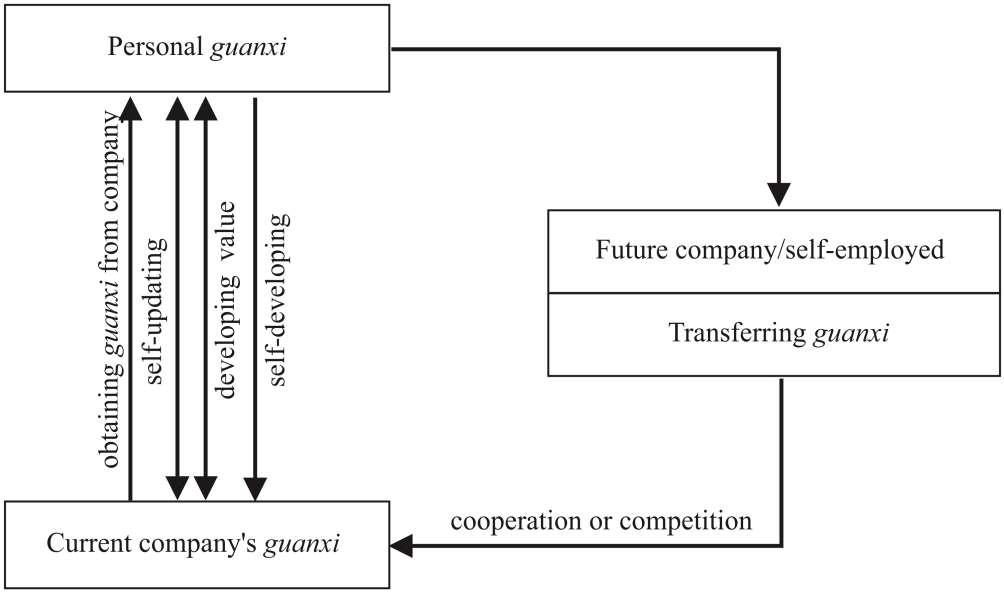
In this section, *guanxi* operations at individual and organizational level will be explained by practitioners.

4.3.1 The Interrelationship of Individual *Guanxi* and Organizational *Guanxi*

The conduct of business between organizations is actually run by individuals at a personal level (see Figure 4.3). In China's pharmaceutical market, existing competition is intensive. The analysis here confirms that an individual's personal *guanxi,* especially in relation to the sales department is seen to assist organizational performance (Yen, Wang and Kao, 2015). Indeed, individual *guanxi* and organizational *guanxi* mutually promote each other, where personal *guanxi* improves career development (Li and Wright, 2000) and is said to facilitate the company's performance too. Two interviewees, the sales director of Company B and the marketing director of Company A, firmly believed that individual *guanxi* could improve company business and their careers. For example, the marketing director of Company A said:

> If you are a professional manager in a company, you can achieve your personal value and development in the company via your personal *guanxi* and network. You can also enhance your personal *guanxi* with the company's platform and *guanxi.* Company is a big platform. These two *guanxis* interact with each other.

Figure 4.3 The Interrelationships between *Guanxi* and the Individual and the Organization



The CEO of Company A also mentioned the dual nature of *guanxi* in relation to the organizational level. He described the positive side of *guanxi* which facilitated achieving their strategy goal, very much like the functions of a "lubricant". Regarding the negative side, he referred to a "small circle" (Luo and Cheng, 2015) to describe the inter-employee *guanxi* inside the company. In his words:

> Besides and more importantly, *guanxi* is a means to achieve your goal. If you use it well, it can serve you and help you develop. Use all kinds of resources, reach consensus during the course of communication, with *guanxi* you can reduce cost during strategy implementation just like a lubricant, you can reduce cost and improve the effectiveness of communication and implementation. Regarding internal organization, sometimes, people in "small circle" breaks the company's rule due to the different levels of closeness. This kind of *guanxi* often hinders the development of the company.

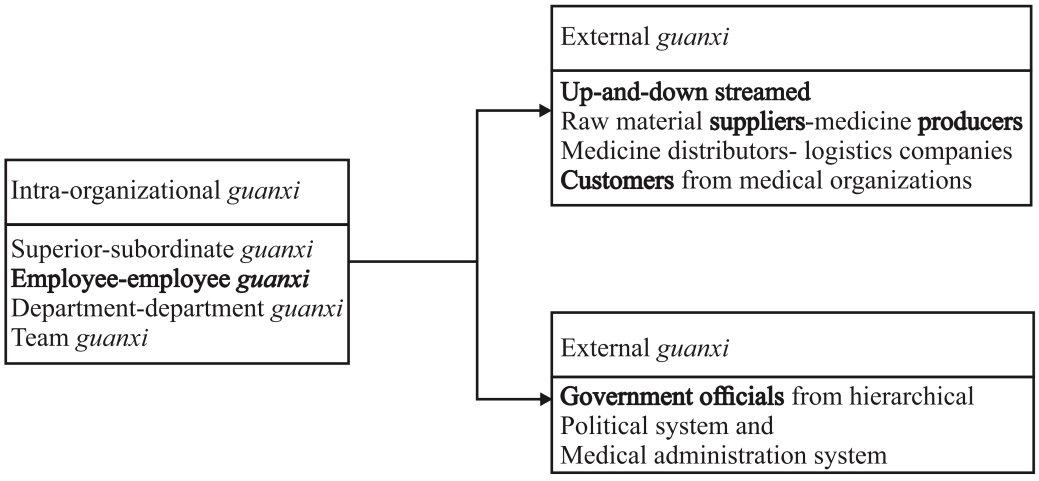
So this complex interrelationship can be seen in this description.The next sub-section considers the nature of *guanxi* at organizational level.

4.3.2 *Guanxi* at Organizational Level

Regarding organizational *guanxi*, Yen, Wang and Kao (2015, p. 10) suggested three types of firms' *guanxi*: external, inter-organizational, and intra-organizational. (See Figure 2.4). Again, two senior interviewees, the marketing director of Company A and the sales director of Company B, categorized organizational *guanxi* as two types: intra *guanxi* and external *guanxi* (Figure 4.4). While aspects of the analysis here differs from the accounts by Yen, Wang and Kao (2015, p. 10), the main elements remain the same. The intra-organizational *guanxi* is related to employee–employee *gaunxi*. The external *guanxi* is related to government officials. The marketing director of Company A offers us a typical illustration of the ways they recounted this element:

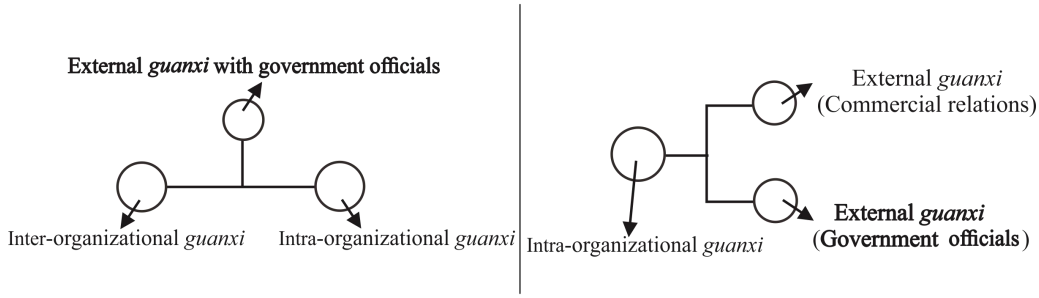
> For company, it is still two kinds, external and internal *guanxi.* External *guanxi* means more about relationship with government. As a matter of fact, external *guanxi* also include commercial relations. It is also very important. Our upstream is raw material company, downstream are mainly medicine logistics companies and medicine distributors/agents.

Figure 4.4 Types of Organizational *Guanxi* in Practice



The author has combined Figure 2.4 and Figure 4.4 as one graphic to compare their particular differences (See Figure 4.5). The difference between Figure 2.4 and Figure 4.4 is the implications of external *guanxi.* External *guanxi* in the literature and given the research here, indicates that government officials are from a hierarchical political system and a medical regulatory system (See Figure 2.6). As this research found that external *guanxi* also means commercial relations such as suppliers, producers and customers (See Figure 4.4). The common point is external *guanxi* which links government relations. The difference is that practitioners categorize inter-organization as external *guanxi*. This principle of classification is more like Fei's differentiation theory (2008).

Figure 4.5 Comparison of Types of Organizational *Guanxi*



Source: Left: Yen, Wang and Kao, 2015, p. 10; Right: from the interviewees' views

All interviewees mentioned the benefits of building *guanxi* with government at the organizational level. No interviewees mentioned supervisor–subordinate *guanxi* in the intra-organization relationships. Given that all the interviewees had been working for their company on average for 10 years and were all senior managers in their company, the team was arguably stable. In the follow-up interviews, only one interviewee, the CEO of Company A, mentioned the existence of this phenomenon in terms of a "small circle" in the

intra-organization. He also pointed out if intra-organizational *guanxi* has no spirit of commitment it brings damage to the company.

Inter-organizational *guanxi* is directed at commercial relationships and as shown in Figure 4.4, two interviewees – sales director of Company B and marketing director of Company A – described inter-organizational *guanxi* as external *guanxi*. This was mainly in relation to *guanxi* with upstream and downstream customers. In China's pharmaceutical industry, the industrial chain runs from raw material suppliers, medicine producers, medicine distributors/logistics companies, to medical organizations. Five interviewees, two in Company A and three in Company B, emphasized that SMPCs must build good relationships with medicine distributors/agents. Because China's pharmaceutical market potential is huge, while SMPCs lack capital, channels, human resources, and opportunities to build, develop and maintain *guanxi* directly with public hospitals, they need the help of local distributors. Local distributors were seen to have strong *guanxi* with local public hospitals. The CEO, sales director and manager of Company B considered that collaborating with professional local distributors enhanced company performance. The sales manager of Company B also indicated:

> Our business strategy is an agency system. Because competitiveness is stringent. From a business perspective, cooperation with local distributors can reduce management cost and coverage market fast. At the same time, sales performance in public hospitals is going up promptly. If we build our own sales team to improve sales, it is really hard to do. And local distributors have good *guanxi* at local market. They do better than us.

Furthermore, Company A had adapted their own sales team to improve business, in view of the intensive competition: a team who primarily focused on seeking for distributors was built. This will be explored further in Section 4.6.2. The sales director and manager of Company A also emphasized the importance of distributors. The sales manager of Company A said that:

> Our products are generic chemical drugs. This market is so competitive. Therefore,

> finding a good local distributor is very important. Local distributors have good relationship with local public hospitals. Distributors' performance is going fast than our own teams.

Two interviewees, the CEO of Company A and the sales director of Company B, mentioned that inter-organizational *guanxi* also manifests itself in inter-organizational alliances. They suggested this kind of alliance is normally organized by individuals, or by a company, or by industrial associations. All members in the alliances act on behalf of their organizations. The intention of alliances is to collect and share governmental or commercial information and then seek collaboration opportunities.

The next section connects the influence of *guanxi* on government policy formulation and implementation. And then the underlying causal mechanisms of *guanxi* will be explored.

4.4 *Guanxi* and Government Policies

As discussed above, contributions and benefits arose from the interviewees building good *guanxi* with government. In this national and cultural context, and for these two companies, the analysis suggests that the real *force* which can influence Porter's (2008) five forces is government policy. Porter did not declare government policy as a "sixth force" and it was deemed to be neutral. In this section, the focus is on analysing the roles and functions of *guanxi* during government policy formulation and implementation and its underlying causal mechanisms.

4.4.1 *Guanxi* and Policy Formulation

Two sales directors emphasized that China's government has "powerful controls" (Berger and Herstein, 2014). The sales director of Company A said:

> Chinese government has powerful controls, under this system, government policies strongly impact on our business. If you do not obey, you are out. This is primitive.

All interviewees considered that government policy was a significant force in China and this counters Porter's neutral stance. Relatedly, how can *guanxi* influence policy formulation? Existing literature (Gao and Tian, 2006; Woodbine and Scully, 2012; Chen, Chen and Huang, 2013) (see Section 2.5) has shown *guanxi*'s negative effect on China's political system with the cause being an imperfect political system (Ren, 2014). Wei and Luo (2013, p. 9-11) state that China is going through the process of a transformational stage and during this period, power and *guanxi* is the decisive social norm in China (Zhao and Timothy, 2014). Indeed, "*guanxi* is often employed as a tool for economic or political gains" (Zhuang, 2012, p. 23). Unavoidably, interest groups (Wang and Ap, 2013) are growing and seemingly influencing public policy formulation too. Wang and Ap (2013, p. 224) define an interest group as "any association or organization which makes a claim on government so as to influence public policy without itself being willing to exercise the formal powers of government". For this thesis, interest groups are like *guanxi*-givers who have power and strength to influence government's official attitude and decision making.

Any type of inter-personal relationship in official circles, such as *guanxi* of leaders and secretaries, officials and business people, family members and heterosexual relationships can benefit personal interests. Success is a set of building blocks with pluralistic *guanxi*. This spreads through the central government and then local government and results in a deterioration of the local political environment. Interest groups utilize a variety of legal or illegal ways to present their requirements and political intentions. In China, those organizations that have advantages of resource, professional knowledge and *guanxi* have an influence on policy formulation and implementation. Both CEOs noted the

interrelationship between *guanxi* and policy. The CEO of Company A, for example, indicated:

> China's economy changed from planned economy to market economy. The market keeps upgrading and updating. It is not fully a free competitive market. Thus, policy influence is strong. Because government controls most of resources in China it influences SMPCs' development.

The CEO of Company B said:

> Sometimes, *guanxi* does influence policy making. Because this is game of interest groups. An interest group has a speaker. If one side wins, they may have *guanxi*. Sometimes, China's society is not entirely rule of law. *Guanxi* and policy are inseparable like twins. They supplement and benefit each other.

The CEO of Company B expressed the interrelationship between policy and *guanxi* as being like inseparable twins and that *guanxi* could play a crucial role on the political stage. Two interviewees, the CEO of Company B and the marketing director of Company A, mentioned the Zheng Xiaoyu case (BBC, 2007). They considered that these events reflected that *guanxi* influenced national policies including pharmaceutical entry, drugs approval, medicine registration and production. At that stage, the State Food and Drug Administration approved a number of generic drugs including chemical drugs and TCMs. Over-production, low technology, and intensive competition are the existing competitive environment (BMI, 2014). The events have been influencing SMPCs' market competition (Wang, 2007, p. 2). After the events, the national government enhances functions and improves the administrations of national agencies and advanced drugs production standards such as New GMP, drugs registration approval and national essential medical insurance lists (NEMIL). The sales manager of Company A described the changes which the new director of China Food and Drug Administration (CFDA) had formulated in the NEMIL. She said that:

> The director, Chen Zhu, is an expert. When he was formulating the first edition NEMIL, he checked the international definition, scope and list of essential drugs based on the evidences of European countries, Japan and Korea. At the same time, he did market research too.

After the case of Zheng Xiaoyu, the interviewee's explanation reflected that the national government reinforced medical administration management and reformed the structure (Yu, 2007). Given this strict national government policy environment and intensive competition, how can *guanxi* be used to achieve strategic goals for SMPCs? What is the causal mechanism by which *guanxi* influences medical insurance lists?

Except for the research & development (R&D) director of Company A and the factory director of Company B, the interviewees considered that *guanxi* is in close relation to the national and provincial basic medical insurance list and essential drugs lists. Those seven interviewees strongly emphasized the significance of the two medical insurance schemes regarding company strategy. Two CEOs pointed out that having products listed on one or both of the two insurance schemes is strategic direction. CEO of Company B said:

> If your products are not listed on the medical insurance schemes, and you make them as key product to improve. This is not realistic and you need to be adjust your strategy.

Two sales directors and two sales managers emphasized the significance of the two medical insurance schemes in relation to market coverage (Wang and Li, 2013) (and see Appendices 12, 13 and 14). The sales manager of Company B described:

> I think it is very important that your product must be listed in the two medical insurance schemes. If yes, because the reimbursed rated is high, patients are acceptable; patients can be reimbursed, doctors are willing to prescribe your product; because doctors are acceptable for the products, therefore, it is easier to improve product at public hospitals, and then distributors are willing be local agents. In the end, medicine producers' sales

are going up.

According to the four interviewees' opinion, those factors cause SMPCs to be involved in finding a way to get products listed on the two medical insurance schemes. In 2009, two medical insurance lists at national level were issued. The national list required all primary medical organizations use the drugs listed in the NEDL. At the same time, provincial governments issued supplementary lists based on the local economy and incidence of a disease. Figures A13.1 and A14.1 (Appendices 13 and 14) show how the differentiation in the amount of supplementary drugs of the different provinces. At the same time, government administrative agencies are different. The National Health and Family Planning Commission (NHFPC) formulated NEDL, and the Ministry of Human Resources and Social Security (MNRSS) reimbursed drugs. The two government agencies adopted different models to filter, price, use and reimburse drugs. Moreover, conflicting interest result in divergences in allocations which were formulated at different interested party (Wang and Li, 2013, p. 905). The sales manager of Company B explained why SMPCs are involved in improving the products in the local supplementary essential drugs lists. He said that:

> The State government will adjust the NBMIL and NEDL once every five years. I consider this is opportunity to a drug producer. Therefore, if drug producer develops one product that has been listed over 14 provincial level BMIL or EDL, that means this product will be listed in the national level lists when the NBMIL and NEDL are adjusted.

According to the sales manager of Company B, this regulatory system of formulating medical insurance provides rent-seeking opportunity for *guanxi* at provincial level (NFZM newspaper, 2014). Four interviewees, two sales directors and two sales managers, considered *guanxi* influences local policies. The sales director of Company B gave the example of Wu Xinming, former section chief of Guangdong Health and Family Planning Commission (HFPC), who was accused of bribe taking and dereliction of duty for formulating Guangdong provincial

supplemented essential drug list in 2014 (Zhou, 2014). This event also related to three medicine agents. As shown in Figure A13.1 (Appendix 13), 29 provincial supplemented essential drug lists were issued from 2009 to 2011. Moreover, those provincial supplementary lists of Jiangxi, Qinghai, Sichuan, and Guizhou have been included in provincial basic medical insurance list. The scope of reimbursement in those provinces has been explored (Wang and Li, 2013). Regarding this phenomenon, national government issued a directive to restrict provincial governments from supplementing drugs at provincial level in 2014 (Zhou, 2014). It shows provincial governments failed in central government policy implementation (BMI, 2014) and that government policy formulation at provincial level was influenced by *guanxi*.

4.4.2 *Guanxi* and Policy Implementation

Both the sales manager of Company A and the sales director of Company B also provided examples to show how the national policy implementation was insufficient. Both of them mentioned the event of “Anhui 1118 list”. The sales manager said that:

> Regarding the NEDL policy, Anhui government formulated independent drugs list based on the local hospitals’ drugs utilization. This list included 1118 products which were used and filtered in the local Great Class AAA hospitals.

The sales director further explained that:

> If your product is listed in this “1118 list”, your product can be sold in this area. If not, even though your products are listed on the NEDL, the sales coverage may not good.

For the interviewees local competition was extremely intensive and the contradiction between national policy and provincial policy had a heavy influence on SMPCs. Clearly, such local policy directly influenced sales in the local market and the question was: How to enter this “1118 list”? This occupied

them and according to all the interviewees, *guanxi* works and this was why the local distributor was important for medicine producers. So, local government was seen as having the power to formulate local policy, thereby influencing the local market. Importantly, for these interviewees, local policy required a corresponding shift in the ways they then implemented SMPCs strategy too. Based on this phenomenon, the marketing director of Company A summarized:

> Even the initial purpose of the State's strategy is good, but during execution in provinces and cities, the result of execution doesn't always match with the initial purpose due to different reasons. If we only consider policy and its execution, it relates to many aspects. For example, one company in one place, this company contributes local tax and employment. Therefore, this local company gains the supporting from local government. It refers to local industrial problems. Even more it is related to stability problems.

This summary by the marketing director points to another example of "regional protectionism". This was also mentioned by the sales director of Company A:

> After formulation of national policies, national policy implementation manifests problems. Actually, regional protectionism emerges recent years. This is big problem, I think. What do the regional protectionism show? On the one hand, local companies attend local DCBP, they obtain preferential policy to win local DCBP. On the other hand, for example, Chongqing government required local hospitals used the drugs that are produced by local SMPCs. This requirement benefits local companies, because they have good local *guanxi* with local government.

Regarding the influence of contradictory government policy, two interviewees, the CEO and the sales director of Company A, both explained the causes. The public hospitals are state owned but government's compensation is insufficient. Thus, the model of supporting hospitals through the sale of drugs is the current popular means of survival for hospitals. Under this medical policy system, public hospitals operate under a non-profitability policy but they follow a profitability model. Market behaviour in public hospitals where they can sell drugs for profits crucially gives *guanxi* an important role in local hospitals. Then, naturally,

China's prescription drugs market is irregular. On the other hand, if policy implementation is not stringent enough, market behaviour in hospitals is distorted: for instance, the business model of prescriptions is based on commission to doctors. This is an open secret in China. There is, then, limited pharmaceutical industry policies of contradiction, non-standardization and slack supervision, hence providing rent-seeking spaces for *guanxi*-givers and *guanxi*-receivers. The CEO of Company A said:

> As long as policy formulation and implementation were not genuinely open and transparent, *guanxi* works. Policy implementation does not genuinely go marketization. Regarding policy implementation, the penalty is weak to illegal behaviour as well as supervision is insufficient.

Policies then, are uncertain and confused (Deng and Kaitin, 2004) and lacking in systematization (Xing, 2006). For example, the implementation of policies of the Drug Centralized Procurement Bidding (DCPB) has distinct conditions, requirements, and criteria in different provinces. Given this context *guanxi* flourishes and all must try and access and utilise it to survive.

4.4.3 *Guanxi* as an Underlying Causal Mechanism

Given the analysis of interviewees' accounts in Sections 4.4.1 and 4.4.2, *guanxi* was deemed to be interrelated to provincial government. Specifically, g*uanxi* influences government policy formulation at provincial level and plays important functions during national policy implementation at local market. *Guanxi* is, then, the underlying 'causal mechanism' shaping government policy formulation and implementation. In this section, a connection back to the critical realist scheme is made: looking at *guanxi* as a causal mechanism in the literature, then one aspect is to conceptualise *guanxi* as one underlying determinant of behaviours (Li and Cai, 2012). Thinking patterns are ways which may enable individual in private to bypass regulations, and structures to achieve aims (Zhai, 2011, p. 153). *Guanxi* as a 'causal mechanism' seems to provide an expedient and flexible way for

individuals to achieve their aims. Looking at the interviewees, they referred to events and empirical experience to begin to outline what *guanxi* does. Those actual events had been exposed publicly.

The analysis of their accounts found that *guanxi* was indeed one influence on policy making, and this is evident in the literature too, with both elements summarized in the Table 4.2.

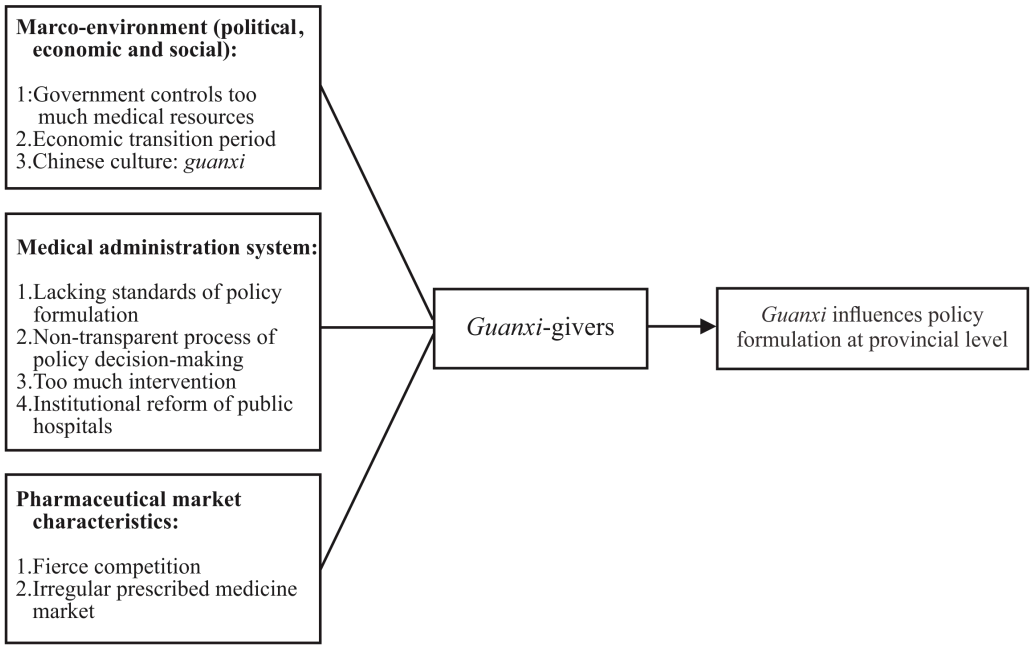
Table 4.2 The Evidences of Causal Mechanisms of *Guanxi* and Government Policy

	Contents
Literature	● Pharmaceutical industry policies are lacking in systematization and legal restraint (Xing, 2006) ● The regulatory regime has been uncertain and confused (Deng and Kaitin, 2004) ● Provincial governments often fail to enforce central government directives (BMI, 2014, p.11) ● China's political system is imperfect that cannot be implemented well. (Ren, 2014)
Example events referred to by the interviewees	● The public case of Zheng xiaoyu (BBC, 2007) ● The public case of Liu Zhengqiu, Zhou Wangjun and Li Caihua (Wangyu, 2004) ● Anhui government formulated "1118 list" restricting drugs utilization at local market. (Quoted by sales manager of Company A and sales director of Company B) ● Chongqing government required local hospitals to use the drugs that are formulated by local drugs producers. (Quoted by sales director of Company A)
Empirical illustrations from the accounts	● "From broad perspective, the state's medical administration system is not very standard yet." (CEO of Company A) ● "This system is still under the slow reform of the separation of prescription and dispensing. The medical treatment system is not open yet, and prescription and dispense of medicine are not really separated yet, leading to

	the medical institution's excessive power on prescription and dispensing." (CEO of Company A) ● "The problem now is the government intervenes too much. Government intervenes in drug pricing and national health insurance. The current medical administration system is not official and fair competition. So *guanxi* kicks in." (CEO of Company B) ● "The current medical administration system is not well built and has defects, but it is implemented for the good of patients and people." (Marketing director of Company A) ● Policy makers in medical administration system have no criteria. The medical administrators have two different medical backgrounds, i.e. the Western medical system and TCMs, thus they may ignore one side to make policy that benefits the other side. (Sales director of Company B)

Given the analysis, and set against the literature noted here, when the interviewees pointed to the medical administration system, it was felt that government policy lacked criteria for deficient conduct or unsound competition and where a handful of interest groups were found to leverage *guanxi* to sway policy making in their favour. The interest groups with *guanxi* worked to have policies or regulations passed that were beneficial to them in the local market. In the industry, any pharmaceutical company's shareholders, consultants, distributors and any person who makes deals with them could be together a small interest group. The detailed analysis, then, suggests that there are three aspects and nine factors, summarized in Figure 4.6 as the causal mechanisms of *guanxi* in China's pharmaceutical industry.

Figure 4.6 The Factors: *Guanxi* Influences on Policy Formulation



As shown in Section 2.8, given the analysis, two new terms arose: *guanxi*-givers and *guanxi*-receivers, with the latter being the two SMPCs. *Guanxi*-givers refer to an official in government, a policy maker, an intermediary who links to government and SMPCs. That is, an individual in a “small circle”, and an agent who is acting on behalf of an interest group.

The next section explores the relationship between *guanxi* and strategy.

4.5 *Guanxi* and Strategy

Sutherland (2014) suggested that organizations should create and preserve barriers to restrict potential competitors involved in the industry, even though it is hard to do this. Importantly too, Gao, Knight and Ballantyne (2012, p. 464-465) added that "*guanxi* can be seen as an organizational strategy", but, they did not explore the influences of *guanxi* and strategy formulation and implementation. This thesis begins to address the gap in linkages between *guanxi* and strategy. As discussed in Sections 4.2 and 4.3.2, *guanxi* is important for organizational strategy formulation and implementation. In the following sections, the author presents the analysis of how the interviewees consider and use *guanxi* when dealing with strategy formulation and implementation. It was noted that *guanxi* at the individual and the organizational levels plays different functions in strategy formulation and implementation. After analysing the data for these two medicine producers, external *guanxi,* such as *guanxi* at the governmental level, is seen to play an important role but is not the determining factor in strategy formulation. Intra-organizational and inter-organizational *guanxi* are mainly in operation in strategy implementation. This will be explored in this section. Based on the two case studies, analysing and discussing the two companies' strategy formulation process first is important.

4.5.1 Strategy Formulation Process

The author has summarized the analysis of the strategy formulation process based on the interviews (see Figure 4.7). Without doubt, SMPCs' strategy formulation is a dynamic process, where both strategy formulation and implementation had to be adjusted following policies that were changing constantly too. Whether considering chemical drugs or TCMs, all interviewees felt that strategy formulation needed to be based on product-oriented rules. Six interviewees, two CEOs, two sales directors and two sales managers, emphasized that all product market characteristics depend on whether a product follows

changing policy and satisfies market demands. Although SMPCs' strategy formulation is product-oriented, in choosing products it is still necessary to consider existing competition. For example, the decision maker of company B considers the existing competition, although he has *guanxi* such as professionals, experts, distributors in a particular field of medicine. The CEO of Company B, considered prioritizing that category of product. He indicated:

> Strategic considerations must centre around market. And I will identify product structure and system based on policy trends. Only by having good product structure can you have good strategy. Therefore, *guanxi* is not determining factor when strategy formulation for pharmaceutical producers. But *guanxi* is a catalytic agent and lubricant to facilitate strategy implementation.

As the decision makers, the two CEOs confirmed that a product's core competitiveness is important. So what is a product with core competitiveness? This will be explored in the next section 4.5.2.

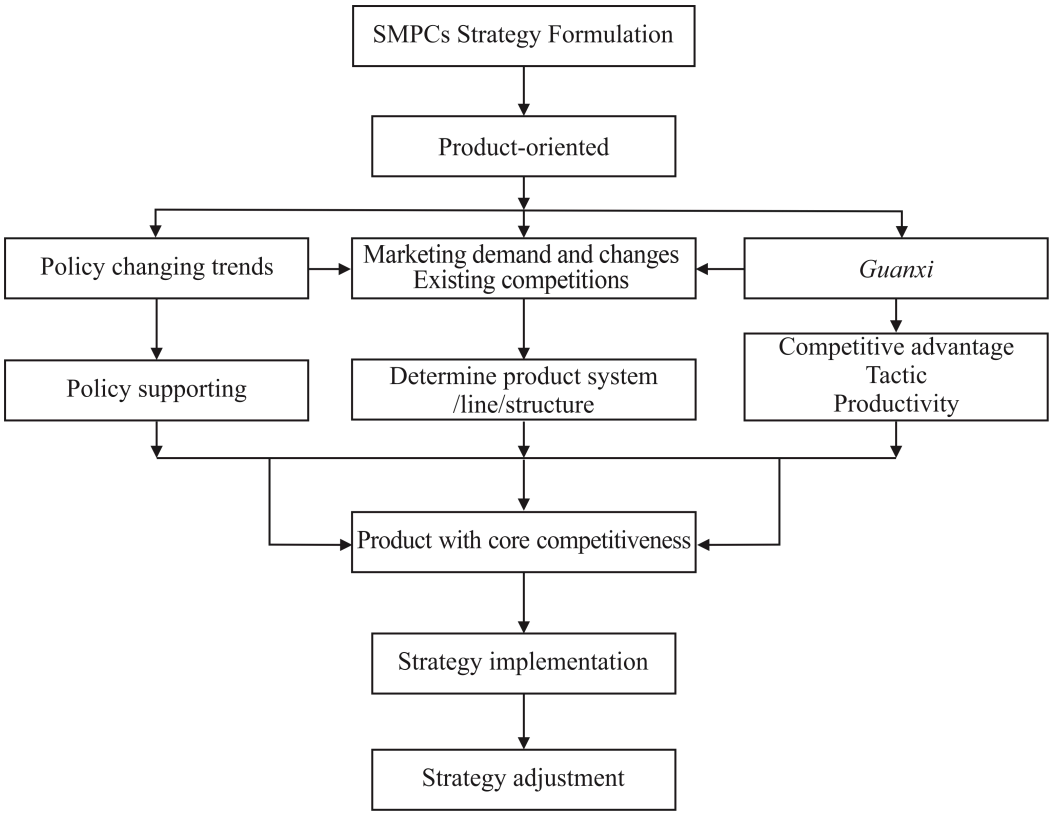
SMPCs' strategy formulation process is not as a linear process but like recursive loops which, from a product-oriented base, constantly take into account existing competition and changing policies, and hence keep adjusting to satisfy market demands before going onto the next strategy implementation process (see Figure 4.7) . Thus dynamic strategy formulation and implementation is arguably carried out and applied simultaneously (Wargin, 1995; Ramaseshan, Ishak and Kingshott, 2013, p. 1224-1225). The interviewees know that policies in China have been changing fast. Thus they aim to adjust their strategy and operations in a timely way. SMPCs' strategy adjustment was product-based and as the sales director of Company B mentioned,

> Your strategy, your position, your operation and management shall be subject to the reality and practical operational environment.

According to the CEO of Company B, dominating influences included particular

policy and existing competition. Therefore, SMPCs' strategy formulation and implementation needed to be adjusted constantly, For example, we see here a direct referral to the company's position in the industry, operation model and management system.

Figure 4.7 SMPCs' Strategy Formulation Process



Crucially too, *guanxi* was considered an important factor in determining and facilitating a strategic goals. With regard to the two medicine producers, *guanxi* was ranked as a secondary factor in strategy formulation whereas *guanxi*'s ranking was different for distributors. As the CEO of Company B elaborates:

> Because of our position in the industrial chain, we have to invest considerable capital in the permanent assets of production, Good Manufacturing Practice (GMP), product R&D and registration, and market promotion. It is harder to utilize *guanxi* to build a factory.

The sales director of Company A added that medicine producer management is based on a series of mechanisms of product technology, registration and promotion. But for distributors and agents, *guanxi* was considered a core factor in their business transactions.

From the analyses of the follow-up interviews, the decision makers, the two CEOs, considered that the three factors of policy trends/opportunities, existing competition, and product were all taken into account in strategy formulation. Notably these two comparison case studies had the same principles of strategy formulation. In sum, the two companies' strategy is product-oriented and adjusted to changing government policies. Different product categories such as chemical medicine product lines and TCMs product lines had the same strategy formulation principle. The existing competition was the second factor to guide strategy decisions. These findings are common across multiple examples. Indeed, it is one of the characteristics of China's pharmaceutical industry. Although China's pharmaceutical market has huge potential, it is highly intensive. Because of high technology, high investment and high risks, the SMPCs will be unlikely to find a "blue ocean" market - that is, an "untapped market space, demand creation, and the opportunity for highly profitable growth" (Kim and Mauborgne, 2005, p. 4) in China. Indeed, in this context, both government policy and *guanxi* were additional key 'forces' that these interviewees had to take account of.

4.5.2 Product-oriented Strategy

SMPCs do, of course, try to find ways to change the competitive situation. Porter (2004) suggested that if pharmaceutical companies use innovative products their strategic positioning constitutes a barrier force to block competitors from entering the market. Licensing and regulatory constraints also need to be taken into account for decision-makers in the pharmaceutical industry. So when the five forces are intensive, SMEs are facing a harsher environment, where firms

may utilize product innovation to change business operations (Hernandez and Delgado, 2009). Leitner (2014, p. 356) argues that dynamic strategy formulation is formed on implementation in the light of product innovation and market development. That is an ongoing process which the accounts of the senior managers support. However, the two CEOs also described the interrelations between *guanxi* and product relationship. In the words of the CEO of Company B:

> In China, if a medicine producer has a patented product with high quality and uniqueness, you may use less *guanxi* force to improve your business. In my opinion, a good product should match conditions of current government policies. Policy is changing fast. We should capitalize on every *guanxi* we get to improve our business.

The CEO of Company A adds:

> Eventually, strategic manifestation will be implemented through product. Of course, a product with core competitiveness has close relationship with *guanxi*. The process of *guanxi* influencing and product is to build and accumulate *guanxi*.

Technology changes industry structure and the competitive environment. Technology as a potential powerful tool (Burgelman, Christensen and Wheelwright, 2009) is improved to deliver cost leadership and differentiation (Hua and Lu, 2013). Here, the two sales directors suggested that SMPCs facilitate product technology to meet the demands of customers or market trends and make price differentiation in the market place better than in other companies. Differentiation in drug pricing strategy had been utilized by them from innovation in drug dosage to the formulation of bidding rules in China's pharmaceutical industry. Producers create or change drug formulation or dosage to create differentiation and SMPCs or their agencies have developed so-called new drugs.

Here, the sales director of Company A said that their competitor, Company XXX,

changed the form of medicine by adding an injection device to anti-cancer chemical drugs; the sales director of Company B also mentioned how their rivals changed the form of their products, for example, TCMs tablets were reformulated as granules; both actions created “new” drugs so as to have a legitimate reason to “command a price premium” (Banker, Mashruwala and Tripathy, 2014, p. 873) and differentiate the pricing of drugs’ bidding prices. The chemical injection drug with the infusion set can obtain a higher biding price than the chemical injection drug alone. Certainly, this kind of product innovation cannot be sustained for a long time. But for domestic companies and medicine agencies, this brings a short-term interest in the local market. This phenomenon reflects how competitors react fast to adjust product strategy based on DCBP policy and existing competition intensity. At the same time, *guanxi* is used to differentiate DCBP price so as to gain competitive advantage.

Company A had two categories of products: anti-cancer medicines and over-the-counter medicines (OTC). Due to overlap production and DCBP policy, the market of anti-cancer chemical chemotherapy drugs is very competitive. And *guanxi* works for this competitive market. All drugs made by Company A are medicines for a standard chemotherapy regimen and are listed in the medical insurance schemes. Although, theoretically, Company A could share the potential market, there are existing competitors fighting for the same market. Therefore, the big policy threats for Company A is DCBP policy. DCBP directly influence Company A’s product bidding price and profits. Because of this situation, Company A insists on R&D for chemical generic first serial drugs. Based on the DCBP policy, generic first serial drugs can gain a high bidding price during DCBP policy. In this situation, both the sales director and the marketing director of Company A mentioned the importance of developing the generic first serial drugs.

In the 2000s, in the local minority culture and geographical environment, central

government allowed and supported the Guizhou government to have the independent right to formulate localized national policies that had been supporting local SMPCs' development. The Guizhou government worked to develop and support the local TCM economy. Company B and many other SMPCs gained opportunities and advantages to develop. Company B had been improving its products line based on minority TCMs. This product-oriented strategy had been improving for three years so that Company B perfected the structure and lines of gynaecological products. This products line and structure provided a focus for Company B.

In the discussion of the two companies' strategy evolution, every interviewee emphasized the significance of R&D in strategy formulation. The introduction of China Food and Drug and Administration (CFDA) has slowed down the process of examining and approving new drugs recently. As a result, new drugs have become a scarce resource for drugs producers. In the end, it has been hard to reach the goal of product innovation for the two companies. Company A focuses on R&D generic first serial drugs; their big competitors are the international giants. When the patent on globally patented drugs expires, producers of patented drugs have been preparing various measures to limit local domestic companies entering the market. The policy of new drugs registration is more stringent than before. For a long time, higher capital and risks have blocked and depressed local SMPCs' motivation for innovation. Further, there is strong resistance from foreign companies towards the local companies.

The CEO of Company B interpreted the reasons for the present situation of R&D:

> In the pharmaceutical industry, most products are facing competition due to product homogeneity. For SMEs, it will take a very long time for registration, approval and marketing. Risk is very high and investment is too much. Why few companies invest in these is maybe because they don't have capability, finance and enough resources.

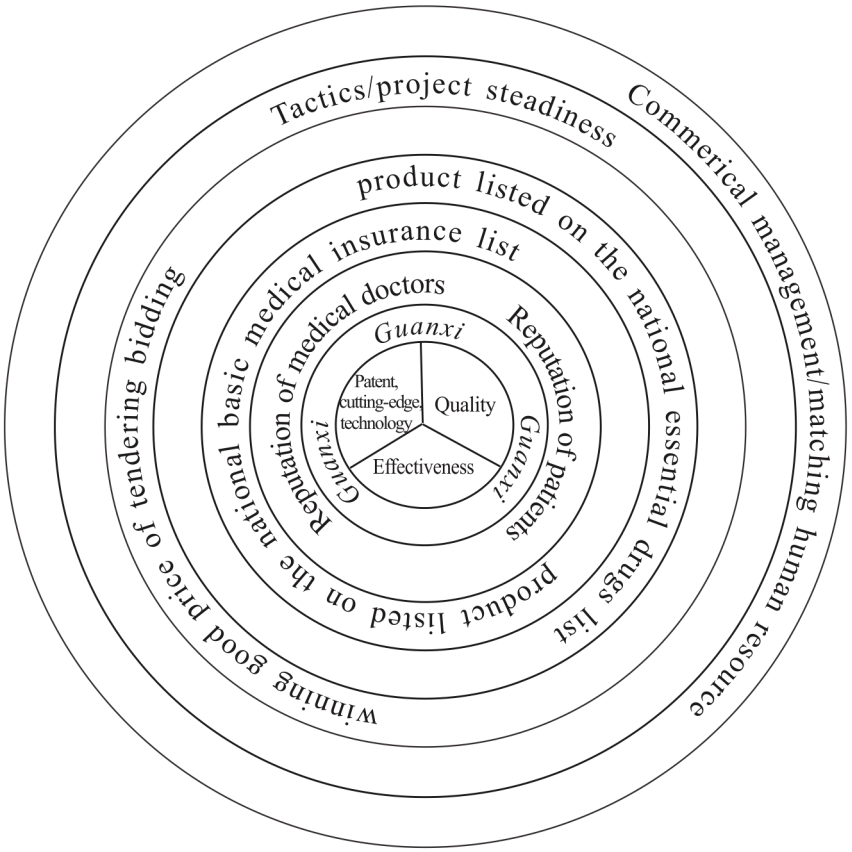
Importantly, building *guanxi* with government was seen to provide effective protection that would enhance technology capabilities so as to improve performance. These twin forces of policy threshold and *guanxi* were deemed, then, to have enhanced their competitiveness. So how do *guanxi* and government policy enhance a product with core competitiveness? The next section explores this from the practitioners' viewpoint. How products will be improved to become products with core competitiveness will be discussed in next section.

4.5.3 *Guanxi* and Products with Core Competitiveness

In considering drugs as a special product, as well as the characteristics of high quality and effectiveness, the analysis highlights that for medicine producers a product's core competitiveness relates to *guanxi*. Importantly, SMPCs utilized *guanxi* to obtain prioritized policy direction and early action to push for the products to be listed in the insurance scheme. In other instances, they used *guanxi* to differentiate the products to the independent tendering bidding regulation so as to obtain a higher price. Those subsidiary advantages enhanced a product's competitiveness in the market.

More generally too, in the Chinese prescription market, public hospitals share the main pharmaceutical market. In considering the kinds of products that are more acceptable to hospitals, further information came from the follow-up interviews. The four interviewees chosen for the follow-up interview were key decision makers who implemented company strategy and operations. They have rich experience in developing their business for more than 10 years in China's pharmaceutical industry and analyses of their accounts showed that products with core competitiveness include one or more characteristics including high quality, effectiveness, reputation of medical doctors and patients, new R&D drugs, patented drugs, unique, cutting-edge technology: these were more likely to be listed by medical insurance and higher tendering bidding price (See Figure 4.8).

Figure 4.8 Prescription Drugs with Core Competitiveness



The marketing director of Company A summarized the characteristics of a product with core competitiveness:

> I think the product with core competitive advantage should have the following characteristics: big enough market, leading technique, broad application and few competitors. And, as for *guanxi*, you should also consider questions such as whether your products are included in National Basic Medical Insurance List or National Essential Drugs List, is it an item with charge, is it exclusive.

As noted earlier, NBMIL and NEDL are very important policies that directly influence product market sales and share rate (further information can be found in Appendices 12 and 13). In practice, if a product appears on any provincial lists

of NEDL, a potential market can be explored. Thus, products listed on the two medical insurance schemes offer core competitiveness for SMPCs.

The CEO of Company B emphasized the importance of the two insurance schemes, and that, if a product cannot be listed on those two insurance schemes, company strategy needs to be adjusted. He said:

> For example, if your products are not listed on the national basic medical insurance list, and you promote them as main products, this is not realistic. Since the products are not national medical insurance products yet, you should adjust your strategy.

The sales manager of Company B elucidated the big differences in whether products can be listed on the National Essential Drugs List or not:

> Even though your product is unique, if it is not on the insurance list and essential drug list (NBMIL & NEDL), it is harder to sell in hospitals. Doctors are not willing to prescribe to patients, and patients are unaware of your products. Or even if you promote your products to hospitals, the sales rate is very low. For example, there is one product named XXX in the same class III hospitals of Zhengjiang province, if it is not on the essential drug list, the sales is about 500 units per month, but it's sales are increasing fast when listed on the essential drug list; it is about 8,000 units per month. It is an obvious change.

From the analysis of the interviewees' quotations, the author learns that if a product is listed on the two medical insurance schemes it has strong core competitiveness. It means it is possible to share a huge potential market. Bach and Allen (2010, p. 41) state that "sustained competitive advantage arises from tackling social, political and environmental issues as part of a corporate strategy – not just pursuing business as usual". Crucially, just how is this condition to be achieved? As the sales director of Company B indicated:

> There are individuals or third party/consulting companies that may use *guanxi* or channels to improve the chance of your product being listed in the medical insurance schemes. Because this process is very complicated. Of course, the product must be matched to the requirements issued by government.

Hence, social and political advantages enhance product competitiveness and in this context, in light of the Figure 4.8, a visual depiction of this analysis of characteristics, *guanxi* sits close to the centre and this is like a centrigugal force. Having drugs with core competitiveness relates to policy making and implementation. A product needs to have the advantages of being listed in the medical insurance schemes and obtaining a good tendering bidding price, and in the background or rather, as an ostensibly hidden 'causal mechanism' lies *guanxi*. This notion of it being a 'causal mechanism' can be consistently inferred from such accounts.

The next section now turns to a summary of the findings and the nature of the contribution to Porter's five forces scheme.

4.6 The Interactive Influence of *Guanxi* and Government Policy on the Five Forces Model

As discussed in Section 4.4.1, government policy is an important 'force' in the pharmaceutical industry in China. Crucially too, *guanxi* is an underlying cause mechanism which is deemed to influence government policy at provincial level. *Guanxi* and government policy interact in complex ways to influence the other five forces. In China's pharmaceutical context, this addition to Porter's Five Forces model is critical as the research reported here has begun to empirically highlight. This section further explores how *guanxi* and government policy interact to influence the five forces.

4.6.1 The Interactive Influence of *Guanxi* and Government Policy on Existing Competitions

Porter (2008) explains that a number of rivals having equal company size

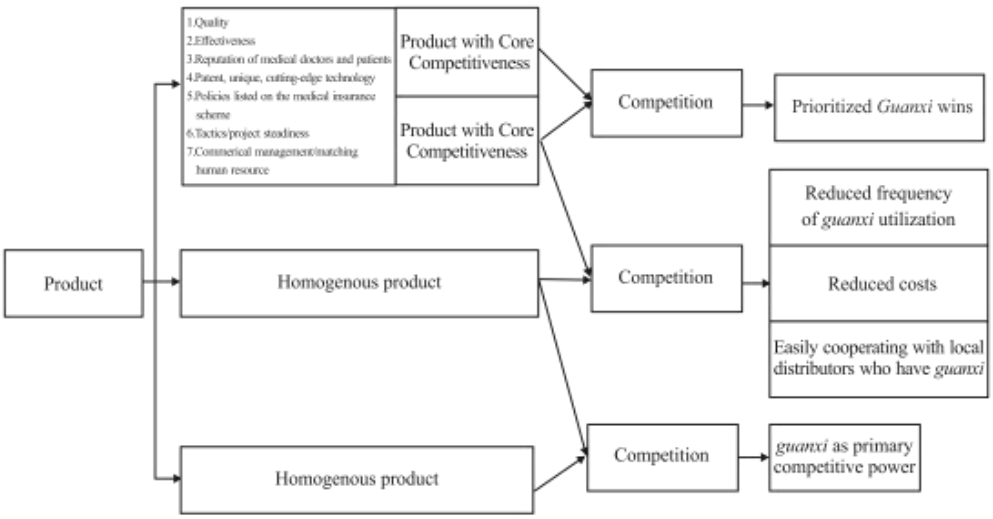
determine industrial intensity and profitability. Yu (2011) states that China's pharmaceutical companies are small scale and over-producing low-technology products. Two illustrative quotations provide a sense of China's pharmaceutical market characteristics: "China's prescription market is irregular market" (CEO of Company A) and "Chinese pharmaceutical market is main homogeneous market" (CEO of Company B). This industrial configuration determines that China's pharmaceutical market is one of fierce rivalry. SMPC competitors "converge to compete" (Porter, 2008) in the homogeneous market. As discussed in Section 4.5.2, strategy formulation was based on product-oriented strategy, therefore, having patented, unique, innovative and high-technology products provides advantages against competing rivals as expected. However, the role of two other 'forces' and this section will highlight why *guanxi* is important to existing product competition.

In the two case studies, seven interviewees (the exceptions were the factory director of Company B and R&D director of Company A) emphasized that strategy formulation is product-oriented and existing competition is based on product competitions also. At the same time, the two companies and their partners (e.g. distributors or agents) used *guanxi* to improve business in the market and hence, *guanxi* also plays an important function during strategy implementation. In summary, and given the analysis of the interviewees' accounts, *guanxi* was found to foster a good environment or develop competitive advantage over rivals in certain markets. It is interesting, though, that the CEO of Company B had a slightly different view from Company A CEO on this:

> When products are homogeneous, especially all are products in national health insurance list, i.e., Product X and Product Y, the hospital face same medicine and effect, which one will they choose? It will depend on their *guanxi*. For instance, what kind of product to be listed in national health insurance list? Listed or not listed, that's a fundamental difference! How to compete? Use *guanxi*!"

According to Company B's CEO, the interrelationship between the product with core competitiveness and *guanxi* can be based on different product properties and the competitive context (See Figure 4.9). When there is competition between different brands of products that all have core competitiveness, one side wins by having prioritized *guanxi*. When competition is between different brands of homogeneous products, *guanxi* played the role of a primary competitive power. When the competition is between a product with core competitiveness and a homogeneous product, *guanxi* was less frequently utilized by the side having the product with core competitiveness. For the side having the homogeneous product, *guanxi* was deemed to be more frequently utilized. Further, both companies have product competitiveness, they could also more easily cooperate with local distributors who have local *guanxi*. Local distributors, who had a competitive advantage, strength and *guanxi,* were actively contacted and negotiated with these two SMPCs to be their local agents. In this case, the two companies have a product with core competitiveness that gives bargaining power to distributors. In contrast, if a product lacks those subsidiary conditions, local distributors will provide the bargaining power for producers.

Figure 4.9 The Influences of *Guanxi* on Product Competition



From the detailed analysis of the interviewees' accounts concerning product competition of *guanxi,* and given the literature review, the strength of *guanxi* has emerged as a important consideration. Based on the competitive status that competitors have built and maintained, they use "strong and right *guanxi"* (Yeung and Tung, 1996, p. 61) with the same customers. The two sales directors highlighted this phenomenon when they were competing with rivals. As one sales director said:

> For instance, two or three medicine producers have the same category of products that are treating the same disease, and face the same public hospitals, normally Class III hospitals. At the same time, all of them have products with core competitiveness. In this highly competitive state, the one with prioritized *guanxi* wins.

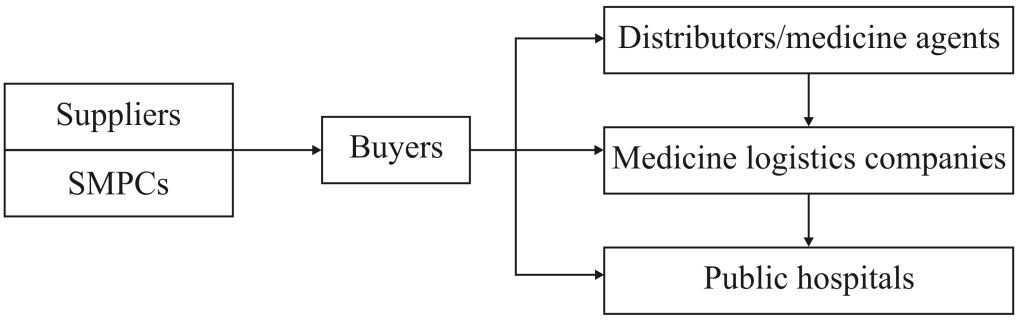
Yeung and Tung (1996) identified three grades – strong, moderate and weak – to estimate the strength of *guanxi.* Although they proposed the notion of strength of *guanxi,* they did not explore it. To date, there is still little research into distinguishing and estimating the strength of *guanxi.* The interviewees in the research reported here frequently mentioned market intensity and application of *guanxi,* especially, when facing the same competitive status, they emphasized that strong *guanxi* offered more competitive advantage.

Regarding rivalry among existing competitors (Porter, 2008), price cuts are often adopted by rivals. In China's prescription market, drugs price cuts are formulated under DCBP policy, again, influenced by government policy. This is different from other industries. DCBP policy directly or indirectly influences other four forces of suppliers, buyers, entrants, and substitutes. The next sections will explore this further.

4.6.2 The Interactive Influence of *Guanxi* and Government Policy on Suppliers and Buyers

As discussed in Section 2.2.2, the relationship between suppliers and buyers is a basic transactional one. For China's pharmaceutical industry context, it is important to first identify the roles of suppliers and buyers and the structure of prescription drugs distribution system (See Appendix 10). As shown in Figure A10.1 (Appendix 10), suppliers are medicine producers who are up-stream in the industry. Medicine producers have three types of buyers: medicine logistics companies, distributors and agents to distribute products in the hospitals (See Figure 4.10). Due to the enormous size and spread of China's market, the medicine logistic companies help producers in conveying drugs to end-users. In this thesis, and given the two case companies, the focus is on medicine distributors/agents and public hospitals who play important roles and influences in relation to suppliers – the next connection in the 'chain'. The section begins with noting the influences of two types of buyers.

Figure 4.10 The Process of Medicine Delivery



"Pharmaceutical companies that offer patented drugs with distinctive medical benefits have more power over hospitals … drug companies offering me-too generic products" (Porter, 2008, p. 14). Based on Porter's explanation, producers command higher prices because of offering patented drugs to hospitals. Porter only mentions the patented product which heightens producers' bargaining power and ignores *guanxi* and government policy given his dominant cultural context. In this thesis, *guanxi* and government policy have been shown to interact in complex and often hidden way to enhance suppliers' power (See Section 4.5.3). Producers with products with core competitiveness have bargaining power with buyers of distributors/agents and as the sales director of Company B said:

> If your product has core competitiveness, it is easier to seek local distributors/agents with strength. This reduces promotion costs. At the same time, the product with core competitiveness has competitive strength to formulate higher price during DCBP.

Whether distributors or agents, the main target is to promote the suppliers' products to be sold in public hospitals. Those distributors/agents have professional sales teams to contact hospitals. As shown in Section 4.3.2, building good external *guanxi* with distributors/agents is important for drugs producers. Five interviewees, two in Company A and three interviewees in Company B, emphasized their distribution strategy where handling different sorts of *guanxi* well directly influenced the organizational performance: further *guanxi*

marketing was seen as the groundwork of firms' survival and development (Han and Li, 2013, p. 33). Against this cultural background, while business people are good at building good relationships with their targets, *guanxi* is unique.

For the two case study companies, the analysis found that building a good relationship with distributors/agents was their main business model. The sales manager of Company A accounted:

> When starting the business, we built its own professional team for marketing; but the competition is more and more intensive. We are under higher competitive pressure. Therefore, we have had to build an independent distributor system to supplement marketing where its own professional teams have no *guanxi* and competitiveness.

And the senior managers including CEO, sales director and sales manager of Company B knew *guanxi*'s significance in the market based on its product system. Thus, they actively formulated a strategy that distributors must have good *guanxi* in the local market as a main business model at both the business starting stage and the development stage.

Being highly active and seeking forms of effective *guanxi,* not only in different government departments but also in hospital departments, in the local market was deemed to have facilitated these two SMPCs' business performance. Clearly *guanxi* exists in the whole pharmaceutical industry chain and although interviewees had different definitions about *guanxi*, all of them displayed remarkable uniformity of attitudes and beliefs in *guanxi* as an important force to facilitate business performances, especially, building good *guanxi* with public hospitals.

At the same time, given their accounts of *guanxi* and products with core competitiveness, all interviewees considered that *guanxi* played a very important role in the competition of public hospitals. This segment is the important terminal

for strategy implementation. Therefore, it was essential here to elaborate the characteristics of public hospitals and the process of accessing drugs in hospitals. Together, a deeper understanding of the functions of *guanxi* in the fiercely competitive market place becomes possible.

On the one hand, based on the existing medical administration system, as shown in Figure A10.1 (See Appendix 10), the biggest buyers are public hospitals. Public hospitals play the double roles of the stated-owned with non-profit institutions as well as the biggest medicine sellers (Jiang, Lv and Zhao, 2014). On the other hand, the institutional reform and management system of public hospitals are critical (Ming and Su, 2011). Up to now, the State is trying to find a suitable plan to improve this situation. And this situation cannot be changed in the short term. However, public hospitals still have a dominant role in China's pharmaceutical industry. Whatever their different product properties, the two SMPCs' strategy implementation was still deemed to be the way to identify and maintain *guanxi* with local distributors and gain a good reputation with the doctors. Thus, it would seem, whether they are individuals (e.g. medicine representatives) or individuals are on behalf of organizations (e.g. medicine producers, distributors and logistics companies), all would need to build *guanxi* with public hospitals, because the public hospitals are the main channel to sell products for SMPCs. The CEO of Company A specifically explained the causality of *guanxi* and medical administration system:

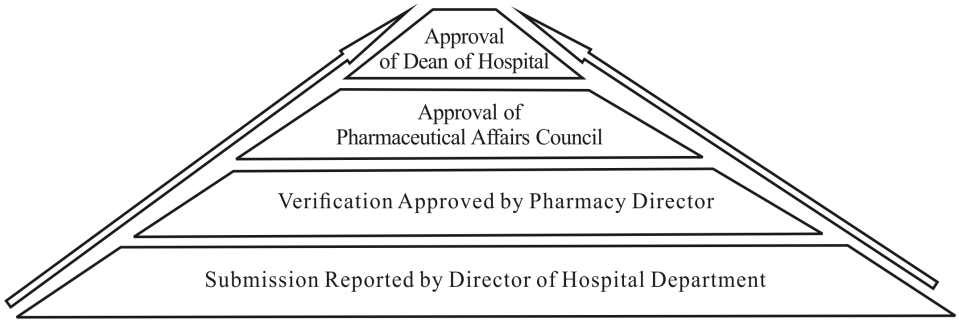
> This is a question of cause and effect. The public medical organization is public, but in fact, public medical organization's behavior and measure are marketization. This is a dual system. With the dual system, there must exist gray deal. According to human nature, it is bound to be operated by a person. If this problem is not solved, the gray deal can't be abolished. That's why gray deal is a "result", not a "reason". Now the legal crackdown of gray behaviour (corruption), together with the rigid supervision, it will also need to pay a heavy social cost.

All the interviewees also said that public hospitals have powerful bargaining

leverage with drugs suppliers, including drugs producers, logistic companies and distributors/agents. Whether chemical medicines or TCMs, every drug has to be approved by a complicated process (see Figure 4.11). During this complicated process, the two companies' distributors/agents were noted as having to connect with every relevant hospital department, and build good networks with hospitals. This is very important for any company in the industry chain. This raises the question of how *guanxi* is important between SMPCs and public hospitals. The CEO of Company B offers a typical illustration here:

> Because of the medical administration system issue, SMPCs have to invest time, and *guanxi* to build relationships with public hospitals. That is why we are seeking for those distributors who have good *guanxi* and strength with local hospitals in the local market.

Figure 4.11 The Process of Accessing Drugs in Hospitals



As shown in Appendix 8*, guanxi* approaches can be utilized by individuals widely, visibly or invisibly a number of existing competitors are competing in the same market. Striving for public hospitals' resources is the main goal for sales representatives, which includes a series of visible or invisible activities. It is an open secret that building good *guanxi* with doctors in public hospitals is very important for SMPCs. Sales representatives visibly visit public hospitals to introduce products every day. Directors of hospitals, medical departments and pharmaceutical preparation sections are target customers for SMPCs. SMPCs' business pattern of prescription-based commission (also known as drug kickbacks) (Hu, Chen and Zhao, 2012; Peng *et al*., 2013) is one dominant way to prompt medicine sales. This way is quick and direct to achieve sales from public hospitals. This business pattern is utilized not only by domestic companies but also by international companies such as GlaxoSmithKline (GSK) (Wangyi, 2015). Arguably, this sales mode can enhance connection, trust and loyalty between *guanxi* and what came to be constituted as *"*givers" and "receivers". But it also damages the prescription market system and competitive environment and leads to drug abuse. Drug abuse increases the cost of national health care. Thus, smashing this pattern is not a simple series of actions of anti-commercial, drug pricing cuts and public hospital reform: it involves system reform.

Although public hospitals have strong bargaining power in the industry, they are still influenced by the local government administrative regulations and directives such as “Anhui 1118 list” and “Chongqing medical administrative requirements” (See Section 4.4.2). This phenomenon reflects that local government’s administrative intervention influences SMPCs strategy implementation at local market.

4.6.3 The Interactive Influence of *Guanxi* and Government Policy on Market Entrants

During the research period of 2009 to 2014, national government policy such as New GMP has directly limited new entrants; *guanxi* and government policy are integrated to influence market entry such as NBMIL, NEDL, and DCBP policy, which influence and restrict entrants in the public hospitals.

Porter (1980, 2008) explains government policy such as licensing requirments directly restricts industry entry. For medicine producers, New GMP policy is a mandatory policy. It is a matter of life and death for SMPCs (See Appendix 6). The New GMP certification is a higher quality standard, with stricter requirements and higher cost for SMPCs than before. In the two case studies, the two companies have totally different categories of product structure. With regard to chemical drugs, it has been implemented with reference to the European Standard. Thus, the rules are standardized. All interviewees of Company A mentioned GMP’s significance and problems with certification. The R&D director mentioned New GMP influencing the factory. She indicated:

> Based on the requirements of the New GMP, our producers must be GMP certified. Its implementation can upgrade production quality and company management skills. But it increase our costs. Without the certification, we will not be able to file for drug registration, participate in drug bidding and procurement and sell in hospitals. I think New GMP will eliminate 30% of SMPCs.

SMPCs are under high pressure from New GMP. Although companies obtain the GMP certification, in the short term, the impacts are excess capacity and increased costs. At the same time, New GMP speeds up the elimination of small and medium-sized enterprises and the creation of mergers and expands opportunities for listing corporations (Tang, 2013).

The sales manager of Company A also explained that New GMP strongly influenced their market activities and performance during certification by New GMP. But Company B seldom mentioned the New GMP issue. They mentioned that they have strength and capability to improve the TCMs' production lines. It was obvious that improving the production line for chemical drug injection is more costly than for TCMs. Besides, all interviewees from both companies seldom made a link between *guanxi* and the New GMP policy.

The increased drug cost directly reduces company's current profits. SMPCs have to consider which production line will be certificated. This decision making is based on the products' characteristics. The factors to be considered are whether or not a product is listed on the insurance scheme, estimating the future product tendering bidding price and the existing market competition. At the same time, homogenization of the market leads to drug pricing and tendering bidding pricing becoming lower and lower. Thus, product competitiveness determines whether or not to renovate a production line for New GMP.

Apart from New GMP policy, NBMIL and NEDL directly influence and restrict drugs utilization in public hospitals when products are not listed in the two national insurance schemes. It also reflects that *guanxi* is an underlying causal mechanism to government policy formulation and implementation at provincial level. In addition, DCBP policy also directly/indirectly influences products entering the public hospitals market. Moreover, DCBP was focused on exploring

its functional influence on substitutes. How DCBP influenced strategy implementation is elaborated on in the next section.

4.6.4 The Interactive Influence of *Guanxi* and Government Policy on Product Substitutes

Porter (2008) points out that positioning downstream is under the threat of substitution. In China's pharmaceutical industry, competition from substitute products mainly happens in the public hospitals. "Advances in technology create new substitutes or shift price-performance comparisons" (Porter, 2008, p. 25). Adding an injection device for anti-cancer chemical drugs or changing drugs forms from TCMs tablet to granules were adapted to create "new" drugs as substitutes (See Section 4.5.2). Those substitutes obtain a higher price under DCBP within a short time. At the same time, *guanxi* acts as competitive advantage to compete with substitutes (See Figure 4.9).

This section looks at how government policy is an important force to influence the power of substitutes. DCBP policy is the main factor that facilitates the replacement of substitutes. All the interviewees emphasized the significance and far-reaching impact of the DCBP policy. It has been developed alongside Medical Reform for 2009. Winning tender purchase is a key goal for strategy implementation. Because of lack of national standardization, its non-transparency and its uncertainty (Geng, 2010; He and Li, 2011), this policy is mainly adopted in centralized provincial regulations. Therefore, every province has different regulations and entry thresholds but the directive has the same purpose of cutting drug prices. The policy directly influences the product's price and profits. The sales director of Company B said:

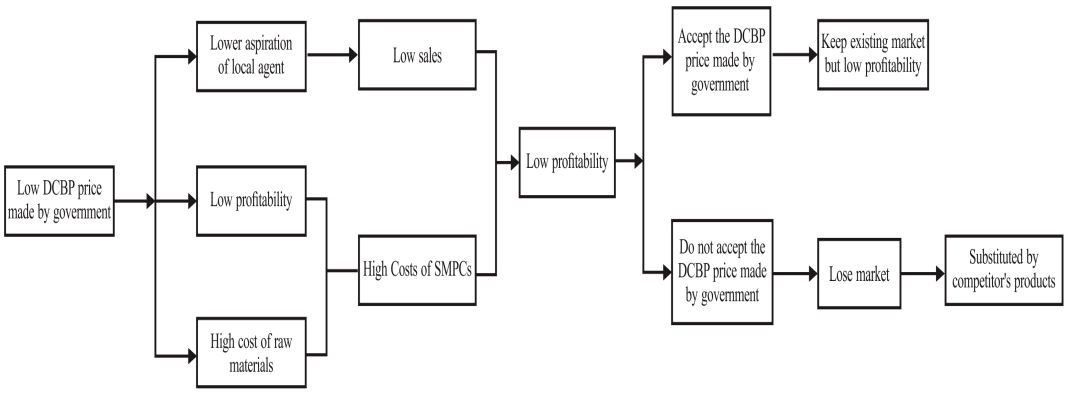
> We have to deal with different provincial standard of DCBP. It strongly influence our strategy implementation. Winning higher drugs tender bidding price is important. But drugs price cut is the trend this year (2014). Balancing national price system is strategy for SMPCs.

In the words of the sales director of Company A:

> This tendering bidding price cut cannot be changed. It is becoming a direct threat for prescription drugs and, since 2014, this policy has been getting stricter. Local government's purpose is directly to reduce medical costs. The union of local medical organizations directly negotiate price with SMPCs. Under this context, *guanxi* has less chance to influence this policy regulation any more.

DCBP policy is provincial government-oriented. In the face of the trend of drugs price cutting, the two companies' decision-making process is the same. Two sales directors described the process and their decision making. The author compiled and summarized the findings (See Figure 4.12). This policy influences strategy implementation and business performance.

Figure 4.12 The DCBP Policy Influences SMPCs' Strategy Decisions



As discussed in Section 2.4.3, DCBP is also a barrier for SMPCs entering the hospitals market. Every drugs producer wants to win the DCBP. Regarding generic drugs, rivals utilized low price strategy to compete in the existing competitive market (Porter, 2008). But since 2013, DCBP price has been reduced by provincial governments. Low DCBP price determines low profitability so that did not inspire local agents. And then the goal of sales performance could not be

achieved. At this time, SMPCs were facing two completely different decisions. If SMPCs accepted the DCBP prices formulated by provincial governments, they maintained existing market but obtained low profitability. If SMPCs did not accept the DCBP prices, they lost existing market. And then substitutes would enter the existing market. The sales director of Company B also emphasized the price of raw materials issue which inevitably influences SMPCs' profitability. The cost of raw materials has been increasing. But the DCBP policy still utilizes a lower drugs price strategy. Cost and DCBP price have obvious conflicts in the industry.

Due to the uncertainty and differentiation of local tendering rules, Company A had misjudged the situation and lost the Fujian province market with the sales director of Company A noting that:

> Products with lower bidding prices have to be withdrawn generally from the market. From 2009 to 2014, regarding generic drugs, many SMPCs had failed in the bidding pricing system in the countrywide market.

The disequilibrium of the bidding price system directly affects SMPCs' sales model and company profits. In contrast, patented products listed in the reimbursement scheme, with higher bidding prices, support and stimulate the marketing model of prescription-based commission (Hu, Chen and Zhao, 2012; Peng, *et al*., 2013). "Discriminatory drug pricing and reimbursement policy and partial policy failures and drugs abuse in public hospitals cause the disequilibrium of revenue and expenditure in medical insurance" (BMI, 2014, p. 10). In the end, local provincial government has adopted a compulsory execution policy to constantly cut drug prices and a policy of drug prices negotiation to reduce patented drugs and exclusive TCMs expenses.

Although this policy can be criticized, it is still the main policy to reveal the drugs' real and practical costs so that the government can formulate and calculate

a drugs pricing strategy for the pharmaceutical industry. Up to the present, the price system of the policy is still significant to manufacturing sectors. Stringent price controls and "continued price cuts" (BMI, 2014, p. 10) heavily influences SMPCs' price system. Based on this stringent situation, SMPCs have to adjust their strategy too. Then, policy is a central force, but so too is *guanxi* in particular contexts as they seek to influence markets.

It is obvious, then, that not only did government policies directly impact SMPCs' strategy formulation and implementation in China, but also more generally that different provincial DCBP policies directly influence SMPCs' profitability. When the drug price cut is the main policy in 2015, price negotiation policy will be issued for patented drugs and new drugs. The secondary pricing policy is critical (Li and Huang, 2013; Wang, Fu and Li, 2015) to SMPCs too. Up to now, Hubei provincial or Gaozhou city governments (in Guangdong province) have permitted local hospitals directly to negotiate drug price with medicine suppliers. However, those policies will accelerate the collapse of small companies in the local market if the local government supports the secondary pricing policy. Hence, it seems that these two companies' strategy may be difficult to execute.

More specifically, for the two case studies (See Appendix 22), strategy formulation has been one of continual adjusting based on the policies changing since 2009. Both companies' strategy formulation and implementation has been dynamically adjusted from 2009 to 2014. Their industry environment encompasses policy making during this Chinese economic transitional period (Wei and Luo, 2013) as well as *guanxi*. While the two case studies utilized focus on strategy or combination of focus on and differentiation strategy of Porter's generic strategy, their strategy has been notably influenced by government policies and *guanxi,* the two additional key 'forces'.

In summary, this chapter noted that the four major policies – New GMP, NBMIL, NEDL, and DCBP – are very important to our two SMPCs. The New GMP policy is a mandatory policy at national level and it directly influences SMPCs entry. NBMIL and NEDL and their sub-lists for provinces are related to SMPCs strategy formulation (See Section 4.4.1); the two medical insurance schemes decide market share rate and coverage with government policy formulation at provincial level being uniquely influenced by *guanxi*. While both the literature and seven of the nine interviewees expressed criticism of DCBP, since it is a complex system lacking coordination and consistency (Geng, 2010; He and Li, 2011), they still considered it to be important enough to influence their own strategy work formulation and implementation. This inherently included an assessment of *guanxi* – that is, its strength and where it resides within their networks. In other words, the *guanxi* givers and receivers.

4.7 Organizational self-development

As shown in Section 2.5, *guanxi* has close connections with government that facilitates company development or not. *Guanxi* is likened to social capital, a key to open a door for people - "who you know" or "who knows you" (Huang and Aaltion, 2014). Yet, as well as the *guanxi* of who you know, the enterprise itself must also have strength and capability including a competitive product, technology, professional team and company certifications and reputation. This is different from the past, when the more you had good *guanxi* the more advantages you obtained. As the CEO of Company B indicated:

> As a matter of fact, *guanxi* works and helps, but the enterprise itself will also need to be strong enough … For example, if I have a good relationship with one expert, but he can't help accept my products in the hospital because of my face. What if my products are fake products or bad quality products? He will surely check a series of things. For example, he will study me, my enterprise, enterprise culture and products. If there is no problem in all of these, it will be better if you have *guanxi*, because there are many homogeneous products.

Guanxi is one key force for effective company operation in strategy formulation and implementation. Yet, it can work when *guanxi* matches an SMPC's operational capability. As the sales director of Company B highlighted:

> *Guanxi* is only one part of the operation. We still need to have operational capability. Even if the resources are abundant, it still won't work if you don't have the capability.

According to these practitioners, then, both individuals and organizations should have capabilities to acquire, integrate and combine resources. Organizational self-development is significant because organization cannot only rely on *guanxi* to survive and develop in the future. There is a transition underway here and, from the practitioners' viewpoint, it is social progress. It does not mean that the individual does not have *guanxi* to facilitate things successfully. But given that policies and the commercial environment are changing constantly and competition is dynamic, being able to continually assess what is needed is more important. Today, as five of the nine interviewees – two CEOs, two sale directors, and the marketing director of Company A – emphasized that *guanxi* remains a competitive advantage for SMPCs in the current environment. Yet, at the same time, they also mentioned that *guanxi* influences will become weaker as time passes. The core competitiveness in the future was seen to lie in high technology product. In the words of the CEO of Company B:

> Then, must *guanxi* be bribery? Not necessarily! Clients will be more confident when they know more about your products, contact more, know more about you and your way of doing things, your professional background, expertise and behaviour.....For example, if competition is at the same starting line through proper competition, SMPCs give the same products to the government, if the experts for approval are the same, they will know you better and accept you if you have *guanxi*.

CHAPTER FIVE: CONCLUSION AND FUTURE RESEARCH

This thesis has sought to explore the interrelationships between policy, strategy and *guanxi;* it conceptualised *guanxi* as a causal mechanism and, from analysis of interviewees' accounts in two SMPCs examined how they saw both *guanxi* and government policies interact to constantly influence strategy formulation and implementation. The two research questions were then answered in section 4.4, section 4.5, and section 4.6.

In the next subsection, the author will note the contribution to knowledge and practice as well as the limitations and areas for future research.

5.1 Conclusions

First, *guanxi* is complex. It is a force in term of Porter's theoretical scheme. It offers competitive advantage to facilitate achieving organizational strategy goals and is embedded in the business practices of SMPCs and seemingly runs through the whole process of their strategy formulation and implementation. Crucially, *guanxi* at the individual level facilitated achieving strategic goals. Building good *guanxi* with local government was a strategic directive for these two SMPCs. So while *guanxi* is not the determining factor, it can be seen to play, for example, a tactical function such as information collector to help decision makers formulate strategy confidently. It also is a "catalyst" or have a "lubricant" function in strategy implementation.

Second, the series of policies of New GMP, National and Provincial Basic Medical Insurance Lists (NBMILs), National and Provincial Essential Drugs List (NEDLs) and Drug Centralized Bidding and Procurement (DCBP) can be seen to influence SMPCs' strategy formulation and implementation. The licensing requirement of New GMP does restrict industry entry (Porter, 1980, 2008) as

well as increase drug costs and potentially, then, reduce company's current profits. The policies of NBMILs and NEDLs can determine products' market coverage rate and thus SMPCs' business performance. As reported by the interviewees here, they also directly influenced and restricted drug utilization when products were not listed on those two medical insurance schemes in public hospitals. Here, significantly, *guanxi* was conceptualised as one underlying causal mechanism influencing government policy formulation at provincial level. Provincial supplementary insurance lists complement market coverage. Because of a lack of national DCBP standardization, this policy implementation was at provincial level and SMPCs have to face different provincial standards and regulations at the local market level. Hence, there is much uncertainty and threat for SMPCs. Specifically, for our two companies, winning DCBP purchase was a key goal for strategy implementation.

Third, a major contribution here can be summed up as follows: *guanxi* and government policy do interact in complex ways to influence SMPCs' strategy. These forces also connect and influence the other five forces. So while the SMPCs' strategy formulation is based on product-oriented strategy, national and provincial policies changing trends and existing competition, *guanxi* was one underlying *force* for getting onto supplementary medical insurance lists so as to enhance product competitiveness. Products with core competitiveness maintain higher DCBP prices so that SMPCs also seek medicine distributors/agents with the strength – *guanxi* – to facilitate business performance quickly and effectively. In this thesis, then, the analysis of *guanxi* suggests that it sets up barriers to lock out competitors or establishes higher standards to prevent new entrants.

Regarding the theoretical implications, for China's pharmaceutical industry, the "pure form" of Porter's strategy theories do not work completely but do help as a "scheme" for practitioners in the industry. Porter's theoretical model did not include such non-market factors as political and social forces. Here, given the

Chinese context, *guanxi* and government policy, interacting in terms of influence on Porter's Five Forces model, adds two key forces to Porter's theoretical model.

Turning to the practical implications, and given this author's own professional practice, the thesis findings can assist strategy makers' understanding of the interaction of *guanxi* and government policy associated with the process of strategy formulation and implementation and, thus, may facilitate achieving strategy goals. Given China's pharmaceutical industry, this thesis does offer a deeper understanding and insights into the evolution of the pharmaceutical industry policies too, as well as conceptualizing *guanxi* as an underlying causal mechanism in the industry. The "seven forces" model, then, could be utilized in this complex industry to assist people like the author – practitioners – to make sense of what they do and how. The essence of the "seven forces" model carries value for pharmaceutical practitioners and ways to assist SMPCs' strategy formulation and implementation. The author herself continues to witness China's pharmaceutical industry going through a period of policy change, and given her experience, the risk from these policy changes is higher for medicine producers and distributors. The costs of being a medicine agent such as the author's company for a product with core competitiveness, market promotion, and team management are higher than before. The research has deepened her understanding of this dynamic context. Moreover, it has enabled the author to systematically undertake research and to make explicit forms of tacit knowledge, here, about *guanxi* and the ways China's healthcare development and policies interact to influence SMPCs strategy formulation and implementation.

In the end, authors agree that "the influence of *guanxi* will continue to be an important factor in Chinese society for a long time in the future" (Zhang and Zhang, 2006, p. 376). As well as using and applying *guanxi*, a need to update and develop capabilities will enable companies to have the capability to effectively

obtain and integrate *guanxi* with policy-supporting resources. It may well be the case too that, in the future, the role of *guanxi* diminishes but this is yet to unfold.

5.2 Limitations and Further Study

This section will illustrate the limitations of this thesis and indicate areas for future study, based on this thesis's outcomes and emergent "seven forces" conceptual framework.

5.2.1 Limitations of the research

Clearly, limitations arising from this research relate to the possibility for geographical variations, and that the research is confined to a particular ownership model. A third linked limitation may arise from efforts to undertake generalization set against a small sample of interviewees. The author will consider each of these in turn next.

First, geographical influences may indeed affect SMPCs' strategy formulation and implementation. China has 34 provincial-level administrative regions, and the two case studies are located in Guangdong and Guizhou Provinces. Pharmaceutical companies located in the east and north of China have to confront regional/cultural differences as well as deal with specific provincial policies and regulations. What this suggests, then, is that further research needs to be conducted in a markedly different geographical location to add to our understanding of the extent to which the findings reported here are specific or generalizable across geographies.

Second, the two case studies chosen display one type of ownership model: domestic private companies. The question arises then in terms of to what extent the findings here apply to other ownership models? There are, for example, many state-owned enterprises (SOEs), joint venture pharmaceutical producers, and

corporations with foreign capital in China. The SOEs especially play a dominant roles in improving China's national economy (Zheng, 2015). Those SOEs in pharmaceutical industry will also need to enhance their competitive advantages to cope with existing competition and yet, due to the ownership issue, and having direct connection with local government, the question arises - do the senior managers from SOEs need to build *guanxi* with government? And, how should they build competitive advantage during strategy formulation and implementation? Both joint venture companies and corporations with foreign capital in China are also working in China's institutional system and the senior managers may be Chinese or work with Chinese employees. These too give rise to questions - Do they still use *guanxi* to impact on their strategy formulation and implementation? How can foreign senior managers working in China understand *guanxi*'s culture and its application? These issues and questions would be a important area for further study, again, adding to the research findings in this thesis

Third, and a linked limitation is the scope of its generalizations. While the comments above indicate the need for further research, also offering a route for careful generalization, the case studies chosen for this thesis were two medium-size private companies. There are over 6,986 pharmaceutical companies (CFDA, 2013) in China, and the two case studies cannot represent all the characteristics of SMPCs. More specifically, the research case studies are medicine producers, and they are positioned in the mainstream of the industry. But China's prescription drug distribution system is complicated. Medicine distributors, agents and logistic companies also play important and different functions in the industry. For example, medicine logistic companies deliver medicines to local hospitals. Medicine agents are in charge of the contact, promotion, and product information service to hospitals. Distributors have functions of both logistic companies and agents and the main target of those companies is to build good relationships with local hospitals. Without doubt,

though, individuals working in these various companies are involved in building good *guanxi* with decision-makers in different departments of local hospitals. They may utilize different strategy formulation principles in the same policy environment. And hence, the question arising is, will *guanxi* have different functions in these different forms of strategy implementation? And, to what extent does this add to/confirm Porter's extended model developed here? In one small way, then, the thesis makes a contribution and paves the way for further research.

In sum, the research reported here and based on the selection of two specific case organizations and a small selection of senior practitioners (the interviewees) has begun to generate insight into the central role of *guanxi* and government policy. The interviewees were decision makers who had more than ten years' rich industrial experience, and while it cannot be claimed that this small size has universality, they offered a route into beginning to understand how the two additional forces are important in their context. Accessing interviewees from other organizations such as hospitals or the ends of the supply chain, would be an important route for adding further insight in future research.

5.2.2 Practical Implications

Turning to the practical implications, the thesis' findings will/can assist strategy makers' understanding of the interaction of *guanxi* and government policy associated with the process of strategy formulation and implementation and thus may facilitate the achievement of strategy goals. Equally, this research would be of interest to different groups such as policy makers/government, researchers working in the institutes of pharmaceutical industry, alongside senior governors working in the medical organizations and more generally. For policy makers, the provincial medical supporting policies, which are formulated by hierarchical medical regulatory system, should be considered the significance of coordination

and unity.

There are practical implications for the author too. As a practitioner, she agrees with the views of CEO of Company B that organizational self-development is far-reaching and that the enterprise itself needs to be strong enough so as to cope with constant changing competition. The extended model offers a means to understand the changing landscape and without doubt, through this research, the author has gained a deeper understanding of and insights into the pharmaceutical industry chain development and efforts at strategic positioning. The development of skills – especially, the ability to look at phenomena from different angles – has enabled her to understand new industries such as the medical device industry. Her experience and research has generated knowledge which will be utilized to generate new projects and collaborations in future too.

5.2.3 Future study

The questions raised in discussing the limitations above would provide useful areas for future study. For this author and future research, an interest in considering how the emergent "seven forces" conceptual framework might be useful for other types of small and medium-sized pharmaceutical companies including producers, medicine distributors/agents and logistic companies, will be pursued. Equally, as noted above, it may also be useful for larger companies in this industry and is another area for future research. A further interesting avenue for further research is to explore more closely the phenomena of interest through observational study where the question is - "To *what extent* does a 'seven force' framework influence small pharmaceutical companies' strategy formulation and implementation?"

Finally, then, the thesis has made a start to providing a conceptual framework that would be used to guide SMPCs' strategy formulation and implementation,

through contributing insights from two case studies in China and offering a conceptual framework elaborating on Porter's influential strategic work.

APPENDICES

Appendix 1: The Chinese Pharmaceutical Industry and Market Overview

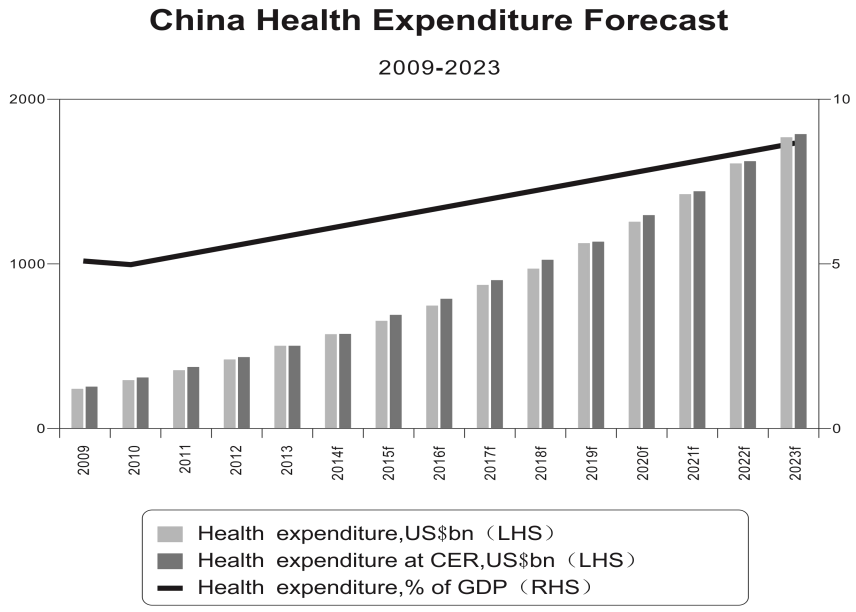
The pharmaceutical industry is one of the leading industries in the People's Republic of China. Based on the definition of the Chinese pharmaceutical industry from the National Bureau of Statistics, the Chinese pharmaceutical industry includes seven sub-sectors as set out below:

1). Manufacture of chemical agents
2). Manufacture of chemical drugs
3). Manufacture of Chinese medicinal decoction pieces
4). Manufacture of Chinese traditional medicines
5). Manufacture of animal drugs
6). Manufacture of biological, biochemical and blood products
7). Manufacture of hygienic materials

BMI (2014, p. 17) reported that Chinese health expenditure reached US$595.2 billion in 2014 (see Figure A1.1). 6,986 domestic pharmaceutical manufacturers and 142,609 domestic medical companies (CFDA, 2013) are providing the pharmaceuticals and services to the medical institutions for end-users.

China continues to enjoy strong growth. Combined sales of prescription drugs and OTC medicines are forecast to increase by 14.7% in US dollars terms (15.7% in local currency terms) from CNY 532.4b (US$86.6bn) in 2013 to CNY 616.1BN (US$ 99.3bn) in 2014 (BMI, 2014, p. 14). BMI (2014, p. 19) also forecasts that "prescription drugs sales will reach CNY 832.6BN (US$ 133.2.bn) by 2018".

Figure A1.1 Chinese Health Expenditure Forecast



Source: BMI, 2014, p. 17

Urbanization is accelerating to bring development opportunities to the pharmaceutical industry. In 2009, IMS Health predicted that China would become the world's third biggest pharmaceutical market by 2013, up from the current number three ranking.

The aging population problem is also becoming increasingly serious in China. The drug consumption of the elderly accounts for 50% of total drug production. Public hospitals are the main end-users in the Chinese pharmaceutical industry providing 90% of market share (Jiang, Lv and Zhao, 2014). Thus, the prescription drug market has continued to expand at an increasing rate. In particular, the Chinese Medical Reform started in 2009 has been boosting market demand and growth. Regarding the current huge prescription drug market, a series of policies and regulations have been promulgated since the Medical Reform started.

Appendix 2: China's Medical Reform

The healthcare sector is very significant in any country and is related to public and social policies. And the pharmaceutical industry is the important area in healthcare. The evolution of China's Medical Reform has been going through six stages as set out below:

Phase 1 The preliminary stage, 1978-1984: The planned economy period

Phase 2 The second stage, 1985-1992: City economic system reform period

Phase 3 The third period,1992-2000: The reform exploration period

Phase 4 The fourth stage, 2000-2005: Health care reform

Phase 5 The fifth stage, 2006-2008: Emphasis on public welfare and medical services;

The institutional framework of the medical system including: the public health service system; medical service system; medical security system; the drug supply system

Phase 6 The sixth stage, 2009-present: Adjustment and Transformation Period

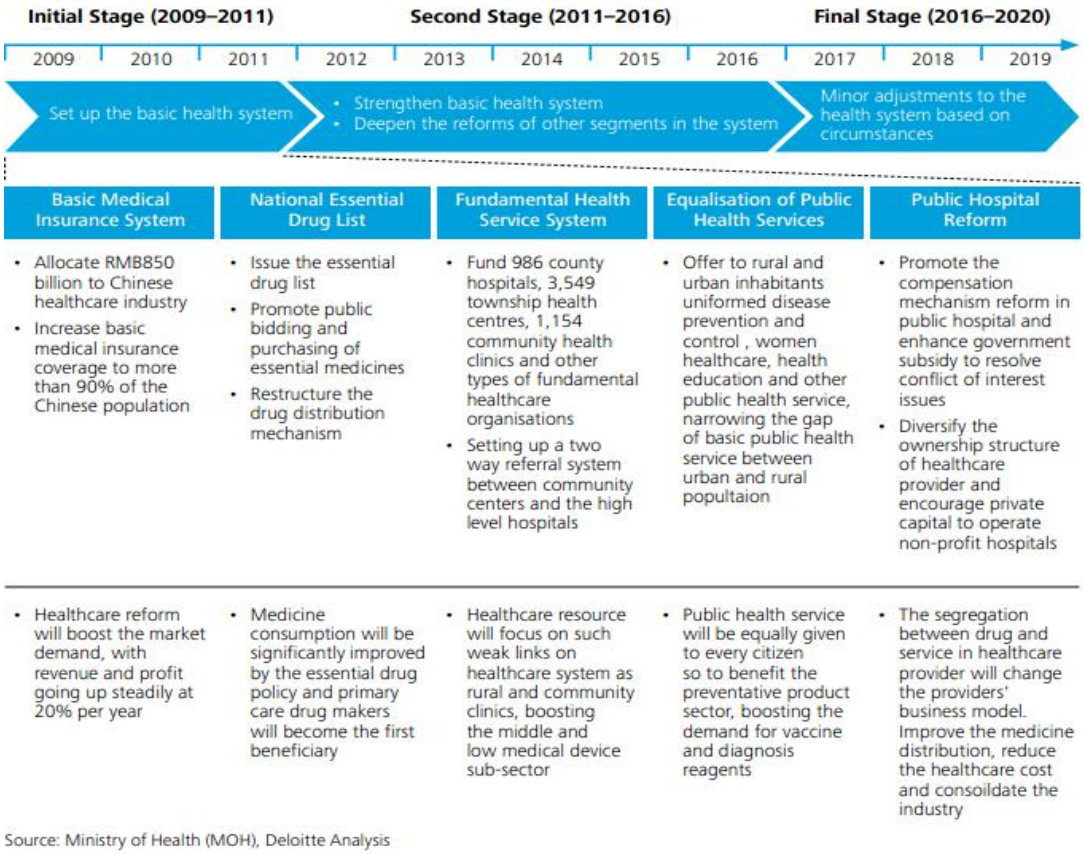
Appendix 3: China's Medical Reform for 2009

China's Medical Reform for 2009 is a major reform regarding the people's livelihood in China. It was formulated under government macroeconomic regulations for constructing a market mechanism. Based on the Chinese medical administration system (see Figure 2.6), every department from central to provincial governments involved in the supervision of Medical Reform and the pharmaceutical industry has the power to formulate and supervise the pharmaceutical industry chain. The hierarchical management system has been rely on the guiding principles and directives for managing the industry, and many important supervision policies were issued during this dynamic period of adjustment (from 2009 to the present).

The Medical Reform includes four management systems:
Medical service system,
Drug supply assurance system,
Drug pricing theory system and
Medical supervision system.

Medical Reform for 2009 includes three stages (See Figure A3.1).

Figure A3.1 China's Medical Reform for 2009



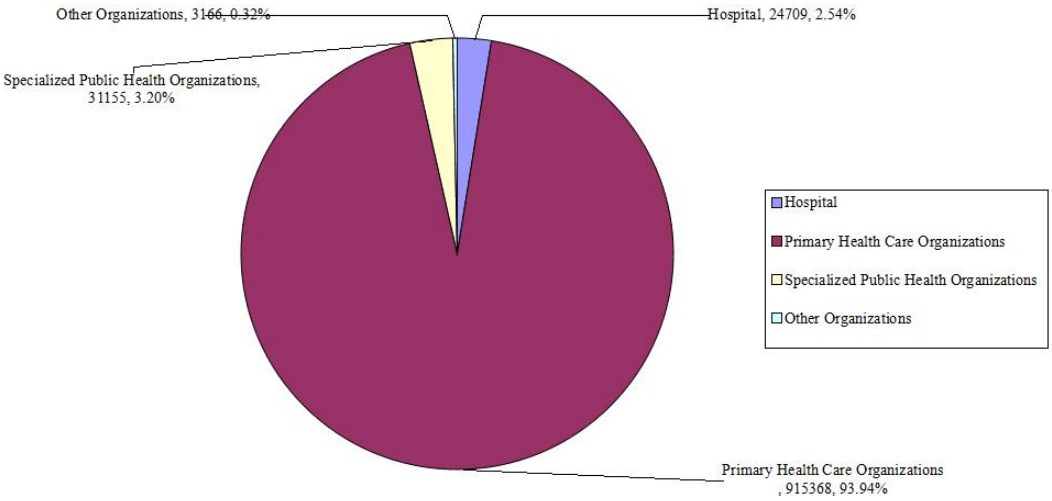
(Source: Ministry of Health, P.R.C)

Appendix 4: China's Medical Organizations

China is huge and has different types of medical organizations. Based on the definition from the Statistical Yearbook of China's Health and Family Planning (National Health and Family Planning Commission, 2014, p. 1-2), medical organizations are defined as those which have been certificated with the license of medical institutions in China. Hospitals include general hospitals, traditional Chinese Medicines hospitals, hospitals of traditional Chinese and Western medicine, national hospitals, special hospitals and nursing hospitals. Exceptions are hospitals of specialized disease prevention, maternal and child-care service centres and nursing homes. Special hospitals include stomatology hospitals, ear nose and throat hospitals, tumor hospitals, maternity hospitals, childrens' hospitals, dermatology hospitals, mental diseases hospitals, orthopaedic hospitals and rehabilitation hospitals. Public hospitals mean hospitals which are state-owned and under collective rule. Private hospitals mean hospitals except for hospitals which are state-owned and under collective rule.

By the end of 2013, China's medical organizations are of different types. China has 974,398 medical organizations including 13,396 public hospitals, 11,313 private hospitals, 915,368 primary healthcare organizations, 31,155 specialized public health organizations. The number of registered doctors is 2,285,794, 1,109,345 of whom work in public hospitals (Statistical Yearbook of China Health and Family Planning, 2014) (See Figure A4.1 and Table A4.1).

Figure A4.1 China's Medical Organizations in 2014



Source: Statistical Yearbook of China Health and Family Planning, 2014

Table A4.1 Chinese Medical Organizations in 2014

	Total	Percentage
	974398	
一、Hospital	**24709**	**2.54%**
Public Hospital	13396	
#Class III Hospitals	1692	
#Class II Hospitals	5944	
#Class-I Hospitals	2784	
#Ungraduated Hospital	2976	
Private Hospital	11313	
二、Primary Health Care Institution	**915368**	**93.94%**
Community Health Service Centre(Station)	33965	
#Government-owned	18638	
County Hospital （& Community Hospital）	37608	
#Government-owned	37105	
Clinic （Infirmary）	195176	
Village Health Clinic	648619	
三、Specialized Public Health Institutions	**31155**	**3.20%**
Centres for Disease Control and Prevention	3516	
Specialized Disease Prevention & Treatment Institution	1270	
Maternity and Child health Care Institution	3144	
Health Inspection Institute	2967	
四、Other Institutions	**3166**	**0.32%**

(# indicates that the number is included in the total number shown for the particular sector.)

Source: Statistical Yearbook of China Health and Family Planning, 2014

Appendix 5: The Classification of Small and Medium-sized Pharmaceutical Companies in China

According to "small and medium-sized enterprises designated type standard"(SMEs-DTS) (Chinese website, 2011), the term small and medium-sized enterprise covers three types of enterprise – medium, small, and micro – based on the enterprise's number of employees, operating income, assets and other indicators with the characteristics of the relevant industry. Although the SMEs-DTS did not single out pharmaceutical and medicine enterprises, it indicated the definition for small and medium-sized pharmaceutical companies (SMPCs). It pointed out that the present DTS should be applicable to all types of enterprises legally established within the territory of the People's Republic of China. Based on the author's practical working experience in China, the author considers that this standard is not suitable for the pharmaceutical industry. Pharmaceutical companies are bigger than the standard of SMEs-DTS. The European Commission defines the SME as having 10-250 staff and turnover of between €2 million and €50 million (see Table A5.1). Thus, the author considers the European Commission classification of SMEs is more suitable for SMPCs. Table A5.1 shows the classification of SMCs in the EU converted from Euro to Renminbi.

Table A5.1 The Classification of SMEs in the EU

Enterprise category	Headcount	Turnover in EU	Turnover in China
medium-sized	< 250	≤ € 50 million	≤ RMB 400 million
Small	< 50	≤ € 10 million	≤ RMB 80 million
Micro	< 10	≤ € 2 million	≤ RMB 16 million

(Source: collocated by the author from European Commission, 2003, p. 36)

Appendix 6: New Good Manufacturing Practice for 2010 (New GMP)

Based on the international GMP regulations, pharmaceutical manufacturers must obtain the new version of GMP certification. The new version of GMP certification has two significant stages: blood products, vaccines and injection of sterile drug production should be qualified following the new drug GMP standards before 31 December 2013. Other categories of drug production should be qualified by 31 December 2015. All Chinese pharmaceutical companies must adhere to the practice by 2015 (See Table A6.1).

The Chinese medicine economic structure is going through a process of industrial upgrading and adjustment. The New GMP regulations, so far, have been implemented over a period of three years. GMP certification is the most essential basic condition for medicine producers. Compared to the GMP version of 1998, the New Good Manufacturing Practice for 2010 highlights the management of professionals, post-marketing observation of product usage and dynamic full supervision of drug quality. The New GMP marks the standard of drug production quality (Wang, 2011). Liang (2011) commented that the new GMP is crucial to upgrade the country's pharmaceutical sector, not only improving drug quality but also assisting the pharmaceutical industry in its goal of going international. For medicine producers, those without GMP certification cannot be listed in the most important national and provincial medical insurance schemes and are not allowed to participate in any market activities including sales, tender bids and service.

Table A6.1 The Deadlines for Chinese GMP Certification

Table: Important China GMP Deadlines		
	Sterile Products	**All other products**
All producers must be GMP certified; otherwise they will not be allowed to produce pharmaceuticals.	Deadline: July 1 2013	Deadline: January 1 2015
Manufacturers that failed to attain GMP certification will not be able to file for drug registration.	Deadline: January 1 2014	Deadline: January 1 2016
Companies that do not wish to be certified can opt to transfer their technology to a GMP-certified facility.	Deadline: December 31 2014	Deadline: December 31 2016
Companies who are in the midst of compliance (but yet to be certified) are allowed to delegate production to other GMP-certified facilities. However, production of biologics and Chinese medicines injectables is not allowed to be delegated.	Such delegation is valid till December 31 2014	Such delegation is valid till December 31 2016

Source: SFDA

Source: Chinese Pharmaceuticals & Healthcare Report, Business Monitor International, 2014, p. 90

Appendix 7: The Drug Centralized Procurement Bidding

The centralized procurement bidding of drugs began in 1999 and now has over 14 year's history by the end of 2014 in China. The Drug Centralized Procurement Bidding is an important policy which is a drugs logistics reform. The purpose is to standardize the processes of purchase, payments, and behaviours (Li and Wang, 2014).

● 2001-2004: Every province had its own procurement system and operator for every city and district with each starting at a difference stage and time in each place. Usually, the procurement time was one year, and was automatically restarted the following year.

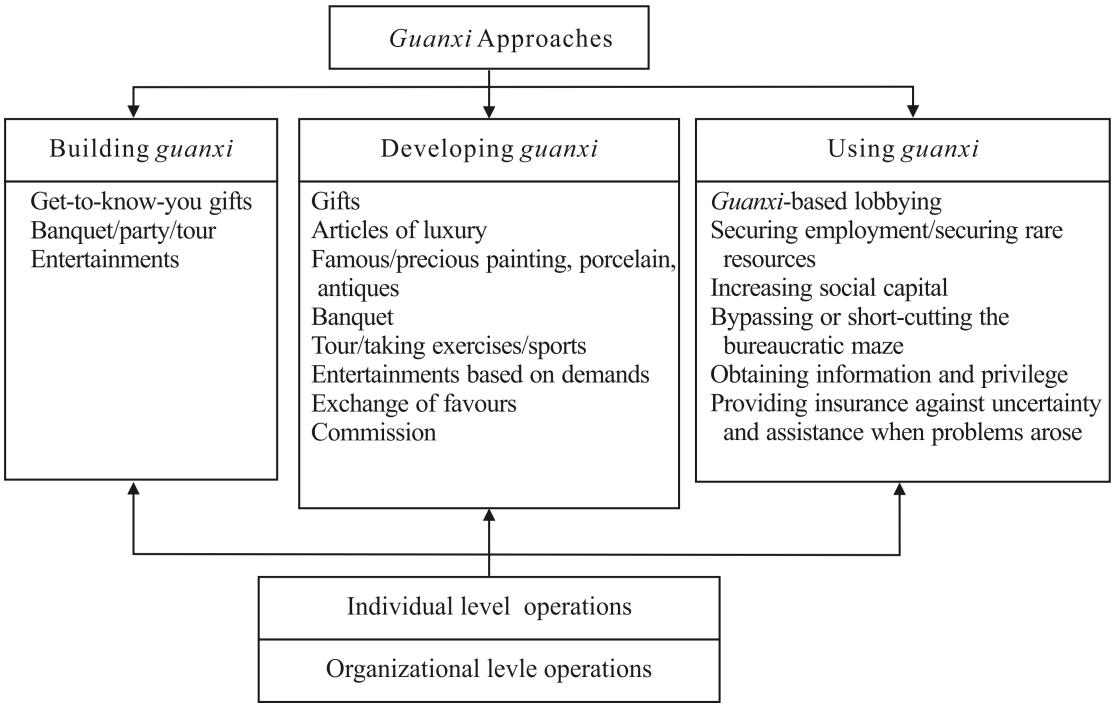
● 2004-2009: The provincial level of procurement was implemented in 2009. The new directives were organized by the provincial governments and resulted in a unified distribution system and also achieved economy of scale. The process of DCBP was complicated and different. Imperfect regulations and poor supervision existed.

● 2009-Present: A series of directives of DCBP were issued by the departments of Ministry of Health. Then, provincial DCBP is based on the provincial unit and implemented by online drug purchase. The policy has been implemented nationwide since 2009.

Appendix 8: *Guanxi* Approaches

This appendix explores which approaches can be utilized to build, develop, and use *guanxi*. Approaches to researching *guanxi* are described in a number of references too. The main approaches are collected from literature, with some are based on the outline in the Figure A8.1.

Figure A8.1 *Guanxi* Approaches



Source: Compiled by the author from Li and Wright, 2000; Fan, 2002, p. 544; Millington, Eberhardt and Wilkinson, 2005; Qian, Razzaque and Keng, 2007; Chen, 2011; Chen and Kim, 2013; Xu and Li, 2013, p. 834; Wang, Wang and Zheng, 2014; Yang and Lau, 2015.

As shown in Figure 2.3**,** whatever the political or commercial intentions**,** building and developing *guanxi* starts with emotional connections. Get-to-know-you gifts,

such as souvenirs, small presents (Yang and Lau, 2015; Qian, Razzaque and Keng, 2007) are like a key to open a gateway (Gao, Knight and Ballantyne, 2012) for people. A gift shortens the distance between individuals, binds individuals and reduces a sense of strangeness. At the same time, a gift economy (Chen, 2011) derives from the culture of *guanxi.* Even more, healthcare products, such as over the counter (OTC) medicines, healthcare nursing products, or household medical devices, can be adopted as gifts too. Prevalence in gifting has also developed to add higher quality and value, such as luxury fashion articles (Chen and Kim, 2013), top-grade cosmetics, famous perfumes. Thus, gift selection and brand orientation enhance gift-giving value (Millington, Eberhardt and Wilkinson, 2005; Qian, Razzaque and Keng, 2007). Various gifts seem good for starting to build initial *guanxi*, such as Chinese tea, porcelain artworks and alcohol. For instance, China's famous alcohol, 'Mao tao' is often adopted as expensive gifts to friends, customers, and government officials. It is often used in banquets officially or unofficially. As well as practical gifts, more and more collectibles (e.g. precious paintings, porcelain and antiques) have been utilized to facilitate a big transaction or project. Exchange of favors positively impacts on and facilitates personal trustworthiness (Jiang, Chen and Shi, 2013).

Another means of building and developing *guanxi* between two individuals or organizations is the banquet (Yang, 1994; Yen, Barnes and Wang, 2011; Chen, 2011). Banquets, entertainments and sight-seeing (Gao, *et a*l., 2014) are basic social activities. Up to now, the banquet amount, selection, location and food style and quality. have been changing based on the needs. Further, some hospitality services, for instance, housekeeping services and 7/24 hours designated drivers are provided to very important persons (VIPs). In addition, accompanying participants to take exercise and engage in sports (Wang, Wang and Zheng, 2014) is also intended to facilitate relationships and trust. Those activities involve time and cost. Thus, identifying the process of quality *guanxi* is the process of building trustworthiness *guanxi*. When *guanxi* reaches a high level,

favors and commission (Yang, Meng and Lau, 2015) may need to be added to maintain and solidify it. This *guanxi* alliance may be solid and maintain long-term interests. Hence one can see that building, developing and using *guanxi* is a complicated process that is involved in individual daily life, the workplace and study.

This thesis cannot list all approaches from literature. There are “some tactics and approaches secretly”(Yen, Wang and Kao, 2015, p10) that were not researched or could not be discovered. Anyway, approaches are based on requirements and needs. The greater the satisfaction of the other party, the greater the benefits to be obtained.

Appendix 9: Types of *Guanxi*

The implications of *guanxi* are very confusing (Fan, 2002). Consequently, the types of *guanxi* are similarly complex. The author compiled the different types from literature (See Table A9.1) in order to identify relevant types for this thesis.

Table A9.1 Types of *Guanxi*

Types of *guanxi* from Literature
● Two different types of *guanxi:* person-to-person and firm-to-firm (Li and Wright, 2000, p. 369) ● Three types of family, helper and business (Fan, 2002, p. 543). ● Two types of *guanxi*: strong *guanxi* and cheap *guanxi* (King, Yu and Zhuang, 2009, p. 9) ● Two types of *guanxi*: with business partners and with government officials (Chen and Wu, 2011) ● *Guanxi* types classified into four types: Inherent *guanxi* (e.g. parent, brothers and sisters, family members); Embedded *guanxi* (e.g. classmate, colleagues, superior-subordinate); Emerging *guanxi* (e.g. friends); Developed *guanxi* (e.g. customers) (Zhuang, 2012, p. 25). ● Two types of *guanxi*: role-based hierarchical *guanxi* endorsed by Confucianism and soil-rooted egocentric *guanxi* derived from daily practices of Chinese people. (Gong, He and Hsu, 2013, p. 362). ● Three streams of individual/interpersonal level and organizational level and social and moral practice (Chen, Chen and Huang, 2013, p. 168). ● Reflecting two types: Vertical (e.g. external *guanxi* with government officials) （Continued）

and horizontal (e.g. intra-organizational *guanxi*; inter-organizational *guanxi*) (Yen, Wang and Kao, 2015, p. 10). ● Dividing *guanxi* circles into core and peripheral members (Luo and Cheng, 2015, p. 1024). ● Four types of *guanxi*: family ties, business ties, community ties, government ties (Chen, Chang, and Lee, 2015, p. 900).

Source: compiled by the author from references cited.

The types of *guanxi* in Table A9.1 are mainly categorized under politics, economy and culture. It is obvious there is no criteria to categorize *guanxi* types. In summary, those types are in relation to personal, business (e.g. organizational) and government relations.

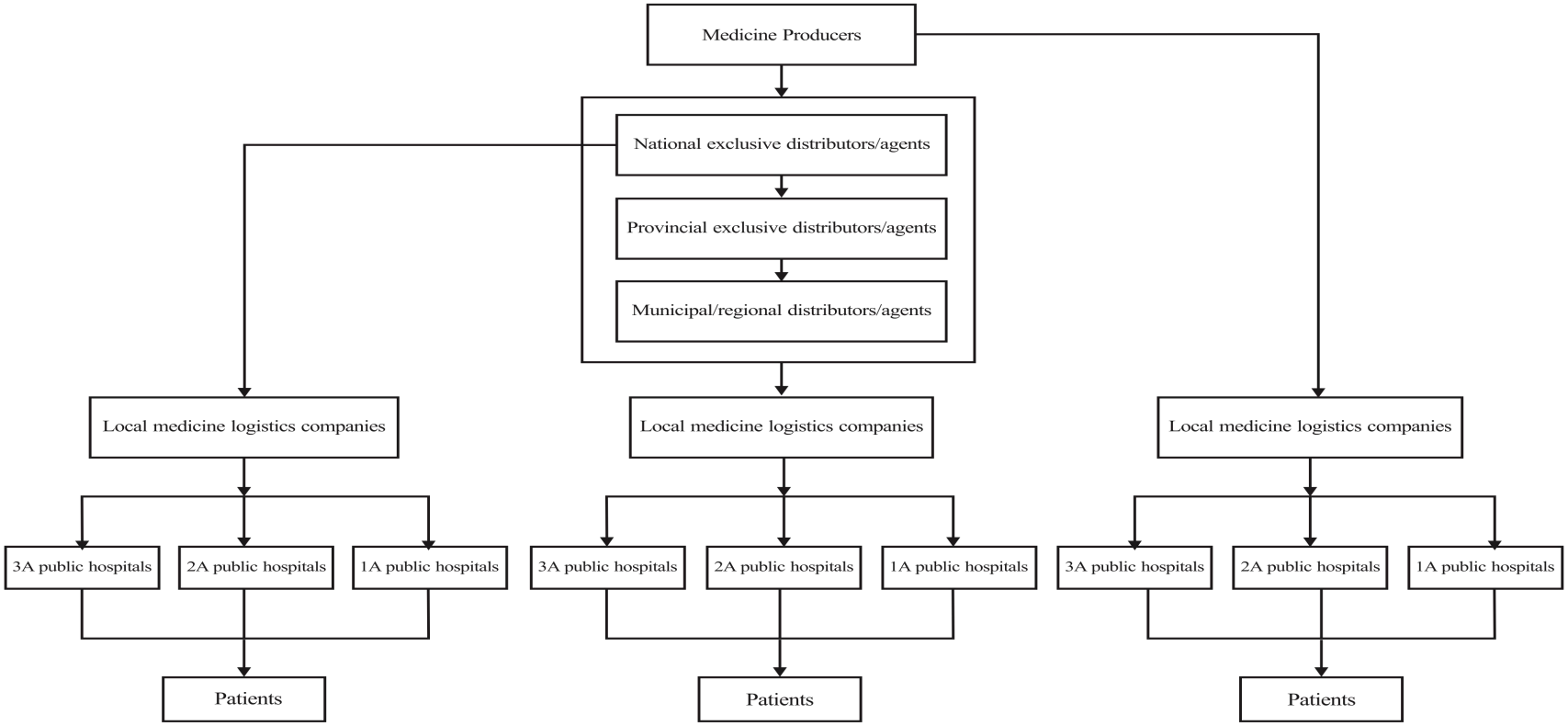
Appendix 10: The Prescription Drug Distribution System in China

China's prescription drug distribution system is complicated. In general, there are four types of company in the Chinese pharmaceutical industry. They are: medicine producers, medicine logistics companies, medicine distributors, and medicine agents (see Figure A10.1). Medicine producers are to produce products based on the Good Manufacturing Practice (GMP) standard. If the producers have strength and capital, they establish their own professional sales team to introduce and promote products to public hospitals. The Chinese market is huge and wide. Medicine producers still need local medicine logistics companies to distribute their products into public hospitals. The functions of medicine logistic companies are to deliver products, provide services, and collect market information from public hospitals based on the Good Supplier Practice (GSP) standard. When SMPCs' medicine goes into the market, it needs a company which can provide market information and services to push up the total sales volume. Thus, medicine distributors and agents were born. Large producers with sufficient funds set up wholly-owned subsidiary companies to be in charge of the market development and sales. Yet due to the insufficiency of funds, networks and human resources, SMPCs have to transfer the risk to the agent in developing the potential market. Hence, they need to develop the market and push up the sales volume with an independent distributor and agents help. To sum up, SMPCs are mainly in charge of the production process. They have to give much attention to the production technology and standards, and leave the marketing and sales to distributors and agency type companies.

Medicine agents are mainly agencies for producers at the national, provincial and city level. The functions of agents are to be in charge of the contact, introduction, promotion, marketing, and the professional product information service to public hospitals. Medicine agents have professional sales teams which are in direct contact with doctors. They are a core bridge between the medicine producers and

the public hospitals. They have good relationship with local hospitals. However, they still need the local logistics companies' help to distribute products to the public hospitals. Medicine agents control the product sales, market information and act as the doctors' contact resource. Thus, they are really in possession of an important position in the value chain of China's medicine industry. The sales volume would be influenced if there were to be a subtle change in this intermediate link. So usually, large foreign pharmaceutical companies, joint ventures and large state-owned enterprises establish their own sales teams in order to ensure the smooth circulation and direct control of distribution networks. Medicine distributors take the dual roles of medicine logistics companies and agents. On the one hand, they take the function of logistics companies to help medicine producers deliver products to hospitals. On the other hand, they are also in charge of delivering qualified products to public hospitals through marketing coordination and promotion.

Figure A10.1 Prescription Drugs Distribution System



Appendix 11: The Pharmaceutical Regulatory System

Chinese pharmaceutical industry regulations rely largely on government regulatory agencies, through rigorous regulations as well as certification and censorship programmes, monitoring all facets of the industry. The central government agencies provide industry development directions, promulgate regulations, and serve the pharmaceutical industry. The regulations and policies issued have far-reaching and significant impacts on the Chinese medical industry. The following Chinese central government agencies relate to the pharmaceutical industry.

- China Food and Drug Administration (CFDA)
- The National Development Reform Commission (NDRC)
- National Health and Family Planning Commission (NHFPC)
- Ministry of Industry and Information Technology (MIIT)
- The Ministry of Finance (MOF)
- Ministry of Human Resources and Social Security (MNRSS)
- Ministry of Commerce (MOC)
- State Administration of Traditional Chinese Medicine (SATCM)

Many central health policies are issued by those government departments shown above; here these are called central policies. Chinese pharmaceutical policies are formulated and implemented following the administrative structure system from the top down (see Figure 2.6). For each province there are relevant departments whose function is to implement the national policies. Policies made and issued by local government are called provincial/local policies.

Policy dictates the direction and development of the pharmaceutical industry, and influences pharmaceutical companies significantly. The medical administration

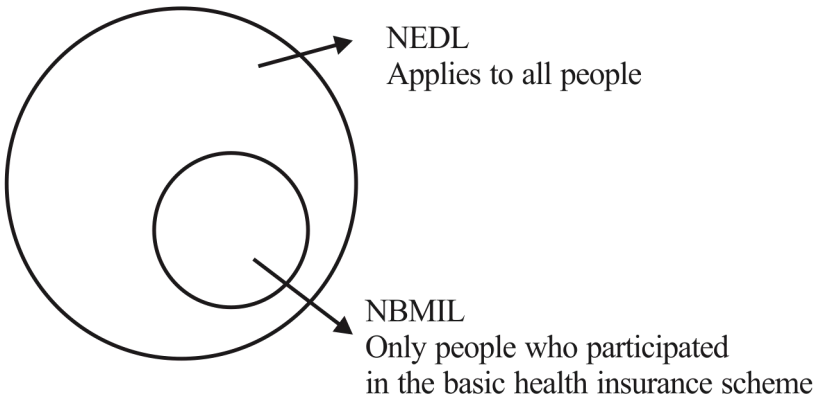
system has been impacting the uncertainty and complexity of domestic and foreign companies conducting business in the Chinese market (Deng and Kaitin, 2004). The Chinese government has carried out a series of reforms related to the pharmaceutical industry regulatory system, the public healthcare insurance system, the drug pricing system, the drug tendering bidding system, and the drug distribution system.

Appendix 12: The National Basic Medical Insurance List

The National Basic Medical Insurance List (NBMIL) is an important policy component of China's Medical Reform. The goal is to ensure drug quality, safety and efficacy. Its implementation regulates standards of medication behaviour, ensures safety of drug usage and reduces medical expenses. It includes national and provincial schemes. The provincial government can supplement the local insurance list in order to develop the local pharmaceutical economy and healthcare. The national and local basic medical insurance lists determine which drugs can be reimbursed for people who have only participated in the basic health insurance programme (see Figure A12.1). It is obvious that listed drugs determine the market share. The sales of listed products can be exploited fully. Thus, regarding this policy, every drug producer absolutely wants its products to be listed in the schemes.

There is little literature on the schemes. Zhang (2010) comments that the medical insurance scheme intends to balance medical insurance funding and control drug expenditure based on drug quality, efficacy and price. Thus, the pharmaceutical companies whose drugs are on the list have an opportunity to cover the potential market.

Figure A12.1 Coverage Differences between NBMIL and NEDL



Appendix 13: The National Essential Drug List (NEDL)

According to the WHO (World Health Organization), the definition of the National Essential Drug List (NEDL) refers to a list of pharmaceuticals needed to meet the public health care needs, at any time, with the qualifications that there is sufficient quantity in the appropriate dosage forms, as well as with prices that the individual and the community can afford. In China, this refers to drugs that have the characteristics of medications that meet basic medical needs, prescription via proper dosage forms and with reasonable prices, all to ensure an adequate supply and demand so that the public can obtain them at a fair price.

NEDL is the generic/characteristic list of medications that the Chinese medical health system has prescribed since 1990. The first edition of NEDL (only chemical medicines) was published in 1982. The new NEDL was published in August 2009, and the NEDL was first seen in the National Basic Medical Insurance List (NBMIL) on this date. If SMPCs' products can be listed in the NEDL, the benefits are that listed products can be used by all primary-level medical organizations in the Chinese market.

Based on the national catalogue lists, the different provincial governments can add a specified number of drugs onto the list, named as the Provincial list, so as to meet the medical and coverage requirements. Thus, the NEDL has sufficiently wide and multi-level coverage (see Figure A13.1). For example, the Urban Basic Medical Insurance System covered over 3.8 million persons in 2008 and the new Rural Cooperative Medical System covered over 8.3 million persons by June of 2009.

Figure A13.1 Provincial Supplemented Essential Drugs Lists

Provincial Supplemented Essential Drugs Lists					
Provinces	Date of Issue	Quantity of Supplements			Sum
		Chemical Drugs/unit	TCMs/unit	Minority TCMs/unit	
Tianjin	2010	120	105	0	225
Hebei	10/2010	87	87	0	174
Shanxi	11/2010	122	73	0	195
Inner Mongolia	09/2010	39	47	122	208
Liaoning	2011	94	70	0	164
Jilin	07/2011	106	101	0	207
Heilungkiang	2011	62	51	0	113
Shanghai	12/2010	234	144	0	378
Jiangsu(2011 Edition)	06/2011	168	107	0	275
Zhejiang	12/2009	97	53	0	150
Anhui	05/2010	194	82	0	276
Fujian(2009 Edition)	12/2009	177	50	0	227
Jiangxi	12/2011	137	91	0	228
Shandong	02/2010	131	66	0	197
Henan	11/2010	134	66	0	200
Hubei(The second batch of)	12/2010	141	24	0	165
Hunan	05/2011	111	83	0	194
Guangdong	11/2010	141	116	0	257
Guangxi(2012)	03/2012	140	126	0	266
Hainan	03/2012	134	69	0	203
Chongqing	12/2012	128	74	0	202
Sichuan (The first/second edition, Call into the directory)	07/2011	138	58	0	196
Guizhou(2012Edition)	02/2012	110	107	0	217
Yunnan(The first/second edition)	11/2010	82	78	0	160
Shanxi	08/2010	98	78	0	176
Gansu	04/2011	82	82	21	185
Qinghai(The 2010/2011 edition)	12/2011	64	71	62	197
Ningxia	11/2009	27	37	0	64
Xinjiang	07/2011	77	88	26	191

Source: Yang and Yang, 2013, p. 12

Appendix 14: The Main Differences between the National Essential Drugs List and the National Basic Medical Insurance List

The NEDL and NBMIL are main important parts of the Medical Reform for 2009. Two lists has differentiation among drugs amount, structure, and forms (Wang and Li, 2013; Yang and Yang, 2013). Follows are the main differences between them (See Figure A14.1).

First, the purposes of the two lists are different. The National Basic Medical Insurance List is mainly used to guide clinicians to choose drugs properly, to guide the production direction of pharmaceutical production enterprises, and to ensure sufficient market supply of essential drugs. The National Basic Medical Insurance List, on the other hand, is mainly used for controlling the drugs cost range for the national basic medical insurance. It is the reference for social insurance agencies to pay the costs of the insured person. Its purpose is to protect the basic medical needs of the insured people, and to ensure the balance of the medical benefits fund.

Second, the basis is different. The National Essential Drugs List mainly considers drugs' rationality and safety issues in clinical use and the level of basic drug use in the whole society. Apart from considering the drugs' safety and effectiveness for the insured person, based on the affordability of the Basic Medical Insurance Fund, the National Basic Medical Insurance List mainly considers drug prices.

Third, the application and scope are different. The National Essential Drugs List applies to all China's people in society, while the National Basic Medical Insurance List only applies to people who have only participated in the basic health insurance programme.

Fourth, the execution effect is different. The National Essential Drugs List plays

a guiding role for clinicians in drug use. It encourages conscious directory usage mainly by social propaganda and doctor training. The National Basic Medical Insurance List is used during payment by the social insurance institute.

Fifth, the administrative agency is different. The National Basic Medical Insurance List is issued by the Ministry of Social Security, while the National Essential Drugs List is issued by the State Food and Drug Administration.

Figure A14.1 Comparative Drugs Amount Among the Provincial Supplemented Essential Drugs Lists and the National Medical Insurance List

Comparison of Drug Quantities on the PSEDL and the NBMIL			
Province	PSEDL(unit)	NBMIL (unit)	Rate (%)
Tianjin	111	823	7.4
Zhejiang	53	987	18.6
Hainan		1093	
Shandong	63	1099	17.4
Hebei	90	1115	12.4
Guangdong	124	1128	9.1
Fujian	49	1144	23.3
Jiangsu	109	1181	10.8
Beijing	142	1218	8.6
Liaoning	75	1225	16.3
Shanghai	142	1980	13.9
Anhui	82	1107	13.5
Jilin		970	
Henan	66	987	15
Hubei	25	1127	45.1
Hunan	86	1116	13
Shanxi	77	933	12.1
Heilungkiang	55	1097	19.9

(PSEDL: Provincial Supplemented Essential Drugs Lists; NBMIL: National Basic Medical Insurance List)

Source: Wang and Li, 2013, p. 903

Appendix 15: Background of Two Case Studies

Enterprise category	Company A	Company B
Company Nature	Private company	Private Company
Establishment	1989	2000
Location	Guangdong	Guizhou
Employee numbers	150	120
Turnover(RMB)	300 million	400 million
Variety of Products	50	36
Medicine Categories	1. Chemical Medicine: anti-cancer chemical drugs of osteocarcinoma, multiple myeloma, lung cancer and gastric cancer and so on. 2. Other OTC products	1. Traditional Chinese Medicine of gynecology, urology, oncology and cardiovascular.

(Continued)

Drug Form	Prescription drugs are injections and OTC products are capsules and tablets.	Tablet, capsule and granule
Product features	Products are imitation drugs. Many competitors for every drug.	Exclusive production for TCMs
Products listed in the NBMIL or NEDL	6 for NBMIL 2 for NEDL	6 for NBMIL 1 for NEDL
Market Coverage	Whole Chinese market	Whole Chinese market
Number of Interviewees	First time: 5 Second time: 2	First time: 4 Second time: 2
Distributor Number	150	300

(National Basic Medical Insurance List (NBMIL); National Essential Drugs List (NEDL))

Appendix 16: Background of Interviewees

Interviewee	Company A	Company B
Headcount	5	4
CEO	Gender: male Age: 56 Work Experience: 30 years, Education: Economics and management PhD in economics, post-doctoral in management, professor, Connection: Getting to know him	Gender: male Age: 50; one of the owners Work Experience: 30 in Pharmaceutical manufacture; Education: bachelor of Traditional Chinese Medicine (TCM) Connection: Knowing him
Sales director	Gender: male Age: 44 Work Experience: 20 years; 7 years as a doctor. 13 years in Company A Education: bachelor of clinical medicine Connection: Knowing him	Gender: male Age: 43 Work Experience: 20 years 7 years in Company B Education: bachelor of Chemistry：Analysis and Testing of Food Connection: Knowing him well

(Continued)

Sales manager	Gender: female Age: 38 Work Experience: 13 years in Pharmaceutical manufacture Working title: dual role of manager of tender bidding Education: bachelor of finance Connection: Knowing her	Gender: male Age: 41 Work Experience: 16 years Education: bachelor of Chinese Language Connection: Knowing him
Marketing director	Gender: male Age: 35 Work Experience: 7 years in Pharmaceutical manufacture Education: Master of pharmacology Connection: Knowing him well	Dual role by sales director
R&D manager/ factory director	Gender: female Age: 38; Work Experience: 8 years in Pharmaceutical manufacture Education: PhD in pharmaceutical chemistry Connection: Knowing her	Gender: male Age: 35 Work Experience: 10 years in pharmaceutical manufacture; Education: Bachelor in pharmaceutical Connection: Getting to know him

Appendix 17: The Questions Asked in the Semi-structure Interviews

1. The Questions Asked in the First interview:

Q1: Could you please introduce yourself and your company? (Gender, Age, Working Experience and Working title)

Q2: Are you involved in the strategy formulation and implementation in your company?

Q3: What is the most important for developing a company strategy?

Q4: Why do you think the policy issue is important in Chinese pharmaceutical industry?

Q5: Which current policies do you think influence your strategy formulation and implementation? And Why and How?

Q6: What role does *guanxi* play under current business environment?

Q7: How do you identify opportunities and avoid the threat under current environment of relevant policies?

2. The Questions Asked in the Follow-up Interview:

Q 1. What factors will you consider when strategy formulation?

Q 2. What do you mean by *guanxi*?

Q 3. You mentioned the interrelationship between institutional system and *guanxi*, what do you mean by that?

Q 4. What are the critical factors on policy making? And why?

Q 5. How to identify and maintain *guanxi*?

Q 6. What is the interaction between *guanxi* and product's competitiveness?

Appendix 18: The Letter for the Semi-structured Interview

Bo Xu
Unit 2402-2404, Chunhui Building
No. 16, Yueken Road, Tianhe District
Guangzhou Guangdong, P.C. China, 510610

August, 2014

Dear participant:

Thanks for your attending my face-to-face interview for doctoral research, which is named "The Influence of *Guanxi* and Government Policies on Application of Porter's Strategy in Small Medium-sized Pharmaceutical Companies (SMPCs) in China". The semi-structured questions are about influencing factors of policy and *guanxi* on SMPCs strategy application in China. The opinions you provide will help me obtain better understanding.

The face-to-face interview is just between you and me. It will take one hour and I will record under your permission and hold the digital record of our interview. I shall immediately turn off the record anytime following your request. The information you provide will be kept strictly confidential and is for academic research purposes only.

For protection of your privacy, your name will not showed on the thesis. Just your work title will be named. It is worthy mentioning that you can withdraw the data without any reason any time before the thesis is submitted to the Nottingham Business School.

Thank you very much for your time and cooperation.

Best regards,

B o Xu

Appendix 19: Quality Criteria for Case Study Research within the Realism Paradigm, and other Research Criteria

	Developed for this paper (i)	Brief description of criteria for this realism research (ii)	Case study techniques within this realism paradigm (iii)	Criteria for case research (iv)	Criteria for constructivist or naturalist research (v)	Criteria for qualitative research (vi)	Criteria for positivism research (vii)
b	*Major author/s*			Yin (1994)	Lincoln and Guba (1985)	Miles and Huberman (1994)	Chia (1997); Neuman (1997)
c	*Ontology*						
	1 Ontological appropriateness	Research problem deals with complex social science phenomena involving reflective people (world 3 in Magee (1985))	Selection of research problem, for example, it is a how and why problem		(World 2 in Magee (1985))		(A single tangible reality consisting of discrete elements (World 1 in Magee (1985)))
d	2 Contingent validity	Open "fuzzy boundary" systems (Yin, 1994) involving generative mechanisms rather than direct cause-and-effect	Theoretical and literal replication, in-depth questions, emphasis on "why" issues, description of the context of the cases	Internal validity	"Truth value" or credibility	Internal validity/ credibility/authenticity	Internal validity
e	*Epistemology*						
	3 Multiple perceptions of participants and of peer researchers	Neither value-free nor value-laden, rather value-aware	Multiple interviews, supporting evidence, broad questions before probes, triangulation. Self-description and awareness of own values. Published reports for peer review		Neutrality or confirmability	Objectivity/confirmability	Value-free, one-way mirror (Guba and Lincoln, 1990)
f	*Methodology*	Trustworthy – the research can be audited	Case study database, use in the report of relevant quotations and matrices that summarise data, and of descriptions of procedures like case selection and interview procedures	Reliability	Consistency or dependability	Reliability/dependability/ audibility	Reliability
	4 Methodological trustworthiness						
g	5 Analytic generalisation	Analytic generalisation (that is, theory building) rather than statistical generalisation (that is, theory-testing)	Identify research issues before data collection, to formulate an interview protocol that will provide data for confirming or disconfirming theory	External validity through the specification of theoretical relationships, from which generalisations can be made	Applicability or transferability	External validity/ transferability/fittingness	
h	6 Construct validity		Use of prior theory, case study database, triangulation	Construct validity			Construct validity
i							External validity, that is, statistical generalisation
j						Utilization/application/ action orientation	

Note: critical theory has not been included in this table as no quality criteria that distinguishes it from constructivism could be found

Source: Healy and Perry, 2000, p. 122

Appendix 20: Tests and Techniques for Establishing Validity and Reliability in Case Study Research

Case study design tests	Corresponding design tests	Case study techniques	Qualitative techniques	Phase of research in which techniques occur
Construct validity		Use multiple sources of evidence		Data collection
		Establish chain of evidence		Data collection
		Have key informants review draft case study report		Researcher's diary and report writing
	Confirmability (corresponding to objectivity and neutrality of positivism)		Confirmability audit (examine the data, findings, interpretations and recommendations)	Data collection and data analysis
Internal validity	Credibility	Do within-case analysis, then cross-case pattern matching		Data analysis
		Do explanation-building		Data analysis
		Assure internal coherence of findings and concepts are systematically related		Data analysis
			Triangulation (sources, investigators, and methods)	Data collection and data analysis
			Peer debriefing	Data analysis
			Member checks	Researcher's diary and report writing
			Researcher's assumptions, worldview, theoretical orientation	Research design
			Researcher self-monitoring	Data collection and data analysis
External validity	Transferability	Use replication logic in multiple-case studies		Research design
		Define scope and boundaries of reasonable analytical generalisation for the research		Research design
		Compare evidence with extant literature		Data analysis
			Predetermined questions	Research design
			Thick description (develop case study data base)	Data collection
			Cross-case analysis	Data analysis
			Specific procedures for coding and analysis	Data analysis

(continued)

Source: Riege, 2003, p. 78

(Continued)

Tests and Techniques for Establishing Validity and Reliability in Case Study Research

Case study design tests	Corresponding design tests	Case study techniques	Qualitative techniques	Phase of research in which techniques occur
Reliability	Dependability	Give full account of theories and ideas		Research design to data analysis
		Assure congruence between research issues and features of study design		Research design
		Develop and refine case study protocol		Research design
		Use multiple researchers		Data collection
		Record observations and actions as concrete as possible		Data collection
		Use case study protocol		Data collection
		Record data, mechanically develop case study database		Data collection
		Assure meaningful parallelism of findings across multiple data sources		Data collection
		Use peer review/examination		Data analysis
			Dependability audit (examine and document the process of inquiry)	Research design
			Clarify researcher's theoretical position and biases	Research design

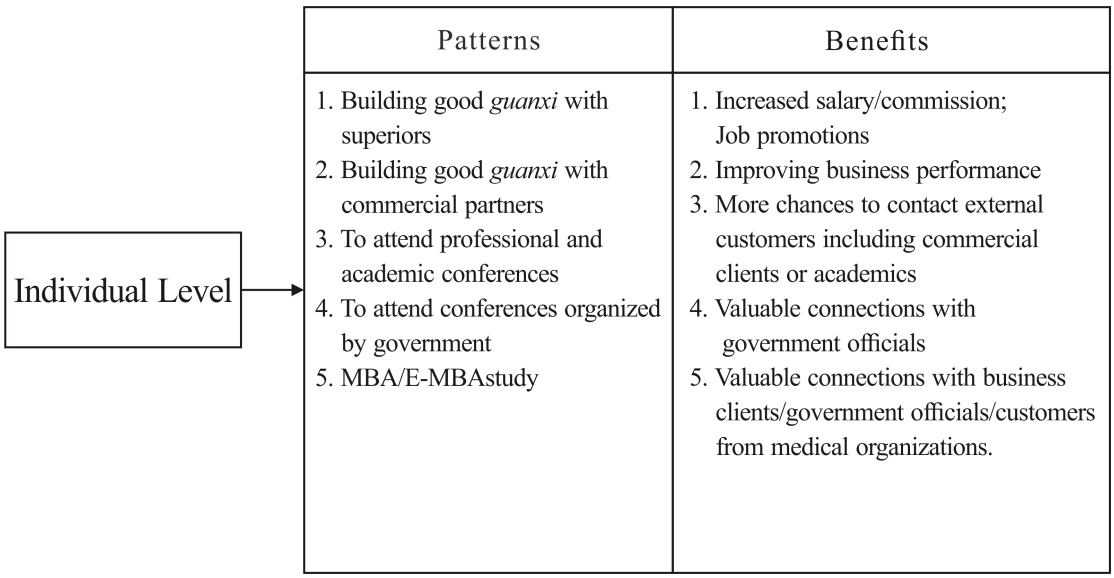
Source: Riege, 2003, p. 79

Appendix 21: *Guanxi* Patterns

Interviewees provided several patterns for developing and using *guanxi* at the individual level (see Figure A21.1) and organizational level (See Figure A21.2). So how to identify and maintain *guanxi* in practice? There were no detailed approaches obtained but common patterns were provided by interviewees. Identifying and maintaining *guanxi* can be cultivated from study, work and life, such as natural relations (family links), common language (common-interest topics) and background (study, working experiences).

In looking at the literature, the contribution of *guanxi* shows tangible and intangible sides (Xu and Li, 2013, p. 834). In practice, interviewees mentioned that building *guanxi* can contribute a number of tangible benefits, such as increased salary/commission, job promotions, directly improving business performance; and intangible benefits, such as valuable connections with highly positioned managers, medical experts, and government officials. For instance, attending professional, academic, and commercial conferences contributes more benefits for individuals. It is worth mentioning, individuals can obtain double benefits not only by developing skills but also by cultivating *guanxi* through high-quality study (e.g. industrial E-MBA programme).

Figure A21.1 *Guanxi*'s Patterns and Benefits for Individuals



Source: Compiled by the author from quotations from the interviews

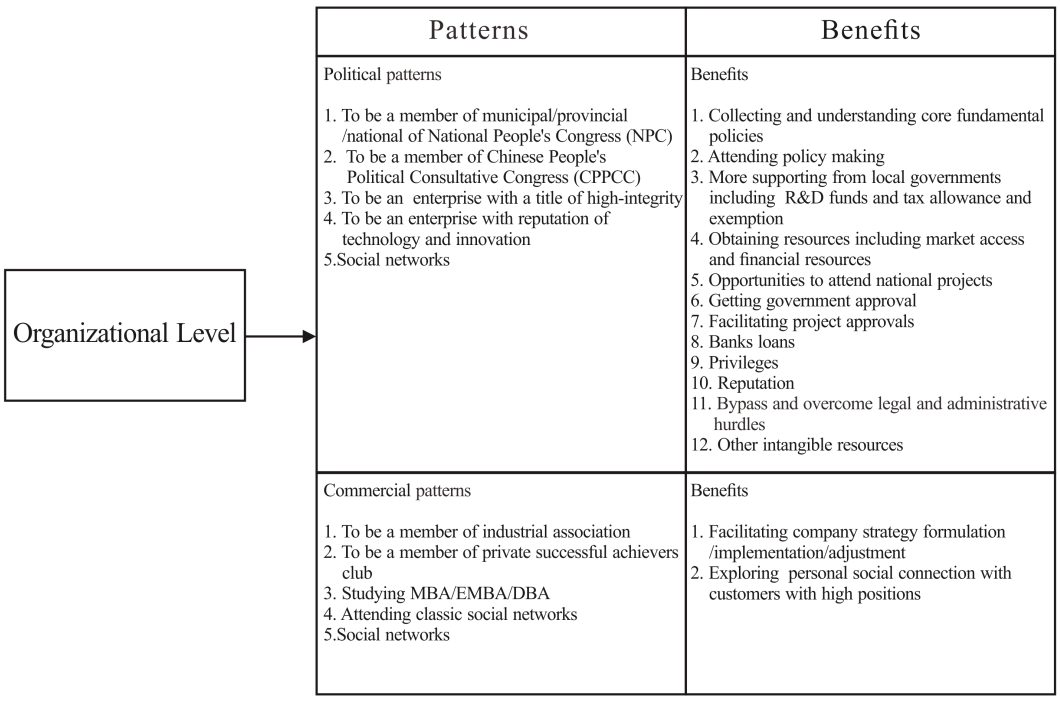
Organizational *guanxi* is based on individual activities. Individuals know what patterns and approaches can be used to identify and maintain *guanxi*. And more senior managers work on behalf of the organization to build, develop and maintain relationships with government. Gu (2013, p. 232) suggests that organizations should "build *guanx*i with relevant government departments to develop a harmonious relationship" so as to "cope with regulatory uncertainty". Thus, there exist formal and informal channels to represent organizational voices. Equally, informal connections are based on individuals. An organization attends many formal meetings to link and build *guanxi* with local government. Senior managers act on behalf of organizations to display personal talents during the connection with government officials.

Because of limited participation mechanisms for the public, citizens, including senior managers, can have some voice in the policy process (Truex, 2014, p. 25). Successful senior managers contribute interests and taxes to local government.

Thus, they could be elected as a municipal/provincial/national member of the National People's Congress (NPC) or the Chinese People's Political Consultative Congress (CPPCC). They can, on behalf of themselves, their own enterprises and industry, propose suggestions so as to influence national and local policies. As China's formal participation channels, the two congresses of NPC and CPPC provide a stage for senior managers who can make their voices heard and explore their resources. At the same time, political connections help private enterprises to obtain resources including market access and financial resources.

At an organizational level, working out the *guanxi* orientations (Zhuang, 2012) is important. An organization can use different patterns from individuals to achieve benefits. Basically, there are two dimensions of political and commercial intentions for firms (see Figure A21.2).

Figure A21.2 *Guanxi*'s Patterns and Benefits for Organizations



Source: Compiled by the author, cited Gao and Tian, 2006, and based on quotations from the interviewees

Appendix 22: Comparison of Two Case Studies' Strategies

Contents	Company A	Company B
Company Strategy	Hybrid strategy: Relevant diversification strategy	Focus on strategy: Focus on prescription drugs market
Product strategy (prescription drugs)	Prescription drugs are focused on providing anti-cancer drugs and cardiovascular drugs	Focus on providing gynecological products
Product system	Chemical drugs including anti-cancer drugs, generic drugs and OTC	TCMs including patented TCMs and generic TCMs
R&D	1. Generic first serial drugs 2. Treatment of drugs, paramedicines and drugs enhancing body immune function	Focus on own unique and patented TCMs
Marketing strategy	1.Building own professional sales teams based on product system 2.Three professional teams focus on professional products 3. Increasing investment in product's academic promotion and professionalism 4. Building distributor system	1. Building professional distributor system 2. Seeking for potential distributors that have strength and *guanxi* in regional market

(Continued)

	as supplementary channel in 2012	
Policy influences	1. Medical Reform 2. New GMP 3. NBMIL & NEDL 4. DCBP	1.Medical Reform 2. New GMP 3. NBMIL & NEDL 4. DCBP
Strategy implementation	1. Hard to do self-initiated R&D chemical drugs 2. Fewer opportunities for imitating generic first serial chemical drugs	1. Hard to do self-initiated R&D TCMs 2. Because of new drugs registration policy, fewer opportunities to imitate TCM
Strategic adjustment and transfer (since 2013)	1. Transfer one professional team of prescription drugs to distributors 2. Focus on building professional distributors for anti cancer drugs 3. Invest in reagent market and health of the general public sector	1. Invest in medical instrument and pathologic diagnosis sectors

(NBMIL**:** National Basic Medical Insurance List; NEDL: National Essential Drugs List; TCM: Traditional Chinese Medicine)

Appendix 23: Transcription of Follow-up Interview-CEO of Company B

XU BO:

Mr ***, thank you very much for the second interview. Let's start with the first question. In strategy formulation in the pharmaceutical industry, what factors will you consider?

CEO:

In my opinion, for strategy formulation, the company should think in the long term rather than the short-term perspective, with market factors as the main focus. Because the market decides on your products, right? You build up a good product structure according to the market. Only after the good product structure is built, can you make a good product strategy. All strategies should be market oriented.

XU BO:

Could you be more specific about "market oriented"? What aspects are included in market factors?

CEO:

For example, I offer a product in *** area. Why did I decide to offer this product? Logically, it's very risky as the technology is not mature yet, right? Besides, it's not been tested in the market. First of all, the *** market is not mature yet in our country. Second, the market size remains unknown. Third, are there many competing manufacturers? Fourth, will there be any difficulty in obtaining approval? The *** diagnosis technology is still blank fields.

XU BO:

There are opportunities from government policy.

CEO:

The product approval takes a very long time. You can't get it approved in just a few years. As a matter of fact, I would consider the market is just beginning, and policy will follow. With the development of the market need, as the incidence of the disease increases the market develops. I have done production and sales. I think I have worked in production and sales and now I think I should establish a pharmaceutical company and manufacture the product. According to my previous experience, policy control was quite loose at the very beginning, usage rate of such medicine was high, and I think this is an opportunity. At that time, we only had one product. Then, we started thinking of selecting products in areas such as gynecology, cardio-cerebral vascular disease and cancer. The competition for cardio-cerebral vascular products is too strong, so I chose specialist products. Obtaining production certificate and the quality control for Traditional Chinese Medicine injections is very difficult. This is still controversial. At that time, we were not strong enough, so we didn't try in this field. When we were strong enough and ready to develop products in this field, the Zheng Xiaoyu news exploded and the state stopped approval for many products with "one knife-at a stroke" all together.

(Zheng Xiaoyu, former director general of China's Food and Drugs Administration was executed for the crime of accepting bribes in 2007.)*

XU BO:

Then you use a "specialist product" strategy?

CEO:

Right, specialized and focused on strategy.

XU BO:

OK, apart from policy and product, do you consider other factors?

CEO:

We consider market factors first. We first need to identify the market, then we choose which area to enter. That is, we need to decide which market area to enter. After that, we decide on the product lines for our main and dedicated products.

XU BO:

OK, apart from these points, will you consider other factors, like *guanxi*?

CEO:

As a matter of fact, I don't think too much about this question. *Guanxi* can only facilitate your approvals and help your products to be listed in the national or provincial health insurance list, in the basic medicine list to be specific. Do you think *guanxi* helps formulate big strategies for pharmaceutical enterprises? I don't think so. That is to say, at the beginning of strategy formulation, *guanxi* is not a core factor. *Guanxi* can be helpful in strategy implementation for achieving strategy goals.

XU BO:

Do you think *guanxi* is important in strategy formulation? Why?

CEO:

It's not a determining factor; it can help you decide how to do it, but it can't determine your strategy goals. For instance, if you have broad human resources and connections in ***, you can consider making *** products.

XU BO:

When you say you have broad connections in a certain aspect, do you mean individual, group, company or third party?

CEO:

All of them. You need to consider the subject comprehensively.

XU BO:

Could I interpret it as choosing your products according to a *guanxi* network? Following this logic, do you choose products according to *guanxi*, or do you choose *guanxi* for your products?

CEO:

Based on strategy, you should consider products first. When you have two products, you can think of other reasons. At that time, we have broad *guanxi* in the cardio-cerebral vascular field, but there are too many products in this field. It's hard to maintain good prices. As such, we mainly focus on *** products. So *guanxi* is not a pivotal factor for a pharmaceutical manufacturer. *Guanxi* is only helpful.

XU BO:

Apart from policy, product and *guanxi*, what other factors will pharmaceutical enterprises consider when formulating strategy?

CEO:

In fact, the market has decided your product structure.

XU BO:

That is to say, gather resources according to the product structure and market needs. Will you adjust the strategy over a period of time?

CEO:

That is for sure.

XU BO:

In that case, you will adjust your strategy? What factors are impacting your strategy?

CEO:

Market factors and state policies. For example, if your products are not listed on the national basic medical insurance list, and you promote them as main products, this is not realistic. Since the products are not national medical insurance products yet, you will need to adjust your strategy.

XU BO:

Will *guanxi* help in strategy implementation then?

CEO:

Ah…that is to say, *guanxi* can make you more confident. Or facilitate and help you to achieve your strategic goal.

XU BO:

Let's move on to the second question. What's your understanding of *guanxi*? Could you define it?

CEO:

I think it will be difficult for foreigners to understand our *guanxi*. Strictly speaking, *guanxi* is "human resources".

XU BO:

You mentioned in the first interview that *guanxi* is a traditional Chinese culture. It is civic culture. *Guanxi* is everywhere and has something to do with the "policy system". Could you elaborate on the relationship between *guanxi* and culture?

CEO:

In China, if you want to achieve a goal, people normally think "what *guanxi* do I have?", "can it be faster?", "can I take a short cut?" If I achieve my goal through *guanxi*, you might say my *guanxi* is illegal and improper. This may be a natural relationship, e.g. brothers, sisters, classmates and teachers. Maybe because of this natural relationship, I gain more information to help me understand policy, right? And, if I have good relationships with certain experts, communications are smooth. Maybe he/she trusts our products and knows us well, so he/she supports us more. As for the connection between *guanxi* and culture and policy systems, this is difficult to elaborate on. For instance, if the product of one manufacturer becomes a national basic medical insurance product just because they have *guanxi*, do you think their product is good?

XU BO:

That's right. Then let's move onto the next question: how do you see the "policy system" in the pharmaceutical industry? Does the policy system have anything to do with *guanxi*? Why?

CEO:

China's medical policy system is somewhat related to the state's policy and strategy. Now the state produces a "simplified policy". The problem now is the government intervenes too much. The government intervenes on price, pricing and national health insurance. It's only opening up now gradually. The current policy system does not promote official and fair competition. So *guanxi* kicks in. So if you have *guanxi*, you will have a competitive advantage. Thus *guanxi* is an endowed condition. *Guanxi* is a way to avert fair competition. That is, you gain an "exclusive" competitive advantage with *guanxi.* That's why the state simplifies policy, to stop such a situation from happening. When the state's policy and institutional system is not working well, *guanxi* kicks in.

XU BO:

We were talking about the current policy system, the effect of *guanxi*. But in more than five thousand years of Chinese history, *guanxi* has a profound history, and has played an important role in imperial times.

CEO:

Yes, great effects. But in a short time, this is difficult to change. So sometimes *guanxi* is going against the law, against regulation in people's mind, even if it is legal, it doesn't behave according to regulation.

XU BO:

OK, in the pharmaceutical industry, what factors will be considered in the state's or in the local strategy's formulation?

CEO:

In my opinion, first, the state's institutional system for sure. Second, the state's finance, including local finance, human resources structure and the economic status quo, and the effect on the whole industry.

XU BO:

What do you mean by effect on the industry?

CEO:

The effect on the industry means the issue of policy will have a great impact on every medical manufacturer, hospital and user. So when making policy, the state will consider these factors. For example, the health insurance in Guizhou will be different from that in Zhejiang and Beijing, because Guizhou is relatively poor. Of course, policy making will be influenced by interest groups. But I don't think the influence of the interest groups is determining factor. Because the policy issued is not for one company or two. For example, Good Manufacturing

Practice (GMP), national health insurance, basic essential drugs list policy. These policies are issued for all companies, not just one or two.

For example, in the pharmaceutical industry, you can't do original equipment manufacturer (OEM), so enterprise has to invest a lot in fixed assets. This is one kind of resource waste.

As for creativity, the state wants to encourage the creation of enterprises. Because of the limitations resulting from policies, it is hard for enterprises to earn profits. Enterprises have no money to do R&D. So most of the enterprises are repeating low-level production. The homogeneous competition has to do with state policy. For example, for an enterprise most of the expenses are taken by intermediaries and the taxes are high. So from where does the money come for R&D? However, the policy does not allow research enterprises to manufacture and the manufacturing enterprises need a large amount of investment.

XU BO:

That is to say, there is contradiction in industry policies. They are not well built yet, but the SMPCs' resources are lacking. So it's difficult to invest in research

CEO:

Even big enterprises have to face this situation. Few enterprises have high-tech medicines. Enterprises would prefer to use the money in advertising rather than R&D. Because, once it invests, it may not be able to get the approval, and the approval process takes a long time. It's too risky. So the contradiction of state policy and mismatch creates a series of problems. That is for sure. So it creates enterprise "myopia" (short sightedness) in our country.

XU BO:

So the reason that medicine manufacturing enterprises need adjustment from

time to time is also because of such an environment.

CEO:

For example, the medical approval was with provincial medical supervision bureaus at one time, then later it lay with the state bureau. We thought we couldn't implement policy in this way, so we adjusted our products from time to time, for our future development. For example, if the state prohibits Chinese medicine, what's the point of researching it? When the state's strategy and directives are not issued yet, the local government has no standard. In this case, the central policies will be different to local policies. For the poor and mountain-locked areas, the state gives political support to Guizhou, especially to Miao medicine. This is a regional advantage.

XU BO:

Let's move onto the fifth question: how to establish and maintain *guanxi*?

CEO:

First, contact during work, foster relationships, develop relationships; second, communicate through culture. As one with a Chinese medical academic background, I may communicate easier with someone with the same background. That's "communicate with the same language and culture". With the same interests and academic background, it will be easier to establish and maintain *guanxi.*

XU BO:

That is the same interest, right? As such, could I take it to mean lower expenses? Haha....

CEO:

You can take it as such. Third, that's communication. Mainly because we have

the same hobbies and share the same ideas for our kids. For example, entertainment and physical activities. This is emotional communication.

XU BO:

The establishment of *guanxi* has to do with people's life, work. A person can establish a network with himself or herself at the centre.

CEO:

Right. And the maintenance of *guanxi*. It's difficult to maintain only with emotion. Nobody accepts you. So you need to consider it from several aspects.

XU BO:

To maintain and establish *guanxi*. *Guanxi* has continuity and value. So what factors will affect the establishment and maintenance of *guanxi*?

CEO:

What factors? For example, if one only talks about interest but nothing else, the relationship can't last long, there will be problems sometimes. Second, if there is only work and no cultural and emotional communication, it won't go well. If you handle these things well, they will help you more.

XU BO:

During business activity in the pharmaceutical industry, will most SMPCs copy the same methods?

CEO:

Yes, they will. For example, in the condition of product homogeneity, people will be more willing to accept your product because of *guanxi*. *Guanxi* is the productive force.

Guanxi has nothing to do with product competition. But under the competition of product homogeneity, *guanxi* is the productive force. So must *guanxi* be bribery? Not necessarily. Customers know more about your products, contacts know more about your way of handling things, so they will be more comfortable in helping you. They appreciate your academic background, expertise and behaviour. So small and medium sized pharmaceutical companies are using *guanxi* to form a special and natural competitive advantage.

We need to view *guanxi* critically, via culture, work, emotional communication and human resources. Everyone understands *guanxi* differently. We need to know people, enterprise and enterprise culture, because there are many similar products.

The entrepreneur plays different roles in strategy formulation. Many strategies are set before looking for *guanxi*. *Guanxi* identifies additional opportunities.

For example, in the cooperation with the Swiss company, you are *guanxi*. In the cooperation with American company, Ms *** is *guanxi*. If we try to look for the client and communicate with them, then it takes longer. But through introduction, we know each other. Since I know the introducer very well and I believe in him or her, it will take a much shorter time. As such, *guanxi* is one kind of productivity or multiplier.

XU BO:
Then let's move onto the last question: what's the relationship between *guanxi* and product competitiveness?

CEO:
In my opinion, I don't think they have an inevitable connection. When we face the same challenges, *guanxi* is the power of competition. When products are

homogeneous, especially when all are products on the national health insurance list, ie., XXX and YYY, when the hospital considers the same medicines and effects, which one will they choose? It will depend on their *guanxi*. For instance, what kind of product is listed on the national medical insurance list? Listed or not listed, that's a fundamental difference! How to compete? Use *guanxi*! Then, must *guanxi* be bribery? Not necessarily! Clients will be more confident when they know more about your products, contact you more, know more about you and your way of doing things, your professional background, expertise and behaviour. If they don't know you, they will be worried about whether your enterprise will still exist in the future. If people don't know the industry and still want to go ahead, how long can they last? If they know you well, they join you at the same starting line, through proper competition. They give the same products to the government. If the experts for approval are the same, they will know you better and accept you if you have *guanxi*.

XU BO:

In the pharmaceutical industry, most products are facing competition due to product homogeneity. For SMEs (small and medium-sized enterprises), it will take a very long time for registration, approval and marketing. Risk is very high and investment is too much. Few enterprises invest in these, perhaps because they don't have the capability, finance and enough resources. In such situations, how can the small and medium pharmaceutical enterprises win or gain a competitive advantage in the competitive environment? Can we interpret *guanxi* as some kind of advantage from special environmental circumstances? All small and medium pharmaceutical enterprises use *guanxi* or other factors, such as pushing their products to be included in the national health insurance list. It is necessary to foster an environment that is good to yourself, or develop a competitive advantage or monopoly in a certain market.

CEO:

That's right! Not necessarily a monopoly, but forming a natural competitive advantage. That is for sure. Let's take the quality of imported products. For example, X and Y companies have the same product type, both of them want to enter China or have entered China. Which product sells better? They will not only need a strong team, but also better *guanxi.*

XUBO:

Right, *guanxi* helps.

CEO:

Right. As a matter of fact, *guanxi* helps, but the enterprise itself will also need to be strong enough. Apart from that, some people understand *guanxi* very superficially. Since everyone understands *guanxi* differently, *guanxi* has layers of meanings. Some meanings have a dark side, some have a bright side, some are positive, some are negative. Take face, for example. I have a good relationship with one expert, but he can't get the products accepted in the hospital just because of my face. What if my products are fake products or poor-quality products? He will surely check a series of things. For example, he will study me, my enterprise, enterprise culture and products. If there is no problem in all of these, it will be better if you have *guanxi*, because there are many homogeneous products.

(** "Face" and renqing (sympathy) belong to Chinese cultural values (Qian, Razzaque and Keng, 2007), and both have an interrelationship with guanxi. Face shows complexity and comprehensive implications. Face indicates Chinese socio-cultural phenomena, and the states of moral, pragmatic or utilitarian and positional valuations (Qi, 2015, p.292).)*

XU BO:

Organizational strategy is product-oriented. Could you elaborate on whether *guanxi* has any influence on the strategy formulation?

CEO:

Personally speaking, you look for *guanxi* after the company strategy is formulated, rather than the other way around.

XU BO:

That's right, for pharmaceutical manufacturing enterprises. But for the agents, they might be the agent for the products just because of certain *guanxi*.

CEO: That's because we are a manufacturing enterprise, in which *guanxi* shows differently. The reason that we establish a pharmaceutical manufacturing enterprise is not because of the *guanxi* we have!

XU BO:

Thank you very much for taking time from your busy schedule to attend our interview. (Smile.....)

CEO:

Hope you find it helpful. (Smile.....)

ABBREVIATIONS AND GLOSSARY

CEO	Chief executive officer
CFDA	China Food and Drug Administration
CPPCC	Chinese People's Political Consultative Congress
DCPB	Drug Centralized Procurement Bidding
GMP	Good manufacturing practice
GSP	Good supply practice
MIIT	Ministry of Industry and Information Technology
MNRSS	Ministry of Human Resources and Social Security
MOC	Ministry of Commerce
MOF	Ministry of Finance
NBMIL	National Basic Medical Insurance List
NDRC	National Development Reform Commission
NEDL	National Essential Drugs List
NHFPC	National Health and Family Planning Commission

NPC	National People's Congress
OTC	Over-the-counter
R&D	Research and development
SATCM	State Administration of Traditional Chinese Medicine
SMEs	Small and medium enterprises
SMPCs	Small and medium-sized pharmaceutical companies
TCMs	Traditional Chinese Medicines

Generic drug: a bioequivalent medicine that contains the same active ingredient as an originator drug. The originator drug is an innovative medicine that no longer has intellectual property protection due to patent expiry (BMI, 2014, p. 191)

Health expenditure: the sum of the funds mobilised by government and private systems for the operation of a healthcare system, according to the World Health Organization (WHO) (BMI, 2014, p. 191).

OTC drug: a medicine that does not require a prescription to be sold to patients. Also known as non-prescription medicines (BMI, 2014, p. 191).

Patented drug: an innovative medicine granted intellectual property protection by the patent and trademark office. The patent may encompass a wide range of claims, such as active ingredient, formulation, mode of action, giving the patent

holder the sole right to sell the drug while the patent is in effect (BMI, 2014, p. 191)

Pharmaceutical, medicines, drugs: synonym terms used interchangeably

Prescription drugs: Patented and generic drugs regulated by legislation that requires a physician's prescription before they can be sold to a patient. (BMI, 2014, p. 191)

BIBLIOGRAPHY

Adige, R., (2014). Don't kill this goose: Government policy should facilitate India to become pharmacy of the world. *Journal of Generic Medicines*, 11(1-2), pp. 11-14.

Allen, *et al*., (2008). Porter's business strategies in Japan. *Business Strategy Series*, 9(1), pp. 37-44.

Arribas, I. *et al*., (2013). *Guanxi*, performance and innovation in entrepreneurial service projects. *Management Decision*, 51(1), pp. 173-183.

Bach, D. and Allen, D., (2010). What every CEO needs to know about non-market strategy. *MIT Sloan Management Review*, 51(3), pp. 41-48.

Banker, R.D., Mashruwala, R., and Tripathy, A., (2014). Does a differentiation strategy lead to more sustainable financial performance than a cost leadership strategy?. *Management Decision*, 52(5), pp. 872-896).

Banta, B., (2012). Analysing discourse as a causal mechanism. *Eurpean Journal of International Relations.* 19(2), pp. 379-402.

Barbalet, J., (2015). *Guanxi*, Tie Strength, and Network Attributes. *American Behavioral Scientist,* 59(8), pp. 1038-1050.

Barros, P.P., (2010). Pharmaceutical Policies in European Countries. *Pharmaceutical Markets and Insurance Worldwide*, 22, pp. 3-27.

BBC Monitoring Asia Pacific (2007). *China's food, drug watchdog vows to draw*

lesson from ex-chief's corruption case. [TV] BBC One, 13 July 2007.

Berger, R. and Herstein, R., (2014). The evolution of Chinese business ethics. *Management Research Review,* 37(9), pp. 778-790.

Berrell, M. and Wrathall, J., (2007). Between Chinese culture and the rule of law. *Management Research News*, 30(1), pp. 57-76.

Besha, P., (2010). Policy making in China's space program: A history and analysis of Chang's lunar orbiter project. *Space Policy*, 26, pp. 214-221.

Bhaskar, R. (1978). *Realist Theory of Science*, Wheatsheaf: Harvester.

BMI (2014). *Pharmaceuticals & Healthcare Report Q4.* Available via: Business Monitor International, [Accessed 5 April 2015]

Bowman, C., (2007). Firm value creation and levels of strategy. *Management Decision*, 45(3), pp. 360-371.

Brown, D. and Pirani, M., (2007). Information Strategies: Motor Dealerships and the Porer Thesis. *Management Decision*, 28(7), pp. 22-25.

Bryman, A. and Bell, E. (2007), *Business Research Methods,* New York: Oxford University Press Inc.

Burgelman, R., Christensen, C., and Wheelwright, S., (2009). *Strategic Management of Technology and Innovation.* New York: McGraw-Hill.

Cai, S. and Yang, Z., (2014). The Role of the *Guanxi* Institution in Skill Acquisition between Firms: A Study of Chinese Firms. *Journal of Supply Chain*

Management, October, pp. 3-23.

Cao, Q., Baker, J., and Schniederjans, D., (2014). Bullwhip effect reduction and improved business performance through *guanxi*: An empirical study. *Production Economics*, 158, pp. 217-230.

CFDA, China Food and Drug Administration, Data Query (2013). [Online]. Available at: http://app1.sfda.gov.cn/datasearch/face3/base.jsp?tableId=34&tableName=TABLE34&title=%D2%A9%C6%B7%C9%FA%B2%FA%C6%F3%D2%B5&bcId=118103348874362715907884020353 [Accessed: 23 July 2013]

Chaharbaghi, K. and Feurer, R., (1994). "Defining competitiveness: A holistic approach", *Management Decision,* 32(2), pp. 49-58.

Chan, L. and Daim, T.U., (2011). Muti-perspective analysis of the Chinese pharmaceutical sector Policy, enterprise and technology. *Journal of Technology Management in China*, 6(2), pp. 171-190.

Chandler, A.D. (1962). *Strategy and structure: chapters in the history of the industrial enterprise.* Cambridge: M.I.T. Press.

Chang, K.C., (2011). A Path to Understanding *Guanxi* in China's Transitional Economy: Variations on Network Behavior. *Sociological Theory*, 29(4), pp. 315-339.

Chen, C.C., Chen, X.P., and Huang, S.S., (2013). Chinese *Guanxi*: An Integrative Review and New Directions for Future Research. *Management and Organization Review*, 9(1), pp. 167-207.

Chen, H.Z., Ellinger, A.E., and Tian, Y., (2011). Manufacturer-supplier *guanxi* strategy: An examination of contingent environmental factors. *Industrial Marketing Management*, 40, pp. 550-560.

Chen, J. and Kim, S., (2013). A Comparison of Chinese Consumers' Intentions to Purchase Luxury Fashion Brands for Self-Use and for Gifts. *Journal of International Consumer Marketing*, 25, pp. 29-44.

Chen, J.S., (2011). Studying up harm reduction policy: The office as an assemblage. *International Journal of Drug Policy*, 22, pp. 471-477.

Chen, W.Y., Wang, M.L., and Hsu, B.F., (2013). When P-J fit and P-O fit meet *guanxi* in a Chinese selection context. *Journal of Technology Management,* 8(3), pp.174-189.

Chen, X. and Chen, C.C., (2004). On the intricacies of the Chinese *guanxi*: a process model of *guanxi* development. *Asia Pacific Journal of Management*, 21(3), pp. 305-324.

Chen, X.Y. and Wu, J., (2011). Do different *guanxi* types affect capability building differently? A contingency view. *Industrial Marketing Management*, 40, pp. 581-592.

Cheng, T.C.E., Yip, F.K., and Yeung, A.C.L., (2012). Supply Risk Management via *guanxi* in the Chinese Business Context: The Buyers' perspective. *International Journal of Production Economics,* 139(1), pp. 3-13.

Chong, M.P.M., Fu, P.P., and Shang, Y.F., (2013). Relational power and influence strategies: a step further in understanding power dynamics. *Chinese Management Studies*, 7(1), pp. 53-73.

Dandira, M., (2012). Strategy in crisis: knowledge vacuum in practitioners. *Business Strategy Series*, 13(3), pp. 128-135.

Danermark, B. (2002). *Explaining Society: Critical Realism in the Social Sciences*, London; New York: Routledge.

Davies, W., (2000). Understanding Strategy. *Strategy&Leadership*, 28(5), pp. 25-30.

Deng, R. and Kaitin, K.I., (2004). The regulation and approval of new drugs in China. *Drug Information Journal*, 37, pp. 29-39.

Dobbs, M., (2014). Guidelines for applying Porter's five forces framework: a set of industry analysis templates. *Competitiveness Review*, 24(1), pp. 32-45.

Dulcic, Z., Gnjidic, V., and Alfirevic, N., (2012). From five competitive forces to five collaborative forces: revised view on industry structure-firm interrelationship. *Procedia-Social and Behavioral Sciences*, 58, pp. 1077-1084.

Easton, G., (2010). Critical realism in case study research. *Industrial Marketing Management,* 39, pp. 118-128.

Efferin, S. and Hopper, T., (2007). Management control, culture and ethnicity in a Chinese Indonesian company. *Accounting, Organizations and Society*, 32, pp. 223-262.

Fan, Y., (2002). Questioning *guanxi*: definition, classification and implications. *International Business Review*, 11(5), pp. 543-561.

Fan, Y.H., Woodbine, G., and Scully, G., (2012). *Guanxi* and its influence on the

judgement of Chinese auditors. *Asia Pacific Business Review*, 18(1), pp. 83-97.

Fan, Y.H., Woodbine, G., and Scully, G., (2014). *Guanxi,* a two-edged sward! How Australian accounting professionals view the process within a moral framework. *Managerial Auditing Journa*l, 29(8), pp. 695-716.

Fei, X.T. (2008). *Xiangtu Zhongguo* [乡土中国]. Translated from the Chinese by Xu Bo, Beijing: Beijing People's Press.

Feng, T. and Wang, D., (2013). Supply chain involvement for better product development performance. *Industrial Management & Data Systems,* 113(2), pp. 190-206.

Feurer, R. and Chaharbaghi, K., (1997). Strategy development: past, present and future. *Training for Quality*, 5(2), pp. 58-70.

Feurer, R., Chaharbaghi, K., and Wargin, J., (1995). Analysis of strategy formulation and implementation at Hewlett-Packard. *Management Decision*, 33(10), pp. 4-16.

Fisher, C. *et al*. (2007). *Researching and Writing a Dissertation: A Guidebook for Business Students*. 2nd ed. Harlow: Pearson Education Limited.

Gao, *et al*., (2014). Toward a gatekeeping perspective of insider-outsider relationship development in China. *Journal of World Business,* 49, pp. 312-320.

Gao, H.Z., Knight, J.G., and Ballantyne, D.N., (2012). *Guanxi* as a gateway in Chinese-Western business relationships. *Journal of Business & Marketing*, 27(6), pp. 456-467.

Gao, Y.Q. and Tian, Z.L., (2006). How Firms Influence the Government Policy Decision-making in China. *Singapore Management Review*, 28(1), pp. 73-85.

Geng, (2010). The purchasing direction guided by policies: comments on policies and regulations of drug centralized bidding during ten years. *Chinese pharmaceutical technology economy and management* , 2010(2), pp. 80-87.

Ghezzi, A., (2013). Revisiting business strategy under discontinuity. *Management Decision*, 51(7), pp. 1326-1358.

Gibb, A., (2006). Making markets in business development services for SMEs. *Journal of Small Business and Enterprise Development*, 13(2), pp.263-283.

Gong, B., He, X., and Hsu, H.M., (2013). *Guanxi* and trust in strategic alliances. *Journal of Management History,* 19(3), pp.362-376.

Grant, R. M., (2008). Why Teaching Strategy Should Be Theory Based. *Journal of Management Inquiry*, 17(4), pp. 276 – 281.

Grigore, A.M., (2014). Book Publishing Business in Romania-An Analysis from the Perspective of Porter's Five Force Model. *Review of International Comparative Management*, 15(1), pp. 31-47.

Gross, N., (2009). A pragmatist theory of social mechanisms. *American Sociological Review*, 74, pp. 358 – 379.

Grundy, T., (2006). Rethinking and reinventing Michael Porter's five forces model. *Strategic Change*, 15, p. 213-229.

Gu, *et al*., (2013). Political connections, *guanxi* and adoption of CSR policies in

the Chinese hotel industry: Is there a link?. *Tourism Management*, 34, pp. 231-235.

Guba, E. and Lincoln, Y. (1994). *Competing paradigms in qualitative research*. in Denzin, N.K. and Lincoln, Y. (Eds), *Handbook of Qualitative Research.* Newbury Park, CA: Sage Publications.

Hadiyati, E., (2015). Marketing and Government Policy on MSMEs in Indonesian: A Theoretical Framework and Empirical Study. *International Journal of Business and Management*, 10(2), pp. 128-141.

Han, J.H. and Li, Y.J., (2013). The culture groundwork of *guanxi* marketing. *Commercial Times*, 2004(26), pp. 32-33.

Han, Y. and Altman, Y., (2010). Confucian moral roots of citizenship behaviour in China. *Asia-Pacific Journal of Business Administration*, 2(1), pp. 35-52.

Han, Y., Peng, Z., and Zhu, Y., (2012). Supervisor-Subordinate *Guanxi* and Trust in Supervisor: A Qualitative Inquiry in the People's Republic of China. *J Bus Ethics,* 108, pp. 313-324.

Harland, C.M., Lamming, R., and Cousins, P. D., (1999). Developing the concept of supply strategy. *International Journal of Operations & Production Management*, 19(7), pp. 650-674.

He, F. H. and Li, X. R., (2011). The literature research of the drug centralized bidding and purchasing system in China from 1999 to 2010. *Chinese Journal of Health Policy*, 4(4), pp. 64-70.

Healy, M. and Perry, C., (2000). Comprehensive criteria to judge validity and

reliability of qualitative research within the realism paradigm. *Qualitative Market Research: An International Journal,* 3(3), pp. 118-126.

Hernandez, M. and Delgado, E., (2009). Product innovation in small manufacturers, market orientation and the industry's five competitive forces. *European Journal of Innovation Management*, 12(4), pp. 470-491.

Hill, J., and Wright, L.T., (2001). A Qualitative Research Agenda for Small to Medium-Sized Enterprises. *Marketing Intelligence & Planning*, 19(6), pp. 432-443.

Hong, J. and Engestrom, Y., (2004). Changing Principles of Communication Between Chinese Managers and Workers: Confucian Authority Chains and *Guanxi* as Social Networking. *Management Communication Quarterly*, 17(4), pp. 552-585.

Hu, J., Chen, W. and Zhao, Z., (2012). Introspection and Countermeasure of Prec luding Drug Rebate in China. *Medicine and Society*, February, 25(2), pp. 15-19.

Hua, R.L. and Lu, L., (2013). Technology strategy and sustainability of business: Empirical experiences from Chinese cases. *Journal of Technology Management*, 8(2), pp. 62-68.

Huang, J. and Aaltio, I., (2014). *Guanxi* and social capital: Networking among women managers in China and Finland. *International Journal of Inter-cultureal Relations,* 39, pp. 22-39.

Huang, X., (2009). Strategic decision making in Chinese SMEs. *Chinese Management Studies*, 3(2), pp. 87-101.

Hunt, O., (2007). Evaluation of Porter's Five Forces Theory. Articlesbase [Online]. Business Strategic Planning. Available at: http://www.articlesbase.com/strategic-planning-articles/evaluation-of-porters-five-forces-theory-176855.html [Accessed 3 September 2015].

Hwang, K. K., (1987). Face and favor, the Chinese power game. *The American Journal of Sociology*, 92(4), pp. 944-974.

Ingram, P. and Zou, X., (2008). Business friendships. *Research in Organizational Behavior*, 28, pp. 167-184.

Jacome, R., Lisboa, J., and Yasin, M., (2002). Time-based differentiation - an old strategic hat or an effective strategic choice: an empirical investigation. *European Business Review*, 14(3), pp. 184-193.

Jia, F. and Lamming, R., (2013). Cultural adaptation in Chinese-Western supply chain partnerships: Dyadic learning in an international context. *International Journal of Operations & Production Management*, 33(5), pp. 528-561.

Jia, F. and Rutherford, C., (2010). Mitigation of Supply Chain Relational Risk Caused by Cultural Differences between China and the West. *The International Journal of Logistics*, 21(2), pp. 251-270.

Jiang, G.C., Lv, R.M., and Zhao, L. (2014). *The Public Hospitals rates 90% Market Share, What Challenge the Private Hospitals* [Online]. Available: http://www.cn-, Available at: healthcare.com/article/20140410/content-438179.html [Accessed: 13 August, 2015]

Jiang, X., Chen, C.C., and Shi, K., (2013). Favor in exchange for trust? The role

of subordinates' attribution of supervisory favors. *Asia Pac J Manage*, 30, pp. 513-536.

Johnson, G. and Scholes, K. (2002). *Exploring Corporate Strategy: Text and Cases.* 6th ed, Financial Times/Prentice Hall, U.K.

Johnson, G. and Scholes, K., (2004). Exploring Corporate Strategy. Beijing: Posts & Telecom Press.

Kay, J.A. (1993). *Foundation of Corporate Success.* Oxford: Oxford University Press.

Kazmi, A., (2008). A proposed framework for strategy implementation in the Indian context. *Management Decision*, 46(10), pp.1546-1581.

Kennedy, S. (2005). *The Business of Lobbying in China.* Cambridge, Mass: Harvard University Press.

Kim, W.C. and Mauborgne, R. (2005). *Blue Ocean Strategy.* Boston: Harvard Business School Press.

Kranenburg, H.V. and Pfann, G., (2002). Government Policy and the Evolution of the Market for Duch Daily Newspapers. *De Economist*, 150(3), pp. 233-250.

Layder, D. (1993). *New Strategies in Social Research: An Introduction and Guide,* Cambridge: Polity Press.

Lee, H., Kim, M.S., and Park, Y., (2012). An analytic network process approach to operationalization of five forces model. *Applied Mathematical Modelling*, 36, pp. 1783-1795.

Lee, M.H., Kim, C.K., and Na, H.S., (2007). Key Success Factors for Korea's Broadband. *International Conference on Convergence Information Technology*, 321, pp. 1584-1590.

Leitner, K.H., (2014). Strategy formation in the innovation and market domain: emergent or deliberate?. *Journal of Strategy and Management,* 7(4), pp. 354-375.

Li, D. and Huang, S., (2013). Discussion on the "Second Bargain" Under Centralized Drug Procurement Policy. *Research and practice of health care medicine*, 10(4), pp. 68-70.

Li, H. and Zhang, Y., (2007). The role of managers' political networking and functional experience in new venture performance: Evidence from China's transition economy. *Strategic Management Journal*, 28(8), pp.791-804.

Li, J. and Wright, P.C., (2000). *Guanxi* and realities of career development: a Chinese perspective. *Career Development International,* 5(7), pp. 369-378.

Li, J.J., Poppo, L., and Zhou, K.Z., (2008). Do managerial ties in China always produce value? Competition, uncertainty, and domestic vs. foreign firms. *Strategic Management Journal*, 29(4), pp. 383-400.

Li, M. and Cai, L.A., (2012). The Effects of Personal Values on Travel Motivation and Behavioral Intention. *Journal of Travel Research*, 51(4), pp. 473-487.

Li, M.Z. and Reimers, K., (2012). Government driven model of institutional change through adoption of new technology: A case study of the failed pharmaceutical bidding and procurement platforms in China. *Chinese Management Studies*, 6(1), pp. 53-64.

Liu, E. and Porter, T., (2010). Culture and KM in China. *The Journal of Information and Knowledge Management Systems*, 40(3/4), pp. 326-333.

Liu, Y., Bao, Y.J., and Liu, W., (2013). Mapping the values and culture in Chinese public sectors: an exploratory study. *Cross Cultural Management,* 20(4), pp. 559-577.

Liu, Y., Luo, Y., and Liu, T., (2009). Governing buyer-supplier relationships through transactional and relational mechanisms: Evidence from China. *Journal of Operations Management*, 27, pp. 294-309.

Love, L.G., Priem, R.L. and Lumpkin, G.T., (2002). Explicitly articulated strategy and firm performance under alternative levels of centralization. *Journal of Management,* 28(5), pp. 611-627.

Lu, L.T., (2012). *Guanxi* and *renqing*: the roles of two cultural norms in Chinese business. *International Journal of Management*, 29(2), pp. 466-75.

Luo, J.D. and Cheng, M.Y., (2015). *Guanxi* Circles' Effect on Organizational Trust: Bringing Power and Vertical Social Exchanges into Intraorganizational Network Analysis. *American Behavioral Scientist,* 59(8), pp. 1024-1037.

Luo, J.D. and Cheng, M.Y., (2015). *Guanxi* Circles' Effect on Organizational Trust: Bringing Power and Vertical Social Exchanges into Intra-organizational Network Analysis. *American behavioral Scientist*, 59(8), pp. 1024-1037.

Luo, Y.D., (2008). The changing Chinese culture and business behavior: The perspective of intertwinement between *guanxi* and corruption. *International Business Review,* 17(2), pp. 188-193.

Magretta, J. (2012). *Understanding Michael Porter: The Essential Guide to Competition and Strategy*. Boston, Massachusetts: Harvard Business Review Press.

Mair, A. (1999). *Learning from Honda. Journal of Management Studies.* 36(1), pp. 25-44.

Mason, K., Easton, G., and Lenney, P., (2013). Causal Social Mechanisms; from the what to the why. *Industrial Marketing Management*, 42, pp. 347-355.

Mathooko, F.M. and Ogutu, M., (2015). Porter's five competitive forces framework and other factors that influence the choice of response strategies adopted by public universities in Kenya. *International Journal of Educational Management,* 29(3), pp. 334-354.

McCarthy, B., (2003). Strategy Is Personality-Driven, Strategy Is Crisis-Driven: Insights From Entrepreneurial Firms. *Management Decision*, 41(1), pp. 327-339.
McGee, B. (1985). *Popper* (3rd edn), London: Fontana.

McGowan, R.A., and Mahon, J.F., (2007). Corporate Political Competitive Analysis. *Handbook of Strategy*, pp. 189-203.

Micheli, P., Mura, M. and Agliati, M., (2011). Exploring the roles of performance measurement systems in strategy implementation: The case of a highly diversified group of firms. *International Journal of Operation & Production Management*, 31(10), pp. 1115-1139.

Miles, M.B. and Huberman, A.M. (1994). *Qualitative Data Amalysis.* London: SAGE Publications.

Millington, A., Eberhardt, M., and Wilkinson, B., (2005). Gift Giving, *Guanxi* and Illicit Payments in Buyer-Supplier Relations in China: Analysing the Experience of UK Companies. *Journal of Business Ethic*, 57, pp. 255-268.

Ming, P. and Su, W., (2011). Exploration of Public Hospital Management System Reform. *Chinese Hospital Management,* 31(2), pp. 1-3.

Mintzberg, H., (1987). The strategy concept 1: five Ps for strategy. *California Management Review*, 30(1), pp. 11.

Mintzberg, H., (1994). The rise and fall of strategic planning. *Harvard Business Review,* January-February, pp. 107-114.

Mintzberg, H., Ahlstrand, B., and Lampel, J. (2005). *Strategy, Bite Back: It is Far More, and, Less, than You Ever Imagined*. NJ: Prentice Hall.

NFZM Newspaper (2014). *The Corruption of Guangdong Privincial Suplemented Essential Drugs List Emerges*, 1st, April, [Online]. Available: http://www.infzm.com/content/99522, [Accessed 26 September 2015]

O'Brien, T. and Ackroyd, S., (2011). Understanding the recruitment and retention of overseas nurses: realist case study research in National Health Service Hospitals in the UK. *Nursing Inquiry*, 19(1), pp. 39-50.

Okumus, F., (2001). Towards a strategy implementation framework. *International Journal of Contemporary Hospitality Management,* 13(7), pp. 327-338.

Okumus, F., (2003). A Framework For Implementation Strategies In

Organizations. *Management Decision*, 41(9), pp. 871-882.

Oral, E.L. and Mistikoglu, G., (2007). Competitive analysis of the Turkish brick industry-a case study for developing countries. *Building and Environment*, 42, pp. 416-423.

Ortega, A.G., Jalón, M.L.D., and Menéndez, J.Á.R., (2014). A strategic analysis of collective urban transport in Spain using the Five Forces Model. *Investigaciones Europeas de Dirección y Economía de la Empresa,* 20, pp. 5-15.

Pablos, P.O., (2005). Western and Eastern views on social networks. *The Learning Organization*, 12(5), pp.436-456.

Park, S.H. and Luo, Y., (2001). *Guanxi* and organizational dynamics: Organizational networking in Chinese firms. *Strategic Management journal*, 22(5), pp. 455-477.

Parnell, J., (2014). Strategic political emphasis, strategic capabilities and uncertainty, An exploratory assessment of managers in the United States. *Journal of Strategy and Management*, 8(1), pp. 41-63.

Parnell, J.A., (2006). Generic strategies after two decades: a reconcep0tualization of competitive strategy. *Management Decision*, 44(8), pp. 1139-1154.

Peng, S. *et al*., (2013). Causes of Drug Kickbacks in the Hospital and Countermeasures. *Hosp Admin J Chin PLA*, 20(6), June, pp. 550-551.

Perry, C., Riege, A., and Brown, L., (1999). Realism's role among scientific paradgms in marketing research. *Irish Marketing Review,* 12(2), pp. 16-23.

Pertusa-Ortega, E.M., Molina-Azorin, J.F., and Claver-Cortes, E. (2009).

Competitive strategies and firm performance: a comparative analysis of pure hgbrid and “stuck-in-the -middle” strategies in Spanish firms. *British Journal of Management*, 20, pp. 508-523.

Phillips, L.D., (2011). What is strategy?. *The Journal of the Operational Research Society*. 62, pp. 926-929.

Porpora, D.V., (1993). Cultural rules and material relations. *Sociological Theory,* 11(2), pp. 212-229.

Porter, M.E. (1980). *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. New York: Free Press.

Porter, M.E. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*. New York: Free Press.

Porter, M.E. (2004). *Competitive Strategy: Creating and Sustaining Superior Performance.* New York: Free Press.

Porter, M.E. (2008). *On Competition: Updated and Expanded Edition*. Boston: Harvard Business School Publishing.

Porter, M.E. (2008). *The Five Competitive Forces That Shape Strategy*: Harvard Business Review [Online]. Available at: https://hbr.org/2008/01/the-five-competitive-forces-that-shape-strategy/ar/1 [Accessed 19 August 2015]

Qian, W., Razzaque, M.A., and Keng, K.A., (2007). Chinese cultureal values and

gift-giving behavior. *Journal of Consumer Marketing*, 24(4), pp. 214-228.

Qin, X. J., (2010). The impact of political forces on urban land ownership reform. *International Journal of Law in the Built Environment,* 2(3), pp. 206-217.

Ramaseshan, B, Ishak, A. and Kingshott, R.P.J. (2013). Interactive Effects of Marketing Strategy Formulation and Implementation upon Firm Performance. *Journal of Marketing Management*, 29(11-12), pp. 1224-1250.

Ramaswamy, K. and Renforth, W., (1996). Competitive intensity and technical efficiency in public sector firms: evidence from India. *International Journal of Public Sector Management*, 9(3), pp. 4-17.

Ranfagni, S. and Guercini, S., (2014). *Guanxi* and Distribution in China: The Case of Ferrero Group. *The International Review of Retail, Distribution and Consumer Research*, 24(3), pp. 294-310.

Ren, J.M., (2014) Officialdom interpersonal relations and political ecology. [Online]. Guang min wang. Available at: http://www.gmw.cn/xueshu/2014-09/10/content_13135988.htm and http://www.gmw.cn/xueshu/2014-09/10/content_13135988_2.htm [Accessed: 25 March 2015]

Riege, A. M., (2003). Validity and reliability tests in case study research:a literature review with "hands-on" applications for each research phase. *Qualitative Market Research: An International Journal,* 6(2), pp. 75-86.

Ryall, M.D., (2013). The New Dynamics of Competition: an emerging science for modeling strategic moves. *Spotlight on Strategy for Turbulent Times, Harvard Business Review*, June, pp. 80-87.

Salavou, H.E., (2013). Hybrid strategies in Greece: a pleasant surprise. *European Business Review*, 25(3), pp. 301-314.

Sathe, V. (1985). *Culture and related corporate realities: Text, cases and readings on organizational entry, establishment and change.* Homewood: Irwin.

Saunders, M., Lewis, P., and Thornhill, A. (2015). *Research Methods for Business Students.* 7th ed, London: Pearson Education Limited.

Schein, E.H., (1984). Coming to a new awareness of organizational culture. *Sloan Management Review,* 25(2), pp. 3-16.

Sekaran (2003). *Research Methods for Business: a Skill Building Approach*, 4th ed, New York: Wiley.

Sharma, G., (2011). Do SMEs need to strategize?. *Business Strategy Series*, 12(4), pp. 186-194.

Sheehan, N.T., (2005). Why old tools won't work in the "new" knowledge economy. *Journal of Business Strategy*, 26(4), pp. 53-60.

Shen, S.Q. and Li, J., (2012). Practice and Thinking Derived From Drug Bidding and Separation Reform of Drug with Medical Service. *China's Medical Insurance*, pp. 68-70.

Shou, *et al*., (2011). The many faces of trust and *guanxi* behavior: Evidence from marketing channels in China. *Industrial Marketing Management*, 40, pp. 503-509.

Silva, D.G., Kosmopoulou, G., and Lamarche, C., (2008). The effect of information on the bidding and survival of entrants in procurement auctions.

Journal of Public Economics, 93, pp. 56-72.

Smith, D. (2006). *Exploring Innovation.* Europe: McGraw-Hill Education.

Smith, J.A. (1995). *Semi-Structured Interviewing and Qualitative Analysis* in: Smith, J.A. Harre, R. and Langenhove, L.V. (Eds). *Rethinking Methods in Psychology.* London: SAGE, pp. 9-26.

Song, L. J. and Werbel, J.D., (2007). *Guanxi* as Impetus? Career Exploration in China and the United States. *Career Development International*, 12, pp. 51 – 67.

Standifird, S.S. and Marshall, S., (2000). The Transaction Cost Advantage of *Guanxi*-Based Business Practices. *Journal of World Business,* 35(1), pp. 21-42.

Sterling, J., (2003). Translating strategy into effective implementation: dispelling the myths and highlighting what works. *Strategy & Leadership*, 31(3), pp. 27-33.

Stiglitz, J.E., (1996). Some lessons from the East Asian miracle. *The World Bank Research Observer*, 11(2), pp. 151-77.

Stiles, J., (2003). A philosophical justification for a realist approach to strategic alliance research. *Qualitative Market Research: An International Journal,* 6(4), pp. 263-271.

Sutherland, E., (2014). Lobbying and litigation in telecommunications markers-reapplying Porter's five forces. *Info,* 16(5), pp. 1-18.

Szeto, R., Wright, P.C., and Cheng, E., (2006). Business Networking in the Chinese Context. *Management Research News*, 29(7), pp.425-438.

Tan, J., Yang, J., and Veliyath, R., (2009). Particularistic and system trust among smalll and medium enterprises: A comparative study in China's transition economy. *Journal of Business Venturing*, 24(2004), pp. 544-557.

Tang, X.L., (2013). The new GMP incubates reform dividend. [新 GMP 孵化改革红利]. Translated from Chinese by Xu Bo. *Medicine economic news*, GZ China.

Tao, F.F., (2012). Where can the drug centralized bidding go. *Capital Medicine*, pp. 11.

Thurlby, B., (1998). Competitive forces are also subject to change. *Management Decision London*, 36(1), pp. 19-24.

Tong, J. and Mitra, A., (2009). Chinese cultural influences on knowledge management practice. *Journal of Knowledge Management*, 13(2), pp. 49-62.

Truex, R., (2014). Consultative Authoritarianism and Its Limits. Comparative Political Studies. [Online]. Available: http://cps.sagepub.com/content/early/2014/06/06/0010414014534196, [Accessed 3 November, 2015].

Tsang, E.W.K., (2014). Case studies and generalization in informaation systems research: A critical realist perspective. *Journal of Strategic Information Systems*, 23, pp. 174-186.

Vining, A.R., (2011). Public agency external analysis using a modified "five forces" framework. *International Public Management Journal,* 14(1), pp. 63-105.

Wang, B., (2011). Research report on the Centralized Drug Purchase. *Chinese Pharmaceutical Affairs,* 25(1), pp. 16-24.

Wang, D. and Ap, J., (2013). Factors affecting tourism policy implementation: A conceptual framework and a case study in China. *Tourism Management*, 36, pp. 221-233.

Wang, G., Wang, X. and Zheng, Y., (2014), "Investing in *guanxi*: An analysis of interpersonal relation-specific investment (RSI) in China", *Industrial Marketing Management*, 43(2014), pp. 659-670.

Wang, J. and Li, J., (2013). The Compartive Differentiation Analyses of the Tranditional Chinese Medicines between Provincial Essential Supplemented Drugs Lists and the National Basic Medical Insurance List. *Chinese Health Management*, 12, pp. 902-906.

Wang, J., Fu, G. and Li, D., (2015). Analysis on Phenomenon of Secondary Bargaining in the Process of Purchasing Practice for Pharmaceuticals. *Soft Science of Health,* 29(8), pp. 476-478.

Wang, W. and Chang, P.P., (2009). Entrepreneurship and strategy in China: why "Porte's five forces" may not be. *Journal of Chinese Entrepreneurship*, 1(1), pp. 196.

Wang, W.J., (2011). New version GMP, Pharmaceutical companies raise the quality price game. *China Business News*, Beijing, China.

Wang, X., (2007). The Corruption Case of State Food and Drug Administration. *Procuratorial Daily*, 10 July, 5th edn, pp. 1-3.

Wangyi (2014). *The director and vice director of Pricing Department of the*

national development and Reform Commission were arrested [Oniline]. Available at: http://money.163.com/14/0928/20/A78OBAFH00252G50.html [Accessed: 8 April 2015]

Warren, D.E., Dunfee, T.W., and Li, N., (2004). Social exchange in China: the double-edged sword of *guanxi. Journal of Business Ethics,* 55(4), pp. 355-372.

Weber, R. (1997). *Ontological Foundations of Information Systems*, Coopers & Lybrand, Melbourne.

Wei, H. and Xi, Y.M., (2001). Is *guanxi* a model of China's business?. *Asia Pacific Management Review*, 6(3), pp. 295-304.

Wei, J.R. and Luo, C.Y., (2013). The analysis of interests group impact on public policy making. [利益集团对公共政策制定的影响分析]. *Journal of Inner Mongolia Agricultural University (Social Science Edition)*, 15(71), pp. 9-11.

Wellman, B., Chen, W., and Dong, W., (2002). Networking *Guanxi*, In Gold, T., Guthrie, D. and Wank, D. (Eds.). Social Networks in China: Institutions, culture, and the changing nature of *Guanxi*. *Cambridge University Press*, pp. 221-241.

Wen, X.G. and Fang, Z.W., 2014. *Blue Book of China's Medical Reform: Annual Report on Reform of Medical and Health System in China (2014-2015)*. 1st ed. Beijing: Social Sciences Academic Press(China).

Wilpert, B.and Scharpf, S.Y., (1990). Intercultural management: joint ventures in the People's Republic of China. *International Journal of Psychology*, 25, pp.643-56.

Winn, D. and Williams, C.K., (2012). Principles for conducting critical realist case study research in information system. *MIS Quarterly,* 36(3), pp. 787-810.

Wint, A.G., (1998). The role of government in enhancing the competitiveness of developing economies: Selective functional intervention in the Caribbean. *International Journal of Public*, 11(4), pp. 281-299.

Wong, M., (2007). *Guanxi* and its role in business. *Chinese Management Studies,* 1(4), pp. 257-276.

Wu, Y.N. and Yang, Y.S., (2014). The competition situation analysis of shale gas industry in China: Applying Porter's five forces and scenario model. *Renewable and Sustainable Energy Reviews*, 40, pp. 798-805.

Xi, X.Y., Zhu, Y.M., and Zhu, S. Z., (2012). Review of Pharmeceutical Industry Policy in China. *China Academic Journal Electronic Publishing House,* 10(4), pp. 6-18.

Xie, E., Peng, M.W., and Zhao, W., (2013). Uncertainties, resources, and supplier selection in an emerging economy. *Asia Pac J Manag*, 30, pp. 1219-1242.

Xing, Y.W., (2006). Pharmaceutical Industry Policy Research. *Exploration of economic problems*, 3, pp. 95-97.

Xu, K. and Li, Y.Z., (2013). Exploring *guanxi* from a gender perspective: urban Chinese women's practices of *guanxi. Gender, Place and Culture,* 22(6), pp. 833-850.

Xue, Y., (2015). How to reach goal that public hospitals pay within 30 days?. [医院 30 天付药款,目标如何实现]. *Jiankangbao*, 7th April, p. 1-2.

Yang, F.X. and Lau, B.M.C., (2015). Does workplace *guanxi* matter to hotel

career success?. *International Journal of Hospitality Management,* 47, pp. 43-53.

Yang, F.X., Meng, V., and Lau, C., (2015). Does workplace guanxi matter to hotel career success?. *International Journal of Hospitality Management*, 47, pp. 43-53.

Yang, H.T. and Jiang, Y., (2008). Management of the Relation Between the Enterprise and Supplier Based on the Chinese GUANXI Culture: A case analysis from SRM of Illumination Company. *2008 4th International Conference on Wireless Communications, Networking and Mobile Computing, Oct.*, pp. 1-4.

Yang, J. and Yang, S., (2013). A Comparative Analysis of the Provincial Essential Medicine Supplementary Lists of 29 Provinces of China. *China Licensed Pharmacist,* 10(4), pp. 9-16.

Yang, M.M. (1994). *Gifts, Favors, Banquets: The Art of Social Relationship in China.* Ithaca, New York: Cornell University Press.

Yen, D.A. Barnes, B.R. and Wang, C.L., (2011). The measurement of *guanxi*: Introducing the GRX scale. *Industrial Marketing Management,* 40(2100), pp. 97-108.

Yen, Y.F., Wang, H.K., and Kao, W., (2015). High-performance work practices and organizational performance in small firms: the role of *guanxi. Total Quality Management & Business Excellence,* pp. 1-19.

Yeung, I.Y.M. and Tung, R., (1996). Acheving Business Success in Confucian Societies: The Importance of *Guanxi* (Connections). *Organizational Dynamics*, Autumn, pp. 54-65.

Yi, G. 2014. *A profound understanding of the new trend of economic*

development in China: China''s economic networks [Online]. Available: http://www.ce.cn/xwzx/gnsz/gdxw/201411/03/t20141103_3832811.shtml [Accessed 5 May 2015]

Yi, S., *et al*., (2014). The existing circumstances and insights of the centralized procurement bidding in China. *China Journal of Modern Medicine,* 24(33), pp. 106-109.

Yin, R.K., (2014). *Case Study Research: Design and Methods. 5th* ed. London: SAGE.

Ying, F., (2007). "*Guanxi"* government and corporate reputation in China, Lessons for international companies. *Marketing Intelligence & Planning*, 25(5), pp. 499-510.

Yoo, J.W., Lemak, D.J., and Choi, Y., (2006). Principles of management and competitive strategies: using Fayol to implement Porter. *Journal of Management History,* 12(4), pp. 352-68.

Yu, J., (2011). Research on the development strategy of Chinese Pharmaceutical Enterprises. *China Academic Journal Electronic Publishing House*, pp. 3-4.

Yu, T.F.L., (2000). A new perspective on role of the government in economic development: Coordination under uncertainty. *International Journal of Social Economics*, 27(7/8/9/10), pp. 994-1012.

Yu, W., (2007). Facing the Predicament of China's Medical Reform. *Money China,* pp. 64-77.

Yuan, D.F., (2014). Study on Impacting Mechanism of Institutional Quality for

Economic Growth of China during Economic Transition Period. *Economic Analysis of Law Review*, 5(2), pp. 220-243.

Yuan, *et al., (*2014). How FIEs may sustain competitive advantage in China: Adapting marketing strategy by the use of *Guanxi. Baltic Journal of Management,* 9(1), pp. 22-46.

Zhai, Q., Lindorff, M., and Cooper, B., (2013). Workplace *Guanxi*: Its Dispositional Antecedents and Mediating Role in the Affectivity-Job Satisfaction Relationship. *Journal of Business Ethics*, 117(3), pp. 541-551.

Zhai, X. (2011). *The Principles of Chinese Guanxi: Time-space Order, Life Desire and Their Changes.* [中国人的关系原理：时空秩序、生活欲念极其流变]. Beijing: Peking University Press.

Zhang, B., (2015). China's Economic Transition Syndrome. *China & Economy*, 23(3), pp. 59-78.

Zhang, W.H. (2007). *Social Capital: theoretical debase and experiential research.* [社会资本：理论争辩与经验研究]. Shanghai: East China University of Science and Technology Press.

Zhang, Y. and Zhang, Z., (2006). *Guanxi* and Organizational Dynamics in China: A Link between Individual and Organizational Levels. *Journal of Business Ethics*, 67, pp. 375-392.

Zhao, J., (2009). Diversified business groups and corporate restructuring in China. *Management Research News*, 32(9), pp. 874-887.

Zhao, J. N., (2014). Three officials of the NDRC price department were took

away: The Beijing News [Online]. Available at: http://business.sohu.com/20140930/n404782103.shtml [Accessed: 19th March 2015]

Zhao, S.N. and Timothy, D.J., (2014). Governance of red tourism in China: Perspectives on power and *guanxi. Tourism Management*, 46(2015), pp. 489-500.

Zhao, X.D., (2012). The natural boundary to government intervention of economy. *China Academic Journal Electronic Publishing House,* 2012(5), pp. 27-31.

Zheng, X.S., (2015). Performance Measurement and Competitive Strategy Development of State-owned Enterprises in China. *European Journal of Business and Economics*, 10(1). 06/04/2015.

Zhou, T., (2014). The curuption of supplemented essential drugs list: National Heal and Family Planning Commission (HFPC) required to restrict list. *Caixin Web*,[Online]. Available at: http://china.caixin.com/2014-09-06/100725982.html, 6 September, [Accessed 29 September 2015]

Zhou, X.H., (2011). Relationship Marketing Based on Chinese Culture. [基于中国文化的关系营销研究]. *Commercial Research,* 407(3), pp. 30-34.

Zhu, *et al*., (2013). HR practices from the perspective of managers and employees in multinational enterprises in China: Alignment issues and implications. *Journal of World Business*, 48, pp. 241-250.

Zhuang, G.J., (2012). *Guanxi* of cultural connotations in China: From angle of view of management academician. [关系在中国的文化内涵：管理学者的视角]. Translated from Chinese by Xu Bo. *Modern Economic Science*, 34(1), pp. 18-29.