ISCTE IUL
Instituto Universitário de Lisboa

Complementary Resources, Entry Mode and the Performance of Diversified Subsidiaries: Empirical Research Based on China National Tobacco Corporation

LI Jun

Thesis submitted as partial requirement for the conferral of the degree of

Doctor of Management

Supervisor:

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Abstract

This dissertation explores the relationship between the complementary resources and entry mode in diversification transformation strategy of China National Tobacco Corporation adopting resource dependence theory and resource base theory. We use “multiple regression empirical analysis method” and “longitudinal case study” approach to test whether the complementary resources and entry mode are related to diversified subsidiary’s performance. We address two main research questions: a) how does diversified subsidiary’s dependence on the main business’ resources affect its performance? And b) whether do entry mode have influence on the relationship between the complementary resources and diversified subsidiary’s performance.

We conduct an extensive literature review and proposed relevant theoretical hypotheses of the relationship among the complementary resources, entry mode, and diversified subsidiary’s performance. We survey on resource complementarity, entry mode and performance based on questionnaire distributed to the top management in both CNTC and its subsidiaries and verify our hypotheses using raw date from 196 valid questionnaires. It is found that remarkable positive relation is only found between resource complementarity and diversified subsidiary’s financial performance, and diversified entry modes exert a moderating effect on resource complementarity’s relations with diversified subsidiary’s performance, financial performance and growth performance. Further, we explore the evolving relationship of the resource dependency and entry mode in the corporation’s diversification in a dynamic perspective based on a longitudinal case drawing on a rich array of documents from CNTC’s progressing in strategic transformation. Our findings have practical significance in the design of a gradual diversification transformation strategy, and especially to managers of CNTC which diversification has become an inevitable choice due to increasingly tight smoke-free policy.

Keywords: Complementary Resources; Entry Mode; Subsidiary’s Performance;

Chinese Tobacco Industry; Diversification Transformation Strategy

JEL: L66; M0

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Resumo

Esta dissertação explora a relação entre os recursos complementares e modo de entrada na estratégia de transformação de diversificação da China National Tobacco Corp, adoptando a teoria de dependência de recurso e teoria de base de recurso. Utilizamos a abordagem do “método de análise empírica de regressão múltipla” e “estudo de caso longitudinal” para testar se os recursos complementares e o modo de entrada estão relacionados como desempenho do subsidiário diversificado. Abordamos duas questões de pesquisa principais: a) como é que a dependência do subsidiário diversificado nos recursos do negócio principal afecta o seu desempenho? E b) se o modo de entrada tem influência na relação entre os recursos complementares e o desempenho do subsidiário diversificado.

Realizamos uma revisão literária extensa e propomos as hipóteses teóricas relevantes da relação entre os recursos complementares, modo de entrada e desempenho do subsidiário diversificado. Pesquisamos a complementaridade de recurso, modo de entrada e desempenho com base no questionário distribuído na gestão de topo da CNTC e suas subsidiárias e verificamos as nossas hipóteses utilizando os dados de 196 questionários válidos. Descobrimos que a relação positiva notável é unicamente encontrada entre a complementaridade de recurso e o desempenho financeiro do subsidiário diversificado, e modos de entrada diversificados exercem um efeito moderado nas relações de complementaridade de recurso com o desempenho do subsidiário diversificado, desempenho financeiro e desempenho de crescimento. Além disso, exploramos a relação em evolução da dependência de recurso e modo de entrada na diversificação da corporação numa perspectiva dinâmica com base num desenho de caso longitudinal sobre uma matriz rica de documentos do progresso de transformação estratégica da CNTC. Os nossos resultados têm um significado práctico no design de uma estratégia de transformação de diversificação gradual, e especialmente para os gestores da CNTC os quais a diversificação se tornou uma escolha inevitável devido à política contra o tabaco cada vez mais apertada.

Palavras chave: Recursos Complementares; Modo de Entrada; Desempenho do Subsidiário; Indústria do Tabaco Chinesa; Estratégia de Transformação de Diversificação

JEL: L66; M0

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摘要

随着经济的发展，人们健康意识不断提升，对烟草制品危害社会环境和人类健康的问题有了更高的认同，控烟越来越成为了各国政府的共同选择。为此，烟草企业为了持续发展，实施多元化战略是一条必经的转型之路。然而，如何成功进行多元化转型是烟草集团亟需思考的战略问题。

本研究整合运用资源依赖理论和资源基础理论，分析与主业资源的依赖关系对多元化转型子企业的绩效影响，以及多元化转型子企业的创设方式对其资源依赖与绩效的调节作用。在本研究的具体设计中，首先本文用资源互补性来刻画战略转型企业主业与多元化投资子公司业务的资源依赖关系；用进入模式来描述战略转型企业进入新的产品市场时的制度安排（即产权结构）；用财务绩效和成长绩效来度量多元化投资子公司的绩效。然后，用来自于中国烟草总公司的 196 份有效问卷作为样本，通过多元回归方法实证分析资源互补性、进入模式与多元化投资子公司的绩效关系，以探究企业多元化战略转型机制。最后，本文还基于对中国烟草多元化战略转型演进过程进行纵向案例分析，研究企业多元化战略转型的动态演化过程。

本文研究结果表明：（1）资源互补性与企业绩效之间的正向关系假设没有得到支持。本文又将企业绩效进一步解构为财务绩效和成长绩效两部分进行研究时发现，资源互补性对企业的财务绩效有显著的正向影响，而资源互补性对企业的成长绩效却是具有显著的负向影响；（2）在独资创设模式下，资源互补性与企业绩效是负向关系。在独资创设模式下，资源互补性与企业财务绩效是负向的关系，而资源互补性与企业成长绩效是正向的关系；（3）在合资创设进入模式下，资源互补性与企业绩效有正向关系。在合资进入模式下，资源互补性与企业财务绩效有正向关系，资源互补性与企业成长绩效也是正向关系；（4）多元化进入模式对资源互补性与企业绩效的关系、资源互补性与财务绩效的关系以及资源互补性与成长绩效的关系均有一定的调节作用。

本文最后总结了研究的主要结论，探讨了本研究的管理实践意义，指出了研究的不足并提出了后续的工作展望。

关键词：资源互补;进入模式;子公司绩效; 中国烟草; 多元化转型战略

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Chapter 1: Introduction

1.1 Research background

1.1.1 China National Tobacco Corporation's Diversification under Regulatory Pressure

China National Tobacco Corporation [CNTC], was established in January, 1982, with RMB 57 billion as its registered capital, RMB 969.9 billion as its total asset and RMB 803.2 billion as shareholder's equity (Li & Zheng, 2016). It is a national economic entity with legal person status that integrates agriculture, industry, commerce and trade. The main business of CNTC is to operate and manage production, supply, sales, import & export and economic and technological cooperation with foreign countries in a centralized and unified manner, in accordance with national planning, relevant regulations, statutes and policies of state laws and the State Council. By the end of 2016, there were 550,000 employees in the national tobacco industry, 58 subordinate organizations, 446 corporations of municipal level, 2,283 sales branches of county level, 105 cigarette industry corporations and cigarette machine manufacturing corporations, 56 tobacco re-drying corporations and 140 other institutions and corporations. By the end of 2015, the total assets of the industry amounted to RMB 1.71113 trillion and the owner's equity was RMB 1.46514 trillion.

CNTC is a state-owned corporation authorized by the Chinese government to execute tobacco monopoly under the leadership of the State Tobacco Monopoly Administration. China's tobacco industry is administrated in the system of unified leadership, vertical management and monopoly franchise. The State Tobacco Monopoly Administration manages people, finance, materials, production, supply, sales, import, export and trade of the national tobacco industry. Tobacco's monopoly franchise system in China includes three statutory licensing systems, which are respectively for production, import and export of monopolized tobacco products; sales and operational entity of monopolized tobacco products; transportation of monopolized tobacco products.

Tobacco industry is quite peculiar. Tobacco business has certain financial and economic value, yet along with the development of economy, people have become more aware of their health. They now have a better understanding of how tobacco products threat social environment and do harm to human health. Tobacco control has become a common choice for national governments likewise. On 21st May 2003, the World Health Organization adopted the treaty of the *World Health Organization Framework Convention on Tobacco Control* [WHO FCTC]. It appealed to all countries to carry out international cooperation as wide as possible to control the tobacco epidemic. China officially ratified the WHO FCTC on 10 November 2003. Along with further implementation of the WHO FCTC, the Chinese government has taken measures on price, increase taxes (In May 2015, the Ministry of Finance of the People's Republic of China and the State Administration of Taxation jointly issued on Adjusting the Consumption Tax on Cigarettes. Adjusting the consumption tax of cigarettes, is, in other words, increasing taxes and raising the price of cigarettes through raising ad valorem tax rate in wholesales and impose specific tax.) to limit consumption of cigarettes for instance. Moreover, a series of administrative regulations have been introduced to manage cigarette consumption behavior. For example, from 2013, central and local People's Congresses of various levels have been developing regulations against smoking in public places. Further amendments on the *Advertising Law* and *Tobacco Advertising Management Provisional Regulations* have comprehensively banned tobacco advertisements, promotions and sponsoring. Central and local governments of various levels have prohibited cigarettes customized for official use.

Therefore, the above regulation-based factors have been squeezing up CNTC's room of survival and development. It is an urgent strategic task for CNTC to figure out how to survive and develop. Along with the implementation of WHO FCTC, tobacco industry in some developed countries has shown signs of collapsing. The success of international tobacco giants' diversification strategy provides a reference for CNTC's development. At present, aside of industrial and commercial taxes paid to the state, CNTC still has much fund for industrial investments. Additionally, thanks to the production technology upgrades in the tobacco industry, the parent company had a large number of redundant employees. In order to create more space for the corporation's development while making it sustainable, implementing diversification strategy is a transformation that CNTC has to undertake.

It has been more than 20 years since CNTC first started diversification in 1990. But, how should diversification be carried to make business profitable? How to make diversification the new highlight of economic growth in the corporation, and moreover, the momentum of continuous and sound development of the industry? Such questions are constantly disturbing the strategic executives of CNTC. The strategic issue to be carefully considered and studied here for CNTC is how to successfully apply diversification. Under such circumstances, to examine the predicament that China's tobacco industry has been facing and to study its diversification has become the most critical issue.

1.1.2 Diversification of Chinese Corporations in Transition

With the development of Internet technology and the wide application of information technology, corporations are placed in a more and more complicated and dynamic environment while facing increasing challenges. In the background of reform and opening up and constantly evolving and changing market economy, China is now more involved in the global economic integration than ever. In the meantime, with China's economy entering a new phase, its economic development method has changed. Chinese corporations are challenged by excess capacity, rising operating costs and lower margin. In this context, to tackle the above-mentioned threats and enable sustainable development, the only way out for most of the Chinese corporations is transformation.

A corporation who adopts strategic transformation would normally adopt industrial shift. For such shift from one industry to another, it does not matter if its longer-ter m strategic target was to fully exit the old industry or partially retaining business in t he old industry. Adopting diversified development is an important strategy in the grad ual strategic transformation. During transformation, with Chinese corporations' continuo us adaptation to external and internal strategic environment, its strategic response has significantly evolved from passive strategic adaptation to active strategic choices (Tan &Tan, 2005). The gradual diversification is a manifestation during that evolution.

1.1.3 Researches about Corporate Diversification in Literatures and the Gap

Facing the constantly changing external business environment, corporate strategic transformation has become a heated topic in practice circles. Compared to the practical application of corporate strategic transformation, there are deficiencies in relevant researches in the academic world (Li, Xue, & Niu, 2015). For example, although diversified development has become one of the choices in corporation’s strategic transformation, it is yet rarely seen in the academics to study corporation’s diversified development from the strategic transformation perspective. Especially, it was rarely studied that how would the inter-dependency of the resources in the old industry and the newly-entered one and the diversified entry mode’s influence on the performance of a diversified corporation.

Although as a choice of business expansion, diversification for corporations has drawn attention from the academics for a long time, with many substantial findings on relevant researches. However, these researches on diversification were carried out from the perspective of corporation expansion. Accordingly, those researches featured performance relationship of diversified strategy and the diversified parent company as investor, not the performance of the diversified investment subsidiary. Yet as diversification is an important tactic in the gradual strategic transformation of the corporation, the diversified investment subsidiary is responsible for pursuing new economic drivers and revives the corporation itself. Thus in the study of perspectives of diversification transformation, it is rather important to study the influence of the resource-wise inter-dependency between diversified subsidiary and parent corporation on the subsidiary. However, literature on corporate diversification pay little attention to that aspect.

Resource based view believes that the unique resources and ability of a corporation and related isolating mechanisms are the core of its competitiveness in the market, determining the performance of the corporation. Corporate performance researches with resource based view emphasized how the resources owned or deployed by an organization have contributed to the corporation’s performance. These studies stress more on the closure knit of the organization. Nevertheless, since 1960s, both the impact of the environment on the organization and the relation between organization and environment has become an important topic in organizational researches. Open system views have become mainstream, which connects organizational issues and environmental issues. Among open system views, resource dependence theory, which originates from sociology, has become one of the most influential strategies in recent organization theories and strategic management, thanks to its active control of external environment (Hillman, Withers, & Collins, 2009).

Resource dependence theory regards organization and its surroundings interdependent. An organization can adjust its dependency on the environment through other alternatives instead of comply with the environment. Therefore, resource dependence is usually borrowed to explain how an organization can reduce its interdependence to the environment, as well as reducing uncertainties. When there is uncertainty and doubts in the interdependence among corporation and other organizations, it is more likely for a corporation to avoid such restraining interdependence through diversification. Diversification is an active strategic choice deployed by organizations to get rid of resource restraints. It is simultaneously viewed as an organization’s response to the environment. Diversification is to allow the organization to form another relation so as to counterbalance the underlying impact from existing inter-dependency. For example, CNTC developed its diversification transformation by entering into relationships that are not tobacco consumption related. Through this entry, CNTC established new environmental inter-dependency with other industries, which helped to counterbalance the mono-inter-dependency with tobacco consumption and prevented it from threatening the sustainability of the corporation. Therefore, it implies that the corporation is trying to stay away from its relatively weaker trading relationship, if this organization is bound by capital or legislation and fail to achieve external interdependence, that products diversification and industry’s diversification is implemented outside of the industry that the corporation belongs to. Progressively, diversification is also a tactic move towards diversified dependence and higher stability and certainty of the environment that the organization is in.

Take a panoramic view of relevant studies based on resource dependence theory; the author has drawn a conclusion as followed: Five research topics within the scope of organizational management based on resource dependence theory, namely merger and acquisition, joint venture, board of directors, political behavior and executive inheritance, have achieved certain research results (Hillman et al., 2009). But there are few studies on the diversely invested subsidiary (or it can be explained as subsidiary invested for diversification)'s dependence on the main business's resources of the diversifying parent corporation.

An organization may struggle to achieve external interdependence due to legal bindings. It is a much valued research topic of how to build up new environment dependence according to resource complementarity with existing resources during diversification.

1.2 Main Research Content and Methodology

1.2.1 Research Content

When encountering external changes of economy, technology and legislative environment, a majority of Chinese corporations have adopted diversified gradual transformation strategy to achieve industrial transfer. CNTC's diversification transformation is a typical case of Chinese corporations' practice of strategic transformation. Few existing researches have touched upon the reconstruction mechanism and process of resource dependence relationship in Chinese corporations' diversification in the perspective of resource dependence theory.

To specify, this research integrates resource-based view and resource dependence theory and studies the impact of resource dependence between the main business of the diversified corporation and the diversely invested subsidiary on the performance of the latter. Furthermore, this research introduces institutional variables to study how a strategically diversified corporation manages the dependence relationship according to institutional arrangement (ownership structure). Such premises are also applied to study how to adjust resource dependence's impact on diversely invested subsidiary's performance. In the design of this research, the author first uses resource complementarity to depict the resource dependence between the main business of the strategically transforming corporation and the diversely invested subsidiaries. An entry model is then adopted to describe the institutional arrangement (ownership structure) when entering into a new product market. Financial performance and growth performance are used to measure the diversely invested subsidiary's performance as a whole. After which, based on relevant definitions and measuring methods, data collected from questionnaires sent out to CNTC serves as research sample. In this method, empirical analysis is used to analyze resource complementarity, entry mode and performance relationship with diversely invested subsidiary, which helps study the corporation's strategic diversification mechanism. At last, the author carries out a longitudinal case study based on the process of CNTC's strategic diversification transformation, and through which, to study how the transformation itself evolved alongside this process.

The main content is arranged as below: First is literature on relevant topics. Then, the author thoroughly organizes researches related to resource complementarity, entry mode, performance of diversely invested subsidiaries. Based on existing research conclusions and logic deduction, the author proposes theoretical hypothesis and concept models about resource complementarity, entry mode and performance relationships of diversely invested subsidiaries. Next, the author carries out solid evidence analysis based on the solid data collected from questionnaires given out to subsidiaries of CNTC. In the meantime, this paper carries out longitudinal case studies towards the evolving process of CNTC's strategic diversification transformation through reading, organizing and analyzing of relevant documents of CNTC (including CNTC's *Annual Meeting Documents on Diversification*, *Guidelines Towards* CNTC's *Diversified Investment and Management*, some of CNTC's directors' speeches during the Eleventh's Five Year Plan, Twelfth's Five Year Plan and Thirteenth's Five Year Plan periods. In the end, the paper draws research conclusion and suggestions, providing CNTC and other corporations undergoing diversification transformation alike with executive advice on how to manage accumulated resource and resource relationship with diversely invested corporations.

This thesis consists of seven chapters which can be summarized as followed:

Chapter 1: Introduction. This chapter first elaborates the research background of this paper from the three perspectives of the diversification of CNTC under the regulative pressure, the diversified development of Chinese corporations in the phase of transition and the gap of the existing research on diversification transformation analysis. The main research contents and methods are illustrated. The technical road map is drawn as well. Finally, the author introduces the theoretical and practical significance of the paper as well as the deficiencies of the study.

Chapter 2: Theoretical review. This chapter summarizes the relevant theories and literature in the order of "diversification - diversified entry mode - resource base and diversified entry". It and determines the boundary and lays the theoretical foundation for the study. In particular, this chapter first introduces the theory and literature situation of diversification and corporate strategic transformation from three aspects: diversification concept, corporate diversification motive and corporate strategic transformation. Then, based on the definition of diversified entry mode and the existing literature on the cause and consequence of diversified entry mode choice, the author reviews the diversified entry mode and consequences followed by choice of the mode. Finally, related researches on the relationship of resources and performance of each entry mode are summarized.

Chapter 3: The third chapter is based on theoretical deduction and put forward the hypothesis. Based on the existing research on the relationship between resource structure and corporate performance, this chapter puts forward three hypotheses about the resource complementarity between diversified parent corporation's main business resources and the subsidiaries', as well as the relationship of such complementarity with the performance of the subsidiaries. Then, from the perspective of entry mode, based on the existing relevant research conclusions, the paper puts forward the three sets of hypotheses about how diversified entry mode will adjust the relationship between resource complementarity and performance of diversified subsidiaries. Finally, the conceptual model of this study is summarized.

Chapter 4: Research design and data acquisition. In this chapter, we mainly describe the measurement of dependent variables, independent variables and control variables, as well as the design and data acquisition of the questionnaire and the reliability and validity. Finally, the descriptive statistical analysis of the sample data is carried out. This chapter’s questionnaire data is from the CNTC.

Chapter 5: Empirical analysis. This chapter is based on data collected in chapter 4. Econometric model is built up from the two perspectives, namely the relationship between complementary resources and corporate performance as well as the adjustment effect of entry mode. This is to verify hypothesis proposed in chapter 3. Verification results are then further analyzed and explained.

Chapter 6: A longitudinal case study on the diversification transformation of CNTC. Case study in this chapter aims to further clarify the evolutionary relationship of resource complementarity and entry mode in the diversification of the corporation from a dynamic perspective. Then, CNTC's diversification development are separated into four phases based on different strategic targets, namely, initial phase, development phase, adjustment phase and synergy phase. Each phase demonstrates the resource dependence and choice of entry mode during diversification transformation of CNTC, as well as the performance of its diversified subsidiary. Lastly, according to the longitudinal evolution of diversification transformation, features of different phases of diversification and development route model are concluded from perspectives of momentum of diversification, relationship between industry newly entered and the main one, ownership arrangement (diversified entry mode), etc.

Chapter 7: Conclusion. This chapter illustrates the verified research conclusion on CNTC's diversification performance interpretation model from the perspective of resource complementary and entry mode. It also gives research conclusion on diversification case of CNTC, with advice and vision for CNTC on diversified fields to enter and the entry mode to use.

1.2.2 Methodology

1.2.2.1 Literature Research Method

Literature research method is mainly applied to the two cases in the thesis. In one case, by going through relevant literates, the author gains an overall understanding towards the scope of the research, summarizes current studies and investigates the possible gap and shortcomings so as to determine the research direction and the research content. In another, read more about existing literates and research results associated with the determined research direction and content. Then, deduce the theoretical hypotheses to be verified based on current research results.

1.2.2.2 Questionnaire-based Empirical Research Method

In this thesis, appropriate variables and measurable mode are selected for testing the unverified theoretical hypotheses. Data needed for empirical research is collected through designing and releasing questionnaires to sample corporations. Moreover, hypotheses are examined using the econometric model. This thesis mainly adopts multiple linear regression models to get the empirical result and the final conclusion.

1.2.2.3 Longitudinal Case Study Method

Case study is deemed as a sort of qualitative empirical research. Through an in-depth analysis of the case, it is possible to examine problems raised under the research framework more effectively (Pettigrew, 1990). Moreover, compared with other methodologies, case study is more suitable for the research on process and mechanism. Therefore, case study facilitates in describing and understanding the dynamic interaction process and the scenario context systematically so as to obtain a comprehensive and integrated viewpoint. Furthermore, by using case study method, researchers could examine the complexity of the object and make a full and solid analysis (Yin, 2009).

Hence, this thesis takes CNTC's diversified transformation as a case and carries out longitudinal study. It further explores how the corporation's resource dependence and entry mode supports and affects its diversified transformation strategy and their evolution problem during the transition.

1.2.3 Technical Route

The thesis mainly carries out the study from theoretical analysis to hypothesis to empirical test in order. Figure1-1 is the detailed technical route:

1.3 Theoretical Significance and Practical Value of the Research

Firstly, the study explores how resources of a transitioning corporation complement with that of diversified subsidiaries and how entry modes affect subsidiaries performance. The study is built upon resource dependence theory and resource-based view, explaining how new margins are created in a corporation's transition from a new perspective of resource endowment, that is, combine valuable, scarce, irreplaceable and inimitable resources from the outside with resources accumulated by the main business to retain its competitive edge.

Secondly, current studies on corporate diversification mostly focus on its impact on corporation performance while neglecting its association with diversified Subsidiaries' performance. This thesis bridges the gap by using the performance of diversely invested subsidiaries (i.e. diversified subsidiaries) to scale corporate diversification. This is because as the outcome of corporate diversification, diversely invested corporate performance should be set as an outcome variable in a study aiming to explore mechanism and pathway of corporate diversification. Moreover, since the performance of diversely invested subsidiaries is logically consistent with corporate diversification, so that the former is set as a proxy variable. With a variable conversion as such, the researcher is enabled to analyze corporate diversification in a microscopic manner.

Thirdly, existing case studies on resource dependence theory focus more on resource complementarity's connection with output performance than growth performance. In the study, both financial performance and growth performance are examined, as the former demonstrates the current development of invested subsidiary while the latter indicates its future growth to an extent. The diversified performance measurement not only serves as an indicator to the subsidiaries' current income, but also enables to forecast its role to play in the parent company's transition based on growth performance.

The study is also of practical significance in management. Now Chinese companies are placed in a rapidly-changing environment, with Chinese economy in upgrades and transformation. In such context, they are seriously threatened by technological evolution and new competitors' entry and might lose its competitive edge or even go bankrupt in a short time. Therefore, a gradual strategic transformation is a vital choice for corporations to tap new growth drivers through diversification. In this process, not only should subsidiaries make full use of the existing resources, but also improve its capability of controlling and managing

With the promotion of tobacco control policy, CNTC speeds up its transformation towards diversification. When it comes to the share holding pattern (organization mode) of diversely invested subsidiaries (i.e. organization model), CNTC is suggested to take account of the extent that the newly-entering industry depends on resources of the man business. For the diversified investment subsidiaries heavily relying on the main business's resources, the corporation should strengthen control, enhance minority investments and explore entry into new industries innovatively.

1.4 Main Innovation Points of the Study

The Study intends to make innovations in the following aspects:

The first innovation lies in its unique perspective of corporate strategic transformation to explore corporate diversification based on resource dependence theory. While existing studies focus on business expansion and the increase of resources (i.e. new resources gained in transition), the study makes exploration from the point of gradual transformation, stressing to transfer resources of main business and strengthen control.

Then, in exploring subsidiaries' dependence on existing resources of main business and its association with subsidiaries' performance, both financial performance and growth performance are set as dependent variables, while previous studies generally take the performance of diversified corporation as a variable.

Thirdly, although fruitful research results of resource dependence theory have been gained in five subjects of organization management, including merger and acquisition, joint venture, board of directors, political behavior and executive inheritance (Hillman et al., 2009), there is few study on diversified subsidiaries' dependence on the existing resources of a transitioning corporation.

The study tries to bridge the gap by applying resource dependence theory to corporate diversification study with CNTC as a case study. It not only analyzes how resource dependence influences the diversified subsidiaries' performance, but also illustrates how entry mode of subsidiaries associate with its resource dependence and performance.

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Chapter 2: Literature Review

Studies on corporate diversification can be traced back to 1950s (Ansoff, 1957). Along with the growing number of researches on corporate diversification strategies and developing economy, diversification strategy has been enriched with more significance in theoretical studies and corporate practice. This chapter will first look into diversification, then diversified entry modes, followed by resource base and diversified entry. The author will briefly review literature on diversification motives, diversified corporation's strategic transformation, choice of diversified entry modes, the relationship between resource base and the performance of corporations taking different diversified entries. This chapter will conclude scholars' research results in corporate resources, strategic transformation and relationship of diversification performance from domestic and abroad, hence help defining the scope and theoretical basis of this research.

2.1 Diversification and Corporate Strategic Transformation

2.1.1 Corporate Diversification Concepts

Corporate diversification strategy has always been a much valued research topic in strategic management (Yao, Lv, & Hailin, 2004). The definition of corporate diversification is, when the volume growth of the current categories cannot fulfill the corporation's ideal performance, it will strategically enter into new product categories, or, attracted by other high margin business first (Thompson & Strickland, 1995).

American scholar Ansoff is one of the earliest who has studied diversification. In 1957, Ansoff published *Strategies for Diversification* on *Harvard Business Review*, in which he stressed that diversification meant to use new products to open up new markets (Ansoff, 1957). In other words, when there are still potential space for development based on the corporation's existing resources, yet its current product line and market capacity are restraining its development or higher margin products emerged in the market, the corporation is compelled to implement diversification to produce new products or entering new markets to sustain its own development and realize its strategic targets. Different from Ansoff's way of defining corporate diversification according to the number of product categories in a corporation, Penrose (1959) stressed in his book *The Theory of Growth of The Firm* that diversification would take place with existing production lines and expand the production to more new products (including intermediate products). He pointed out that diversification would not only increase final products but would also increase basic operable domains of the corporation. Rumelt (1974) had further described corporate diversification as a competitive strategy in his research. To his knowledge, corporate diversification was based on certain diversification capability, original skills and fixed targets. It was a competitive strategy demonstrated through new activities originated from old ones. The essence of diversification behavior was to explore new fields. It was not only about forming new competitive advantages, but also strengthening competitiveness of main business by entering into upper stream and down stream of industry chain through diversification.

Oriented from different research objectives, academics had different categorization for corporate diversification. This paper had concluded some categorization methods as followed:

2.1.1.1 Related Diversification and Unrelated Diversification

Based on the correlation among diversification, the research will be treating the two types of it, including related diversification and unrelated diversification (Rumelt, 1982). Related diversification refers to the development strategy where a corporation develops new models using relevant existing production technique, skills, user resources and management skills to enter into relevant industries. Related diversification can be divided into technology related, sales related, production related and mix related of the former three. This is expanding the corporation's business scope centralized with the originate one. Normally this development strategy only applies to corporation with rather strong competitiveness in the current industry, yet facing with declining growth and attractiveness of the originate industry declines. Related diversification allows the corporation to acquire integrated advantage with its expertise in manufacturing, product knowledge, skills and technique. In this way, it is more profitable for two or more business to be operated integrated that independently, bringing in the synergistic effect of “1+1>2”.

Unrelated diversification refers to that the corporation adds a category of products completely irrelevant to existing products. Meanwhile, the corporation is facing with a whole new different market rather than the old one. This method treats the two business scopes that the corporation’s in as two centrifugal circles without overlap or crossover. Usually a corporation suitable for this strategy is in a slowing down and less attractive industry, yet the corporation itself does not have competitive advantage in this old industry. When a corporation is lack of rather strong skills and relevant capabilities to expand to products or services related to the main business, it is optimal to choose the unrelated diversification strategy.

2.1.1.2 Horizontal Diversification and Vertical Diversification

Based on the different orientation or corporate diversification, it was divided into horizontal diversification and vertical diversification (Ansoff, 1965). Horizontal diversifi cation refers that a corporation takes full advantage of its existing market advantage a nd social reputation and produce products of different technical requirements according to different users’ demand.

Vertical diversification, on the other hand, represents that a corporation adopts the upstream or downstream development strategy on the basis of its existing business.

2.1.1.3 Internal Diversification and External Diversification

According to the different entry mode for the corporation to enter into different product market, existing researches divided diversification into internal diversification (internally developed diversification) and external diversification (for example, external merger and aquisition for diversification) (Lamont & Anderson, 1985). In this classification method, internal and external refers to different models of a corporation entering different product market. Among that, internal diversification is to invest on establishing a completely new subsidiary and achieve self-reliant diversification. However, external diversification is the corporation to achieve diversification through acquisitions, joint ventures or strategic cooperation (for example, alliance) externally.

2.1.2 Motives of Corporate Diversification

Why would a corporation carry out diversification? This paper reviewed existing literature on motives behind diversification and deducted the perspectives as listed below:

2.1.2.1 Perspective of Resource-based View

Teece (1980) believed that some companies had excess resources, which, if not to be traded in the market, should be invested to diversified production for higher profit. Such resources could generally be divided into two. The first category was resources of high trading costs. The second was indivisible resources. These two types of resources would not be successfully traded in the market, thus a corporation with such excess resources would adopt diversification strategy. Montgomery and Wernerfelt (1988) believed that resources owned by a corporation can have discrepancy in specificity. Resources of higher specificity would potentially have excess return ratio, nevertheless, their usage would be limited in a smaller number of industries. This amplified that whether a corporation should deploy diversification strategy was determined by its resource heritage. In respect of that, for resources of low specificity, the corporation would be able to achieve higher profit through rather extensive diversified expansion.

2.1.2.2 Perspective of Asset Portfolio

This theory regarded corporate diversified investment to be risk-balancing and return-stabilizing. Markham (1973) deemed that as long as the cash flow of each business were incompletely relevant, the general volatility of cash flow, or rather, comprehensive risks, would decrease due to corporation's diversification. Lubatkin and Chatterjee's (1994) study demonstrated that diversification could help reduce certain risks and therefore create value for shareholders.

2.1.2.3 Perspective of Principal Agent Theory

The principal agent theory believed that the agent pursuing maximization of its own benefits might take actions inconsistent with the principal's interests (Jensen & Meckling, 1976). Administrative members might have adopted diversification merely to reduce their own employment risks and enhance wage, power and fame (Hoskisson & Hitt, 1990). This theory was presented in mainly three hypotheses: 1) Maximum growth hypothesis: According to Mueller (1969), since the ownership and the administrative authority are separated, the administrative staffs were very possibly to be motivated to enlarge the scale of the corporation. 2) Free cash flow hypothesis: When the industry became rather mature, the management would transfer cash flow on research and development to more investment opportunities. Jensen (1986) referred to it as the free cash flow hypothesis. Free cash flow theory implied that the management might conduct diversified merger and acquisition, which would depreciate the corporation's value. 3) Dispersion of manager's individual risks: As dispersed investment portfolio would help avoid risks, implement of diversification strategy in the corporation would help disperse manager's risks. Chinese scholars (Zhang, Li, & Xu, 2005) pointed out in their study that the rationale of improper diversified operation in Chinese corporations was mainly the prevalent existence of principal agency system.

2.1.2.4 Perspective of Government Policy and Regulation

One of the earliest relevant researches abroad believed that policies influencing corporate diversification the most were antitrust laws and taxation laws. Related studies showed that in 1960s, antitrust laws, which limited horizontal and vertical merger and acquisition, had resulted in the popularity of mixed diversification model during 1960s to 1970s. But when it came to 1980s, when the restrictions eased, merger and acquisition back to the main business had revived (Ravenscraf & Scherer, 1989; Markides, 1995). After which, Khanna and Palepu's (1999) research results proved that emerging economies entities and countries' corporate diversification was also influenced by national strategies, government policies and government's intervention in corporate operations. Relevant research demonstrated that there was still a comparatively big regulation difference between developed countries and emerging economic entities. In emerging economic entities, the relationship between the market and the government was obscure to a certain extent, while laws and legislation and other relevant regulations could be defective. Such factors would cast huge impact on corporation's strategic decisions of diversification.

2.1.3 Diversification and Strategic Transformation of a Corporation

Diversified investment is one of the crucial strategies in the gradual transformation and industrial transfer of a corporation. As the external environment had become more complicated and dynamic than ever, corporations were up against increasing survival challenges (Van De Ven & Poole, 1995). To confront threats in this environment and ensure their own sustainable development, many corporations were obliged to make the decision of strategic transformation. It is a strategic choice in corporation's transformation to enter into new product markets in diversification mode. Therefore, in existing researches, some scholars chose to use corporate products, operable market scope or change of operating geographic areas to define the corporation's strategic transformation. For example, Ansoff (1965) deemed that strategic transformation was a re-association of specific products from the corporation with market segments, as well as the reassignment of resources between them. Wiersema and Bantel (1992) defined the change of diversification degree of a corporation's products as strategic transformation.

Scholars from home and abroad had touched upon strategic transformation from three managerial logics, namely, corporation actively engaged, restrained by regulations and manager's strain behavior. Three theoretical perspectives were developed in this manner, which were resource and capability, external environment of the organization and characteristics and motives of the manager. In current studies on corporate strategic transformation, resource and capability perspective had become the mainstream.

From the managerial logic for which the corporation would actively engage in, researches on strategic transformation based on resource and capability perspective focused more on existing resources and capabilities' effects when the corporation was adapting to external environmental changes. It claimed to achieve optimization of economic performance by matching up the corporation and its environment (Kraatz & Zajac, 2001). Penrose (1959) treated resources as the driver of a corporation who was self-sustained in expansion and innovation, as well as pointed out the significance of historical resources in stimulating and guiding the strategic transformation and development of a corporation. Nevertheless, resource dependence theory suggested that an organization was interdependent with its surroundings. Therefore, resource dependence theory indicated that when a corporation was entering a new market in its diversification transformation, it should focus on establishing or controlling resource-complementary dependence relationships. In this way, it would be able to acquire resources needed to enter into the new market. Risks of corporate diversification would be lowered accordingly. For example, the entry mode of joint ventures is an approach for a corporation to acquire relevant resources. Hence, if the corporation has chosen diversification as its approach of strategic transformation, it will need to handle the relationship between historical resources and complementary resources as well as enhance the corporation's efficiency in diversification transformation.

2.2 Diversification Entry Modes and Selections

2.2.1 Concept of Diversification Entry Modes

If a corporation's development is analyzed from the dimension of finished product market, corporate diversification development refers to the behavior of a corporation developing new products for new markets. Corporate diversification entry mode is the method a corporation adopted to enter a new product market (a new industry). When implementing diversification strategy, a constantly asked question would be: in which way should the corporation enter into the new business?

The academia categorized various entry modes from different angles. For example, Root (1988) divided entry modes in the international market into three export entry mode (trade entry), contractual entry mode and investment entry mode. Meanwhile, Pan and Tse (2000) proposed a hierarchy model of market entry mode. Firstly, it divided entry modes into equity and non-equity modes. Secondly, it divided equity entry mode into wholly-owned and joint-venture modes. Apart from that, non-equity entry mode was separated into contractual and export modes. If the strategic entry mode in the corporation's diversification, it would be in regard with equity entry mode, which signifies the diversifying investing corporation's control and exposure to risk over the diversified subsidiaries under different entry modes.

Generally, a corporation can achieve diversification in equity entry mode in two ways, namely, wholly owned establishment entry and joint venture establishment entry. Wholly owned establishment entry happens when the corporation fully funded itself in establishing a completely new subsidiary and achiever diversification internally. Yet, joint venture establishment means that the strategic partners will jointly empower a new entity to expand to a new product or even a new market.

2.2.2 Causes and Consequences of Diversified Entry Mode Selection

In the implementation of diversified strategy, the first question to address is which method to adopt for new business exploitation, thus making the selection of entry mode a vital decision. Research on strategy management exploits the connection between entry mode and corporate performance from perspectives of industry, resource and institution (Peng, 2003). The industry-based view prioritizes factors like industry structure and competitive position and evaluates entry modes with transaction cost. Resource-based view upholds the idea that decisions on entry mode are determined by corporate resource in hand. Besides industry organization and corporate resource, those who hold institution-based view believe that social institutions in different countries and regions also affect corporate behavior.

Scholars in favor of resource-based (Wernerfelt, 1984; Barney, 1991) view believe that business expansion must be built upon sufficient resources and certain capability with core competitive edge placed at the center. That is why corporate resource is a vital factor for diversification. When new business is highly connected with original business scope in technology, production and market, namely, the new business is highly resource complementary, sole investment is recommended to realize efficient resource transfer, including the transfer of key know-how, technological development and management skills. Meanwhile, however, chances are corporations would confront with industry barrier or expected retaliation (Porter, 2004) imposed by existing companies. On the other hand, if there is no direct connection between corporation and diversified subsidiaries in technology, production and market, that is, with poor resource complementarity, a collaborative-invested mode might help to bridge the gap of resource, knowledge and capability, so as to realize a quick business expansion and excellent subsidiary performance.

2.3 Resource and Performance of Diversified Subsidiary

2.3.1 Resource and Corporate Competency

Starting from the mid-1980s, corporate resource theory has created a unique perspective in modern strategy management, which explores corporate competencies in distinct manner from the traditional industry-based view.

Resource-based view believes that it is unique corporate resource, capability and correspondent isolating mechanism that drives sustainable corporate growth and form corporate competencies, instead of market and industrial competition structure. As collections of both tangible and intangible assets, resource and capability, here, include capital fund, machinery equipment, management skills, organization design, information and knowledge about how to select and implement optimized operation strategy and etc. Not only does corporation have the ownership of “resource”, but also “capability” to put them into good use. As Penrose (1959) put it in her work, Enterprise Growth Theory, a corporation is both a unit of management and a collection of productive resource. Then, the possession of resource makes a corporation heterogeneous. Even with the same resource composition, productive service offered through resource input and use are unlikely the same and thus to cause corporation heterogeneity. To put it in simple, as a hierarchical body composed of diversified resources, a corporation’s expansion is restricted by its resources.

Resource-based view stresses the vital role of “resource” in identifying a corporation’s competencies and making strategic decisions. So here come questions like what does “resource” refer to? What resource contributes to corporate competencies? A number of related researches have been done to address the issues from different angles. Wernerfelt (1984), or instance, defines “resource” as tangible and intangible assets owned by corporations semi permanently. Grant (1991) regards “resource” as elements input in production process, including machinery equipment, patent, brand, employees’ personal skills and etc. “Resource” is defined by Amit and Schoemaker (1993) as element stock owned or controlled by a corporation, which can be transferred to final product or services under a certain mechanism. Amongst various definitions, the most far-reaching theory was proposed by Barney (1991) and Peteraf (1993). In Barney’s (1991) opinion, not all corporate resources manage to form corporate competencies, unless it is valuable, rare, inimitable and irreplaceable. Similarly, Peteraf (1993) proposes four basic conditions: the heterogeneity of resources, post competition constraint, imperfect mobility and prior competition constraint. Only with these conditions met, is it possible to turn resources into competencies. In addition, some scholars study other resources that maintain substantial competitiveness, including unique capability (Hitt, Hoskisson, & Ireland 1994), intangible asset (Itami & Roehl, 1987), organization culture (Barney, 1986), trust (Barney & Hansen, 1994), management skills (Powell, Koput, & Smith-Doerr, 1996), human resources (Amit & Schoemaker, 1993) and etc.

2.3.2 Resource and Diversification Strategy

Resource was firstly connected with corporate strategy by Penrose (1959). Grant (1991) pointed out that diversification strategy is, in fact, a means of resource distribution, which should be carried out by identifying, developing, fostering and improving heterogeneous resource. Also, diversification strategy is an upgrading of resource-based strategy.

Resource has been regarded as a critical element to interpret diversification strategy in theory (Chatterjee & Wernerfelt, 2010). Penrose believes that with years of accumulation, corporations accumulate abundant resources, especially the manager’s decision-making resources. To put these surplus resources into good use, the prioritized way to adopt is diversification. After dividing resources into material resource and human resource, Penrose advocates that diversification is restricted by the connection of tangible assets between corporation and subsidiaries. Wernerfelt (1984) also asserts that resource-based theory enables corporations to know what resources could push forward diversification and address the issues of key resources during expansion. According to Collis and Montgomery (1999) the internal driver for diversification is surplus corporate resources and excessive capability. Being hard to divide and costly to trade, it is difficult for corporations to put them on sales or on rent.

Through diversification, corporations are enabled to enter different industries and expand business scopes, with knowledge and experience enhanced and core strategic resources accumulated. Yet there are opposite voices on the relation between corporate resource and diversification strategy. Collis and Montgomery (1999) proposed that resources and capabilities, on the one hand, restricted the selection of diversification strategy; on the other hand, resources and capabilities in excess served as driving forces for diversification. Montgomery and Wernerfelt (1988) pointed out that multiple-used critical resources, excessive capabilities in possession and correspondent market opportunities are drivers of diversification. If applications of some critical or strategic surplus resources are limited, diversified strategy will be resorted. Kraatz and Zajac (2001) concluded that apart from positive effect, resources might impede strategic adjustment and do harm to corporate performance. That is because corporations with abundant resources are neither alert to environmental changes, nor motivated to pursue progress by learning, so that they have less wiliness to adjust strategy.

There are plenty of researches on how some specific resources influence diversification strategy. Markides and Williamson (1996) advocated that increasing research input gave impetus to diversification progress. Chatterjee and Wernerfelt (2010) divide corporate resources by resilience into tangible resources (factory building, equipment, technology, etc.), intangible resources and financial resources. The latter two, suitable for business expansion, are deemed as the most important drivers for diversified development. R&D cost and performance, for instance, are positively associated, since advertisement spending, R&D spending and capital investment help corporation to gain core skills and irreplaceable capabilities. Hence, the management is suggested to invest associated industries for diversification.

2.3.3 Resource Dependency and Diversification Performance

Scholars in favor of resource-dependence theory, represented by Madhok and Tallman (1998) advocate that resource dependence among organizations can be divided into endogenous dependence and exogenous dependence. Endogenous dependence, also called dependence in structural dimension, means that resources owned by different organizations are associated internally. It is due to the resource complementarity that brings about trade or economic collaboration among corporations. Exogenous dependence is aroused in trading process (in process dimension), as the trading partner possesses rare and irreplaceable resources. Diversification can be categorized into associated diversification and non-associated diversification by the relation between diversified development and existing products. Associated diversification refers to the strategy that corporations incorporate the existing production technology, experience, user resource, and management skills into new product development as a way to enter an associated industry. Therefore, associated diversified subsidiaries depend on parent company’s resources in structural dimension. Likewise, non-associated subsidiaries show dependence in process dimension.

Studies with diversified subsidiaries (i.e. resource-dependent focal companies) output performance as an outcome variable advocate that resource dependence among organizations can be divided into endogenous dependence and exogenous dependence. Endogenous dependence, also called dependence in structural dimension, means that resources owned by different organizations are associated internally. It is due to the resource complementarity that brings about trade or economic collaboration among corporations. Exogenous dependence is aroused in trading process (in process dimension), as the trading partner possesses rare and irreplaceable resources. Diversification can be categorized into associated diversification and non-associated diversification by the relation between diversified development and existing products. Associated diversification refers to the strategy that corporations incorporate the existing production technology, experience, user resource, and management skills into new product development as a way to enter an associated industry. Therefore, associated diversified subsidiaries depend on parent company’s resources in structural dimension. Likewise, non-associated subsidiaries show dependence in process dimension.

Studies with diversified subsidiaries (i.e. resource-dependent focal companies) output performance as an outcome variable, advocated by Gulati, Lavie, and Singh (2009) pointed out that if shareholders of the joint venture had partnership in the past, the co-founded subsidiary would gain higher market return. Williamson (1985) argued that cooperation built upon previous experience can be regarded as asset proprietary investment, from which learning would be more efficient.

Rumelt (1974) investigated 246 large-scale US corporations, which are parent companies of diversified subsidiaries, and took their performance as an outcome variable. The research result demonstrates that with associated diversification strategy adopted, corporations have an-average-better performance than others. By analyzing 680 listed companies, Chinese scholars, Fu and Yang (2005), also prove diversification's positive influence on corporate performance. Similar positive results were concluded by Zhao, Fang, and Yu (2005) as well.

2.4 Summary

Taking the transformation of CNTC as a case study, the thesis exploits resource complementarity between the main business of corporation and diversified subsidiaries as well as how entry mode influences the performance of diversified subsidiaries. The fundamental research target is to figure out how different modes of founding (entry), associated diversification or non-associated diversification, impose impact on the performance of diversified subsidiaries.

According to resource-based view, unique corporate resources and capabilities as well as correspondent isolating mechanism, determining factors for the corporate performance, provide momentum to substantial competitiveness. As a result, corporations in transition towards diversification should pay attention to the resource source of diversified subsidiaries. Despite many researches on diversification based on corporate resource, few literature discuss resource dependence between the main business and diversified subsidiaries from diversified subsidiaries' angle and exploit how founding mode of subsidiaries impact its performance.

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Chapter 3: Research Hypothesis and Theoretical Basis

This chapter is based on research results on the relationship between resource structure and corporate performance. From the perspective of resource complementarity, there is resource dependence between the main business resources and diversified subsidiary's resources. The author proposes hypotheses in this chapter about the relationship between such resource dependence and diversified subsidiary's performance. The author will then progress to the perspective of entry mode in the background of existing researches. Then the author will further develop hypotheses on how diversified entry modes can adjust resource complementarity and subsidiary's performance.

3.1 Relationship between Resource Complementarity and Diversified Subsidiary's Performance

In this research, resource complementarity refers to how inter-dependent are the main business's resources and the diversified subsidiary's resources. The idea of complementarity originated from geometry. As resource-based theory developed, complementarity was then used to describe how different resources could support each other. In other words, resources can have a better assembly effect together then separately.

The author's definition is identical to (Enrico, 2012) that complementary resources were corporation's internal resources with interconnection and mutual compensation and thus to become value-added. Meanwhile, Teece (1986) held the same opinion, that complementary resource was not a single type of resource, but the aggregation of multiple resources, and they were not exclusive to certain innovative behavior but contained in multiple innovative behaviors; together with the existence of other resources, they resulted in the appreciation of resource value (Teece, 1986). In many internal resources of a corporation, complementary resources were not enough to change the corporate performance. It would require the integration of other resources so as to generate synergy, and moreover, enhance and demonstrate corporate value (Blaek & Boal, 1994).

When a strategically transforming corporation is entering a new product market and forming a diversely invested subsidiary, the performance of the subsidiary will be influenced by the complementary relationship between resource capacity accumulated from the primary business of the parent company and internal resources of the subsidiary. First of all, during years of operation, certain know-how and techniques would have been acquired by the primary business. If such know-how and techniques become complementary with other resource-wise capability, the subsidiary's performance will be enhanced. Christmann (2000) found out in his resource-based research that exclusive complementary resources were the key resources determining corporate performance. Wang and Su (2014) introduced the idea of complementary asset into technology intermediary and pointed out that complementary asset was the source of corporation's competitiveness in the market. Wang and Su also verified that complementary asset of the technology intermediary could actively promote the technology transfer performance of a corporation. Secondly, after years of operations, a strategic transformation corporation would have abundant market resources. Its sales channels of the main business would significantly facilitate the business of the subsidiary. Song, Droge, Hanvanich, and Calantone (2005) researched and identified that the synergistic effect of market resources and innovation resources can effectively stimulate better performance from the corporation. In addition, Wang, Lo, and Yang (2004) showed that marketing skills and technology capability were the main drivers of a corporation's performance. Furthermore, the corporate reputation built from the primary business may become the complementary resources of the subsidiary. If other resources of the subsidiary can be complementary to the reputation of the strategically transforming corporation, it will enhance the performance of the subsidiary entering into a new industry. As was studied, a corporation's social reputation originated from a collection of characteristics related to its past behavior (Weigelt & Camerer, 1988), Brown's(1998) research indicated that, if a consumer could not acquire necessary information to evaluate the product characteristics before purchase decision, he/she would then make assumption based on his/her impression of the producer corporation. Thus, corporate reputation is a kind of intangible asset that is rare, valuable, sustainable and inimitable. It is also an important tool for a corporation to achieve strategic competitive advantage.

The overall performance of the corporation mainly includes two aspects: financial performance and non-financial performance. Among that, the financial performance shows how corporate operations in the past effect in financial income of the current period. We adopt corporate growth performance to measure non-financial performance, which signifies the long-term potential of corporation. Corporate growth could be observed from the increase of employees, socialization of the corporation (Bain, 1956) and the increase of sales (Song, 2004). Resource-based view believed that a corporation was a collection of resources of various functionality. Grant (1991) regarded corporate growth was determined by the exclusiveness between new investments and the corporation's existing resources; that was, if the two were highly relevant, it would facilitate the corporation's growth. Similarly, we could deduce from Grant's (1991) study that the stronger the resource complementarity was between the diversely invested subsidiary and the parent corporation, the more likely the parent company would provide more opportunities for the growth of subsidiary. It all would promote the corporation's growth performance. Secondly, in many years of operation, the parent company has accumulated abundant human resources, with quite a few experience managerial staff as well as employees with competitive technical skills. If the parent company's human resources become complementary with the resources required for the subsidiary's operation, it will boost development and innovation in management structure and operation methodology in the diversified subsidiary and promote the corporation's growth accordingly. Jia, Zhang, and Zhang (2013) refer that a corporation's innovation stemmed from employees' creativeness. In addition, Chen, Shi, and Wu (2015) had also verified in their research that the synergistic effect of human complementary resources and innovative resources can promote the growth of a corporation. Moreover, years' devotion in the primary business, the strategic transformation corporation should have accumulated certain know-hows, techniques, brand awareness, reputation and customer groups. If the parent corporation could enable the complementarity between such exclusive resources from the parent corporation and other resources from the diversified subsidiary, it would upgrade subsidiary's research and development capability, capacity and product sales volume and eventually the corporation itself (Fombrun, 2005; Batjargal, 2007).

To sum up, as diversified subsidiaries, if the unique resources and techniques provided by the parent corporation become complementary with it, its stronger dependence on complementary resources may improve its overall performance and its constitutional performance (financial performance and growth performance). Upon that, the author of this thesis proposed the following hypotheses.

Hypothesis 1: The higher the resource complementarity is, the better the subsidiary's performance will be.

Hypothesis 1a: The higher the resource complementarity is, the better the subsidiary's financial performance will be.

Hypothesis 1b: The higher the resource complementarity is, the better the subsidiary's growth performance will be.

3.2 Entry Mode's Moderation towards the Relationship between Resource Complementarity and the Diversely Invested Subsidiary's Performance

The diversified entry modes refer to the institutional arrangement (ownership structure) when the strategically transforming corporation enters into a new product market. Various entry modes reflect the ownership arrangement towards the diversified subsidiaries which are established based on the diversely investing parent company's control over complementary resources. From resource-based view, some resources would influence corporation's diversification entry mode; corporation's control over different resources determine the adoption of different entry modes (Anderson & Gatignon, 1986; Brouthers, Brouthers, & Werner., 2003). Thus, diversified entry is one of the most important strategic decisions in corporation's diversification transformation.

Observing the current progress of diversification in strategic transformation corporation, establishing corporations that are either wholly-owned or joint venture are the main two equity entry mode. These two types of establishment of diversified subsidiaries represent the parent corporation's degree of control over complementary resources. Thus, this research elaborated respectively on these two entry modes' moderating effect to resource complementarity and diversified subsidiary's performance.

3.2.1 The Regulatory Role of Wholly Owned Establishment Entry

In diversification, a corporation's choice of diversification entry mode is greatly influenced by the relevance of new product market that the company expects to enter to the company's current main business. Generally speaking, if the new market and the company's current main business share high relevance or similarity, the company normally would choose to establish a new business to enter the new market. This is because the various resources accumulated by the parent company's main business, to a large extent, can meet the need for the development of the newly established subsidiary. Also, this diversification entry mode can bring the company more synergy effect, which has been proved by the research of Pitts (1980). Additionally, as mentioned by Sharma (1998), compared with other diversification entry modes, when entering a relevant business area, it's easier for the wholly-owned subsidiary to utilize the resources accumulated by its parent company's main business to develop itself. Moreover, as mentioned by Yin and Wei (2000), effective transfer of key know-how, technological development capability and management skills can be achieved by entering the new market through wholly owned establishment. With the essential resources obtained from the parent company, not only will the subsidiary realize rapid and stable development, but also both the parent and the subsidiary can gain more profit with the synergy effect. It is also mentioned by Lubatkin (1983) that an important obstacle to the success of corporate diversification is the integration of dispersed business. Compared with a new business built through other modes, wholly owned establishment (subsidiary) can better adapt to the culture and systematic procedures of the parent company. More importantly, managers of the newly developed business have an extensive social network connecting enterprises and other business partners, which allows the new company the access to enormous intangible resources from the beginning and thus can greatly advance the company's business expansion and its growth (Zhou, 2008).

As above mentioned, by adopting the wholly owned establishment entry mode, the company undergoing strategic transformation can provide the newly established diversifying subsidiary with most relevant resources it needs to develop. Based on this, the following hypotheses are proposed:

Hypothesis 2: Under the wholly owned establishment entry mode, the higher the complementarity is between the main business resources of the company undergoing diversification transformation and those of the diversifying subsidiary, the better the performance of the diversifying subsidiary will be.

Hypothesis 2a: Under the wholly owned establishment entry mode, the higher the complementarity is between the main business resources of the company undergoing diversification transformation and those of the diversifying subsidiary, the better the financial performance of the diversifying subsidiary will be.

Hypothesis 2b: Under the wholly owned establishment entry mode, the higher the complementarity is between the main business resources of the company undergoing diversification transformation and those of the diversifying subsidiary, the better the growth performance of the diversifying subsidiary will be.

3.2.2 The Regulatory Role of Joint Venture Establishment Entry

Joint Venture Establishment entry is also another common entry mode (Roberts & Berry, 1985) during a company's diversification process. Firstly, the joint venture establishment entry not only allows the company the access to its partner's organizational knowledge and other resources, but also it enables the company to combine its own resources with those of the joint venture and thus can maximize the value of company's resources (Cai, 2010). It is also mentioned in Liu's (2008) study that joint venture establishment is a better way to share the research and development costs and risks, to speed up the technological R&D and product marketization. By establishing a joint venture, different parties can learn from each other, which will provide a broader and more flexible space for development than an individual company. In addition, joint venture is the most commonly adopted option for a company to enter a new market with restrictions, for example, Sino-foreign joint venture. A study by Yin

(2009) confirmed that the more constraints the host country's institutional environment imposes, the more likely it is Cai for foreign companies to establish a joint venture to enter the host market.

Companies can establish joint ventures through syndication. Once a joint venture is formed, it will exist as an independent economic entity with legal person status and its sustainable development will depend on the effective integration of the resources of different departments within the company (Li & Zhao, 2013). The competitive edge of a company comes from its core resources with heterogeneity which will maintain the sustainability of the company's competitive edge. As an economic entity, a joint venture cannot gain sustainable advantages without valuable, inimitable, rare and irreplaceable heterogeneous resources that are usually provided by the parent company. The realization of the value of those heterogeneous resources in the joint venture dictates the company (joint venture as in the above)'s final performance (Cai, 2010). It is also demonstrated by Barney's (1991) study that the resources of the joint venture provided by its parent directly influence the joint venture's value creation and hence determine the potential profit of the parent through such partnership.

As above mentioned, by adopting the joint venture establishment entry mode, companies undergoing strategic transformation, to a certain extent, can provide the diversifying subsidiary with necessary resources for development. Based on this, the following hypotheses are proposed:

Hypothesis 3: Under the joint venture establishment entry mode, the higher the complementarity is between the main business resources of the company undergoing diversification transformation and that of the diversifying subsidiary, the better the performance of the diversifying subsidiary will be.

Hypothesis 3a: Under the joint venture establishment entry mode, the higher the complementarity is between the main business resources of the company undergoing diversification transformation and that of the diversifying subsidiary, the better the financial performance of the diversifying subsidiary will be.

Hypothesis 3b: Under the joint venture establishment entry mode, the higher the complementarity is between the main business resources of the company undergoing

diversification transformation and that of the diversifying subsidiary, the better the growth performance of the diversifying subsidiary will be.

3.2.3 The Regulatory Role of Entry Modes

Entry mode refers to the way that a company undergoing diversification enters a new product market (new industry). Different diversification entry modes have different influences on the companies (Busija, O'Neill, & Zeithaml, 2007). Pitts (1980) mentioned in his study that a company will have more synergy through wholly owned establishment entry, whereas diversification through acquisition will give the new business managers more decision-making power so that they will be more focused on performance improvement. A similar view was also proposed by Ansoff in the discussion on "Make or Buy" as far back as 1965.

Moreover, from the perspective of incumbent companies' reaction, different diversification entry modes have different effects. Smiley (1988) mentioned in his study that the incumbents in the new industry will actively resist the new entrants by taking aggressive measures such as massive advertising and lowering prices, which will affect the business performance of the new entrants. Chatterjee (1990) pointed out that new entries being resisted is because the additional capacity brought into the industry will impose potential threats on the incumbents. If the new entry is made by acquiring an existing business, the incumbents will not expect an increase in productive capacity or price cuts. Hence, the incumbents will not retaliate against new entries, which will enable the acquisitive entrants to achieve the expected performance quickly and reduce the likelihood of their withdrawal from the entered industry. However, if the entry is realized by wholly owned establishment, then the additional capacity will possibly threaten the incumbents and the new entrants will have to bear extra costs to gain market shares.

From the perspective of the diversifying subsidiary, different entry modes chosen by the parent will closely affect the variety and quantity of the complementary resources the subsidiary could get, which will further affect all aspects of the subsidiary's development. As mentioned earlier, if the parent company chooses to enter a new industry via establishing a new company, then the newly formed diversifying subsidiary will receive complementary resources needed for its development as much as possible from its parent. Whereas if the parent company enters a new industry through joint venture establishment, the complementary resources obtained from the parent company for the subsidiary's growth will be fewer.

As above mentioned, different entry modes will have different effects. Based on this, the following hypotheses are proposed:

Hypothesis 4: Diversification entry modes will have regulatory effects on the relationship between the diversifying subsidiary's performance and the complementarity between the main business resources of the company undergoing diversification transformation and those of the subsidiary.

Hypothesis 4a: Diversification entry modes will have regulatory effects on the relationship between the diversifying subsidiary's financial performance and the complementarity between the main business resources of the company undergoing diversification transformation and those of the subsidiary.

Hypothesis 4b: Diversification entry modes will have regulatory effects on the relationship between the diversifying subsidiary's growth performance and the complementarity between the main business resources of the company undergoing diversification transformation and those of the subsidiary.

3.3 Summary

Hence, concept framework of this study is formed based on all the hypotheses mentioned above (see Figure 3-1). From the perspective of resource complementarity, this chapter proposed relevant theoretical hypotheses of the relationship between the three: corporation's main business resources, invested diversified subsidiary's resource dependency and diversified subsidiary's corporate performance. Furthermore, based on entry mode, the author proposed relevant hypotheses that diversified entry mode will regulate resource complementarity and subsidiary's corporate performance.

Figure 3-1 Conceptual Framework

Chapter 4: Survey on Resource Complementarity, Entry Mode and Performance

Theoretical hypotheses require empirical support, while empirical analysis require acquisition of sample database. This chapter defined dependent variable, independent variable and control variable. This chapter first defined dependent variables, independent variables and control variables. It then referred to measurement scales existing in literature. Based on the above, the author designed a questionnaire about resource dependence, entry mode and corporate performance. This questionnaire was distributed to the top management in both CNTC and its subsidiaries. In this way, the author acquired raw data for empirical analysis. After that, the author gave out a descriptive statistical analysis of the raw data.

4.1 Design of the Questionnaire

Based on the hypotheses in chapter 3, the author designed the questionnaire. In the initial stage of the design, to verify the hypotheses, the author intended to measure the related variables. By looking into existing researches, the author found resembling measured items. Through direct quotation and some minor adjustments, the measured items were adapted for this research. For example, in this questionnaire, items measuring corporation capability, competitive environment and corporate performance are designed in this way. In consideration of the above and based on the practical circumstances of investigated corporations in Guizhou, the author designed the general items to be measured initially. The initial measurements should be able to describe the variables as clearly as possible. After the questionnaire being reviewed by industry experts, the author made certain amendments to it, adjusting ambiguous expressions and finalize it.

The questionnaire mainly consists of two parts (See Appendix): The first part is the basic information of the corporation, including its full name, location, the main products or services, age of establishment, number of employees, current size assets and affiliation with the CNTC. The second part mainly described some relevant background knowledge of the corporation, mainly including: the resource complementarity of the surveyed corporation and CNTC as well as the surveyed corporation's capabilities, competitive environment, performance (growth performance and financial performance).

All questions in the second section are affirmative, using five-point Likert-type scale (Likert, 1970) for the measurement. According to the subjective cognition and feelings of the respondents, the numbers 1 to 5 respectively represent the degree of measurement corresponding to the items. In general, when using five-point Likert-type scale, the five-point scale is the most reliable option. For if it exceeded five points, it would be difficult for ordinary people to identify. At the same time, it prevented lack of significant differentiation in the degree of opinions, making it more reliable in empirical studies (Wang, 2008; Rong, 2009; Wu, 2010).

In the followed part, the author will verify the categories of variables (dependent variable, independent variable and controlled variable) according to the hypotheses. The measurement items of the variables in the questionnaire will be further clarified.

4.1.1 Dependent Variables and Measurement

The dependent variable in this paper is the performance of the diversified subsidiary. To further analyze the relationship between resource complementarity and subsidiary’s performance, the author categorized the performance of the diversified subsidiary into two dimensions, namely, financial performance and growth performance. That was inspired by Covin and Slevin (1991) and Lumpkin and Dess (1996) who proposed that corporate performance was constituted by growth and profitability. This chapter studies more profoundly on the relationship among corporation’s growth performance and financial performance and resource complementarity. In regard of that, the measurement towards performances consisted two parts, which were measurements of corporation’s growth performance and financial performance.

The measurement of corporation’s growth performance was carried out on the basis of

Zhu and Tao (2014) and Zheng and Wei's (2015) relevant researches and measurement items. It mainly adopted the subjective indicator evaluation method. The corporation's growth performance was measured in three aspects including staff scale increase, sales growth and market share growth (see Table 4-1). The scales were from 1 to 5, which respectively stood for rapidly decreased, partly decreased, basically unchanged, partly increased and rapidly increased.

Table 4-1 Measurement Items of Corporate Growth Performance

Measured variable	Item	Literature support
Growth performance	1.Changing situation in staff scale in the past three years	Tao, Wang, and Chen (2014), Zheng and Wei (2015)
	2. Changing situation in core product sales volume in the past three years	
	3. Changing situation in market shares of core products in the past three years	

As for the measurement of corporation's financial performance, Venkatraman and Ramanujam (1986) and Tan's (1994) relevant researches and measurement items supported the process. The measurement of the corporation's financial performance was carried out in three items (see Table 4-2). Scales from 1 to 5 in the measurement respectively represented very low, relatively low, medium, relatively high and very high. The specific measurement items are listed in the followed Table 4-2.

Table 4-2 Measurement Items of Corporate Financial Performance

Measured variable	Item	Literature support
Financial performance	1. The situation of sales margin of core products	Venkatraman and Ramanujam (1986), Tan (1994)
	2. The situation of return on investment of the corporation	
	3. The situation core products' market standing	

4.1.2 Independent Variable and Measurement

The independent variable in this paper referred to resource complementarity. To specify, it referred to the complementarity between the resource capability of the main tobacco business and that of the invested corporation. The measuring of corporate resource complementarity referenced related research measurement items of Harrigan (1988), Lunnan and Haugland (2008) and Xu and Xu's (2012). Ten items were covered in the measurement of resource complementarity, in which numbers 1 to 5 respectively stood for completely not agree, not agree, not sure, agree and absolutely agree. Specific measurement items were as in the followed Table 4-3.

Table 4-3 Measurement Items of Corporate Resource Complementarity

Measured variable	Item	Literature support
Resource complementarity	1. If CNTC's resources and knowledge is indispensable to the successful establishment of this corporation	Harrigan (1988); Lunnan and Haugland (2008) ; Xu and Xu (2012)
	2.If we replace CNTC with another shareholder, it would cost huge for this corporation	
	3.If we replace CNTC with another shareholder, it would be hard for other shareholders to recoup their investments	
	4.If we replace CNTC with another shareholder, it would be hard for this corporation itself to recoup the investments	
	5.We are convinced that our cooperative partner, CNTC, will only be able to achieve its commercial objectives with our help	
	6.IfCNTC's sales channels largely facilitated the development of this corporation's business	
	7.Consumers of CNTC may potentially become users of this corporation's products	
	8.CNTC is the main client purchasing this corporation's products or services	
	9.CNTC is the main supplier of this corporation	
	10.The brand reputation of CNTC benefits this corporation's competitiveness in the market	

4.1.3 Control variables and Measurement

To effectively study resource complementarity, diversified entry mode and diversified corporation's performance, this research used the diversified corporation's capability as well as its competitive environment, scale, age and industry as the five control variables in the model.

4.1.3.1 Corporate Capability

Corporate capability-based view believes that, compared to external conditions, internal conditions are more decisive for the corporation to obtain competitive advantage in the market. The accumulation of internal resources and capabilities are key factors in amplifying how it can make excess earnings and maintain competitive advantage in the market. In diversification, the diversified corporation's performance relies heavily on its own capabilities. Therefore, corporate capability, as one of the control variables, facilitated the study of the relationship between complementary resources and corporation's diversification performance. In this paper, due to the distinctiveness of CNTC's diversification, the focus was mainly on the impact of corporate innovation, organizational and managerial and marketing capabilities in the process of corporate diversification.

(1) Innovation Ability

Chen (2003) suggested that innovation was the main pathway for corporation to acquire competitive advantages. Relevant researches also proposed that the difference of corporations' technological research and development capability was the main cause of corporate heterogeneity (Maritan & Schnatterly, 2002). Henderson and Cockburn (1994) suggested that if the corporation's capability was to become the driver of its competitive advantage, it should meet three standards: 1) it should be distributed over the industry internally in a heterogeneity fashion; 2) it would be impossible to trade conveniently in the factor market at a price lower than its actual marginal value; 3) It would be hard or high-cost to replicate (Wernerfelt, 1984; Barney, 1986; Peteraf, 1993).

In circumstances where the corporation had multiple entrepreneurial competencies that meet these criteria, most scholars suggested that the unique capabilities of a corporation's research and development activities became the sources of the corporation’s competitive advantages (Dierickx & Cool., 1989; Nelson, 1991). It was confirmed by researches that there was a clear and continuing difference in the ability of corporations in engaging in research and development of new products (Clark & Fujimoto, 1991; Leonard-Barton, 1992; Eisenhardt & Tabrizi, 1995); such differences directly led to the imbalanced competitive advantages of corporations. Porter had pointed out in his research on technological innovation and corporation’s competitive advantages that technological revolution was one of the main drivers of competition, that it played a crucial part in the structural changes and the creation of emerging industries. It also performed as a giant equalizer eroding competitive advantages of other corporations with strong barriers, while driving other corporations to the front-line of competition.

Many of the large enterprises nowadays excel by utilizing technological changes. In all the factors changing competitive rules, technological transformation is the most prominent one. Wang, Chen, and Xu (2000) suggested that, in recent years, innovation had become more appreciated by business management theory and practice, where highly-efficient technological innovation appeared to be the key to business success. Guo (2002) also believed that innovation ability was the main contributor of a corporation’s specific competitive advantage.

Thus, when measuring innovation capability, this paper referenced to Kreiser, Marino, and Weaver (2002), Hu and Shuang’s (2011) relevant research measurement items. Four items were proposed to measure the innovation capability of the corporation, among which, the numbers 1-5 respectively represented complete nonconformity, basic nonconformity, general conformity, and complete conformity. Measured items were as listed in the Table 4-4:

(2) Managerial and Organizational Capability

Managerial and organizational capability is also a main element in corporate capabilities. Many corporations quickly adapts to the changes in the market, which allows rapid development. The rationale behind that is the flexibility of their managerial systems, which are of rather high adaptability. Strong managerial and organizational capability allows the corporation to tackle market changes promptly. It can also strengthen organizational communication, provoke efficient strategic decisions, fortify connections internally and externally of the organization and thus enhance the corporation's competitive advantage.

Table 4-4 Measurement Items of Innovation capability

Measured variable	Item	Literature support
Innovation capability	1.This corporation's top management tend to accept new ideas and new objects	Kreiser et al. (2002);Hu and Shuang (2011);Wang (2012)
	2.This corporation tend to realize objectives through aggressive and quick actions	
	3.This corporation is able to grasp new opportunities in the market	
	4.This corporation is competitive in introducing and acquiring new technology	

Moreover, strong managerial and organizational capability can facilitate corporation's innovation capability, thus indirectly strengthen the corporation's competitive advantage. Li and Liu (2001) indicated in their studies, that technological innovation and diffusion capability and organizational capability could promote each other, but also offset each other. So when the two sorts of capabilities achieve a benign interaction, the corporation will have quality capabilities which allow more capabilities to develop orderly. In general, it will ultimately enhance the output capacity of all work flows including the key ones. When the corporation makes strategic mistakes, leading to in-coordinated development of the two sorts of capabilities, the corporation's capabilities will not be able to satisfy output demands of various work flows. Accordingly, it will affect the corporation's production efficiency and outcomes. Because a corporation's above-average income originates from corporation's capabilities. In a nutshell, types, numbers and standards of a corporation's capabilities determine its competitive advantages and margins.

Of the two, managerial and organizational capabilities tend to be more proactive. Through a variety of incentives and internal and external resources integration, managerial and organizational capability can strengthen the original weak technological innovation and diffusion capability rapidly. However, the originally strong technological innovation and diffusion capability may be constrained by the "bottleneck" of weak organizational capabilities. It is difficult to exert their due functions. In the long run, a considerable part of technological innovation and diffusion capability may even be transformed into the conditional or potential capability and may even be completely lost. Song and Su (1999) considered that rigid functional behavior within the organization should be the reason why many companies lacked the vitality and ability to innovate, many of the failure of innovation efforts. No individual functions can make the corporate dynamic. Only good integration of the functions can make the innovation process efficient and organized and generate continuous flow of innovation. Miao and Bao (2002) suggested, for an organization, its innovation capability was related to the organization's resources and the degree of organizational decentralization or centralization. Organizational flexibility affects different types of technological innovation in either product or process. Therefore, organizational innovation has positive impact on technological innovation. On one hand, the technology department acquires strong innovation capability; on the other hand, it helps create effective integration among various departments within the organization.

Thus, this paper referenced to Maritan and Schnatterly's (2002) relevant research measurement items and measured the corporation's managerial and organizational capabilities in four items, among which, the numbers 1-5 respectively represented complete nonconformity, basic nonconformity, general conformity, and complete conformity. Measured items were as listed in the Table 4-5.

Table 4-5 Measurement Items of Managerial and Organizational Capability

Measured variable	Item	Literature support
Managerial and organizational capability	1.There are rarely chaos in daily management of the corporate	Maritan and Schnatterly (2002)
	2.Decisions of the superior department of this corporation can be quickly and accurately implemented in the lower departments	
	3.Various functional departments of the corporation often communicate and coordinate	
	4.The management methods and approaches of the corporation are quite flexible	

(3) Marketing Capability

With the establishment and development of market economy, the importance of marketing has become increasingly prominent. A corporation's marketing capability has become another important indicator of the strength of an enterprise.

Reichheld (1996) believed that good marketing could attract customers, so that businesses would win and maintain customer loyalty. A loyal customer base can increase revenue as each satisfied customer will purchase more products or pay premium for this corporation’s products. Meanwhile, it can also lower the cost of marketing, reducing the cost of retaining existing costumer while making it easier for new customers acquisition through customer word-of-mouth (Liu, 2004). Cao and Yao (1999) investigated 128 private-owned companies and found that 45.31% of the private-sector owners invested their time and energy into marketing activities and were more market-oriented. Vorhies, Harker, and Rao (1999) believed that good corporation marketing capabilities could enable companies to efficiently satisfy the target market’s demands and gain competitive advantage over competitors in meeting similar customer needs, and thereby contributing to the the corporation’s sustainable growth. Xu and Meng (2000) built the time-function model from the quantitative perspective and discussed marketing capability using this model (Xu & Meng, 2000). It deemed that corporation’s leapfrog development in its marketing ability is the premise of sustainable development. Ma and Zhang (2002) held the opinion that high-performing businesses generally had advantages in terms of marketing capabilities; that the formation of marketing capability tended to be long-term (Ma & Zhang,2002). A corporation must take effective measures to stimulate the enhancement and the accumulation of its marketing capability. Through econometric analysis, Weerwardena (2003) believed that marketing ability would not only affect the corporation's innovation pace, but also affect the company's sustainable competitive advantage, since a corporation with special marketing capability tend to create higher value than its competitors in the target market (Weerawardena, 2003). Douglas et al. analyzed marketing capabilities in terms of pricing, product development, channel management, marketing communications, sales, marketing information management, marketing planning and so on (Vorhies & Morgan, 2005). Empirical research confirmed that the marketing capability related to business performance was identifiable and that it was an important variable to explain the performance gap of the corporation.

It can be seen from the above literature that enterprises with good marketing capabilities should also have good operating performance. Therefore, by referencing relevant research measurement items of Calantone, Schmidt, and Song (1996), Niu and Zhao (2009), this paper measured marketing capability in four items, among which, the numbers 1-5 respectively represented complete nonconformity, basic nonconformity, general conformity, and complete conformity. Measured items were as listed in the Table 4-6:

Table 4-6 Measurement Items of Marketing Capability

Measured variable	Item	Literature support
Marketing capability	1.The products and services provided by this corporation have brand advantages	Calantone et al. (1996), Zhou (2002) and Niu (2009)
	2.This corporate has a national or inter-provincial market network	
	3.The corporation can promptly adjust the current business development strategy, and quickly build connections with the new market	
	4.When faced with new markets of potential, the corporation can quickly integrate resources and promptly establish new distribution channels	

4.1.3.2 Competitive Environment of the corporation

The environment where the corporation is also significantly influence its own development. Existing research identified the competitive environment's vital impact on business performance (Keats & Hitt, 1988; Bantel, 1998). By referencing relevant research measurement items of Wang (2006), this paper measured the corporation's financial performance in two items, among which, the numbers 1-5 respectively represented complete nonconformity, basic nonconformity, general conformity, and complete conformity. Measured items were as listed in the Table 4-7:

4.1.3.3 Corporate Scale

Corporate scale would affect its choice of diversification entry modes. According to previous studies, the larger the size of the business was, the more it favored wholly-owned model (Agarwal & Ramaswami, 1992; Erramilli & Rao, 1993). Because large corporations have more resources available for entering into new markets.

Table 4-7 Marketing Capability of Competitive Environment of the corporation

Measured variable	Item	Literature support
Competitive environment	1.In the industry where the corporation is, competition is rather fierce	Wang (2006)
	2.This corporation has strong competitors in the market	

It is generally believed that there are two indicators to be used to measure corporate scale: the size of the corporation's assets and the total number of employees in it. In this paper, the author adopted these two indicators to measure the control variable, corporate scale. Apparently, the size of the corporation's assets and its human resources have a significant impact on the selection its market entry mode (e.g. enter by opening up a new company or acquire an already existing one) (Caves & Mehra, 1986; Kogut & Singh, 1988).

4.1.3.4 Age of Corporate Establishment

Age of corporate establishment is a frequently used as a control variable when studying influencing factors of business performance. Research shows that there is a certain correlation between the age of establishment and the performance of the corporation. Therefore, in studying the relationship between the resource complementarity and the diversification performance of the corporation, this paper stripped off relevant influence of the corporation’s age of establishment on the research. This paper collected data in the questionnaire through the open question "your corporation’s age of establishment: _____ years" and then process them by coding.

4.1.3.5 The Industry Which the Corporation Belongs to

The levels of difficulty and resources required for corporations in the implementation of diversification were largely varied, which was proved in Yang, Jin, and Li (2010) relevant studies. Therefore, here in this paper, industry belonged to was one of the control variables as well. In the questionnaire, the industry information was obtained through the question "The main products or services provided by your corporation are: _________", and then encoded the information accordingly. Referencing Yu, Huang, and Cao’s (2015) study, the value of 1 represents emerging industries, including IT, bio-pharmaceuticals and electronics industry; the value of 0 represents traditional industries.

4.2 Data Collection and Credibility & Validity Test

4.2.1 Questionnaire Release and Data Collection

4.2.1.1 Questionnaire Subject

To ensure credibility and accuracy of data collection, it is of vital significance to select proper questionnaire subjects. Given that research object and questions are more of organization-based, rather than individual-related or team-related, it is crucial to hear voices from senior managers or general managers who are familiar with the overall corporate operation. So inviting the management to fill in the questionnaire not only complies with the research requirement, but also help to result in accurate data collection.

4.2.1.2 There are two ways to release the subject-based questionnaire.

1. On-spot questionnaire release and collection. It is more likely to collect abundant data in short time by releasing and collecting questionnaires on site, as subjects tend to take the investigation more seriously and thus to ensure more valid and accurate data.

2. Online questionnaire release and collection. As a cost-efficient and far-reaching investigation manner, electric questionnaire is mainly suitable for data-collection from remote-located enterprises.

Online questionnaire was firstly released in this study though website links and Wechat. But it is not as effective as was expected due to the subjects' concern about information security. Then, the researcher turned to on-spot questionnaire release, 300 questionnaires released on conferences of the industry and trainings, with 263 collected, 196 valid (Raw Data see Appendix). The on-site distribution and collection of the questionnaire started from December 2016 to May 2017. It was assisted by my colleague and took half an year.

4.2.2 Reliability Analysis

Reliability is defined as the ratio between variance of true score and variance of observed score. Reliability analysis is a method to measure the stability and credibility of a comprehensive evaluation system with Cronbach's α as a common index. α falls between 0 to

1; α over 0.7 means the questionnaire is highly reliable while α between 0.6 and 0.7 indicates the questionnaire is acceptable (Wang, 2004). From the following table, it is known that with α 0.676, the questionnaire is acceptable.

Table 4-8 Reliability Statistics

Cronbach's Alpha	Items
0.676	30

4.2.3 Validity Analysis

Validity demonstrates to what extent the measurement result reflects the object; the higher, the more valid it is. In this study, the validity analysis is mainly based on KMO. KMO above 0.7 means the questionnaire is of good validity. The Table 4-9 shows that with KMO at 0.711 and highly significant sign, the questionnaire performs well in validity.

Table 4-9 Table KMO and Bartlett Test

Kaiser-Meyer-Olkin [KMO] Metric with sufficient samples		0.711
Bartlett's test of sphericity	Chi-squared Approximation	3261.281
	df	435
	Sig.	.000

4.3 Overall Characteristics of Subsidiaries Based on Descriptive Statistics Analysis

This study firstly adopts descriptive statistical methods to generate overall characteristics of the founding year personnel number, asset scale, industrial characteristics, and entry mode of the samples.

4.3.1 Year of Establishment

It is known from the following Table 4-10, 60.20% subsidiaries invested by CNTC for diversification were established between 1992 and 2005, with 12 to 25 years of history up to now. The second peak occurred between 2011 and 2015, with 38 subsidiaries established, occupying 12.80% of total amount.

Table 4-10 The distribution of Year of Establishment of Subsidiaries

Year	Frequency	Ratio	Cumulative Ratio
1978	1	0.5	0.5
1982	2	1.0	1.5
1984	1	0.5	2.0
1986	2	1.0	3.1
1987	1	0.5	3.6
1988	1	0.5	4.1
1989	1	0.5	4.6
1990	2	1.0	5.6
1991	3	1.5	7.1
1992	12	6.1	13.3
1993	5	2.6	15.8
1994	9	4.6	20.4
1995	15	7.7	28.1
1996	6	3.1	31.1
1997	8	4.1	35.2
1998	12	6.1	41.3
1999	2	1.0	42.3
2000	12	6.1	48.5

Year	Frequency	Ratio	Cumulative Ratio
2001	4	2.0	50.5
2002	3	1.5	52.0
2003	13	6.6	58.7
2004	10	5.1	63.8
2005	7	3.6	67.3
2006	2	1.0	68.4
2007	8	4.1	72.4
2008	3	1.5	74.0
2009	5	2.6	76.5
2010	4	2.0	78.6
2011	13	6.6	85.2
2012	8	4.1	89.3
2013	8	4.1	93.4
2014	3	1.5	94.9
2015	6	3.1	98.0
2016	2	1.0	99.0
2017	2	1.0	100.0
Total	196	100.0	

To further analyze (see Table 4-11), in terms of founding years of sample subsidiaries, the mean value is Year 2001 and the mode is Year 1999, namely most enterprises have about 22-year history up to now. The earliest was established in 1978 while the latest 2017, showing that during CNTC's diversification, old and new enterprises were both investment targets.

Table 4-11 Descriptive Statistics on Year of Establishment

Indicator	Value
Mean value	2001.65
Median	2001.00
Mode	1995
Range	39
Minimum value	1978
Maximum value	2017

It is known from the following column Figure 4-1, CNTC tends to choose companies founded between 1992 and 2015 as investment targets for diversification. This is due to the advocate initiated by Tobacco Monopoly Bureau in 1992, that is, “with one business as focus, developing diversified business models, especially the tertiary industry”. CNTC took active exploitation in the following diversified development.

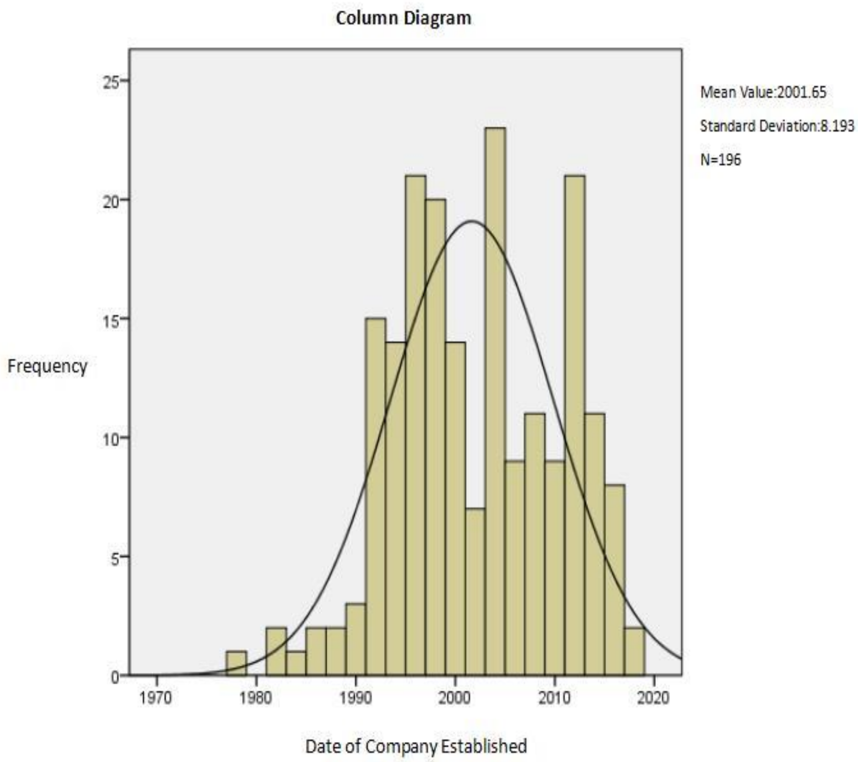

Figure 4-1 Distribution of the Year of Establishment

4.3.2 Number of Staff

It is known from the Table 4-12 that both small companies with dozens of staff and large companies with nearly 10,000 staffs were investment targets of CNTC. Statistics show that the majority of invested companies fall into the category of 101-1000 employees, at 132 (67.4%) while the least fall into the category of 1001 to 10000 employees, only at 12 (6.10%).

Table 4-12 The Distribution of Number of Staff in Subsidiaries

Interval	Subsidiaries Number	Ratio (%)
1~100	52	26.50
101~1000	132	67.40
1001~10000	12	6.10
Total	196	100

The following Table 4-13 demonstrates the mean value of the staff number in subsidiaries is 452.That among sample subsidiaries, the minimal number of employees is 5 while the maximum is 9344 and the mode is 235, namely, the most companies have 235 employees.

Table 4-13 Descriptive Statistics of the Staff Number in Subsidiaries

Indicator	Value
Mean value	452
Median	237
Mode	235
Range	9339
Minimum value	5
Maximum value	9344

4.3.3 Subsidiaries Asset

The Table 4-14 illustrates that there are 66 subsidiaries with asset of 10.01-100 million yuan, occupying the majority at 33.67% while only 13 subsidiaries fall into the category of 10,000 to 1 million-yuan assets, sharing the minority at 6.63%. There are 25 subsidiaries with asset of over 1 billion-yuan assets, taking up 12.76%. Hence, it can be concluded that investment has been injected to both small asset-scale and large asset-scale companies.

Table 4-14 The Distribution of Subsidiaries Asset

Interval (Unit: 10k RMB)	Subsidiary Number	Ratio (%)
1~100	13	6.63
101~1000	38	19.39
1001~10000	66	33.67
10001~100000	54	27.55
Over 100000	25	12.76
Total	196	100

The following Table 4-15 demonstrates the mean value of the subsidiaries asset is 130841.080 yuan. It is analyzed that some subsidiaries only own asset of 286,000 yuan while some reach asset scale of 930,294,644,000 yuan. The mode is 100 million yuan, showing that the majority of subsidiaries own asset of 100 million yuan.

Table 4-15 Descriptive Statistics on Asset (Unit: 10k RMB)

Indicator	Value
Mean value	130841.080
Median	6687.070
Mode	10000.000
Range	28.600
Minimum value	93.2946.440

Table 4-16 The Situation of the Industry Which the Subsidiaries belongs to

Industry	Subsidiaries Number	Ratio (%)
agriculture, forestry, pasture, fishery	8	4.08
manufacturing	56	28.57
electric power, heating power, fuel gas and water production and supply	4	2.04
construction industry	3	1.53
wholesale and retail	33	16.84
transportation, software and information technology service	9	4.59
hospitality and catering	30	15.31
information transmission, software and information technology service	6	3.06
finance	11	5.61
real estate	11	5.61
lease and business service	13	6.63
scientific research and technological service	2	1.02
hydraulic engineering, environment and public facility management	3	1.53
residential service, repair and other service	6	3.06
culture, sport and recreation	1	0.52
Total	196	100.0

4.3.4 The Industry Which the Subsidiaries belongs to

Refers to *Classification and Code Standard of National Economy Industry*

(GB/4754-2011), Sample Subsidiaries are belongs to 15 industries (see Table 4-16), among which the most subsidiaries (56) take manufacturing as main business, accounting for 28.57%; wholesale and retail is the second popular area, with 33 subsidiaries engaged, taking up 16.84%; only two subsidiaries involve culture, sport and recreation industry, occupying 0.52%.

4.3.5 Diversified Entry Mode

As is shown by the following Table 4-17, CNTC established subsidiaries for diversification in two manners, among which solely-invested subsidiaries occupy the majority at 139 (70.92%), while joint-invested subsidiaries occupy only 57 (29.08%). Hence, the statistics indicate that CNTC is more inclined to expand new areas by investing a company exclusively.

Table 4-17 Descriptive Statistics on Entry Modes during CNTC's Diversification

Entry mode	Subsidiaries	Ratio (%)
Joint-invested	57	29.08
Solely-invested	139	70.92
Total	196	100

4.4 Conclusions of the Questionnaire

The questionnaire covered resource complementarity, entry mode and corporate performance in CNTC and its subsidiaries. Through questionnaire data analysis, the author drew the followed conclusion.

1) There were 196 effective copies of questionnaire collected with good reliability and validity;

2) Based on all descriptive statistics of sample data, the general features of CNTC's diversified subsidiaries' are: i) established around 1992 to 2015; ii) average number of

employees of each of CNTC's subsidiary is 452, but the number can vary largely in between each of the subsidiaries; iii) average asset value of each CNTC subsidiary is 1308.41 million Yuan with the most of them around 100 million. iv) CNTC's subsidiaries cover 15 industries, among which, most of them belong to manufacturing industry.

3) CNTC tends to choose wholly owned entry in diversified entry modes. There are not many joint venture in samples.

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Chapter 5: Empirical Analysis

After obtaining first-hand data, this chapter constructs the econometric model from the perspectives of the relationship between complementary resources and corporate performance and the moderating effect of entry mode. It verifies the relevant theoretical assumptions in Chapter 3 and further analyzes and verifies the results.

This thesis use hierarchical ordinary least squares regression [OLS] analysis on resource complementarity, and the moderating role of entry mode. In order to check whether there is a common linear problem in the regression model, we first make a correlation analysis of the variables. This study used Pearson Correlation to analyze the association between variables. It is regarded that the absolute value of the correlation coefficient $|r| = 0$ is irrelevant, $|r| <0.3$ is low correlation, $0.3 <|r| <0.7$ is moderating correlation, $|r|> 0.7$ is highly correlated (Zhang, 2008).

5.1 Regression Analysis on Resource Complementarity

This section uses a hierarchical regression model to empirically examine the performance of CNTC's diversified subsidiary. The dependent variables of the model mainly include the following three: the financial performance of the sample corporation, the growth performance of the sample corporation and the performance of the sample corporation itself. Variables and definitions in regressions are included in Table 5-1.

5.1.1 Regression Analysis of Resource Complementarity and the Diversified Subsidiary's Performance

This part mainly studies how resource complementarity influence on diversified subsidiary's performance. The diversified subsidiary's performance is measured through the aggregated average of its growth performance and financial performance.

Table 5-1 Variables and Definitions in Regressions

Variable	Variable definition	Variable code
Dependent variable	Corporate performance	CP
	Finance performance	FP
	Growth performance	GP
Independent variable	Resource complementarity	RC
Control variable	Innovation ability	IA
	Managerial and organizational capability	MAN
	Marketing capability	MC
	Environment of competition	EOC
	Corporate asset	ASSET
	Number of staff	STA
	Year of establishment	YEAR
	Industry which the corporation belongs to	IND

The model of regression analysis on resource complementarity and the diversified subsidiary's performance is as followed:

$$\mathbf{CP_i = \alpha_0 + \beta_1 CR_i + \beta_2 IA_i + \beta_3 MAN_i + \beta_4 MC_i + \beta_5 EOC_i + \beta_6 ASSET_i + \beta_7 PEOP_i + \beta_8 YEAR_i + \beta_9 IND_i} + \boldsymbol{\varepsilon}_\mathbf{i} \quad (5\text{-}1)$$

5.1.1.1 The Correlation Analysis

From the Table 5-2, it can be observed that the absolute value of the correlation coefficient respectively among dependent variable corporate performance (CP), the independent variable resource complementarity (RC) and the control variables innovation ability (IA),managerial and organizational capability (MAN), marketing capability (MC), environment of competition (EOC), corporate asset scale (ASSET), number of staff (STA), year of establishment (YEAR) and the industry which the corporation belongs to (IND). The correlation between variables is rather low, indicating that there will be no multicollinearity in this model.

Table 5-2 Correlation Coefficient Matrix in Regression Analysis of Resource Complementarity and Diversified Subsidiary's Performance (N=196)

	CP	RC	IA	MAN	MC	EOC	ASSET	STA	YEAR	IND
CP	1.000									
RC	-0.036	1.00								
IA	0.193	-0.005	1.000							
MAN	0.167	-0.058	0.079	1.000						
MC	0.349	0.037	0.297	0.195	1.000					
EOC	-0.218	0.038	0.273	0.313	0.196	1.000				
ASSET	0.272	-0.090	0.337	0.368	0.146	-0.046	1.000			
STA	0.223	-0.019	0.208	0.221	0.146	-0.070	0.163	1.000		
YEAR	0.169	-0.023	0.074	0.159	0.241	0.142	0.174	0.142	1.000	
IND	-0.010	-0.073	-0.037	-0.043	0.095	0.047	-0.075	0.126	-0.013	1.000

5.1.1.2 Regression Analysis

Regression results below Table 5-3 shows that Resource Complementarity (RC) is negatively related with Corporate Performance (CP) with a coefficient of -0.015 and an insignificant t-Statistic. Therefore, the hypothesis 1 in this chapter cannot be verified. The reason may be that the relationship between resource complementarity and corporate financial performance is different from the relationship between resource complementarity and corporate growth performance, which leads to the regression results in the following table. In the following analysis, this paper will respectively carry out an empirical study on the relationship between resource complementarity and corporate financial performance, as well as the relationship between resource complementarity and business growth performance, in order to further explore the relationship between resource complementarity and financial performance and growth performance relationship.

Table 5-3 Resource Complementarity Regression Analysis on Diversified Subsidiaries' Performance (N=196)

Variable	Coefficient	t-Statistic
C	2.444***	9.104
RC	-0.015	-0.338
IA	0.025	0.428
MAN	0.058	0.751
MC	0.187***	4.837
EOC	-0.141***	-4.603
ASSET	0.014*	1.862
STA	0.023	1.440
YEAR	0.003	1.220
IND	-0.019	-0.382
R-squared	0.279	
Adjusted R-squared	0.244	
F-statistic	8.005	
Prob (F-statistic)	0.000	

Note: * indicates P <0.1, ** indicates P <0.05, *** indicates P <0.01

5.1.2 Regression Analysis of Recourse Complementarity and Diversified Subsidiaries' Financial Performance

This section mainly studies the financial performance related to the complementarity of resources, the corresponding estimation model is as follows:

$$\mathbf{FP_i = \alpha_0 + \beta_1 CR_i + \beta_2 IA_i + \beta_3 MAN_i + \beta_4 MC_i + \beta_5 EOC_i + \beta_6 ASSET_i + \beta_7 PEOP_i + \beta_8 YEAR_i + \beta_9 IND_i} \quad (5\text{-}2)$$

5.1.2.1 The Correlation Analysis

From the Table 5-4 below, it can be observed that the absolute value of the correlation coefficient respectively among variables (Variables and The definitions see Table 5-1). The correlation between variables is rather low, indicating that there will be no multicollinearity in this model.

Table 5-4 Correlation Coefficient Matrix (N=196)

	FP	RC	IA	MAN	MC	EOC	ASSET	PEOP	YEAR	IND
FP	1.000									
RC	0.148	1.000								
IA	0.290	-0.005	1.000							
MAN	0.273	-0.058	0.079	1.000						
MC	0.211	0.037	0.297	0.195	1.000					
EOC	-0.027	0.038	0.273	0.313	0.196	1.000				
ASSET	0.241	-0.090	0.337	0.368	0.146	-0.046	1.000			
PEOP	0.280	0.019	0.208	0.221	0.146	-0.070	0.163	1.000		
YEAR	0.094	-0.023	0.074	0.159	0.241	0.142	0.174	0.142	1.000	
IND	0.048	-0.073	-0.037	-0.043	0.095	0.047	-0.075	0.126	-0.013	1.000

5.1.2.2 Regression Analysis

The regression results in the Table 5-5 show that the Resource Complementarity (RC) have a positive relationship with the firm's financial performance (CP) and the t-value is significant, indicating that the resource complementarities have a significant positive impact on the firm's financial performance, which is in line with our assumptions 1a. It can be observed that the control variables are all positively related to financial performance (CP).

Table 5-5 Resource Complementarity and the Results of Regression Analysis on the Financial Performance of Diversified Subsidiaries (N=196)

Variable	Coefficient	t-Statistic
C	1.694***	5.515
RC	0.130**	2.518
IA	0.067	1.000
MAN	0.093	1.057
MC	0.072	1.638
EOC	-0.054	-1.531
ASSET	0.014*	1.700
STA	0.046**	2.478
YEAR	0.001	0.165
IND	0.043	0.768
R-squared	0.201	
Adjusted R-squared	0.162	
F-statistic	5.192	
Prob(F-statistic)	0.000	

Note: * indicates P <0.1, ** indicates P <0.05, *** indicates P <0.01

As indicated in the Table 5-5 of regression results, Only the coefficient of environment of competition (EOC) is negative, the possible reason is that the more competitive environment the company is in, the more difficult it will be for a company to obtain more revenue, and hence a negative relationship.

5.1.3 Regression Analysis on Complementarity of Resources and Growth Performance of Diversified Subsidiaries

This section mainly studies the growth performance by the complementarity of resources related to the situation, the corresponding estimation model is as follows:

$$\mathbf{GP_i = \alpha_0 + \beta_1 CR_i + \beta_2 IA_i + \beta_3 MAN_i + \beta_4 MC_i + \beta_5 EOC_i + \beta_6 ASSET_i + \beta_7 PEOP_i + \beta_8 YEAR_i + \beta_9 IND_i} \tag{5-3}$$

5.1.3.1 The Correlation Analysis

From the Table 5-6, it can be observed that the absolute value of the correlation coefficient respectively among variables (Variables and The definitions see Table 5-1).The correlation between variables is rather low, indicating that there will be no multicollinearity in this model.

5.1.3.2 Regression Analysis

The regression results in the following Table 5-7 show that the resource complementarity (RC) have a negative impact on the growth performance (GP) of the firm, and it is significant, assuming 1b is not validated.

Consider of the growth variable and the coefficients of the related control variables, possible reasons that the resource complementarity (RC) have a negative impact on the growth performance (GP) of the firmare as followed:

Firstly. The resources provided by the CNTC to the invested enterprises have caused the inertia and the higher the resource complementarity is of the invested enterprises High, business inertia may be greater. Because the subsidiary businesses now have access to the resources they need from CNTC, they no longer have to worry about resource problems as they did before. The subsidiary may be complacent and lose the ability of companies to access the resources they need from a highly competitive environment. Then it is also reluctant to invest more in product development and innovation, leading to the weakening of their own relevant capabilities, which can be reflected from the negative value of the coefficient of the control variable, innovation ability (IA). Therefore, due to the lack of upgrades in the core products of enterprises, the diversified subsidiary becomes less competitive in the competitive market environment. That will consequently leads to the shrinking of its core products' sales volume and market share.

Table 5-6 Correlation Coefficient Matrix in Regression Analysis of Resource Complementarity and the Growth Performance (N=196)

	GP	RC	IA	MAN	MC	EOC	ASSET	STA	YEAR	IND
GP	1.000									
RC	-0.167	1.000								
IA	0.051	-0.005	1.000							
MAN	0.027	-0.058	0.0794	1.000						
MC	0.336	0.037	0.297	0.195	1.000					
EOC	-0.292	0.038	0.273	0.313	0.196	1.000				
ASSET	0.202	-0.090	0.337	0.368	0.146	-0.046	1.000			
STA	0.102	0.019	0.208	0.221	0.146	-0.070	0.163	1.000		
YEAR	0.170	-0.023	0.074	0.159	0.241	0.142	0.174	0.142	1.000	
IND	-0.052	-0.073	-0.037	-0.043	0.095	0.047	-0.075	0.126	-0.013	1.000

Secondly, since enterprises can obtain relevant complementary resources from CNTC, the enterprises themselves do not have to spend too much human resources on resource acquisition. The more resources CNTC provides with the sample subsidiary, the less the invested enterprises will spend on labor costs. There are even likely budget cuts in labor costs. Thus, the higher resource complementarity is, the stronger negative influence it will have to the invested subsidiary's growth performance.

Table 5-7 The Results of Regression Analysis on the Complementarity of Resources and the Growth Performance of Diversified Subsidiaries (N=196)

Variable	Coefficient	t-Statistic
C	3.193***	8.687
RC	-0.160***	-2.597
IA	-0.017	-0.210
MAN	0.023	0.214
MC	0.301***	5.695
EOC	-0.228***	-5.443
ASSET	0.013	1.299
STA	0.001	0.032
YEAR	0.005*	1.644
IND	-0.081	-1.200
R-squared	0.304	
Adjusted R-squared	0.270	
F-statistic	9.024	
Prob(F-statistic)	0.000	

Note: * indicates P <0.1, ** indicates P <0.05, *** indicates P <0.01

5.2 Regression Analysis of the Moderating Role of Entry Mode

In this section, we first analyze the relationship between resource complementarity and corporate performance in different diversified entry modes, and then analyze whether diversified entry patterns have a moderating effect on the relationship between resource complementarity and corporate performance. The followed content discusses the relationship of resource complementarity and corporate performance in joint venture mode and wholly-owned mode.

For CNTC's diversification, this thesis considered mainly the followed two entry modes (see Table 5-8). In the sample, there are 57 corporations which entered in the form of joint ventures and 139 enterprises have entered into wholly-owned establishments. It can be seen that there are the least number of samples created with joint ventures, and the largest ones with sole proprietorship.

Table 5-8 Definition of Diversified Entry Modes and Copies of Questionnaires

Item	Variable definition	Copies of questionnaires
Regulated variable	Joint venture establishment (JVE)	57 copies
	Wholly-owned establishment (WOE)	139 copies

5.2.1 The Moderating Effect Analysis of the Wholly-owned Entry Mode

In the regression analysis of this section, sample data is divided into two groups: minority share investment and non-minority share investment. Effects of samples' resource complementarity in each group to different performances of the corporation is treated separately.

Wholly-owned Establishment's Moderating Effect on the Relationship of Resource Complementarity and Corporate Performance

From the Table 5-9, it can be acknowledged that, in the WOE group, the influence effect of resource complementarity to corporation's financial performance is -0.041, it is not significant. It identifies that in WOE mode, resource complementarity is negatively related to corporate performance. This empirical result is in inconsistent with hypothesis 2. Hypothesis 2 is thus assumed unverified. The possible reason behind it was that CNTC was lack of relevant knowledge, technology and experience of relevant business or industry, which led to an unfavorable outcome in entering into new business or new industry. In the following empirical study, the author will further study the relationship of resource complementarity and financial performance as well as the relationship between resource complementarity and growth performance under the WOE mode.

Table 5-9 The Regression Analysis Results of WOE's Moderating Effects to the Relationship of Resource Complementarity and Corporate Performance (N=139)

Variable	Samples of WOE(N=139)
C	2.427***
	(6.823)
RC	-0.041
	(-0.626)
IA	0.009
	(0.108)
MAN	0.118
	(1.147)
MC	0.219***
	(4.073)
EOC	-0.147***
	(-3.363)
ASSET	0.009
	(0.917)
STA	0.006
	(0.288)
YEAR	0.001
	(0.313)
IND	0.006
	(0.092)
R-squared	0.223
Adjusted R-squared	0.169
F-statistic	4.116
Prob(F-statistic)	0.000

Note: * indicates P <0.1, ** indicates P <0.05, *** indicates P <0.01. Numbers in the brackets are the t-statistics of the regression coefficients.

WOE's Moderating Effects on the Relationship of Resource Complementarity and corporation's Financial Performance

From the Table 5-10, it can be observed that in the WOE group, resource complementarity's influence effect to corporation's financial performance is -0.208 ($p<0.05$) and significant. It identifies that in WOE mode, resource complementarity is negatively related to financial performance. Thus, hypothesis 2a is not verified empirically.

Table 5-10 The Regression Analysis Results of WOE's Moderating Results to the Relationship of Resource Complementarity and Corporation's Financial Performance (N=139)

Variable	Samples of WOE(N=139)
C	3.213***
	(6.706)
RC	-0.208**
	(-2.381)
IA	-0.056
	(-0.499)
MAN	0.080
	(0.574)
MC	0.310***
	(4.274)
EOC	-0.209***
	(-3.566)
ASSET	0.010
	(0.787)
STA	-0.003
	(-0.093)
YEAR	0.005
	(1.160)
IND	-0.096
	(-1.147)
R-squared	0.210
Adjusted R-squared	0.165
F-statistic	4.036
Prob(F-statistic)	0.000

Note: * indicates P <0.1, ** indicates P <0.05, *** indicates P <0.01. Numbers in the brackets are the t-statistics of the regression coefficients.

WOE's Moderating Effects on the Relationship of Resource Complementarity and Corporation's Growth Performance

From the Table 5-11, it can be observed that in the WOE group, resource complementarity's influence effect to corporation's growth performance is 0.127 ($p<0.1$). It identifies that in WOE mode, resource complementarity is positively related to corporation's growth performance. Thus, hypothesis 2b is verified empirically.

Table 5-11 The Regression Analysis Results of WOE's Moderating Results to the Relationship of Resource Complementarity and Corporation's Growth Performance (N=139)

Variable	Samples of WOE(N=139)
C	1.641***
	(4.177)
RC	0.127*
	(1.771)
IA	0.073
	(0.804)
MAN	0.156
	(1.377)
MC	0.128*
	(2.162)
EOC	-0.084
	(1.741)
ASSET	0.007
	(0.700)
STA	0.015
	(0.635)
YEAR	-0.003
	(-0.849)
IND	0.107
	(1.567)
R-squared	0.210
Adjusted R-squared	0.155
F-statistic	3.808
Prob(F-statistic)	0.000

Note: * indicates P <0.1, ** indicates P <0.05, *** indicates P <0.01. Numbers in the brackets are the t-statistics of the regression coefficients.

5.2.2 The Moderating Effect of JVE Entry Mode

In the regression analysis of this section, JVE samples will be selected and verified for the relationship between resource complementarity and different performances of the corporation.

JVE's Moderating Effects on the Relationship of Resource Complementarity and Corporate Performance

From the Table 5-12, it can be observed that in the JVE group, resource complementarity's influence effect to corporation's financial performance is -0.120 (p<0.05) with significant t-statistics. It identifies that in JVE mode, resource complementarity is positively related to corporate performance. Thus hypothesis 3 is verified empirically. In the following empirical studies, the relationship between resource complementarity and financial performance and the relationship between resource complementarity and growth performance under the JVE mode will be further studied.

Table 5-12 The Regression Analysis Results of JVE's Moderating Results to the Relationship of Resource Complementarity and Corporation Performance (N=57)

Variable	Samples of JVE(N=57)
C	2.393***
	(6.925)
RC	0.120**
	(2.131)
IA	0.081
	(1.200)
MAN	-0.086
	(-0.882)
MC	0.131**
	(2.964)
EOC	-0.165***
	(-4.671)
ASSET	0.017*
	(1.835)
STA	0.057**
	(2.667)
YEAR	0.002
	(0.473)
IND	0.077
	(0.943)
R-squared	0.552
Adjusted R-squared	0.465
F-statistic	6.425
Prob(F-statistic)	0.000

Note: * indicates P <0.1, ** indicates P <0.05, *** indicates P <0.01. Numbers in the brackets are the t-statistics of the regression coefficients.

JVE's Moderating Effects on the Relationship of Resource Complementarity and

Corporation's Financial Performance

From the Table 5-13, it can be observed that in the JVE group, resource complementarity's influence effect to corporation's financial performance is -0.089 (p<0.1) with significant t-statistics. It identifies that in JVE mode, resource complementarity is significantly positively related to financial performance. Thus, hypothesis 3a is verified empirically.

Table 5-13 The Regression Analysis Results of JVE's Moderating Results to the Relationship between Resource Complementarity and Corporation's Financial Performance (N=57)

Variable	Samples of JVE(N=57)
C	3.031***
	(6.124)
RC	0.089*
	(1.612)
IA	0.121
	(1.247)
MAN	-0.228
	(-1.629)
MC	0.295***
	(4.643)
EOC	-0.299***
	(-5.907)
ASSET	0.018
	(1.333)
STA	0.0135
	(0.441)
YEAR	0.001
	(0.027)
IND	0.194*
	(1.668)
R-squared	0.613
Adjusted R-squared	0.539
F-statistic	8.280
Prob(F-statistic)	0.000

Note: * indicates P <0.1, ** indicates P <0.05, *** indicates P <0.01. Numbers in the brackets are the t-statistics of the regression coefficients.

JVE's Moderating Effects on the Relationship of Resource Complementarity and Corporation's Growth Performance

From the Table 5-14, it can be observed that in the JVE group, resource complementarity's influence effect to corporation's financial performance is -0.150 ($p<0.05$) with significant t-statistics. It identifies that in JVE mode, resource complementarity is negatively related to corporation's growth performance. Thus, hypothesis 3b is verified empirically.

Table 5-14 The Regression Analysis Results of JVE's Moderating Results to the Relationship of Resource Complementarity and Corporation's Growth Performance (N=57)

Variable	Sample of JVE(N=57)
C	1.754***
	(3.555)
RC	0.150**
	(1.869)
IA	0.042
	(0.430)
MAN	0.056
	(0.399)
MC	-0.032
	(-0.507)
EOC	-0.031
	(-0.616)
ASSET	0.0167
	(1.231)
STA	0.101***
	(3.292)
YEAR	0.003
	(0.635)
IND	-0.041
	(-0.353)
R-squared	0.358
Adjusted R-squared	0.235
F-statistic	2.912
Prob(F-statistic)	0.008

Note: * indicates P <0.1, ** indicates P <0.05, *** indicates P <0.01. Number in the brackets are the t-statistics of the regression coefficients.

5.2.3 The Moderating Effect Analysis of Diversified Entry Mode

This section uses hierarchical regression analysis to examine whether there is a moderating role for diversified entry patterns in the relationship between resource complementarity and corporate performance. The role of moderating variables in the model is demonstrated through interactive terms of regulating variable and regulated explanatory variable. Through explanatory variable, regulating variable, interactive item's progressive inclusion into the regression model, the author will observe the model's overall effect and each variable coefficient as well as them being either positive or negative. It will then be verified whether the regulating variable performs moderating effects and its actual significance. Whether the effects of all the adjustment effects are significant can be observed by observing whether the model’s changes are significant or not. If the changes are significant, it indicates that the newly entered regulating variables have a significant promotion effect on the overall explanatory of the model, that is, the overall moderating effect exists. The moderating effect of specific variables is verified by the regression coefficient and the degree of significance of the interaction terms. The degree of coefficient determines whether the variable has a moderating effect, while the coefficient method represents the direction of its regulation.

If the regulating variable is a categorical variable in the research, then it is needed to convert the categorical variable to a dummy variable first. The number of dummy variables required equals the number of level variables minus one. According to the sample data, the diversified entry modes in this study mainly include JVE and WOE. Therefore, in this section, only one dummy variable needs to be constructed. The specific dummy variables and illustrations are as following Table 5-15:

Table 5-15 Dummy Variable Illustration

Dummy variable	Variable illustration
JVE	“JVE=1”stands for JVE group; “JVE=0”stands for non-JVE group

From the Table 5-15, when JVE=0, it stands for the controlled group, which is the WOE group.

Analysis on Diversified Entry Modes’ Moderating Effect on the Relation between

Resource Complementarity and Corporate Performance.

This sector adopts hierarchical regression method to analyze whether diversified entry modes impose moderating effect and here is the measurement model.

Main effect model:

$$\mathbf{CP_i = \alpha_0 + \beta_1 CR_i + \beta_2 JVF_i + \beta_3 IA_i + \beta_4 MAN_i + \beta_5 MC_i + \beta_6 EOC_i + \beta_7 ASSET_i + \beta_8 PEOP_i + \beta_9 YEAR_i + \beta_{10} IND_i + \varepsilon_{\mathit{i}}} \quad (5\text{-}4)$$

Moderating effect model:

$$\mathbf{CP_i = \alpha_0 + \beta_1 CR_i + \beta_2 JVF_i + \beta_3 \overline{CR_i} * \overline{JVF_i} + \beta_4 \mathit{IA}_i + \beta_5 MAN_i + \beta_6 MC_i + \beta_7 EOC_i + \beta_8 ASSET_i + \beta_9 PEOP_i + \beta_{10} YEAR_i + \beta_{11} IND_i + \varepsilon_{\mathit{i}}} \quad (5\text{-}5)$$

In the model, $\overline{CR_i}$、$\overline{JVF_i}$ are respectively standardized variables of CR_i、JVF_i. The empirical results are in Table 5-16.

Table 5-16 Hierarchical Regression Results of Diversified Entry Mode's Moderating Effect on Resource Complementarity and Corporate Performance

Variable	Model 1		Model 2		Model 3	
	coefficient	t-statistic	coefficient	t-statistic	coefficient	t-statistic
IA	0.024	0.412	0.040	0.684	0.042	0.731
MAN	0.060	0.783	0.052	0.682	0.051	0.676
MC	0.186***	4.839	0.183***	4.814	0.189***	4.954
EOC	-0.141***	-4.637	-0.140***	-4.624	-0.146***	-4.796
ASSET	0.014*	1.899	0.011	1.565	0.012	1.633
STA	0.023	1.427	0.018	1.135	0.021	1.311
YEAR	0.003	1.230	0.001	0.612	0.001	0.580
IND	-0.017	-0.353	-0.006	-0.126	0.002	0.031
RC			0.004	0.099	-0.008	-0.177
JVF			0.106**	2.475	0.111***	2.598
					0.025	1.410
R^2	0.279		0.302		0.310	
F	9.034***		8.016***		7.506***	
ΔR^2	0.279		0.024***		0.007	

Note: * indicates P<0.1, ** indicates P<0.05, *** indicates P<0.01.

According to the Table 5-16, of three hierarchical regression models increase in sequence from 0.279, 0.302 to 0.310 and they all pass F test at 0.001 significance level. From the changes of R^2, it is known that of moderating effect model is 0.7% higher than that of control effect model (P=0.160,but not of significance). Hence, diversified entry modes could moderating the relation between resource complementarity and corporate performance, thus verifying hypothesis 4 to some extent.

The following Figure 5-1 is entry modes' moderating effect on corporate performance a linear figure, which demonstrates that relations between resource complementarity and corporate performance vary with different entry modes adopted.

The next of thesis investigates whether diversified entry modes impose moderating effect on the resource complementarity's relations with financial performance and with growth performance respectively.

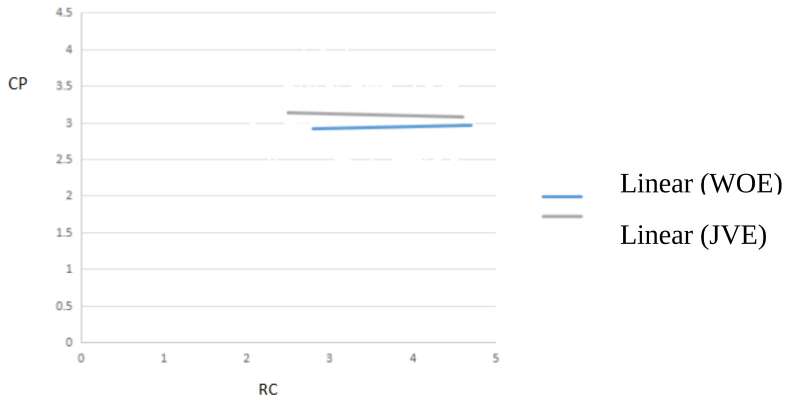

Figure 5-1 Entry Modes' Moderating Effect on the Relationship of Resource Complementarity and Corporate Performance

Analysis on Diversified Entry Modes' Moderating Effect on the Relation between Resource Complementarity and Financial Performance.

This sector adopts hierarchical regression method to analyze whether diversified entry modes impose moderating effect and here is the model.

Main effect model:

$$\mathbf{FP_i = \alpha_0 + \beta_1 CR_i + \beta_2 JVF_i + \beta_3 IA_i + \beta_4 MAN_i + \beta_5 MC_i + \beta_6 EOC_i + \beta_7 ASSET_i + \beta_8 PEOP_i + \beta_9 YEAR_i + \beta_{10} IND_i + \varepsilon_i} \quad (5\text{-}6)$$

Moderating effect model:

$$\mathbf{FP_i} = \boldsymbol{\alpha_0} + \boldsymbol{\beta_1}\mathbf{CR_i} + \boldsymbol{\beta_2}\mathbf{JVF_i} + \boldsymbol{\beta_3}\overline{\mathbf{CR_i}} * \overline{\mathbf{JVF_i}} + \boldsymbol{\beta_4}\boldsymbol{IA}_\mathbf{i} + \boldsymbol{\beta_5}\mathbf{MAN_i} + \boldsymbol{\beta_6}\mathbf{MC_i} + \boldsymbol{\beta_7}\mathbf{EOC_i} + \boldsymbol{\beta_8}\mathbf{ASSET_i} + \boldsymbol{\beta_9}\mathbf{PEOP_i} + \boldsymbol{\beta_{10}}\mathbf{YEAR_i} + \boldsymbol{\beta_{11}}\mathbf{IND_i} + \boldsymbol{\varepsilon_i} \quad (5\text{-}7)$$

Here, $\overline{\mathrm{CR_i}}$、$\overline{\mathrm{JVF_i}}$ are variables of standardized $\mathrm{CR_i}$、$\mathrm{JVF_i}$ respectively. The empirical result of the model is shown as Table 5-17.

Table 5-17 Hierarchical Regression Results of Diversified Entry Mode's Moderating Effect on Resource Complementarity and Financial Performance

Variables	Model 4		Model 5		Model 6	
	Coefficient	T Value	Coefficient	T Value	Coefficient	T Value
IA	0.076	1.121	0.075	1.114	0.076	1.125
MAN	0.075	0.847	0.090	1.020	0.089	1.016
MC	0.077*	1.717	0.070*	1.598	0.073*	1.632
EOC	-0.049	-1.386	-0.053*	-1.513	-0.055*	-1.557
ASSET	0.013	1.484	0.013	1.544	0.013	1.559
STA	0.048**	2.582	0.043*	2.314	0.044*	2.345
YEAR	0.001	0.114	0.001	0.115	0.001	-0.125
IND	0.030	0.524	0.050	0.885	0.053	0.926
RC			0.140***	2.684	0.136**	2.544
JVF			0.057	1.155	0.059	1.186
					0.009	0.430
R^2	0.174		0.206		0.207	
F	4.908***		4.814***		4.374***	
ΔR^2			0.033*		0.001	

Note: * indicates P<0.1, ** indicates P<0.05, *** indicates P<0.01.

According to the Table 5-17, of three hierarchical regression models increase in sequence from 0.179, 0.206 to 0.207 and they all pass F test at 0.001 significance level. From the changes of R^2, it is known that of moderating effect model is 0.1% higher than that of control effect model (but not of significance). Hence, diversified entry modes could moderating the relation between resource complementarity and financial performance, thus verifying hypothesis 4a to some extent.

The following Figure 5-2 is entry modes' moderating effect on finance performance a linear figure, which demonstrates that relations between resource complementarity and financial performance vary with different entry modes adopted.

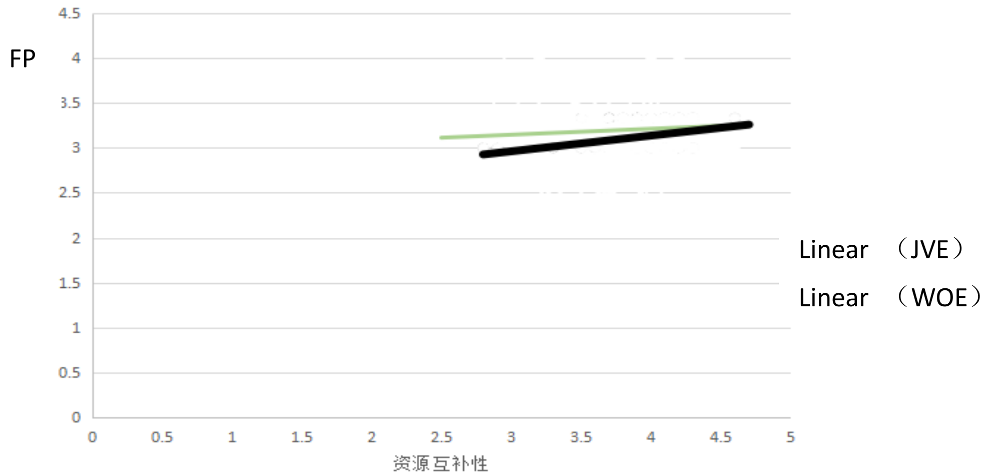

Figure 5-2 Entry Modes' Moderating Effect the Relationship of Resource Complementarity and Financial Performance

It is known from the Figure 5-2 that with moderation of the two diversified entry modes, there is a positive correlation between resource complementarity and financial performance.

Analysis on Diversified Entry Modes' Moderating Effect on the Relation between Resource Complementarity and Growth Performance

This sector adopts hierarchical regression method to analyze whether diversified entry modes impose moderating effect and here is the model.

Main effect model:

$$\mathbf{GP_i = \alpha_0 + \beta_1 CR_i + \beta_2 JVF_i + \beta_3 \mathit{IA}_i + \beta_4 MAN_i + \beta_5 MC_i + \beta_6 EOC_i + \beta_7 ASSET_i + \beta_8 PEOP_i + \beta_9 YEAR_i + \beta_{10} IND_i + \varepsilon_{\mathit{i}}} \tag{5-8}$$

Moderating effect model:

$$\mathbf{GP_i = \alpha_0 + \beta_1 CR_i + \beta_2 JVF_i + \beta_3 \overline{CR_i} * \overline{JVF_i} + \beta_4 \mathit{IA}_i + \beta_5 MAN_i + \beta_6 MC_i + \beta_7 EOC_i + \beta_8 ASSET_i + \beta_9 PEOP_i + \beta_{10} YEAR_i + \beta_{11} IND_i + \varepsilon_{\mathit{i}}} \tag{5-9}$$

Here, $\overline{CR_i}$、$\overline{JVF_i}$ are variables of standardized CR_i、JVF_i respectively. The empirical result of the model is shown as Table 5-18.

According to the Table 5-18, of three hierarchical regression models increase in sequence from 0.279, 0.329 to 0.340 and they all pass F test at 0.001 significance level. From the changes of R^2 , it is known that of moderating effect model is 0.1% higher than that of control effect model and is of significance. Hence, it is concluded that diversified entry modes could moderating the relation between resource complementarity and growth performance, thus verifying hypothesis 4b.

Table 5-18 Hierarchical Regression Results of Diversified Entry Mode's Moderating Effect on Resource Complementarity and Growth Performance

Variable	Model 7		Model 8		Model 9	
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic
IA	-0.028	-0.345	0.004	0.057	0.009	0.112
MAN	0.044	0.416	0.014	0.132	0.013	0.125
MC	0.295***	5.511	0.296***	5.691	0.306***	5.874
EOC	-0.234***	-5.497	-.226***	-5.484	-0.237***	-5.705
ASSET	0.015	1.486	0.010	0.981	0.010	1.064
STA	-0.002	-0.108	-0.007	-0.301	-0.002	-0.080
YEAR	0.005*	1.669	0.003	0.993	0.003	0.957
IND	-0.065	-0.943	-0.063	-0.935	-0.050	-0.745
RC			-0.131**	-2.132	-0.152**	-2.433
JVF			0.154***	2.643	0.163***	2.798
					0.041*	1.781
R^2	0.279		0.329		0.340	
F	9.032***		9.082***		8.604***	
ΔR^2			0.051***		0.010*	

Note: * represents P<0.1, ** represents P<0.05, *** represents P<0.01.

The following Figure 5-3 is a linear figure, which demonstrates that relations between resource complementarity and growth performance vary with different entry modes adopted.

5.3 Summary

Chapter 5 analyzes how resource complementarity impacts corporate performance and entry modes moderating effects based on 196 valid questionnaires through empirical study and drives into the following conclusions:

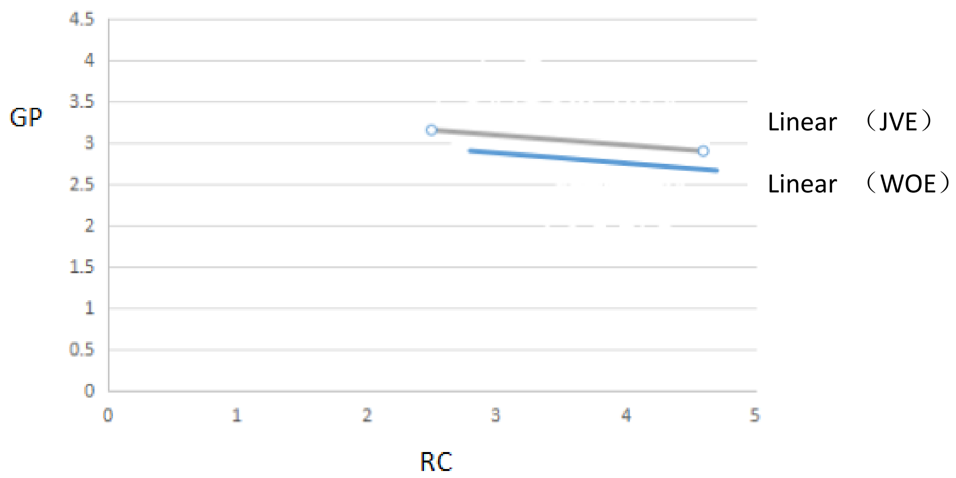

Figure 5-3 Entry Mode’s Moderating Effect the Relationship of Resource Complementarity and Growth Performance

Firstly, empirical study shows that positive correlation between resource complementarity and corporate performance is not tenable on all conditions. In this study, corporate performance is evaluated from two perspectives, financial performance and growth performance. Remarkable positive relation is only found between resource complementarity and financial performance (hypothesis 1a is versified) while the relation between resource complementarity and growth performance is negative (hypothesis 1b is not verified). So it is due to different relations that results in failure of significance test.

Secondly, under solely invested mode, correlation between resource complementarity and corporate performance is negative so that hypothesis 2 is false. More specifically, resource complementarity and financial performance are negatively correlated (hypothesis 2a is not verified) while corporate performance and growth performance are positively correlated (hypothesis 3b is verified). As data is collected from CNTC, it is clear that the higher complementary in resource between CNTC’s main business and the diversely-invested subsidiaries, the better growth performance subsidiaries would boast.

Thirdly, under jointly-invested entry mode, resource complementarity and corporate performance are positively correlated, which illustrates that the higher resource complementarity between CNTC’s main business and the invested diversified subsidiaries, the better corporate performance of subsidiaries there would be and thus to prove hypothesis 3. Under jointly-invested entry mode, there is a positive correlation between resource complementarity and financial performance (hypothesis 3a is verified) while corporate performance and growth performance are positively correlated (hypothesis 3b is verified). As data is collected from CNTC, it is clear that under jointly-invested mode, the higher complementary in resource between CNTC's main business and the diversely-invested subsidiaries, the better financial performance subsidiaries would boast and the better growth performance as well.

Fourthly, it is found that diversified entry modes exert a moderating effect on resource complementarity's relations with corporate performance, financial performance and growth performance. However, between control effect model and moderating effect model is not significant. Hence, hypothesis 4, hypothesis 4a and hypothesis 4b are proved with evidence.

Chapter 6: The Analysis of the Longitudinal Case Study of CNTC's Diversification Development

The author has carried out an empirical study of the relationship between the resource dependency of the diversification transformation corporation and the diversely invested subsidiary, the entry mode and the subsidiary's performance. Furthermore, the evolving relationship of the resource dependency and entry mode in the corporation's diversification is studied in a dynamic perspective. Therefore, this chapter studied the development of CNTC's diversification as a specific case. It illustrates the evolving of CNTC as well as its resource dependency and choices of entry modes in different development phases. The author has also concluded the features of different phases of its diversification and diversification pattern in perspectives of diversification drivers, industries entered as well as control rights arrangement (diversified entry mode).

6.1 Introduction of CNTC

China National Tobacco Corporation (CNTC), established in January, 1982, with RMB 57 billion as its registered capital, RMB 969.9 billion as its total asset and RMB 803.2 billion as shareholder's equity. CNTC is authorized by the Chinese government as a state wholly-owned corporation, led by the State Tobacco Monopoly Bureau. CNTC's specialty lies in its complete monopoly in the domestic tobacco market. That is, the corporation itself represent the whole Chinese tobacco industry. It is highly centralized in administration, manufacturing and operation management. CNTC manages in a unified manner of the national tobacco industry from aspects of people, finance, materials, production, supply, sales, import, export and trade.

CNTC is a corporation with specific professional functional business divisions with many administrative levels, with clear assignment and intimate cooperation internally. CNTC now has 33 provincial tobacco monopoly companies including the Shenzhen site and Dalian site, 16 provincial China Tobacco monopoly companies, 7 directly affiliated companies for tobacco corollary businesses, 57 cigarette corporations, more than 1,000 commercial companies as well as other national professional companies and other enterprise and public institutions covering businesses of tobacco leaves, cigarette sales, cigarette machines, commodity and import and export. Below is the structure of the main tobacco business corporation which CNTC belongs to (see Figure 6-1).

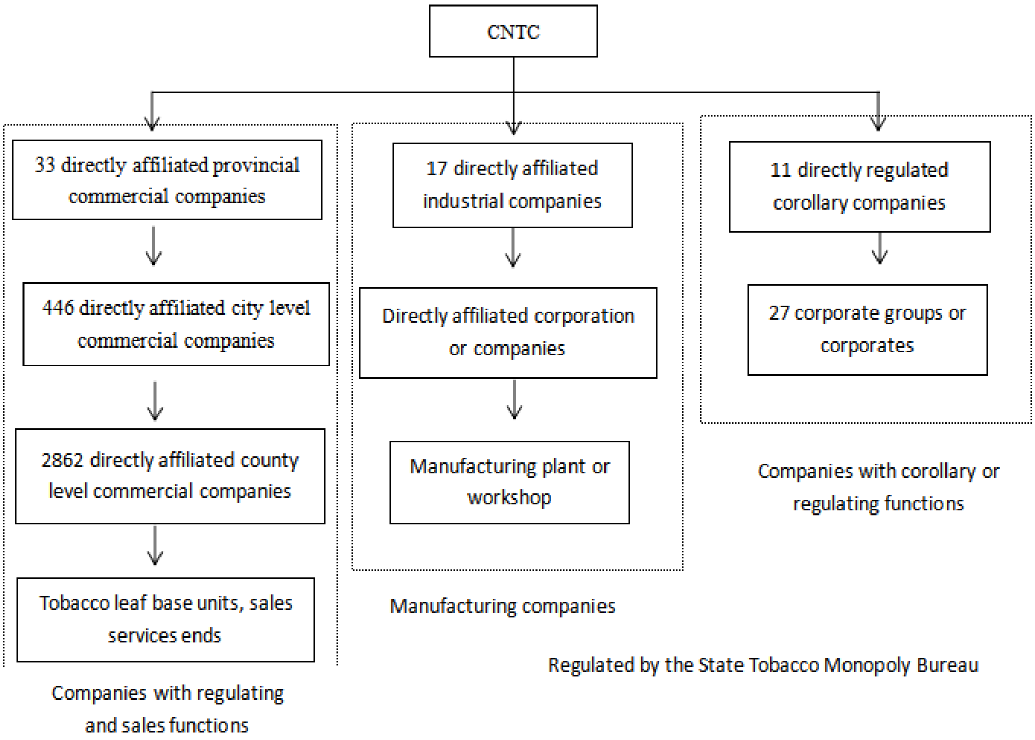

Figure 6-1 The Structure of the Main Tobacco Business Corporation Which CNTC Belongs to

From the above figure, it can be observed that the parent company serves as the operation entity and carries out unified management of the production, supply, sales, people, finance, material, import and export. Other companies below it mainly conduct its investment decisions and capital operation decisions.

The State Tobacco Monopoly Bureau implement strict management towards the production and operation of CNTC. The bureau carries out licensing policy for the manufacturing, sales, import and export of cigarette products, materials like tobacco leaves as well as special tobacco machines. The bureau also implements strict administrative examination and approval system in the upstream and downstream tobacco products, production and circulation in many areas. There are clearly stipulations on the cultivation, acquisition and allocation of tobacco leaves, as well as the establishment, construction, technology and production requirements of tobacco product manufacturers

In CNTC's price control, especially in the allocation and wholesale links, prices are controlled according to the different grades of products in a unified manner. Retail price of cigarettes are expressly marked. Article 17 in the *Tobacco Monopoly Law* stipulates that the State Council department in charge of tobacco monopoly administration and the State Council pricing authorities select cigarettes of certain brands and specifications as representatives depending on the grading of cigarettes. Price of representative products will be determined jointly by the State Council department in charge of tobacco monopoly administration and the State Council pricing authorities. Non-representative cigarettes are determined by and registered to provincial, autonomous regions and municipalities monopoly tobacco administration.

In taxation, CNTC’s industrial and commercial tax profits had increased from RMB 7.5 billion in 1981 before monopoly to RMB 1,079.5 billion, which was 100 times’ increase. Amount paid to national finance increased from RMB 6.7 billion in 1981 to RMB 1,000.6 billion in 2016, with 149 times’ increase. Total asset had grown from RMB 10.8 billion in 1984, the year of the formation of the economic entity to RMB 1,116.5 billion in 2011, with 103 times’ increase. Owner’s equity had grown from RMB 3.7 billion in 1984 to RMB 931.5 billion in 2011, with 252 times’ increase. In 2016, national cigarette online orders took 92% of all with 100% digital transaction method and 97.7% allocated and distributed to retail ends. Cigarette wholesale-retail gross margin exceeded 12% with 85.1 points out of 100 in customer satisfaction rating.

Brand-wise, through more than three decades’ effort, CNTC has nurtured some famous cigarette brands with rather strong market competitiveness, which has largely enhanced the quality and benefits of the whole industry. For example, three well-known brands, Chunghua, Huanghelou and Furongwang, ranked top three on the Hurun Brands List of “China’s most valuable tobacco brands”.

However, along with the implementation of tobacco control as an important public policy by many governments worldwide, Chinese government also started to release relevant policies. Framework Convention on Tobacco Control (hereinafter, FCTC) effected during January, 2006 in China. During December, 2012, eight ministries including the Ministry of Industry and Information Technology commissions promulgated the "China Tobacco Control Plan (2012-2015)" and made a relatively comprehensive plan for tobacco control during the "12th Five-Year Plan" period. In the meantime, from the "12th Five-Year Plan" to the 18th CPC National Congress report, all of them clearly set "improving people's health level" as an important indicator of development. From the current government policy, with the development of society and economy, our country will place greater emphasis on people-oriented and take tobacco control as a long-held public policy of our country. At the same time, according to Bain & Co.'s classification of industrial monopoly and competition types, China's tobacco industry is an oligopoly-type market structure. However, China's tobacco industry has structural features of low market concentration and complete concentration of property rights, which has given China's tobacco industry a strong administrative monopoly. Thus the executive power has a strong influence on CNTC's decision-making. In order to seek more long-term development and to obtain more benefits, CNTC has to consider how to make the transition and how to develop new business in line with "tobacco control."

Therefore, since its founding in 1982, CNTC has been boldly exploring and implementing diversified management strategies. Looking back at the development of tobacco business diversification in China for nearly three decades, there is now a set of diversified management systems and procedure with a complete and diversified workforce, with a total of more than RMB 200 million yuan of diversified assets and Hehe Group, a more mature and diversified enterprise. It is fair to say that diversification has undergone a qualitative change.

6.2 The Analysis of CNTC’s Diversification Development Phase

CNTC diversified from scratch, evolving from a small scale and now with a qualitative development, a journey of thirty years. In this section, the author divides its diversification development according to different strategic objectives into four periods: starting period, developing period, adjusting period and enhancing period. A vertical analysis is carried out through CNTC's driving force for diversification, the relationship between industry entered and the main industry and control power arrangements.

6.2.1 Starting Period of CNTC's Diversification (1980-1990)

Beginning in the 1980s (after the Third Plenary Session of the 11th CPC Central Committee), China ushered in the historic opportunity of reform and opening up and all industries and businesses start to experience a rapid development. With the continuous improvement of the people's income level, the demand for goods and daily necessities had diversified. At that time, due to the relative lack of supplies, market opportunities were everywhere. Due to the national economy's leaning toward the production of consumer goods, the finance departments at both the central and local levels were optimistic about the contribution of tobacco taxes. Thus the two increased investment in tobacco and accelerated the rapid development of CNTC's cigarette manufacturing (boosted up to more than 3,000 cigarette manufacturers).

Driven by the demand of the main business, CNTC started to invest in upstream industries, including the production and supply of various corollary raw and auxiliary materials required for organizing cigarette production. However, due to the independent operation of CNTC's affiliated corporations, there had not been much support from other sources. In addition, there were only a small amount of funds available, the majority of projects had a relatively small investment and a low starting point. In spite of this, CNTC has also altered its dilemma of restrained by the supply of auxiliary materials for cigarettes by investing in the upstream industry of tobacco production. It had also effectively boosted the development of CNTC, as well as the growth of China's tobacco-supporting industries and the tobacco upstream industry's development. In the meantime, corporations owned by CNTC began to address the employment of the offspring of workers and improve employee benefits through diversification. During this period, diversification featured in two types of corporation: 1) wholly owned hotel and other corporations of the service industry. At that time, with rapid development of the national economy, there appeared frequent commercial exchanges and a sharp increase in the floating population. Yet, nationally, there was a lack of supply in hotels and restaurants. During this specific phase, the affiliated corporations of CNTC had accumulated a certain amount of capital. Therefore, in consideration of establishing tobacco brand image and the construction of self-owned compatible business office and living facilities, CNTC began to invest in hotels and restaurants. Moreover, as the strength of tobacco companies continued to increase, the scale of investment in hotels and restaurants was also growing. Construction standards had been gradually raised and expanded from small hostels and hotels to regular star-rated hotels.2) The other type were corporations specialized in labor services jointly funded by CNTC and its affiliated companies' employees. Such companies had touched upon agriculture, forestry, animal husbandry and fishery bases as well as commercial companies (labor service companies) for resettlement of families of CNTC's staff and for diverting workers.

During this period, the establishment of diversified corporations of such as above types, not only increased the income of CNTC's workers but also improved the livelihood of employees while making a positive contribution to the steady development of CNTC. However, restrained by its system and mechanism, the corporation was weak in management, profitability and momentum, which led to a tough competitive environment for CNTC.

6.2.2 The Strategic Development Phase of CNTC (1990-2000)

In the early 1990s, the diversification of CNTC experienced rapid development together with the main industry. Especially after Mr. Deng Xiaoping's South Talks and the 14th CPC Congress, a whole round of investment fever came along. The CPC Central Committee and the State Council issued the "Decision on Vigorously Developing the Tertiary Industry," which at the time greatly stimulated the investment and development of the tertiary industry.

In August 1992, China's State Tobacco Monopoly Bureau put forward the principle of "focused on one industry, explore diversified operation and vigorously develop the tertiary industry." By that time, CNTC had just gone through the rapid development of two five-year plans and accumulated huge sums of fund. Under the impetus and influence of the investment externally, the investment scope of the its affiliated companies expanded to more than 20 industry sectors, with the total investment skyrocketing and the investment scale of individual projects increased by a large margin. By the end of the 1990s, among the seven intensively invested industries, the investment in hotels and services ranked first. The runner-up was industrial manufacturing. It witnessed the health growth of investment and performance of those invested tobacco-supporting business, which was an evidence of the main tobacco business's control over upstream business. Investment in financial and insurance industry grew rapidly, ranking third. Transport agency, warehousing and commercial trade followed closely with adjustments in developing, ranking fourth and fifth. It suggested that tobacco companies were integrating downstream enterprises while operating their main businesses. During this period, although the diversification of CNTC was in line with rapid growth of the national economy, it had played a positive role in broadening the business field for the main industry and providing job opportunities. However, it also revealed signs of disordered diversified investment. In regard of this situation, in the 1996 CNTC meetings on diversified management, the problems arising from diversified operations were characterized as "lack of understanding, lack of management, irrational investment, dispersing investment and low efficiency. Some of the problems are unlikely to be solved within a short period of time ". At CNTC's conference on January 18, 1998, the basic concept of the cross-century reform and development of CNTC was delivered as "Become international and implement big enterprise group strategy and diversified management strategies." It was illustrated as the principle of the cross-century reform and development of CNTC. It was also proposed in this meeting that, through further reform and development as well as consolidating required fund or through merger and acquisition, the corporation should form into a development pattern a centralized in one industry while carrying out diversified operation. In November of the same year, the State Administration for Industry and Commerce approved the registration and set up the "China Tobacco Industry Development Center", which was mainly responsible for the diversification of direct investment by CNTC.

By the end of 2000, a total investment of RMB 38.17 billion yuan was invested in the diversification of CNTC, with 1761 projects invested, of which 347 were major projects with a total value of RMB 10 million yuan (inclusive), 125 were used for foreign investment projects, 15 were for overseas investment and 1614 enterprises were established in total. Among that, 399 enterprises were under deficit, accounting for 24,72%, profit and loss offset cumulative tax and tax revenue of RMB 11.357 billion yuan. The entire scheme's total profited RMB 7.026 billion yuan, with a total assets of the opened up enterprises of RMB 48.014 billion yuan, employing 134,200 people, including 26,600 workers merely or tobacco businesses. See Table 6-1 for diversified business sub-sectors' cumulative investment and their share of total investment:

Table 6-1 CNTC's Diversification Operation in China in 2000 Accounted for the Proportion of Total Investment by Sector

Industry	Accumulated investment (RMB billion yuan)	Ratio of accumulated investment over total investment
Hotel, restaurant and service	10.353	27.13%
Processing	6.070	15.9%
Finance and insurance	4.676	12.25%
Transport agents and warehousing	4.298	11.26%
Commercial trade	3.086	8.09%
Real estate	3.000	7.86%
Construction	1.203	3.15%
Agriculture, forestry, animal husbandry and fishery	0.055	0.14%
Advertising and information	0.053	0.14%
Others	5.376	14.08%

In the three years from 1998 to 2000, there was a big difference in investment amount and return among various corporations invested in line of the diversification strategy. There was also a big difference in the investment structure and changes between different industries. Through comprehensive analysis, we can sum up five characteristics:

(1) The intensity of diversified investment and their returns in different regions have obvious differences. The scale of investment basically matches the capital expansion capacity of the main tobacco industry. By the end of 2000, CNTC's diversified operations landed across the country, but the operating conditions in different regions and the scales of

investment remained different. To be more specific, The more competitive the investing corporation was, their intensity of investment tended to be stronger with multiple operation projects. According to the statistics, six provincial commercial companies, namely Yunnan, Shanghai, Shandong, Hunan, Zhejiang and Jiangsu companies, invested RMB 31.375 billion yuan in total, accounting for 82.92% of the total investment in of the CNTC system's diversification. The accumulated tax revenue was 9.236 billion yuan, 81.32% of the tax and profit realized by the operation and the total profit of 5.859 billion yuan, accounting for 83.39% of the total operating profit. They were the main force for diversifying the investment CNTC. Among them, Yunnan company ranks first with a total investment of RMB 21.25 billion yuan, accounting for 57.62% of the total diversified business of CNTC system. Shanghai had made a total investment of RMB 2.491 billion yuan, ranking the second place, with a total profit of RMB 2.931 billion yuan. In terms of the Group as a whole, the diversification of investments and returns had a high degree of concentration and the investment and returns were basically in line with each other. There was consistency between the economies of scale of the diversification of CNTC and management capabilities of the main business and capital expansion capabilities.

(2) Dispersal of diversified investment reflected that the projects were mnot closely associated in industrial relations. Moreover, the operation scale was generally small. As of the end of 2000, data showed that the diversified business scope of CNTC had expanded to more than a dozen industries with a total of 1,614 invested companies, most of which were not related to the tobacco industry. Because diversified industries were more dispersed investment and were generally small single scaled investment without significant priority industry performance. Hence, a large sum of capital were invested in a fragmented way. Such behavior had restrained CNTC from utilizing its scale advantage.

(3) There had been excessive investment in hotels and service industries with too many projects constructed. By the end of 2000, the investment in hotels and service industries by CNTC affiliated corporations reached RMB 10.353 billion yuan, accounting for 27.12% of the total investment in its diversification, ranking the first among the major investment industries of it. A total of 304 corporations were opened up by CNTC affiliated corporations

in this industry, including 130 corporations in deficit, accounting for 42.76% and the cumulative loss of up to RMB 198 million yuan. Compared with the investment in other industries, the investment in hotels and service industries hindered the CNTC's diversified investment. Most of CNTC's diversification projects were generally moderate in investment scale or even quite small for some of them, with small-scaled investment, some projects are small-scale investment, the construction of rather low thresholds. However, in the hotels and service industries, they were highly over-invested and over-constructed.

(4) The tobacco-supporting industry was empowered with a higher degree of integration, a longer industry chain and usually with better economic benefits. As of the end of 2000, CNTC invested in 11 categories tobacco-supporting manufacturers in printing, wire drawing, BOPP film, white cardboard, coated paper, aluminum foil paper, tipping paper, plug wrap, flavors and fragrances, binders and chemical fertilizers for tobacco, including nearly 160 manufacturers, with a total investment of RMB 2.804 billion yuan and total tax profit of RMB 3.39 billion yuan. In addition, the processing technique of the tobacco-supporting sector was the one highly correlated with the main business and of the highest return of investment. Some supporting companies had enhanced their technique and achieved market expansion and extension. They provided products to markets other than tobacco industry. What they achieved were not only service to the community, but also expansion of their own business fields.

(5) The main method of diversification were wholly-owned entry and joint venture entry through investment. In such process, the concentration of investment was deemed not to be high. A classic case of this was the investment in the financial and insurance industry. Since 1998, CNTC had invested in the financial insurance industry for more than RMB 1 billion yuan annually with its scale of investment increasing for three consecutive years. This industry enjoyed the smallest loss rate and the fastest growth of investment in the seven major industries invested .By the end of 2000, CNTC's affiliated companies had invested a total of RMB 4.676 billion yuan in the financial and insurance industry, with 63 projects invested and no loss-making ones. In spite of the high intensity, fast growth and favorable returns for the investment, the vast majority of the project that CNTC invested were in the form of share

participation instead of holding. From the practice of the followed years, investing in the financial insurance industry and a few specific industries through equity participation or holding helped the tobacco system to exert its financial advantages, reduce investment risks and secure stable profits.

6.2.3 The Strategic Adjusting Phase of CNTC's Diversification (2000-2015)

Due to the blind investment and expansion during the rapid development period and the increasingly fierce market competition, CNTC conducted regulation and rectification to issues appeared in the diversified investments. First of all, the focus of investment gradually shifted to the dominant areas. Meanwhile, rational choices gradually took place of blind investments and the management of enterprises gradually intensified. Secondly, CNTC started to form diversified investment management agencies to reduce the blindness of investment. It cleaned up internal non-performing assets through capital verification, increased rate of profitable corporate assets and improved the quality of diversely invested assets and return of investment.

Since 2000, in accordance with the guidance of "strictly control increment, revitalize stock, strengthen management and improve efficiency", CNTC had done a great deal of work in diversified management and had gradually changed the chaotic investment and management in the past. The whole group became less impulsive in investment, transitioning from casual investment to prudent decision-making and from extensive to intensive operations. Competitive affiliated companies investing in diversified businesses tended to make more rational choice of investment. CNTC's diversified operation had stepped into the phase of structural adjustment.

From 2001 to 2005, judging from historical clearing of registration and the clearing of assets per year, the diversified investment of CNTC was implemented in large scales, wide areas, with many remaining problems and extensive management. There were defects in management mechanism, management policies in the supervision of diversely invested assets as well as the management of diversely operated companies. For diversified companies, the modern enterprise system with clear ownership, clear powers, strict protection and smooth circulation had not yet been established in terms of operation and management. This phenomenon appeared in four aspects: First, the relationship between property rights was not clear enough. The investment structure of diversified corporations in the industry was rather complicated with complex investment hierarchy, multiple investment parties and cross-investment. In particular, the investors of some diversified companies were vaguely identified with inarticulate ownership of property. Second, investment was not effectively controlled. Many investment projects were lack of scientific feasibility studies, normative examination and approval procedures, investment arbitrariness and were not standardized in decision-making. Third, financial accounting is not canonical. Such financial accounting was not able to truly reflect the profit and loss status of the invested companies, which had also hidden the investment risk of long-term investment. Fourth, companies were rather extensively managed. It was commonly seen to put too much emphasis on investment compared to management.

In November 2005, the State Council of the People's Republic of China issued the document "Notice on Further Deepening the Opinion of the Tobacco Industry Asset Management System on Deepening the Reform of Tobacco Enterprises" (General Office of the State Council [2005] No. 57) . Based on the accumulated macroeconomic regulation, production and operation experience, CNTC began to stress more on how to improve its asset management capability. In order to meet the requirements of the internal managerial reform, CNTC established China Tobacco Investment Management Company by the end of 2005 to take charge of the centralized management of diversified investment and operation.

Since 2006, the tobacco group had gradually promoted diversified investment management in the three phases of "clearing and retiring", "strengthening management" and "integration and optimization" according to the general working concept of "leaning and strengthening afterwards”. By the end of May 2006, CNTC had basically completed the liquidation and registration of its diversified investment and had a more comprehensive understanding of its diversified investment and the diversified companies. By the end of September the same year, its construction of diversified investment management institutions was basically completed. Thus it formed a new diversified investment management system.

From 2006 to 2008, it was CNTC's diversified liquidation phase of diversification. During this time, it basically fulfilled the "three basic" objectives and tasks by overall completing the disposal of non-performing assets, the treatment of the historically remained problems and the exit of the relevant companies that were included in the exclusion plan.

From 2009 to 2010, CNTC mainly strengthened their management of its diversification. They endeavored to fulfill their obligations, implement supervision and realize standardization.

Since 2011, the management of diversified investment in the industry had shifted to integration and optimization. By integrating existing assets and optimizing resource allocation, CNTC aimed to achieve "three improvements", namely, enhancing management, up-leveling economic efficiency and strengthen competitiveness. In the same year, in order to further implement the guidelines of "sound management and standardized operation" and the requirements of "centralized management, hierarchy responsibility, entity operation and strengthened supervision", CNTC continued to treat strengthening the supervision and administration of diversified investment as a top priority. It issued the "Regulations on Further Strengthening Investment Management in the Tobacco Industry" (The Office of CNTC [2011] No. 173) and further specified the concept of diversified investment, institutional construction, investment hierarchy and project approval.

After the reorganizing and liquidation and management strengthening during "11th Five-Year" period, the retained diversified businesses were mainly high-quality assets. These diversified investments were mainly concentrated in supporting materials, hotels, financial and securities, transport energy, real estate, cigarette retail and other industries. In order to further standardize the diversified investment, CNTC subsequently issued "Guidelines for Diversified Investment in the 12th Five-year Plan Period of the Tobacco Industry "(the Office of CNTC [2011] No. 174). It called for the effective transformation of the diversified development method through gradual adjustment of the diversified investment structure, so that investment would relatively concentrate in areas and projects with good prospects. In the meantime, CNTC would support projects that could hep the tobacco industry to enhance safety and achieve production upgrades. Equal supports would be dedicated to businesses assuring the preservation and appreciation of state-owned assets, strategic investments in line with the national industrial development and major livelihood projects.

In general, CNTC achieved "three improvements" in management level, economic efficiency and competitiveness in the adjustment period of diversification management. To summarize this phase, it had put forward the following five important experiences: First, equally value "leaning" and "strengthening". Through vitalizing existing assets, properly increasing investment, gradually withdrawing from the non-key fields, further optimizing the investment structure and allocating resources, increasing return on investment so as to boost the development of the major businesses. Secondly, insist on strengthening management and supervision. By establishing improved diversified investment supervision system and strengthening the corporate governance structure, the management system will become more complete, the operation of enterprises more standardized and management and supervision more in place. Thirdly, continue to promote institutional reform. That helps straighten out the diversified relationship between assets and management, reduce the investment level and improve the level of substantive operation and operational efficiency. Fourth, continue to promote resource integration. The organization can take hotel integration as the threshold. Through building an industry consolidation platform, it can nurture outstanding diversified companies and explore effective ways and means for diversified asset consolidation. In the meantime, through the integration of territorial-owned companies in other industries, the allocation of resources was further optimized and the economic benefits were enhanced. Fifth, insist on maintaining a harmonious and stable development environment. The corporations should conscientiously implement relevant laws and regulations and the policies issued by state bureaus. It is suggested to use legitimate methodology and the rule of law to properly solve various types of contradictions and problems in development and thus handle issues left over by history according to law.

Although diversified investment management during this period has entered a normative and benign development track, there are still some problems and weaknesses, which are mainly manifested in five aspects: First, from an industrial perspective, although the total investment in diversification is large, investment has still been more dispersed, involving many industries, widely distributed with large-scale management and no obvious leading industries. Secondly, diversified investment, business management and operations still have not meet the requirements of market-oriented operation. Additionally, diversified management mechanisms, operational mechanisms and other aspects are still waiting to be further explored and improved. Thirdly, most corporations are small in size and lack of economies of scale. Leading enterprises, high-quality diversified ones and well-known brands are under-built. Fourthly, there are limited financing channel for development. Most of the corporations adopt the methods of capital injection by shareholders and bank loans, while financing by means of capital markets is rarely seen. The fifth point is that，the team-building a professionals for diversification can be enhance. The overall staff capability needs to be further improved. The structure of talent needs to be further optimized. The employment mechanism needs to be further improved.

6.2.4 The Phase of Increasing Efficiency in CNTC's Diversification (2015 to now)

Nowadays, the pressure of compliance with tobacco control has been increasing year by year. At the same time, specific means of government economic regulation have been continuously enhanced. The "favorable tax rate" policy (May, 2015) has shrunk the profit margin of the tobacco industry. The "supply-side" reform of overcapacity is in urgent need of solution. At the same time, this period is the decisive stage for China to achieve the goal of building a well-off society in an all-round way. It is an important part of managing the state-owned assets of CNTC. Thus, diversification of assets is a priority. As a result, the strategic goal of diversified development of CNTC in the new phase can be understood as "making progress steadily". Specifically, it is based on the guidelines of "deepening reform, integrating and optimizing, improving quality and increasing efficiency and innovating and developing". It is guided by the reform to improve the mechanism. Integrated assets can serve as an comprehensive way to intensify stock asset. Moreover, incremental investment should be made in the principle of optimization. The group should also add momentum for enhancement and innovate to transform its model of development. It should also effectively improve the diversified management level and economic benefits, so that diversified operations can promote the sustained and healthy development of tobacco groups.

The development can be illustrated as followed: on the premises of ensuring development quality and risk control, the tobacco corporations should base ourselves on stock assets, focus on long-term development, highlight main businesses, make precise and effective investments and promote diversified transformation and upgrading. Specific measures are as below:

(1) Support the corollary businesses with prominent influences to CNTC's safe development and key breakthroughs in technological innovation. It especially refers to supporting industry projects which help technological innovation and upgrades, ensuring the development of the steady development of the main business, meeting the supply demand, fortifying the authority in the market, and supporting industrial projects with core competitiveness. It also includes projects transforming related major scientific and technological achievements.

(2) As of the end of 2015, a total of 114 tobacco-supporting companies were invested in the tobacco industry with a total investment amount of RMB 4.26 billion yuan. In 2015, the wholly-owned and controlled enterprises achieved a total profit of RMB 1.48 billion yuan. The main supporting companies in the industry are seriously repeated in investment. There has been issues of the number redundant number of small-scaled companies and insufficient marketization. It is intended to reach "a new level of cigarettes", which requires reduction of costs and efficiency enhancement. CNTC aims to enhance its competitiveness, adhere to the market discipline, respect the wills of market participants, explore and promote the development of many forms and effectively protect and promote the main tobacco business's development. First, control the investment of new capacity. It is rational to promote the existing cigarette supporting enterprises take the path of connotation development, to enhance market awareness and competitiveness and to strive to improve product quality and service. Secondly, CNTC should guide the development of supporting enterprises depending on categories. For key sectors related to the safety and quality of tobacco products and quality, such as tow, thin tobacco sheet, CNTC should be focused and support the cultivation of leading enterprises. It should carry out market-oriented regionalization and explore localization of domestic vinegar fiber tow supply mode. For cigarette paper, it is suggested to

support the development of key enterprises for demonstration. Thirdly, mature provincial-level companies should be encouraged and supported to progressively integrate tobacco-supporting companies invested by CNTC within its territory, to strengthen intensive management and achieve economies of scale.(2) Fourthly, CNTC can explore the market-oriented reorganization with the help of the capital market. Reorganize assets with the leading enterprises in the industry through equity replacement. Fifth, it should acknowledge the market survival rule and withdraw the inferior companies through merger and acquisition or bankrupcy liquidation.

(3) Steadily promote hotel integration and development. This should be carried out through in-depth implementation of the "tobacco industry hotel integration scheme". The hotels shall be built in accordance with domestic first-class hotel brand. Therefore, it can enhance the value of hotel assets and operating efficiency.

In the process, the threshold is to build Zhongwei hotel information platform and membership programs, which will further promote hotel integration. Such integration efforts should be market-oriented and voluntary-based. Methods including brand integration, chain store implementation, unified marketing and so on can be adopted to promote hotels meanwhile meeting the requirement to join the integration of industry hotel resources. In terms of brand building, CNTC will need to completed the brand design of the four sub-brands in Zhongwei series and provide support to the member hotels to enhance their quality. A membership system of Zhongwei can be supplementary in this process. CNTC can open up the hotels' information resources and gradually increase marketing efforts to achieve cooperation and win-win, while actively exploring the market-oriented operation mechanism of hotels. In order to improving management and economic benefits, the reform of the hotel management system and mechanism can be further explored according to market-oriented requirements. Yunnan Zhongwei hotels can serve as pilot to deepen professional manager regime. China Tobacco companies in Yunnan, Shandong, Hunan, Zhejiang and other areas can further explore unified purchases of hotel supplies and bring down costs and increase efficiency.

(4)If the risk is controllable, it is acceptable to invest in finance. CNTC should support the existing high-quality joint-stock financial enterprises to increase their investment as well as financial projects of good prospect and other robust financial projects.

(5)Rely on professionals and professional platforms. Make proper investments in new technologies, new industries and new formats that may have a good prospect and a greater impact on social and economic development.

(6)Participate in projects in line of the strategic development of the state and head office, which are under risk control and can promote revolution-stimulating, livelihood-enhancing and structure-adjusting investment.

CNTC has determined its development road-map as market-oriented and reform driven, with actively experimenting of methods to actively elevate diversification development's competitiveness. Concrete measures are as followed:

(1) Optimize investment structure following the "leaning" and "strengthening" principle. CNTC should resolutely withdraw from enterprises of poor asset quality and management efficiency. It should also exit from enterprises of unfavorable prospect. Nevertheless, if some industries are not of priority in development, it should also withdraw promptly. In this way, further reduction can be expected in the investment hierarchy. Accordingly, it can also distinguish the asset and managerial relationship among diversified companies. With the integration of stock assets and explicit development guideline, the main business can be highlighted with the investment structure further optimized.

(2) Foster diversified leading companies and build up integrated industry platform. Different integration modes can be chosen judging by the realistic situations. According to the industrial relations in which corporations are integrated, horizontal integration, vertical integration and cross-industry integration can be adopted. In accordance with the integrated carriers and content, the companies can choose asset integration, brand integration, management integration, technology integration and other means. Corporations can be guided through market-oriented means to improve industrial concentration and specialization. CNTC should stick to being market-oriented, interest-based and make win-win as its fundamental principle. It can realize complementary advantages and sharing of resources mainly through the cultivation of leading enterprises and the construction of an integrated platform.

(3) Further deepen reform and innovate in diversified system reform. Build a diversified investment platform. CNTC should research and explore on supporting the development of 1-2 high-quality provincial-level diversified investment management company, which is to create an industrial investment platform. It is beneficial to introduce other provincial-level companies through equity participation, which will not only help improve the ownership structure and corporate governance, but also propel the gathering of more resources and strength.

(4) Actively use the help from the capital market to promote the transformation and upgrading of diversified companies. The role of capital markets in diversified development should be more valued. CNTC can see the stock market, property market, revitalize stock asset, actively utilize increment and optimize configuration. It can also encourage and support the diversification of provincial-level investment management companies to gradually shift from the corporate management to capital management. Explore and promote the mixed ownership reform in diversified enterprises. Research to promote the listing of qualified enterprises and enhance their ability of direct financing and self-sustaining capabilities. This can ensure that listed companies to make better use of the fund amplification effect of the capital market. The group should also properly handle non-operational assets such as self-protection assets and support qualified companies to explore the combination of industry and finance.

(5) In line with the relevant requirements of the "CPC Central Committee and the State Council's Guiding Opinions on Deepening the Reform of State-owned Enterprises" (September 2015), CNTC took Yunnan Hehe Group as a pilot to explore modes and ways of innovative corporation's diversified development. Oriented from market economy reform, the Hehe Group has been actively promoting the reform of the management system and mechanism. It studied and drafted a pilot program for the reform of a diversified investment management system.

6.3 The Vertical Evolution in CNTC's Diversification Transformation

The author has summarized the diversification targets and milestone events mentioned in 6.2. They were demonstrated in Figure 6-2 below as of the features of different phases of CNTC's diversification development:

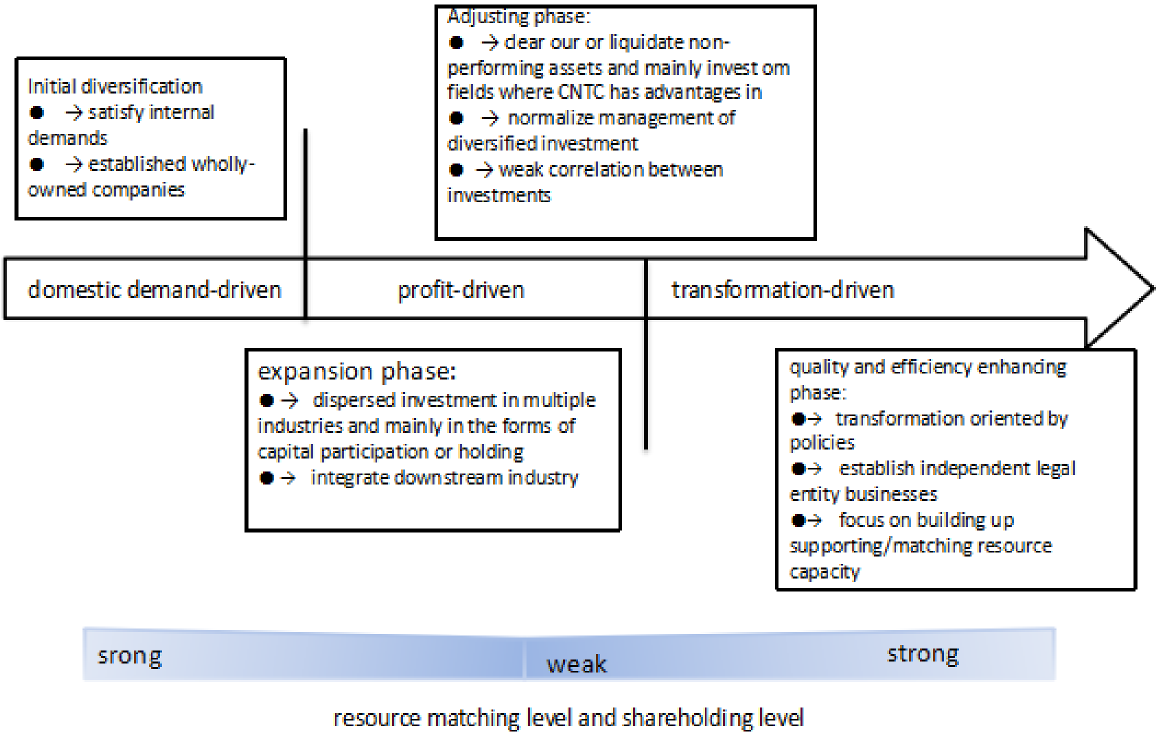

Figure 6-2 Features of Different Phases of CNTC's Diversification Development

From the features in Figure 6-2 of diversification development, it can be observed that CNTC's diversification was progressive instead of overnight accomplishment. The diversification went through starting phase, developing phase, adjusting phase and efficiency increasing phase. In the process of diversification transformation, relevant corporations were required to build up new environmental dependency according to resource complementarity in different phases. To further clarify the vertical evolution of CNTC's diversification transformation, the author has conducted analysis from the following three perspectives, namely resource matching, share-holding strength and development momentum, see Figure 6-3.

6.3.1 The Evolution of Resource Corollary in Diversified Transformation

In the perspective of resource complementarity, the relation between the diversification development of CNTC and its main industry resources has once weakened for a while then picked up its momentum again on a regular pace. The ever-changing external environmental is accompanied with constantly changing resources. Thus, a different resource condition may lead to varying levels of relevance for diversified industry.

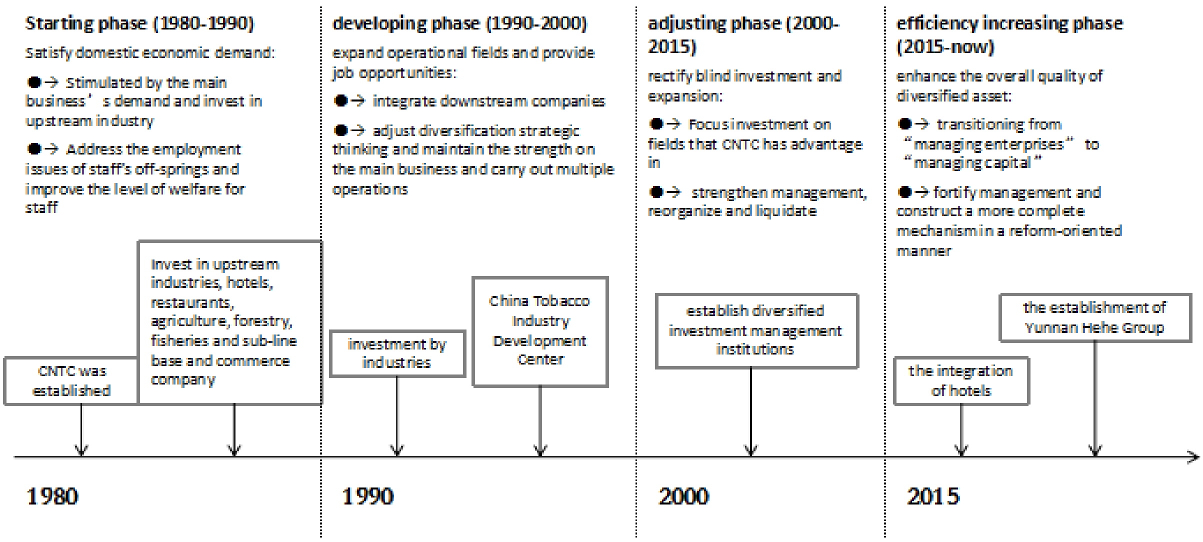

Figure 6-3 Road-map of CNTC's Diversification Development

At the early stage of tobacco diversification, driven by main business growth, the investment aims to rev up tobacco productivity with measures of integrating up-stream industries and ensuring the production and supply of raw materials needed for tobacco production. In this period, in addition to capital resources, the labor resources of stuff as well as of stuff's children is another weapon for CNTC. In order to build brand image, construct office buildings and provide welfare facilities, CNTC has founded several service companies in areas of hotels, restaurants, forestry, agriculture, husbandry and fishery, in a way to bridge the gap between diversified subsidiaries and main businesses and highlight the highly-matched resources.

Later, as capital massively accumulates and investment receives overheated attention, CNTC extended it business to 20 industries with a trend of integrating down-stream enterprises. The cumulative proportion for investment in certain industries can be found in Figure 6-4. The diversified marketing of CNTC has shifted to multi-industry, multi-project and multi-area investment. Due to the scattered investment and the low relevance to tobacco's main business, the large investment volume is debilitated by the small amount of paybacks, thus fails to give full play to its scale strength. Therefore, the complementarity of company resources weakens. Contrast to the high profits for the tobacco-related industries, the diversified marketing of tobacco industry enjoys the same level of operation performance and overall revenue with that in other industries with no obvious advantages.

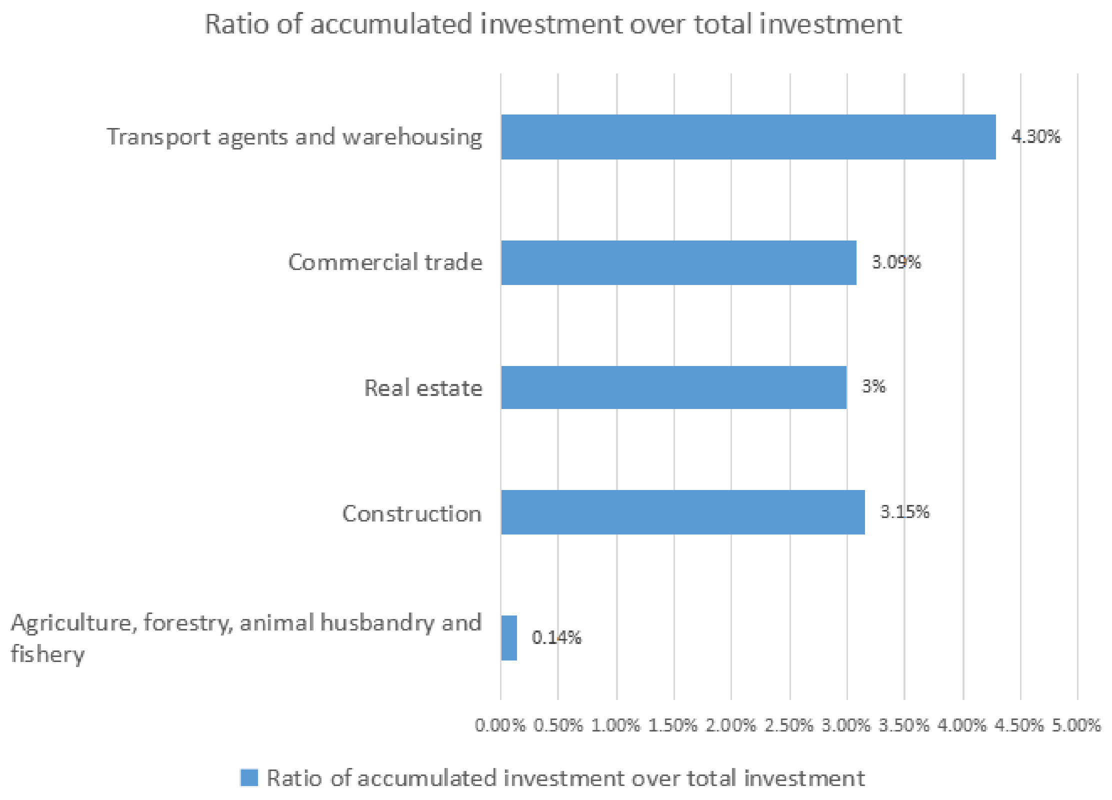

Figure 6-4 Ratio of Investment in Diversified Sectors

During the adjustment and performance lifting period, CNTC rectifies blind investments and expansions, follows the principle of "Simplification before Diversification", and clears up enterprises of poor resource match, low relevance and no obvious advantage, in a way to gradually optimize investment structure. Among its diversified attempts, the processing technologies of ancillary products are the most relevant operations to the main tobacco business and yield the most. Other supporting industries seek out to provide services other than tobacco by technology upgrading and market expansion, which not only benefit the society, but stretch itself to new areas as well.

In addition, pressured by smoking control, tobacco industry feels urgent to cut its reliance on environment and to push ahead with business diversification. The step that CNTC is taking is to build a major resource supporting industry under the help of its main business, and to support industry that benefit tobacco's business upgrading and growth safety. Besides, CNTC strives to integrate competitive hotels resources establishing a valued hotel chain. These strategies gradually enhance the complimentary relation between company resources and diversified marketing, thus reducing risks of the diversification experiment.

6.3.2 Evolution of Resource Control (Entry Mode) in the Process of Diversification

From the perspective of stake control, CNTC's grip on the diversified business underwent an upward parabola curve.

Initially, CNTC developed diversified business with a wholly-owned mode regarding up-stream industry integration, hotel management and service-type firm establishment. Though undermined by insufficient capital and small investment scale, the wholly-owned tobacco subsidiary made it through by conforming to the trend of massive-scale technology adjustment and upgrading, and integrating up-stream industries. As a result, it gets rid of the restriction of auxiliary materials production and laid solid foundation for the future development. Due to limited investment, CNTC started from small-scaled guesthouses and expanded to high-level hotels as its power gets strengthened. In addition, CNTC set up agriculture, forestry, husbandry, fishery and commerce businesses, many of which hold collective shares from the staff from CNTC.

Influenced by the varying investment volume and scattered investment scale, CNTC gradually loosed its grip on investing shares in the transition period from strategic development to adjustment. The investment types of CNTC mainly include shares holding and equity participation with poor relevance and low concentration. From previous experiences, investing in financial insurance industry with the above two modes helps to play financial advantages, reduce investment risks and secure stable profits, however, is not suitable for all industries.

In the entire course of diversification, CNTC's investment in supporting industries, hotels and service industries has been relatively large. Practice shows that enterprises should strengthen their control over the diversified subsidiaries that are much beholden to main industry resources, increase minority equity investment and explore new innovative industries. CNTC is suggested to retain those diversified businesses with high relevance to the main industry, hotels as well as service-oriented enterprises, the wholly holding nature of which makes CNTC’s grip tighter on diversified investment once again, following the principle of “Simplification before Diversification” and after clearing out unsound industry participants. The strategy of CNTC’s diversification plan has shifted from “Enterprise Management” to “Capital Management”, which is conductive to lean management, quality improvement, core business highlighting and leading brand building. The founding of ZhongWei Hotels and the establishment of Yunnan Hehe Group symbolize the transformation of CNTC’s diversified enterprise into a modern enterprise operation mode as an independent legal entity.

6.3.3 The Evolution of Drivers of Diversification Development

From various stages of development motivation, the diversification drivers are divided into: domestic demand-driven, profit-driven and transformation-driven. Domestic demand driven was mainly demonstrated through CNTC's integration of tobacco industry to meet the independent requirements of self-sustaining. In addition, CNTC established hotels and service-oriented companies to solve the employment of workers' off-springs and improve staff welfare. At that time, this action had not only increased the income of tobacco workers, improved employee's livelihood, but also made a positive contribution to the stable development of CNTC. At the beginning of the 21st century, with the rapid development of the national economy, CNTC quickly accumulated its capital with its natural advantage in resources. Coupled with the surge in external demand, driven by profit, CNTC began to actively invest in a number of industry sectors, constantly seeking business expansion and achieved rather good results.

With the progress of tobacco control, CNTC had gradually accelerated the diversified strategic transformation. The main driving force of diversification strategy during this period originated from restructuring demand. In diversification, CNTC revitalized stock assets, properly increased investment and gradually exited non-key fields. Furthermore, it optimized investment structure and resource allocation and increased return on investment, which helped the development of the main business. In the meantime, CNTC should pay attention to the dependency of the diversely entered industry to the main business's resources. This can help determine its organizational model towards the diversely invested subsidiary. For example, CNTC's diversified transformation and development at the current phase is, in fact, to embed CNTC into non-tobacco consumption relationship. So that it can offset the influence of its original unitary dependence on tobacco consumption through entering other sectors and establishing a new environmental dependency relationship with them. The drivers of transformation can be constantly changing judging by environment and timing. Thus, in future development, CNTC will continue to reflect on diversified strategies to tackle the uncertainty and instability in the environment.

In general, the application of diversified operation strategy was to enhance corporation's economic efficiency. There can be opportunities alongside risks in the journey of diversification. Influenced by various policies and other factors, the tobacco industry is seeing limits in growth and decreasing margin. It is the time when diversification strategy rises to be one of the main approaches for tobacco business to survive and go beyond. Yet, there are still improvements to be done in diversification strategies. It would require the management to research and verify the evolution of diversified strategy in a more cautious and discreet manner. Only by that, corporation's operational risks can be brought down to a reasonable level. In this way, CNTC will be able to grasp the rightful path and direction of tobacco industry's diversified development.

Chapter 7: Conclusion, Suggestion and Research Prospect

7.1 Research Conclusion

Taking empirical data of CNTC's diversified development as sample, the Study exploits how the performance of diversified subsidiary is correlated with resource complementarity and entry mode. On the basis of theoretical hypothesis, questionnaire-based data, regression model analysis and case study of CNTC's diversified development, the conclusion is arrived as follow.

Firstly, according to CNTC's empirical data, positive correlation is not found in all cases between resource complementarity and subsidiary's performance. More specifically, by dividing performance into two dimensions, it is found that resource complementarity is positively correlated with financial performance while negatively with growth performance.

Secondly, with regard to entry mode regulate the relation between resource complementarity and performance, it is discovered that under wholly-invested mode, resource complementarity is negatively related with financial performance while positively with growth performance; under jointly-invested mode, resource complementarity is positively related with both financial performance and growth performance; diversified entry modes impose significant regulating effects on resource complementarity and diversified subsidiary's growth performance while exert certain but not significant impact on resource complementarity's relations with corporation performance and financial performance.

Thirdly, by following the timeline of diversified development, it is concluded that the driving force of CNTC's diversification varies from internal demand, profit to transition, in different historical eras. In review of the whole process, the resource complementarity between its main business and diversified subsidiaries decreases first and then climbs again. In terms of entry mode selection, the control over complementary resource decreases first and then goes up again.

7.2 Management Practice and Suggestion

Due to increasingly tight smoke-free policy, the tobacco industry in China is confronting an urgent need to exploit sustainable development, during which diversification has become an inevitable choice. In the diversified transition, CNTC is expected to fully consider resource complementarity between its main business and new business and adopt appropriate entry mode. Also, it is suggested to consider relations among resource complementarity, entry modes and financial performance and growth performance of diversified subsidiaries as a whole and achieve sustainable growth with progressive transition. In view of the research conclusions, CNTC is advised to enter non-tobacco industry by founding joint ventures and consolidate related industries with complementary resources by making full use of its strength in resource and brand. Furthermore, with market competency as its core, CNTC is suggested to make breakthrough in technology and management and gradually utilizing prominent resources and capabilities of its main business to form the core competency of its diversified subsidiaries.

7.3 Research Limitation and Prospect

Despite much effort to make up deficiency and avoid error, there are still limitations in this research. Firstly, in analysis of entry mode selection, the study only takes founding wholly-owned subsidiary and joint venture into account without discussing how merger and acquisition (M&A), a major means to exploit new industry, regulates the relation between resource complementarity and subsidiaries' performance. The impact of M&A is worthwhile since it could play an instructive role in decision-makings over CNTC's diversified development. Secondly, in the case study of CNTC's diversified development, research source mainly comes from CNTC's archives, the address from the managers in the management meeting , annual reports and media coverage. However, it does not involve any interview with related CNTC managers or any investigation into specified diversified subsidiaries or any talk with their senior managers. Hence, the insight into the longitude case study is not profound enough and the evolution pathway lacks certain precision. Thirdly, the thesis only takes

CNTC as an empirical case, which is obviously not diversified enough; after all progressive diversification is a common strategic choice for Chinese companies to cope with China's economic transformation.

There are several gaps that future studies could strive to fill to remedy limitations mentioned above. Firstly, it is suggested to study M&A's regulating effect on resource complementarity and subsidiary performance based on the previous discussion on the two entry modes with probable new findings to occur. Secondly, dynamic relations among resource complementarity, entry mode selection and subsidiary performance might be more clearly shown through a dialogue with CNTC's related managers and a field trip to diversified subsidiaries combining with solid theoretical foundation and empirical case study. The third suggestion goes to increasing sample diversity, since diversified samples enable to produce more persuasive empirical result.

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Bibliography

Agarwal, S. & Ramaswami, S. N. (1992). The choice of foreign market entrymode: Impact of ownership, location and internalization factors. *Journal of International Business Studies*, 23 (1), 1-27.

Amit, R. & Schoemaker, P. J. H. (1993). Strategic asset and organizational rent. *Strategic Management Journal*, 14 (1), 33-46.

Anderson, E. & Gatignon, H. (1986). Modes of foreign entry: A transaction cost analysis and propositions. *Journal of International Business Studies*, 17 (3), 1-26.

Ansoff, H. I. (1957). Strategies for diversification. *Harvard Business Review*, 35 (5), 113-124.

Ansoff, H. I. (1965). *Corporatestrategy: An Analytic Approach to Business Policy for Growth and Expensio*n. New York: McGraw-Hill.

Bain, J. S. (1956). *Barriers to New Competition.* Cambridge, MA: Harvard University Press.

Bantel, K. A. (1998). Technology-based, adolescent firm configurations: Strategy identification, context, and performance. *Journal of Business Venturing*, 13 (3), 205-234.

Barney, J. B. & Hansen M. (1994). Trustworthiness and competitive advantage. *Strategic Management Journal*, 15: Winter Special Issue, 175-190.

Barney, J. B. (1986). Strategic factor markets: Expectations, luck, and business strategy. *Management Science*, 32 (10), 1231-1240.

Barney, J. B. (1991). Firm resource and sustained competitive advantage. *Journal of Management*, 17 (1), 99-120.

Batjargal, B. (2007). Comparative social capital: Networks of entrepreneurs and venture capitalists in China and Russia. *Management and Organization Review*, 3 (3), 397-419.

Blaek, J. A. & Boal K. B. (1994). Strategic resources: Traits, configurations and paths to sustainable competitive advantage. *Strategic Management Journal*, 15, 131-148.

Brouthers, K. D., Brouthers L. E., & Werner S. (2003). Transaction cost-enhanced entry mode choices and firm performance. *Strategic Management Journal*, 24 (12), 1239-1248.

Brown, T. J. (1998). Corporate associations in marketing, antecedents and consequences. *Corporate Reputation Review*, 1, 215-233.

Busija, E. C., O’Neill H. M., & Zeithaml C. P. (2007). Diversification strategy, entry mode and performance: Evidence of choice and constraints. *Strategic Management Journal*, 18 (4), 321-327.

Cai, H. M. (2010). An exploratory study on the performance of sino-foreign joint venture from the resource-based theory. *Commercial Research*, 4, 74-77.

Calantone, R. J., Schmidt, J. B., & Song. X. M. (1996). Controllable factors of new product success: A cross-national comparison. *Informs*, 15 (4), 341-358.

Cao, S. Y. & Yao. M. Q. (1999). The present situation and development trend of private entrepreneurs in Zhejiang province. *Journal of Hangzhou Teachers College*, 4, 75-82.

Caves, R. & Mehra S. (1986). *Entry of Foreign Multinationals into U.S. Manufacturing Industries. In M. Porter (ed.), Competition in Global Industries*. Boston: Harvard Business School Press.

Chatterjee, S. (1990). Excess resources, utilization costs, and mode of entry. *Academy of Management Journal*, 33 (4), 780-800.

Chatterjee, S. & Wernerfelt B. (2010). The link between resources and type of diversification: Theory and evidence. *Strategic Management Journal*, 12 (1), 33-48.

Chen, J. (2003). *Understanding R&D*. Beijing: China Machine Press.

Chen, S., Shi. X. B., & Wu. S. Y. (2015). Impact of complementary assets and innovation asset synergy on performance—From the prospect of moderating effect of environmental dynamism. S*ystems Engineering*, 22 (1).

Christmann, P. (2000). Effects of “best practices” of environmental management on cost advantage: The role of complementary assets. *Academy of Management Journal*, 43 (4), 663-668.

Clark, K. B. & Fujimoto T. (1991). *Product Development Performance: Strategy, Organization and Management in the World Auto Industry*. Boston: Harvard Business School Press.

Collis, D. J. & Montgomery C. A. (1999). Chapter 2 – Competing on resources: Strategy in the 1990s. *Knowledge & Strategy*, 73 (4), 25-40.

Covin, J. G. & Slevin, D. P. (1991). A conceptual model of entrepreneurship as firm behavior. *Entrepreneurship Theory and Practice*, 16 (1), 7-25.

Dierickx, I. & Cool, K. (1989. Asset stock accumulation and competitive advantage. *Management Science*, 35, 1504-1511.

Eisenhardt, K. M. & Tabrizi, B. N. (1995). Accelerating adaptive processes: Product innovation in the global computer industry. *Administrative Science Quarterly*, 40, 84-110.

Enrico, B. (2012). Resource interaction in inter-organizational networks: Foundations, comparison and a research agenda. *Journal of Business Research*, 65 (2), 266-276.

Erramilli & Rao (1993). Service firms' international entry-mode choice: A modified transaction cost approach. *Journal of Marketing*, 57 (3), 19-43.

Fombrun, C. (2005). Corporate Reputations as Economic Assets. In M. Hitt, R. E. Freeman, and J.S. Harrison (Ed.), *The Blackwell Handbook of Strategic Management.* Malden, MA: Blackwell.

Fu, J. & Yang. Z. (2005). Diversification operation of listed corporations and corporate value research. *Journal of China University of Geosciences (Social Sciences Edition)*, 5, 36-40.

Grant, R. M. (1991). The resource-based theory of co*mpetitive advantage: Implications for strategy formulation. California Management Review*, 33 (3), 114-135.

Gulati, R., Lavie, D., & Singh, H. (2009). The nature of partnering experience and the gains from alliances. *Strategic Management Journal*, 30 (11), 1213-1233.

Guo, B. (2002). Application and development of real option theory and method in management of technology and innovation. *R&D Management*, 14 (4), 10-15.

Harrigan, K. R. (1988). Joint ventures and competitive strategy. *Strategic Management Journal*, 9 (2), 141-158.

Henderson, R. & Cockburn, I. (1994). Measuring competence? Exploring firm effects in pharmaceutical research. *Strategic Management Journa*l, 15 (S1), 63-84.

Hillman, A. J., Withers, M. C., & Collins, B. J. (2009). Resource dependence theory: A review. *Journal of Management*, 35 (6), 1404-1427.

Hitt, M. A., Hoskisson, R. E., & Ireland R. D. (1994). A mid-range theory of the interactive effects of international and product diversification on innovation and performance. *Journal of Management*, 20 (2), 297-326.

Hoskisson, R. E. & Hitt, M. A. (1990). Antecedents and performance outcomes of diversification: A review and critique of theoretical perspectives. *Journal of Management*, 16 (2), 461-509.

Hu, B. & Shuang. H. J. (2011). Research on the relationship between entrepreneurial environment and entrepreneurial performance of Wuhan optics valley industry cluster. *Science & Technology Progress and Policy*, 28 (15), 50-56.

Itami, H. and Roehl, T. (1987). *Mobilizing Invisible Assets*. Cambridge, MA: Harvard University Press.

Jensen, M. C. (1986). Agency cost of free cash flow, corporate finance. *American Economic Review*, 76 (2), 323-329.

Jensen, M. C. & Meckling, W. H. (1976). Theory of the firm: Managerial agency costs and ownership structure. *Social Science Electronic Publishing*, 3 (4), 305-360.

Jia, J., Zhang. Z., & Zhang. W. (2013). Research on the effect of complementary asset cooperation on enterprise performance. *Science Research Management*, 34 (10), 84-93.

Keats, B. W. & Hitt, M. A. (1988). A causal model of linkages among environmental dimensions, macro organizational characteristics, and performance. *Academy of Management Journal*, 31 (3), 570-598.

Khanna, T. & Palepu, K. (1999). Corporate strategies for business groups in emerging markets. *Social Science Electronic Publishing*.

Kogut, B. & Singh, H. (1988). The effect of national culture on the choice of entry mode. *Journal of International Business Studies*, 19 (3), 411-432.

Kraatz, M. S. & Zajac, E .J. (2001). How organizational resources affect strategic change and performance in turbulent environments: Theory and evidence. *Organization Science*, 12 (5), 632-657.

Kreiser, P. M., Marino, L.D., & Weaver, K. M. (2002). Assessing the psychometric properties of the entrepreneurial orientation scale: A multi-country analysis. *Entrepreneurship Theory & Practice*, 26 (4), 71-71.

Lamont, B. T. & Anderson, C. R. (1985). Mode of corporate diversification and economic performance. *Academy of Management Journal*, 28 (1), 155-179.

Leonard-Barton, D. (1992). Core capabilities and core rigidities: a paradox in managing new product development. *Strategic Management Journal*, 13, 111-125.

Li, G. & Zhao. Z. (2013). Research on the relationship among control, innovation and performance of joint venture. *Word Economy Studies*, 04, 73-79.

Li, X., Xue. Y., & Niu. J. (2015). Research and review on corporations' strategic transformation and construction of basic framework. *Foreign Economies and Management*, 37 (12), 3-15.

Li, X. Z. & Zheng. X. (2016). *China Tobacco Yearbook (2016)*. Beijing: China Economic Publishing House.

Li, Y. & Liu. Y. (2001). Value networks management based on value creation (I): Features and formation. *Journal of Industrial Engineering and Engineering Management*, 15 (4), 38-41.

Likert, R. (1970). *A Technique for the Measurement of Attitudes. InAttitude Measurement, ed. Gene F. Summers.* Chicago: RandMcNally.

Liu, J. (2008). The concept, connotation and mode of the company's venture capital. *Modern Management Science*, 3, 111-113.

Liu, M. (2004). Review of overseas marketing performance evaluation. *Commercial Business Review*, 3, 33-37.

Lubatkin, M. (1983). Mergers and the performance of the acquiring firm. *Academy of Management*, 8 (2), 218-225.

Lubatkin, M. & Chatterjee, S. (1994). Extending modern portfolio theory into the domain of corporate diversification: Dose it apply. *Academy of Management Journal*, 37 (1), 109-136.

Lumpkin, G. T. & Dess, G.G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21 (1), 135-172.

Lunnan, R. & Haugland, S. A. (2008). Predicting and measuring alliance performance: A multidimensional analysis. *Strategic Management Journal*, 29 (5), 545-556.

Ma, X. & Zhang. W. (2002). Research on the high standard of enterprise marketing capability. *Modern Electric Power*, 19, 101-106.

Madhok, A. & Tallman, S. B. (1998). Resources, transactions and rents: Managing value through inter-firm collaborative relationships. *Organization Science*, 9 (3), 326–339.

Maritan, C. A. & Schnatterly, K. (2002). Intangible capital as drivers of value: Resources, capabilities, and management systems. *Academy of Management Annual Meeting Proceedings*, 1, S1-S6.

Markham, J. W. (1973). *Conglomerate enterprise and public policy*. Harvard Business School Publications.

Markides, C. C. (1995). Diversification, restructuring and economic performance. *Strategic Management Journal*, 16 (2), 101-118.

Markides, C. C. & Williamson, P. J. (1996). Corporate diversification and organizational structure: A resource-based view. *Academy of Management Journal*, 39 (2), 340-367.

Miao, R. B. & Bao. G. M. (2002). The relationship between institution innovation, management innovation and TVE's technology innovation. *Studies in Science of Science,* 20 (3), 330-336.

Montgomery, C. A. & Wernerfelt, B. (1988). Diversification, ricardian rents, and tobin's q. *The RAND Journal of Economics*, 19 (4), 623-632.

Mueller, R. (1969). Conglomerate mergers. *Quarterly Journal of Economics*, 83 (1), 643-659.

Nelson, R. (1991). Why do firms differ and how does it matter. *Strategic Management Journal*, 12, 61-74.

Niu, Y. G. & Zhao. P. (2009). Review of literatures on brand theme language recall. *Foreign Economics & Management*, 31 (8), 36-45.

Pan, Y. & Tse, D. K (2000). The hierarchical model of market entry modes. *Journal of International Business Studies*, 31 (4), 535-554.

Peng, M. W. (2003). Institutional transitions and strategic choices. *Academy of Management Review*, 28 (2), 275-296.

Penrose, E. T. (1959). *The Theory of the Growth of the Firm*. New York: John Wiley.

Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, 14 (3), 179-191.

Pettigrew, A. M. (1990). Longitudinal field research on change: Theory and practice. *Organization Science*, 1 (3), 267-292.

Pitts, R. A. (1980). Toward a contingency theory of multibusiness organization design. *Academy of Management Review*, 5 (2), 203-210.

Porter, E. M. (2004). *Competitive Strategy*. Simon & Schuster Inc.

Powell, W. W., Koput, K. W., & Smith-Doerr L. (1996). Interorganizational collaboration and the locus of innovation: Network of learning in biotechnology. *Administrative Science Quarterly*, 41, 116-145.

Ravenscraft, D. J. & Scherer, F. M. (1989). The profitability of mergers. *International Journal of Industrial Organization*, 7 (1), 101-116.

Reichheld, F. F. (1996). *The Loyalty Effect*. Boston: Harvard Business School Press.

Roberts, E. B. & Berry, C. A. (1985). Entering new businesses: Selecting strategies for success. *Sloan Management Review*, 26 (3), 3-17.

Rong, T. (2009). *AMOS Research Methods*. Chongqing: Chongqing University Press.

Root, F. R. (1988). Environmental risks and the bargaining power of multinational corporations. *International Journal of Modern Physics D*, 3 (1), 111-124.

Rumelt, R. P. (1982). Diversification strategy and profitability. *Strategic Management Journal*, 3, 359-369.

Rumelt, R. P. (1974). Strategy, structure, and economic performance. *Journal of Behavioral Economics*, 75, 91-92.

Sharma, A. (1998). The mode of entry and ex-post performance. *Strategic Management Journal*, 19, 879-900.

Smiley, R. (1988). Empirical evidence on strategic entry deterrence. *International Journal of Industrial Organization*, 6 (2), 167-180.

Song, C. & Su. J. (1999). A study of corporate's core value evaluation system. *Value Engineering*, S1, 180-185.

Song, K. (2004). The characteristics of corporate growth. *Contemporary Manager*, 8, 54-55.

Song, M., Droge, C., Hanvanich, S., & Calantone, R. (2005). Marketing and technology resource complementarity: An analysis of their interaction effect in two environmental contexts. *Strategic Management Journal*, 26 (3), 259-276.

Tan, J. (1994). Litschert R J. environment-strategy relationship and its performance implication: An empirical study of the Chinese electronic industry. *Strategic Management Journal*, 15 (1), 1-20.

Tan, J. & Tan. D. (2005). Environment-strategy co-evolution and co-alignment: A staged model of Chinese SOEs under transition. *Strategic Management Journal*, 26 (2), 141-157.

Tao, Q. Y., Wang. X. Y., & Chen. X. Y. (2014). Studies on the relationship between social network and small and medium-sized enterprises'g rowth performance-based on the survey of 200 enterprises in Beijing high-end industrial park. Journal of Beijing Union University, 28 (1), 51-59.

Teece, D. J. (1980). Economies of scope and the scope of the enterprise. *Journal of Economic Behavior & Organization*, 1 (3), 223-247.

Teece, D. J. (1986). *Firm Boundaries, Technological Innovation and Strategic Management.* Lexington *MA:* Lexington Books.

Thompson, A. A. & Strickland, A. J. (1995). *Crafting & Implementing Strategy (6th ed.)*. Boston: Richard D. Irwin, Inc.

Van De Ven, A. H. & Poole, M. S. (1995). Explaining development and change in organization. *Academy of Mangement Review*, 20 (3), 510-540.

Venkatraman, N. & Ramanujam, V. (1986). Measurement of business performance in strategy research: A comparison of approaches. *Academy of Management Review*, 11 (4), 801-814.

Vorhies, D. W. & Morgan, N. (2005). Bench marking marketing capabilities for sustainable competitive advantage. *Journal of Strategic Marketing*, 2, 80-94.

Vorhies, D. W., Harker, M., & Rao. C. P. (1999). The capabilities and performance advantages of market-driven firms. *European Journal of Marketing*, 33 (11/12), 1171-1202.

Wang, Q. (2004). *Enterprise Resources and Competitive Advantages: A Study Based on the Theory and Experience of Zhejiang Private Manufacturing Enterprises*. Zhejiang: Zhejiang University.

Wang, Q. X. (2006). Firm resources and competitive advantage: An empirical research. *Studies in Science of Science*, 24 (4), 563-570.

Wang, X. & Su. Q. (2014). A study on the relationship between technology intermediary complementary assets and technology transfer performance with network intensity as regulating variables. *Forecasting*, 2, 26-31.

Wang, Y. (2008). *Research on Strategic Subsidiaries' Strategic Networks, Social Capital and E-learning - Empirical Analysis Based on Host Country Subnets*. Doctorial Dissertation ,Fudan University.

Wang, Y., Lo. H. P., & Yang. Y. (2004). The constituents of core competencies and firm performance; evidence from high-technology firms in China. *Journal of Engineering and Technology Management*, 21 (4), 249-280.

Wang, Y., Chen. J., & Xu. Q. R. (2000). Discussion on ecological design based on life cycle. *China Soft Science,* 3, 117-119.

Weerawardena, J. (2003). The role of marketing capability in innovation-based competitive strategy. *Journal of Strategic Marketing*, 11 (1), 15-35.

Weigelt, K. & Camerer, C.F. (1988). Reputation and corporate strategy: A review of recent theory and applications. *Strategic Management Journal*, 9, 443 -454.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5, 171-180.

Wiersema, M. F. & Bantel, K. A. (1992). Top management team demography and corporate strategic change. *Academy of Management journal*, 35 (1), 91-121.

Williamson, O. E. (1985). *The Economic Institutions of Capitalism: Firms, Market, Relational Contracting*. New York: Free Press.

Wu, M. (2010). *Questionnaire Statistical Analysis of Practice*. Chongqing: Chongqing University Press.

Xu, E. M. & Xu. K. (2012). Research on the impact of resource complementarity on the performance of opportunism and strategic alliance. *Management World*, 1.

Xu, L. & Meng. Y. (2000). Research on business marketing based on quantitative analysis. *Chinese Journal of Management Science*, 11, 158-162.

Yang, X., Jin. Z., & Li. K. (2010). Research on the relationship between diversified factors and diversification strategy - Empirical study based on Chinese listed companies. *Nankai Business Review*, 13 (6), 41-49.

Yao, J. Lv. Y., & Hailin. L. (2004). An empirical study on the relationship between diversification and economic performance of China's listed companies. *Management World*, 11, 119-125.

Yin, J. & Wei. J. (2000). Research on the entry mode of diversification strategy. *Scientific Management Research*, 4, 48-50+55.

Yin, R. K. (2009). *Case Study Research: Design and methods (4th ed.)*. California: Sage Publications.

Yu, H., Huang. X., & Cao. X. (2015). Regulating role of corporate social capital in the relationship between corporate social responsibility and corporate performance. *Marketing*, 27 (1), 169-180.

Zhang, L. (2008). *An Empirical Study Based on the Institutional Perspective of China's Listed Companies and Corporate Performance*. Shandong University.

Zhang, Y., Li. X., & Xu. D. (2005). Principal-agent issues, ownership structure and corporate diversification. *Economic Science*, 3.

Zhao, S., Fang. P., & Yu. Y. (2005). Empirical study on diversification of listed corporation and relationship with market performance. *Market Modernization*, 10, 32-33.

Zheng, X. Y. & Wei. J. (2015). Correlation between ambidexterity of legitimacy and growth of affiliated firms in business groups. *Journal of Management Sciences in China*, 18 (6), 1-14.

Zhou, H. (2008). Theoretical summary of the motivation behind enterprise's diversification entry mode choic. *Modern Management Science*, 1, 46-48.

Zhu, F. L. & Tao. Q. Y. (2014). A study of social networks on growth for SMEs: taking science and technology SMEs Beijing as an example. *Studies in Science of Science*, 10, 1540-1545.

Appendix

Questionnaire on "Diversified Performance of China Tobacco Group: Resource Complementarity and Entry Mode"

Distinguished ladies and gentlemen,

School of Economics and Management, University of Electronic Science and Technology of China (UESTC) is now doing a research, with the aim to explore the relationship between the diversified performance of China Tobacco Group and the resource complementarities and corresponding diversified entry mode of the Group and its diversified subsidiaries. Please kindly help us to complete this questionnaire for your answers are very important to our research. We are grateful for your warm help given your busy schedule!

This questionnaire is purely for academic research and the obtained information will not be used for any commercial purposes. Please be assured to give your objective answers.

Thanks very much for your support and cooperation!

★Notes on completing the questionnaire:

1. We hope that you will give an objective answer to each question based on the actual situation in order to obtain an accurate and effective research conclusion.

2. Each question of this questionnaire should be answered and please tick √ in the options or fill in the ______.

3. There is no right or wrong answer, please fill in according to the actual situation.

4. To make sure that the targeted respondents have an all-around understanding of the whole enterprise, we hope that the query respondents should be senior executives or general manager of your company (diversified subsidiaries of China Tobacco Group).

5. If you wish to get the results of this survey, please leave your E-mail:________________

Part I: Company Profile

1. Your company name: ____
2. The main products of your production or service is: __________________________
3. Years of the establishment of your company: _______ years
4. Number of current employees in your company: _________
5. Amount of current assets of your company: _________
6. Your company is _____________ of Tobacco Group.

   A. a wholly-owned acquisition B. a joint venture with other business organizations

   C. an equity (holding minority ownership) D. a sole proprietorship (or transformation)

Part II: Company Information

I) The following describes the complementary resource situation of your company and China Tobacco Group. Please tick √ on the appropriate degree number based on the actual situation of your company.

Items	Strongly Disagree	Disagree	Uncertain	Agree	Totally Agree
1. Resources and knowledge of China Tobacco Group is indispensable for the successful foundation of our company	1	2	3	4	5
2. If we replace China Tobacco Group as a shareholder, the cost would be enormous.	1	2	3	4	5
3. If we replace China Tobacco Group with another shareholder, it is difficult to withdraw investments from other shareholders.	1	2	3	4	5
4. If we replace China Tobacco Group with another shareholder, it is difficult to withdraw investments of our company.	1	2	3	4	5

5. We believe that our partner, the Tobacco Group, can only achieve business objectives with our help.	1	2	3	4	5
6. The sales channels owned by the Tobacco Group can provide great help to the development of our company's business.	1	2	3	4	5
7. The consumer groups owned by the Tobacco Group are likely to be transformed into users of our products.	1	2	3	4	5
8. Tobacco Group is the main customer to purchase or use the product and service of our company.	1	2	3	4	5
9. Tobacco Group is the main supplier of our company.	1	2	3	4	5
10. The brand reputation of Tobacco Group is beneficial to the market competition of our company.	1	2	3	4	5

II) The following describes the entrepreneurship of your company. Please tick √ on the appropriate degree number based on the actual situation of your company.

Items	Strongly Disagree	Disagree	Uncertain	Agree	Totally Agree
1. Senior executives are willing to accept new ideas and new things.	1	2	3	4	5
2. Our company tends to be bold and swift to achieve its goals.	1	2	3	4	5
3. Our company can better grasp new opportunities in the market.	1	2	3	4	5
4. The ability of our company to introduce and learn new technologies is strong.	1	2	3	4	5
5. There is little confusion in the routine management of our company.	1	2	3	4	5
6. The decision of the superior department of our company can be carried out promptly and accurately to the subordinate department.	1	2	3	4	5

7. Our company has frequent communication and coordination among the various functional departments.	1	2	3	4	5
8. The management methods of our company are fairly flexible.	1	2	3	4	5
9. The products and services provided by our company have brand superiority.	1	2	3	4	5
10. Our company has a nationwide or trans-provincial market network	1	2	3	4	5
11. Our company can adjust the current business development strategy according to the situation promptly, and establish contact with the new market quickly.	1	2	3	4	5
12. When there is a potential new market, our company can quickly integrate resources and establish a new distribution channel in time.	1	2	3	4	5

One: The following describes the competitive environment of a company. Please tick √ on the appropriate degree number based on the actual situation of your company.

Items	Strongly Disagree	Disagree	Uncertain	Agree	Totally Agree
1. The industry our company involved is very competitive.	1	2	3	4	5
2. Our company is confronted with strong competitors in the market.	1	2	3	4	5

Two: The following describes corresponding enterprise performances. Please tick √ on the appropriate degree number based on the actual situation of your company.

Items	Extremely Low	Very low	Moderate	Very High	Extremely High
1. Sale margin of our core products	1	2	3	4	5
2. Return on investment	1	2	3	4	5
3. Market competitiveness of our products	1	2	3	4	5

Three: The following describes corresponding enterprise growth. Please tick √ on the appropriate degree number based on the actual situation of the recent 3 years of your company.

1. Our company's staff size over the past recent three years	Reduce quickly	Reduce in a certain degree	Roughly unchanged	Increase moderately	Increase quickly
2. Sales volume of our company's core products over the past recent three years	1	2	3	4	5
3. The market share of our company's core products over the past recent three years	1	2	3	4	5
4.	1	2	3	4	5

The questionnaire is now to this end. Please check if there are omissions of the questions. Thank you for your participation and strong support, we wish you a thriving career!

Project Group of School of Economics and Management

University of Electronic Science and Technology of China

Dec. 27th, 2016